#### **ELECTRICITY INDUSTRY ACT**

# ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY MARKET) REGULATIONS 2004

# WHOLESALE ELECTRICITY MARKET AMENDING RULES (6 June 2012)

#### **Disclaimer**

This unofficial consolidated version of the Wholesale Electricity Market Rules reflects the rules as amended and published in the Government Gazette up to 15 December 2006 and amending changes made by the IMO up to the date of this document. This unofficial version is provided as a clean copy for information and has no legal standing. The Independent Market Operator disclaims any responsibility for any liability arising from any act done or omission made in reliance on this unofficial version of the Wholesale Electricity Market Rules.

For the version of the Wholesale Electricity Market Rules that is currently in force under the *Electricity Industry (Wholesale Electricity Market) Market Rules 2004* please refer to the *Wholesale Electricity Market Rules (September 2006)* as Gazetted on 19 September 2006 and any subsequent amendments gazetted in the Western Australia Government Gazette or approved and published by the IMO on the IMO web site.

# **Version history**

Date	Amendment	Rule Change Reference
15 December 2006	All rules amended and published in the Government Gazette up to 15 December 2006	
10 May 2007	IMO amended clauses 7.9.1, 7.9.2, 7.9.4, 7.9.5, 7.9.6, 7.9.8, 7.9.11, and 7.9.12	RC_2007_01
1 July 2007	IMO amended clause 4.26.2	RC_2007_05
1 September 2007	IMO amended Appendix 5	RC_2007_11
3 September 2007	Updated the Glossary	
1 October 2007	IMO amended clauses 6.17.6, 7.7.5A and 7.7.5B	RC_2007_02
	IMO amended clauses 3.16.9, 3.17.9, 3.18.11 and 3.19.6	RC_2007_03
4 October 2007	IMO amended clauses 3.21.7 (new), 7.13.1 and 7.13.1A (new)	RC_2007_15
	IMO amended clauses 3.18.6, 3.21.4, 3.21.5 (new), 3.21.6 (new), 6.3A.2, 7.3.4 and 7.13.1	RC_2007_16
15 October 2007	IMO amended clauses 2.28.16 and 2.28.16B (new)	RC_2007_04
25 October 2007	IMO amended clauses 6.4.6 (new), 6.5A.1 and 6.12.1	RC_2007_06
1 November 2007	IMO amended clauses 4.26.1, 4.26.3 and the Glossary	RC_2007_08
	IMO amended clauses 1.4.1 and the Glossary	RC_2007_17
	IMO amended clauses 2.37.1, 3.19.1, 3.21.6, 4.24.13, 6.5.1, 10.5.1 and the Glossary	RC_2007_20
20 November 2007	IMO amended clause 2.13.10	RC_2007_07
1 December 2007	IMO amended clause 4.12.6	RC_2007_21
	IMO amended clauses 5.2.1 and 5.2.2	RC_2007_22
18 December 2007	IMO amended clause 4.16.5	RC_2007_24
21 December 2007	IMO amended clause 6.20.3	RC_2007_26
1 February 2008	IMO amended clauses 6.5.1A, 6.5.1C (new), 6.5.4, 6.17.1, 6.17.5, 6.21.2, 7.10.1, 9.8.1 and the Glossary	RC_2007_10
	IMO amended clauses 6.17.6 and 7.13.1	RC_2007_18
	IMO amended clause 4.28.8	RC_2007_19
1 March 2008	IMO amended clause 10.5.1	RC_2007_13
20 March 2008	IMO amended clauses 6.14.2, 6.14.3 and 6.14.4	RC_2008_05
10 April 2008	IMO amended clause 4.5.9	RC_2007_28
20 April 2008	IMO amended clauses 2.23.12, 3.11.8, 3.11.8A (new), 3.11.8B (new), 3.11.8C (new), 3.11.8D (new) and 3.13.1	RC_2008_12
1 May 2008	IMO amended clause 4.28.9, Appendix 5 and Appendix 5A (new)	RC_2008_09
2 May 2008	IMO amended clauses 3.4.1 and 3.5.1	RC_2007_31
15 May 2008	IMO amended clauses 2.24.5 and 2.24.5A (new)	RC_2008_13
26 May 2008	IMO amended clause 4.25.9	RC_2008_01

Date	Amendment	Rule Change Reference
	IMO amended clause 3.17.9	RC_2008_02
	IMO amended clauses 3.16.4 and 3.17.5	RC_2008_03
1 June 2008	IMO amended clauses 4.26.1, 4.26.1A (new), 4.26.1B (new), 4.26.2, 4.26.3, and the Glossary	RC_2007_36
24 June 2008	IMO amended clauses 2.13.9 and 2.34.12	RC_2008_04
1 July 2008	IMO amended clauses 2.30.1A (new), 2.30.4, 2.30.5 and 4.23A.4 (new)	RC_2008_10
10 July 2008	IMO amended clauses 4.25.4A (new), 4.25.4B (new), 4.25.4C (new) and 4.25.4D(new)	RC_2008_06
	IMO amended clauses 6.4.7 (new), 6.14.1, 6.14.1A (new), 6.14.7 (new) and 7.13.1B (new)	RC_2008_08
1 August 2008	IMO amended clauses 2.34.14, 6.18.1, 6.18.2, 6.18.3, 6.20.1, 6.20.5, 6.20.7, 6.20.8, 10.5.1 and Appendix 1	RC_2008_07
	IMO amended clauses 2.13.8 (b), 4.16.4 (e), 4.26.2, 6.14.4 (b), 7.7.5A (b), 9.10.1 and Appendix 5	RC_2008_19
6 August 2008	IMO amended clauses 2.26.1, 2.26.3, 2.26.4, 4.1.19, 4.16.3, 4.16.4, 4.16.5, 4.16.7, 4.16.8, 4.16.9 (new), 4.22.3 and Appendix 4	RC_2008_11
20 August 2008	IMO amended clauses 6.5.1 and 6.5A.1	RC_2008_15
2 September 2008	IMO amended clauses 3.21A.7, 3.21A.7A (new), 4.1.26, 4.10.1, 4.27.10, 4.27.10A (new), 4.27.11, 4.27.11A (new), 4.27.11B (new), 4.27.11C (new), 4.27.11D (new), 4.27.12, 6.5.1A and 6.5.1C	RC_2008_17
1 November 2008	IMO amended clauses 4.11.5 and 10.2.2	RC_2008_14
	IMO amended clauses 3.7.3(new), 3.7.4 (new), 3.7.5 (new) and 3.7.6 (new)	RC_2008_21
	IMO amended the Glossary	RC_2008_23
18 November 2008	IMO amended clauses 2.1.3 and 2.2.3	RC_2008_18
1 January 2009	IMO amended clause 4.12.1	RC_2008_26
	IMO amended clauses 4.28.3 and 4.28.4.	RC_2008_27
1 February 2009	IMO amended clauses 4.26.1 and 4.26.1A	RC_2008_24
	IMO amended clause 4.28A.1	RC_2008_25
	IMO amended clauses 4.24.3 and 4.24.15	RC_2008_28
	IMO amended clause 2.33.4	RC_2008_29
	IMO amended clauses 7.9.1, 7.9.1A (new) and 7.9.5	RC_2008_40
16 February 2009	IMO amended clauses 4.13.1, 4.13.10, 4.13.10A (new), 4.13.11, 4.13.11A (new) and 4.13.11B (new)	RC_2008_30
	IMO amended clauses 2.12, 2.14.5A (new), 2.14.6A (new), 2.14.6B (new), 2.14.7, 2.14.8(new) and 2.14.9 (new)	RC_2008_33

Date	Amendment	Rule Change Reference
1 March 2009	IMO amended clauses 2.29.5, 2.29.8A (new), 2.29.9A (new), 2.29.9B (new), 2.29.9C (new), 4.8.3, 4.10.1, 4.11.1, 4.11.4, 4.11.4A (new), 4.12.8 (new), 4.14.1, 4.25.4E (new), 4.25.4F (new), 4.26.2C (new), 7.7.10 (new), 7.13.1 and the Glossary	RC_2008_20
18 March 2009	IMO amended clause 7.10.5 and 7.10.5A (new)	RC_2009_09
17 April 2009	IMO amended the Glossary	RC_2009_12
27 April 2009	IMO amended clauses 1.4.1, 2.5.7 and 4.11.5	RC_2009_01
	IMO amended clause 2.8.13	RC_2009_02
	IMO amended clauses 2.10.6, 2.10.13, 2.10.14, 2.10.15, 2.10.16 and the Glossary	RC_2009_04
1 May 2009	IMO amended clause 8.6.1 and Appendix 5	RC_2008_32
1 June 2009	IMO amended clauses 3.11.8E (new) and 6.17.6	RC_2008_38
1 July 2009	IMO amended clause 7.2.5	RC_2009_03
6 July 2009	IMO amended clauses 2.7.4, 2.7.5, 2.7.8, 2.28.4, 2.31.1, 2.31.5, 2.31.6, 2.31.12, 2.31.13, 2.31.21, 2.34.8, 2.37.8, 2.41.2, 2.41.3, 4.27.10, 5.2.1, 5.2.7, 5.4.2, 5.4.14, 5.5.3, 9.23.1, 9.23.1, 9.23.5, 9.23.6, 10.5.1 and the Glossary	RC_2009_16
10 July 2009	IMO made minor corrections	
1 August 2009	IMO amended clauses 7.2.3C and 7.3.6	RC_2009_13
17 August 2009	IMO amended clauses 3.18.4 and 3.18.5D (new)	RC_2009_05
24 August 2009	IMO amended clauses 3.11.15 (new), 4.14.11 (new), 7.13.3 (new) and 10.2.7 (new)	RC_2009_26
2 September 2009	IMO amended clauses 2.16.9F, 2.16.9FA (new) and 2.16.9FB (new)	RC_2009_15
1 October 2009	IMO amended clauses 4.26.1, 4.26.1C (new), 4.26.2, 4.26.2D (new), 4.26.2E (new), 4.26.3 and 4.26.3A (new)	RC_2008_20
	IMO amended clause 4.26.1	RC_2009_18
	IMO amended clauses 2.10.4 and 2.10.11	RC_2009_24
	IMO amended clause 4.26.2D	RC_2009_29
1 November 2009	IMO amended clauses 4.2.7, 4.14.6 and Appendix 3	RC_2009_07
	IMO amended clause 4.27.2	RC_2009_19
	IMO amended clause 3.19.2	RC_2009_20
30 November 2009	IMO amended clauses 2.23.1, 2.23.2, 2.23.3, 2.23.5, 2.23.7, 2.23.12, 3.11.11, 3.11.14, 3.13.1, 3.13.3, 3.13.3A (new), 3.13.3B (new), 3.13.3C (new) and 3.22.1	RC_2009_23
1 December 2009	IMO amended clauses 4.1.26 and 4.11.1	RC_2009_11

Date	Amendment	Rule Change Reference
18 December 2009	IMO amended clauses 1.4.1, 1.5.1, 2.1.2, 2.5.7, 2.5.14, 2.5.15, 2.7.6, 2.7.8, 2.8.9, 2.13.10, 2.14.1, 2.14.3, 2.16.2, 2.28.16B, 2.29.9, 2.30.5, 2.30B.3, 2.30B.5, 2.30B.9, 2.30B.11, 2.30C.1, 2.31.3, 2.32.4, 2.34.7, 3.10.2, 3.18.11, 3.18.11A, 3.19.6, 4.10.1, 4.11.1, 4.12.6, 6.3A.2, 6.5.1, 8.4.1, 8.4.2, 8.4.3, 8.4.4, 8.4.5, 8.5.2, 8.6.1, 8.6.2, 9.3.4, 9.9.1, 9.16.2, 9.23.4, 9.24.1, 9.24.2, 10.5.1, the Glossary, Appendix 4A and Appendix 5	RC_2009_30
15 January 2010	IMO amended clauses 2.3.1, 2.3.1A (new), 2.3.2, 2.3.5, 2.3.10, 2.3.14, 2.3.15, 2.3.17, 2.7.4, 2.7.5, 2.7.7, 2.10.8, 2.10.9, 2.10.13 and the Glossary	RC_2009_28
20 January 2010	IMO amended clauses 1.8.2, 1.9.7, 1.9.8, 1.9.9, 1.9.10 and Appendix 8	RC_2009_41
1 February 2010	IMO amended clauses 4.1.1, 4.1.1A, 4.5.2, 4.9.3, 4.11.1, 4.12.6, 4.15.1, 4.15.2, 4.28C (new) the Glossary and Appendix 3	RC_2009_10
1 February 2010	IMO amended clause 9.9.2	RC_2009_21
1 March 2010	IMO amended clause 10.5.1	RC_2009_17
1 April 2010	IMO amended clauses 4.26.2, 4.26.2E, 4.26.2F (new), 4.26.3. and 4.26.3A	RC_2010_03
1 May 2010	IMO amended clause 3.9.1	RC_2009_40
1 June 2010	IMO amended clauses 3.21A.2, 3.21A.3, 3.21A.4, 3.21A.7, 4.1.26, 4.12.6, 4.26.1A, 7.9.4. and the Glossary	RC_2009_08
	IMO amended clauses 6.20.2, 6.20.7, 6.20.9, 6.20.9A (new) and 6.20.10	RC_2009_35
1 July 2010	IMO amended clause 3.13.3A	RC_2010_01
	IMO amended clauses 4.1.2, 4.1.27, 4.13.5, 4.13.8, 4.13.10, 4.13.11, 4.23A.3, 4.24.1, 4.25.3A, 4.25.4, 4.25.4B, 4.25.4F, 4.25.8, 4.25.9, 4.25.12, 4.26.2C, 4.27.5, 4.27.6, 4.27.7, 4.27.8, 4.27.9, 4.27.10A, 4.27.11, 4.27.11A, 4.27.11D, 4.28C.2, 4.28C.4, 4.28C.7, 4.28C.8, 4.28C.9 and 4.28C.12	RC_2010_02
1 September 2010	IMO amended clauses 3.21A.7A, 4.1.26 and 4.26.1A	RC_2010_16
	IMO amended clauses 2.8.1, 2.8.2, 2.11.1, 2.11.2, 2.13.17, 2.13.18, 2.13.22, 2.13.23, 2.13.24, 2.13.26, 2.13.28, 2.15.3, 2.16.9G, 2.16.9H, 2.17.3, 2.31.13, 2.32.1, 2.32.5, 2.32.6, 2.32.7, 10.2.2 and 10.5.1 and the Glossary	RC_2010_18
1 October 2010	IMO amended clauses 2.29.8B (new), 4.25.1, 4.25.2, 4.25.3B (new), 4.25.4, 4.25.9 and 4.25A (new)	RC_2008_20
	IMO amended clauses 6.16.1, 9.3.3, 9.18.3, 9.24.1, 9.24.3, 9.24.3A (new), 9.24.4, 9.24.5, 9.24.8, 9.24.8A (new), 9.24.9 and the Glossary	RC_2010_04
	IMO amended clause 6.4.6	RC_2010_10
1 November 2010	IMO amended clauses 2.3.5, 2.3.5A (new) and 2.3.13	RC_2010_15

Date	Amendment	Rule Change Reference
1 December 2010	IMO amended clauses 2.13.6, 2.13.6A (new), 2.13.6B (new), 2.13.6C (new), 2.13.6D (new), 2.13.6E (new), 2.13.6F (new), 2.13.6G (new), 2.13.6H (new), 2.13.6I (new), 2.13.6J (new), 2.13.6K (new), 2.13.7, 2.13.8,, 7.10.5, 7.10.5B (new), 7.10.7, 10.5.1 and the Glossary	RC_2009_22
	IMO amended clauses 2.10.7, 2.34.2A, 2.34.10, 2.37.5, 3.4.5, 3.5.6, 3.17.1, 3.17.6, 3.21.4, 3.21.7, 4.8.3, 6.2.2, 6.2.2A, 6.2A.2, 6.3A.2, 6.3A.3, 6.3B.1B, 6.3B.3, 6.3C.3, 6.3C.9, 6.4.1, 6.4.3, 6.5.1A, 6.5.2, 6.5A.2, 6.5C.2, 6.5.4, 6.5C.6, 6.6.2A, 6.6.5, 6.7.2, 6.14.1, 6.16.1, 6.18.2, 6.19.3, 6.19.4, 6.19.9, 6.20.1, 6.20.9A, 6.21.1, 6.21.2, 7.10.5, 7.11.3, 7.11.4, 7.11.6A, 7.11.9, 8.7.1, 9.4.5, 9.4.7, 9.17.3, 9.18.3, 9.19.5, 9.20.5, 9.20.7, 9.24.10, 10.5.1, 10.7.1, 10.8.2 and the Glossary	RC_2010_26
1 January 2011	IMO amended clauses 3.21A.16 (new) and 10.6.1.	RC_2009_08
	IMO amended clause 3.21A.16	RC_2010_34
1 February 2011	IMO amended clauses 3.21AA (new), 4.11.1, 7.10.2, 7.10.5A, 7.12.1, 7.13.1 and the Glossary	RC_2009_37
	IMO amended clauses 4.24.1 and the Glossary	RC_2010_35
1 April 2011	IMO amended clauses 2.30.6, 2.30.7, 2.30.7A (new) and Appendix 2	RC_2010_06
	IMO amended clauses 2.38.7 (new), 2.38.8 (new), 2.38.9 (new) and 4.13.7	RC_2010_36
1 May 2011	IMO amended clauses 9.16.3 and 9.16.3A(new) and the Glossary	RC_2010_19
	IMO amended clauses 2.23.9, 2.23.11, 2.24.2, 2.24.2A (new), 2.24.2B (new) and 9.16.3	RC_2010_20
	IMO amended clauses 2.34.1, 2.34.12 and 7.7.4A	RC_2010_21
	IMO amended clauses 3.21.2, 3.21.6, 3.21.8 (new), 3.21.9 (new), 3.21.10 (new), 3.21.11 (new), 3.21.12 (new), 6.15.1, 6.15.2 and the Glossary	RC_2010_23
1 July 2011	IMO amended clauses 2.1.2, 2.8.13, 2.17.1, 2.22.1, 2.37.6, 2.37.7, 2.37.8, 2.38.1, 2.38.2, 2.38.3, 2.38.4, 2.38.5, 5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.6, 5.2.7, 5.2A (new), 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.5, 5.3.6, 5.3.7, 5.3.8, 5.3.9, 5.3A (new), 5.4.1, 5.4.2, 5.4.3, 5.4.4, 5.4.5, 5.4.6, 5.4.7, 5.4.8, 5.4.9, 5.4.10, 5.4.11, 5.4.12, 5.4.13, 5.4.14, 5.5.1, 5.5.2, 5.5.3, 5.5.4, 5.6.1, 5.6.2, 5.6.3, 5.7.1, 5.7.2, 5.8.1, 5.8.2, 5.8.3, 5.8.4, 5.8.5, 5.8.6, 5.8.7, 5.8.8, 5.9.1, 5.9.2 (new), 5.9.3 (new), 6.17.6, 7.1.1, 7.6.1A (new) 7.6.6, 7.13.1, 9.12.1, 9.12.2, 9.14.1, 9.14.2, 9.18.3, 9.24.3A, 10.5.1, the Glossary and Appendix 1	RC_2010_11
	IMO amended clauses 4.11.3A, 7.13.1C (new), 7.7.5B and 7.7.5E (new)	RC_2010_24
	IMO amended clauses 2.29.5N (new), 2.29.5O(new), 2.31.23A (new) and Appendix 1	RC_2010_29

Date	Amendment	Rule Change Reference
8 July 2011	IMO amended clauses 2.24.1, 2.24.2, 4.1.8, 4.1.9, 4.1.10, 4.1.12, 4.1.13, 4.1.14, 4.1.15A (new), 4.1.16, 4.1.17, 4.1.18, 4.1.20, 4.1.21, 4.1.21A (new), 4.1.26, 4.2.7, 4.4.1, 4.7.1, 4.9.5, 4.9.9, 4.9.9A (new), 4.10.1, 4.10.2, 4.10.3, 4.10.4 (new), 4.11.1, 4.11.2, 4.11.3A, 4.11.5, 4.11.10 (new), 4.11.11 (new), 4.15.1, 4.20.1, 4.20.5A (new), 4.27.10, 4.27.10A, 4.27.11, 4.27.11A, 4.27.11B, 4.27.11C, 4.27.11D, 4.28C.1, 4.28C.2, 4.29.1, 10.5.1 and the Glossary	RC_2010_14
1 October 2011	IMO amended clauses 6.17.6 and 7.7.5D	RC_2008_20
	IMO amended clauses 2.8.13, 4.1.21, 4.1.27, 4.9.9, 4.10.3, 4.11.2A (new), 4.13.1B (new), 4.13.1, 4.13.1A (new), 4.13.1B (new), 4.13.1C (new), 4.13.2, 4.13.2A (new), 4.13.2B (new), 4.13.2C (new), 4.13.3, 4.13.5, 4.13.8, 4.13.10, 4.13.10A, 4.13.10B (new), 4.13.10C (new), 4.13.11, 4.13.11A, 4.13.11B, 4.13.12, 4.13.13 (new), 4.13.14 (new), 4.20.1, 4.25.1, 4.25.2, 4.25.3B, 4.25.4B, 4.26.1, 4.26.1A, 4.28.4, 4.28C.8, 4.28C.8A (new), 4.28C.12, 4.28C.12A (new) and the Glossary	RC_2010_12
	IMO amended clause 4.26.1 and 4.26.1A	RC_2010_22
	IMO amended clauses 2.27.1, 2.27.2, 2.27.4, 2.29.1, 2.29.1A (new), 2.29.5, 2.29.5A (new), 2.29.5B (new), 2.29.5C (new), 2.29.5D (new), 2.29.5E (new), 2.29.5F (new), 2.29.5G (new), 2.29.5H (new), 2.29.5I (new), 2.29.5M (new), 2.29.5J (new), 2.29.5M (new), 2.29.8A, 2.29.8B, 2.29.9A, 2.29.9B, 2.29.9C, 2.30.3, 2.30.5, 2.30B.2, 2.30B.5, 2.33.1, 2.33.4, 2.35.1, 3.14.1, 3.17.5, 4.8.3, 4.10.1, 4.11.1, 4.11.4, 4.11.4A, 4.12.1, 4.12.4, 4.12.8, 4.14.1, 4.18.1, 4.18.2, 4.25.1, 4.25.2, 4.25.3B, 4.25.4, 4.25.4E, 4.25.4F, 4.25.9, 4.25.10, 4.25A, 4.25A.1, 4.26.1B, 4.26.1C, 4.26.2, 4.26.2C, 4.26.2CA (new), 4.26.2D, 4.26.2E, 4.26.2F, 4.26.3, 4.26.3A, 4.26.4, 6.3A.2, 6.5A.1, 6.11.1, 6.11.2, 6.11A.1, 6.12.1, 6.15.2, 6.16.1, 6.16.2 (new), 6.17.6, 7.1.1, 7.2.2, 7.6.10, 7.7.3, 7.7.4, 7.7.4A, 7.7.10, 7.10.4, 7.13.1, 9.3.3, 9.3.4, 9.3.7, 9.13.1, 10.5.1, the Glossary, Appendix 1 and Appendix 3	RC_2010_29
1 November 2011	IMO amended clauses 3.22.2, 3.22.3, 9.9.1, 9.9.1A, 9.9.2, 9.9.3, 9.9.3A (new), 9.9.3B (new), 9.9.4, 9.10A.1, 9.11.1 and the Glossary	RC_2010_33
	IMO amended clauses 2.8.11, 2.24.1, 2.24.2A, 2.34.12, 3.19.12, 3.21.9, 4.1.13, 4.1.18, 4.5.9, 4.10.1, 4.25.4F, 5.1.1, 6.3B.1B, 6.6.3A, 6.14.4, 7.6A.5, 9.20.5, 9.24.5, the Glossary, Appendix 1 and Appendix 3	RC_2011_06
	IMO amended clause 2.38.7.	RC_2011_04
	IMO amended clause 7.6.3	RC_2011_05
1 December 2011	IMO amended clause 2.31.23A	RC_2010_29
	IMO amended clauses 4.26.2, 4.26.2B and 4.26.5.	RC_2011_07
	IMO amended clauses 4.12.4, 4.12.8, 4.26.2D and 7.6.10	RC_2011_08
1 January 2012	IMO amended clause 4.1.11	RC_2010_14

Date	Amendment	Rule Change Reference
	IMO amended clauses 4.10.1, 4.10.3, 4.10.3A (new), 4.11.2, 4.11.2A, 4.11.3A, 4.11.3B, 4.11.3C (new), 4.11.3D (new), 4.11.3E (new), 6.17.6, 7.7.5A, 7.7.5B, 7.7.5C, 7.7.5D, 7.7.5E, 7.7.9, 7.13.1, 7.13.1C, 10.5.1 ,the Glossary and Appendix 9 (new)	RC_2010_25
	IMO amended clauses 2.10.17 (new), 2.10.18 (new) and 2.10.19 (new)	RC_2011_12
	IMO amended clause 4.16.3	RC_2011_13
1 March 2012	IMO amended clauses 2.17.1, 2.31.13, 2.32.7A (new), 2.32.7B (new), 2.32.7C (new), 2.32.7D (new), 2.32.7E (new), 2.32.7F (new) and the Glossary.	RC_2010_31
	IMO amended clauses 2.33.1, 2.33.2, 2.33.3, 2.33.4, 3.2.1, 3.11.8A, 3.11.8B, 3.13.1, 3.13.3B, 3.13.3C, 3.14.3, 3.21B.7, 4.25.2, 4.28.5, 6.5C.6, 6.18.2, 7.2.3B, 7.6.2, 7.6A.5, 10.5.1, Appendix 1 and the Glossary.	RC_2011_11
1 June 2012	IMO amended clauses 1.10 (new), 2.37.4, 7A.1.2 (new) and 7A.1.16 (new).	RC_2011_10
6 June 2012	IMO amended clauses 4.5.12 and Appendix 3.	RC_2011_14

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# 1. Introduction

#### The Market Rules

#### 1.1. Authority of Market Rules

- 1.1.1. These are the market rules made under the Regulations and contemplated by section 123 of the Electricity Industry Act 2004 ("Electricity Industry Act").
- 1.1.2. These Market Rules govern the market and the operation of the South West interconnected system, including the wholesale sale and purchase of electricity, Reserve Capacity, and Ancillary Services.

#### 1.2. Objectives

- 1.2.1. The objectives of the market are:
  - to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;
  - to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;
  - (c) to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;
  - (d) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system; and
  - (e) to encourage the taking of measures to manage the amount of electricity used and when it is used.

## **Conventions**

#### 1.3. Electricity Industry Act and Regulations

1.3.1. A word or phrase defined in the Electricity Industry Act or the Regulations has the same meaning when used in these Market Rules.

### 1.4. Other rules of interpretation

1.4.1. In these Market Rules, unless the contrary intention appears:

- (a) (**Glossary**): a word or phrase listed in the Glossary in Chapter 11 has the meaning given in the Glossary;
- (b) (day): a day means a calendar day;
- (c) [Blank]
- (d) (singular and plural): the singular includes the plural and the plural includes the singular;
- (e) (**gender**): a reference to a gender includes any gender;
- (f) (headings): headings (including those in brackets at the beginning of paragraphs) are for convenience only and do not affect the interpretation of these Market Rules;
- (g) (persons): a reference to a person includes an individual, a firm, a body corporate, a partnership, a joint venture, an unincorporated body or association, or any government agency;
- (h) (things): a reference to any thing (including any amount) is a reference to the whole and each part of it;
- (i) (clauses etc): a reference to a clause, chapter, annexure or schedule is a reference to a clause or chapter in or annexure or schedule to the Market Rules;
- (j) (statutes etc): a reference to a statute, ordinance, code or other law includes regulations and other instruments under it and consolidations, amendments, re-enactments or replacements of any of them;
- (k) (variations): a reference to a document (including the Market Rules) includes any variation or replacement of it;
- (I) (other parts of speech): other parts of speech and grammatical forms of a word or phrase defined in the Glossary in chapter 11 have a corresponding meaning;
- (m) (appointments): where these Market Rules confer a power on a person to make an appointment to a position, the person also has the power:
  - i. to specify the period for which any person appointed in exercise of the power ("appointee") holds the position;
  - ii. to remove or suspend an appointee and to reappoint or reinstate an appointee; and
  - iii. where an appointee is suspended or is unable, or expected to become unable, for any other cause to perform the functions of the position, to appoint a person to act temporarily in place of the appointee during the period of suspension or other inability;
- (n) (amendments): if the IMO or System Management has the power to make, prescribe, determine, compile, establish or develop a document,

- instrument, matter or thing, then the IMO or System Management also has the power to amend, replace or revoke the whole or part of that document, instrument, matter or thing exercisable in like manner and subject to like conditions (if any):
- (o) (functions): "function" includes function, power, duty, responsibility and authority;
- (p) (include or including): the words "include" or "including" are not used as, nor are they to be interpreted as, words of limitation, and, when introducing an example, do not limit the meaning of the words to which the example relates;
- (q) [Blank]
- (r) (Headings and comments): headings and comments appearing in boxes in these Market Rules (other than the Refund Table in clause 4.26) are for convenience only and do not affect the interpretation of these Market Rules.
- 1.4.2. In these Market Rules, unless the contrary intention appears, any notice or confirmation required to be issued by the IMO may be issued by an automated software system employed by the IMO.
- 1.4.3. The Wholesale Electricity Market will operate on Western Standard Time (= Coordinated Universal Time (UTC) + 8 hours). At all times, the times and time limits mentioned in these Market Rules refer to Western Standard Time.

#### 1.5. Subservient Documents

- 1.5.1. The following documents are subservient to the Market Rules:
  - (a) Market Procedures; and
  - (b) any other document or instrument issued, made or given by the IMO under the Market Rules.
- 1.5.2. In the event of conflict between the Market Rules and other documents, then the order of precedence is to be, in the following order:
  - (a) the Electricity Industry Act;
  - (b) the Regulations;
  - (c) the Market Rules;
  - (d) the Market Procedures; and
  - (e) any other document or instrument issued, made or given by the IMO under the Market Rules.

## Chapter 1

1.5.3. If a provision of a document which is higher in the order of precedence (in this clause called the "higher provision") is inconsistent with a provision of a document which is lower in the order of precedence, then the higher provision prevails, but only to the extent of the inconsistency.

#### 1.6. Notices

1.6.1. The IMO must develop a Market Procedure which sets out the method by which notices and communications required under, contemplated by or relating to, these Market Rules are to be given to or by the IMO.

#### 1.7. Publication

1.7.1. Where the IMO is required by these Market Rules to publish or release a document or information, then the IMO must make that document or information available on the Market Web Site, in a place which is generally accessible by members of the class of persons entitled to access that document or information given the IMO's determination of its confidentiality status in accordance with clause 10.2.

# **Staging**

#### 1.8. Staging of the Market Rules

- 1.8.1. Subject to clause 1.8.2, a provision of the Market Rules commences at the time fixed by the Minister.
- 1.8.2. Chapter 1, Chapter 4 and Chapter 11 commence when these Market Rules are made.
- 1.8.3. The Minister may fix different times for different provisions of these Market Rules under clause 1.8.1.
- 1.8.4. The Minister must publish notice of the commencement time fixed for a provision under clause 1.8.1 in the Government Gazette.
- 1.8.5. Until such time as clauses 2.4 to 2.11 take effect, the Minister may develop, maintain and make Amending Rules, and develop, formulate and publish Market Procedures in accordance with the Regulations.
- 1.8.6. To avoid doubt, and without limiting the foregoing, where a word or phrase listed in the Glossary in Chapter 11 is defined by reference to a provision of these Market Rules, regard should be had to that provision for the purposes of determining the meaning of that word or phrase, even though the provision has not yet commenced.

#### 1.9. Transition

- 1.9.1. The Minister may perform any of the functions of the IMO under, or obligations imposed on the IMO by, clauses 4.2, 4.3 and 4.4 in respect of the first Reserve Capacity Cycle.
- 1.9.2. Until the IMO is established, the Minister may perform any of the other functions of the IMO under, or obligations imposed on the IMO by, these Market Rules in accordance with the Regulations.
- 1.9.3. Where the IMO or the Minister:
  - (a) takes any action to enable the IMO to perform functions under, or obligations imposed by, a provision of these Market Rules, before the provision commences in anticipation of the provision commencing; and
  - (b) the action was taken so far as reasonably practicable in accordance with the provision, as though the provision was in force at the time the action was taken.

then, after the provision commences, the action is deemed to have been taken validly in accordance with the provision.

- 1.9.4. Any action taken by the Minister under clause 1.9.1 or 1.9.2 is deemed to have been taken by the IMO for the purposes of these Market Rules.
- 1.9.5. In making any determination or decision or taking any action under these Market Rules, the IMO may rely on any action by the IMO or the Minister under clause 1.9.1 or 1.9.2.
- 1.9.6. The IMO may treat any expression of interest, submission, application, approval, statement or document ("the application") made or given by a person to the IMO or the Minister in anticipation of a provision of these Market Rules commencing as having been made to the IMO after the relevant provision commences and the IMO may take action under these Market Rules on the basis of the application or taking into account the application.
- 1.9.7. [Blank]
- 1.9.8. [Blank]
- 1.9.9. [Blank]
- 1.9.10. [Blank]
- 1.9.11. The following provisions relate to Outage Scheduling and are to cease to have effect following Energy Market Commencement:

- (a) This clause 1.9.11 is applicable to a Rule Participant's transmission networks and generation systems to which that Rule Participant anticipates clause 3.18.2(c) will apply upon registration of the facility or, in the case of a generation system, upon the registration of an Intermittent Load to be supplied by that facility.
- (b) A Rule Participant owning or operating a facility to which (a) relates may submit Outage Plans for such facility with System Management in accordance with the Power System Operation Procedure as if clause 3.18.2(c) relates to the facility.
- (c) Where a Rule Participant submits an Outage Plan for a facility to System Management in accordance with (b) and System Management is of a view that after Energy Market Commencement the list described in clause 3.18.2(c) would be applicable to the facility then System Management must process the Outage Plan in accordance with the Power System Operation Procedure as if clause 3.18.2(c) relates to the facility.
- (d) Where System Management has approved an Outage Plan for a facility in accordance with (c) then that Outage Plan is to continue to apply to that facility after it becomes a Registered Facility or, in the case of a generation system, upon registration of an Intermittent Load to be supplied by that facility.
- (e) Any Outage Plan approved in accordance with this clause 1.9.11 for a facility is deemed to have been scheduled and approved in accordance with Chapter 3 once that facility becomes a Registered Facility or a generation system serving an Intermittent Load.
- 1.9.12. Until three months after Energy Market Commencement the IMO, a person appointed by the Minister under clause 2.13.1, or System Management (as applicable) need take no action under clause 2.13 in respect of suspected non-compliance by a Rule Participant where, in the view of the IMO, a person appointed by the Minister under clause 2.13.1, or System Management (as applicable), it would not be reasonable to expect the Rule Participant to comply fully with the Market Rules because of restrictions in the timing of events and the availability of data or system limitations where these restrictions or limitations stem from the commissioning of the energy market, provided that the Rule Participant employs reasonable endeavours to comply with the intent of the Market Rules.

# 1.10. Specific Transition Provisions – Balancing and Load Following Services

#### 1.10.1. In this clause 1.10:

**Balancing Final Rule Change Report:** Means the IMO's Final Rule Change Report for the Rule Change Proposal: Competitive Balancing and Load Following Market (RC\_2011\_10).

**Pre-Amended Rules:** Means the Market Rules as in force immediately before the amendments made by the Balancing Final Rule Change Report come into effect (and if the amendments come into effect on more than one date, the last date on which the balance of the amendments come into effect).

**Post-Amended Rules:** Means the Market Rules as in force immediately after the amendments made by the Balancing Final Rule Change Report come into effect (and if the amendments come into effect on more than one date, the last date on which some of the amendments come into effect).

- 1.10.2. Before 8:00 AM on the Balancing Market Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, each Rule Participant must perform all obligations imposed on that Rule Participant under the Post-Amended Rules, in relation to the Balancing Market Commencement Day and subsequent Trading Days, that, if the Post-Amended Rules were in force, the Rule Participant would have been required to perform under the Post-Amended Rules. This includes but is not limited to obligations relating to:
  - (a) updated Standing Data under clause 2.34;
  - (b) information required to be shared between the IMO and System Management under Chapters 2 and 7, including:
    - i. Outage schedules under clause 7.3.4;
    - ii. Resource Plans under clause 7.4; and
    - iii. Fuel Declarations under clause 7.5.1;
  - (c) certification of Reserve Capacity under clauses 4.10 and 4.11;
  - (d) a submission, including:
    - i. a Bilateral Submission under clause 6.2;
    - ii. a STEM Submission under clause 6.3B;
    - iii. a Resource Plan Submission under clause 6.5;
    - iv. a Balancing Submission under clause 7A.2;
    - v. the Balancing Portfolio Supply Curve under clause 7A.2.9; and
    - vi. a LFAS Submission under clause 7B.2;
  - (e) the STEM Auction under clause 6.4;
  - (f) a Non-Balancing Dispatch Merit Order under clause 6.12;
  - (g) Load Forecasts under clause 7.2.1;
  - (h) a Dispatch Instruction, Dispatch Order and an Operating Instruction under Chapter 7;
  - (i) information in relation to the Verve Energy Balancing Portfolio under clause 7.6A.2;

- (j) a Dispatch Advisory under clause 7.11;
- (k) a Forecast BMO under clause 7A.3.16;
- (I) an LFAS Quantity forecast under clause 7B.1.4; and
- (m) an LFAS Merit Order, a Forecast LFAS Merit Order or the LFAS Price under clause 7B.3.
- 1.10.3. On the Scheduling Day relating to the Trading Day that is also the Balancing Market Commencement Day set by the IMO under clause 7A.1.2, notwithstanding that the Pre-Amended Rules continue to apply, Rule Participants are not required to perform obligations under the following Pre-Amended Rules:
  - (a) Resource Plan data under clauses 6.5, 6.5C, 6.11 and 7.4;
  - (b) Balancing Data under clauses 6.5A and 6.11A;
  - (c) the Dispatch Merit Order under clause 6.12;
  - (d) Load Forecast and Ancillary Service Requirements under clause 7.2;
  - (e) Outages under clause 7.3;
  - (f) Dispatch Merit Orders and Fuel Declarations under clause 7.5;
  - (g) Dispatch under clause 7.6;
  - (h) Scheduling and Dispatch of the Electricity Generation Corporation under clause 7.6A; and
  - (i) Dispatch Instructions under clauses 7.7 and 7.8,

but only to the extent that these obligations relate to the Trading Day that is also the Balancing Market Commencement Day or subsequent Trading Days.

- 1.10.4. After 8:00 AM on the Balancing Market Commencement Day, notwithstanding that the Post-Amended Rules apply, each Rule Participant must perform all obligations imposed on that Rule Participant under the Pre-Amended Rules, arising in relation to each Trading Day (or part of a Trading Day) up to but excluding the Balancing Market Commencement Day, that, if the Pre-Amended Rules were in force, the Rule Participant would have been required to perform under the Pre-Amended Rules. This includes, but is not limited to, obligations relating to:
  - (a) administration of the Market under Chapter 2;
  - (b) energy scheduling, including calculation of prices and quantities for Balancing and Ancillary Services under Chapter 6;
  - (c) Dispatch under Chapter 7;
  - (d) settlement under Chapter 9; and
  - (e) treatment of information under Chapter 10.

# 2. Administration

#### **Functions and Governance**

#### 2.1. Independent Market Operator

- 2.1.1. The Independent Market Operator, or IMO, is established under the Electricity Industry (Independent Market Operator) Regulations 2004.
- 2.1.2. The functions of the IMO are:
  - (a) to administer these Market Rules;
  - (b) to operate the Reserve Capacity Mechanism, the Short Term Energy Market and the balancing process;
  - (c) to settle such transactions as it is required to under these Market Rules;
  - (d) to carry out a Long Term PASA study and to publish the Statement of Opportunities Report;
  - (e) [Blank]
  - (f) to process applications for participation, and for the registration, deregistration and transfer of facilities;
  - (g) to release information required to be released by these Market Rules;
  - (h) to publish information required to be published by these Market Rules;
  - (i) to develop amendments to these Market Rules and replacements for them;
  - (j) to develop Market Procedures, and amendments and replacements for them, where required by these Market Rules;
  - (k) to make available copies of the Market Rules and Market Procedures, as are in force at the relevant time;
  - to monitor other Rule Participants' compliance with the Market Rules, to investigate potential breaches of the Market Rules, and if thought appropriate, initiate enforcement action under the Regulations and these Market Rules;
  - (m) to support the Economic Regulation Authority in its market surveillance role, including providing any market related information required by the Economic Regulation Authority;
  - to support the Economic Regulation Authority in its role of monitoring market effectiveness, including providing any market related information required by the Economic Regulation Authority; and

- (o) to carry out any other functions conferred, and perform any obligations imposed, on it under these Market Rules.
- 2.1.3. The IMO may delegate any of its functions under the Market Rules (other than the power to do the things indicated as not able to be delegated in regulation 17(I) of the Regulations) to a person or body of persons that is, in the IMO's opinion, competent to exercise the relevant functions. A function performed by a delegate is to be taken to be performed by the IMO. A delegate performing a function under this clause 2.1.3 is to be taken to do so in accordance with the terms of the delegation unless the contrary is shown. Nothing in this clause 2.1.3 limits the ability of the IMO to perform a function through an officer, employee or agent.

#### 2.2. System Management

- 2.2.1. The Electricity Networks Corporation, acting through the segregated business unit known as System Management, has the function of operating the SWIS in a secure and reliable manner for the purposes of regulation 13(1) of the Regulations.
- 2.2.2. The other functions of System Management in relation to the Wholesale Energy Market are:
  - (a) to procure adequate Ancillary Services where the Electricity Generation Corporation cannot meet the Ancillary Service Requirements;
  - (b) to assist the IMO in the processing of applications for participation and for the registration, de-registration and transfer of facilities;
  - (c) to develop Market Procedures, and amendments and replacements for them, where required by these Market Rules;
  - (d) to release information required to be released by these Market Rules;
  - to monitor Rule Participants' compliance with Market Rules relating to dispatch and Power System Security and Power System Reliability; and
  - (f) to carry out any other functions or responsibilities conferred, and perform any obligations imposed, on it under these Market Rules.
- 2.2.3. System Management may delegate any of its functions under the Market Rules (other than the power to do the things indicated as not able to be delegated in the Regulations) to a person or body of persons that is, in System Management's opinion, competent to exercise the relevant functions. A function performed by a delegate is to be taken to be performed by System Management. A delegate performing a function under this clause 2.2.3. is to be taken to do so in accordance with the terms of the delegation unless the contrary is shown. Nothing in this clause 2.2.3 limits the ability of System Management to perform a function through an officer, employee or agent.

#### 2.3. The Market Advisory Committee

- 2.3.1. The Market Advisory Committee is a committee of industry representatives convened by the IMO:
  - (a) to advise the IMO regarding Rule Change Proposals;
  - (b) to advise the IMO and System Management regarding Procedure Change Proposals;
  - (c) to advise the IMO regarding market operation and SWIS operation matters; and
  - (d) to advise the IMO regarding matters concerning the evolution of these Market Rules.
- 2.3.1A. The Market Advisory Committee is a non voting committee.
- 2.3.2. The IMO must develop and publish a constitution for the Market Advisory Committee detailing:
  - (a) the process for convening the Market Advisory Committee;
  - (b) the terms of reference of the Market Advisory Committee;
  - (c) the membership terms of Market Advisory Committee members;
  - (d) the process for appointing and replacing Market Advisory Committee members by the IMO;
  - (e) the conduct of Market Advisory Committee meetings;
  - (f) the role of the Market Advisory Committee Secretariat;
  - (g) interaction between the Market Advisory Committee and the IMO;
  - (h) the ability of the Market Advisory Committee to delegate any of the roles described in clause 2.3.1 to a Working Group; and
  - (i) the governance arrangements to apply between the Market Advisory Committee and any Working Groups where the Market Advisory Committee delegates any of the roles described in clause 2.3.1 to a Working Group.
- 2.3.3. The constitution of the Market Advisory Committee must be consistent with the Market Rules.
- 2.3.4. The IMO must invite public submissions when developing or amending the constitution of the Market Advisory Committee.
- 2.3.5. Subject to clause 2.3.13, the Market Advisory Committee must comprise:

- (a) at least three and not more than four members representing Market Generators, of whom one must represent the Electricity Generation Corporation;
- (b) one member representing Contestable Customers;
- at least one and not more than two members representing Network Operators, of whom one must represent the Electricity Networks Corporation;
- (d) at least three and not more than four members representing Market
   Customers, of whom one must represent the Electricity Retail Corporation;
- (e) one member nominated by the Minister to represent small-use consumers;
- (f) one member representing System Management;
- (g) one member representing the IMO; and
- (h) a chairperson, who must be a representative of the IMO.
- 2.3.5A. Subject to clause 2.3.13, when appointing or removing members of the Market Advisory Committee, the IMO must use its reasonable endeavours to ensure equal representation of Market Generators and Market Customers.
- 2.3.6. The Minister may appoint a representative to attend Market Advisory Committee meetings as an observer.
- 2.3.7. The Economic Regulation Authority may appoint a representative to attend Market Advisory Committee meetings as an observer.
- 2.3.8. The IMO may appoint and remove members of the Market Advisory Committee.
- 2.3.9. The IMO must annually review the composition of the Market Advisory Committee and may remove and appoint members following the review.
- 2.3.10. When appointing and removing members of the Market Advisory Committee, the IMO must consult with, and take nominations from Rule Participants and industry groups, that it considers relevant to the Wholesale Electricity Market, and, if practicable, must choose members from persons nominated.
- 2.3.11. The IMO may remove a member of the Market Advisory Committee at any time in the following circumstances:
  - (a) the person becomes an undischarged bankrupt;
  - (b) the person becomes of unsound mind or his or her estate is liable to be dealt with in any way under law relating to mental health; or
  - (c) an event specified for this purpose in the constitution for the Market Advisory Committee occurs; or

- (d) in the IMO's opinion the person no longer represents the person or class of persons that they were appointed to represent in accordance with clause 2.3.5.
- 2.3.12. A member of the Market Advisory Committee may resign by giving notice to the IMO in writing.
- 2.3.13. Where a position on the Market Advisory Committee is vacant at any time, the IMO must use its reasonable endeavours to appoint a person to fill the position, but the Market Advisory Committee may continue to perform its functions under this clause 2.3 despite any vacancy.
- 2.3.14. The IMO must provide the Secretariat for the Market Advisory Committee.
- 2.3.15. The Secretariat must convene the Market Advisory Committee:
  - (a) on any occasion where these Market Rules require a meeting to discuss a Rule Change Proposal;
  - (aA) on any occasion where these Market Rules require a meeting to discuss a Procedure Change Proposal;
  - (b) not less than once every six months so as to raise and discuss issues with respect to the operation of the market; and
  - (c) on any occasion when two or more members of the Market Advisory Committee have informed the Secretariat in writing that they wish to bring a matter regarding market operation, the evolution of these Market Rules or the operation of these Market Rules before the Market Advisory Committee for discussion.
- 2.3.16. Subject to clause 10.2.4, the IMO must provide the members of the Market Advisory Committee any information in its possession that is pertinent to the issues being addressed by the Market Advisory Committee.
- 2.3.17. The Market Advisory Committee may:
  - (a) establish one or more Working Groups comprised of Representatives of Rule Participants and other interested stakeholders, to assist the Market Advisory Committee in advising the IMO on any of the matters listed in clause 2.3.1 of these Market Rules; and
  - (b) disband any Working Groups where it considers that the Working Group is no longer required, or will no longer be required, to assist the Market Advisory Committee in advising the IMO on any of the matters listed in clause 2.3.1 of these Market Rules.

### **Market Documents**

#### 2.4. Market Rules

- 2.4.1. The IMO:
  - (a) is responsible for maintaining the Market Rules; and
  - (b) is responsible for ensuring the development of amendments of, and replacements for, the Market Rules; and
  - (c) may make amending rules (as defined in the Regulations) ("Amending Rules") in accordance with this Chapter.
- 2.4.2. The IMO must not make Amending Rules unless it is satisfied that the Market Rules, as proposed to be amended or replaced, are consistent with the Wholesale Market Objectives.
- 2.4.3. In deciding whether or not to make Amending Rules, the IMO must have regard to the following:
  - (a) any applicable policy direction given to the IMO under clause 2.5.2;
  - (b) the practicality and cost of implementing the Rule Change Proposal;
  - (c) the views expressed in any submissions on the Rule Change Proposal;
  - (d) the views expressed by the Market Advisory Committee where the Market Advisory Committee met to consider the Rule Change Proposal; and
  - (e) any technical studies that the IMO considers are necessary to assist in assessing the Rule Change Proposal.
- 2.4.4. The IMO must maintain on the Market Web Site a Rules Change Proposal form which must include:
  - (a) contact details for proposing rule changes; and
  - (b) information that must be provided in proposing a change, including:
    - i. the name of the person submitting the Rule Change Proposal, and where relevant, details of the organisation that person represents;
    - ii. the issue to be addressed;
    - iii. the degree of urgency of the proposed change;
    - iv. any proposed specific changes to particular rules;
    - v. a description of how the rule change would allow the Market Rules to better address the Wholesale Market Objectives; and
    - vi. any identifiable costs and benefits of the change.

#### 2.5. Rule Change Proposals

- 2.5.1. Any person (including the IMO) may make a Rule Change Proposal by completing a Rule Change Proposal form. A person other than the IMO must submit the completed Rule Change Proposal form to the IMO.
- 2.5.2. The Minister may give a policy direction to the IMO with respect to the development of the market. A policy direction must not be inconsistent with the Wholesale Market Objectives. Before giving a policy direction, the Minister may provide a draft of the proposed policy direction to the IMO and seek the IMO's views on it.
- 2.5.3. If the Minister gives a policy direction, the IMO must develop one or more Rule Change Proposals implementing the policy direction and progress it using the rule change process in this clause 2.5 and clauses 2.6 to 2.8.
- 2.5.4. Where the IMO considers that a change to the Market Rules is required to maintain consistency with any applicable law or regulation or the Wholesale Market Objectives, the IMO is responsible for developing an appropriate Rule Change Proposal.
- 2.5.5. Where necessary, the IMO may contact the person submitting a Rule Change Proposal and request clarification of any aspect of the Rule Change Proposal. Any clarification received is to be deemed to be part of the Rule Change Proposal.
- 2.5.6. Within five Business Days of the later of:
  - (a) receiving the Rule Change Proposal; and
  - (b) any clarification under clause 2.5.5,

the IMO must notify the person who submitted the Rule Change Proposal whether or not the IMO will progress the Rule Change Proposal any further.

- 2.5.7. When it has developed a Rule Change Proposal, or within seven Business Days of receiving a Rule Change Proposal under clause 2.5.1, the IMO must publish notice of the Rule Change Proposal on the Market Web Site. The notice must include:
  - (a) the date that the Rule Change Proposal was submitted, if applicable;
  - (b) the name, and where relevant, the organisation, of the person who made the Rule Change Proposal;
  - details of the Rule Change Proposal, including relevant references to clauses of the Market Rules and any proposed specific changes to those clauses;

- (d) the description of how the rule change would allow the Market Rules to better address the Wholesale Market Objectives given by the person submitting the proposed rule change;
- (e) whether the Rule Change Proposal will be progressed and the reason why the Rule Change Proposal will or will not be progressed; and
- (f) if the Rule Change Proposal will be progressed further:
  - i. whether the Rule Change Proposal is to be subject to the Fast Track Rule Change Process in accordance with clause 2.5.9 and the reasons for this decision;
  - ii. if the Rule Change Proposal is subject to the Fast Track Rule Change process, and the Rule Change Proposal did not include proposed specific changes to clauses, the IMO's proposed Amending Rules to implement the Rule Change Proposal; and
  - iii. if the Rule Change is not subject to the Fast Track Rule Change process, a call for submissions in relation to the Rule Change Proposal. The due date for submissions must be:
    - 1. 30 Business Days after the notification; or
    - if a longer timeframe is determined in accordance with clause 2.5.10, at a time that is consistent with that timeframe.
- 2.5.8. Where a Rule Change Proposal that will be progressed relates to a Protected Provision the IMO must notify the Minister at the same time as it gives the notice described in clause 2.5.7.
- 2.5.9. The IMO may subject a Rule Change Proposal to the Fast Track Rule Change Process if, in its opinion, the Rule Change Proposal:
  - (a) is of a minor or procedural nature; or
  - (b) is required to correct a manifest error; or
  - (c) is urgently required and is essential for the safe, effective and reliable operation of the market or the SWIS.
- 2.5.10. Subject to clause 2.5.12, the IMO may at any time after deciding to progress a Rule Change Proposal decide to extend the normal timeframe for processing Rule Change Proposals. If the IMO decides to do so, then it may modify the times and time periods under clauses 2.6 or 2.7 in respect of the Rule Change Proposal and publish details of the modified times and time periods.
- 2.5.11. If a Rule Change Proposal was subject to the Fast Track Rule Change Process, and the IMO decides to extend the timeframe, it must either:
  - (a) extend the timeframe by no more than 15 Business Days; or

- (b) reclassify the Rule Change Proposal as not being subject to the Fast Track Rule Change Process, and must progress it in accordance with clause 2.7.
- 2.5.12. The IMO must publish a notice of an extension determined in accordance with clause 2.5.10, and must update any information already published in accordance with clause 2.5.7(f).
- 2.5.13. A notice of extension must include:
  - (a) the reasons for the proposed extension;
  - (b) the views of any Rule Participants consulted on the extension;
  - (c) the proposed length of any extension; and
  - (d) the proposed work program.
- 2.5.14. A Rule Change Proposal that the IMO decides is subject to the Fast Track Rule Change Process is to be progressed in accordance with clause 2.6, and clause 2.7 does not apply.
- 2.5.15. A Rule Change Proposal that the IMO decides is not subject to the Fast Track Rule Change Process is to be progressed in accordance with clause 2.7, and clause 2.6 does not apply.

#### 2.6. Fast Track Rule Change Process

- 2.6.1. Within five Business Days of publishing the notice referred to in clause 2.5.7, the IMO must notify those Rule Participants that it considers have an interest in the Rule Change Proposal of its intention to consult with them concerning the Rule Change Proposal.
- 2.6.2. Within five Business Days of publishing the notice referred to in clause 2.5.7, a
  Rule Participant may notify the IMO that they wish to be consulted concerning the
  Rule Change Proposal.
- 2.6.3. Within 15 Business Days of publishing the notice referred to in clause 2.5.7, the IMO must have completed such consultation as the IMO considers appropriate in the circumstances with the Rule Participants described in clauses 2.6.1 and 2.6.2.
- 2.6.4. Within 20 Business Days of publishing the notice referred to in clause 2.5.7, the IMO must prepare and publish a Final Rule Change Report containing:
  - (a) the information in the notice of the Rule Change Proposal under clause 2.5.7;
  - (b) any analysis of the Rule Change Proposal that the IMO has carried out;
  - (c) the identities of Rule Participants that were consulted;

- (d) information on any objections expressed by the Rule Participants consulted, and the IMO's response to the objections;
- (e) the IMO's assessment of the Rule Change Proposal in light of clauses 2.4.2 and 2.4.3;
- (f) a decision by the IMO that:
  - i. the Rule Change Proposal be accepted in the proposed form; or
  - ii. the Rule Change Proposal be accepted in a modified form; or
  - iii. the Rule Change Proposal be rejected;
- (g) the IMO's reasons for the decision; and
- (h) if the IMO decides to make Amending Rules arising from the Rule Change Proposal:
  - i. the wording of the Amending Rules; and
  - ii. the proposed date and time that the Amending Rules will commence.

#### 2.7. Standard Rule Change Process

- 2.7.1. Any person may make a submission to the IMO relating to a Rule Change Proposal within the time frame specified under clause 2.5.7(f)(iii).
- 2.7.2. Subject to clause 10.2.4, the IMO must release all information submitted under clause 2.7.1 to the public.
- 2.7.3. The IMO may hold public forums or workshops concerning a Rule Change Proposal.
- 2.7.4. Within one Business Day after the publication of a notice of a Rule Change Proposal in accordance with clause 2.5.7, the IMO must notify the members and observers of the Market Advisory Committee as to whether the IMO considers the Rule Change Proposal requires convening a meeting of the Market Advisory Committee and the reasons why.
- 2.7.5. The IMO must convene a meeting of the Market Advisory Committee concerning a Rule Change Proposal before the due date for submissions in relation to the Rule Change Proposal if:
  - (a) the IMO considers that advice on the Rule Change Proposal is required from the Market Advisory Committee; or
  - (b) two or more members of the Market Advisory Committee have informed the IMO in writing that they consider that advice on the Rule Change Proposal is required from the Market Advisory Committee.
- 2.7.6. Within 20 Business Days following the close of submissions, the IMO must:

- (a) prepare and publish a Draft Rule Change Report on the Rule Change Proposal; and
- (b) publish a deadline for further submissions in relation to the Rule Change Proposal, where that deadline must be at least 20 Business Days after the date the deadline is published.
- 2.7.7. The Draft Rule Change Report must contain:
  - (a) the information in the notice of the Rule Change Proposal under clause 2.5.7;
  - all submissions received before the due date for submissions, a summary of those submissions, and the IMO's response to issues raised in those submissions;
  - (c) a summary of any public forums or workshops held;
  - (d) a summary of the views expressed by the members of the Market Advisory Committee where the Market Advisory Committee met to consider the Rule Change Proposal and, if the Market Advisory Committee has delegated its role to consider the Rule Change Proposal to a Working Group under clause 2.3.17(a), a summary of the views expressed by that Working Group;
  - (e) the IMO's assessment of the Rule Change Proposal in light of clauses 2.4.2 and 2.4.3;
  - (f) a proposal as to whether the Rule Change Proposal should be accepted in the form proposed. The proposal may be that:
    - i. the Rule Change Proposal be accepted in the proposed form; or
    - ii. the Rule Change Proposal be accepted in a modified form; or
    - iii. the Rule Change Proposal be rejected; and
  - (g) if the IMO proposes to make Amending Rules arising from the Rule Change Proposal:
    - i. the wording of the proposed Amending Rules; and
    - ii. a proposed date and time the proposed Amending Rules will commence.
- 2.7.8. Within 20 Business Days of the deadline specified under clause 2.7.6(b), the IMO must prepare and publish a Final Rule Change Report containing:
  - (a) the information in the Draft Rule Change Report;
  - (b) all submissions received before the deadline for submissions specified in relation to the relevant Draft Rule Change Report under clause 2.7.6(b), a summary of those submissions, and the IMO's response to the issues raised in those submissions;

- (c) any further analysis or modification to the Rule Change Proposal;
- (d) the IMO's assessment of the Rule Change Proposal in light of clauses 2.4.2 and 2.4.3;
- (e) a decision by the IMO that:
  - i. the Rule Change Proposal be accepted in the proposed form; or
  - ii. the Rule Change Proposal be accepted in a modified form; or
  - iii. the Rule Change Proposal be rejected;
- (f) the IMO's reasons for the decision; and
- (g) if the IMO decides to make Amending Rules arising from the Rule Change Proposal:
  - i. the wording of the Amending Rules; and
  - ii. the proposed date and time that the Amending Rules will commence.

# 2.8. Review of IMO Rule Amendment Decisions, Ministerial Approval and Coming into Force of Rule Amendments

- 2.8.1. A Rule Participant may apply to the Electricity Review Board for a Procedural Review of a decision by the IMO contemplated by clause 2.5.9, 2.6.4(f) or 2.7.8(e) within 10 Business Days of the relevant decision, on the grounds that the IMO has not followed the rule change process set out in clauses 2.5, 2.6 and 2.7.
- 2.8.2. Following an application for a Procedural Review under clause 2.8.1, if the Electricity Review Board finds that the IMO has not followed the rule change process set out in clauses 2.5, 2.6 and 2.7 the Electricity Review Board may set aside the IMO's decision and direct the IMO to reconsider the relevant Rule Change Proposal in accordance with the process set out in clauses 2.5, 2.6 and 2.7.
- 2.8.3. The IMO must submit a Rule Change Proposal, together with the Final Rule Change Report, to the Minister for approval where Amending Rules in the Final Rule Change Report under clause 2.6.4 or 2.7.8 amend or replace a Protected Provision, or, in the IMO's opinion, would have the effect of changing the meaning or effect of one or more Protected Provisions.
- 2.8.4. Subject to clause 2.8.6, the Minister must consider the Rule Change Proposal within 20 Business Days and decide whether the Market Rules, as amended or replaced by the proposed Amending Rules, are consistent with the Wholesale Market Objectives.
- 2.8.5. Where a Rule Change Proposal is submitted under clause 2.8.3, the Minister may:
  - (a) approve the proposed Amending Rules;

- (b) not approve the proposed Amending Rules; or
- (c) send back to the IMO the proposed Amending Rules with any revisions the Minister considers are required to ensure the Market Rules, as amended or replaced by the proposed Amending Rules, are consistent with the Wholesale Market Objectives.
- 2.8.6. The Minister may extend the time for a decision on a Rule Change Proposal under clause 2.8.4 by a further period of up to 20 Business Days by notice to the IMO. The Minister may extend the time for a decision in respect of a Rule Change Proposal more than once.
- 2.8.7. The IMO must publish notice of any extension under clause 2.8.6 on the Market Web Site.
- 2.8.8. Where the Minister does not make a decision by the original date determined in accordance with clause 2.8.4, or by an extended date determined in accordance with clause 2.8.6, as applicable, then the proposed Amending Rules will be taken to have been approved by the Minister.
- 2.8.9. Where the Minister does not approve the proposed Amending Rules or sends proposed Amending Rules back to the IMO under clause 2.8.5(c), the Minister must give reasons, and the IMO must publish a notice of the Minister's decision and the reasons given by the Minister.
- 2.8.10. Where the Minister sends proposed Amending Rules back to the IMO in accordance with clause 2.8.5(c), the IMO must:
  - publish the revised Amending Rules and call for submissions on the revised Amending Rules within 15 Business Days of publication; and
  - (b) provide a revised Final Rule Change Report, including any submissions received on the Minister's revised Amending Rules to the Minister within 25 Business Days and clauses 2.8.4 to this clause 2.8.10 apply to the revised Final Rule Change Report.
- 2.8.11. Amending Rules are made:
  - (a) for Rule Change Proposals to which clause 2.8.3 applies, when the Minister has either approved, or is taken by clause 2.8.8 to have approved, the Amending Rules; and
  - (b) for Rule Change Proposals to which clause 2.8.3 does not apply, when the IMO has decided to make the Amending Rules as notified under clause 2.6.4(f) or clause 2.7.8(e).
- 2.8.12. Subject to clause 2.8.2, Amending Rules commence at the time and date determined by the IMO. The IMO must publish notice of the time and date Amending Rules commence.

- 2.8.13. The following clauses are Protected Provisions:
  - (a) clauses 1.1 to 1.3 and 1.5 to 1.9;
  - (b) clauses 2.1 to 2.24, 2.28, 2.31.1, 2.31.3, 2.31.5(a), 2.31.6, 2.34.1 and 2.36.1;
  - (c) clauses 3.15, 3.18.18 and 3.18.19;
  - (d) clauses 4.1.4 to 4.1.12, 4.1.15 to 4.1.19, 4.1.21, 4.1.22, 4.1.24, 4.5.10, 4.5.11, 4.5.15 to 4.5.20, 4.13.10, 4.13.10A, 4.13.10B, 4.13.11, 4.13.11A, 4.16, 4.24.1, 4.24.2 and 4.24.12;
  - (e) [Blank]
  - (f) clauses 9.16.3, 9.16.4 and 9.20.2; and
  - (g) clauses 10.1.1, 10.1.2, 10.2.1, 10.3 and 10.4.

### 2.9. Market Procedures

- 2.9.1. The IMO must manage the development of, amendment of, and replacement for Market Procedures which these Market Rules require be developed by the IMO.
- 2.9.2. System Management must manage the development of, amendment of, and replacement for Market Procedures which these Market Rules require be developed by System Management.
- 2.9.3. Market Procedures
  - (a) must:
    - i. be developed, amended or replaced in accordance with the process in these Market Rules;
    - ii. be consistent with the Wholesale Market Objectives; and
    - iii. be consistent with these Market Rules, the Electricity Industry Act and Regulations; and
  - (b) may be amended or replaced in accordance with clause 2.10 and must be amended or replaced in accordance with clause 2.10 where a change is required to maintain consistency with Amending Rules.
- 2.9.4. The IMO must maintain on the Market Web Site a Procedure Change Submission form.
- 2.9.5. The IMO must develop an Administration Procedure setting out the procedure for developing and amending Market Procedures and:
  - (a) the IMO must follow the Administration Procedure when developing and approving Procedure Change Proposals, except when producing the first version of the Administration Procedure;

- (b) System Management must follow the Administration Procedure when developing Procedure Change Proposals; and
- (c) Rule Participants involved in the Procedure Change process must follow the Administration Procedure when assisting the IMO or System Management to develop Procedure Change Proposals.
- 2.9.6. The IMO must comply with Market Procedures applicable to it.
- 2.9.7. System Management must comply with Market Procedures applicable to it.
- 2.9.8. A Rule Participant other than the IMO or System Management must comply with Market Procedures applicable to it.

## 2.10. Procedure Change Process

- 2.10.1. The IMO or System Management, as applicable, may initiate the Procedure Change Process by developing a Procedure Change Proposal.
- 2.10.2. Rule Participants may notify the IMO or System Management, as applicable, where they consider an amendment or replacement of a Market Procedure would be appropriate.
- 2.10.3. If an Amending Rule requires the IMO or System Management to develop new Market Procedures or to amend or replace existing Market Procedures, then the IMO or System Management, as applicable, is responsible for the development of, amendment of or replacement for, Market Procedures so as to comply with the Amending Rule.
- 2.10.4. Where the Procedure Change Proposal is developed by System Management, System Management must provide the Procedure Change Proposal to the IMO, and the IMO must publish it within five Business Days.
- 2.10.5. The IMO must publish Procedure Change Proposals that the IMO develops.
- 2.10.6. A Procedure Change Proposal must include:
  - (a) a proposed Market Procedure or an amendment to or replacement for a Market Procedure, indicating the proposed amended words, or a proposed Market Procedure; and
  - (b) the reason for the proposed Market Procedure or an amendment to or replacement for a Market Procedure or proposed Market Procedure.
- 2.10.7. At the same time as it publishes a Procedure Change Proposal notice, the IMO must publish a call for submissions on that proposal. The due date for submissions must be 20 Business Days from the date the call for submissions is published. Any person may make a submission to the IMO relating to a Procedure Change Proposal. A Procedure Change Submission may be made

- using the Procedure Change Submission form maintained on the Market Web Site in accordance with clause 2.9.4.
- 2.10.8. Within one Business Day after the publication of a Procedure Change Proposal notice in accordance with clause 2.10.4 or 2.10.5, as applicable, the IMO must notify all members and observers of the Market Advisory Committee as to whether the IMO considers that the Procedure Change Proposal requires convening the Market Advisory Committee and the reasons why.
- 2.10.9. The IMO must convene a meeting of the Market Advisory Committee concerning the Procedure Change Proposal before the due date for submissions in relation to the Procedure Change Proposal if:
  - (a) the IMO considers that advice on the Procedure Change Proposal is required from the Market Advisory Committee; or
  - (b) two or more members of the Market Advisory Committee have informed the IMO in writing that they consider that advice on the Procedure Change Proposal is required from the Market Advisory Committee.
- 2.10.10. Following the closing date for submissions, the IMO or System Management, as applicable, must prepare a Procedure Change Report on the Procedure Change Proposal.
- 2.10.11. Where the Procedure Change Report is prepared by System Management, System Management must provide the Procedure Change Report to the IMO, and the IMO must publish it within five Business Days.
- 2.10.12. The IMO must publish Procedure Change Reports that the IMO prepares.
- 2.10.13. The Procedure Change Report must contain:
  - (a) the wording of the proposed Market Procedure or amendment to or replacement for the Market Procedure;
  - (b) the reason for the proposed Market Procedure or amendment to or replacement for the Market Procedure;
  - all submissions received before the due date for submissions, a summary
    of those submissions, and the response of the IMO or System
    Management, as applicable, to the issues raised in those submissions;
  - (d) a summary of the views expressed by the Market Advisory Committee and, if the Market Advisory Committee has delegated its role to consider the Procedure Change Proposal to a Working Group under clause 2.3.17(a), a summary of the views expressed by that Working Group;
  - (e) in the case of a Procedure Change Proposal developed by the IMO, a proposed date and time for the Market Procedure or amendment or replacement to commence, which must, in the IMO's opinion, allow

- sufficient time after the date of publication of the Procedure Change Report for Rule Participants to implement changes required by it; and
- (f) in the case of a Procedure Change Proposal developed by System Management, a recommendation for a date and time for the Market Procedure, amendment or replacement to commence which, in System Management's opinion, allows sufficient time after the date of publication of the IMO's approval of the Procedure Change Proposal under clause 2.10.12, for Rule Participants to implement changes required by it.
- 2.10.14. For Procedure Change Proposals developed by System Management, the IMO must within 10 Business Days of the publication of the Procedure Change Report make a decision as to whether to approve the proposed Market Procedure or amendment to or replacement for the Market Procedure. The IMO may
  - (a) approve the proposed Market Procedure or amendment to or replacement for the Market Procedure; or
  - (b) reject the proposed Market Procedure or amendment to or replacement for the Market Procedure.
- 2.10.15. Where the IMO approves a proposed Market Procedure or amendment to or replacement for the Market Procedure from System Management, it must notify System Management and the IMO must publish, the following information:
  - (a) that the proposed Market Procedure or amendment to or replacement for the Market Procedure is approved;
  - (b) the IMO's reasons for the decision; and
  - (c) a date and time for the Market Procedure, amendment or replacement to commence, which must, in the IMO's opinion, allow sufficient time after the date of publication of the Procedure Change Report for Rule Participants to implement changes required by it.
- 2.10.16. Where the IMO rejects a proposed Market Procedure or amendment to or replacement for the Market Procedure from System Management:
  - (a) the IMO must:
    - i. notify System Management; and
    - ii. publish the following information:
      - 1. that the proposed Market Procedure or amendment to or replacement for the Market Procedure is rejected; and
      - 2. the IMO's reasons for the decision; and
  - (b) in the case of a proposed Market Procedure or amendment to or replacement for the Market Procedure required by an Amending Rule, System Management must submit a revised Procedure Change Proposal

in accordance with clause 2.10 that complies with the Amending Rule and is acceptable to the IMO. The provisions of clause 2.10 apply to any revised Procedure Change as if it were a new Procedure Change Proposal by System Management.

- 2.10.17. If the IMO considers, at any time after publishing a Procedure Change Proposal, that it is necessary to extend the normal timeframes for processing the Procedure Change Proposal because:
  - (a) issues of sufficient complexity or difficulty have been identified relating to the Procedure Change Proposal; or
  - (b) further public consultation on an issue associated with the Procedure Change Proposal is required; or
  - (c) the Procedure Change Proposal cannot be dealt with adequately without an extension because of any other special circumstance,

then the IMO may modify the times and time periods under clauses 2.10.7 or 2.10.14 in respect of the Procedure Change Proposal and publish details of the modified times and time periods.

- 2.10.18. The IMO must publish a notice of an extension determined in accordance with 2.10.17 and must update any information already published in accordance with clause 2.10.7 or 2.10.15.
- 2.10.19. A notice of extension under clause 2.10.18 must include:
  - (a) the reasons for the proposed extension;
  - (b) the views of any Rule Participant consulted on the extension;
  - (c) the proposed length of any extension; and
  - (d) the proposed work program.

## 2.11. Coming into Force of Procedure Amendments

- 2.11.1. A Rule Participant may apply to the Electricity Review Board for a Procedural Review of a decision by the IMO or System Management contemplated by clause 2.10.13 or 2.10.14 within 10 Business Days of the decision, on the grounds that the IMO or System Management has not followed the process set out in clause 2.10 or the Administration Procedure.
- 2.11.2. Following an application for a Procedural Review under clause 2.11.1, if the Electricity Review Board finds that the IMO or System Management has not followed the process set out in clause 2.10 or the Administration Procedure, the Electricity Review Board may set aside the IMO's decision or System Management's decision and direct the IMO or System Management to reconsider the relevant Procedure Change Proposal in accordance with clause 2.10 and the Administration Procedure.

# Chapter 2

- 2.11.3. Subject to clauses 2.11.2 and 2.11.4, a Market Procedure or an amendment of or replacement for a Market Procedure commences at the time and date specified under clause 2.10.13(e) or 2.10.15(c), as applicable.
- 2.11.4. If at any time, the IMO considers that Rule Participants will not have sufficient time to implement any necessary changes required by the Market Procedure, amendment or replacement, the IMO may extend the time and date when that Market Procedure, amendment or replacement commences by publishing notice of the revised time and date when the amendment of or replacement for that Market Procedure commences.

# Monitoring, Enforcement and Audit

## 2.12. [Blank]

- 2.12.1. [Blank]
- 2.12.2. [Blank]
- 2.12.3. [Blank]
- 2.12.4. [Blank]
- 2.12.5. [Blank]

# 2.13. Market Rule Compliance Monitoring and Enforcement

- 2.13.1. The Minister may from time to time appoint a person to be responsible for investigating alleged breaches by the IMO of the Market Rules and Market Procedures.
- 2.13.2. The IMO must monitor other Rule Participants' behaviour for compliance with the Market Rules and Market Procedures in accordance with the Monitoring Protocol.
- 2.13.3. The IMO must ensure it has processes and systems in place to allow it to monitor Rule Participants' behaviour for compliance with the Market Rules and Market Procedures in accordance with the Monitoring Protocol.
- 2.13.4. A Rule Participant may inform the IMO in writing if it considers that it or another Rule Participant has breached the Market Rules or a Market Procedure, and may provide evidence of that breach.
- 2.13.5. A Rule Participant may inform the person referred to in clause 2.13.1 in writing if it considers that the IMO has breached the Market Rules or a Market Procedure, and may provide evidence of that breach.

- 2.13.6. System Management must monitor Rule Participants' behaviour for compliance with the provisions of the Market Rules referred to in clause 2.13.9 and the Power System Operation Procedures developed by System Management.
- 2.13.6A Subject to clause 2.13.6B, System Management must report any alleged breaches of the provisions of the Market Rules referred to in clause 2.13.9 or the Power System Operation Procedures to the IMO in accordance with the Monitoring and Reporting Protocol.
- 2.13.6B System Management is not required to report an alleged breach by a Market Participant of clause 7.10.1 or clause 3.21 of the Market Rules to the IMO if:
  - (a) the extent of the alleged breach is either within the Tolerance Range established under clause 2.13.6D or the Facility Tolerance Range established under clause 2.13.6E; or
  - (b) the alleged breach is limited to occurring within a single Trading Interval; or
  - (c) in the case of an alleged breach of clause 7.10.1, the alleged breach is outside the Tolerance Range or Facility Tolerance Range, as applicable, where:
    - the Rule Participant has notified System Management of a Forced Outage in accordance with clause 3.21.4 that is applicable to the period of the alleged breach; and
    - ii. the alleged breach relates to the Rule Participant generating at a level below its Resource Plan or the Dispatch Instruction applicable to the relevant Forced Outage period.
- 2.13.6C Nothing in clause 2.13.6B relieves:
  - (a) System Management from its obligation to monitor Rule Participants' compliance with the provisions of the Market Rules referred to in clause 2.13.9 and the Power System Operation Procedures developed by System Management;
  - (b) System Management of its obligation to report to the IMO any alleged breach by a Market Participant of clause 7.10.1 or clause 3.21 not covered under clause 2.13.6B; or
  - (c) Rule Participants from the obligation to fully comply with the Market Rules and the Power System Operation Procedures, regardless of whether System Management is required under the Market Rules to report any alleged breach to the IMO.
- 2.13.6D System Management may determine the Tolerance Range to apply to all Facilities for the purposes of System Management's reporting of alleged breaches of clause 7.10.1 and clause 3.21 to the IMO under clause 2.13.6A. When determining the

appropriate Tolerance Range to apply for all Market Participants, System Management must:

- (a) consult with Rule Participants prior to setting the Tolerance Range; and
- (b) submit to the IMO for publication on the Market Web Site at least 14 Business Days prior to the date from which change to the Tolerance Range becomes effective, the following:
  - i. all submissions received from Rule Participants;
  - ii. the Tolerance Range; and
  - iii. an effective date for the commencement of the Tolerance Range.
- 2.13.6E System Management may determine a Facility Tolerance Range to apply to a specific generation Facility for the purposes of System Management's reporting of alleged breaches of clause 7.10.1 and clause 3.21 to the IMO under clause 2.13.6A. A Facility Tolerance Range will apply for a specific generation Facility in place of the Tolerance Range determined under clause 2.13.6D. When determining the Facility Tolerance Range to apply for the specific generation Facility, System Management must:
  - (a) consult with Market Participants prior to setting the Facility Tolerance Range; and
  - (b) submit to the IMO for publication on the Market Web Site at least 14 Business Days prior to the date from which any changes to the Facility Tolerance Range become effective the following:
    - i. the reasons for System Management's decision;
    - ii. any submissions received from Market Participants;
    - iii. the applicable Facility Tolerance Range; and
    - iv. an effective date for the commencement of the applicable Facility Tolerance Range.
- 2.13.6F System Management must not show bias towards a Market Participant in respect to the Facility Tolerance Range.
- 2.13.6G System Management must review the Tolerance Range and any Facility Tolerance Ranges at least annually. System Management may vary the Tolerance Range and any Facility Tolerance Ranges following this review.
- 2.13.6H A Market Participant may request in writing that the IMO reassess a Facility Tolerance Range for that Market Participant's Facility. Once such a request is made in writing:
  - (a) the IMO must consult with System Management and the Market Participant concerning the Facility Tolerance Range;

- (b) the IMO may give a direction to System Management to vary a Facility Tolerance Range where it finds that:
  - System Management has not followed the relevant Market Rules or any relevant Power System Operation Procedures in determining the Facility Tolerance Range; or
  - ii. the IMO deems, based on the information provided by the Market Participant and System Management, that the Facility Tolerance Range is not reasonable; and
- (c) the IMO must use best endeavours to complete the assessment within 10 Business Days from receipt of the request; and
- (d) the IMO must publish any direction provided to System Management to vary a Facility Tolerance Range on the Market Web Site within 5 Business Days of issuing that direction.
- 2.13.6I Where the IMO makes a direction under clause 2.13.6H, that direction will apply until the Facility Tolerance Range is varied in accordance with clause 2.13.6G.
- 2.13.6J The IMO must publish all information provided pursuant to clauses 2.13.6D and 2.13.6E on the Market Web Site within 5 Business Days of receipt.
- 2.13.6K System Management must document the procedure for determining and reviewing the annual Tolerance Range and any Facility Tolerance Ranges to apply for the purposes of clause 7.10.1 and clause 3.21 of the Market Rules in the Power System Operation Procedure, and System Management and Market Participants must follow that documented Power System Operation Procedure.
- 2.13.7. System Management must ensure it has processes and systems in place to allow it to monitor Rule Participants' behaviour in accordance with clauses 2.13.6 and 2.13.6A.
- 2.13.8. If System Management becomes aware of an alleged breach of the provisions of the Market Rules referred to in clause 2.13.9 or the Power System Operation Procedures as a result of its monitoring activities, then it must:
  - (a) record the alleged breach of the Market Rules referred to in clause 2.13.9 or the Power System Operation Procedures; and
  - (b) subject to clause 2.13.6B, notify the IMO of the alleged breach in accordance with clause 2.13.6 or, in the case of an alleged breach by the IMO, notify the person referred to in clause 2.13.1 in accordance with clause 2.13.5.
- 2.13.9. System Management must monitor Rule Participants for breaches of the following clauses:
  - (a) [Blank]

- (b) clauses 3.4.6 and 3.4.8;
- (c) clauses 3.5.8 and 3.5.10;
- (d) clauses 3.6.5 and 3.6.6B;
- (e) clauses 3.16.4, 3.16.7, and 3.16.8A;
- (f) clauses 3.17.5 and 3.17.6;
- (g) clause 3.18.2(f);
- (gA) clauses 3.21A.2, 3.21A.12, and 3.21A.13;
- (gB) clauses 3.21B.1 and 3.21B.2;
- (h) clause 4.10.2, where System Management is instructed by the IMO under clause 4.25.13;
- (hA) clause 7.2.5;
- (hB) clause 7.5.5;
- (i) clause 7.7.6(b);
- (j) clauses 7.10.1, 7.10.3, 7.10.6 and 7.10.6A; and
- (k) clause 7.11.7.
- 2.13.10 If the IMO becomes aware of an alleged breach of the Market Rules or Market Procedures, then:
  - (a) it must record the alleged breach;
  - (b) it must investigate the alleged breach;
  - (c) it must record the results of each investigation;
  - (d) where it reasonably believes a breach of the Market Rules or Market Procedures has taken place, it may issue a warning to the Rule Participant to rectify the alleged breach. The warning must:
    - i. identify the clause or clauses of the Market Rules or the Market Procedures that the IMO believes has been, or are being, breached;
    - ii. describe the behaviour that comprises the alleged breach;
    - iii. request an explanation; and
    - request that the alleged breach be rectified and a time (which the IMO considers reasonable) by which the alleged breach should be rectified; and
  - (e) it must record the response of the Rule Participant to any warning issued under clause 2.13.10(d).

- 2.13.11. If the IMO becomes aware of an alleged breach of the Market Rules or the Market Procedures, then it may meet with the relevant Rule Participant on one or more occasions to discuss the alleged breach and possible actions to rectify the alleged breach.
- 2.13.12. As part of an investigation into alleged breaches of the Market Rules or Market Procedures, the IMO may:
  - (a) require information and records from Rule Participants; and
  - (b) conduct an inspection of a Rule Participant's equipment.
- 2.13.13. Rule Participants must cooperate with an investigation into an alleged breach of the Market Rules or Market Procedures, including:
  - (a) providing the IMO with information requested under clause 2.13.12 relating to the alleged breach in a timely manner; and
  - (b) allowing reasonable access to equipment for the purpose of an inspection carried on under clause 2.13.12.
- 2.13.14. Where a Rule Participant does not comply with clause 2.13.13, the IMO may appoint a person to investigate the matter and provide a report or such other documentation as the IMO may require. If the IMO does so, then:
  - (a) the Rule Participant must assist the person to undertake the investigation and prepare the report or other documentation; and
  - (b) the cost of the investigation and the preparation the report or other documentation must be met by the Rule Participant unless the IMO determines otherwise.
- 2.13.15. Where the alleged breach relates to a Category A Market Rule (as determined in accordance with the Regulations) and the IMO is not the Rule Participant that is alleged to have breached the Market Rules, the IMO must make a decision as to whether a breach has occurred.
- 2.13.16. The IMO may:
  - (a) decide a breach has taken place in which case the IMO may issue a penalty notice in accordance with the Regulations; or
  - (b) decide a breach has not taken place and notify:
    - i. the Rule Participant that is alleged to have breached the Market Rules; and
    - ii. where a Rule Participant notified the IMO in accordance with clause 2.13.4, that Rule Participant,

of its decision.

2.13.17. Where the IMO issues a penalty notice under clause 2.13.16(a), the Rule Participants that received the penalty notice may seek a review of that decision by the Electricity Review Board in accordance with the Regulations.

#### 2.13.18. Where:

- (a) the alleged breach relates to a Category B or Category C Market Rule (as determined in accordance with the Regulations); and
- (b) following the investigation referred to in clause 2.13.10(b), the IMO reasonably believes that a breach of the Market Rules has taken place,

the IMO may bring proceedings before the Electricity Review Board.

- 2.13.19. Where the person referred to in clause 2.13.1 receives notice of an alleged breach by the IMO in accordance with clause 2.13.5, the person referred to in clause 2.13.1 must investigate the alleged breach of the Market Rules or Market Procedures, and may require information and records from the IMO.
- 2.13.20. The IMO must cooperate with an investigation referred to in clause 2.13.19.
- 2.13.21. Following the investigation referred to in clause 2.13.19, where the person referred to in clause 2.13.1 reasonably believes a breach of the Market Rules or Market Procedures has taken place it:
  - (a) may issue a warning to the IMO to rectify the alleged breach. The warning must:
    - identify the clauses of the Market Rules or the Market Procedures that the person referred to in clause 2.13.1 considers have been breached;
    - ii. describe the behaviour that comprises the alleged breach;
    - iii. request an explanation; and
    - iv. request that the alleged breach be rectified and a time (which the person referred to in clause 2.13.1 considers reasonable) by which the alleged breach should be rectified; and
  - (b) may meet with the IMO on one or more occasions to discuss the alleged breach and possible actions to rectify the alleged breach.
- 2.13.22. Where the person referred to in clause 2.13.1 considers that the alleged breach has not been rectified within the time set out in accordance with clause 2.13.21(a)(iv) it may bring proceedings before the Electricity Review Board.
- 2.13.23. The orders that the Electricity Review Board may make for a breach of the Market Rules and the procedures for the operation of the Electricity Review Board are set out in the Regulations.

- 2.13.24. The IMO may direct a Rule Participant to do or to refrain from doing any thing that the IMO thinks necessary or desirable to give effect or to assist in giving effect to any order of the Electricity Review Board.
- 2.13.25. A Rule Participant must comply with a direction of the IMO given under clause 2.13.24.
- 2.13.26. The IMO must release a report at least once every six months setting out a summary for the preceding six months of:
  - (a) proceedings that have been brought before the Electricity Review Board;
  - (b) findings of the Electricity Review Board on matters referred to them;
  - (c) orders made by the Electricity Review Board; and
  - (d) civil penalties imposed by the IMO under clause 2.13.16(a), where these have not been set aside by the Electricity Review Board.
- 2.13.27. In considering the circulation of the report under clause 2.13.26 and 2.13.28, the IMO must have regard to the Wholesale Market Objectives.
- 2.13.28. In addition to the regular publication described in clause 2.13.26, the IMO may release a report on any one or more matters where the IMO has made a decision under clause 2.13.16(a) or which have been referred to the Electricity Review Board, the findings of the IMO and the Electricity Review Board, as applicable, on those matters and any sanctions imposed by the IMO or the Electricity Review Board in relation to those matters.
- 2.13.29. No Rule Participant or former Rule Participant is entitled to make any claim against the IMO for any loss or damage incurred by the Rule Participant from the publication of any information pursuant to clauses 2.13.26 or 2.13.28 if the publication was done in good faith. No action or other proceeding will be maintainable by the person or Rule Participant referred to in the publication on behalf of the IMO or any person publishing or circulating the publication on behalf of the IMO and this clause operates as leave for any such publication except where the publication is not done in good faith.
- 2.13.30. Claims for confidentiality of information which may be published under clauses 2.13.26 or 2.13.28 must be dealt with in accordance with the provisions for reporting information in clause 10.2.
- 2.13.31. The IMO must, and is entitled to, provide the reports referred to in clauses 2.13.26 or 2.13.28 to all Rule Participants and interested parties. However, the IMO is not required to provide a report to such a person if the IMO considers it is inappropriate in the circumstances, including without limitation, where there may be confidentiality issues.

#### 2.14. Audit

- 2.14.1. The IMO must appoint one or more Market Auditors that may be used to conduct the audits described in clauses 2.14.2 and 2.14.6(b).
- 2.14.2. The IMO must ensure that the Market Auditor carries out the audits of the matters identified under clause 2.14.3 no less than annually.
- 2.14.3. The IMO must ensure that the Market Auditor carries out the audits of such matters as the IMO considers appropriate, which must include:
  - (a) the compliance of the IMO's internal procedures and business processes with the Market Rules;
  - (b) the IMO's compliance with the Market Rules and Market Procedures; and
  - (c) the IMO's market software systems and processes for software management.
- 2.14.4. The Market Auditor must provide the IMO with a report, and the IMO must within 30 Business Days of receiving the report either:
  - (a) accept the report and any recommendations contained in it; or
  - (b) prepare a separate report setting out the matters raised in the Market Auditor's report which the IMO accepts and those which it does not accept and setting out the IMO's reasons for that view.
- 2.14.5. The IMO must publish the Market Auditor's report and any report it prepared under clause 2.14.4(b) within 30 Business Days of receiving the Market Auditor's report.
- 2.14.5A. The IMO must annually provide to the Minister a report on the IMO's compliance with the Market Rules and Market Procedures. The report must contain:
  - (a) the reports published in clause 2.14.5; and
  - (b) the results of any investigations of the IMO's compliance with the Market Rules and Market Procedures carried out by the person appointed under clause 2.13.1.
- 2.14.6. In accordance with the Monitoring Protocol, the IMO must at least annually, and may more frequently where it reasonably considers that System Management may not be complying with the Market Rules and Market Procedures:
  - (a) require System Management to demonstrate compliance with the Market Rules and Market Procedures by providing such records as are required to be kept under these Market Rules or any Market Procedure; or
  - (b) subject System Management to an audit by the Market Auditor to verify compliance with the Market Rules and Market Procedures.

- 2.14.6A. Where System Management is subject to an audit in accordance with clause 2.14.6 (b), the IMO must provide System Management with a copy of the report, and System Management must within 20 Business Days of receiving the report either:
  - (a) accept the report and any recommendations contained in it; or
  - (b) provide the IMO with a separate report setting out the matters raised in the Market Auditor's report which System Management accepts and those which it does not accept and setting out System Management's reasons for that view.
- 2.14.6B. Where System Management is subject to an audit in accordance with clause 2.14.6 (b), the IMO must publish the Market Auditor's report and any report provided by System Management under clause 2.14.6A(b) within 30 Business Days of System Management receiving the Market Auditor's report.
- 2.14.7. The IMO must annually prepare a report for the Minister on System Management's compliance with the Market Rules and Market Procedures. The report must contain:
  - (a) reports published in clause 2.14.6B; and
  - (b) the results of any investigations of System Management's compliance with the Market Rules and Market Procedures carried out by the IMO under clause 2.13.10(b); and
  - (c) details of any relevant information received under clause 2.14.6(a).
- 2.14.8. The IMO must provide System Management with the report prepared in accordance with clause 2.14.7, and System Management must within 20 Business Days of receiving the report either:
  - (a) accept the report and any recommendations contained in it; or
  - (b) prepare a separate report setting out the matters raised in the report which System Management accepts and those which it does not accept and setting out System Management's reasons for that view.
- 2.14.9. The IMO must, within 10 Business Days following the date specified in clause 2.14.8, provide to the Minister the report prepared in accordance with clause 2.14.7 and any report prepared by System Management under clause 2.14.8(b).

#### 2.15. Monitoring and Reporting Protocols

2.15.1. Prior to Energy Market Commencement, the IMO must develop and implement a Monitoring Protocol.

- 2.15.2. The purpose of the Monitoring Protocol is to state how the IMO will implement its obligations under these Market Rules to monitor Rule Participants' behaviour for compliance with the Market Rules and Market Procedures.
- 2.15.3. The Monitoring Protocol must specify:
  - (a) the IMO's monitoring processes for assessing compliance with the Market Rules and Market Procedures by Rule Participants;
  - (b) a process for System Management to demonstrate compliance with the Market Rules and Market Procedures and audit processes where the IMO requires such demonstration or an audit in accordance with clause 2.14.6;
  - (c) a process for Rule Participants to report alleged breaches of the Market Rules or Market Procedures;
  - (d) processes for investigations into alleged breaches of the Market Rules or Market Procedures;
  - (e) guidelines for the IMO when issuing warnings about alleged breaches of the Market Rules or Market Procedures to Rule Participants under clause 2.13.10(c); and
  - (f) the procedure for bringing proceedings in respect of Category B or C Market Rule breaches before the Electricity Review Board.
- 2.15.4. Prior to Energy Market Commencement System Management must develop and implement a Monitoring and Reporting Protocol and seek the approval of the IMO for that Monitoring and Reporting Protocol.
- 2.15.5. The purpose of the Monitoring and Reporting Protocol is to state how System Management will implement its obligations under these Market Rules to monitor Rule Participant's behaviour for compliance with the Market Rules in accordance with clause 2.13.6 and with Market Procedures developed by System Management.
- 2.15.6. The Monitoring and Reporting Protocol must specify:
  - (a) System Management's monitoring processes for assessing compliance with the Market Rules and Market Procedure by Market Participants; and
  - (b) the provision of information about breaches or other information the IMO may request to the IMO.
- 2.15.7. The Monitoring Protocol developed by the IMO, and the Monitoring and Reporting Protocol developed by System Management are Market Procedures under these Market Rules, and must be developed and amended in accordance with clauses 2.9 and 2.10.
- 2.15.8. The IMO and the Economic Regulation Authority must agree a reporting protocol, which must specify:

- (a) the circumstances in and process by which the IMO may communicate to the Economic Regulation Authority information related to compliance with the Market Rules that may have a bearing on compliance with licences granted under the Electricity Industry Act; and
- (b) the circumstances in and process by which the Economic Regulation Authority may communicate to the IMO information related to compliance with licences granted under the Electricity Industry Act that may have a bearing on compliance with the Market Rules.

## 2.16. Monitoring the Effectiveness of the Market

- 2.16.1. The IMO is responsible for collection and primary analysis of data in accordance with this clause 2.16. The IMO must:
  - (a) compile the data identified in the Market Surveillance Data Catalogue and provide that data to the Economic Regulation Authority; and
  - (b) analyse the compiled data in accordance with clause 2.16.4 and provide the results of the analysis to the Economic Regulation Authority.
- 2.16.2. The IMO must develop a Market Surveillance Data Catalogue, which identifies data to be compiled concerning the market. The Market Surveillance Data Catalogue must identify the following data items:
  - (a) the number of Market Generators and Market Customers in the market;
  - (b) the number of participants in each Reserve Capacity Auction;
  - (c) clearing prices in each Reserve Capacity Auction and STEM Auctions;
  - (d) Balancing Data prices and other Standing Data prices used in Balancing;
  - (dA) all Reserve Capacity Auction offers;
  - (e) all bilateral quantities scheduled with the IMO;
  - (f) all STEM Offers and STEM Bids, including both quantity and price terms;
  - (g) [Blank]
  - (gA) all Fuel Declarations;
  - (gB) all Availability Declarations;
  - (gC) all Ancillary Service Declarations;
  - (h) any substantial variations in STEM Offer and STEM Bid prices or quantities relative to recent past behaviour;
  - (hA) any evidence that a Market Customer has significantly over-stated its consumption as indicated by its Net Contract Position with a regularity that cannot be explained by a reasonable allowance for forecast uncertainty or the impact of Loss Factors;

- the capacity available through Balancing from Generators and Non-Scheduled Generators and Dispatchable Loads;
- (j) the frequency and nature of Dispatch Instructions to Market Participants other than the Electricity Generation Corporation;
- (k) the number and frequency of outages of Scheduled Generators and Non-Scheduled Generators, and Market Participants' compliance with the outage scheduling process;
- (I) the performance of Market Participants with Reserve Capacity Obligations in meeting their obligations;
- (m) details of Ancillary Service Contracts and Balancing Support Contracts that System Management enters into;
- (n) [Blank]
- (o) the number of Rule Change Proposals received, and details of Rule Change Proposals that the IMO has decided not to progress under clause 2.5.6; and
- (p) such other items of information as the IMO considers relevant to the functions of the IMO and the Economic Regulation Authority under this clause 2.16.
- 2.16.3. The IMO must publish the Market Surveillance Data Catalogue, and must republish this document whenever it changes.
- 2.16.4. The IMO must undertake the following analysis of the data identified in the Market Surveillance Data Catalogue to calculate relevant summary statistics:
  - (a) where applicable, calculation of the means and standard deviations of values in the Market Surveillance Data Catalogue;
  - (b) monthly, quarterly and annual moving averages of prices for the STEM Auctions and Balancing;
  - (c) statistical analysis of the volatility of prices in the STEM Auctions and Balancing;
  - (cA) any consistent or significant variations between the Fuel Declarations, Availability Declarations, and Ancillary Service Declarations for, and the actual operation of, a Market Participant facility in real-time;
  - (d) the proportion of time the prices in the STEM Auctions and through Balancing are at each Energy Price Limit;
  - (e) correlation between capacity offered into the STEM Auctions and the incidence of high prices;
  - (f) correlation between capacity available in the Balancing and the incidence of high prices; and

- (g) exploration of the key determinants for high prices in the STEM and Balancing, including determining correlations or other statistical analysis between explanatory factors that the IMO considers relevant and price movements; and
- (h) such other analysis as the IMO considers appropriate or is requested of the IMO by the Economic Regulation Authority.
- 2.16.5. The IMO must, on request from the Economic Regulation Authority, and in any event at least once each month, provide the Economic Regulation Authority with the data identified in the Market Surveillance Data Catalogue and the results of the analysis on that data referred to in clause 2.16.4.
- 2.16.6. Where the Economic Regulation Authority considers that it is necessary or desirable for the performance of its functions or the functions of the IMO under this clause 2.16, the Economic Regulation Authority may collect additional information from Rule Participants as follows:
  - (a) the Economic Regulation Authority may issue a notice to one or more Rule Participants requiring them to provide specified data to the Economic Regulation Authority by a date (which the Economic Regulation Authority considers to be reasonable);
  - (b) Market Participants must provide any information requested by the Economic Regulation Authority by the date specified in the notice; and
  - (c) the Economic Regulation Authority must provide this information to the IMO where the Economic Regulation Authority considers that it is necessary or desirable for the performance of the IMO's functions under this clause 2.16.
- 2.16.7. Without limitation, additional information that can be collected by the Economic Regulation Authority includes:
  - (a) cost data for the Electricity Generation Corporation, including actual fuel costs by Trading Interval;
  - (b) System Management's operational records, including SCADA records, of the level of utilisation and fuel related data for each of the Electricity Generation Corporation's Registered Facilities by Trading Interval; and
  - (c) the terms of Bilateral Contracts entered into by the Electricity Generation Corporation and the Electricity Retail Corporation.
- 2.16.8. Rule Participants may notify the IMO or the Economic Regulation Authority of behaviour that they consider reduces the effectiveness of the market, including behaviour related to market power, and the Economic Regulation Authority, with the assistance of the IMO, must investigate the behaviour identified in each relevant notification.

- 2.16.9. The Economic Regulation Authority is responsible for monitoring the effectiveness of the market in meeting the Wholesale Market Objectives and must investigate any market behaviour if it considers that the behaviour has resulted in the market not functioning effectively. The Economic Regulation Authority, with the assistance of the IMO, must monitor:
  - (a) Ancillary Service Contracts and Balancing Support Contracts that System Management enters into and the criteria and process that System Management uses to procure Ancillary Services and balancing support services from other persons;
  - (b) inappropriate and anomalous market behaviour, including behaviour related to market power and the exploitation of shortcomings in the Market Rules or Market Procedures by Rule Participants including, but not limited to:
    - prices offered by a Market Generator in its Portfolio Supply Curve that do not reflect the Market Generator's reasonable expectation of the short run marginal cost of generating the relevant electricity;
    - ii. [Blank]
    - iii. Balancing Data price changes, and changes in other Standing Data prices used in Balancing, that cannot be justified by an underlying change in cost;
    - iv. Availability Declarations that may not reflect the reasonable expectation of a facilities availability, beyond outages of which System Management has been notified;
    - v. Ancillary Service Declarations that may not reflect the reasonable expectation of the ancillary services to be provided by a facility; and
    - vi. Fuel Declarations that may not reflect the reasonable expectation of the fuel that a facility will be run on in real-time.
  - (c) market design problems or inefficiencies; and
  - (d) problems with the structure of the market.
- 2.16.9A. The IMO must assist the monitoring activities identified in clause 2.16.9(b)(i) by examining prices in STEM Submissions, including Standing STEM Submissions, used in forming STEM Bids and STEM Offers against information collected from Rule Participants in accordance with clauses 2.16.6 and 2.16.7.
- 2.16.9B. Where the IMO concludes that prices offered by a Market Generator in its Portfolio Supply Curve may not reflect the Market Generator's reasonable expectation of the short run marginal cost of generating the relevant electricity and the IMO considers that the behaviour relates to market power the IMO must:
  - (a) as soon as practicable, request an explanation from the Market Participant which has made the relevant STEM Submission; and

- (b) advise the Economic Regulation Authority of its conclusions. The IMO advice must outline the reasons for the IMO's conclusions.
- 2.16.9C. The Market Participant must submit the explanation requested under clause 2.16.9B within 2 Business Days from receiving the request.
- 2.16.9D. The IMO must publish the explanation submitted under clause 2.16.9C on the Market Web Site as soon as practicable.
- 2.16.9E. Where the Economic Regulation Authority receives an advice from the IMO under clause 2.16.9B(b) or receives a notification from a Rule Participant under clause 2.16.8, the Economic Regulation Authority must investigate the identified behaviour. Without limitation, for this purpose the Economic Regulation Authority must examine the IMO advice, any explanation received under clause 2.16.9C, any data already in the possession of the Economic Regulation Authority or additional data it requests from the relevant Market Participant under clause 2.16.6 to assist in the investigations.
- 2.16.9F Subject to clause 2.16.FA, the Economic Regulation Authority must publish the results of its investigations within six months from receiving the IMO advice under clause 2.16.9B(b) or from receiving a notification from a Rule Participant under clause 2.16.8. If that day is not a Business Day, then the next Business Day following that six month period will apply.
- 2.16.9FA Subject to clause 2.16.9FB, the Economic Regulation Authority may extend the timeframe for an investigation under clause 2.16.9E for a period of up to six months, to the nearest Business Day following that six month extension period. Where the Economic Regulatory Authority makes such an extension it must notify the IMO and the IMO must publish a notice of the extension on the Market Web Site within one Business Day of receiving the notification. The Economic Regulation Authority may extend the timeframe for an investigation more than once.
- 2.16.9FB For investigations of matters notified under clause 2.16.8, a notice of extension must not include any information identifying the Market Participant under investigation.
- 2.16.9G. Where the Economic Regulation Authority determines that prices in the Portfolio Supply Curve, subject to the investigation, did not reflect the Market Generator's reasonable expectation of the short run marginal cost of generating the relevant electricity, the Economic Regulation Authority must request that the IMO applies to the Electricity Review Board for an order for contravention of clause 6.6.3.
- 2.16.9H. Where the IMO receives a request under clause 2.16.9G the IMO must refer the relevant matter to the Electricity Review Board requesting that a civil penalty be imposed on the relevant Market Participant.

- 2.16.10. The Economic Regulation Authority must also review:
  - (a) the effectiveness of the Market Rule change process and Procedure change process;
  - (b) the effectiveness of the compliance monitoring and enforcement measures in the Market Rules and Regulations;
  - (c) the effectiveness of the IMO in carrying out its functions under the Regulations, the Market Rules and Market Procedures; and
  - (d) the effectiveness of System Management in carrying out its functions under the Regulations, the Market Rules and Market Procedures.
- 2.16.11. The Economic Regulation Authority must provide to the Minister a report on the effectiveness of the market and dealing with the matters identified in clauses 2.16.9 and 2.16.10:
  - (a) at least annually; and
  - (b) more frequently where the Economic Regulation Authority considers that the market is not effectively meeting the Wholesale Market Objectives.
- 2.16.12. A report referred to in clause 2.16.11 must contain:
  - (a) a summary of the information and data compiled by the IMO and the Economic Regulation Authority under clause 2.16.1;
  - (b) the Economic Regulation Authority's assessment of the effectiveness of the market, including the effectiveness of the IMO and System Management in carrying out their functions, with discussion of each of:
    - i. the Reserve Capacity market;
    - ii. the market for bilateral contracts for capacity and energy;
    - iii. the STEM;
    - iv. Balancing;
    - v. the dispatch process;
    - vi. planning processes; and
    - vii. the administration of the market, including the Market Rule change process;
  - (c) an assessment of any specific events, behaviour or matters that impacted on the effectiveness of the market; and
  - (d) any recommended measures to increase the effectiveness of the market in meeting the Wholesale Market Objectives to be considered by the Minister.
- 2.16.13. In carrying out its responsibilities under clause 2.16.9(b), the Economic Regulation Authority must:

- (a) estimate the prevalence of such behaviour;
- (b) estimate the cost to end users of such behaviour;
- (c) estimate the impact of such behaviour on the effectiveness of the market in meeting the market objectives;
- (d) consult with Market Participants on the impacts of such behaviour;
- (e) estimate the benefits and costs of any recommended measure to reduce such behaviour. The Economic Regulation Authority:
  - i. may use market simulation tools to estimate the benefits and costs;
  - ii. must give consideration to:
    - 1. the probability of success of the measure in reducing the behaviour;
    - 2. the implications on the efficiency of the market of implementing the measure; and
    - 3. the costs of compliance as a result of implementing the measure:
- (f) where the benefits of any change are estimated to exceed the cost, make recommendations to the Minister for implementing the measures in a report under clause 2.16.11; and
- (g) provide details of its findings in a report to the Minister under clause 2.16.11.
- 2.16.14. The Economic Regulation Authority must use any information collected under this clause 2.16, including information provided to it by the IMO, only for the purpose of carrying out its functions under this clause 2.16. The Economic Regulation Authority must treat information collected as confidential and must not publish any of that information other than in accordance with this clause 2.16. The IMO must use information provided to it by the Economic Regulation Authority under clause 2.16.6(c) only for the purpose of carrying out its functions under this clause 2.16. The IMO must treat information provided to it by the Economic Regulation Authority under clause 2.16.6(c) as confidential and must not publish any of that information other than in accordance with this clause 2.16.
- 2.16.15. Where the Economic Regulation Authority provides a report to the Minister in accordance with clause 2.16.11, it must, after consultation with the Minister, publish a version of the report which has confidential or sensitive data aggregated or removed. An assessment of the results of the Economic Regulation Authority's monitoring under clause 2.16.9(b) must be included in the published version of the report.
- 2.16.16. In respect of any reports published under this clause 2.16, only aggregate or summary statistics of confidential data may be published. The aggregation must

be at a level sufficient to ensure the underlying data cannot be identified. Where aggregated data is derived from confidential data collected from three or less Market Participants, then this data should not be published.

# **Reviewable Decisions and Disputes**

### 2.17. Reviewable Decisions

- 2.17.1. Decisions by the IMO made under the following clauses are Reviewable Decisions:
  - (a) clause 2.3.8;
  - (aA) clause 2.5.9;
  - (aB) clause 2.6.4(f);
  - (aC) clause 2.7.8(e);
  - (aD) clause 2.10.13;
  - (aE) clause 2.10.14;
  - (b) clause 2.13.28;
  - (c) clause 2.28.16;
  - (d) clauses 2.30.4 and 2.30.8;
  - (e) clause 2.31.10;
  - (eA) Clause 2.32.7E(b);
  - (f) clause 2.34.7;
  - (g) clause 2.34.11;
  - (h) clauses 2.37.1 to 2.37.3;
  - (i) [Blank]
  - (j) clause 4.9.9;
  - (k) clause 4.15.1;
  - (I) clause 4.27.7;
  - (m) clause 4.28.7;
  - (n) [Blank]
  - (o) [Blank]
  - (p) clause 10.2.1.
- 2.17.2. Decisions by the IMO made under the following clauses may be subject to a Procedural Review:
  - (a) clauses 2.5.9, 2.6.4(f) and 2.7.8(e);

- (b) clauses 2.10.13, 2.10.14.
- 2.17.3. In accordance with the Regulations, a Rule Participant may apply to the Electricity Review Board for a review of Reviewable Decisions or a decision made under clauses subject to Procedural Review.

## 2.18. Disputes

- 2.18.1. The dispute process set out in clauses 2.18, 2.19 and 2.20 applies to any dispute concerning:
  - (a) the application or interpretation of these Market Rules;
  - (b) the failure of Rule Participants to reach agreement on a matter where these Market Rules require agreement or require the Rule Participants to negotiate in good faith with a view to reaching agreement;
  - (c) payment of moneys under, or the performance of any obligation under, these Market Rules,

but does not apply to:

- (d) any matter that is identified as a Reviewable Decision or is subject to Procedural Review; or
- (e) a matter that arises under a contract between Rule Participants, unless the IMO is a party to the contract and the contract provides that the dispute process applies.
- 2.18.2. For the purposes of these Market Rules, the "Dispute Participants" are the Rule Participants raising the dispute, the IMO and all Rule Participants named in a Notice of Dispute or joined to the dispute in accordance with clause 2.19.5.
- 2.18.3. At any time during the course of resolving a dispute a Dispute Participant may refer a question of law to a court of competent jurisdiction.
- 2.18.4. Dispute Participants must not agree to actions to be taken in resolution of a dispute that are inconsistent with the Market Rules.

#### 2.19. First Stage Dispute Resolution

- 2.19.1. Where a Rule Participant wishes to raise a dispute with another Rule Participant concerning a matter to which this dispute process applies, it may issue a Notice of Dispute to each other Rule Participant that is a party to the dispute within 12 months of the matter giving rise to the dispute.
- 2.19.2. The Rule Participant raising the dispute may name any Rule Participant in a Notice of Dispute that the Rule Participant raising the dispute considers may be affected by the dispute or resolution of the dispute.

- 2.19.3. The Notice of Dispute must be in writing and must contain:
  - (a) the date on which the Notice of Dispute was issued;
  - (b) the identity of the Rule Participant issuing the Notice of Dispute;
  - (c) the identities of the other Rule Participants party to the dispute;
  - (d) the details of the dispute, including a description of the disputed actions, and the time and date when the disputed actions occurred; and
  - (e) the contact person for the Rule Participant issuing the dispute, and their mailing address.
- 2.19.4. A Rule Participant receiving a Notice of Dispute under clause 2.19.1 must supply a confirmation of the receipt of the Notice of Dispute within two Business Days of receipt of the Notice of Dispute, including details of a contact person and their mailing address.
- 2.19.5. Where the IMO receives a Notice of Dispute and it considers that a Rule Participant not named in the Notice of Dispute may be affected by the dispute or resolution of the dispute, it may, within 10 Business Days of receiving the Notice of Dispute, join the Rule Participant to the dispute by notifying the Rule Participant of the dispute and providing a copy of the Notice of Dispute.
- 2.19.6. The Chief Executive Officers, or their designated representatives with authority to resolve the dispute, from all Dispute Participants must make reasonable endeavours to meet on one or more occasions, and to attempt in good faith and using their best endeavours at all times to resolve the dispute.
- 2.19.7. A dispute must be escalated to the second stage dispute resolution process in clause 2.20 if the Dispute Participants have not resolved the dispute (as evidenced by the terms of the settlement being reduced to writing and signed by each Chief Executive Officer) within:
  - (a) a time period agreed by all Dispute Participants; or
  - (b) if no time period is agreed by all Dispute Participants, within 60 days of the date on which the Notice of Dispute was issued.

#### 2.20. Second Stage Dispute Resolution

- 2.20.1. Where any Dispute is not resolved as provided for in clause 2.19 then the Dispute Participants must give consideration to resolving the dispute through mediation, conciliation, arbitration or alternative dispute resolution methods, using an independent body agreed between the Dispute Participants.
- 2.20.2. If any Dispute is not resolved as provided for in clause 2.19 and a Dispute Participant has given consideration to resolving the dispute in accordance with

clause 2.20.1, then that Dispute Participant may commence proceedings before a court of competent jurisdiction in relation to the dispute.

# **Market Consultation**

#### 2.21. Market Consultation

- 2.21.1. The IMO must consult on such matters with such persons and over such timeframes as are specified in these Market Rules.
- 2.21.2. The IMO must:
  - (a) conduct its consultation processes in good faith; and
  - (b) ensure that these consultation processes allow a reasonable opportunity for relevant stakeholders to present their views.
- 2.21.3. System Management must consult on such matters with such persons and over such timeframes as are specified in these Market Rules.
- 2.21.4. System Management must:
  - (a) conduct its consultation processes in good faith; and
  - (b) ensure that these consultation processes allow a reasonable opportunity for relevant stakeholders to present their views.

# **Budgets and Fees**

#### 2.22. Determination of the IMO's budget

- 2.22.1. For the purposes of this clause 2.22, the services provided by the IMO are:
  - market operation services, including the IMO's operation of the Reserve Capacity market, STEM and Balancing and the IMO's settlement and information release functions;
  - (b) system planning services, including the IMO's performance of the Long Term PASA function; and
  - (c) market administration services, including the IMO's performance of the Market Rule change process, Market Procedure change process, the operation of the Market Advisory Committee and other consultation, monitoring, enforcement, audit, registration related functions and other functions under these Market Rules.
- 2.22.2. Prior to the establishment of the IMO the Minister must determine the budget of the IMO, for each of the services described in clause 2.22.1.

- 2.22.3. For the Review Period, the IMO must seek the approval of its Allowable Revenue from the Economic Regulation Authority for each of the services described in clause 2.22.1 in accordance with the following:
  - by 30 November of the year prior to the start of the Review Period, the IMO must submit a proposal for its Allowable Revenue over the Review Period;
  - (b) the Economic Regulation Authority must undertake a public consultation process in approving the Allowable Revenue for the IMO for a Review Period, which must include publishing an issues paper and issuing an invitation for public submissions;
  - (c) by 31 March of the year in which the Review Period commences, the Economic Regulation Authority must determine the Allowable Revenue of the IMO for the Review Period for each of the services described in clause 2.22.1.
- 2.22.4. Where the Economic Regulation Authority does not make a determination by the date specified in clause 2.22.3(c), the Allowable Revenue from the previous Review Period, or the budget determined by the Minister under clause 2.22.2, as applicable, will continue to apply until the Economic Regulation Authority makes a determination.
- 2.22.5. Following the establishment of the IMO, by 30 April each year, the IMO must prepare a budget proposal for each of the services described in clause 2.22.1 for the coming Financial Year and submit it to the Minister.
- 2.22.6. Following the first determination of the Allowable Revenue of the IMO by the Economic Regulation Authority under clause 2.22.3 and subject to clauses 2.22.7 and 2.22.8, the budget proposal must be consistent with the Allowable Revenue determined by the Economic Regulation Authority for the relevant Review Period.
- 2.22.7. Where the revenue earned for the services described in clause 2.22.1 via Market Fees in the previous Financial Year is greater than or less than the IMO's expenditure for that Financial Year, the current year's budget must take this into account by decreasing the budgeted revenue by the amount of the surplus or adding to the budgeted revenue the amount of any shortfall, as the case may be.
- 2.22.8. Where, taking into account any adjustment under clause 2.22.7, the budget proposal is likely to result in revenue recovery, over the relevant Review Period, more than 15% greater than the Allowable Revenue determined by the Economic Regulation Authority, the IMO must apply to the Economic Regulation Authority to reassess the Allowable Revenue. The IMO must endeavour to make such an application in sufficient time to allow its budget proposal to be approved under clause 2.22.9 before the commencement of the Financial Year to which it relates. The Economic Regulation Authority may amend a determination under clause

- 2.22.3(c) if the IMO makes an application under this clause 2.22.8. Clause 2.22.3(b) applies in the case of an application under this clause 2.22.8.
- 2.22.9. The Minister must make a decision on the budget proposal within 30 Business Days, and notify the IMO of the decision. The Minister may:
  - (a) approve the budget proposal; or
  - (b) refer the budget proposal back to the IMO for re-consideration in accordance with any directions or recommendations of the Minister.

When the Minister refers the budget proposal back to the IMO, the IMO must reconsider the proposal in accordance with any directions or recommendations of the Minister and re-submit a revised budget proposal to the Minister, in which case this clause 2.22.9 applies.

- 2.22.10. Where the Minister does not approve a budget proposal in accordance with clause 2.22.9 prior to the commencement of the Financial Year to which it relates, the prior year's budget and any market fees derived from that budget in accordance with clause 2.24 continue to apply until the Minister makes a decision.
- 2.22.11. The IMO must publish the approved budget within five Business Days following the Minister approving the budget in accordance with clause 2.22.9.
- 2.22.12. The Economic Regulation Authority must take the following into account when determining the Allowable Revenue of the IMO:
  - (a) the Allowable Revenue must be sufficient to cover the forward looking costs of providing the services described in clause 2.22.1 and performing its functions and obligations under these Market Rules in accordance with the following principles:
    - recurring expenditure requirements and payments are recovered in the year of the expenditure;
    - capital expenditures are to be recovered through the depreciation and amortisation of the assets acquired by the capital expenditure in a manner that is consistent with generally accepted accounting principles;
    - iii. costs incurred by the IMO that are related to market establishment, as designated by the Minister, are to be recovered over a period determined by the Minister from Energy Market Commencement; and
    - iv. notwithstanding paragraphs (i), (ii) and (iii), expenditure incurred, and depreciation and amortisation charged, in relation to any Declared Market Project are to be recovered over the period determined for that Declared Market Project.

- (b) the Allowable Revenue must include only costs which would be incurred by a prudent provider of the services described in clause 2.22.1, acting efficiently, seeking to achieve the lowest practicably sustainable cost of delivering the services described in clause 2.22.1 in accordance with these Market Rules, while effectively promoting the Wholesale Market Objectives.
- (c) where possible, the Economic Regulation Authority should benchmark the Allowable Revenue against the costs of providing similar services in other jurisdictions.
- 2.22.13. Subject to clause 2.22.14, the IMO may declare a project to be a Declared Market Project if:
  - (a) the project involves:
    - i. a major change to a function of the IMO or System Management under these Market Rules; or
    - ii. a major change to any of the computer software or systems that the IMO or System Management uses in the performance of any of its functions under these Market Rules; and
  - (b) the IMO estimates that the cost to implement the changes would cause either the IMO's budget or System Management's budgets during the current Review Period to exceed their respective approved Allowable Revenue by more than 15%.
- 2.22.14. Before the IMO commences a Declared Market Project the IMO must obtain approval from the Economic Regulation Authority for an increase in the Allowable Revenue relevant to the Declared Market Project, including the period over which the incremental Allowable Revenue will apply.

### 2.23. Determination of System Management's budget

- 2.23.1. For the purposes of this clause 2.23, the services provided by System Management are:
  - (a) system operation services, including all of System Management's functions and obligations under these Market Rules.
- 2.23.2. For each year until the process referred to in clause 2.23.3 to 2.23.10 applies, the Shareholding Minister must determine the budget of System Management for the services described in clause 2.23.1.
- 2.23.3. For each Review Period, System Management must seek the approval of its Allowable Revenue from the Economic Regulation Authority in accordance with the following:

- (a) by 30 November of the year prior to the start of the Review Period, System Management must submit a proposal for its costs over the Review Period;
- (b) the Economic Regulation Authority must undertake a public consultation process, which must include publishing an issues paper and issuing an invitation for public submissions;
- (c) by 31 March of the year in which the Review Period commences, the Economic Regulation Authority must determine the Allowable Revenue of System Management for the Review Period for the services described in clause 2.23.1.
- 2.23.4. Where the Economic Regulation Authority does not make a determination by the date specified in clause 2.23.3(c), the Allowable Revenue from the previous Review Period, or the budget determined by the Shareholding Minister under clause 2.33.1, as applicable, will continue to apply until the Economic Regulation Authority makes a determination.
- 2.23.5. Following the first determination of the Allowable Revenue of System Management by the Economic Regulation Authority in accordance with clause 2.23.3, by 30 April each year System Management must prepare a budget proposal for the services described in clause 2.23.1 for the coming Financial Year.
- 2.23.6. Subject to clauses 2.23.7 and 2.23.8, the budget proposal must be consistent with the Allowable Revenue determined by the Economic Regulation Authority for the relevant Review Period.
- 2.23.7. Where the revenue earned for a service described in clause 2.23.1 via System Operation Fees in the previous Financial Year is greater than or less than System Management's expenditure for that Financial Year, the current year's budget must take this into account by decreasing the budgeted revenue by the amount of the surplus or adding to the budgeted revenue the amount of any shortfall, as the case may be.
- 2.23.8. Where, taking into account any adjustment under clause 2.23.7, the budget proposal is likely to result in revenue recovery, over the relevant Review Period, more than 15% greater than the Allowable Revenue determined by the Economic Regulation Authority, System Management must apply to the Economic Regulation Authority to reassess the Allowable Revenue. System Management must endeavour to make such an application in sufficient time to meet its obligation under clause 2.23.9. The Economic Regulation Authority may amend a determination under clause 2.23.3(c) if System Management makes an application under this clause 2.23.8. Clause 2.23.3(b) applies in the case of an application under this clause 2.23.8.
- 2.23.9. System Management must provide a copy of its budget proposal to the IMO by 30 April each year. The IMO must review the budget proposal and submit a report

- containing advice on whether System Management's budget is consistent with the Allowable Revenue determined by the Economic Regulation Authority, including the reasons why, to the Minister by 31 May.
- 2.23.10. The budget proposal must be reflected in the Statement of Corporate Intent for the Electricity Networks Corporation and must be consistent with the segregation of System Management from other business units of the Electricity Networks Corporation.
- 2.23.11. System Management must provide its approved budget to the IMO and the IMO must publish the approved budget by 30 June each year.
- 2.23.12. The Economic Regulation Authority must take the following into account when determining the Allowable Revenue of System Management:
  - (a) the Allowable Revenue must be sufficient to cover the forward looking costs of providing the services described in clause 2.23.1 and performing its functions and obligations under these Market Rules in accordance with the following principles:
    - recurring expenditure requirements and payments are recovered in the year of the expenditure;
    - capital expenditures are to be recovered through the depreciation and amortisation of the assets acquired by the capital expenditure in a manner that is consistent with generally accepted accounting principles;
    - iii. costs incurred by System Management that are related to market establishment, as designated by the Minister, are to be recovered over a period determined by the Minister from Energy Market Commencement; and
    - iv. notwithstanding paragraphs (i), (ii) and (iii), expenditure incurred, and depreciation and amortisation charged, in relation to any Declared Market Project are to be recovered over the period determined for that Declared Market Project.
  - (b) the Allowable Revenue must include only costs which would be incurred by a prudent provider of the services described in clause 2.23.1, acting efficiently, in accordance with good electricity industry practice, seeking to achieve the lowest practicably sustainable cost of delivering the services described in clause 2.23.1 in accordance with these Market Rules, while effectively promoting the Wholesale Market Objectives; and
  - (c) where possible, the Economic Regulation Authority should benchmark the Allowable Revenue against the costs of providing similar services in other jurisdictions.

#### 2.24. Determination of Market Fees

- 2.24.1. The fees charged by the IMO are:
  - (a) Market Fees, System Operation Fees and Regulator Fees determined in accordance with clause 2.24.2;
  - (b) Application Fees described in clauses 2.33.1(a), 2.33.2(a), 2.33.3(a), 2.33.4(a), 2.33.5(a) and 4.9.3(c); and
  - (c) a Reassessment Fee described in clause 4.11.11.
- 2.24.2. Before 30 June each year, the IMO must determine and publish the level of the Market Fee rate, System Operation Fee rate and Regulator Fee rate, and the level of each of the Application Fees, and the level of the Reassessment Fee to apply over the year starting 1 July. Where:
  - (a) the Minister has not approved the IMO's budget proposal, the IMO will determine and publish the expected level of Market Fee rate for the IMO based on the most recent budget proposal (or revised budget proposal) provided to the Minister under clause 2.22.9;
  - (b) System Management has not provided the IMO with its approved budget, under clause 2.23.11, the IMO will determine and publish the expected level of System Operation Fee rate for System Management based on the most recent budget information provided to the IMO under either clause 2.23.9 or clause 2.23.11; and
  - (c) the Economic Regulation Authority has not provided the IMO with the information required under clause 2.24.6 by the date which is five Business Days prior to 30 June, the IMO will determine and publish the expected level of Regulator Fee rate based on the most recent information provided to the IMO by the Economic Regulation Authority under clause 2.24.6.
- 2.24.2A. The IMO must determine and publish a level of revised Market Fee rate, System Operation Fee rate or Regulator Fee rate (as applicable) within five Business Days of receiving the information, if in any year:
  - (a) the Minister notifies approval of the IMO budget proposal later than 30 June; or
  - (b) System Management provides the IMO with its approved budget under clause 2.23.11 later than 30 June; or
  - (c) the Economic Regulation Authority provides the IMO with the information required under clause 2.24.6 later than the date which is five Business Days prior to 30 June.
- 2.24.2B A revised Market Fee rate, System Operation Fee rate and Regulator Fee rate will supersede any expected Market Fee rate, System Operation Fee rate and

Regulator Fee rate and are recoverable from Market Participants in arrears with effect from the start of the Financial Year to which they apply.

- 2.24.3. At the same time, the IMO must also publish an estimate of the total amount of revenue to be earned from:
  - (a) Market Fees collected for the IMO's:
    - i. market operation services;
    - ii. system planning services; and
    - iii. market administration services,

where the amounts to be earned for each service is equal to the relevant costs in the IMO's approved budget published in accordance with clause 2.22.11;

- (b) System Operation Fees collected for System Management's:
  - i. system operation services;

where the amount to be earned is equal to the relevant costs in System Management's budget published in accordance with clause 2.23.11; and

- (c) Regulator Fees collected for the Economic Regulation Authority's monitoring and regulation services,
  - where the amount must be consistent with the amount notified in accordance with clause 2.24.6.
- 2.24.4. The Market Fee rate, System Operation Fee rate and Regulator Fee rate should be set at a level that the IMO estimates will earn revenue equal to the relevant estimate of revenue under clause 2.24.3.
- 2.24.5. The Economic Regulation Authority may recover a portion of its budget determined by the Minister responsible for the Economic Regulation Authority which corresponds to the costs of the Economic Regulation Authority in undertaking its Wholesale Electricity Market related functions and other functions under these Market Rules from the collection of Regulator Fees under these Market Rules.
- 2.24.5A Where the revenue earned via Regulator Fees in the previous Financial Year is greater than or less than the Economic Regulation Authority expenditure related to the functions described in clause 2.24.5 for that Financial Year, the current year's budget must take this into account by decreasing the budgeted revenue by the amount of the surplus or adding to the budgeted revenue the amount of any shortfall, as the case may be.
- 2.24.6. By the date which is five Business Days prior to 30 June each year, the Economic Regulation Authority must notify the IMO of the dollar amount that the Economic Regulatory Authority may recover under clause 2.24.5.

- 2.24.7. The level of each Application Fee:
  - (a) must reflect the estimated average costs to the IMO of processing that type of application;
  - (b) must be consistent with the Allowable Revenue approved by the Economic Regulation Authority; and
  - (c) may be different for different classes of Rule Participant and different classes of facility.

## 2.25. Payment of Market Participant Fees

- 2.25.1. The IMO must charge a Market Participant the relevant payment amount for Market Fees, System Operation Fees and Regulator Fees for a Trading Month in accordance with clause 9.13.
- 2.25.2. Each Market Participant must pay the relevant payment amount for Market Fees, System Operation Fees and Regulator Fees in accordance with Chapter 9.
- 2.25.3. Following receipt of a payment contemplated by clause 2.25.2, the IMO must:
  - (a) pay each of System Management and the Economic Regulation Authority in accordance with Chapter 9 an amount corresponding to the part of the payment received multiplied by the relevant proportionality factor;
  - (b) transfer to the fund established under clause 9.22.9 in accordance with Chapter 9 an amount corresponding to the part of the payment received multiplied by the relevant proportionality factor.
- 2.25.4. The relevant proportionality factor for the IMO, System Management or the Economic Regulatory Authority for a Financial Year is:
  - (a) the estimate of the total amount to be earned from Market Fees, System Operation Fees or Regulator Fees (as applicable) in respect of its services published for the relevant year under clause 2.24.3; divided by
  - (b) the estimate of the total amount to be earned from Market Fees, System Operation Fees and Regulator Fees in respect of all services published for the relevant year under clause 2.24.3.
- 2.25.5. Rule Participants must pay the relevant Application Fee upon submitting an application form in accordance with clause 2.31.2, or in accordance with clause 4.9.3, as applicable.

# **Maximum and Minimum Prices and Loss Factors**

# 2.26. Economic Regulation Authority Approval of Maximum and Minimum Prices

- 2.26.1. Where the IMO has proposed a revised value for the Maximum Reserve Capacity Price in accordance with clause 4.16 or a change in the value of one or more Energy Price Limits in accordance with clause 6.20, the Economic Regulation Authority must:
  - (a) review the report provided by the IMO, including all submissions received by the IMO in preparation of the report;
  - (b) make a decision as to whether or not to approve the revised value for the Maximum Reserve Capacity Price or any value comprising the Energy Price Limits;
  - (c) in making its decision, only consider:
    - i. whether the proposed revised value for the Maximum Reserve Capacity Price or Energy Price Limit proposed by the IMO reasonably reflects the application of the method and guiding principles described in clauses 4.16 or 6.20 (as applicable);
    - ii. whether the IMO has carried out an adequate public consultation process; and
  - (d) notify the IMO as to whether or not it has approved the revised value.
- 2.26.2. Where the Economic Regulation Authority rejects a revised Maximum Reserve Capacity Price or the Energy Price Limits submitted by the IMO it must give reasons and may direct the IMO to carry out all or part of the review process under clause 4.16 or 6.20 (as applicable) again in accordance with any directions or recommendations of the Economic Regulation Authority.
- 2.26.3. The Economic Regulation Authority must review the methodology for setting the Maximum Reserve Capacity Price and the Energy Price Limits not later than the fifth anniversary of the first Reserve Capacity Cycle and, subsequently, not later than the fifth anniversary of the completion of the preceding review under this clause 2.26.3. A review must examine:
  - (a) the level of competition in the market;
  - (b) the level of market power being exercised and the potential for the exercise of market power;
  - (c) the effectiveness of the methodology in curbing the use of market power;
  - (d) historical Reserve Capacity Offers and the proportion of Reserve Capacity Offers with prices equal to the Maximum Reserve Capacity Price;

- historical STEM Bids and STEM Offers and the proportion of STEM Bids and Offers with prices equal to the Energy Price Limits;
- (f) the appropriateness of the parameters and methodology in clauses 4.16 and the Market Procedure referred to in clause 4.16.3 for recalculating the Maximum Reserve Capacity Price;
- (g) the appropriateness of the parameters and methodology in clause 6.20 for recalculating the Energy Price Limits;
- (h) the performance of Reserve Capacity Auctions, STEM Auctions and Balancing in meeting the Wholesale Market Objectives; and
- (i) other matters which the Economic Regulation Authority considers relevant.
- 2.26.4. The Economic Regulation Authority must provide a report to the Minister on the review conducted under clause 2.26.3.

#### 2.27. Determination of Loss Factors

- 2.27.1. By 1 June of each year Network Operators must calculate and provide to the IMO Loss Factors for each connection point in their Networks at which any of the following is connected:
  - (a) a Scheduled Generator;
  - (b) a Non-Scheduled Generator;
  - (c) a Non-Dispatchable Load;
  - (d) an Interruptible Load; or
  - (e) [Blank]
  - (f) a Dispatchable Load.
- 2.27.1A. A Market Participant may request, during the process of obtaining a relevant Arrangement for Access, that the relevant Network Operator determine and provide to the IMO, Loss Factors to apply to a facility or a Non-Dispatchable Load where there are no Loss Factors applying to the connection point at which the facility or the Non-Dispatchable Load will be connected.
- 2.27.2. In calculating Loss Factors, Network Operators must apply the following principles:
  - (a) Loss Factors are static and apply to each connection point until new Loss Factors are calculated in accordance with clause 2.27.1 or 2.27.4(d);
  - (b) Loss Factors must represent the marginal losses for a connection point relative to the Reference Node, averaged over all Trading Intervals in a year, weighted by the absolute value of the net demand at that connection point during the Trading Interval;
  - (c) Loss Factors must be calculated using:

- i. generation and load meter data from the preceding 12 months; or
- iA. for a new facility or a Non-Dispatchable Load, any other relevant data provided to the Network Operator by the Market Participant and as agreed with the Network Operator and the IMO, and
- ii. an appropriate network load flow software package; and
- (d) Loss Factors must include transmission and distribution losses;
- (e) a specific Loss Factor must be calculated for each:
  - i. Scheduled Generator;
  - ii. Non-Scheduled Generator;
  - iii. [Blank]
  - iv. Interruptible Load;
  - v. Dispatchable Load; and
  - vi. Non-Dispatchable Load above 1000kVA peak consumption;
- (f) the same Loss Factor will apply to all Non-Dispatchable Loads less than 1000kVA peak consumption, and will be determined on an averaged basis.
- 2.27.2A For the purpose of these Market Rules, where a Loss Factor must be applied to a Notional Wholesale Meter value then the loss factor described in clause 2.27.2(f) is to apply.
- 2.27.3. The IMO must publish the Loss Factors as soon as practicable after receiving them from all Network Operators.
- 2.27.3A. Once all Loss Factors are published in accordance with clause 2.27.3 or where one or more Loss Factors are changed in accordance with clauses 2.27.4(e) or 2.27.5 the IMO must publish the time from which the Loss Factor or Loss Factors will apply, where this must be from the commencement of a Trading Day.
- 2.27.3B. In setting the time from which a Loss Factor or Loss Factors will apply in accordance with clause 2.27.3A the IMO must allow sufficient time for Market Participants to identify and update Standing Data that is dependent on Loss Factors.
- 2.27.4. A Market Participant may apply to the IMO for a re-assessment of any Loss Factor applying to a Scheduled Generator, Non-Scheduled Generator, Interruptible Load, Dispatchable Load or Non-Dispatchable Load registered to that Market Participant. The following process will apply to every application:
  - (a) the Market Participant must apply to the IMO in writing within 15 Business Days of receiving the notification of the Loss Factors, stating the Loss Factors that it believes to be in error and its reasons for believing that the Loss Factors should take some other value;

- (b) upon receiving such an application, the IMO must:
  - within two Business Days notify the relevant Network Operator that the IMO intends to carry out an audit of the Loss Factor calculation; and
  - ii. within 25 Business Days audit the Loss Factor calculation.
- (c) the relevant Network Operator must cooperate with the audit of the Loss Factor calculation by providing reasonable access to the data and calculations used in producing the Loss Factor.
- (d) Where the audit reveals an error in the Loss Factor calculation, the IMO must direct the Network Operator to recalculate the Loss Factor, and may instruct the Network Operator to recalculate other Loss Factors provided by that Network Operator.
- (e) Where the IMO directs the Network Operator to recalculate a Loss Factor, then the Network Operator must do so, and must provide the recalculated Loss Factor to IMO. The recalculated Loss Factor is substituted for the value previously applied with effect from the time published by the IMO in accordance with clause 2.27.3A.
- 2.27.5. Where a Network Operator fails to provide the IMO with a Loss Factor in accordance with clause 2.27.1 or 2.27.4(d), the IMO must continue to use the equivalent Loss Factor from the previous year until such time as the Network Operator has provided the IMO with the new Loss Factor and that Loss Factor has taken effect. The recalculated Loss Factor is substituted for the value previously applied with effect from the time published by the IMO in accordance with clause 2.27.3A.
- 2.27.6. The IMO must document standards, methodologies and procedures to be used in determining the Loss Factors in the Market Operations Procedure and Network Operators must follow that documented Market Procedure when determining the Loss Factors.

# Participation and Registration

## 2.28. Rule Participants

- 2.28.1. The classes of Rule Participant are:
  - (a) Network Operator;
  - (b) Market Generator;
  - (c) Market Customer;
  - (cA) Ancillary Service Providers;
  - (d) System Management; and

- (e) the IMO.
- 2.28.2. Subject to clauses 2.28.3 and 2.28.16, a person who owns, controls or operates a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, must register as a Rule Participant in the Network Operator class.
- 2.28.3. A person that owns, controls or operates a transmission system or distribution system may, but is not required to, register as a Rule Participant in the Network Operator class where both the following are satisfied:
  - (a) System Management informs the IMO that it has determined that it does not require information about the relevant network to maintain Power System Security and Power System Reliability; and
  - (b) no Market Participant Registered Facilities are directly connected to the transmission system or distribution system.
- 2.28.4. A person who intends to own, control or operate a transmission system or distribution system which will form part of the South West Interconnected System, or will be electrically connected to that system, may register as a Rule Participant in the Network Operator class.
- 2.28.5. Subject to clause 2.28.16, a person registered as a Network Operator may be registered as a Rule Participant in another class or other classes.
- 2.28.6. Subject to clause 2.28.16, a person who owns, controls or operates a generation system which has a rated capacity that equals or exceeds 10 MW and is electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, must register as a Rule Participant in the Market Generator class.
- 2.28.7. A person that owns, controls or operates a generation system which has a rated capacity of less than 10 MW, but which equals or exceeds 0.005 MW, and is electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, may register as a Rule Participant in the Market Generator class.
- 2.28.8. A person who intends to own, control or operate a generation system which has a rated capacity that equals or exceeds 0.005 MW and is or will be electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, may register as a Rule Participant in the Market Generator class.
- 2.28.9. Subject to clause 2.28.16, a person registered as a Market Generator may be registered as a Rule Participant in another class or other classes.

- 2.28.10. Subject to clause 2.28.16, a person who sells electricity to Contestable Customers in respect of facilities electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, must register as a Rule Participant in the Market Customer class.
- 2.28.11. A person who intends to sell electricity to Customers in respect of Facilities electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, may register as a Rule Participant in the Market Customer class.
- 2.28.11A. A person who intends to enter into an Ancillary Service Contract with System Management and who is not registered in any other Rule Participant Class must register as an Ancillary Service Provider;
- 2.28.11B. A person who is registered in a Rule Participant Class other than the Ancillary Service Provider class, or who does not intend to enter into an Ancillary Service Contract with System Management may not register as an Ancillary Service Provider.
- 2.28.12. Subject to clause 2.28.16, a person registered as a Market Customer may be registered as a Rule Participant in another class or classes.
- 2.28.13. Subject to clause 2.28.16 and 4.24.4, a person not covered by clauses 2.28.2 to 2.28.12 but who sells or purchases electricity or another electricity related service under these Market Rules to or from the IMO must register as a Rule Participant. The person must register in either the Market Generator class or the Market Customer class, as determined by the IMO.
- 2.28.14. System Management is a Rule Participant, but is not required to register.
- 2.28.15. The IMO is a Rule Participant, but is not required to register, and must not be registered in any other Rule Participant class.
- 2.28.16. The IMO may determine that a person is exempted from the requirement to register in accordance with clauses 2.28.2, 2.28.6, 2.28.10, 2.28.11A or 2.28.13. An exemption may be given subject to any conditions the IMO considers appropriate and may, upon prior reasonable notice, be revoked at any time.
- 2.28.16A. For the purposes of clause 2.28.16:
  - (a) A person (the "Applicant") who applies to the IMO for an exemption under clause 2.28.16 from the requirement to register may:
    - notify the IMO of the identity of a person (an "Intermediary") to be registered instead of the Applicant;

- ii. provide the IMO with the written consent of the Intermediary to act as Intermediary in a form reasonably acceptable to the IMO;
- (b) If an application for exemption made in accordance with clause 2.28.16A(a) is granted by the IMO in accordance with clause 2.28.16 then:
  - provided the Intermediary satisfies all relevant registration requirements that the Applicant would have been required to satisfy, the IMO must register the Intermediary as a Rule Participant as if it were the Applicant;
  - ii. the Intermediary will be considered for the purposes of these Market Rules to be the Applicant;
  - iii. all references in these Market Rules to the Applicant will be deemed to be references to the Intermediary (unless the context requires otherwise);
  - iv. all acts, omissions, statements, representations and notices of the Intermediary in its capacity as the Rule Participant under these Market Rules will be deemed to be the acts, omissions, statements, representations and notices of the Applicant;
  - v. the Intermediary and the Applicant will be jointly and severally liable for the acts, omissions, statements, representations and notices of the Intermediary in its capacity as the Rule Participant under these Market Rules;
  - vi. the IMO or any other Rule Participant may fulfil any obligations to the Applicant under these Market Rules by performing them in favour of the Intermediary;
  - vii. the Applicant must procure, and where necessary must facilitate, the Intermediary's compliance with its obligations under these Market Rules, including any obligations that, but for the exemption, would be placed on the Applicant; and
  - viii. the Applicant must, where necessary, participate in and abide by the outcome of any dispute process under clauses 2.18 to 2.20.
- (c) For the purposes of enforcing clauses 2.28.16A(b)(vii) and (viii), a reference in these Market Rules to "Rule Participant" includes the Applicant.
- (d) The Applicant may revoke the appointment of the Intermediary by giving notice of such revocation to the IMO.
- (e) At 4.30 am, 2 business days after the IMO receives notice of such revocation, the Intermediary will cease to be considered the Applicant's Intermediary for the purposes of these Market Rules and the Applicant will not be liable under clause 2.28.16A(b)(v) for any acts, omissions,

- statements, representations or notices of the Intermediary occurring after that time.
- (f) If the Applicant revokes the appointment of an Intermediary, the exemption granted by the IMO to the Applicant as contemplated by clause 2.28.16A(b) ceases at the time the Intermediary ceases to be the Applicant's Intermediary in accordance with clause 2.28.16A(e).
- (g) The IMO may permit the Applicant to designate the Intermediary as the Applicant's Intermediary for part only of the Applicant's business (provided that that part represents one or more discrete Facilities).
- 2.28.16B. Without limiting the generality and the operation of clause 2.28.16, the IMO may exempt under clause 2.18.16 a person who owns, controls or operates a generation system which has a rated capacity that equals or exceeds 10 MW and is electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, from the requirement to register as a Rule Participant in the Market Generator class, in respect of that generation system, where all of the following are satisfied:
  - (a) positive MWh quantities measured by the interval meter or meters associated with that generation system are not reasonably expected to exceed 5 MWh in any Trading Interval;
  - (b) negative MWh quantities measured by the interval meter or meters associated with that generation system are not reasonably expected to increase by more than 5 MWh in any Trading Interval in the event of an outage of that generating system;
  - (c) System Management informs the IMO that it has determined that it does not require information about the relevant generation system to maintain Power System Security and Power System Reliability;
  - (d) The meter or meters measuring the generation system remains registered by an existing Market Customer; and
  - (e) The IMO determines that with the exemption the cumulative effect of all exemptions given under this clause 2.28.16B is consistent with the Wholesale Market Objectives,

and the IMO may give the exemption subject to any conditions the IMO considers appropriate and may revoke the exemption if the IMO determines that any of these conditions, or any of the conditions in this clause 2.28.16B, ceases to be satisfied.

2.28.17. A Rule Participant under these Market Rules is a participant for the purposes of section 121(2) of the Electricity Industry Act.

- 2.28.18. A Rule Participant that is registered as either a Market Generator or a Market Customer is a Market Participant. Where a Rule Participant is registered as both a Market Generator and a Market Customer it is represented as being one Market Participant that is both a Market Generator and a Market Customer.
- 2.28.19. A Rule Participant must:
  - (a) be resident in, or have permanent establishment in, Australia;
  - not be an externally-administered body corporate (as defined in the Corporations Act), or under a similar form of administration under any laws applicable to it in any jurisdiction;
  - (c) not have immunity from suit in respect of the obligations of a Rule Participant under these Market Rules; and
  - (d) be capable of being sued in its own name in a court of Australia.

# 2.29. Facility Registration Classes

- 2.29.1. The following are Facilities for the purposes of these Market Rules:
  - (a) a distribution system;
  - (b) a transmission system;
  - (c) a generation system;
  - (d) a connection point at which electricity is delivered from a distribution system or transmission system to a Rule Participant ("**Load**"); and
  - (e) a Demand Side Programme.
- 2.29.1A. The Facility Classes:
  - (a) a Network;
  - (b) a Scheduled Generator;
  - (c) a Non-Scheduled Generator;
  - (d) an Interruptible Load;
  - (e) a Dispatchable Load; and
  - (f) a Demand Side Programme.
- 2.29.2. No facility registered in one Facility Class can simultaneously be registered in another Facility Class.
- 2.29.3. Subject to clause 2.29.9, a Network Operator must register any transmission system or distribution system owned, operated or controlled by that Network Operator as a Network, where that transmission or distribution system forms part of the South West Interconnected System, or is electrically connected to that system.

- 2.29.4. Subject to clause 2.29.9, a Market Generator that owns, operates or controls a generation system:
  - (a) must register that generation system as a Non-Scheduled Generator where the generation system has a rated capacity that equals or exceeds 0.005 MW and the generation system is an Intermittent Generator;
  - (b) must register that generation system as a Scheduled Generator where the generation system has a rated capacity that equals or exceeds 10 MW and the generation system is not an Intermittent Generator;
  - (c) subject to clause 2.29.6, may register that generation system as a Scheduled Generator where the generation system is not an Intermittent Generator and has a rated capacity that equals or exceeds 0.2 MW but which is less than 10 MW; and
  - (d) must register that generation system as a Non-Scheduled Generator where the generation system has a rated capacity that equals or exceeds 0.005 MW and where the generation system is not otherwise required to be registered in accordance with (a) or (b) and where the option to register in accordance with (c), if applicable, is not exercised.
- 2.29.5. Subject to clauses 2.29.9 and 2.29.8A, a Market Customer that owns, operates or controls a Load:
  - (a) may register that Load as an Interruptible Load if that Load has equipment installed to cause it to be interrupted in response to under frequency situations;
  - (b) [Blank]
  - (c) may register that Load as a Dispatchable Load if that Load:
    - i. is able to respond to instructions from System Management to increase or decrease consumption; and
    - ii. has a rated capacity of not less than 0.2 MW.

#### 2.29.5A. A Market Customer that:

- (a) has entered into; or
- (b) intends to enter into

a contract with a person who owns, controls or operates a Non-Dispatchable Load or Interruptible Load, for the Load to provide curtailment on request by the Market Customer, may register a Demand Side Programme.

2.29.5B. A Market Customer with a Demand Side Programme may apply to the IMO to associate a Non-Dispatchable Load or Interruptible Load with the Demand Side Programme. The Market Customer must provide the following information to the IMO in support of the application:

- evidence satisfactory to the IMO that the Market Customer has entered into a contract with the person who owns, operates or controls the Load to provide curtailment on request by the Market Customer;
- (b) the connection point of the Load;
- (c) the expected minimum consumption of the Load in units of MW;
- (d) the contract start date;
- (e) the contract end date; and
- (f) where the Load has a generation system that can connect to the network behind its associated meter, a single line diagram for the Load, including the locations of generators, transformers, switches, operational and settlement meters.
- 2.29.5C. The IMO must within one Business Day notify an applicant of the receipt of the application submitted under clause 2.29.5B. The IMO may, at its discretion, require that an applicant provide information that is missing from the application or is inadequately specified. The date the requested information is submitted to the IMO will become the date of receipt of the application.
- 2.29.5D. The IMO must determine, in accordance with clause 2.29.5E, whether to accept or reject an application submitted under clause 2.29.5B, and must notify the applicant of its decision within 10 Business Days of receipt of the application.
- 2.29.5E. The IMO must accept an application submitted under clause 2.29.5B unless:
  - (a) the IMO considers that the evidence provided by the Market Customer under clauses 2.29.5B and 2.29.5C is not satisfactory;
  - (b) the relevant Load is not equipped with interval metering;
  - (c) the relevant Load is an Interruptible Load assigned Capacity Credits for any part of the proposed Association Period;
  - (d) the relevant Load is registered as an Intermittent Load for any part of the proposed Association Period; or
  - (e) the relevant Load is already associated with a Demand Side Programme for any part of the proposed Association Period.
- 2.29.5F. If the IMO accepts an application under clause 2.29.5D then the IMO must:
  - (a) include in its notification to the applicant:
    - i. the date and time from which the relevant Load will be associated with the Demand Side Programme, as defined under clause 2.29.5G(a); and

- ii. the date and time from which the relevant Load will cease to be associated with the Demand Side Programme, as defined under clause 2.29.5G(b); and
- (b) provide System Management with any single line diagrams received in accordance with clause 2.29.5B(f), if applicable, within one Business Day.
- 2.29.5G If the IMO accepts an application submitted under clause 2.29.5B then the IMO must associate the relevant Load ("Associated Load") with the Demand Side Programme for the period ("Association Period") between:
  - (a) the later of:
    - i. the start of the Trading Day commencing on the contract start date provided under clause 2.29.5B(d); and
    - ii. the start of the Trading Day following the day that the IMO notifies the applicant of its decision under clause 2.29.5D; and
  - (b) the end of the Trading Day starting on the contract end date provided under clause 2.29.5B(e).
- 2.29.5H. If the IMO rejects an application submitted under clause 2.29.5B, then the IMO must include in its notification to the applicant under clause 2.29.5D the reasons for the rejection of the application. A Market Customer whose application is rejected may reapply to associate a Non-Dispatchable Load or Interruptible Load with a Demand Side Programme under clause 2.29.5B.
- 2.29.51. A Market Customer with an Associated Load may apply to the IMO to:
  - (a) cancel the association of the relevant Load with the Demand Side Programme; or
  - (b) reduce the Association Period of the Associated Load.
- 2.29.5J. The IMO must within one Business Day notify an applicant of the receipt of an application submitted under clause 2.29.5l.
- 2.29.5K. The IMO must determine whether to accept or reject an application submitted under clause 2.29.5I and notify the applicant of its decision within two Business Days of the receipt of the application. The IMO must accept the application unless the proposed change would affect the association of the relevant Load with the Demand Side Programme during any period before the Trading Day commencing on the third Business Day after the receipt of the application.
- 2.29.5L. If the IMO accepts an application submitted under clause 2.29.5l then it must either:
  - (a) cancel the association of the relevant Load with the Demand Side Programme; or

- (b) reduce the Association Period of the Associated Load, as requested in the application.
- 2.29.5M. If the IMO rejects an application submitted under clause 2.29.5I, then the IMO must include in its notification to the applicant under clause 2.29.5K the reasons for the rejection of the application.

#### 2.29.5N. Prior to 1 October 2011:

- (a) the IMO must determine for each relevant Market Customer a transition plan to allocate all Capacity Credits assigned to its Demand Side Programmes or Curtailable Loads for future Capacity Years to one or more new Demand Side Programme Facilities, that will take effect from 1 October 2011; and
- (b) Market Customers with Demand Side Programmes or Curtailable Loads assigned Capacity Credits for a future Capacity Year may:
  - (i) apply to pre-register Demand Side Programmes in accordance with their transition plans; and
  - (ii) apply to associate any Curtailable Loads, Non-Dispatchable Loads or Interruptible Loads with their pre-registered Demand Side Programmes.

#### 2.29.5O. At 8:00 AM on 1 October 2011:

- (a) all Capacity Credits assigned to Demand Side Programmes and Curtailable Loads for the current and any future Capacity Years will transfer to the relevant Demand Side Programme Facilities in accordance with the transition plans developed under clause 2.29.5N(a), along with any associated obligations, rights and liabilities:
- (b) all pre-registered Demand Side Programmes will be deemed to be registered Demand Side Programmes;
- (c) any application to pre-register a Demand Side Programme under consideration by the IMO will be deemed to be an application to register a Demand Side Programme; and
- (d) each Load that was previously registered as a Curtailable Load will be deemed to be a Non-Dispatchable Load or Interruptible Load, as appropriate, and Curtailable Loads will cease to be a Facility Class.
- 2.29.6. A Rule Participant must ensure that a Scheduled Generator registered by that Rule Participant is able to respond to instructions from System Management to increase or decrease output.

# Chapter 2

- 2.29.7. A Rule Participant must ensure a Non-Scheduled Generator registered by that Rule Participant is able to respond to instructions from System Management to decrease output.
- 2.29.8. A Rule Participant must ensure a Dispatchable Load registered by that Rule Participant is able to respond to instructions from System Management to increase or decrease consumption.
- 2.29.8A. A Rule Participant must ensure an Interruptible Load or Dispatchable Load registered by that Rule Participant is equipped with an interval meter.
- 2.29.9. The IMO may determine that a person is exempted from the requirement to register a Facility in accordance with this clause 2.29. An exemption may be given subject to any conditions that the IMO considers appropriate.
- 2.29.9A. The IMO must not register a Demand Side Programme where the minimum notice period required for dispatch exceeds four hours as specified in Standing Data.
- 2.29.10 On request, the IMO must exempt a person from the requirement to register a generating system in accordance with this clause 2.29 if that generating system is identified by that person as supplying an Intermittent Load in accordance with clause 2.30B.2 and that generating system satisfies all the requirements of these Market Rules to serve Intermittent Load.
- 2.29.11 With respect to the registration of a generation system to serve Intermittent Load, not more than one generation system may be registered for each Intermittent Load.

## 2.30. Facility Aggregation

- 2.30.1. When registering facilities, a Rule Participant, or an applicant for rule participation, may apply to the IMO to allow the registration of two of more facilities as an aggregated facility.
- 2.30.1A. For each Capacity Year the IMO may only accept an application under clause 2.30.1 once with respect to each Facility.
- 2.30.2. Subject to clauses 2.30.5(a) to 2.30.5(c), Intermittent Generators operated by a single Market Participant that inject energy at a common network connection point and which, except for the operation of this clause 2.30.2, may be registered individually as Non-Scheduled Generators, must be aggregated as a single Non-Scheduled Generator.
- 2.30.3. [Blank]

- 2.30.4. The IMO must consult with System Management and the relevant Network Operator when assessing an application for Facility aggregation and inform the relevant Rule Participant whether the aggregation of the facilities is allowed.
- 2.30.5. The IMO must only allow the aggregation of facilities if, in its opinion:
  - (a) the aggregation will not adversely impact on System Management's ability to maintain Power System Security and Power System Reliability;
  - (b) adequate control and monitoring equipment exists for the aggregated Facility;
  - (c) none of the Facilities within the aggregated facility are subject to an Ancillary Service Contract or Network Control Service Contract that requires that Facility not be part of an aggregated facility;
  - (d) the aggregated facilities are at the same location or have the same Loss Factor; and
  - (e) System Management and the IMO will continue to be provided with the same Standing Data for each individual facility as before the facilities were aggregated.
- 2.30.6. If the individual Facilities forming part of an aggregated facility have their own meters, and there is no single meter for the entire aggregated facility, then the settlement meter data for the aggregated facility must be the sum of the meter readings for its component facilities. Subject to clause 2.30.7A, an aggregated facility which has been registered as a Facility is taken to be treated as a single Facility for the purpose of these rules.
- 2.30.7. If the IMO approves the aggregation of Facilities then, subject to clause 2.30.7A, that aggregated facility must be registered as a single Facility for the purpose of these Market Rules
- 2.30.7A. If the IMO approves the aggregation of Facilities of a Scheduled Generator then each individual facility in that aggregated Facility that injects energy at an individual network connection point to the South West interconnected system must be treated as an individual Facility for the purpose of determining the Reserve Share (p,t) values under Appendix 2.
- 2.30.8. Where the IMO considers, after consultation with System Management, that a change in one or more of the criteria in clause 2.30.5 means that an aggregated facility should no longer be aggregated, it must inform the relevant Rule Participant of the date on which the aggregated facility will be considered to have been disaggregated.
- 2.30.9. Except where clause 2.30.2 requires the aggregation of facilities, a Rule
  Participant with an aggregated facility may notify the IMO that it no longer wishes
  to operate the facility as an aggregated facility from a specified date.

- 2.30.10. Where an aggregated facility is disaggregated in accordance with clause 2.30.8 or 2.30.9:
  - each disaggregated facility is registered as a separate facility for the purpose of these Market Rules from the date specified by the IMO or the Rule Participant, as applicable; and
  - (b) the IMO may require the Rule Participant to provide Standing Data relevant to each disaggregated facility.
- 2.30.11. The IMO must document the facility aggregation and disaggregation process in the Registration Procedure, and:
  - (a) applicants for facility aggregation or disaggregation must follow that documented Market Procedure; and
  - (b) the IMO and System Management must follow that documented Market Procedure when processing applications for facility aggregation and disaggregating previously aggregated facilities.

## 2.30A Exemption from Funding Spinning Reserve

- 2.30A.1. When registering an Intermittent Generator as a Non-Scheduled Generator, a Rule Participant, or an applicant for rule participation, may apply to the IMO for that Intermittent Generator to be exempted from funding Spinning Reserve cost.
- 2.30A.2 Where an application is received in accordance with clause 2.30A.1, the IMO must exempt the Intermittent Generator from funding Spinning Reserve costs where the applicant demonstrates to the satisfaction of the IMO that the shut down of the facility is a gradual process not exceeding a maximum ramp down rate equal to the installed capacity divided by 15MW/minute.
- 2.30A.3 The IMO must consult with System Management when assessing an application for exemption from funding Spinning Reserve costs.
- 2.30A.4 If the IMO approves the application for exempting an Intermittent Generator from funding Spinning Reserve costs then that facility must be excluded from the set of applicable facilities described in Appendix 2.
- 2.30A.5 Where the IMO considers, after consultation with System Management, that a change in the nature of an Intermittent Generator means that it should no longer be exempted from funding Spinning Reserve costs, it must:
  - (a) inform the relevant Market Participant of the first Trading Month from which the facility will cease to be exempted; and
  - (b) include that facility in the list of applicable facilities described in Appendix 2 from the commencement of that Trading Month.

- 2.30A.6 The IMO must document the Spinning Reserve costs exemption process in the Registration Procedure, and:
  - (a) applicants for exemption from Spinning Reserve costs must follow that documented Market Procedure; and
  - (b) the IMO and System Management must follow that documented Market Procedure when processing applications for exemption from Spinning Reserve cost funding.

#### 2.30B Intermittent Load

- 2.30B.1 An Intermittent Load is a Load that satisfies the requirements of clause 2.30B.2 and is recorded in Standing Data as being an Intermittent Load.
- 2.30B.2. For a Load to be eligible to be an Intermittent Load the IMO must be satisfied that the following conditions are met:
  - (a) a generation system must exist:
    - which can typically supply the maximum amount of that Load to be treated as Intermittent Load either in accordance with clause 2.30B.11 or without requiring energy to be withdrawn from a Network. Where clause 2.30B.11 applies then, for the purpose of this clause (i), the amount that the generation system can supply must be Loss Factor adjusted from the connection point of the generation system to the connection point of the Intermittent Load;
    - ii. the output of which is netted off consumption of the Load either in accordance with clause 2.30B.12 or by the meter registered to that Load; and
    - iii. which would in the view of the IMO, if it were not serving an Intermittent Load, be eligible to hold an amount of Certified Reserve Capacity, determined in accordance with clause 2.30B.4, at least sufficient to supply the amount of energy that the generation system is required by (a)(i) to be able to supply while simultaneously being able to satisfy obligations on any Capacity Credits associated with that generation system;
  - (b) the Load shall reasonably be expected to have net consumption of energy for not more than 4320 Trading Intervals in any Capacity Year;
  - (c) the Market Customer for that Load must have an agreement in place with a Network Operator to allow energy to be supplied to the Load from a Network:
  - (d) the Load is an Interruptible Load or a Non-Dispatchable Load; and
  - (e) the Load is not expected (based on applications accepted by the IMO under clause 2.29.5D and any amendments accepted by the IMO under

clause 2.29.5K) to be associated with any Demand Side Programme for any period following the registration of the Load as an Intermittent Load.

- 2.30B.3. The IMO must require that a Market Customer, or applicant to become a Market Customer, applying to register an Intermittent Load provide in regard to the generation system referred to in clause 2.30B.2(a):
  - (a) the maximum capacity in MW, excluding capacity for which Capacity Credits are held, that the generating system can be guaranteed to have available to supply Intermittent Load, when it is operated normally at an ambient temperature of 41°C;
  - (aA) where clause 2.30B.11 applies, the connection point of the generation system;
  - (b) at the option of the applicant:
    - i. the anticipated reduction, measured in MW, in the maximum capacity described in (a) when the ambient temperature is 45°C;
    - ii. the method to be used to measure the ambient temperature at the site of the generating system for the purpose of determining Intermittent Load Refunds, where the method specified may be either:
      - a publicly available daily maximum temperature at a location representative of the conditions at the site of the generating system as reported daily by a meteorological service; or
      - a daily maximum temperature measured at the site of the generator by the SCADA system operated by System Management,

where no method is specified, a temperature of 41°C will be assumed; and

- (c) details of primary and any alternative fuels, including details and evidence of both firm and non-firm fuel supplies and the factors that determine restrictions on fuel availability that could prevent the generation system from operating at its full capacity.
- 2.30B.4. The IMO must use the information provided by a Market Customer in accordance with clause 2.30B.3 to assess the additional Certified Reserve Capacity beyond the capacity required to meet Reserve Capacity Obligations on Capacity Credits actually held by the generation system referred to in clause 2.30B.2(a) that the IMO would normally assign to that generation system in accordance with Chapter 4 if:
  - (a) the Intermittent Load did not exist; and
  - (b) the generation system otherwise satisfied all requirements necessary to be treated as a Scheduled Generator entitled to hold Certified Reserve Capacity.

- 2.30B.5. A Market Customer, or applicant to become a Market Customer, may apply for a Load to be treated as an Intermittent Load as part of Market Customer registration (for a Non-Dispatchable Load) or Facility registration (for an Interruptible Load).
- 2.30B.6. Subject to clause 2.30B.6A, the IMO must accept an application for a Load to be an Intermittent Load if the requirements of clause 2.30B.2 are satisfied.
- 2.30B.6A. Where a Load referred to in clause 2.30B.6 is to be supplied by a generating system to which clause 2.30B.11 pertains, then the Load is to only be treated as an Intermittent Load from the first Trading Day in which both the Load and generating system are operating and until the commencement of the next Capacity Year.
- 2.30B.7. The IMO may cease to treat a Load as an Intermittent Load and require a Market Participant to modify its Standing Data in accordance with clause 2.34.11 from the commencement of a Trading Month if the IMO considers that the requirements of clause 2.30B.2 are no longer satisfied.
- 2.30B.8. The IMO may consult with System Management in determining whether or not to accept, or continue to accept, a Load as satisfying the requirements of clause 2.30B.2.
- 2.30B.9. Where an Intermittent Load is transferred from one Market Customer to another all obligations to pay Intermittent Load Refunds calculated after the date of transfer, in regard to that Intermittent Load, including those Intermittent Load Refunds arising from consumption that occurred prior to the date of transfer are automatically transferred to the Market Customer.
- 2.30B.10. For the purpose of defining Metered Schedules associated with the meter measuring an Intermittent Load, the following methodology is to apply:
  - (a) Define for each Trading Interval:
    - i. Subject to clause 2.30B.12, NMQ to be the net metered energy measured by the meter where a positive amount indicates supply and a negative amount indicates consumption;
    - ii. NS to be the net supply (supply as a positive value plus consumption as a negative value) measured by the Intermittent Load meter which corresponds to supply and consumption, excluding consumption by Intermittent Loads, by Market Customers and Market Generator Facilities (excluding generation systems to which clause 2.30B.11 pertains) which are separately metered for the purpose of settlement under these Market Rules. This may have a positive or negative value;
    - iii. NL to be the maximum possible consumption behind that meter due to consumption which is not Intermittent Load but which is

- measured only by the meter which also measures the Intermittent Load. This has a negative value;
- iv. [Blank];
- v. MSG to be the greater of zero and the maximum energy output from a registered generating system (excluding generation systems to which clause 2.30B.11 pertains) in excess of that required to supply the Intermittent Load based on Standing Data and measured only by the Intermittent Load meter. This has a positive value;
- vi. AMQ to be the adjusted meter quantity which equals NMQ less NS;
- (b) if there is no registered generating system (excluding a generation system to which clause 2.30B.11 pertains) the output of which is measured only by the meter which also measures the Intermittent Load then:
  - i. if AMQ is less than or equal to NL then:
    - for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is AMQ-NL;
    - for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads only measured by the Intermittent Load meter is NL;
  - ii. if AMQ is greater than NL but less than zero then:
    - for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is zero;
    - for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads only measured by the Intermittent Load meter is AMQ;
  - iii. if AMQ is greater than or equal to zero then:
    - for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is AMQ;
    - for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads only measured by the Intermittent Load meter is zero;
- (c) if there is a registered generating system (excluding a generation system to which clause 2.30B.11 pertains) measured only by the meter that also measures the Intermittent Load then:
  - i. if AMQ is less than or equal to NL then:

- for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is AMQ-NL;
- for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads measured only by the meter that also measures the Intermittent Load is NL;
- for the purpose of defining its Metered Schedule the metered quantity associated with the Scheduled Generator measured only by the meter that also measures the Intermittent Load is zero;
- ii. if AMQ is greater than NL but less than or equal to zero then:
  - for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is zero;
  - for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads measured only by the meter that also measures the Intermittent Load is AMQ;
  - for the purpose of defining its Metered Schedule the metered quantity associated with the Scheduled Generator measured only by the meter that also measures the Intermittent Load is zero;
- iii. if AMQ is greater than zero but less than or equal to MSG then:
  - for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is zero;
  - for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads measured only by the meter that also measures the Intermittent Load is zero;
  - for the purpose of defining its Metered Schedule the metered quantity associated with the Scheduled Generator measured only by the meter that also measures the Intermittent Load is AMQ;
- iv. if AMQ is greater than MSG then:
  - for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is AMQ – MSG;

- for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads measured only by the meter that also measures the Intermittent Load is zero;
- for the purpose of defining its Metered Schedule the metered quantity associated with the Scheduled Generator measured only by the meter that also measures the Intermittent Load is MSG.
- 2.30B.11. The generation system described in clause 2.30B.2(a) is deemed to satisfy the requirements of clause 2.30B.2(a)(i) if it is located at a different connection point to that of the Load to which clause 2.30B.2 pertains and all of the following conditions are satisfied prior to the Load commencing to be an Intermittent Load:
  - (a) the generation system must be a registered Facility;
  - (b) the Load to which clause 2.30B.2 pertains must have a nominated maximum consumption quantity specified in its Standing Data of not less than 40 MWh;
  - (c) the output of the generation system must be measured by an interval meter registered with a Metering Data Agent;
  - (d) the generation system must have no Capacity Credits associated with it for the Capacity Year during which it is expected to commence operation;
  - (f) the generation system must be constructed with the intention of serving the Intermittent Load;
  - (g) the generation system must not be part of an Aggregate Facility with other generation systems; and
  - (h) the IMO was notified of the use of such a generation system to serve the Intermittent Load in accordance with clause 4.5.3A(b)(iii) prior to the registration of that Intermittent Load.
- 2.30B.12. Where a generation system described in clause 2.30B.2(a) satisfies the requirements of clause 2.30B.11 and is associated with an Intermittent Load then the interval meter associated with that generation system is not to be included in settlement processes with the exception that:
  - (a) for the purpose of clause 2.30B.10(a)(i), the net metered energy for a Trading Interval measured by the Intermittent Load meter and used in defining NMQ is to be reduced by the metered output for the corresponding Trading Interval of the generation system Loss Factor adjusted from the connection point of the generation system to connection point of the Intermittent Load; and

- (b) the meter data for the generation system is to be used in determining the applicable capacity associated with that generation system as required by Appendix 2.
- 2.30B.13. Where a generation system described in clause 2.30B.2(a) satisfies the requirements of clause 2.30B.11 and is associated with an Intermittent Load then that generation system is to be deemed to be at the location of the Intermittent Load with respect to its inclusion in Bilateral Submissions, STEM Submissions and Resource Plans.

#### 2.30C. Rule Commencement and Registration Data

- 2.30C.1. The IMO must not require that an applicant for Rule Participant registration or Facility registration provide information on any application form, or evidence to support that application form, pertaining to registration if the applicable Market Rules requiring that information to be provided have not commenced.
- 2.30C.2. Prior to the Appointed Day, the IMO may delay the requirement for a person to pay fees related to Rule Participant registration or Facility Registration until the Appointed Day.
- 2.30C.3. Where a rule is to commence after the Appointed Day which requires additional or revised Standing Data to be maintained, the IMO must notify Rule Participants of:
  - (a) the additional or changed Standing Data required, and
  - (b) the time and date by which the additional or changed Standing Data must be provided and accepted;

where the IMO must set the time and date in (b) to allow Market Participants sufficient time to provide the requested data and for it to be accepted prior to the rule commencing.

2.30C.4. Where the IMO issues a notice in accordance with clause 2.30C.3, Rule Participants must provide the additional Standing Data requested by the time and date specified in that notice.

## 2.31. Registration Process

- 2.31.1. The IMO must maintain the following registration forms on the Market Web Site:
  - (a) the Rule Participant registration form;
  - (b) the Rule Participant de-registration form;
  - (c) the Facility registration form;
  - (d) the Facility de-registration form; and
  - (e) the Facility transfer form.

- 2.31.2. Any person wishing to register or de-register as a Rule Participant in one or more classes, or to register, de-register, or transfer a Facility, must complete the applicable form and submit that form, supporting information and any applicable Application Fees to the IMO.
- 2.31.3. The IMO must notify an applicant of the receipt of the application within one Business Day of receipt of an application form described in clause 2.31.1.
- 2.31.4. Subject to clause 2.30C.1, the IMO may, at its discretion, require that an applicant provide information that is missing from the relevant application form, or is inadequately specified. The date at which the requested information is submitted to the IMO in full is to become the date of receipt of the application for the purpose of clause 2.31.3.

#### 2.31.5. The IMO:

- (a) must consult with System Management with respect to applications for Facility registration, de-registration or transfer; and
- (b) may consult with relevant Network Operators with respect to application for registration, de-registration or transfer of generating works or Loads.
- 2.31.6. In the case of an application for Facility registration, the IMO must notify an applicant within 15 Business Days from the date of notification of receipt of:
  - (a) the dates on which any tests required by these Market Rules that must be conducted prior to a facility registration may be held;
  - (b) the date by when results of tests referred to in paragraph (a) must be made available to the IMO; and
  - (c) the date by when the IMO plans to accept or reject the application, being no later than 10 Business Days after the date in paragraph (b).
- 2.31.7. When a test is required under the Market Rules prior to the registration of a Facility, the IMO may determine that the test is not necessary and in doing so must take into consideration any previous tests performed in connection with an Arrangement for Access.
- 2.31.8. System Management must allow a facility holding an Arrangement for Access to operate for the purpose of tests required under the Arrangement for Access, provided that the carrying out of these tests have received approval from System Management.
- 2.31.9. The relevant Network Operator must cooperate with any tests required by these Market Rules that must be conducted prior to the registration of a Facility.
- 2.31.10. The IMO must determine whether to accept or reject the application and notify an applicant accordingly:

- (a) by the date specified in accordance with clause 2.31.6(c) in the case of an application for Facility registration;
- (b) within 20 Business Days after the date of notification of receipt in the case of an application for Rule Participant registration in the Market Generator or Market Customer class; and
- (c) within five Business Days from the date of notification of receipt in the case of other applications.
- 2.31.11. Where the IMO has accepted the application the notification must include:
  - (a) in the case of an application to register as a Rule Participant in one or more classes, the date and time that registration is to take effect where the date is to be the later of the earliest date by which the IMO can facilitate the registration and the date specified in accordance with clause 2.33.1(k);
  - (b) in the case of an application to de-register as a Rule Participant in one or more classes
    - i. where the Rule Participant is a Market Generator or Market Customer, the date and time on which the Rule Participant must cease trading as a Market Generator or Market Customer, being the start of the Trading Day beginning on the date specified in accordance with clause 2.33.2(d); and
    - ii. a statement that de-registration as a Rule Participant will not take effect until the requirements of clause 2.31.16 are satisfied;
  - (c) in the case of an application to register a Facility, the date and time that registration is to take effect where the date is to be the later of the earliest date by which the IMO can facilitate the registration and the date specified in accordance with clause 2.33.3(c)(xii);
  - (d) in the case of an application to de-register a Facility, the date and time that de-registration is to take effect where the date is to be the later of the earliest date by which the IMO can facilitate the de-registration and the date specified in accordance with clause 2.33.4(d); and
  - (e) in the case of an application to transfer a Facility, the date and time that transfer is to take effect where the date is to be the later of the earliest date by which the IMO can facilitate the transfer and the date specified in accordance with clause 2.33.5(e)(iii).
- 2.31.12. Where the IMO has rejected the application the notification must include the reason for its rejection of the application.
- 2.31.13. The IMO may only reject an application if:

- (a) subject to clause 2.30C.1, the application form, when read together with any information received after a request under clause 2.31.4, is incomplete or provides insufficient detail;
- (b) subject to clause 2.30C.1, required supporting evidence is insufficient or not provided;
- (c) the required Application Fee is not paid;
- (d) the IMO is not satisfied that the applicant can comply with the requirements for Rule Participation or Facility registration;
- (e) in the case of an application to register as a Rule Participant in any class where the person has previously been de-registered as a Rule Participant following an order from the Electricity Review Board or de-registered by the IMO under clause 2.32.7E(b), the IMO is not satisfied that person has remedied the reason for or underlying cause of the prior de-registration;
- (f) in the case of an application to de-register as a Market Generator, the applicant has not arranged to de-register its Registered Facilities that are generating works or transfer those Registered Facilities to another Rule Participant prior to the proposed date of de-registration as a Market Generator;
- (g) in the case of an application to de-register as a Market Customer, the applicant has not arranged to de-register its Registered Facilities that are Loads or transfer those Registered Facilities to another Rule Participant prior to the proposed date of de-registration as a Market Customer;
- (h) in the case of an application to de-register as a Network Operator, the applicant has not arranged to de-register its Registered Facilities that are Networks or transfer those Registered Facilities to another Rule Participant prior to the proposed date of de-registration as a Network Operator;
- in the case of an application to register a Facility, the applicant fails to conduct tests in accordance with clause 2.31.6, fails those tests, or fails to provide adequate information about the tests;
- (j) in the case of an application to register a Facility, the relevant Metering Data Agent informs the IMO that the facility is not registered in its Meter Registry or that the Meter Registry information is not consistent with the information in the application to register the facility; or
- (k) in the case of an application to de-register a Facility, the Market Participant holds Capacity Credits for the Facility.
- 2.31.14. A person who has an application to become a Rule Participant approved for one or more Rule Participant classes, is to become a Rule Participant in the approved class or classes from the date and time specified in accordance with clause 2.31.11(a).

- 2.31.15. A person who has an application for de-registration from being a Market Generator or Market Customer, accepted must cease trading as a Market Generator or Market Customer, as applicable, by the date for ceasing trade specified in clause 2.31.11(b)(i).
- 2.31.16. Where an application for de-registration from a Rule Participant class has been accepted by the IMO, participation in the Rule Participant class cease from the end of the first Business Day in which the Rule Participant:
  - (a) has de-registered all of its Facilities applicable to the class;
  - (b) has resolved and settled all outstanding disputes, investigations and enforcement actions;
  - (c) has paid all outstanding debts to the IMO; and
  - (d) has received final payment of all amounts owed to it by the IMO.
- 2.31.17. The fact that a person has ceased to be registered in any Rule Participant class does not affect any right, obligation or liability of that person under these Market Rules which arose prior to the cessation of its registration.
- 2.31.18. If the IMO accepts a facility registration then that Facility becomes a Registered Facility of the applicant from the date and time specified in accordance with clause 2.31.11(c).
- 2.31.19. If the IMO accepts a facility deregistration then that Facility ceases being a Registered Facility of the applicant from the date and time specified in accordance with clause 2.31.11(d).
- 2.31.20. If the IMO accepts a Facility transfer then from the date and time specified in accordance with clause 2.31.11(e):
  - each Facility covered by the transfer will cease to be a Registered Facility of the Rule Participant to whom it was registered prior to the transfer; and
  - (b) each Facility covered by the transfer will become a Registered Facility of the Rule Participant who submitted the application.
- 2.31.21. The IMO must maintain a register of:
  - (a) Rule Participants; and
  - (b) Registered Facilities.
- 2.31.22. For the purpose of this clause 2.31:
  - (a) the IMO must only indicate that it can facilitate participation in a Rule
    Participant class or Facility Class from the time that the IMO has
    established that System Management can facilitate such participation; and

- (b) System Management must facilitate participation in a Rule Participant class or Facility Class by an approved applicant as soon as practicable.
- 2.31.23. The IMO must document the registration, de-registration and transfer process in the Registration Procedure, and:
  - applicants to register or de-register as a Rule Participant in a particular class must follow the documented Market Procedure applicable to that class;
  - (b) applicants to register, de-register, or transfer a Facility in a particular Facility Class must follow the documented Market Procedure applicable to that class;
  - (c) System Management must provide the IMO with all assistance required of it under these Market Rules and in accordance with the documented Market Procedure; and
  - (d) the IMO must follow that documented Market Procedure when processing applications for Rule Participant registration or de-registration, or for registration, de-registration or transfer of a facility.
- 2.31.24. A person who is a Rule Participant registered in a particular class and wishes to be registered in another class must apply for registration as a Rule Participant in that class under this clause 2.31.

#### 2.32. Rule Participant Suspension and Deregistration

- 2.32.1. Where the IMO receives notice that the Electricity Review Board has made a decision in accordance with the Regulations that a Rule Participant be suspended, the IMO must issue a Suspension Notice to the Rule Participant.
- 2.32.2. The IMO must copy any Suspension Notice to all Rule Participants and must inform all Rule Participants when a Suspension Notice is withdrawn.
- 2.32.3 The IMO may specify in a Suspension Notice directions that the relevant Rule Participant must comply with to give effect to the suspension.
- 2.32.4. From the time the IMO issues a Suspension Notice to a Rule Participant:
  - (a) the Rule Participant must comply with the Suspension Notice, including:
    - i. trading or ceasing trading in the Wholesale Electricity Market to the extent specified in the notice; and
    - ii. continuing to meet any existing Reserve Capacity Obligations specified in the notice.
  - (b) the IMO may do all or any of the following to give effect to the notice:

- i. reject any submissions from, or on behalf of, the Market Participant, and cancel any existing submissions; and
- ii. withhold payments owed to a defaulting Rule Participant.
- 2.32.5. The IMO must withdraw a Suspension Notice where:
  - (a) if the notice was issued under clause 9.23, the defaulting Rule Participant has remedied the relevant suspension event and is complying with its Prudential Obligations; and
  - (b) if the notice was issued under clause 2.32.1, it receives a further notice that the Electricity Review Board has withdrawn the suspension,

and no other circumstances exist that would entitle the IMO to issue a Suspension Notice.

- 2.32.6. Where a Rule Participant has been suspended for 90 days, the IMO may apply to the Electricity Review Board for a de-registration order in accordance with the Regulations.
- 2.32.7. Where the IMO receives notice that the Electricity Review Board has made a decision in accordance with the Regulations that a Rule Participant be deregistered, the relevant Rule Participant ceases to be a Rule Participant from the time specified in the notice. The IMO must de-register all of the Facilities registered by the Rule Participant by the time specified in the notice.
- 2.32.7A. The IMO may at any time review whether a Rule Participant registered in the classes outlined in clause 2.28.1(b) or (c) continues to meet all of the criteria specified in clause 2.28.19.
- 2.32.7B. If the IMO becomes aware that a Rule Participant registered in the classes outlined in clause 2.28.1(b) or (c) no longer meets all of the criteria specified in clause 2.28.19, the IMO may issue a Registration Correction Notice to that Rule Participant.
- 2.32.7C. Each Registration Correction Notice must:
  - (a) specify which of the criteria specified in clause 2.28.19 the IMO considers the Rule Participant no longer meets;
  - (b) require that the Rule Participant:
    - i. correct the circumstances that have led to it no longer meeting all of the criteria specified in clause 2.28.19 and provide evidence to the IMO that it has done so; or
    - ii. provide evidence to the IMO that it continues to meet all of the criteria specified in clause 2.28.19;

- (c) specify a date and time for the Rule Participant to respond to the Registration Correction Notice, which must be at least 90 days from the date of the Registration Correction Notice; and
- (d) specify a date and time from which the de-registration of the Rule Participant will become effective, should that Rule Participant not provide evidence in response to the Registration Correction Notice that is satisfactory to the IMO.
- 2.32.7D. Where the IMO has issued a Registration Correction Notice it may extend the deadline for:
  - (a) correcting the circumstances that are the subject of the notice; or
  - (b) responding to the notice

for any period that it considers is appropriate in the circumstances.

- 2.32.7E. The IMO must consider any evidence or submissions provided by a Rule Participant in response to a Registration Correction Notice and determine whether:
  - it is satisfied that the Rule Participant meets all of the criteria specified in clause 2.28.19. If so, the IMO will notify the Rule Participant that no further action will be taken; or
  - (b) it is not satisfied that the Rule Participant meets all of the criteria specified in clause 2.28.19. If so, the IMO will issue a De-registration Notice notifying the Rule Participant that it will cease to be registered from the date and time specified in the De-registration Notice and the Rule Participant will cease to be registered with effect from that date and time.
- 2.32.7F. Where the IMO de-registers a Rule Participant it must also de-register all of the Facilities registered by the Rule Participant by the time specified in the Deregistration Notice. For the avoidance of doubt, the IMO must not de-register a Rule Participant, if that Rule Participant holds Capacity Credits for any of its Facilities.
- 2.32.8. The de-registration of a Rule Participant does not affect any rights, obligations or liabilities arising under or in connection with these Market Rules prior to the time the Rule Participant ceases to be a Rule Participant.
- 2.32.9. The IMO may require a Network Operator to disconnect one or more of the Facilities registered by a suspended or deregistered Rule Participant in order to give effect to a Suspension Notice or deregistration. If the IMO gives a notice under this clause to a Network Operator, then the Network Operator must comply with the notice as soon as practicable. If the disconnection arises because of the suspension of a Market Participant and the Suspension Notice is subsequently withdrawn by the IMO under clause 2.32.5, then the IMO must request the

relevant Network Operator to reconnect the Facilities registered by the relevant Rule Participant.

## 2.33. The Registration Forms

- 2.33.1. The IMO must prescribe a Rule Participant registration form that requires an applicant for registration as a Rule Participant to provide the following:
  - (a) the relevant non-refundable Application Fee;
  - (b) whether the applicant is already a Rule Participant in other classes;
  - (c) contact details for the applicant;
  - (d) invoicing details for the applicant;
  - (e) tax information from the applicant required by law;
  - (f) the class or classes of Rule Participant to which the application relates;
  - (g) [Blank]
  - (h) if the application relates to the sale of electricity to Contestable Customers by an applicant for the Market Customer class:
    - i. evidence that the applicant holds an Arrangement for Access for the purpose of taking power from the electricity grid; and
    - ii. the information described in Appendix 1(f);
  - confirmation of the implementation of any processes or systems required by these Market Rules for each Rule Participant class to which the application relates;
  - information on any Facility registration applications that will follow successful Rule Participant registration or are required as a condition of Rule Participant registration;
  - (k) a proposed date for becoming a Rule Participant for each Rule Participation class to which the application relates;
  - information required for the IMO to determine the applicant's required Credit Limit;
  - (m) such other information as the IMO considers it requires to process the application;
  - (n) an undertaking that the Rule Participant agrees to comply with its obligations as set out in these Market Rules; and
  - (o) a statement that the information provided is accurate.
- 2.33.2. The IMO must prescribed a Rule Participant de-registration form that requires an applicant for de-registration as a Rule Participant to provide the following:
  - (a) the relevant non-refundable Application Fee;

- (b) the identity of the Rule Participant;
- (c) the classes of Rule Participation to which the application relates;
- (d) a proposed date for ceasing operation in each Rule Participant class covered by the application, where that date must be not earlier than 10 Business Days after the date of application;
- (e) such other information as the IMO considers it requires to process the application; and
- (f) a statement that the information provided is accurate.
- 2.33.3. The IMO must prescribe a Facility registration form that requires an applicant for Facility registration to provide the following:
  - (a) the relevant non-refundable Application Fee where this Application Fee may differ for different facility classes;
  - (b) the identity of the party making the application, where that party must be a Rule Participant or be in the process of applying to be a Rule Participant;
  - (c) for each Facility to be registered:
    - i. the name of the Facility;
    - ii. the owner of the Facility;
    - iii. the class of Facility;
    - iv. the location of the Facility;
    - v. if the Facility is aggregated or not and details of any proposed aggregation;
    - vi. contact details for the Facility;
    - vii. if the Facility is yet to commence operation:
      - a proposed date for commencing commissioning the Facility;
         and
      - 2. a commissioning plan for the Facility.
    - viii. evidence that an Arrangement for Access is in place, if necessary;
    - ix. details of operational control over that Facility;
    - x. applicable Standing Data as required by Appendix 1;
    - xi. information on the communication systems that exist for operational control of the Facility; and
    - xii. a date for commencement of operation; and
  - (d) a statement that the information provided is accurate.

- 2.33.4. The IMO must prescribe a Facility de-registration form that requires an applicant for Facility de-registration to provide the following:
  - (a) the relevant non-refundable Application Fee;
  - (b) identification of the Registered Facility to which the application relates;
  - (c) Information as to whether the Registered Facility is being;
    - i. decommissioned; or
    - moth-balled or placed in reserve shut-down, in which case information on the time required to return the Registered Facility to service should be included;
  - (d) a proposed date on which that Registered Facility is to cease to be registered in the name of that Rule Participant where that date must be;
    - i. not earlier than six months after the date of application if the Facility will cease operation; or
    - ii. the date the application is accepted in the event that the Facility has been rendered permanently inoperable; or
    - iii. not earlier than one month after the date of application if the Facility is a Demand Side Programme; and
  - (e) such other information as the IMO considers it requires to process the application; and
  - (f) a statement that the information provided is accurate.
- 2.33.5. The Facility transfer form prescribed by IMO must require that an applicant for transfer of a Facility provide the following:
  - (a) the relevant non-refundable Application Fee;
  - (b) the identity of the party making the application, where that party must be a Rule Participant or be in the process of applying to be a Rule Participant;
  - (c) the name of the Rule Participant in respect of which the Facility is currently registered;
  - (d) evidence that the Rule Participant identified in (c) consents to the transfer;
  - (e) for each facility to be transferred:
    - i. the name of the Facility;
    - ii. the owner of the Facility;
    - iii. a proposed date for the transfer to take affect;
    - iv. evidence that any required Arrangement for Access is in place; and
    - v. details of operational control over that facility; and

- (f) evidence to the satisfaction of IMO that the party making the application has assumed the Reserve Capacity Obligations associated with the Facility, and agrees to any Short Term Special Price Arrangements or Long Term Special Price Arrangements associated with the Facility;
- (g) such other information as the IMO considers it requires to process the application; and
- (h) a statement that the information provided is accurate.

# 2.34. Standing Data

- 2.34.1. The IMO must:
  - (a) maintain a record of the Standing Data described in Appendix 1, including the date from which the data applies; and
  - (b) provide the Standing Data, excluding any Standing Data described in the following clauses of Appendix 1, and any revisions of that Standing Data, to System Management as soon as practicable:

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i. clause (c);
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- ii. clause (e) v;
- iii. clause (h) vi;
- iv. clause (i) xA;
- v. clause (k) i.7;
- vi. clause (k) ii.2;
- vii. clause (I) iii.4;
- viii. clause (I) iii.5; and
- ix. clause (m).
- 2.34.2. Each Rule Participant must ensure that Standing Data required by the Market Rules to be provided to the IMO for that Rule Participant is and remains accurate.
- 2.34.2A. A Rule Participant must, as soon as practicable, seek to have its Standing Data revised, other than Standing Data described in clause 2.34.2B, if it becomes aware that its Standing Data is currently inaccurate or not in compliance with the requirements of these Market Rules, or will become inaccurate or will cease to be in compliance with the requirements of these Market Rules within the next 5 Business Days.
- 2.34.2B A Rule Participant may seek to have the following Standing Data changed at any time:
  - (a) price or payment related data;

- (b) whether a Load not currently treated as an Intermittent Load is treated as an Intermittent Load, provided that the Rule Participant is confident that the Load satisfies the requirements of clause 2.30B.2 and provided that the Rule Participant complies with clause 4.28.8A; and
- (c) whether a Load currently treated as an Intermittent Load is to cease to be treated as an Intermittent Load.
- 2.34.3. A Rule Participant that seeks to change its Standing Data, other than Standing Data changed in accordance with the processes set out in clauses 6.2A, 6.3C or 6.5C, must notify the IMO of:
  - (a) the revisions it proposes be made to its Standing Data;
  - (b) the reason for the change; and
  - (c) the date from which the revision will take effect.
- 2.34.4. Notwithstanding clauses 2.34.2 and 2.34.3, a Rule Participant is not required to notify the IMO of changes to Standing Data where the changes reflect a temporary change in the capability of a Registered Facility resulting from a Planned Outage, Forced Outage or Consequential Outage.
- 2.34.5. The IMO must confirm receipt of the notification described in clause 2.34.3 within one Business Day of receipt of notification.
- 2.34.6. The IMO may, at its discretion, request further information from a Rule Participant, including requiring that tests be conducted and evidence provided, concerning a notification of a change in Standing Data described in clause 2.34.3. A Rule Participant must comply with a request under this clause.
- 2.34.7. The IMO may reject a change:
  - (a) in Standing Data related to prices and payments
    - i. if the price or payment data submitted is inconsistent with any applicable limit on those values under these Market Rules; or
    - ii. if the IMO is not satisfied with evidence provided that the submitted data represents the reasonable costs of the Market Participant in the circumstances related to that price or payment; and
  - (b) in any other Standing Data if it considers that an inadequate explanation, including test results, was provided to justify the change in Standing Data.
- 2.34.8. Other than Standing Data changed in accordance with the processes set out in clauses 6.2A, 6.3C or 6.5C, the IMO must notify the Rule Participant of its acceptance or rejection of the change in Standing Data as soon as practicable, and no later than three Business Days after the later of:
  - (a) the date of notification described in clause 2.34.3; and

- (b) if IMO makes a request under clause 2.34.6, the date on which the information requested is received by the IMO.
- 2.34.9. If the IMO rejects a change in Standing Data it must provide the Rule Participant that requested the change with its reasons for rejecting the change.
- 2.34.10. Where System Management becomes aware that a Rule Participant's Standing Data is currently inaccurate, or will become inaccurate as of a date in the future, it must, as soon as practicable, notify the IMO of the item that it considers to be inaccurate or which will become inaccurate, as the case may be.
- 2.34.11. The IMO may require that a Rule Participant provide updated Standing Data for any of its Registered Facilities if the IMO considers the information provided by the Rule Participant to be inaccurate or no longer accurate.
- 2.34.12. The IMO must consult with System Management before making a decision requiring a Rule Participant to provide updated Standing Data under clause 2.34.11, excluding any Standing Data described in the following clauses of Appendix 1:
  - (a) clause (c);
  - (b) clause (e) v;
  - (c) clause (h) vi;
  - (d) clause (i) xA;
  - (e) clause (k) i.7;
  - (f) clause (k) ii.2;
  - (g). clause (l) iii.4;
  - (h) clause (l) iii.5; and
  - (i) clause (m).
- 2.34.13. If the IMO requires a Rule Participant to provide updated Standing Data under clause 2.34.11, then:
  - (a) The Rule Participant must provide the IMO with updated Standing Data for the specified Registered Facility as soon as practicable; and
  - (b) where the Rule Participant fails to provide updated Standing Data in a timely manner, the IMO may temporarily substitute data restricting the capability of the Facility until such time as the Rule Participant updates the Standing Data. The IMO must notify the Rule Participant when it is using such substitute data.
- 2.34.14 The IMO must commence using revised Standing Data from:

- (a) 8:00 AM on the Scheduling Day following the IMO's acceptance of the revised Standing Data in the case of:
  - i. Standing STEM Submissions;
  - iA. Standing Bilateral Submissions;
  - iB. Standing Resource Plan Submissions;
  - ii. commitment and decommitment cost data and Standing Balancing Data; and
  - iii. Standing Data changes stemming from acceptance of an application under clause 6.6.9;

with the exception that the previous Standing Data remains current for the purpose of settling the Trading Day that commences at the same time as that Scheduling Day; and

- (b) as soon as practicable in the case of any other revised Standing Data.
- 2.34.15. System Management must commence using the Standing Data or revised Standing Data, as soon as it is received from the IMO.

# **Communications and Systems Requirements**

### 2.35. Dispatch Systems Requirements

- 2.35.1. Market Participants with Scheduled Generators, Non-Scheduled Generators, Dispatchable Loads and Demand Side Programmes that are not under the direct control of System Management must maintain communication systems that enable communication with System Management for dispatch of those Registered Facilities.
- 2.35.2. Market Participants with Registered Facilities to which clause 7.8.1 relates must provide the necessary communication systems for System Management to activate and control the level of output of the Registered Facility as required for it to comply with Dispatch Instructions.
- 2.35.3. The Rule Participant in respect of an Interruptible Load must maintain systems to reduce the energy consumption of the Interruptible Load in response to system frequency changes.
- 2.35.4. System Management must document the communications and control system requirements necessary to support the dispatch process described in these Market Rules in the Power System Operation Procedure. System Management, Market Participants and Network Operators must comply with that documented Market Procedure in respect of communication and control system requirements.

### 2.36. Market Systems Requirements

- 2.36.1. Where the IMO uses software systems in the Reserve Capacity Auction, STEM Auction or settlement processes, it must:
  - maintain a record of which version of software was used in producing each set of results, and maintain records of the details of the differences between each version and the reasons for the changes between versions;
  - (b) maintain each version of the software in a state where results produced with that version can be reproduced for a period of at least 1 year from the release date of the last results produced with that version;
  - (c) ensure that appropriate testing of new software versions is conducted;
  - (d) ensure that any versions of the software used by the IMO have been certified as being in compliance with the Market Rules by an independent auditor;
  - (e) require vendors of software audited in accordance with clause (d) to make available to Rule Participants explicit documentation of the functionality of the software adequate for the purpose of audit.
- 2.36.2. A "version" of the software referred to in clause 2.36.1 means any initial software used and any changes to the software that could have a material effect on the prices or quantities resulting from the use of the software.
- 2.36.3. A Market Participant must ensure that any of its systems which are linked to the IMO's systems must conform to the IMO's data and IT security standards at the point of interface.
- 2.36.4. No Market Participant is to deliberately use systems in manner that will undermine the operability of those or connected software systems.
- 2.36.5. The IMO must document the data and IT interface requirements, including security standards required for Market Participants to operate in the Wholesale Electricity Market in the relevant procedure to which the system pertains and the IMO and Market Participants must comply with that documented Market Procedure in respect of data and IT interface requirements.
- 2.36.6. The IMO may require Market Participants to submit information to the IMO using software systems that the IMO specifies, and may reject information submitted by another method.

### **Prudential Requirements**

### 2.37. Credit Limit

2.37.1. The IMO must determine a Credit Limit for each Market Participant.

- 2.37.2. The IMO may revise the Credit Limit of a Market Participant at any time.
- 2.37.3. The IMO must review the Credit Limit of a Market Participant at least once each year.
- 2.37.4. The Credit Limit for each Market Participant is the dollar amount determined by the IMO as being equal to the maximum net amount that the Market Participant is expected to owe the IMO over any 70 day period where this amount is not expected to be exceeded more than once in a 48 month period. When determining the Credit Limit for a Market Participant the IMO must take into account:
  - (a) the average level and volatility of the Balancing Price and the STEM Clearing Price for the previous 48 months, or such shorter time period as data is available for;
  - (b) the metered quantity data for the Market Participant, or an estimate of their expected generation and consumption where no meter data is available;
  - (c) the correlation between the Relevent Dispatch Quantity and the Balancing Price;
  - (d) the length of the settlement cycle and the process set out in clauses 9.23, 9.24 and 2.32;
  - (e) a reduction in the Credit Limit reflecting applicable bilateral contract purchase quantities, where these quantities are the historical bilateral contract submissions, or an estimate of the Market Participant's expected bilateral contract levels where no historical bilateral contract submission data is available;
  - (f) the historical STEM sales and purchases, or an estimate of the Market Participant's expected STEM sales and purchases where no historical STEM sale and purchase data is available;
  - (fA) the historical level of payments under clause 9.8.1 or an estimate of the Market Participant's expected level of payments under clause 9.8.1 where no historical payment data is available;
  - (g) the expected level of Ancillary Service payments;
  - (h) the statistical distribution of the accrued amounts that may be owed to the IMO;
  - (i) the degree of confidence that the Credit Limit will be large enough to meet large defaults; and
  - (j) any past breach of the Regulations or these Market Rules by, the Market Participant or a related entity of the Market Participant.
- 2.37.5. A Market Participant must notify the IMO as soon as practicable where it considers that:

- (a) its metered consumption quantities in a Trading Month will significantly exceed the amount assumed in the last calculation of its Credit Limit; or
- (b) its quantity of electricity purchased bilaterally in a Trading Month will be significantly lower than assumed in the last calculation of its Credit Limit.
- 2.37.6. [Blank]
- 2.37.7. [Blank]
- 2.37.8. The IMO must notify each Market Participant of their Credit Limit, and provide details of the basis for the determination of the Credit Limit.
- 2.37.9. The IMO must develop guidelines in the Market Procedure referred to in clause 2.43 for determining the expected value of a transaction. The guidelines must be consistent with the methodology that the IMO uses to determine Credit Limits for Market Participants.

### 2.38. Credit Support

- 2.38.1. Where at any time a Market Participant does not meet the Acceptable Credit
  Criteria set out in clause 2.38.6, then the Market Participant, must ensure that the
  IMO holds the benefit of Credit Support in an amount not less than its Credit Limit.
- 2.38.2. Where a Market Participant's existing Credit Support is due to expire or terminate, then that Market Participant must, at least 10 Business Days before the time when the existing Credit Support will expire or terminate, ensure that the IMO holds the benefit of a replacement Credit Support in an amount not less than the level required under clause 2.38.1 that will become effective at the expiry of the existing Credit Support.
- 2.38.3. Where a Market Participant's Credit Limit is increased, or where the existing Credit Support is no longer current or valid (for example, because the credit support provider ceases to meet the Acceptable Credit Criteria) or where some or all of the Credit Support has been drawn on by the IMO in accordance with these Market Rules, then that Market Participant must ensure that the IMO holds the benefit of a replacement Credit Support in an amount not less than the level required under clause 2.38.1 within one Business Day.
- 2.38.4. The Credit Support for a Market Participant must be:
  - (a) an obligation in writing that:
    - i. is from a credit support provider, who must be an entity which meets the Acceptable Credit Criteria and which itself is not a Market Participant;
    - ii. is a guarantee or bank undertaking in a form prescribed by the IMO;

- iii. is duly executed by the credit support provider and delivered unconditionally to the IMO;
- iv. constitutes valid and binding unsubordinated obligations to the credit support provider to pay to the IMO amounts in accordance with its terms which relate to obligations of the relevant Market Participant under the Market Rules; and
- v. permits drawings or claims by the IMO to a stated amount; or
- (b) a cash deposit ("**Security Deposit**") made with the IMO by or on behalf of the Market Participant.
- 2.38.5. Where Credit Support is provided as a Security Deposit in accordance with clause 2.38.4(b), it will accrue interest daily at the Bank Bill Rate, and the IMO must pay the Market Participant the interest accumulated at the end of each calendar month less any liabilities and expenses incurred by the IMO, including bank fees and charges.
- 2.38.6. An entity meets the Acceptable Credit Criteria if it is:
  - (a) either:
    - i. under the prudential supervision of the Australian Prudential Regulation Authority; or
    - ii. a central borrowing authority of an Australian State or Territory which has been established by an Act of Parliament of that State or Territory;
  - (b) resident in, or has a permanent establishment in, Australia;
  - (c) not an externally-administered body corporate (within the meaning of the Corporations Act), or under a similar form of administration under any laws applicable to it in any jurisdiction;
  - (d) not immune from suit;
  - (e) capable of being sued in its own name in a court of Australia; and
  - (f) has an acceptable credit rating, being either:
    - a rating of A-1 or higher for short term unsecured counterparty obligations of the entity, as rated by Standard and Poor's (Australia) Pty. Limited; or
    - ii. a rating of P-1 or higher for short term unsecured counterparty obligations of the entity, as rated by Moodys Investor Services Pty. Limited.
- 2.38.7. The IMO must maintain on the Market Web Site a list of entities which:

- (a) have provided the IMO, in the previous twelve months, with evidence satisfactory to the IMO that they meet the Acceptable Credit Criteria outlined in clause 2.38.6; or
- (b) the IMO has determined in its absolute discretion meet the Acceptable Credit Criteria outlined in clause 2.38.6.
- 2.38.8 The IMO must monitor the entities included on the list described in clause 2.38.7 against the requirements in clause 2.38.6 (f).
- 2.38.9 The IMO may remove the name of an entity from the list described in clause 2.38.7 at any time if the IMO considers that the entity no longer meets the Acceptable Credit Criteria defined in clause 2.38.6.

### 2.39. Trading Limit

- 2.39.1. The Trading Limit for a Market Participant is to equal the prudential factor specified in clause 2.39.2 multiplied by the total amount which can be drawn or claimed under, or applied from, its Credit Support.
- 2.39.2. The prudential factor is 0.87.

### 2.40. Outstanding Amount

- 2.40.1. The Outstanding Amount for a Market Participant at any time equals:
  - (a) [Blank]
  - (b) the total amount calculated as follows:
    - the aggregate of the amounts payable by the Market Participant to the IMO under these Market Rules, including amounts for all past periods for which no Settlement Statement has yet been issued, and whether or not the payment date has yet been reached; less
    - ii. the aggregate of the amounts payable by the IMO to the Market Participant under these Market Rules, including amounts for all past periods for which no Settlement Statement has yet been issued, and whether or not the payment date has yet been reached.
- 2.40.2. The amounts to be used for the purposes of making the calculation under clause 2.40.1(b)(i) and (ii) will be the actual amounts for which Settlement Statements have been issued by the IMO and the IMO's reasonable estimate of other amounts.

### 2.41. Trading Margin

2.41.1. The Trading Margin for a Market Participant at any time equals the amount by which its Trading Limit exceeds its Outstanding Amount at that time.

- 2.41.2. A Market Participant must not make any submission to the IMO where the transaction contemplated by the submission could result in the Trading Margin of the Market Participant being exceeded, were the transaction to be valued according to the expected value guidelines referred to in clause 2.37.9.
- 2.41.3. The IMO may reject any submission from a Market Participant where in the IMO's opinion the transaction contemplated by the submission could result in the Trading Margin of the Market Participant being exceeded, were the transaction to be valued according to the expected value guidelines referred to in clause 2.37.9.
- 2.41.4. The IMO may notify a Market Participant at any time of the level of their Trading Margin.

### 2.42. Margin Call

- 2.42.1. If, at any time, a Market Participant's Trading Margin drops to zero or below, then the IMO may issue a Margin Call Notice to the Market Participant, specifying the amount of the Margin Call.
- 2.42.2. The Typical Accrual for a Market Participant at any time is the amount that the IMO determines would have been the Outstanding Amount of the Market Participant at that time if the prices and quantities applying to amounts payable by the Market Participant were equal to the average prices and quantities as applied in the most recent determination of the Market Participant's Credit Limit.
- 2.42.3. The amount of the Margin Call must be equal to the Market Participant's Outstanding Amount less the Market Participant's Typical Accrual.
- 2.42.4. Where a Margin Call Notice is issued, the Market Participant must within one Business Day from the Margin Call Notice being issued respond to the Margin Call by either:
  - (a) paying to the IMO in cleared funds a Security Deposit as contemplated under clause 2.38.4(b); or
  - (b) ensuring the IMO has the benefit of additional Credit Support of the kind contemplated by clause 2.38.4(a),

in the amount of the Margin Call.

- 2.42.5. The IMO may cancel a Margin Call Notice at any time. The cancellation of a Margin Call Notice does not affect the IMO's rights to issue a further Margin Call Notice on the same grounds that gave rise to the original Margin Call Notice.
- 2.42.6. Where a Market Participant fails to comply with clause 2.42.4 the provisions of clause 9.23 apply.

2.42.7. Where the IMO issues a Margin Call Notice, it must review the Credit Limit of the relevant Market Participant and increase the Credit Limit in line with the amount of the Margin Call.

### 2.43. Prudential Market Procedure

- 2.43.1. The IMO must develop a Market Procedure dealing with:
  - (a) determining Credit Limits;
  - (b) assessing persons against the Acceptable Credit Criteria;
  - (c) Credit Support arrangements, including:
    - i. the form of acceptable guarantees and bank letters of credit;
    - ii. where and how it will hold cash deposits and how the costs and fees of holding cash deposits will be met;
    - iii. the application of monies drawn from Credit Support in respect of amounts owed by the relevant Market Participant to IMO;
  - (d) calculation of Trading Margins;
  - (e) guidelines for assessing the expected value of transactions;
  - (f) issuing of Margin Calls; and
  - (g) other matters relating to clauses 2.37 to 2.42,

and Market Participants and the IMO must comply with that Market Procedure.

# **Emergency Powers**

### 2.44. Minister's Emergency Powers

- 2.44.1. If the Minister requests the IMO to suspend the application of all or any of these Market Rules (other than this clause 2.44) or any element of the market in connection with the exercise of emergency powers under the Energy Operators (Powers) Act 1979 or under emergency provisions of other legislation, then the IMO must do so.
- 2.44.2. The IMO must lift a suspension as soon as practicable after the Minister requests the IMO to do so.
- 2.44.3. The IMO must promptly notify Market Participants of any suspension or lifting of a suspension.
- 2.44.4. During a suspension, the IMO may give directions to Market Participants as to the operation of the market, and Market Participants must comply with those directions.

# 3 Power System Security and Reliability

## **Security and Reliability**

### 3.1. SWIS Operating Standards

- 3.1.1. The frequency and time error standards for a Network in the SWIS are as defined in the Technical Rules that apply to that Network.
- 3.1.2. The voltage standards for a Network in the SWIS are as defined in the Technical Rules that apply to that Network.

### 3.2. Technical Envelope, Security and Equipment Limits

- 3.2.1. An Equipment Limit means any limit on the operation of a Facility's equipment that is provided as Standing Data for the Facility to System Management by the IMO in accordance with clause 2.34.1(b).
- 3.2.2. System Management must record Equipment Limit information in accordance with the Power System Operation Procedure.
- 3.2.3. A Security Limit means any technical limit on the operation of the SWIS as a whole, or on a region of the SWIS, necessary to maintain Power System Security, including both static and dynamic limits, and including limits to allow for and to manage contingencies.
- 3.2.4. Network Operators, in consultation with System Management, must determine any Security Limit in accordance with the Power System Operation Procedure, and System Management must record Security Limit information in accordance with the Power System Operation Procedure.
- 3.2.5. The Technical Envelope represents the limits within which the SWIS can be operated in each SWIS Operating State. In establishing and modifying the Technical Envelope under clause 3.2.6, System Management must:
  - (a) respect all Equipment Limits;
  - (b) respect all Security Limits;
  - (c) respect all SWIS Operating Standards;
  - (d) respect all Ancillary Service standards specified in clause 3.10; and
  - (e) take into account those parts of the SWIS which are not designed to be operated to the planning criteria in the relevant Technical Code.
- 3.2.6. System Management must establish and modify the Technical Envelope in accordance with clause 3.2.5 and the Power System Operation Procedure.

- 3.2.7. System Management must develop a Power System Operation Procedure documenting:
  - the process to be followed by System Management in maintaining Equipment Limit information;
  - (b) the process to be followed by Network Operators and System Management in determining the Security Limits and maintaining Security Limit information;
  - (c) the process to be followed by System Management in establishing and modifying the Technical Envelope; and
  - (d) the processes to be followed by System Management to enable it to operate the SWIS according to the Technical Envelope applicable to each SWIS Operating State.
- 3.2.8. System Management must operate the SWIS in accordance with the Power System Operation Procedure and the Technical Envelope for the applicable SWIS Operating State.

### 3.3. Normal Operating State

- 3.3.1. The SWIS is in a Normal Operating State when System Management considers that all of the following circumstances apply:
  - (a) the voltage magnitudes at all energised busbars at every switchhouse, switchyard or substation of the SWIS are within the applicable Security Limits;
  - (b) the MVA flows on all Registered Facilities are within the applicable Security Limits:
  - (c) all other electric plant forming part of, or having or likely to have a material impact on the operation of, the SWIS is being operated within any applicable Equipment Limits and Security Limits;
  - (d) the configuration of the SWIS is such that the severity of any potential fault is within the capability of circuit breakers to disconnect the faulted circuit or equipment;
  - the frequency at all energised busbars at every switchhouse, switchyard or substation of the SWIS is within the normal operating frequency band of the SWIS Operating Standards;
  - (f) the levels of all Ancillary Services being provided meet the Ancillary Service Requirements; and
  - (g) conditions on the SWIS are secure in accordance with the requirements of the Technical Envelope.
- 3.3.2. When the SWIS is in a Normal Operating State, System Management must:

- not require a Registered Facility to be operated inconsistently with the Security Standards or its Equipment Limits for the Normal Operating State;
- (b) not utilise the overload capacity of Scheduled Generators (as indicated in Standing Data);
- (c) schedule and dispatch Ancillary Services in accordance with the Ancillary Service Requirements;
- subject to clause 3.19, accept applications for the scheduling of outages unless System Management considers that these would endanger Power System Security or Power System Reliability; and
- (e) not take any actions that in its opinion would be reasonably likely to lead to a High-risk Operating State.
- 3.3.3. System Management may include in the Power System Operation Procedure guidelines describing matters it will take into account in making a determination under clause 3.3.1.

### 3.4. High Risk Operating State

- 3.4.1. The SWIS is in a High-risk Operating State when System Management considers that any of the following circumstances exist, or are likely to exist within the next fifteen minutes, or are likely to exist at a time beyond the next fifteen minutes; and actions other than those allowed under the Normal Operating State must be implemented immediately by System Management so as to moderate or avoid the circumstance:
  - (a) there is a violation of the Spinning Reserve requirements determined in accordance with clause 3.11;
  - (b) insufficient Load Following range is available to meet the requirements determined in accordance with clause 3.11;
  - (c) there is a voltage deviation of greater than ±6% from the values determined in accordance with clause 3.1.2;
  - (d) there is a frequency deviation of greater than ±0.12 Hz from the values determined in accordance with clause 3.1.1 at an energised busbar at any switchyard or substation of the SWIS;
  - (e) a transmission line is overloaded but the overload can be managed for the timeframe during which the overload is expected to be rectified;
  - (f) there is a short circuit condition that could result in equipment fault levels being exceeded;
  - (g) there would be an overload, under-voltage situation or threat to the stability of the power system if a credible contingency occurred;

- (h) System Management is aware that one or more Market Participants have been notified by fuel suppliers and/or fuel transporters that a fuel shortfall is likely in relation to one or more Registered Facilities, where such fuel shortfall will limit the availability of generation during the next 24 hours, and where this might affect Power System Security or Power System Reliability;
- (i) imminent generator unavailability that would cause supply to fall below load;
- (j) significant SCADA system degradation is occurring which limits System Management's ability to control the power system;
- (k) there is a major bushfire or storm near, or forecast to be near, elements of the SWIS; and
- (I) any other circumstance which would, in the reasonable opinion of System Management, threaten Power System Security or Power System Reliability.
- 3.4.2. When the SWIS is in a High Risk Operating State, System Management must:
  - (a) not require Registered Facilities to operate inconsistently with the Security Standards or their Equipment Limits for the High Risk Operating State; and
  - (b) schedule and dispatch Ancillary Services appropriate for the High Risk Operating State in accordance with Ancillary Service Requirements.
- 3.4.3. When the SWIS is in a High Risk Operating State, System Management may:
  - (a) cancel or defer Planned Outages that have not yet commenced;
  - (b) require the return to service in accordance with the relevant Outage Contingency Plan of Network equipment undergoing Planned Outages, or take other measures contained in the relevant Outage Contingency Plan for any Registered Facility; and
  - (c) utilise the overload capacity of Scheduled Generators (as indicated in Standing Data).
- 3.4.4. System Management may take any other actions as it considers are required, consistent with good electricity industry practice, to return the SWIS to a Normal Operating State provided it acts with as little disruption to electricity supply and to the implementation of Resource Plans that it has received from the IMO as is reasonably practicable in the circumstances.
- 3.4.5. System Management must return the SWIS from a High Risk Operating state to a Normal Operating State as soon as practicable.
- 3.4.6. When the SWIS is in a High Risk Operating State, Rule Participants must:

- (a) subject to clause 3.4.7, comply with directions issued by System Management in accordance with clauses 3.4.3 and 3.4.4; and
- (b) otherwise, use reasonable endeavours to assist System Management to return the SWIS to a Normal Operating State.
- 3.4.7. A Rule Participant is not required to comply with directions issued by System Management, issued in accordance with clauses 3.4.3 or 3.4.4, if such compliance would endanger the safety of any person, damage equipment, or breach any applicable law.
- 3.4.8. Where a Rule Participant cannot comply with a direction issued by System Management it must inform System Management immediately.
- 3.4.9. System Management may include in the Power System Operation Procedure guidelines describing matters it will consider in making a determination under clause 3.4.1.

### 3.5. Emergency Operating State

- 3.5.1. The SWIS is in an Emergency Operating State when System Management considers that any of the following circumstances exist, or are likely to exist within the next fifteen minutes, or are likely to exist after fifteen minutes; and actions other than those allowed under the Normal Operating State or High-risk Operating State must be implemented immediately by System Management so as to moderate or avoid the circumstance:
  - (a) there is a frequency deviation of greater than ±0.5 Hz from the values determined in accordance with clause 3.1.1 for more than five minutes at any energised busbar at any switch-yard or substation of the SWIS;
  - (b) there is a voltage deviation of greater than ±10% from the values determined in accordance with clause 3.1.2 for more than five minutes;
  - (c) circuit currents exceed hard circuit ratings;
  - (d) System Management expects a significant generation shortfall;
  - (e) significant involuntary load interruption is occurring;
  - (eA) operation under a Normal Operating State or a High-Risk Operating State would pose a significant risk to the physical safety of the public or field personal;
  - (f) significant primary SCADA system failure is occurring which has forced System Management to move power system control away from its primary control centre; or
  - (g) significant transmission separation is occurring, or is imminent, resulting in limited power transfer and power system instability; and

- (h) any other circumstance which would, in the reasonable opinion of System Management, significantly threaten Power System Security or Power System Reliability.
- 3.5.2. An Emergency Operating State as defined in these Market Rules does not necessarily correspond to a civil emergency, or emergencies as defined in legislation but may commence as a result of these.
- 3.5.3. System Management must not take any actions that in its opinion would be reasonably likely to lead to an Emergency Operating State.
- 3.5.4. When the SWIS is in an Emergency Operating State, System Management must not require Registered Facilities to operate inconsistently with the Security Standards or their Equipment Limits for the Emergency Operating State.
- 3.5.5. When the SWIS is in an Emergency Operating State, System Management may:
  - (a) direct any Rule Participant to provide Ancillary Services, whether that Rule Participant has an Ancillary Services Contract in relation to the relevant Facility or not;
  - (b) utilise the overload capacity of Scheduled Generators (as indicated by Standing Data);
  - (c) cancel or defer Planned Outages, require the return to service in accordance with the relevant Outage Contingency Plan of Registered Facilities undergoing Planned Outages or take other measures contained in the relevant Outage Contingency Plans;
  - (d) issue directions to Rule Participants to operate their Registered Facilities in specific ways; and
  - (e) take such other actions as it considers are required, consistent with good electricity industry practice, to restore the SWIS to a Normal Operating State, or to restore the SWIS to a High Risk Operating State where a Normal Operating State is not immediately achievable.
- 3.5.6. System Management must return the SWIS from an Emergency Operating State to a Normal Operating State as soon as practicable.
- 3.5.7. Subject to clause 3.5.6, while operating under an Emergency Operating State, System Management must attempt to operate the SWIS in such a way as to, first minimise the disruption to electricity supply, and then, minimise the disruption to the implementation of Resource Plans, to the extent that is reasonably practicable to do so in the circumstances.
- 3.5.8. When the SWIS is in an Emergency Operating State, Rule Participants must:
  - (a) subject to clause 3.5.9, comply with directions issued by System Management in accordance with clause 3.5.5; and

- (b) otherwise, use their best endeavours to assist System Management to return the SWIS to a Normal Operating State.
- 3.5.9. A Rule Participant is not required to comply with directions issued by System Management, issued in accordance with clause 3.5.5, if such compliance would endanger the safety of any person, damage equipment, or breach any applicable law.
- 3.5.10. Where a Rule Participant cannot comply with a direction issued by System Management in accordance with clause 3.5.5 it must inform System Management immediately.
- 3.5.11. System Management may include in the Power System Operation Procedure guidelines describing matters it will consider in making determination under clause 3.5.1.

### 3.6. Demand Control

- System Management must determine the aggregate requirements for automatic under frequency load shedding in accordance with the SWIS Operating Standards.
- 3.6.2. System Management must produce operational plans to implement the aggregate under frequency load shedding requirements. These operational plans must account for sensitive loads and for the rotation of loads between load shedding bands.
- 3.6.3. System Management must ensure that the operational plans have the approval of the IMO.
- 3.6.4. System Management must inform all Network Operators of its operational plans for under frequency load shedding.
- 3.6.5. Network Operators must implement System Management's operational plans for automatic under frequency load shedding approved by the IMO by:
  - setting their automatic under frequency load shedding equipment in accordance with System Management's operational plans, including the rotation of loads between load shedding bands;
  - (b) maintaining the equipment which will implement the automatic under frequency load shedding in good order; and
  - (c) reporting to System Management at the times required by System Management on their compliance with System Management's operational plans.

### Chapter 3

- 3.6.6. System Management must make plans for manual load shedding, and must inform Network Operators of these plans.
- 3.6.6A. System Management may issue manual disconnection directions to Network Operators, where such directions must be in accordance with System Management's load shedding plans.
- 3.6.6B. Network Operators must comply with any manual disconnection directions received from System Management.

### 3.7. System Restart

- 3.7.1. System Management must make operational plans and preparations to restart the SWIS in the event of system shutdown.
- 3.7.2. System Management must use its reasonable endeavours to restart the SWIS in the event of system shutdown.
- 3.7.3 System Management must publish guidelines for the preparation of Local Black Start Procedures and may amend the guidelines from time to time.
- 3.7.4 Each Scheduled Generator and Non-Scheduled Generator must develop Local Black Start Procedures in accordance with the guidelines published under clause 3.7.3.
- 3.7.5 Local Black Start Procedures must provide sufficient information to enable System Management to understand the likely condition and capabilities of Facilities following any major supply disruption or system shutdown such that System Management is able to make the operational plans and preparations referred to in clause 3.7.1.
- 3.7.6 System Management may require any Scheduled Generator or Non-Scheduled Generator to submit its Local Black Start Procedures to System Management for review and to amend its Local Black Start Procedures to take into account the results of the review.

### 3.8. Investigating Incidents in the SWIS

- 3.8.1. System Management must notify the IMO of any incidents in the operation of equipment comprising the SWIS that:
  - (a) endangers Power System Security or Power System Reliability to a significant extent; or
  - (b) causes significant disruption to the operation of the dispatch process set out in clauses 7.6. and 7.7.

3.8.2.

- (a) The IMO must coordinate an investigation into any incidents that are notified to it by System Management in accordance with clause 3.8.1 which the IMO considers have had, or had the potential to have had, a significant impact on the effectiveness of the market.
- (b) The IMO may require System Management and the Rule Participants involved in the incident to provide a report on the incident within a reasonable time period specified by the IMO.
- (c) System Management or a Rule Participant must comply with any request by the IMO for a report under paragraph (b).
- (d) The IMO may conduct its own investigation of, or engage independent experts to report on, the incident.
- 3.8.3. Following the investigation, the IMO must publish a report detailing its findings and including:
  - (a) any reports provided in accordance with clause 3.8.2(d) after the IMO has removed any information that cannot be made public under these Market Rules or which the IMO considers should not be released; and
  - (b) a description of any changes to the Market Rules or Market Procedures that the IMO considers necessary to prevent the future occurrence of similar incidents.
- 3.8.4. Where the IMO considers that changes in the Market Rules are necessary, it must draft a suitable Rule Change Proposal and progress it using the rule change process in clauses 2.5 to 2.8.
- 3.8.5. Where the IMO considers that changes in a Market Procedure which these Market Rules contemplate will be developed by the IMO are necessary, it must draft a suitable Procedure Change Proposal and progress it using the Procedure change process in clause 2.10.
- 3.8.6. Where the IMO considers that changes in a Market Procedure which these Market Rules contemplate will be developed by System Management are necessary, it must advise System Management, and System Management must draft a suitable Procedure Change Proposal and progress it using the Procedure change process in clause 2.10.

# **Ancillary Services**

### 3.9. Definitions of Ancillary Services

- 3.9.1. Load Following Service is the service of frequently adjusting:
  - (a) the output of one or more Scheduled Generators;
  - (b) the output of one or more Non-Scheduled Generators; or

- (c) the consumption of one or more Loads
- within a Trading Interval so as to match total system generation to total system load in real time in order to correct any SWIS frequency variations.
- 3.9.2. Spinning Reserve Service is the service of holding capacity associated with a synchronised Scheduled Generator, Dispatchable Load or Interruptible Load in reserve so that the relevant Facility is able to respond appropriately in any of the following situations:
  - (a) to retard frequency drops following the failure of one or more generating works or transmission equipment; and
  - (b) in the case of Spinning Reserve Service provided by Scheduled Generators and Dispatchable Loads, to supply electricity if the alternative is to trigger involuntary load curtailment.
  - (c) [Blank]
- 3.9.3. Spinning Reserve response is measured over three time periods following a contingency event. A provider of Spinning Reserve Service must be able to ensure the relevant Facility can:
  - (a) respond appropriately within 6 seconds and sustain or exceed the required response for at least 60 seconds; or
  - (b) respond appropriately within 60 seconds and sustain or exceed the required response for at least 6 minutes; or
  - respond appropriately within 6 minutes and sustain or exceed the required response for at least 15 minutes,

for any individual contingency event.

- 3.9.4. [Blank]
- 3.9.5. [Blank]
- 3.9.6. Load Rejection Reserve Service is the service of holding capacity associated with a Scheduled Generator or Dispatchable Load in reserve so that:
  - (a) the Scheduled Generator can reduce output rapidly; or
  - (b) the Dispatchable Load can increase consumption rapidly,

in response to a sudden decrease in SWIS load.

- 3.9.7. Load Rejection Reserve response is measured over two time periods following a contingency event. A provider of Load Rejection Reserve Service must be able to ensure that the relevant Facility can:
  - respond appropriately within 6 seconds and sustain or exceed the required response for at least 6 minutes; or

(b) respond appropriately within 60 seconds and sustain or exceed the required response for at least 60 minutes,

for any individual contingency event.

- 3.9.8. System Restart Service is the ability of a Registered Facility which is a generation system to start without requiring energy to be supplied from a Network to assist in the re-energisation of the SWIS in the event of system shut-down.
- 3.9.9. Dispatch Support Service is any other ancillary service that is needed to maintain Power System Security and Power System Reliability that are not covered by the other Ancillary Service categories. Dispatch Support Service is to include the service of controlling voltage levels in the SWIS, where that service is not already provided under any Arrangement for Access or Network Control Service Contract.

### 3.10. Ancillary Service Standards

- 3.10.1. The standard for Load Following Service is a level which is sufficient to:
  - (a) provide Minimum Frequency Keeping Capacity, where the Minimum Frequency Keeping Capacity is the greater of:
    - i. 30 MW; and
    - ii. the capacity sufficient to cover 99.9% of the short term fluctuations in load and output of Non-Scheduled Generators and uninstructed output fluctuations from Scheduled Generators, measured as the variance of 1 minute average readings around a thirty minute rolling average.
  - (b) [Blank]
- 3.10.2. The standard for Spinning Reserve Service is a level which satisfies the following principles:
  - (a) the level must be sufficient to cover the greater of:
    - 70% of the total output, including Parasitic Load, of the generation unit synchronised to the SWIS with the highest total output at that time; and
    - ii. the maximum load ramp expected over a period of 15 minutes;
  - (b) the level must include capacity utilised to meet the Load Following Service standard under clause 3.10.1, so that the capacity provided to meet the Load Following requirement is counted as providing part of the Spinning Reserve requirement;
  - (c) the level may be relaxed by up to 12% by System Management where it expects that the shortfall will be for a period of less than 30 minutes; and

- (d) the level may be relaxed following activation of Spinning Reserve and may be relaxed by up to 100% if all reserves are exhausted and to maintain reserves would require involuntary load shedding. In such situations the levels must be fully restored as soon as practicable.
- 3.10.3. [Blank]
- 3.10.4. The standard for Load Rejection Reserve Service is a level which satisfies the following principles:
  - (a) the level sufficient to keep over-frequency below 51 Hz for all credible load rejection events;
  - (b) may be relaxed by up to 25% by System Management where it considers that the probability of transmission faults is low.
- 3.10.5. The level of Load Following Service, Spinning Reserve Service and Load Rejection Reserve Service may be reduced:
  - (a) following relevant contingencies; or
  - (b) where System Management cannot meet the standard without shedding load, providing that System Management considers that reducing the level is not inconsistent with maintaining Power System Security.
- 3.10.6. The standard for System Restart Service is a level which is sufficient to meet System Management's operational plans as developed in accordance with clause 3.7.1.

### 3.11. Determining & Procuring Ancillary Service Requirements

- 3.11.1. System Management must determine all Ancillary Service Requirements in accordance with the SWIS Operating Standards and the Ancillary Service Standards.
- 3.11.2. System Management must update Ancillary Service Requirements on an annual basis. The Ancillary Service Requirements must be set based on the facilities and configuration expected for the SWIS in the coming year.
- 3.11.3. If it considers that a considerable shortfall of any Ancillary Service relative to the applicable Ancillary Service Standard is occurring, or is likely to occur before the next update under clause 3.11.2, System Management may reassess the level of the Ancillary Service Requirements for that Ancillary Service at that time.
- 3.11.4. System Management must determine the Ancillary Service Requirements in accordance with clause 3.11.1 and 3.11.5 for the:
  - (a) Load Following Service;
  - (b) Spinning Reserve Service;

- (c) [Blank]
- (d) Load Rejection Reserve Service;
- (e) each Dispatch Support Service; and
- (f) System Restart Service
- 3.11.5. The Ancillary Service Requirements may:
  - (a) be location specific;
  - (b) vary for different SWIS load levels or other scenarios;
  - (c) vary by the type of day and time of day; and
  - (d) vary across the year.
- 3.11.6. System Management must submit the Ancillary Service Requirements to the IMO for approval. The IMO must audit System Management's determination of the Ancillary Service Requirements and may require System Management to redetermine the Ancillary Service Requirements, in which case this clause 3.11.6 applies to any recalculated requirements.
- 3.11.7. System Management must make an annual Ancillary Services plan describing how it will ensure that the Ancillary Service Requirements are met. The Ancillary Services plan must only include:
  - (a) the Electricity Generation Corporation's Registered Facilities; and
  - (b) facilities under the control of Rule Participants, where System Management has an Ancillary Services Contract with each of those Rule Participants.
- 3.11.7A. The Electricity Generation Corporation must make its capacity to provide Ancillary Services from its facilities available to System Management to a standard sufficient to enable System Management to meet its obligations in accordance with these Market Rules.
- 3.11.8. System Management may enter into an Ancillary Service Contract with a Rule Participant other than the Electricity Generation Corporation, for Spinning Reserve and Load Following Ancillary Services, where:
  - (a) it does not consider that it can meet the Ancillary Service Requirements with the Electricity Generation Corporation's Registered Facilities; or
  - (b) the Ancillary Service Contract provides a less expensive alternative to Ancillary Services provided by the Electricity Generation Corporation's Registered Facilities.
- 3.11.8A. System Management may enter into an Ancillary Service Contract with a Rule Participant for Load Rejection Reserve Service, System Restart Service or Dispatch Support Service.

- 3.11.8B System Management must obtain the approval of the Economic Regulation Authority before entering into an Ancillary Service Contract for Dispatch Support Ancillary Services.
- 3.11.8C The Economic Regulation Authority must only review whether an Ancillary Service Contract, to which 3.11.8B applies, would achieve the lowest practicably sustainable cost of delivering the services.
- 3.11.8D The Economic Regulation Authority may undertake a public consultation process in determining whether to approve the Ancillary Service Contract for Dispatch Support Service. In determining whether to undertake a public consultation process, the Economic Regulation Authority must have regard to the terms of the Ancillary Service Contract, including the length of its intended operation and whether a need exists to expedite the approval process.
- 3.11.8E The scope of any Ancillary Services Contract entered into by System Management for the purposes of clause 3.11.8 must:
  - (a) not include components for the payment of energy; and
  - (b) only include the availability of the service based on a proportion of the values determined under clause 3.13.3.
- 3.11.9. Where it intends to enter into an Ancillary Service Contract, System Management must:
  - (a) seek to minimise the cost of meeting its obligations under clause 3.12.1; and
  - (b) give consideration to using a competitive tender process, unless System Management considers that this would not meet the requirements of paragraph (a).
- 3.11.10. Where System Management has entered into an Ancillary Service Contract, System Management must report the capacity of each Ancillary Service contracted, and the prices and terms for calling on the relevant Facility to provide that capacity to the IMO.
- 3.11.11. By 1 June each year, System Management must submit to the IMO a report containing information on:
  - the quantities of each of the Ancillary Services provided in the preceding year, including Ancillary Services provided under Ancillary Service Contracts, and the adequacy of these quantities;
  - (b) the total cost of each of the categories of Ancillary Services provided, including Ancillary Services provided under Ancillary Service Contracts, in the preceding year; and

- (c) the Ancillary Service Requirements for the coming year and the Ancillary Services plan to meet those requirements.
- 3.11.12. The IMO must audit System Management's determination of the Ancillary Services plan submitted to the IMO under clause 3.11.11. The IMO may require System Management to amend the Ancillary Services plan and resubmit it to the IMO, in which case this clause 3.11.12 applies to any amended plan.
- 3.11.13. By 1 July each year, System Management must have obtained the IMO's approval of a report provided under clause 3.11.11 or 3.11.12. The IMO must publish the approved report as soon as practicable.
- 3.11.14. System Management must document in the Power System Operation Procedure the procedure to be followed, and must follow that documented Market Procedure, when:
  - (a) determining Ancillary Service Requirements; and
  - (b) entering into Ancillary Service Contracts, including the process for conducting competitive tender processes utilised for the awarding of Ancillary Service Contracts.
- 3.11.15 System Management must document in the Power System Operation Procedure the procedure to be followed where the Market Rules require Ancillary Services to be provided. System Management and Rule Participants must comply with that documented Market Procedure.

### 3.12. Ancillary Service Dispatch

3.12.1. System Management must schedule and dispatch facilities to meet the Ancillary Service Requirements in each Trading Interval in accordance with Chapter 7.

### 3.13. Payment for Ancillary Services

- 3.13.1. The total payments by the IMO on behalf of System Management for Ancillary Services in accordance with Chapter 9 comprise:
  - (a) [Blank]
  - (aA) for Load Following Service for each Trading Month:
    - i. a capacity payment Capacity\_LF calculated as;
      - the Monthly Reserve Capacity Price in that Trading Month;
      - multiplied by LFR, the capacity necessary to meet the Ancillary Service Requirement for Load Following in that month;
    - ii. an availability payment

- Availability\_Cost\_LF(m) calculated in accordance with clause 9.9.2(d) for that Trading Month;
- (b) an amount Availability\_Cost\_R(m) for Spinning Reserve for each Trading Month, which is calculated in accordance with clause 9.9.2(c) for that Trading Month; and
- (c) Cost\_LRD, the monthly amount for Load Rejection Reserve and System Restart, determined in accordance with the process described in clause 3.13.3B and 3.13.3C; and Dispatch Support service determined in accordance with clause 3.11.8B.
- 3.13.1A. To allow the IMO to distribute the total payments described in clause 3.13.1 in accordance with Chapter 9, System Management must provide the IMO with settlement information for Ancillary Service Contracts in accordance with clauses 3.22.2 and 3.22.3.
- 3.13.2. Payments for usage of Ancillary Services are achieved through the operation of the Balancing mechanism settlement process, and no additional payments will be due by the IMO to System Management for the use of Ancillary Services.
- 3.13.3. The parameters Margin\_Peak and Margin\_Off-Peak to be used in the settlement calculation described in clause 9.9.2 are:
  - (a) where the Economic Regulation Authority has not completed its first assessment in accordance with clause 3.13.3A:
    - i. 15 % for Margin\_Peak; and
    - ii. 12% for Margin\_Off-Peak; and
  - (b) determined by the Economic Regulation Authority, where the Economic Regulation Authority has completed its first assessment in accordance with clause 3.13.3A.
- 3.13.3A For each Financial Year, by 31 March prior to the start of that Financial Year, the Economic Regulation Authority must determine values for the parameters Margin\_Peak and Margin\_Off-Peak, taking into account the Wholesale Market Objectives and in accordance with the following:
  - (a) by 30 November prior to the start of the Financial Year, the IMO must submit a proposal for the Financial Year to the Economic Regulation Authority:
    - for the reserve availability payment margin applying for Peak
       Trading Intervals, Margin\_Peak, the IMO must take account of:
      - the margin the Electricity Generation Corporation could reasonably have been expected to earn on energy sales forgone due to the supply of Spinning Reserve during Peak Trading Intervals;

- the loss in efficiency of the Electricity Generation
   Corporation Registered Facilities that System Management
   has scheduled to provide Spinning Reserve during Peak
   Trading Intervals that could reasonably be expected due to
   the scheduling of those reserves;
- ii. for the reserve availability payment margin applying for Off-Peak Trading Intervals, Margin\_Off-Peak, the IMO must take account of:
  - the margin the Electricity Generation Corporation could reasonably have been expected to earn on energy sales forgone due to the supply of Spinning Reserve during Off-Peak Trading Intervals;
  - the loss in efficiency of the Electricity Generation
     Corporation Registered Facilities that System Management
     has scheduled to provide Spinning Reserve during Off-Peak
     Trading Intervals that could reasonably be expected due to
     the scheduling of those reserves;
- (b) the Economic Regulation Authority must undertake a public consultation process, which must include publishing an issues paper and issuing an invitation for public submissions.
- 3.13.3B. For each Review Period, by 31 March of the year in which the Review Period commences, the Economic Regulation Authority must determine values for Cost\_LR, taking into account the Wholesale Market Objectives and in accordance with the following:
  - (a) by 30 November of the year prior to the start of the Review Period, System Management must submit a proposal for the Cost\_LR parameter for the Review Period to the Economic Regulation Authority. Cost\_LR must cover the costs for providing the Load Rejection Reserve Service and System Restart Service and Dispatch Support Service except those provided through clause 3.11.8B;
  - (b) the Economic Regulation Authority must undertake a public consultation process, which must include publishing an issues paper and issuing an invitation for public submissions.
- 3.13.3C. For any year within a Review Period if System Management determines Cost\_LR for the following Financial Year to be materially different than the costs provided under clause 3.13.3B, then the Economic Regulation Authority must determine the revised values for Cost\_LR, taking into account the Wholesale Market Objectives and in accordance with the following:
  - (a) by 30 November of the year prior to the start of the relevant Financial Year, System Management must submit an updated proposal for the Cost\_LR parameter to the Economic Regulation Authority. Cost\_LR must cover the

- costs for providing the Load Rejection Reserve Service and System Restart Service and Dispatch Support Service except those provided through clause 3.11.8B;
- (b) the Economic Regulation Authority may undertake a public consultation process and:
  - i) if a public consultation process is undertaken, the Economic Regulation Authority must publish an issues paper and issue an invitation for public submissions; and
  - ii) if a public consultation process is not undertaken, the Economic Regulation Authority must publish the reasons behind the decision.

### 3.14. Ancillary Service Cost Recovery

- 3.14.1. Market Participant p's share of the Load Following Service payment cost in each Trading Month m is Load\_Following\_Share(p,m) which equals :
  - (a) the Market Participant's contributing quantity; divided by
  - (b) the total contributing quantity of all Market Participants, where a Market Participant's contributing quantity for Trading Month m is the sum of:
    - the absolute value of the sum of the Metered Schedules for the Non-Dispatchable Loads and Interruptible Loads registered by the Market Participant for all Trading Intervals during Trading Month m; and
    - ii. the sum of the Metered Schedules for Non-Scheduled Generators registered by the Market Participant for all Trading Intervals during Trading Month m.
    - iii. [Blank]
- 3.14.2. Market Participant p's share of the Spinning Reserve service payment costs in each Trading Interval t is Reserve\_Share(p,t) which equals the amount determined in Appendix 2.
- 3.14.3. Market Participant p's share of the Load Rejection Reserve Service, System Restart Service and Dispatch Support Service payment costs in each Trading Month m is Consumption\_Share(p,m) determined in accordance with clause 9.3.7.

### 3.15. Review of Ancillary Service Requirements Process and Standards

3.15.1. From time to time, and at least once in every five year period starting from Energy Market Commencement, the IMO, with the assistance of System Management, must carry out a study on the Ancillary Service Standards and the basis for setting Ancillary Service Requirements. The study must include:

- technical analyses determining the relationship between the level of Ancillary Services provided and the SWIS Operating Standards set out in clause 3.1;
- identification of the expected costs that would result from an increase in the requirements for Ancillary Services due to additional Facilities connecting to the SWIS;
- (c) a cost-benefit study on the effects on stakeholders of providing and using a variety of levels of each Ancillary Service; and
- (d) a public consultation process.
- 3.15.2. The IMO must publish a report containing:
  - (a) the inputs and results of the technical and cost-benefit studies;
  - (b) the submissions received by the IMO in the consultation process, a summary of those submissions, and any responses to issues raised in those submissions; and
  - (c) any recommended changes to Ancillary Service Standards and the basis for setting Ancillary Service Requirements.
- 3.15.3. If the IMO recommends any changes in the report in clause 3.15.2, the IMO must make a Rule Charge Proposal in accordance with clause 2.5.1 to implement those changes.

# **Medium and Short Term Planning**

### 3.16. Medium Term PASA

- 3.16.1. System Management must carry out a Medium Term PASA study by the 15th day of each month.
- 3.16.2. The Medium Term PASA study must consider each week of a three year planning horizon, starting from the month following the month in which the Medium Term PASA study is performed.
- 3.16.3. System Management must use the assembled data to assist it with respect to:
  - (a) setting Ancillary Service Requirements over the year; and
  - (b) outage planning for Registered Facilities; and
  - (c) assessing the availability of Facilities providing Capacity Credits, and the availability of other capacity.
- 3.16.4. Unless otherwise directed by System Management, Rule Participants must provide the following data to System Management in respect of each week in the

Medium Term Planning horizon described in clause 3.16.2 by the time specified in the Power System Operation Procedure:

- (a) for Network Operators:
  - future changes to transmission capacities and ratings of equipment, to the extent that these have been planned at the time of providing the data;
  - ii. in accordance with clause 3.18, confirmation of previous outage plans and any new outage plans; and
  - iii. future access quantities at entry and exit point to its Network;
- (b) for Market Generators:
  - planned future changes to generating facility capabilities and Ancillary Service capabilities;
  - ii. in accordance with clause 3.18, confirmation of previous outage plans and any new outage plans;
  - iii. any proposed closure of a Registered Facility;
  - iv. any energy constraints for any week in the Medium Term Planning horizon described in clause 3.16.2; and
  - v. estimated weekly output for Non-Scheduled Generators; and
- (c) for Market Customers:
  - i. [Blank]
  - ii. in accordance with clause 3.18, confirmation of previous outage plans and any new outage plans; and
  - iii. availability of Demand Side Management capacity.
- 3.16.5. In conducting a Medium Term PASA study, System Management may use information developed by System Management in relation to:
  - (a) SWIS Operating Standards;
  - (b) Ancillary Service Requirements;
  - (c) Ancillary Service Contracts.
- 3.16.6. In conducting a Medium Term PASA study, System Management may, in place of information provided in accordance with clause 3.16.4, use information developed by System Management.
- 3.16.7. Rule Participants must provide the information System Management requests, and any other data they are aware of that might be relevant to a Medium Term PASA study, within the timeframe specified in the Power System Operation Procedure.

- 3.16.8. System Management must review the information provided by Rule Participants, and where necessary, seek additional information or clarifications.
- 3.16.8A. Rule Participants must provide any additional information or clarifications requested by System Management, within the time frame specified in the Power System Operation Procedure.
- 3.16.9. By the 15th day of each month, System Management must provide to the IMO and the IMO must publish the following information developed as a result of its Medium Term PASA study for each week in the Medium Term Planning horizon described in clause 3.16.2:
  - (a) peak load forecasts for the following scenarios:
    - i. mean;
    - ii. mean plus one standard deviation; and
    - iii. mean plus two standard deviations.
  - (b) forecast total available generation capacity by constrained region;
  - (c) System Management's reasonable forecast of the total available Demand Side Management capacity by week and by constrained region;
  - (d) the amount equal to:
    - i. the load forecast referred to in (a)(iii); minus
    - ii. the total forecast available generation capacity; minus
    - iii. System Management's reasonable forecast of the total available Demand Side Management capacity;
  - (e) any weeks where there is expected to be a shortfall of capacity, including a shortfall of Ancillary Services or an inability to satisfy the Ready Reserve Standard;
  - (f) transmission outages of which System Management is aware, forecast transmission capacity between potentially constrained regions, under normal conditions and some contingency scenarios, and any constraints that are likely under these scenarios;
  - (g) possible security problems that could affect market or dispatch outcomes;
  - (h) potential fuel supply, transport or storage limitations that could affect generation capacity of which System Management is aware;
  - the details of any use by System Management of its own data in place of data provided in accordance with clause 3.16.6, and the reasons why System Management's data was substituted; and
  - (j) for each approved Commissioning Test the Facility to be tested and the dates and times during which the Commissioning Test will be conducted.

3.16.10. System Management must document the procedure it follows in conducting Medium Term PASA studies in the Power System Operation Procedure and System Management must follow that documented Market Procedure when conducting a Medium Term PASA study.

### 3.17. Short term PASA

- 3.17.1. System Management must carry out a Short Term PASA study:
  - (a) every Thursday, and provide the Short Term PASA results referred to in clause 3.17.9 to the IMO by 4:30 PM; and
  - (b) on any other day if it determines that changes have occurred that would materially affect market outcomes during the first week of the period covered by the previous Short Term PASA study, and provide the Short Term PASA results referred to in clause 3.17.9 to the IMO as soon as practicable.
- 3.17.2. The IMO must publish the Short Term PASA results referred to in clause 3.17.9 provided by System Management as soon as practicable after it receives it from System Management.
- 3.17.3. The Short Term PASA study must consider each six-hour period of a three week planning horizon ("**Short Term PASA Planning Horizon**"), starting from 8 AM on the day following the day on which the Short Term PASA study is performed.
- 3.17.4. System Management must use the Short Term PASA study to assist it in:
  - (a) setting Ancillary Service Requirements in each six-hour period during the Short Term PASA Planning Horizon;
  - (b) assessing final approval of Planned Outages; and
  - (c) assessing the availability of capacity holding Capacity Credits in each sixhour period during the Short Term PASA Planning Horizon.
- 3.17.5. Unless otherwise directed by System Management, Rule Participants must, before 10 AM every Thursday, submit information to System Management, consisting of:
  - (a) for a Network Operator, availability over the next Short-Term PASA Horizon of all Registered Facilities;
  - (b) for a Market Generator, availability over the next Short-Term PASA Horizon of all its Registered Facilities which are generating works; and
  - (c) for a Market Customer, information about the availability over the next Short-Term PASA Horizon of all its Registered Facilities that are Loads or Demand Side Programmes and demand forecasts for any other load facilities designated as significant by System Management.

- 3.17.6. Where a Rule Participant becomes aware that the information it submitted in accordance with clause 3.17.5 has materially changed during the first week of the period covered by the previous Short Term PASA study, then it must re-submit the relevant data to System Management as soon as practicable, and in any case within 24 hours.
- 3.17.7. In conducting the Short Term PASA study, System Management may, use information developed by System Management in relation to:
  - (a) SWIS Operating Standards;
  - (b) Ancillary Service Requirements;
  - (c) Ancillary Service Contracts;
  - (d) load forecasts.
- 3.17.8. In conducting a Short Term PASA study, System Management may, in place of information provided in accordance with clause 3.17.5, use information developed by System Management.
- 3.17.9. System Management must ensure that the results of a Short Term PASA study which it provides to the IMO include for the Short Term PASA Planning Horizon:
  - (a) peak load forecasts for the following scenarios:
    - i. mean;
    - ii. mean plus one standard deviation; and
    - iii. mean plus two standard deviations;
  - (b) forecast total available generation capacity by six-hour period;
  - (c) System Management's reasonable forecast of the total available Demand Side Management capacity by six-hour period;
  - (d) by six-hour period, the amount equal to:
    - i. the load forecast referred to in (a)(iii); minus
    - ii. the total forecast available generation capacity; minus
    - iii. System Management's reasonable forecast of the total available Demand Side Management capacity;
  - (e) any six-hour periods where a shortfall of capacity is forecast, including a shortfall of Ancillary Services or an inability to satisfy the Ready Reserve Standard;
  - (f) transmission outages of which System Management is aware, forecast transmission capacity between potentially constrained regions, and any constraints that are likely;
  - (g) possible security problems that could affect market or dispatch outcomes;

- (h) [Blank]
- the details of any use by System Management of its own data in place of data provided in accordance with clause 3.17.8, and the reasons why System Management's data was substituted; and
- for each approved Commissioning Test the Facility to be tested and the dates and times during which the Commissioning Test will be conducted.
- 3.17.10. System Management must document the procedure it follows in conducting Short Term PASA studies in the Power System Operation Procedure and System Management must follow that documented Market Procedure when conducting a Short Term PASA study.

### 3.18. Outage Scheduling

3.18.1. Where a reference is made to an outage of a Facility or item of equipment in clauses 3.18, 3.19, 3.20 and 3.21, this includes partial and complete outages and de-ratings of the Facility or item.

### 3.18.2.

- (a) System Management must compile a list of all equipment on the SWIS that is required to be subject to outage scheduling by System Management. The list must also include equipment for which System Management requires notice of partial outages or de-ratings.
- (b) System Management must review the list described in paragraph (a) from time to time and may update the list.
- (c) The list described in paragraph (a) must include:
  - i. all transmission network Registered Facilities;
  - ii. all Registered Facilities holding Capacity Credits, except those to which clause 3.18.2A applies;
  - iiA. all generation systems to which clause 2.30B.2(a) relates, except those to which clause 3.18.2A applies;
  - iii. all Registered Facilities subject to an Ancillary Services Contract; and
  - iv. any other equipment that System Management determines must be subject to outage scheduling to maintain Power System Security and Power System Reliability.
- (d) The list described in paragraph (a) may specify that a piece of equipment on the list is subject to outage scheduling by System Management only at certain times of the year.

- (e) System Management must provide the list described in paragraph (a) and any updated list to the IMO. The IMO must publish any list provided by System Management.
- (f) If a Market Participant's or Network Operator's Facility (or an item of equipment forming part of that Facility) is on the list described in paragraph (a), then the Market Participant or Network Operator, as applicable, must schedule outages for the equipment in accordance with this clause 3.18 and clauses 3.19, 3.20 and 3.21.

#### 3.18.2A.

- (a) Except where clause 3.18.2(c)(iv) applies, Registered Facilities with a Standing Data nameplate capacity of less than 10 MW and generation systems to which clause 2.30B.2(a) relates and which have a nameplate capacity of less than 10 MW are not required to schedule outages for that equipment in accordance with this clause 3.18 and clauses 3.19 and 3.20 other than as required by this clause 3.18.2A.
- (b) If (a) applies to a Market Participant's Facility or generation system then that Market Participant must notify System Management of proposed Planned Outages of that Facility or generation system not less than 2 Business Days prior to their commencement and must specify the duration of the Planned Outage;
- (c) Where System Management is advised of a proposed Planned Outage in accordance with (b) then System Management must record that outage as an approved Planned Outage.

### 3.18.3.

- (a) If a Market Participant's or Network Operator's Facility (or an item of equipment forming part of a Facility or an item of equipment which is a generation system to which clause 2.30B.2(a) relates) is on the list described in clause 3.18.2(a), then the Market Participant or Network Operator may request that the IMO reassess the inclusion of the Facility or item of equipment on the list in accordance with this clause 3.18.3.
- (b) Following a request by a Market Participant or Network Operator under paragraph (a), the IMO must consult with System Management and the Market Participant or Network Operator concerning whether the Facility or item of equipment should remain on the list.
- (c) The IMO may give a direction to System Management that a Facility or item of equipment should not remain on the list where it finds that:
  - System Management has not followed the Market Rules or the Power System Operation Procedure in compiling the list under clause 3.18.2; and

- ii. if the Market Rules and the Power System Operation Procedure had been followed, then the Facility or item of equipment would not have been on the list.
- (d) Where the IMO gives a direction to System Management that the Facility or item of equipment does not need to remain on the list, System Management must remove the Facility or item from the list.
- 3.18.4. System Management must maintain an outage schedule, containing information on all Scheduled Outages.
- 3.18.4A. A proposal submitted to System Management in accordance with this clause 3.18 by a Market Participant or Network Operator in which permission is sought from System Management for the scheduling of the removal from service (or derating) of an item of equipment is a proposed outage plan ("Outage Plan").
- 3.18.5. Market Participants:
  - (a) must, subject to clause 3.18.5A, submit to System Management details of a proposed Outage Plan at least one year but not more than three years in advance of the proposed outage, where:
    - the outage relates to a Facility or item of equipment in respect of which a Market Participant holds Capacity Credits at any time during the proposed outage;
    - ii. the Facility or item of equipment has a nameplate capacity greater than 10 MW; and
    - iii. the proposed outage has a duration of more than one week; and
  - (b) otherwise may submit an Outage Plan to System Management not more than three years and not less than two days in advance of the proposed outage.
- 3.18.5A. Market Participants may submit an Outage Plan to which clause 3.18.5(a) relates to System Management less than one year, but not less than two days, in advance of the proposed outage, but in such instances:
  - (a) System Management must give priority to Outage Plans to which clause 3.18.5(a) relate and which were received more than one year in advance of the commencement of the proposed outage;
  - (b) System Management must give priority to Outage Plans to which this clause 3.18.5A relates in the order they are received; and
  - (c) System Management must give no special priority to Outage Plans to which this clause 3.18.5A relates relative to Outage Plans to which clause 3.18.5(a) does not relate.

- 3.18.5B. Network Operators may submit an Outage Plan to System Management not more than three years and not less than two days in advance of the proposed outage.
- 3.18.5C. Where a Network outage is likely to unduly impact the operation of one or more Market Participant Registered Facilities, System Management may require that in developing their Outage Plans the relevant Network Operator and affected Market Participants coordinate the timing of their outages so as to minimise the impact of the Network outage on the operation of the Market Participant Facilities.
- 3.18.5D Notwithstanding the requirements in chapter 10, in exercising the obligation set out in clause 3.18.5C, System Management may make such information in the outage schedule maintained in accordance with clause 3.18.4 available to a Network Operator to coordinate outage timing.
- 3.18.6. The information submitted in an Outage Plan must include:
  - (a) identity of the Facility or item of equipment that will be unavailable;
  - (b) the quantity of any de-rating where, if the Facility is a generating system, this quantity is in accordance with clause 3.21.5;
  - (c) the reason for the outage;
  - (d) the proposed start and end times of the outage;
  - (e) an assessment of risks that might extend the outage;
  - (f) details of the time it would take the Facility or item of equipment to return to service, if required; and
  - (g) contingency plans for the early return to service of the Facility or item of equipment("Outage Contingency Plans").
- 3.18.7. Outage Plans submitted by a Market Participant or Network Operator must represent the good faith intention of the Market Participant or Network Operator to remove from service, or de-rate, the relevant Facility or item of equipment, for maintenance.
- 3.18.7A. System Management may reject an Outage Plan first submitted within 6 weeks of the commencement time of the outage without evaluating that Outage Plan if, in the opinion of System Management, the submitting party has not allowed adequate time for the Outage Plan to be assessed.
- 3.18.8. Where a Market Participant or Network Operator no longer plans to remove from service, or de-rate, the relevant Facility or item of equipment, for maintenance it must inform System Management as soon as practicable.
- 3.18.9. Where a Market Participant or Network Operator intends to remove from service, or de-rate, the relevant Facility or item of equipment, for maintenance at a different

- time than indicated in an Outage Plan, it must submit a revised Outage Plan to System Management as soon as practicable.
- 3.18.10. System Management must use a risk assessment process using the criteria set out in clause 3.18.11 to evaluate Outage Plans:
  - (a) when an Outage Plan is received or revised; and
  - (b) on an ongoing basis as part of the Medium Term PASA and Short Term PASA studies.
- 3.18.11. System Management must apply the following criteria when evaluating Outage Plans:
  - (a) the capacity of the total generation and Demand Side Management Facilities remaining in service must be greater than the second deviation load forecast published in accordance with clause 3.16.9(a)(iii) or clause 3.17.9(a)(iii), as applicable;
  - (aA) the total capacity of the generation Facilities remaining in service, and System Management's reasonable forecast of the total available Demand Side Management, must satisfy the Ready Reserve Standard described in clause 3.18.11A;
  - (b) the transmission capacity remaining in service must be capable of allowing the dispatch of the capacity referred to in paragraph (a);
  - (c) the Facilities remaining in service must be capable of meeting the applicable Ancillary Service Requirements;
  - (d) the Facilities remaining in service must allow System Management to operate the power system within the Technical Envelope; and
  - (e) notwithstanding the criteria set out in paragraphs (a) to (d), System Management may allow an outage to proceed if it considers that preventing the outage would pose a greater threat to Power System Security or Power System Reliability over the long term than allowing the outage.
- 3.18.11A. The Ready Reserve Standard requires that the available generation and demandside capacity at any time satisfies the following principles:
  - (a) Subject to (c), the additional energy available within fifteen minutes must be sufficient to cover:
    - i. 30% of the total output, including Parasitic Load, of the generation unit synchronized to the SWIS with the highest total output at that time:
    - ii. plus the Minimum Frequency Keeping Capacity as defined in clause 3.10.1(a).

- (b) Subject to (c), and in addition to the additional energy described in (a), the additional energy available within four hours must be sufficient to cover:
  - 70% of the total output, including Parasitic Load, of the generation unit synchronized to the SWIS with the second highest total output at that time;
  - ii. less the Minimum Frequency Keeping Capacity as defined in clause 3.10.1(a).
- (c) System Management may relax the requirements in (a) and (b) in the following circumstances:
  - where System Management expects that the load demand will be such that it exceeds the second standard deviation peak load forecast level, as described in clause 3.17.9(a), used in the most recently published Short Term PASA for that Trading Interval;
  - ii. during the four hours following an event that has caused System Management to call on additional energy maintained in accordance with clauses (a) or (b).
- 3.18.12. Except to the extent required by the criteria in clause 3.18.11 and to the extent allowed by clause 3.18.5A, in evaluating Outage Plans, System Management must not show bias towards a Market Participant or Network Operator in regard to its Outage Plans.
- 3.18.13. Following an evaluation of a new Outage Plan or an Outage Plan or group of Outage Plans that System Management has previously accepted fully or subject to conditions:
  - (a) System Management may find that an Outage Plan, or group of Outage Plans, when considered together, are acceptable, unacceptable or are acceptable under certain circumstances. If System Management finds that a group of Outage Plans when considered together are acceptable, unacceptable or acceptable under certain circumstances, then all the Outage Plans in that group have that status.
  - (b) Where System Management finds that an Outage Plan is acceptable, then it must schedule the Outage Plan in System Management's outage schedule accordingly and inform the Market Participants or Network Operators that submitted the Outage Plans.
  - (c) Where System Management finds that an Outage Plan is acceptable under certain circumstances, then it must inform the Market Participant or Network Operator that submitted the Outage Plan of its finding and the circumstances under which the Outage Plan would be acceptable. System Management must:

- i. consult with the Market Participant or Network Operator about those circumstances:
- ii. determine a date by which it expects to have sufficient information on those circumstances to reassess the Outage Plan;
- iii. inform the Market Participant or Network Operator of the date; and
- iv. reassess the outage plan using the criteria under clause 3.18.11 following the date specified in accordance with clause 3.18.13(c)(ii);
- (d) Where System Management finds that an Outage Plan is unacceptable, then System Management must inform all Market Participants and Network Operators affected and must negotiate with the affected Market Participants and Network Operators to attempt to reach agreement as to System Management's outage schedule, and:
  - If agreement is reached, then the affected Market Participants and Network Operators must resubmit Outage Plans to System Management; or
  - ii. If no agreement is reached within 15 Business Days, System Management must:
    - decide which of the Outage Plans are acceptable and schedule these Outages Plans into System Management's outage schedule where they are not already scheduled;
    - decide which of the Outage Plans are unacceptable and remove these Outages Plans from the System Management's outage schedule where they were previously scheduled; and
    - 3. notify each affected Market Participant whether its Outage Plan has been scheduled.
- (e) Where, as a result of an evaluation, the status of an Outage Plan that was previously acceptable or acceptable under certain conditions changes then System Management must modify its outage schedule accordingly.
- 3.18.14. System Management must use the following criteria when making a decision referred to in clause 3.18.13(d)(ii), in descending order of priority:
  - (a) System Management must give priority to the criteria in clause 3.18.11;
  - (b) System Management must give priority to Outage Plans that have previously been scheduled in System Management's outage schedule, in the order in which they were entered into the schedule. For the purposes of this clause an Outage Plan which has been entered into the outage schedule and has subsequently been revised in accordance with clause 3.18.9 is considered to have been entered into the schedule on the date

- the most recent revision of the Outage Plan was submitted under that clause;
- (c) System Management must have regard to the technical reasons for the requested maintenance, the technical implications for the relevant equipment if the maintenance is not carried out and a reasonable duration for maintenance carried out for those reasons; and
- (d) System Management must give priority to Outage Plans that would be more difficult to reschedule, including considering the amount of capacity that would be taken out of service and the duration of the outage.
- 3.18.15. Where System Management informs a Market Participant or Network Operator that an Outage Plan has not been scheduled or has been removed from System Management's outage schedule under clause 3.18.13(d)(ii), the Market Participant or Network Operator may apply to the IMO to reassess the decision in accordance with the following procedures:
  - (a) A Participant or Network Operator can only apply for the IMO to reassess a decision on the grounds that System Management has not followed the Market Rules or its Power System Operation Procedure;
  - (b) The Market Participant or Network Operator must submit a written application to the IMO, and forward a copy to System Management, stating the reasons why it considers that System Management's decision under clause 3.18.13(d)(ii) should be reassessed and providing any supporting evidence:
    - within ten Business Days of being informed of System Management's decision; and
    - ii. no later than five Business Days prior to the date when the outage would have commenced.
  - (c) Until the IMO completes its reassessment, System Management's decision continues to have effect and System Management and the Market Participant or Network Operator must continue to plan their operations on this basis.
  - (d) System Management must submit records relating to System Management's outage schedule around the date of the relevant outage to the IMO within two Business Days of being informed of the Market Participant's or Network Operator's application under paragraph (b).
  - (e) The IMO must consult with System Management and the Market Participant or Network Operator concerning the Outage Plan, and must make a complete reassessment by the earlier of:
    - ten Business Days of receiving the application under paragraph (b);
       or

- ii. two Business Days prior to the date when the outage would have commenced.
- (f) The IMO may give a direction to System Management that the Outage Plan should be scheduled in System Management's outage schedule where it finds that:
  - System Management has not followed the Market Rules or its Power System Operation Procedure; and
  - ii. if the Market Rules and the Power System Operation Procedure had been followed, then the Outage Plan would have been scheduled; and
- (g) Where the IMO gives a direction to System Management that the Outage Plan should be scheduled in System Management's outage schedule, System Management must schedule it into the outage schedule in accordance with the direction.
- 3.18.16. Where System Management informs a Market Participant or Network Operator that an Outage Plan is unacceptable, and the IMO does not give System Management a direction under clause 3.18.15(f), then System Management and the Market Participant or Network Operator must use their best endeavours to agree an alternative time for the relevant outage, and System Management must schedule the alternative time in its outage schedule.
- 3.18.17. System Management must keep records of all of its outage evaluations and decisions made in accordance with this clause 3.18, together with the reasons for each outage evaluation and decision, and must submit these records to the IMO:
  - (a) in the event of a review referred to in clause 3.18.15; and
  - (b) not less than once every three months.
- 3.18.18. From time to time, and at least once in every five year period starting from Energy Market Commencement, the IMO, with the assistance of System Management, must conduct a review of the outage planning process against the Wholesale Market Objectives. The review must include a technical study of the effectiveness of the criteria in clause 3.18.11 and a broad consultation process with Rule Participants.
- 3.18.19. At the conclusion of a review under clause 3.18.18, the IMO must publish a report containing:
  - (a) the inputs and results of the technical study;
  - (b) the submissions made by Rule Participants in the consultation process and any responses to issues raised in those submissions;
  - (c) any recommended changes to the outage planning process, formulated as one or more Market Rule changes or Market Procedure changes.

- 3.18.20. If the IMO recommends any changes in the report in clause 3.18.19, the IMO must either submit a Rule Change Proposal in accordance with clause 2.5.1 or initiate a Procedure Change Process in accordance with clause 2.10, as the case may be.
- 3.18.21. System Management must document the procedure it follows in conducting outage planning in the Power System Operation Procedure and System Management, the IMO, Market Participants and Network Operators must follow that documented Market Procedure when planning outages.

### 3.19. Outage Approval

- 3.19.1. No later than two days prior to the date of commencement of any outage ("Scheduled Outage") in System Management's outage schedule, the Market Participant or Network Operator involved must request that System Management approve the Scheduled Outage proceeding, specifying the Trading Day and Trading Intervals during which the Scheduled Outage will occur.
- 3.19.2. Market Participants and Network Operators may request that System Management approve an outage of a Facility or item of equipment that is not a Scheduled Outage ("Opportunistic Maintenance") to be carried out during a Trading Day,
  - (a) at any time between 10:00 AM on the day prior to the Scheduling Day and 10:00 AM on the Scheduling Day for that Trading Day, where the request relates to an outage to occur at any time and for any duration during the following Trading Day; or
  - (b) at any time on the Trading Day not later than 1 hour prior to the commencement of the Trading Interval during which the requested outage is due to commence, where
    - i. the outage must be to allow minor maintenance to be performed;
    - ii. the outage must not require any changes in scheduled energy or ancillary services; and
    - iii. the outage may be for any duration and must end before the end of the Trading Day;

where the request must include all of the information specified in clause 3.18.6, and must specify the Trading Intervals during which the Opportunistic Maintenance will occur.

3.19.3. Subject to clause 3.19.3A, System Management must assess the request for approval of a Scheduled Outage or Opportunistic Maintenance, based on the information available to System Management at the time of the assessment, and applying the criteria set out in clause 3.19.6.

- 3.19.3A. In assessing whether to grant a request for Opportunistic Maintenance, System Management:
  - (a) must not grant permission for Opportunistic Maintenance to begin prior to the first Trading Interval for which Opportunistic Maintenance is requested;
  - (b) must not approve Opportunistic Maintenance for a Facility or item of equipment on two consecutive Trading Days;
  - (c) may decline to approve Opportunistic Maintenance for a Facility or item of equipment where it considers that the request has been made principally to avoid exposure to Reserve Capacity refunds as described in clause 4.26 rather than to perform maintenance; and
  - (d) may decline to approve Opportunistic Maintenance for a facility where it considers that inadequate time is available before the proposed commencement time of the outage to adequately assess the impact of that outage.
- 3.19.4. System Management must either approve or reject the Scheduled Outage or Opportunistic Maintenance and inform the Market Participant or Network Operator of its decision as soon as practicable.
- 3.19.5. Where a change in power system conditions after System Management has approved a Scheduled Outage or Opportunistic Maintenance means that the Scheduled Outage or Opportunistic Maintenance is no longer approvable applying the criteria in clause 3.19.6, System Management may decide to reject the Scheduled Outage or Opportunistic Maintenance. Where System Management makes such a decision, it must inform the relevant Market Participant or Network Operator of its decision immediately.
- 3.19.6. System Management must use the following criteria when considering approval of Scheduled Outages or Opportunistic Maintenance:
  - (a) the capacity of the generation Facilities remaining in service, and System Management's reasonable forecast of the total available Demand Side Management, must be greater than the load forecast for the relevant time period;
  - (b) the Facilities remaining in service must be capable of meeting the Ancillary Service Requirements;
  - (c) the Facilities remaining in service must allow System Management to operate the power system within the Technical Envelope;
  - (d) where a group of outages when considered together, do not meet the criteria set out in paragraphs (a) to (c), then System Management should give priority:
    - i. to outages Scheduled in System Management's outage schedule more than one month ahead; then

- ii. to previously Scheduled Outages that have been deferred in accordance with clauses 3.19.4 or 3.19.5, but were originally scheduled in System Management's outage schedule more than one month ahead; then
- iii. to outages scheduled in System Management's outage schedule less than one month ahead; then
- iv. to previously Scheduled Outages that have been deferred in accordance with clauses 3.19.4 or 3.19.5, but were originally scheduled in System Management's outage schedule less than one month ahead; then
- v. to Opportunistic Maintenance; and
- (e) notwithstanding the criteria set out in paragraphs (a) to (d), System Management may allow a Scheduled Outage to proceed if it considers that rejecting it would pose a greater threat to Power System Security or Power System Reliability than accepting it.
- 3.19.7. Where System Management informs a Market Participant or Network Operator that an outage is rejected, then System Management and the Market Participant or Network Operator must use their best endeavours to find an alternative time for the relevant outage.
- 3.19.8. Subject to clause 3.19.9, Market Participants and Network Operators must comply with System Management's decision to reject an outage, and the relevant Market Participant or Network Operator must ensure that the outage is not taken.
- 3.19.9. Compliance with clause 3.19.8 is not required if such compliance would endanger the safety of any person, damage equipment, or violate any applicable law. Where a Rule Participant cannot comply with such a decision it must inform System Management as soon as practicable.
- 3.19.10. Where a Market Participant or Network Operator has reason to believe that System Management has not followed the Market Rules or the Power System Operation Procedure in its decision to reject an outage it may report the decision to the IMO as a potential breach of the Market Rules in accordance with clause 2.13.4.
- 3.19.11. An outage, including Opportunistic Maintenance, that is approved by System Management under clause 3.19.4 is a Planned Outage.
- 3.19.12.
- (a) Where System Management informs a Market Participant or Network
  Operator that an Outage Plan previously scheduled in System
  Management's outage schedule is rejected within 48 hours of the time
  when the outage would have commenced in accordance with the Outage

- Plan, the Market Participant or Network Operator may apply to the IMO for compensation.
- (aA) Compensation will only be paid where details of the relevant Outage Plan have been submitted to System Management at least one year in advance of the time when the outage would have commenced.
- (b) Compensation will only be paid for the additional maintenance costs directly incurred by a Market Participant or Network Operator in the deferment or cancellation of the relevant outage.
- (c) Compensation will not be paid for Opportunistic Maintenance.
- (d) The Market Participant or Network Operator must submit a written request for compensation to the IMO within three months of System Management's decision, including invoices and other documents demonstrating the costs referred to in paragraph (b).
- (e) The IMO must determine the amount of compensation within one month of the submission of the application for compensation, and must notify the Market Participant or Network Operator of the amount determined and the reasons for its determination.
- (f) The determined amount of compensation:
  - i. if less than or equal to \$50,000, must be paid to the applicant in accordance with Chapter 9 in respect of the Trading Month during which the determination is made; and
  - ii. if greater than \$50,000, must be paid to the applicant in accordance with Chapter 9 in equal instalments over between one and six Trading Months as determined by the IMO, where:
    - 1. if practicable, the IMO must endeavour not to recover more than \$50,000 in any Trading Month;
    - interest is to be paid to the applicant calculated by the IMO in accordance with clause 9.1.3 if the amount is recovered over two or more Trading Months; and
    - the Trading Month amounts are to be included in its Non-STEM Settlement Statement pertaining to each of the applicable Trading Months from the Trading Month during which the determination is made.
- 3.19.13. System Management must keep records of all of its outage evaluations and decisions made in accordance with this clause 3.19, together with the reasons for each outage evaluation and decision, and must submit these records to the IMO:
  - (a) where requested by the IMO; and
  - (b) not less than once every three months.

3.19.14. System Management must document the procedure it follows in conducting final approval of outages in the Power System Operation Procedure and System Management, Market Participants and Network Operators must follow that documented Market Procedure when conducting final approval of outages.

#### 3.20. Outage Recall

- 3.20.1. Where the SWIS is in an Emergency Operating State, or High-Risk Operating State, System Management may direct a Market Participant or Network Operator that a Facility or item of equipment be returned to service from Planned Outages in accordance with the relevant Outage Contingency Plan, or take other measures contained in the relevant Outage Contingency Plan.
- 3.20.2. Subject to clause 3.20.3, Market Participants and Network Operators must comply with directions from System Management under clause 3.20.1.
- 3.20.3. Rule Participants are not required to comply with directions issued by System Management under clause 3.20.1 if such compliance would endanger the safety of any person, damage equipment, or violate any applicable law. Where a Rule Participant cannot comply with such a direction it must inform System Management as soon as practicable.

### 3.21. Forced Outages

- 3.21.1. A Forced Outage is any outage of a Facility or item of equipment on the list described in clause 3.18.2 that has not received System Management's approval, including:
  - outages or de-ratings for which no approval was received from System Management, excluding Consequential Outages;
  - (b) any part of a Planned Outage that exceeds its approved duration; and
  - (c) where the Market Participant or Network Operator does not follow a direction from System Management under clause 3.20.1 to return the equipment to service within the time specified in the appropriate contingency plan.
- 3.21.2. A Consequential Outage is an outage of a Facility or item of equipment on the list described in clause 3.18.2 for which no approval was received by System Management, but which System Management determines:
  - (a) was caused by a Forced Outage to another Rule Participant's equipment;and
  - (b) would not have occurred if the other Rule Participant's equipment did not suffer a Forced Outage,

but excludes any outage deemed not to be a Consequential Outage in accordance with clause 3.21.10.

- 3.21.3. System Management must keep a record of all Forced Outages and Consequential Outages of which it is aware.
- 3.21.4. If a Facility or item of equipment that is on the list described in clause 3.18.2 or a Facility or generation system to which clause 3.18.2A relates suffers a Forced Outage or Consequential Outage, then the relevant Market Participant or Network Operator must inform System Management of the outage as soon as practicable. Information provided to System Management must include:
  - (a) the time the outage commenced;
  - (b) an estimate of the time the outage is expected to end;
  - (c) the cause of the outage;
  - (d) the Facility or item of equipment or Facilities or items of equipment affected; and
  - (e) for each affected Facility or item of equipment, the expected quantity of any de-rating by Trading Interval, where, if the Facility is a generating system, this quantity is to be submitted in accordance with clause 3.21.5.
- 3.21.5 The quantity of an outage notification submitted to System Management is the reduction in capacity from the relevant Facility's maximum capacity measured on a sent out basis at 41 degrees Celsius where the maximum capacity is as found in the Standing Data file for Temperature Dependence provided under Appendix 1(b) iv and converted to a sent out basis at 41 degrees Celsius. The remaining capacity, determined as the maximum capacity minus the notified outage, must be available to System Management for dispatch.
- 3.21.6 The following will apply for the purposes of clauses 7.3.4 (a) and 7.13.1A (b):
  - (a) outage data will be entered by Market Participants in System Management's computer interface system on a sent out basis at 15 degrees Celsius. System Management will convert the outage data to a sent out basis at 41 degrees Celsius by multiplying the outage quantity at 15 degrees Celsius by the ratio of the maximum capacity at 41 degrees Celsius to the maximum capacity at 15 degrees Celsius for the Facility as found in the Standing Data file for temperature dependence provided under Appendix 1(b) iv on a generated basis for that facility. Market Participants will submit the outage data at 41 degrees Celsius as displayed by System Management's computer interface system;
  - (b) System Management will calculate the Forced Outage (on a sent out basis at 41 degrees Celsius) for a Facility in a Trading Interval as the greater of:
    - i zero and
    - the sum of all Forced Outages notified for that Facility minus the difference of the Facility maximum capacity and its Reserve Capacity Obligation Quantity;

- (c) System Management will calculate the Planned Outage (on a sent out basis at 41 degrees Celsius) for a Facility in a Trading Interval as the greater of:
  - i. zero and
  - ii. the sum of all Planned Outages minus the greater of:
    - zero and
    - 2. the maximum capacity of the Facility minus its Reserve Capacity Obligation Quantity minus the sum of all Forced Outages notified for the Facility before the adjustment in (b) above is made by System Management; and
- (d) System Management will calculate the Consequential Outage (on a sent out basis at 41 degrees Celsius) for a Facility in a Trading Interval as the greater of:
  - i. zero and
  - ii. the sum of all Consequential Outages minus the greater of:
    - 1. zero and
    - the maximum capacity of the Facility minus its Reserve
       Capacity Obligation Quantity minus the sum of all Forced
       Outages and the sum of all Planned Outages notified for the
       Facility before the adjustments in (b) and (c) above are
       made by System Management;
- (e) the IMO will provide System Management the Reserve Capacity Obligation Quantity of each Facility as currently applicable;
- (f) the maximum capacity used in this clause is the value defined in clause 3.21.5.
- 3.21.7 Notwithstanding the requirements of clause 3.21.4 that a relevant Market Participant or Network Operator must inform System Management of a Forced Outage or Consequential Outage as soon as practicable, a Market Participant or Network Operator must provide full and final details of the relevant Planned Outage, Forced Outage or Consequential Outage to System Management no later than fifteen calendar days following the Trading Day.
- 3.21.8 If a Market Participant considers that one of its Facilities has suffered a Consequential Outage then the Market Participant may provide System Management with a notice confirming details of the Consequential Outage no later than 15 calendar days following the Trading Day on which the Consequential Outage commenced. The notice must:
  - (a) be signed by an Authorised Officer of the Market Participant;
  - (b) confirm that a Consequential Outage has occurred; and

- (c) provide details (to the best of its knowledge) of the events which resulted in the Consequential Outage.
- 3.21.9. In its determination of a Consequential Outage under clause 3.21.2, System Management must accept the information provided by a Market Participant under clause 3.21.8 unless the information is inconsistent with other information held by System Management.
- 3.21.10 If a Market Participant informs System Management of a Consequential Outage under clause 3.21.4, but does not provide System Management with a notice in accordance with clause 3.21.8, then the outage will be deemed not to be a Consequential Outage and System Management must not include the outage as a Consequential Outage in the schedule provided to the IMO in accordance with clause 7.13.1A(b).
- 3.21.11 System Management must retain the notices it receives under clause 3.21.8, and must provide copies to the IMO:
  - (a) if requested by the IMO; and
  - (b) at least once every six months.
- 3.21.12 System Management must document the procedure to be followed in determining and reporting Forced Outages and Consequential Outages in the Power System Operation Procedure and System Management, Market Participants and Network Operators must follow that documented Market Procedure.

# **Commissioning Tests**

#### 3.21A Commissioning Tests

- 3.21A.1. A Commissioning Test ("Commissioning Test") is a test of the ability of a generating system to operate at different levels of output reliably.
- 3.21A.2. A Market Participant seeking to conduct a Commissioning Test for a generating system that has undergone significant maintenance or for a new generating system that has yet to commence operation, must request permission for such tests from System Management in accordance with clause 3.21A.4.
- 3.21A.3. System Management may approve a Commissioning Test only for a new generating system that is yet to commence operation, or for an existing generating system that has undergone significant maintenance.
- 3.21A.4. A Market Participant requesting permission for Commissioning Tests must submit to System Management the following information at least 20 Business Days in advance of the start date of the proposed tests:
  - (a) the name and location of the facility to be tested;

- (b) details of the proposed Commissioning Test Period, including start and end dates for the proposed tests; and
- (c) details of the tests to be conducted, including an indicative test program, fuel mix and trip risk of the facility to be tested.
- 3.21A.5. Commissioning Test plans submitted by a Market Participant must represent the good faith intention of the Market Participant to conduct such Commissioning Test.
- 3.21A.6. Where a Market Participant no longer plans to conduct a Commissioning Test it must inform System Management as soon as practicable.
- 3.21A.7. System Management must accept a request for a Commissioning Test unless:
  - (a) in its opinion inadequate information is provided in the request; or
  - (b) in its opinion the conduct of the test at the proposed time would pose a threat to Power System Security or Power System Reliability; or
  - (c) in the case of a new generating system that is yet to commence operation, the proposed Commissioning Test Period is greater than four months.

#### 3.21A.7A. [Blank]

- 3.21A.8. System Management must not show bias towards a Market Participant in regard to scheduling of Commissioning Tests.
- 3.21A.9. System Management must notify a Market Participant as to whether System Management has approved a Commissioning Test within 10 Business Days of receiving the notification described in clause 3.21A.4.
- 3.21A.10. Where System Management notifies a Market Participant that:
  - (a) a Commissioning Test has not been approved it must provide an explanation for its decision.
  - (b) a Commissioning Test has been approved then, subject to clause3.21A.11, the Market Participant may proceed with that Commissioning Test.
- 3.21A.11. If having approved a Commissioning Test, System Management becomes aware that:
  - (a) the conduct of the test at the proposed time would pose a threat to Power System Security or Power System Reliability, or in the case of a Facility returning to service after extended maintenance the return to service has been delayed, then it may delay the commencement of the Commissioning Test; or
  - (b) the Commissioning Test is no longer required then it may revoke its approval of the Commissioning Test,

- and must notify the Market Participant conducting the Commissioning Test of such delay or cancellation.
- 3.21A.12. In conducting a Commissioning Test a Market Participant must conform to the test plan approved by System Management.
- 3.21A.13. If a Market Participant conducting a Commissioning Test cannot conform to the test plan approved by System Management then it must inform System Management as soon as practicable.
- 3.21A.14. Where a Facility is subject to a Commissioning Test the Dispatch Schedule for that Facility during the period of the Commissioning Test is to reflect the energy produced by the facility.
- 3.21A.15. System Management must document the procedure it follows in scheduling Commissioning Tests in the Power System Operation Procedure and System Management and Market Participants must follow that documented Market Procedure when planning and conducting Commissioning Tests.
- 3.21A.16. By 8.30am each day System Management must provide the IMO with the information submitted under clause 3.21A.4 for Commissioning Tests approved under clause 3.21A.9 for the Trading Day following the current Scheduling Day.

#### 3.21AA Equipment Tests

- 3.21AA.1 An Equipment Test ("Equipment Test") is a test conducted by a Market Participant of the ability of a generating system to:
  - (a) verify Standing Data for a Facility in accordance with clause 2.34.6;
  - (b) resolve technical performance issues; or
  - (c) confirm capability of Ancillary Services.
- 3.21AA.2 A Market Participant may apply to System Management for an Equipment Test no later than 12PM on the Scheduling Day for the next Trading Day.
- 3.21AA.3 An application for an Equipment Test must be made in accordance with the Power System Operation Procedure and contain:
  - (a) the name and location of the Facility to be tested;
  - (b) the commencement time of all Trading Intervals during which testing will be conducted; and
  - (c) details of the test to be conducted, including an indicative test program.
- 3.21AA.4 System Management must notify the Market Participant of whether System Management has approved an Equipment Test by no later than 4PM on the Scheduling Day.

- 3.21AA.5 System Management must not show bias towards a Market Participant concerning the approval of Equipment Tests.
- 3.21AA.6 In deciding whether to approve a proposed Equipment Test, System Management must have regard to whether:
  - (a) there is adequate time to properly consider the application;
  - (b) outages approved pursuant to clause 3.19 and tests approved pursuant to clause 4.25.8 would be affected by the intended Equipment Test; and
  - (c) the test can be accommodated at the proposed time without undue risk to Power System Security or Power System Reliability.
- 3.21AA.7 System Management must document the procedure it follows in approving Equipment Tests in the Power System Operation Procedure and System Management and Market Participants must follow that documented Market Procedure when planning and conducting Equipment Tests.
- 3.21AA.8 If, having approved an Equipment Test, System Management becomes aware that:
  - (a) the conduct of the test at the proposed time would pose a threat to Power System Security or Power System Reliability; or
  - (b) the Equipment Test is no longer required,
  - then it may cancel its approval of the Equipment Test at any time, including after the start of the Equipment Test, and must notify the Market Participant of the cancellation.
- 3.21AA.9 In conducting an Equipment Test a Market Participant must conform to the test plan approved by System Management.
- 3.21AA.10 If a Market Participant conducting an Equipment Test cannot conform to the test plan approved by System Management then it must inform System Management as soon as practicable.

## **Decommitment and Reserve Capacity Obligations**

#### 3.21B. Decommitment and Reserve Capacity Obligations

- 3.21B.1. Except where approval for a Planned Outage has been granted, or clause 7.9.6 applies, a Market Participant must seek permission from System Management before putting a Scheduled Generator holding Capacity Credits into a state where it will take more than four hours to re-synchronise the Scheduled Generator.
- 3.21B.2. A Market Participant must request from System Management the permission described in clause 3.21B.1 not less than two hours prior to the facility ceasing to be able to be re-synchronised within four hours, including in that request:

- (a) the identity of the Scheduled Generator;
- (b) the time at which the Market Participant wants to have the Scheduled Generator enter a state where it will take more than four hours to resynchronise; and
- (c) the first time after that in (b) at which the Scheduled Generator will be able to be resynchronised with four hours notice.
- 3.21B.3. System Management must assess the request for permission, based on the information available to System Management at the time of the request, and applying the criteria set out in clause 3.21B.5.
- 3.21B.4. System Management must either approve or reject the request and inform the Market Participant of its decision as soon as practicable, but no later than one hour prior to the time described in clause 3.21B.2(b).
- 3.21B.5. System Management may only withhold the permission described in clause 3.21B.1 if:
  - (a) the request for that permission is not in compliance with clause 3.21B.2 or the Power System Operation Procedure; or
  - (b) granting permission would mean that System Management would be incapable of maintaining the Ready Reserve Standard.
- 3.21B.6. Where System Management informs a Market Participant that permission is not granted, then System Management and the Market Participant must use their best endeavours to find an alternative time for the Scheduled Generator to be put into a state where it will take more than four hours to re-synchronise the Scheduled Generator
- 3.21B.7. If System Management grants permission, then within the time period set out in clause 3.21B.2(b) and 3.21B.2(c), or such alternative times as are mutually agreed in accordance with clause 3.21B.6, System Management must not require that Scheduled Generator to perform in accordance with its Reserve Capacity Obligations.
- 3.21B.8. System Management must document the procedure it follows granting permission is accordance with this clause 3.21B in the Power System Operation Procedure and System Management and Market Participants must follow that documented Market Procedure.

### **Settlement Data**

#### 3.22. Settlement Data

3.22.1. The IMO must provide the following information to the Settlement System for each Trading Month:

- (a) Capacity\_LF as described in clause 3.13.1(aA);
- (b) [Blank]
- (c) Margin\_Peak as described in clause 3.13.3A;
- (d) Margin\_Off-Peak as described in clause 3.13.3A;
- (e) Capacity\_R\_Peak, the requirement for Spinning Reserve for Peak Trading Intervals assumed in forming Margin\_Peak;
- (f) Capacity\_R\_Off-Peak, the requirement for Spinning Reserve for Off-Peak Trading Intervals assumed in forming Margin Off-Peak;
- (fA) LFR as described in clause 3.13.1(aA)(i)(2);
- (g) Cost\_LRD as the sum of:
  - i. Cost\_LR (as described in clause 3.13.3B and 3.13.3C) divided by
     12 as a monthly amount; and
  - ii. the monthly amount for Dispatch Support service as advised in accordance with clause 3.22.3(b); and
- (h) the compensation due to changed outage plans to be paid to a Market Participant for that Trading Month as determined in accordance with clause 3.19.12(e).
- 3.22.2. When System Management has entered into an Ancillary Service Contract with a Rule Participant, System Management must as soon as practicable and not less than 20 Business Days prior to the Ancillary Service Contract taking effect, provide the IMO with:
  - (a) the identity of the Rule Participant; and
  - (b) for each Contracted Ancillary Service to be provided by the Rule Participant under the Ancillary Service Contract:
    - i. a unique indentifer for the Contracted Ancillary Service;
    - ii. the type of Ancillary Service where this can be one of:
      - 1. Spinning Reserve Service;
      - 2. Load Following Service;
      - 3. Load Rejection Reserve Service;
      - 4. System Restart Service; or
      - 5. Dispatch Support Service; and
    - iii. the form of settlement data that System Management will provide to the IMO for the Contracted Ancillary Service provided by the Rule Participant, where this data must be one of the formats allowed by clause 3.22.3.

- 3.22.3. System Management must provide the following information to the IMO for each Rule Participant holding an Ancillary Service Contract for a Trading Month by the date specified in clause 9.16.2(a):
  - (a) the identity of the Rule Participant;
  - (b) for each Contracted Ancillary Service provided under an Ancillary Service Contract held by the Rule Participant:
    - i. the type of Ancillary Service where this can be one of:
      - 1. Spinning Reserve Service;
      - 2. Load Following Service;
      - 3. Load Rejection Reserve Service;
      - 4. System Restart Service; or
      - 5. Dispatch Support Service;
    - ii. for each Trading Interval of the Trading Month the quantity of Ancillary Service to a precision of 0.001 units, where the unit of measure is:
      - 1. MWh for Spinning Reserve Service;
      - 2. MWh for Load Following Service;
      - 3. MWh for Load Rejection Reserve Service;
      - 4. as determined by System Management for System Restart Service; or
      - 5. as determined by System Management for Dispatch Support Service; and
    - iii. either:
      - 1. a total monthly payment for the Ancillary Service in dollars and whole cents; or
      - 2. a price in dollars and whole cents per unit of the quantity described in (ii) per Trading Interval.

# 4 Reserve Capacity Rules

# The Reserve Capacity Cycle

### 4.1. The Reserve Capacity Cycle

- 4.1.1. This clause 4.1 sets out the timetable by which the key events described in this Chapter in respect of each Reserve Capacity Auction must occur. The events described below comprise a single Reserve Capacity Cycle, except where otherwise indicated. The Reserve Capacity Cycle will be repeated for each Reserve Capacity Auction.
- 4.1.1A. Clause 4.28B and 4.28C takes precedence over this clause 4.1 and events described in clause 4.28B and 4.28C are not required to comply with the timetable of this section 4.1 except where specified in clause 4.28B and 4.28C.
- 4.1.2. The first Reserve Capacity Auction is scheduled to be held in year 2005 with a single Reserve Capacity Auction to be scheduled in each subsequent year.
- 4.1.3. Year 1 of a Reserve Capacity Cycle is the Calendar Year in which the Reserve Capacity Auction for that Reserve Capacity Cycle is scheduled to be held, while Year 4 is the final year of the Reserve Capacity Cycle. Year 1 of the first Reserve Capacity Cycle is 2005.
- 4.1.4. The IMO must advertise a Request for Expressions of Interest in accordance with clause 4.2.4 by 5 PM on or before:
  - (a) 15 October 2004, in the case of the first Reserve Capacity Cycle; and
  - (b) 31 January of Year 1, in the case of subsequent Reserve Capacity Cycles.
- 4.1.5. The IMO must allow potential Reserve Capacity providers to respond to the Request for Expressions of Interest in accordance with clause 4.2 until 5 PM of the first Business Day falling on or following:
  - (a) 10 December 2004, in the case of the first Reserve Capacity Cycle; and
  - (b) 1 May of Year 1, in the case of subsequent Reserve Capacity Cycles.
- 4.1.6. The IMO must publish a summary of the responses to its Request for Expressions of Interest in accordance with clause 4.2.7 by 5 PM of the first Business Day falling on or following:
  - (a) 23 December 2004, in the case of the first Reserve Capacity Cycle; and
  - (b) 15 May of Year 1, in the case of subsequent Reserve Capacity Cycles.

- 4.1.7. The IMO must accept lodgement of applications for certification of Reserve Capacity for the Reserve Capacity Cycle in accordance with clause 4.9.1 from 9 AM of the first Business Day falling on or following:
  - (a) 4 January 2005, in the case of the first Reserve Capacity Cycle; and
  - (b) 1 May of Year 1, in the case of subsequent Reserve Capacity Cycles.
- 4.1.8. The IMO must publish a Statement of Opportunities Report produced in accordance with the Long Term PASA process described in clause 4.5.11 by 5 PM of the first Business Day falling on or following 17 June of Year 1 of the relevant Reserve Capacity Cycle.
- 4.1.9. [BLANK]
- 4.1.10. The IMO must publish on the Market Web Site the Reserve Capacity Information Pack in accordance with clause 4.7.2 by 5 PM of the first Business Day falling on or following 17 June of Year 1 of the relevant Reserve Capacity Cycle.
- 4.1.11. The IMO must cease to accept lodgement of applications for certification of Reserve Capacity for the Reserve Capacity Cycle in accordance with clause 4.9.1 from 5 PM of the last Business Day falling on or before:
  - (a) 20 July of Year 1 for Reserve Capacity Cycles up to and including 2010; and
  - (b) 1 July of Year 1 for Reserve Capacity Cycles from 2011 onwards.
- 4.1.12. The IMO must notify each applicant for certification of Reserve Capacity of the Certified Reserve Capacity to be assigned by 5 PM of the last Business Day on, or before:
  - (a) 5 August of Year 1 for Reserve Capacity Cycles up to and including 2010; and
  - (b) 19 August of Year 1 for Reserve Capacity Cycles from 2011 onwards.
- 4.1.13. Each Market Participant must provide to the IMO any Reserve Capacity Security required in accordance with clause 4.13.1 not later than 5 PM of the last Business Day falling on or before:
  - (a) for Reserve Capacity Cycles up to and including 2010:
    - 10 August of Year 1 of the relevant Reserve Capacity Cycle if any of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c); or
    - ii. 29 August of Year 1 of the relevant Reserve Capacity Cycle if any of the Facility's Certified Reserve Capacity is specified to be offered into the Reserve Capacity Auction in accordance with clause 4.14.1(a) and where none of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c);
  - (b) for Reserve Capacity Cycles from 2011 onwards:

- 2 September of Year 1 of the relevant Reserve Capacity Cycle if any of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c); or
- (ii) 14 September of Year 1 of the relevant Reserve Capacity Cycle if any of the Facility's Certified Reserve Capacity is specified to be offered into the Reserve Capacity Auction in accordance with clause 4.14.1(a) and where none of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c).
- 4.1.14. Each Market Participant holding Certified Reserve Capacity for the Reserve Capacity Cycle must provide to the IMO notification in accordance with clause 4.14.1 as to how much of its Certified Reserve Capacity will be traded bilaterally and how much will be offered to the IMO in the Reserve Capacity Auction held in Year 1 of the relevant Reserve Capacity Cycle not later than 5 PM of the last Business Day falling on or before:
  - (a) 9 September 2005, in the case of the first Reserve Capacity Cycle;
  - (b) 10 August of Year 1, in the case of subsequent Reserve Capacity Cycles up to and including 2010; and
  - (c) 2 September of Year 1, in the case of Reserve Capacity Cycles from 2011 onwards.
- 4.1.15. By 5 PM of the first Business Day following the notification deadline specified in clause 4.1.14, the IMO must confirm to each Market Participant in accordance with clause 4.14.9 the amount of Certified Reserve Capacity that can be traded bilaterally from its Facilities.
- 4.1.15A. The IMO must publish the Certified Reserve Capacity for each Facility in accordance with clause 4.9.9A by 5 PM of the first Business Day following the confirmation deadline specified in clause 4.1.15.
- 4.1.16. The IMO must publish the information required by clauses 4.15.1 and 4.15.2 pertaining to whether or not a Reserve Capacity Auction is required by 5 PM of the last Business Day falling on or before:
  - (a) 16 September 2005, in the case of the first Reserve Capacity Cycle;
  - (b) 18 August of Year 1, in the case of subsequent Reserve Capacity Cycles up to and including 2010; and
  - (c) the first Business Day following the confirmation deadline specified in clause 4.1.15, in the case of Reserve Capacity Cycles from 2011 onwards.

If the Reserve Capacity Auction is cancelled, the IMO will assign Capacity Credits on the same day in accordance with clause 4.20.5A(a).

4.1.17. If a Reserve Capacity Auction proceeds, then the IMO must accept submission of Reserve Capacity Offers from Market Participants in accordance with clause 4.17.2:

- (a) from 9 AM of the first Business Day falling on or following:
  - i. 20 September 2005 of Year 1, in the case of the first Reserve Capacity Cycle;
  - ii. 20 August of Year 1, in the case of subsequent Reserve Capacity Cycles up to and including 2010; and
  - iii. the second Business Day following the confirmation deadline specified in clause 4.1.15, in the case of Reserve Capacity Cycles from 2011 onwards.
- (b) until 5 PM of the last Business Day falling on or before:
  - i. 29 September 2005, in the case of the first Reserve Capacity Cycle;
  - ii. 29 August of Year 1, in the case of subsequent Reserve Capacity Cycles up to and including 2010; and
  - iii 14 September of Year 1, in the case of Reserve Capacity Cycles from 2011 onwards.
- 4.1.18. If a Reserve Capacity Auction proceeds, then the IMO must:
  - (a) run the Reserve Capacity Auction on the first Business Day falling on or following:
    - i. 3 October of 2005, in the case of the first Reserve Capacity Cycle;
    - ii. 1 September of Year 1, in the case of subsequent Reserve CapacityCycles up to and including 2010; and
    - iii. 15 September of Year 1, in the case of Reserve Capacity Cycles from 2011 onwards; and
  - (b) publish the results in accordance with clause 4.19.5 by 5 PM of that day.
- 4.1.19. The IMO must commence a review of the Maximum Reserve Capacity Price as required by clause 4.16.3 with the objective of completing the review, including consideration of public submissions in relation to that review, so as to allow a reasonable time for the Economic Regulation Authority to approve any proposed change in value and for that value to be implemented prior to the date and time specified in clause 4.1.4 that relates to the following Reserve Capacity Cycle.
- 4.1.20. Each Market Participant holding Certified Reserve Capacity which has been scheduled by the IMO in a Reserve Capacity Auction must provide to the IMO:
  - notification, in accordance with clause 4.20, of how many Capacity Credits each Facility will provide; and
  - (b) notification of any Long Term Special Price Arrangements to be accepted in accordance with clause 4.22,

not later than 5 PM of the last Business Day falling on or before 21 September of Year 1 of the relevant Reserve Capacity Cycle.

- 4.1.21. A Market Participant may apply to the IMO under clause 4.13.2A for a recalculation of the amount of Reserve Capacity Security required to be held by the IMO for a Facility in accordance with clause 4.13.2(b) after 5 PM of the last Business Day falling on or before 24 September of Year 1 of a Reserve Capacity Cycle.
- 4.1.21A. Not later than 5 PM of the last Business Day falling on or before 24 September of Year 1 of a Reserve Capacity Cycle, the IMO must, in the event that a Reserve Capacity Auction was required, assign Capacity Credits in accordance with clause 4.20.5A.
- 4.1.22. For the first Reserve Capacity Cycle, the IMO must publish the date and time from which the initial Reserve Capacity Requirements for Market Customers will apply (which is the Initial Time as determined in accordance with clause 4.1.25), not later than 30 Business Days prior to the day on which the Initial Time occurs.
- 4.1.23. Each Market Customer must provide to the IMO the information described in clause 4.28.8 by:
  - (a) in the case of the first Reserve Capacity Cycle, 5 PM on the Business Day being 15 Business Days prior to the day on which the Initial Time occurs; and
  - (b) in the case of a subsequent Reserve Capacity Cycle, 5 PM on the last Business Day falling on or before 20 August of Year 3 of that cycle.
- 4.1.24. The IMO must publish the initial Individual Reserve Capacity Requirement for each Market Customer in accordance with clause 4.28.7 by:
  - (a) in the case of the first Reserve Capacity Cycle, 5 PM on the Business Day being 10 Business Days prior to the day on which the Initial Time occurs; and
  - (b) in the case of a subsequent Reserve Capacity Cycle, by 5 PM on the last Business Day falling on or before 10 September of Year 3 of that cycle.
- 4.1.25. The initial Individual Reserve Capacity Requirement for a Market Customer is to apply from:
  - (a) in the case of the first Reserve Capacity Cycle, the earlier of Energy Market Commencement and the start of the Trading Day commencing on 1 October 2007 ("Initial Time"); and
  - (b) in the case of a subsequent Reserve Capacity Cycle, the start of the Trading Day commencing on 1 October of Year 3 of that cycle.
- 4.1.26. Reserve Capacity Obligations apply:
  - (a) in the case of the first Reserve Capacity Cycle:
    - from the Initial Time, for Facilities that were commissioned before Energy Market Commencement;
    - ii. from the Trading Day commencing on the scheduled date of commissioning, as specified in accordance with clause 4.10.1(c)(iii)(7),

- for Scheduled Generators and Non-Scheduled Generators commissioned between Energy Market Commencement and 30 November 2007, inclusive; and
- from the Trading Day commencing on 1 October 2007 for Interruptible Loads, Curtailable Loads or Dispatchable Loads commissioned after Energy Market Commencement; and
- (b) for subsequent Reserve Capacity Cycles up to and including 2009:
  - from the Trading Day commencing on 1 October of Year 3, for
    Facilities that were commissioned as at the scheduled time of the
    Reserve Capacity Auction for the Reserve Capacity Cycle as specified
    in clause 4.1.18(a) or for Facilities which have provided Capacity
    Credits in one or both of the two previous Reserve Capacity Cycles;
  - ii. from the Trading Day commencing on the scheduled date of commissioning, as specified in accordance with clause 4.10.1(c)(iii)(7), or as revised in accordance with clause 4.27.11A or clause 4.27.11B, for Facilities commissioned between 1 August of Year 3 and 30 November of Year 3; and
  - iii. from the Trading Day commencing on 30 November of Year 3, for new generating systems undertaking Commissioning Tests after 30 November of Year 3; and
- (c) for subsequent Reserve Capacity Cycles from 2010 onwards:
  - from the Trading Day commencing on 1 October of Year 3, for
    Facilities that were commissioned as at the scheduled time of the
    Reserve Capacity Auction for the Reserve Capacity Cycle as specified
    in clause 4.1.18(a) or for Facilities which have provided Capacity
    Credits in one or both of the two previous Reserve Capacity Cycles;
  - ii. from the Trading Day commencing on the scheduled date of commissioning, as specified in accordance with clause 4.10.1(c)(iii)(7), or as revised in accordance with clause 4.27.11A or clause 4.27.11B, for Facilities commissioned between 1 June of Year 3 and 1 October of Year 3; and
  - iii. from the Trading Day commencing on 1 October of Year 3, for new generating systems undertaking Commissioning Tests after 1 October of Year 3.

#### 4.1.27. [Blank]

4.1.28. Every month between 1 October of Year 3 and 30 September of Year 4 of a Reserve Capacity Cycle after the first Reserve Capacity Cycle and every month between Energy Market Commencement and 30 September of Year 4 of the first Reserve Capacity Cycle:

- (a) the IMO must update the values of each Market Participant's Individual Reserve Capacity Requirement in accordance with clause 4.28.11; and
- (b) the IMO must publish updated Individual Reserve Capacity Requirements no later than by 5:00 PM on the Business Day being five Business Days prior to the commencement of the Trading Month from which the updated Individual Reserve Capacity Requirements will apply.
- 4.1.29. The Reserve Capacity Price and Monthly Reserve Capacity Price for a Reserve Capacity Cycle are applicable between the following time and dates:
  - (a) from:
    - in the case of the first Reserve Capacity Cycle, the start of the Trading Day commencing on the earlier of Energy Market Commencement and the start of the Trading Day commencing on 1 October 2007;
    - ii. in the case of subsequent Reserve Capacity Cycles, the start of the Trading Day commencing on 1 October of Year 3 of the relevant cycle;
       and
  - (b) to the end of the Trading Day ending on 1 October of Year 4 of the relevant cycle.
- 4.1.30. The Reserve Capacity Obligations for a Facility arising through holding Capacity Credits for a Reserve Capacity Cycle cease to apply from:
  - (a) subject to paragraph (b), the completion of the Trading Day ending on 1October of Year 4 of the relevant Reserve Capacity Cycle; and
  - (b) the completion of the Trading Day ending on the scheduled date of decommissioning, as specified in accordance with clause 4.10.1(d), for Facilities decommissioned between 1 August of Year 4 of the relevant Reserve Capacity Cycle and 1 October of Year 4.
- 4.1.31. The description of an event in this clause is for the purpose of identifying where it fits into the Reserve Capacity Cycle, and does not affect the interpretation of the relevant provisions of this Chapter.
- 4.1.32. The IMO may modify or extend a date or time set under this clause 4.1 (except the dates and times set by clause 4.1.18, 4.1.26, 4.1.29 and 4.1.30). If the IMO extends a date or time under this clause 4.1.32, then it must publish notice of the modified or extended time or date on the Market Web Site and the modified or extended date or time takes effect for the purposes of these Market Rules.

# The Reserve Capacity Expression of Interest

- 4.2. The Reserve Capacity Expression of Interest Process
- 4.2.1. The purpose of the Reserve Capacity Expression of Interest is to provide the IMO with an indication from existing and potential new Market Participants of the amount

- of new generation and new Demand Side Management capacity they are willing to offer to make available as Reserve Capacity.
- 4.2.2. The IMO must prepare a Request for Expressions of Interest which contains information which includes, the information described in clause 4.3.1.
- 4.2.3. The Request for Expressions of Interest is to be made available:
  - (a) on a web-site;
  - (b) to any person on application to the IMO.
- 4.2.4. By the date and time specified in clause 4.1.4, the IMO must have advertised the Request for Expressions of Interest, including how to obtain the Request for Expression of Interest:
  - (a) on a web-site; and
  - (b) in local and national media which, in the opinion of the IMO, is likely to be seen by potential suppliers of Reserve Capacity.
- 4.2.5. At its discretion, the IMO may continue to advertise and promote the Request for Expression of Interest until the deadline for submissions of Expression of Interest specified in clause 4.2.6.
- 4.2.6. Expressions of Interests must be provided to the IMO by the time and date specified in clause 4.1.5 and must contain the information described in clause 4.4.1.
- 4.2.7. By the date and time specified in clause 4.1.6, the IMO must publish the following information:
  - (a) the number of Expression of Interests received;
  - (b) based on the Expression of Interests, the additional Reserve Capacity potentially available, categorised as:
    - i. capacity associated with Facilities that are committed; and
    - ii. capacity associated with Facilities that are not yet committed, where this capacity is to be further categorised between new Facilities for which:
      - an offer by the relevant Network Operator to enter into an Arrangement for Access ("Access Proposal") has been made and all necessary Environmental Approvals granted;
      - applications for both Access Proposals and Environmental Approvals have been made and one or both are being processed;
      - 3. no Access Proposal has been applied for or some or all Environmental Approvals have not been applied for;

- (c) based on the Expression of Interests, the additional Reserve Capacity potentially available categorised as:
  - i. capacity associated with Intermittent Generators;
  - ii. capacity associated with non-Intermittent Generators;
  - iii. capacity associated with Demand Side Management; and
- (d) based on the Expression of Interests, the additional Reserve Capacity potentially available categorised based on fuel type and back-up fuel options;
- (e) the IMO's estimate of the existing capacity eligible to be assigned Certified Reserve Capacity in the SWIS; and
- (f) the preliminary Reserve Capacity Requirement for the Reserve Capacity Cycle to which the Expression of Interest relates that was included in the Request for Expression of Interest.

### 4.3. Information to be Included in Requests for Expression of Interest

- 4.3.1. A Request for Expression of Interest for a Reserve Capacity Cycle must include the following information:
  - (a) a request for a response by interested parties not later than the relevant time specified in clause 4.1.5;
  - (b) the preliminary Reserve Capacity Requirement for the Reserve Capacity Cycle determined in accordance with clause 4.6.3;
  - (c) for each of the three previous Reserve Capacity Cycles (if applicable):
    - i. the Reserve Capacity Requirement determined in accordance with clause 4.6.1;
    - ii. the Availability Curve referred to in clause 4.5.10(e) applicable to that Reserve Capacity Cycle;
    - iii. the Reserve Capacity Auction Requirement for any Reserve Capacity Auction held:
    - iv. the number of Capacity Credits acquired by the IMO;
    - v. the Maximum Reserve Capacity Price;
    - vi. the Reserve Capacity Price; and
    - vii. the Monthly Reserve Capacity Price;
  - (d) the number of Capacity Credits which the IMO expects to be traded bilaterally;
  - (e) the amount of capacity expected to be required from new Facilities, where this figure is based on the difference between the preliminary Reserve Capacity Requirement for the Reserve Capacity Cycle as determined in accordance with clause 4.6.3 and the latest information available to the IMO as to the

- aggregate available capacity for the SWIS during the period to which the Reserve Capacity Requirement relates;
- (f) the then current Maximum Reserve Capacity Price;
- (g) a brief summary of the eligibility requirements for Reserve Capacity to be certified under clause 4.11;
- (h) information on how to obtain the Market Rules from a web-site;
- (i) the following information on timetables and processing times for the Reserve Capacity Cycle:
  - the date and time from which the lodgement of applications for certification of Reserve Capacity will be allowed;
  - ii. the date and time by which applications for certification of Reserve Capacity must be lodged;
  - iii. the date and time that applicants for Certified Reserve Capacity will be notified of the Certified Reserve Capacity assigned;
  - iv. the date and time by which a Market Participant which holds Certified Reserve Capacity must notify the IMO as to how much of that capacity will be traded bilaterally, offered into a Reserve Capacity auction, or not be made available to the market in accordance with clause 4.14.1;
  - v. the date and time by which the IMO will announce whether the Reserve Capacity Auction will be cancelled;
  - vi. the date and time from which the lodgement of Reserve Capacity Offer submissions will be allowed;
  - vii. the last date and time at which lodgements of Reserve Capacity Offer will be allowed;
  - viii. the date and time the Reserve Capacity Auction results will be published; and
  - ix. the last date and time by which:
    - Long Term Special Price Arrangements can be accepted by Market Participants; and
    - 2. Market Participants can inform the IMO of the Facilities which will provide Capacity Credits;
- (j) the information required to be included in an Expression of Interest and the format in which that information is to be presented;
- (k) the closing date and time for submission of Expressions of Interest; and
- (I) who to contact with questions and responses to the Expression of Interest, including that person's contact details.

### 4.4. Information to be Included in Expression of Interests

- 4.4.1. An Expression of Interest for a Reserve Capacity Cycle must include the following information:
  - (a) the identity of the person proposing to provide Reserve Capacity and contact details;
  - (b) for each Facility covered by the Expression of Interest, its name and location and whether it is:
    - i. an Intermittent Generator;
    - iA. a non-Intermittent Generator not serving Intermittent Load;
    - ii. a non-Intermittent Generator serving Intermittent Load; or
    - iii. a form of Demand Side Management;
  - (c) the maximum Reserve Capacity anticipated to be available from each Facility;
  - (cA) for non-Intermittent Generators serving Intermittent Load, the maximum capacity anticipated to be required to serve the Intermittent Load;
  - (d) for each Facility:
    - i. the expected earliest date that the Facility will be able to be fully operational;
    - ii. the status of any applications for Access Proposals in respect of that Facility;
    - iii. the status of any applications for Environmental Approvals required in respect of that Facility;
    - iv. details of the type and quantity of fuel expected to be available to that Facility;and
    - v. the hours during a typical week when the Facility will not be available to be dispatched due to staffing restrictions or other factors.

# The Long Term SWIS Capacity Requirements

### 4.5. Long Term Projected Assessment of System Adequacy

- 4.5.1. The Long Term PASA Study must be performed annually by the IMO and considers each of the years in the Long Term PASA Study Horizon.
- 4.5.2. The Long Term PASA Study must take into account:
  - (a) demand growth scenarios, including peak and annual energy requirements;
  - (b) expected Demand Side Management capabilities and taking into account clause 4.28.10;

- (c) generation capacity expected to be available, including details of any Early Certified Reserve Capacity, seasonal capacities, Ancillary Service capabilities, long duration outages and, for Non-Scheduled Generators, production profiles;
- (d) expected transmission network capabilities allowing for expansion plans, losses and constraints; and
- (e) the capacity described in clause 4.5.2A.
- 4.5.2A. The IMO must determine an estimate of the Reserve Capacity required to cover the forecast cumulative needs of Intermittent Loads such that:
  - (a) this Reserve Capacity estimate is in addition to the Reserve Capacity required to satisfy the Planning Criterion in the situation where there were no Intermittent Loads; and
  - (b) this Reserve Capacity estimate must be set by the IMO to equal the sum over all expected Intermittent Loads of their forecast maximum possible Intermittent Load levels multiplied by:
    - i. the ratio of:
      - 1. the Reserve Capacity Target for the relevant Capacity Year as described in clause 4.5.10(b)(i); and
      - 2. the expected peak demand for the relevant Capacity Year as described in clause 4.5.10(b)(ii);
    - ii. minus one.
- 4.5.3. The IMO must notify Rule Participants of the information that it requires from them in the areas described in clause 4.5.2, in respect of each year of the Long Term PASA Study Horizon, no later than 1 April of Year 1 of the relevant Reserve Capacity Cycle.
- 4.5.3A. The information requested by the IMO under clause 4.5.3 must include a request for Market Customers to provide the following information pertaining to Intermittent Loads and Loads that are expected to be registered and operating as Intermittent Loads during the second Capacity Year commencing during the Long Term PASA Study Horizon:
  - (a) the amount of capacity required to serve that Load in the event of a failure of on-site generation where this amount of capacity cannot exceed the greater of:
    - i. either:
      - for an existing Intermittent Load, the maximum allowed level of Intermittent Load specified in Standing Data for that Intermittent Load at the time of providing the data; or
      - 2. for an Intermittent Load that is yet to be registered with the IMO, zero; and

- ii. the Contractual Maximum Demand associated with that Intermittent Load to apply during the Capacity Year to which the nomination relates. The Market Customer must provide evidence to the IMO of this Contractual Maximum Demand level unless the IMO has previously been provided with that evidence; and
- (b) for each Intermittent Load that is yet to be registered with the IMO:
  - i. the location of the Load;
  - evidence that the Load can be expected to satisfy the requirements to be registered as an Intermittent Load during the second Capacity Year within the Long Term PASA Study Horizon; and
  - the expected firm MW capacity and location of any generation system to serve that Intermittent Load in accordance with clause 2.30B.2(a) that is to be located at a different connection point to the Intermittent Load.
- 4.5.4. Rule Participants must provide the data requested by the IMO in accordance with clause 4.5.3 within 15 Business Days from the date of that request.
- 4.5.5. The IMO may request from persons who are not Rule Participants information in the areas described in clause 4.5.2 in respect of each year of the Long Term PASA Study Horizon.
- 4.5.6. The IMO must review the information provided to it in accordance with clause 4.5.4 and as a result of a request under clause 4.5.5, and where necessary, seek clarifications.
- 4.5.7. The IMO must treat all information provided to it in accordance with clauses 4.5.4, 4.5.5 and 4.5.6 as confidential except where the provider has granted permission for its release or as otherwise provided under these Market Rules. However, the IMO may release any such information as part of an unidentifiable component of an aggregate number in a Statement of Opportunities Report.
- 4.5.8. Where information provided to the IMO in accordance with clauses 4.5.4, 4.5.5 and 4.5.6 is not adequate or is insufficient for the purpose for which it is required, the IMO may make its own estimate and use that estimate in place of information provided in accordance with clauses 4.5.4, 4.5.5 and 4.5.6.
- 4.5.9. The Planning Criterion to be used by the IMO in undertaking a Long Term PASA study is that there should be sufficient available capacity in each Capacity Year during the Long Term PASA Study Horizon to:
  - (a) meet the forecast peak demand (including transmission losses and allowing for Intermittent Loads) supplied through the SWIS plus a reserve margin equal to the greater of:

- 8.2% of the forecast peak demand (including transmission losses and allowing for Intermittent Loads); and
- ii. the maximum capacity, measured at 41°C, of the largest generating unit;

while maintaining the Minimum Frequency Keeping Capacity for normal frequency control. The forecast peak demand should be calculated to a probability level that the forecast would not be exceeded in more than one year out of ten; and

(b) limit expected energy shortfalls to 0.002% of annual energy consumption (including transmission losses).

#### 4.5.10. The IMO must use the information assembled to:

- (a) assess the extent to which the anticipated installed generation capacity and Demand Side Management capacity is capable of satisfying the Planning Criterion, identifying any capacity shortfalls in each Relevant Year in the Long Term PASA Study Horizon, for each of the following scenarios;
  - i. median peak demand assuming low demand growth;
  - ii. one in ten year peak demand assuming low demand growth;
  - iii. median peak demand assuming expected demand growth;
  - iv. one in ten year peak demand assuming expected demand growth;
  - v. median peak demand assuming high demand growth;
  - vi. one in ten year peak demand assuming high demand growth,

where the low, expected, and high demand growth cases reflect demand changes stemming from different levels of economic growth, with these being temperature adjusted to produce the one in ten year peak demand cases.

- (b) forecast the Reserve Capacity Target and corresponding expected peak demand for each Capacity Year during the Long Term PASA Study Horizon, where:
  - i. the Reserve Capacity Target for a Capacity Year is the capacity required to meet the Planning Criterion in that year under the scenario described in paragraph (a)(iv); and
  - ii. the expected peak demand in that year is the peak demand under the scenario described in paragraph (a)(iv);
- identify and assess any potential capacity shortfalls isolated to a sub-region of the SWIS resulting from expected restrictions on transmission capability or other factors;
- (d) identify any potential transmission, generation or demand side capacity augmentation options to alleviate capacity shortfalls identified in paragraphs (a) and (c); and

- (e) develop a two dimensional curve for each of the 2nd and 3rd Capacity Years of the Long Term PASA Study Horizon describing the information referred to in clause 4.5.12 ("Availability Curve").
- 4.5.11. The IMO must publish the Statement of Opportunities Report for a Reserve Capacity Cycle by the date specified in clause 4.1.8.
- 4.5.12. An Availability Curve for a Capacity Year is to contain the following information:
  - (a) the forecast capacity, in MW, required for more than 24 hours per year, 48 hours per year and 72 hours per year;
  - (b) the minimum capacity required to be provided by generation capacity if Power System Security and Power System Reliability is to be maintained. This minimum capacity is to be set at a level such that if:
    - i all Demand Side Management capacity (excluding Interruptible Load used to provide Spinning Reserve to the extent that it is anticipated to provide Certified Reserve Capacity), were activated during the Capacity Year so as to minimise the peak demand during that year; and
    - the Planning Criterion and the criteria for evaluating Outage Plans set out in clause 3.18.11 were to be applied to the load scenario defined by clause 4.5.12(b)(i), then

it would be possible to satisfy the Planning Criterion and the criteria for evaluating Outage Plans set out in clause 3.18.11, as applied in clause 4.5.12(b)(ii), using, to the extent that the capacity is anticipated to provide Certified Reserve Capacity, the anticipated installed generating capacity, the anticipated Interruptible Load capacity available as Spinning Reserve and, to the extent that further generation capacity would be required, an appropriate mix of generation capacity to make up that shortfall; and

- (c) the capacity associated with each Availability Class where:
  - the capacity quantity associated with Availability Class 4 is the Reserve Capacity Target for the Capacity Year less the greater of the quantity specified under clause 4.5.12(b) and the quantity specified under clause 4.5.12(a) as being required for more than 24 hours per year;
  - ii. the capacity quantity associated with Availability Class 3 is:
    - the Reserve Capacity Target for the Capacity Year less the greater of the quantity specified under clause 4.5.12(b) and the quantity specified under clause 4.5.12(a) as being required for more than 48 hours per year; less
    - 2. the capacity quantity associated with Availability Class 4;
  - iii. the capacity quantity associated with Availability Class 2 is:

- 1. the Reserve Capacity Target for the Capacity Year less the greater of the quantity specified under clause 4.5.12(b) and the quantity specified under clause 4.5.12(a) as being required for more than 72 hours per year; less
- 2. the sum of the capacity quantities associated with each of Availability Class 3 and Availability Class 4;
- iv. the capacity quantity associated with Availability Class 1 is:
  - 1. the Reserve Capacity Target for the Capacity Year; less
  - 2. the sum of the capacity quantities associated with each of Availability Class 2, Availability Class 3 and Availability Class 4;

#### 4.5.13. The Statement of Opportunities Report must include:

- (a) the input information assembled by the IMO in performing the Long Term PASA study including, for each Capacity Year of the Long Term PASA Study Horizon:
  - i. the demand growth scenarios used;
  - ii. the generation capacities of each generation Registered Facility;
  - iii. the generation capacities of each committed generation project;
  - iv. the generation capacities of each probable generation project;
  - v. the Demand Side Management capability and availability;
  - vA. the amount of Reserve Capacity forecast to be required to serve the aggregate Intermittent Load;
  - vi. the assumptions about transmission network capacity, losses and network and security constraints that impact on study results; and
  - vii. a summary of the methodology used in determining the values and assumptions specified in (i) to (vi), including methodological changes relative to previous Statement of Opportunities Reports;
- (b) the Reserve Capacity Target for each Capacity Year of the Long Term PASA Study Horizon;
- (c) the amount by which the installed generation capacity plus the Demand Side Management available exceeds or falls short of the Reserve Capacity Target for each Capacity Year and each demand growth scenario considered in the study;
- (d) the extent to which localised supply restrictions will exist while satisfying the Reserve Capacity Target for each Capacity Year and each demand growth scenario considered in the study;
- (e) a statement of potential generation, demand side and transmission options that would alleviate capacity shortfalls relative to the Reserve Capacity Target and to capacity requirements in sub-regions of the SWIS; and

- (f) the Availability Curve for the 2nd and 3rd Capacity Years of the Long Term PASA Study Horizon.
- 4.5.14. The IMO must document the procedure it follows in conducting the Long Term PASA and reviews under clause 4.5.15 in the Reserve Capacity Procedure and Rule Participants, including the IMO, must follow that documented Market Procedure in the conduct of the Long Term PASA study and the review under clause 4.5.15.
- 4.5.15. From time to time, and at least once in every five year period starting from Energy Market Commencement, the IMO must conduct a review of the Planning Criterion and the process by which it forecasts SWIS peak demand. This review must include:
  - (a) a review of the technical analysis; and
  - (b) a cost-benefit study on the effects on stakeholders of a variety of levels of generation adequacy.
- 4.5.16. In conducting a review under clause 4.5.15, the IMO must invite submissions in accordance with the Reserve Capacity Procedure on the performance of the Planning Criterion and the process by which it forecasts SWIS peak demand from Rule Participants and take any submissions into account in the review.
- 4.5.17. In accordance with the Reserve Capacity Procedure, the IMO must make available a draft of the report described in clause 4.5.18 to Rule Participants for comment and invite submissions on the draft report.
- 4.5.18. After concluding the review described in clause 4.5.15, the IMO must publish a final report containing:
  - (a) issues identified by the IMO;
  - (b) assumptions made by the IMO in undertaking the review;
  - (c) submissions received by the IMO from Rule Participants in accordance with clause 4.5.16;
  - (d) the IMO's responses to the issues raised in those submissions;
  - (e) the results of the technical and cost-benefit studies;
  - (f) the submissions on the draft report received by the IMO from Rule Participants in accordance with clause 4.5.17;
  - (g) the IMO's responses to the issues raised in those submissions; and
  - (h) any recommended changes to the Planning Criterion.
- 4.5.19. Where the IMO finds that a change to the process by which it forecasts SWIS peak demand would be beneficial in light of the Wholesale Market Objectives, it must:
  - (a) make a Rule Change Proposal to implement the change; and/or
  - (b) make a Procedure Change Proposal to implement the change.

- 4.5.20. If the IMO contracts with a third party to conduct the analysis required under this clause 4.5, then:
  - (a) the IMO must ensure that the third party is familiar with the methodology employed in conducting the analysis required under this clause 4.5 in previous years; and
  - (b) the IMO must approve any variations in the process to be used by that third party where variations may only be accepted if not inconsistent with the requirements specified in the Market Rules or the Reserve Capacity Procedure.

#### 4.6. Reserve Capacity Requirements

- 4.6.1. The Reserve Capacity Requirement for a Reserve Capacity Cycle is the Reserve Capacity Target for the Capacity Year commencing on 1 October of Year 3 of the Reserve Capacity Cycle as reported in the Statement of Opportunities Report for that Reserve Capacity Cycle.
- 4.6.2. The expected peak demand corresponding to the Reserve Capacity Requirement is the forecasted value determined in accordance with clause 4.5.10(b)(ii) for the Capacity Year commencing on 1 October of Year 3 of the Reserve Capacity Cycle.
- 4.6.3. The preliminary Reserve Capacity Requirement for a Reserve Capacity Cycle to be included in the relevant Request for Expression of Interest is:
  - (a) for the first Reserve Capacity Cycle is 3,862 MW; and
  - (b) for subsequent Reserve Capacity Cycles, the Reserve Capacity Target for the Capacity Year commencing on 1 October of Year 3 of the Reserve Capacity Cycle as reported in the Statement of Opportunities Report for the preceding Reserve Capacity Cycle.

# **Certification of Reserve Capacity**

#### 4.7. The Reserve Capacity Information Pack

- 4.7.1. [BLANK]
- 4.7.2. By the time specified in clause 4.1.10, the IMO must publish the Reserve Capacity Information Pack for a Reserve Capacity Cycle on the Market Web Site.
- 4.7.3. The Reserve Capacity Information Pack for a Reserve Capacity Cycle must include the following information:
  - (a) the Reserve Capacity Requirement for the Reserve Capacity Cycle, as determined in accordance with clause 4.6.1;
  - (b) an explicit description of the Availability Curve to be used in restricting the amount of Reserve Capacity only available for a limited number of hours per

year that can be traded bilaterally in accordance with clause 4.14.9, or scheduled in the Reserve Capacity Auction in accordance with clause 4.19.1; and

- (c) instructions as to how to obtain from the Market Web Site a copy of:
  - i. the Request for Expression of Interest; and
  - ii. the report described in clause 4.2.7,

for the Reserve Capacity Cycle.

# 4.8. Who Can Apply for Certification of Reserve Capacity

- 4.8.1. Subject to clause 4.8.2, a Market Participant may apply for certification of the amount of Reserve Capacity which can be provided by a Facility if:
  - (a) the Facility is a Registered Facility other than a Network; or
  - (b) the Facility is not a Registered Facility but the Market Participant intends to have the Facility registered as a Registered Facility other than a Network by the commencement date of the Reserve Capacity Obligations for the relevant Reserve Capacity Cycle as specified in clause 4.1.26.
- 4.8.2. For the first Reserve Capacity Cycle, Western Power may not apply for certification of Reserve Capacity for its generation systems, with the Certified Reserve Capacity and associated Reserve Capacity Obligations for those Facilities instead being assigned and set in accordance with clauses 4.11.7 and 4.12.5.

### 4.9. Process for Applying for Certification of Reserve Capacity

- 4.9.1. Applications for certification of Reserve Capacity:
  - (a) for the current Reserve Capacity Cycle may be lodged with the IMO from the date and time specified in clause 4.1.7 and until the time specified in clause 4.1.11; and
  - (b) for a future Reserve Capacity Cycle may be lodged with the IMO at any time prior to the date and time specified in clause 4.1.7 for the Reserve Capacity Cycle to which the application relates.
- 4.9.2. Only the Market Participant which has registered a Facility, or which intends to register a Facility, may apply for certification of Reserve Capacity in respect of that Facility.
- 4.9.3. A Market Participant applying for certification of Reserve Capacity must provide to the IMO:
  - (a) the data specified in clause 4.10.1, in the format specified in the Reserve Capacity Procedure;

- in the case of application for certification of Reserve Capacity for an Intermittent Generator that is yet to enter service, the report described in clause 4.10.3; and
- (c) in the case of an application for conditional certification for a future Reserve Capacity Cycle, or subsequent applications for Early Certified Reserve Capacity for a Facility for the same Reserve Capacity Cycle, an Application Fee to cover the cost of processing the application.
- 4.9.4. Applications for certification of Reserve Capacity must be made in the form prescribed by IMO.
- 4.9.5. If the IMO assigns Certified Reserve Capacity to a Facility for a future Reserve Capacity Cycle under clause 4.11 ("Conditional Certified Reserve Capacity"):
  - (a) the Conditional Certified Reserve Capacity is conditional upon the information included in the application for Certified Reserve Capacity remaining correct as at the date and time specified in clause 4.1.11 for that future Reserve Capacity Cycle
  - (b) the Market Participant holding the Conditional Certified Reserve Capacity must, in accordance with clauses 4.9.1 and 4.9.3, re-lodge an application for Certified Reserve Capacity with the IMO between the date and time specified in clause 4.1.7 and the time specified in clause 4.1.11 for that future Reserve Capacity Cycle;
  - (c) if the IMO is satisfied that the application re-lodged in accordance with paragraph (b) is consistent with the information upon which the Conditional Certified Reserve Capacity was assigned and is correct, then the IMO must confirm:
    - i. the Certified Reserve Capacity;
    - ii. the Reserve Capacity Obligations Quantity; and
    - iii. the Reserve Capacity Security levels,

that were previously conditionally assigned, set or determined by the IMO, subject to the Certified Reserve Capacity for an Intermittent Generator being assigned in accordance with clause 4.11.2(b); and

- (d) if the application re-lodged in accordance with paragraph (b) is found by the IMO to be inaccurate or is not consistent with the information upon which the Conditional Certified Reserve Capacity was assigned, then the IMO must process the application without regard for the Conditional Certified Reserve Capacity.
- 4.9.6. The IMO must notify an applicant for certification of Reserve Capacity of receipt of the application within one Business Day of receipt.

- 4.9.7. If a Market Participant fails to receive notification of receipt from the IMO in accordance with clause 4.9.6, then it must contact the IMO and arrange for resubmission of the information prior to the time and date specified in clause 4.1.11.
- 4.9.8. The IMO must notify applicants for certification of Reserve Capacity for:
  - (a) the current Reserve Capacity Cycle, of the quantity of the Certified Reserve Capacity assigned to, and the initial Reserve Capacity Obligation Quantity set for, each Facility covered by the application, by the date and time specified in clause 4.1.12;
  - (b) a future Reserve Capacity Cycle, of the quantity of Conditional Certified Reserve Capacity assigned to, and the initial Reserve Capacity Obligation Quantity set for, each Facility covered by that application within 90 days of the IMO receiving the application.
- 4.9.9. If the IMO assigns Certified Reserve Capacity to a Facility in respect of a Reserve Capacity Cycle, the IMO must advise the applicant:
  - of the amount of Certified Reserve Capacity assigned to the Facility in respect of the Reserve Capacity Cycle, as determined in accordance with clause 4.11 or clause 4.9.5(c) (as applicable);
  - (b) of the initial Reserve Capacity Obligations Quantity set for the Facility, as determined in accordance with clause 4.12 or clause 4.9.5(c) (as applicable);
  - (c) of any Reserve Capacity Security required as a condition of a Market Participant holding the Certified Reserve Capacity, as determined in accordance with clause 4.13.2 or clause 4.9.5(c) (as applicable);
  - (d) in the case of Conditional Certified Reserve Capacity, that the certification is subject to the conditions in clause 4.9.5(a) and (b);
  - (e) upon the request of the applicant, of the calculations upon which the IMO's determinations are based; and
  - (f) whether the IMO accepted or rejected a proposed alternative value to be used in the calculation of the Required Level for a Facility for which a Market Participant nominated to use the methodology described in clause 4.11.2(b) in its application for certification, as determined in accordance with clause 4.11.2A, if applicable.
- 4.9.9A The IMO must publish, by the date and time specified in clause 4.1.15A, the level of Certified Reserve Capacity assigned to each Facility.
- 4.9.10. The IMO must document the procedure that:
  - (a) Market Participants must follow in the process of applying for Certified Reserve Capacity; and

(b) the IMO must follow in processing applications for Certified Reserve Capacity, including how Certified Reserve Capacity is assigned and Reserve Capacity Obligation Quantities are set,

in the Reserve Capacity Procedure. The IMO and Market Participants must follow that documented Market Procedure when Market Participants are applying for Certified Reserve Capacity and when the IMO is processing those applications.

# 4.10. Information Required for the Certification of Reserve Capacity

- 4.10.1. Each Market Participant must ensure that information submitted to the IMO with an application for certification of Reserve Capacity pertains to the Reserve Capacity Cycle to which the certification relates, is supported by documented evidence and includes, where applicable, the following information:
  - (a) the identity of the Facility;
  - (b) the Reserve Capacity Cycle to which the application relates;
  - (bA) with the exception of applications for Conditional Certified Reserve Capacity:
    - i. evidence of an Arrangement for Access or evidence that the Market Participant has accepted an Access Proposal from the relevant Network Operator made in respect of the Facility and that the Facility will be entitled to have access from a specified date occurring prior to the date specified in clause 4.10.1(c)(iii)(7), including the level of unconstrained access and details of any constraints that may apply;
  - (c) if the Facility, or part of the facility, is yet to enter service:
    - i. [Blank]
    - ii. with the exception of applications for Conditional Certified Reserve Capacity, evidence that any necessary Environmental Approvals have been granted or evidence supporting the Market Participant's expectation that any necessary Environmental Approvals will be granted in time to have the Facility meet its Reserve Capacity Obligations by the date specified in clause 4.10.1(c)(iii)(7);
    - iii. the Key Project Dates occurring after the date the request is submitted, including, if applicable, but not limited to:
      - when all approvals will be finalised or, in the case of Interruptible Loads and Demand Side Programmes all required contracts will be in place;
      - when financing will be finalised;
      - 3. when site preparation will begin;
      - 4. when construction will commence;
      - 5. when generating equipment or Dispatchable Load equipment will be installed or, in the case of Interruptible Loads and

- Demand Side Programmes, all required control equipment will be in place;
- 6. when the Facility, or part of the Facility, will be ready to undertake Commissioning Tests; and
- 7. when the Facility, or part of the Facility, will have completed all Commissioning Tests and be capable of meeting Reserve Capacity Obligations in full;
- (d) if the Facility is a Registered Facility that will be decommissioned prior to the date specified in clause 4.1.30(a) for the Reserve Capacity Cycle to which the application relates, the planned decommissioning date;
- (dA) a description and a configuration of the main components of the Facility;
- (e) for a generation system other than an Intermittent Generator:
  - i. the capacity of the Facility and the temperature dependence of that capacity;
  - ii. the maximum sent out capacity, net of Intermittent Loads, embedded and Parasitic Loads, that can be guaranteed to be available for supply to the relevant Network from the Facility when it is operated normally at an ambient temperature of 41°C;
  - iii. the maximum sent out capacity, net of Intermittent Loads, embedded and Parasitic Loads, beyond the capacity described in (ii), that can be made available for supply to the relevant Network from the Facility at an ambient temperature of 41°C and any restrictions on the availability of that capacity, including limitations on duration;
  - iv. at the option of the applicant, the method to be used to measure the ambient temperature at the site of the Facility for the purpose of defining the Reserve Capacity Obligation Quantity, where the method specified may be either:
    - a publicly available daily maximum temperature at a location representative of the conditions at the site of the Facility as reported daily by a meteorological service; or
    - a daily maximum temperature measured at the site of the generator by the SCADA system operated by System Management.

(Where no method is specified, a temperature of 41°C will be assumed):

v. subject to clause 4.10.2, details of primary and any alternative fuels, including details and evidence of both firm and non-firm fuel supplies and the factors that determine restrictions on fuel availability that could prevent the Facility operating at its full capacity;

- vi. the expected forced and unforced outage rate based on manufacturer data; and
- vii. for Facilities that have operated for at least 12 months, the forced and unforced outage rate of the Facility;
- (f) for Interruptible Loads, Demand Side Programmes and Dispatchable Loads:
  - i. the Reserve Capacity the Market Participant expects to make available from each of up to 3 blocks of capacity;
  - the maximum number of hours per year the Interruptible Load,
     Demand Side Programme or Dispatchable Load is available to provide
     Reserve Capacity, where this must be at least 24 hours;
  - iii. the maximum number of hours per day that the Interruptible Load,
    Demand Side Programme or Dispatchable Load is available to provide
    Reserve Capacity if called, where this must be:
    - 1. not less than four hours; and
    - 2. not more than the maximum of the periods specified in subclause (vi);
  - iv. the maximum number of times the Interruptible Load, Demand Side Programme or Dispatchable Load can be called to provide Reserve Capacity during a 12 month period, where this must be at least six times;
  - v. the minimum notice period required for dispatch of the Interruptible Load, Demand Side Programme or Dispatchable Load, where this must not be more than 4 hours; and
  - vi. the periods when the Interruptible Load, Demand Side Programme or Dispatchable Load can be dispatched, which must include the period between noon and 8:00 PM on all Business Days;
- (g) for all Facilities:
  - any restrictions on the availability of the Facility due to staffing constraints; and
  - ii. any other restrictions on the availability of the Facility;
- (h) whether the application relates to confirmation of Conditional Certified Reserve Capacity;
- (i) whether the applicant wishes to nominate the use of the methodology described in clause 4.11.2(b), in place of the methodology described in clause 4.11.1(a), in assigning the Certified Reserve Capacity or Conditional Certified Reserve Capacity to apply to a Scheduled Generator or a Non-Scheduled Generator;
- (j) whether the Facility will be subject to a Network Control Service contract; and

- (k) where an applicant nominates to use the methodology described in clause 4.11.2(b) and the Facility is already in full operation under the configuration for which certification is being sought (as outlined in clause 4.10.1(dA)), the date on which the Facility became fully operational under this configuration, unless this date has already been provided to the IMO in a previous application for certification of Reserve Capacity.
- 4.10.2. For the purpose of clause 4.10.1(e)(v), an applicant may not claim that a Facility has an alternative fuel unless the Facility has on-site storage, or uninterruptible supply of that fuel, sufficient to maintain 12 hours of operation at the level of capacity specified in clause 4.10.1(e)(ii).
- 4.10.3. An application for certification of Reserve Capacity that includes a nomination to use the methodology described in clause 4.11.2(b) for a Facility that:
  - (a) is yet to enter service;
  - (b) is to re-enter service after significant maintenance;
  - (c) is to re-enter service after having been upgraded; or
  - (d) has not operated with the configuration outlined in clause 4.10.1(dA) for the full period of performance assessment identified in step 1(a) of the Relevant Level Methodology,

must include a report prepared by an expert accredited by the IMO in accordance with clause 4.11.6. The IMO will use the report to assign Certified Reserve Capacity for the Facility and to determine the Required Level for that Facility.

- 4.10.3A. A report provided under clause 4.10.3 must include:
  - (a) for each Trading Interval during the period identified in step 1(a) of the Relevant Level Methodology, a reasonable estimate of the expected energy that would have been sent out by the Facility had it been in operation with the configuration proposed under clause 4.10.1(dA) in the relevant application for certification of Reserve Capacity;
  - (b) a value, expressed in MW as a sent out value, which equals the 5 percent probability of exceedance of expected generation output for the Facility for all the Trading Intervals that occurred within the last three years up to, and including, the last Hot Season, where this value is to be used in the calculation of the Required Level in clause 4.11.3B;
  - (c) a proposed alternative value to that specified in clause 4.10.3A(b), expressed in MW as a sent out value, to apply for the purposes of the Required Level, if in the opinion of the expert the value provided under clause 4.10.3A(b) would not be a reasonable representation of the Facility's 5 percent probability of exceedance of expected generation output during its first year of operation; and

- (d) the reasons for any proposed alternative value provided under clause 4.10.3A(c).
- 4.10.4 If a Market Participant becomes aware of any changes to the details provided to the IMO in accordance with this clause 4.10 for a Facility yet to commence operation or a Facility that is undergoing significant maintenance, then the Market Participant must advise the IMO of the revised details for the Facility as soon as practicable.

# 4.11. Setting Certified Reserve Capacity

- 4.11.1. Subject to clause 4.11.7, the IMO must apply the following principles in assigning a quantity of Certified Reserve Capacity to a Facility for the Reserve Capacity Cycle for which an application for Certified Reserve Capacity has been submitted in accordance with section 4.10:
  - (a) subject to clause 4.11.2, the Certified Reserve Capacity for a Scheduled Generator for a Reserve Capacity Cycle must not exceed the IMO's reasonable expectation of the amount of capacity likely to be available, after netting off capacity required to serve Intermittent Loads, embedded loads and Parasitic Loads, for Peak Trading Intervals on Business Days in the period from the:
    - i start of December for Reserve Capacity Cycles up to and including 2009; or
    - ii trading day starting on 1 October for Reserve Capacity Cycles from 2010 onwards
    - in Year 3 of the Reserve Capacity Cycle to the end of July in Year 4 of the Reserve Capacity Cycle, assuming an ambient temperature of 41°C;
  - (b) where the Facility is a generation system (other than an Intermittent Generator), the Certified Reserve Capacity must not exceed the sum of the capacities specified in clauses 4.10.1(e)(ii) and 4.10.1(e)(iii), and must not exceed the unconstrained level of network access as provided in 4.10.1(bA);
  - (c) the IMO must not assign Certified Reserve Capacity to a Facility for a Reserve Capacity Cycle if:
    - for Reserve Capacity Cycles up to and including 2009 that Facility is not operational or is not scheduled to commence operation for the first time so as to meet its Reserve Capacity Obligations by 30 November of Year 3 of that Reserve Capacity Cycle;
    - ii. for Reserve Capacity Cycles from 2010 onwards that Facility is not operational or is not scheduled to commence operation for the first time so as to meet its Reserve Capacity Obligations by 1 October of Year 3 of that Reserve Capacity Cycle; or

- iii. that Facility will cease operation permanently, and hence cease to meet Reserve Capacity Obligations, from a time earlier than 1 August of Year 4 of that Reserve Capacity Cycle;
- iv. that Facility already has Capacity Credits assigned to it under Clause4.28C for the Reserve Capacity Cycle; or
- v. that Facility is an Interruptible Load and, based on applications accepted under clauses 2.29.5D and 2.29.5K (as applicable), the Facility will be associated with a Demand Side Programme for any period when Reserve Capacity Obligations would apply for the Facility for the Reserve Capacity Cycle;
- (d) [Blank]
- (e) [Blank]
- (f) the IMO must not assign Certified Reserve Capacity to a Facility that is not expected to be Registered Facility by the time its Reserve Capacity Obligations for the Reserve Capacity Cycle would take effect;
- (g) in respect of a Facility that will be subject to a Network Control Service contract, the IMO must not assign Certified Reserve Capacity in excess of the capacity that the IMO believes that Facility can usefully contribute given its location and any network constraints that are likely to occur;
- (h) the IMO may decide not to assign Certified Reserve Capacity to a Facility if:
  - the Facility has operated for at least 36 months and has had a Forced
    Outage rate of greater than 15% or a combined Planned Outage rate,
    Forced Outage rate and Equipment Test rate of greater than 30% over
    the preceding 36 months; or
  - ii. the Facility has operated for less than 36 months, or is yet to commence operation, and the IMO has cause to believe that over a period of 36 months the Facility is likely to have a Forced Outage rate of greater than 15% or a combined Planned Outage rate, Forced Outage rate and Equipment Test rate of greater than 30%,

where the Planned Outage rate, the Forced Outage rate and Equipment Test rate for a Facility for a period will be calculated in accordance with the Power System Operation Procedure. The IMO may consult with System Management in deciding whether or not to refuse to grant Certified Reserve Capacity under this paragraph;

- the Certified Reserve Capacity assigned to a Facility is to be expressed to a precision of 0.001 MW; and
- (j) the Certified Reserve Capacity for a Demand Side Programme for a Reserve Capacity Cycle must not exceed the IMO's reasonable expectation of the amount of capacity likely to be available from that Facility during the periods specified in clause 4.10.1 (f)(vi), after netting off capacity required to serve

minimum loads, from the Trading Day starting on 1 October in Year 3 of the Reserve Capacity Cycle to the end of July in Year 4 of the Reserve Capacity Cycle.

- 4.11.2. Where an applicant submits an application for Certified Reserve Capacity, in accordance with clause 4.10, and nominates under clause 4.10.1(i) to have the IMO use the methodology described in clause 4.11.2(b) to apply to a Scheduled Generator or a Non-Scheduled Generator, the IMO:
  - (a) may reject the nomination if the IMO reasonably believes that the capacity of the Facility has permanently declined, or is anticipated to permanently decline prior to or during the Reserve Capacity Cycle to which the Certified Reserve Capacity relates;
  - (aA) if it rejects a nomination under clause 4.11.2(a), the IMO must process the application as if the application had nominated to use the methodology described in clause 4.11.1(a) rather than the methodology described in clause 4.11.2(b); and
  - (b) if it has not rejected the nomination under clause 4.11.2(a), must assign a quantity of Certified Reserve Capacity to the relevant Facility for the Reserve Capacity Cycle equal to the Relevant Level as determined in accordance with the Relevant Level Methodology, but subject to clauses 4.11.1(b), 4.11.1(c), 4.11.1(f), 4.11.1(g), 4.11.1(h) and 4.11.1(i).
- 4.11.2A. Where an applicant nominates under clause 4.10.3A(c) to have the IMO use an alternative value to that specified in clause 4.10.3A(b) the IMO:
  - (a) may reject the proposed alternative value if it does not consider the reasons provided in accordance with clause 4.10.3A(d) provide sufficient evidence that an alternative value is required; and
  - (b) must use the alternative value in the calculation of the Required Level if it does not reject the proposed alternative value under clause 4.11.2A(a).
- 4.11.3. [Blank]
- 4.11.3A. [Blank]
- 4.11.3B. The Required Level (which for an upgraded Facility is calculated for the Facility as a whole):
  - (a) for Facilities assigned Certified Reserve Capacity under clause 4.11.1(a), is calculated by the IMO using the Capacity Credits assigned to the Facility and temperature dependence information submitted to the IMO under clause 4.10.1(e)(i) or provided in Standing Data (where available) and converted to a sent out basis to 41°C;
  - (b) for Facilities assigned Certified Reserve Capacity under clause 4.11.2(b), is either:

- the value, expressed in MW as a sent out value, that equals the 5
  percent probability of exceedance of expected generation output for
  the Facility, submitted to the IMO in the report described in clause
  4.10.3A(b);or
- ii. the proposed alternative value, expressed in MW as a sent out value, provided in the report described in clause 4.10.3A(c), where the IMO has accepted the proposed alternative value under clause 4.11.2A; and
- (c) for Demand Side Programmes, is calculated by the IMO using the Facility's Relevant Demand minus the Capacity Credits assigned to the Facility.
- 4.11.3C. For each three year period, beginning with the period commencing on 1 January 2015, the IMO must, by 1 April of the first year of that period, conduct a review of the Relevant Level Methodology. In conducting the review, the IMO must:
  - (a) examine the effectiveness of the Relevant Level Methodology in meeting the Wholesale Market Objectives; and
  - (b) determine the values of the parameters K and U in step 17 of the Relevant Level Methodology to be applied for each of the three Reserve Capacity Cycles commencing in the period,
  - and the IMO may examine any other matters that the IMO considers to be relevant.
- 4.11.3D. In conducting a review under clause 4.11.3C, the IMO must publish a draft report and invite submissions from Rule Participants and any other stakeholders the IMO considers should be consulted.
- 4.11.3E. At the conclusion of a review under clause 4.11.3C, the IMO must publish a final report containing:
  - (a) details of the IMO's review of the Relevant Level Methodology;
  - (b) a summary of the submissions received during the consultation period;
  - (c) the IMO's response to any issues raised in those submissions;
  - (d) the values of the parameters K and U determined under clause 4.11.3C; and
  - (e) any recommended amendments to the Relevant Level Methodology which the IMO intends to progress as a Rule Change Proposal.
- 4.11.4. When assigning Certified Reserve Capacity to an Interruptible Load, Demand Side Programme or Dispatchable Load, the IMO must indicate what Availability Class is applicable to that Reserve Capacity where this Availability Class must reflect the maximum number of hours per year that the capacity will be available and must not be Availability Class 1.
- 4.11.5. In assigning Certified Reserve Capacity to a Facility, the IMO may:

- (a) require Network Operators to confirm that the data and information related to clause 4.10.1(bA) provided to the IMO by or on behalf of an applicant for Certified Reserve Capacity is complete, accurate and up to date; and
- (b) request that a Network Operator provide the IMO within a reasonable timeframe with any other information held by the Network Operator that the Network Operator reasonably considers is relevant to the application

and Network Operators must use their best endeavours to cooperate with such requests and provide the information requested within the timeframe specified by the IMO in the request.

- 4.11.6. The IMO must accredit not less than two independent experts at any time to prepare reports on the estimated Reserve Capacity of Intermittent Generators that are yet to commence operation, at the expense of the applicant. The IMO:
  - (a) must publish the contact details of these accredited independent experts on the Market Web Site:
  - (b) must ensure that any expert it accredits is familiar with the meaning of the value to be estimated; and
  - (c) can remove accreditation of an expert at any time, but must allow the expert to complete any work in progress as an accredited expert at the time accreditation is removed.
- 4.11.7. Subject to clause 4.11.9 for the first Reserve Capacity Cycle, the Certified Reserve Capacity assigned to all Western Power generation systems is 3,224 MW. This amount is not to be allocated to individual generation systems, but is instead to be associated with Western Power's portfolio of Scheduled Generators and Unscheduled Generators.
- 4.11.8. Western Power must notify the IMO of the quantity of Certified Reserve Capacity it considers it has available for the period from the Trading Day commencing on 1 November 2007 and until the Trading Day ending on 1 August 2008 ("relevant period") by the date and time specified in clause 4.1.11, including supporting evidence, where that quantity:
  - (a) must only include capacity provided by Facilities that are committed to be available during the relevant period; and
  - (b) must include any capacity that Western Power has procured under contracts with third parties that give Western Power the right to dispatch the capacity during the relevant period.
- 4.11.9. The IMO must review the information provided by Western Power in accordance with clause 4.11.8 and if the IMO, taking into account the information provided by Western Power under clause 4.11.8, considers that the capacity available to Western Power during the relevant period will be different to the Certified Reserve Capacity assigned

to Western Power's generation systems under clause 4.11.7, then the IMO may review that value.

- 4.11.10 Upon the receipt of advice provided in accordance with clause 4.10.4 for a Facility that has already been assigned Capacity Credits for the relevant Capacity Year, the IMO must review the information provided and decide whether it is necessary for the IMO to reassess the assignment of Certified Reserve Capacity to the Facility. If this information would have resulted in the IMO assigning a lower, non-zero level of Certified Reserve Capacity the IMO must reduce the Capacity Credits assigned to that Facility accordingly and must advise the Market Participant within 90 days of receiving the submission.
- 4.11.11 Where the IMO reassesses the amount of Certified Reserve Capacity assigned to a Facility under clause 4.11.10 based on information provided to the IMO under clause 4.10.4 the Market Participant will pay a Reassessment Fee to cover the cost of processing the reassessment.

### 4.12. Setting Reserve Capacity Obligations

- 4.12.1. The Reserve Capacity Obligations of a Market Participant holding Capacity Credits, are as follows:
  - (a) a Market Participant (other than the Electricity Generation Corporation) must ensure that for each Trading Interval:
    - the aggregate MW equivalent of the quantity of Capacity Credits held by the Market Participant applicable in that Trading Interval for Interruptible Loads and Demand Side Programmes registered to the Market Participant; plus
    - the MW quantity calculated by doubling the net MWh quantity of energy to be sent out during the Trading Interval by Facilities registered by that Market Participant; plus
    - iiA. if a STEM submission does not exist for that Trading Interval, the MW quantity calculated by doubling the total MWh quantity of energy to be consumed by that Market Participant including demand associated with any Interruptible Load, but excluding demand associated with any Dispatchable Load, during that Trading Interval as indicated in the applicable Resource Plan; plus
    - the MW quantity calculated by doubling the total MWh quantity covered by STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction determined by the IMO for that Market Participant under clause 6.9 for that Trading Interval, corrected for loss factor adjustments so as to be a sent out quantity; plus
    - iv. capacity expected to experience a forced outage at the time that STEM submissions were due which becomes available in real time,

is not less than the total Reserve Capacity Obligation Quantity for that Trading Interval for Facilities registered to the Market Participants, less double the total MWh quantity to be provided as Ancillary Services as specified by the IMO for that Market Participant in accordance with clause 6.3A.2(e)(i).

- (b) the Electricity Generation Corporation must ensure that for each Trading Interval:
  - i. [Blank]
  - ii. the MW quantity calculated by doubling the total MWh quantity which the Electricity Generation Corporation is selling to other Market Participants as indicated by the applicable Net Contract Position of the Electricity Generation Corporation, corrected for loss factor adjustments so as to be a sent out quantity; plus
  - the MW quantity calculated by doubling the total MWh quantity covered by STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction determined by the IMO for the Electricity Generation Corporation under clause 6.9 for that Trading Interval, corrected for loss factor adjustments so as to be a sent out quantity; plus
  - iv. capacity expected to experience a forced outage at the time that STEM submissions were due which becomes available in real time,

is not less than the total Reserve Capacity Obligation Quantity for the Electricity Generation Corporation for that Trading Interval, less double the total MWh quantity to be provided as Ancillary Services as specified by the IMO for the Electricity Generation Corporation in accordance with clause 6.3A.2(e)(i).

- (c) the Market Participant must make the capacity associated with the Capacity Credits provided by a Facility applicable to a Trading Interval, up to the Reserve Capacity Obligation Quantity for the Facility for that Trading Interval, available for dispatch by System Management in accordance with Chapter 7.
- 4.12.2. A Market Participant holding Capacity Credits must also comply with the following obligations:
  - (a) the Market Participant must comply with outage planning obligations specified in clauses 3.18, 3.19, 3.20 and 3.21;
  - (b) the Market Participant must submit to tests of availability of capacity and inspections conducted in accordance with clause 4.25;
  - (c) the Market Participant must comply with Reserve Capacity performance monitoring obligations in accordance with clause 4.27; and
  - (d) the Market Participant must, in relation to each Facility assigned Certified Reserve Capacity on the basis of having an alternative fuel available, maintain adequate fuel for 12 hours of operation except on any Trading Day for which

the IMO has waived this requirement in response to a Planned Outage or in the event of an extended Forced Outage.

- 4.12.3. The IMO must use the information described in clauses 4.10.1 and 4.25.12 to set the Reserve Capacity Obligation Quantity to apply to a Facility in each Trading Interval. The Reserve Capacity Obligation Quantity to apply to a Facility may differ between Trading Intervals.
- 4.12.4. Subject to clause 4.12.5, where the IMO establishes the initial Reserve Capacity Obligation Quantity to apply for a Facility for a Trading Interval:
  - the Reserve Capacity Obligation Quantity must not exceed the Certified Reserve Capacity held by the Market Participant for the Facility;
  - (aA) for generation systems that are Intermittent Generators, the Reserve Capacity Obligation Quantity is zero;
  - (b) for generation systems other than Intermittent Generators, except where otherwise precluded by this clause 4.12.4, the Reserve Capacity Obligation Quantity:
    - i. must not be less than the amount specified in clause 4.10.1(e)(ii) except on Trading Days when the maximum daily temperature at the site of the generator exceeds 41°C, in which case the Reserve Capacity Obligation Quantity must not be less than the amount specified in clause 4.10.1(e)(ii) adjusted to an ambient temperature of 45°C;
    - ii. may exceed the amount in clause 4.12.4(b)(i) by an amount up to the amount specified in clause 4.10.1(e)(iii), adjusted to an ambient temperature of 45°C on Trading Days when the maximum daily temperature at the site of the generator exceeds 41°C, for not more than the maximum duration specified in accordance with clause 4.10.1(e)(iii); and
    - iii. must account for staffing and other restrictions on the ability of the Facility to provide energy upon request; and
  - (c) for Interruptible Loads, Demand Side Programmes and Dispatchable Loads, except where otherwise precluded by this clause 4.12.4, the Reserve Capacity Obligation Quantity:
    - i. will equal zero once the capacity has been dispatched under clause 7.6.6(e) for the number of hours per year that are specified under clause 4.10.1(f)(ii);
    - ii. will equal zero for the remainder of a Trading Day in which the capacity has been dispatched under clause 7.6.6(e) for the number of hours per day that are specified under clause 4.10.1(f)(iii);

- iii. will equal zero once the capacity has been dispatched under clause 7.6.6(e) for the maximum number of times per year specified under clause 4.10.1(f)(iv);
- iv. must account for staffing and other restrictions on the ability of the Facility to curtail energy upon request; and
- v. will equal zero for Trading Intervals which fall outside of the periods specified in clause 4.10.1(f)(vi).
- 4.12.5. For the first Reserve Capacity Cycle, the initial Reserve Capacity Obligation Quantity for Western Power's generation systems is to equal the Certified Reserve Capacity for Western Power's generation systems, modified such that if the maximum ambient temperature at the site of Western Power's generation systems exceeds 41°C on a Trading Day, as measured by Western Power's SCADA system, then Western Power's Reserve Capacity Obligation Quantity for that Trading Day is to be reduced by the difference between that generation system's rated capacity at 41°C and its rated capacity at 45°C.
- 4.12.6. Subject to clause 4.12.7, any initial Reserve Capacity Obligation Quantity set in accordance with clauses 4.12.4, 4.12.5, 4.28B.4, or 4.28C.4 is to be reduced once the Reserve Capacity Obligations take effect, as follows:
  - (a) if the aggregate MW equivalent to the quantity of Capacity Credits (as modified from time to time under the Market Rules) for a Facility is less than the Certified Reserve Capacity for that Facility at any time (for example as a result of the application of clause 4.20.1, clause 4.25.4 or clause 4.25.6), then the IMO must reduce the Reserve Capacity Obligation Quantity to reflect the amount by which the aggregate Capacity Credits fall short of the Certified Reserve Capacity;
  - (b) subject to clause 4.27.9, during Trading Intervals where there is a Consequential Outage or a Planned Outage for a Facility provided to the IMO by System Management in accordance with clause 7.3.4, the IMO must reduce the Reserve Capacity Obligation Quantity for that Facility, after taking into account any adjustments in accordance with paragraph (a), to reflect the amount of capacity unavailable due to that outage; and
  - (c) if the generating system, which for the purposes of permission sought under clause 3.21A.2 has undergone significant maintenance, is subject to a Commissioning Test during a Trading Interval, then the IMO must reduce the Reserve Capacity Obligation Quantity for that Facility to zero during that Trading Interval.
- 4.12.7. If a Facility assigned Certified Reserve Capacity is not a Registered Facility for any time period during which its Reserve Capacity Obligations apply, then the Market Participant which holds the Capacity Credits provided by that Facility will be deemed to have failed to satisfy its Reserve Capacity Obligations during that time period.

4.12.8. Where a Demand Side Programme is dispatched under clause 7.6.6(e) to a level equal to its Reserve Capacity Obligation Quantity on two consecutive days the Reserve Capacity Obligation Quantity for the third consecutive day will be zero.

# **Commitment of Capacity to Auction or Bilateral Trade**

# 4.13. Reserve Capacity Security

- 4.13.1. Where the IMO assigns Certified Reserve Capacity to a Facility that is yet to enter service (or re-enter service after significant maintenance or having been upgraded), the relevant Market Participant must ensure that the IMO holds the benefit of a Reserve Capacity Security in an amount determined under clause 4.13.2(a) by the date and time specified in clause 4.1.13.
- 4.13.1A For the purposes of this clause 4.13, where an existing Facility is undergoing significant maintenance or being upgraded the requirement to provide Reserve Capacity Security applies only to the part of the Facility either undergoing significant maintenance or being upgraded.
- 4.13.1B The obligation under clause 4.13.1 to provide Reserve Capacity Security does not apply where the Market Participant has provided Reserve Capacity Security in relation to the same Facility for a previous Reserve Capacity Cycle, unless the Facility is an existing Facility undergoing significant maintenance or being upgraded.
- 4.13.1C For the purposes of this clause 4.13, a Facility includes part of a Facility, any upgrade or significant maintenance to an existing Facility, unless otherwise stated.
- 4.13.2. For the purposes of clause 4.13 the amount of Reserve Capacity Security is:
  - (a) at the time and date referred to in clause 4.1.13, twenty-five percent of the Maximum Reserve Capacity Price included in the most recently issued Request for Expressions of Interest at the time the Certified Reserve Capacity is assigned, expressed in \$/MW per year, multiplied by an amount equal to:
    - i. the Certified Reserve Capacity assigned to the Facility; less
    - ii. the total of any Certified Reserve Capacity amount specified in accordance with clause 4.14.1(d) or referred to in clause 4.14.7(c)(ii); and
  - (b) at the time and date referred to in clause 4.1.21, twenty-five percent of the Maximum Reserve Capacity Price included in the most recently issued Request for Expressions of Interest at the time the Certified Reserve Capacity is assigned, expressed in \$/MW per year, multiplied by an amount equal to the total number of Capacity Credits assigned to the Facility under clause 4.20.5A.

- 4.13.2A A Market Participant may apply to the IMO for a recalculation of the amount of Reserve Capacity Security required to be held for a Facility using the formula in clause 4.13.2(b) after the time and date referred to in clause 4.1.21.
- 4.13.2B Within 10 Business Days after receipt of a request from a Market Participant under clause 4.13.2A the IMO must recalculate the amount of Reserve Capacity Security required to be held by a Facility using the formula in clause 4.13.2(b). If the amount recalculated by the IMO under clause 4.13.2(b) is less than that originally calculated under clause 4.13.2(a) then the IMO must:
  - (a) notify the Market Participant of the result of the calculation;
  - (b) offer the Market Participant the opportunity to replace the Reserve Capacity Security in accordance with clause 4.13.2C, and
  - (c) if the Market Participant provides a replacement Reserve Capacity Security in accordance with clause 4.13.2C, return any excess Reserve Capacity Security.
- 4.13.2C Where under clause 4.13.2B the IMO notifies a Market Participant that excess Reserve Capacity Security is currently held, then a Market Participant may replace the existing Reserve Capacity Security with a replacement Reserve Capacity Security. The replacement Reserve Capacity Security must:
  - (a) be in an amount not less than the amount required under clause 4.13.2(b); and
  - (b) become effective before the IMO returns any excess Reserve Capacity Security.
- 4.13.3. Where a Market Participant's existing Reserve Capacity Security is due to terminate and after that termination the Market Participant will continue to have an obligation to ensure the IMO holds the benefit of a Reserve Capacity Security under clause 4.13.1, then that Market Participant must ensure that the IMO holds the benefit of a replacement Reserve Capacity Security. The replacement Reserve Capacity Security must:
  - (a) be an amount not less than the amount required under clause 4.13.2; and
  - (b) become effective before the termination of the existing Reserve Capacity Security.
- 4.13.4. Where a Market Participant's Reserve Capacity Security is no longer current or valid (for example, because the Reserve Capacity Security provider ceases to meet the Acceptable Credit Criteria), then that Market Participant must ensure that the IMO holds the benefit of a replacement Reserve Capacity Security in an amount not less than the level required under clause 4.13.2 within one Business Day.
- 4.13.5. The Reserve Capacity Security for a Market Participant must be:
  - (a) an obligation in writing that:

- is from a Reserve Capacity Security provider, who must be an entity which meets the Acceptable Credit Criteria and which itself is not a Market Participant;
- ii. is a guarantee or bank undertaking in a form prescribed by the IMO;
- iii. is duly executed by the Reserve Capacity Security provider and delivered unconditionally to the IMO;
- iv. constitutes valid and binding unsubordinated obligations to the Reserve Capacity Security provider to pay to the IMO amounts in accordance with its terms which relate to the obligations of the relevant Market Participant under the Market Rules to pay compensation under clause 4.13.11; and
- v. permits drawings or claims by the IMO to a stated amount; or
- (b) if the IMO in its discretion considers it an acceptable alternative in the circumstances to the obligation under clause 4.13.5(a), a cash deposit ("Security Deposit") made with the IMO (on terms acceptable to the IMO in its discretion) by or on behalf of the Market Participant.
- 4.13.6. Where Reserve Capacity Security is provided as a Security Deposit in accordance with clause 4.13.5(b), it will accrue interest daily at the IMO Deposit Rate, and the IMO must pay the Market Participant the interest accumulated at the end of each calendar month less any liabilities and expenses incurred by the IMO, including bank fees and charges.
- 4.13.7. An entity meets the Acceptable Credit Criteria if it meets the criteria defined in clause 2.38.6.
- 4.13.8. The IMO must develop a Market Procedure dealing with:
  - (a) determining Reserve Capacity Security;
  - (b) assessing persons against the Acceptable Credit Criteria;
  - (c) Reserve Capacity Security arrangements, including:
    - i. the form of acceptable guarantees and bank undertakings;
    - ii. where and how it will hold cash deposits and how the costs and fees of holding cash deposits will be met;
    - iii. the application of monies drawn from Reserve Capacity Security in respect of amounts payable by the relevant Market Participant to the IMO under clause 4.13.11A;
  - (d) other matters relating to clauses 4.13,and Market Participants and the IMO must comply with that Market Procedure.
- 4.13.9. If a Market Participant does not comply with clause 4.13.1 in full by the date and time specified in:

- (a) clause 4.1.13(a) in the case of Facility with Certified Reserve Capacity specified to be traded bilaterally in accordance with clause 4.14.1(c); or
- (b) clause 4.1.13(b) in the case of Facility with Certified Reserve Capacity specified to be offered into the Reserve Capacity Auction in accordance with clause 4.14.1(a) and where none of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c),

for the Reserve Capacity Cycle to which the certification relates, the Certified Reserve Capacity of that Facility will lapse.

- 4.13.10 If a Market Participant that provides Reserve Capacity Security in respect of a Facility:
  - (a) either:
    - operates the Facility at a level which is at least equivalent to its Required Level, adjusted to 90 percent of the level of Capacity Credits specified in clause 4.20.5A, in at least two Trading Intervals before the end of the relevant Capacity Year; or
    - ii. provides the IMO with a report under clause 4.13.10C, which specifies that the Facility can operate at a level which is at least equivalent to its Required Level, adjusted to 90 percent of the level of Capacity Credits specified in clause 4.20.5A; and
  - (b) is considered by the IMO to be in Commercial Operation,

then the IMO will return the Reserve Capacity Security to the Market Participant as soon as practicable after the end of the relevant Capacity Year and in any event by 30 November of the Year 4 of the relevant Reserve Capacity Cycle.

- 4.13.10A A Market Participant may request the IMO to determine that a Facility is in Commercial Operation for the purposes of Chapter 4 of these Market Rules.
- 4.13.10B. On receipt of a request made under clause 4.13.10A the IMO must determine, within 20 Business Days, whether the Facility is in Commercial Operation. In making each such determination the IMO:
  - (a) must have regard to the following, if applicable:
    - i. whether the Facility has completed an approved Commissioning Test under clause 3.21A and subsequently produced energy for at least two Trading Intervals; and
    - ii. any formal advice received from the Market Participant that it has completed an approved Commissioning Test under clause 3.21A and is commercially operational; and
  - (b) may have regard to any additional information the IMO considers relevant.
- 4.13.10C For a Facility certified under clause 4.11.2(b), a Market Participant may provide the IMO with a report, in accordance with the Reserve Capacity Procedure, prepared by

an independent expert accredited by the IMO, before the end of the relevant Capacity Year. The report must specify the independent expert's best estimate of the level to which the Facility can operate, expressed in MW as a sent out value, at the time the report is prepared.

- 4.13.11. If a Market Participant that provides a Reserve Capacity Security in respect of a Facility fails to operate that Facility in accordance with clause 4.13.10 before the end of the relevant Capacity Year then the Market Participant must pay to the IMO, as compensation to the market, an amount equal to the Reserve Capacity Security amount for that Facility as soon as practicable after the end of the relevant Capacity Year and in any event by 30 November of Year 4 of the relevant Capacity Cycle.
- 4.13.11A The payment obligation under clause 4.13.11 may be satisfied by the IMO drawing upon the Reserve Capacity Security for the Facility, and applying the amount claimed (after meeting the IMO's costs associated with doing so) so as to:
  - firstly, offset the cost of funding Supplementary Capacity Contracts for any capacity shortage stemming entirely or in part from the Facility not being available; and
  - (b) secondly, once all costs to which paragraph (a) refers are covered, make a rebate payment to Market Customers in proportion to their Individual Reserve Capacity Requirements during the Trading Month in accordance with Chapter 9.

#### 4.13.11B [Blank]

- 4.13.12. If the Reserve Capacity Security drawn upon under clause 4.13 is a cash deposit, then the Market Participant forfeits the amount of the cash deposit.
- 4.13.13 A Market Participant may apply to the IMO for the release of any Reserve Capacity Security held by the IMO, at any time prior to the end of the relevant Capacity Year, if the Reserve Capacity Security relates to a Facility that:
  - (a) has operated at a level equivalent to its Required Level, adjusted to 100 percent of the level of Capacity Credits specified in clause 4.20.5A, in at least two Trading Intervals prior to the end of the relevant Capacity Year; and
  - (b) is considered by the IMO to be in Commercial Operation.
- 4.13.14 Where the IMO receives an application made under clause 4.13.13 or clause 4.28C.12 it must, within 10 Business Days:
  - (a) determine whether the need to maintain the Reserve Capacity Security has ceased;
  - (b) notify the Market Participant of its determination;
  - (c) if the Reserve Capacity Security is a cash deposit that is no longer required to be held, return the cash deposit (plus interest earned); and

(d) if the Reserve Capacity Security is a non-cash deposit and is no longer required to be held, notify the provider that the IMO relinquishes any rights to draw on the Reserve Capacity Security.

### 4.14. Market Participant Auction and Bilateral Trade Declaration

- 4.14.1. Subject to clause 4.14.3, each Market Participant holding Certified Reserve Capacity for the current Reserve Capacity Cycle must, by the date and time specified in clause 4.1.14 provide the following information to the IMO for each Facility (expressed in MW to a precision of 0.001 MW):
  - (a) the total amount of Reserve Capacity the Market Participant intends to make available in a Reserve Capacity Auction if held for the current Reserve Capacity Cycle, where the amount to be made available is not to include Reserve Capacity covered by a pre-existing Special Price Arrangement;
  - (b) the total amount of Reserve Capacity covered by a pre-existing Special Price Arrangement that the Market Participant intends will not be traded bilaterally;
  - (c) the total amount of Reserve Capacity the Market Participant intends will be traded bilaterally;
  - (d) the total amount of Reserve Capacity that the Market Participant has decided will not now be made available to the market, where this amount cannot include Reserve Capacity covered by a pre-existing Special Price Arrangement,

where the sum of the values for (a), (b), (c) and (d) must equal the Certified Reserve Capacity of the Facility for the Reserve Capacity Cycle.

- 4.14.2. A Capacity Credit (and the Reserve Capacity associated with a Capacity Credit) is "traded bilaterally" for the purposes of these Market Rules where:
  - (a) the Market Participant holding the Capacity Credits has entered into an arrangement with another Market Participant under which the Capacity Credits will be allocated to the other Market Participant for settlement purposes to allow the other Market Participant to meet its Individual Reserve Capacity Requirement in accordance with clauses 9.4 and 9.5; or
  - (b) the Market Participant holding the Capacity Credit allocates the Capacity Credit for settlement purposes to meet its own Individual Reserve Capacity Requirement in accordance with clauses 9.4 and 9.5.
- 4.14.3. A Market Participant may not make a submission under clause 4.14.1 with respect to a Facility subject to a Network Control Service Contract.
- 4.14.4. The value specified by the Electricity Generation Corporation in accordance with clause 4.14.1(c) must be not less than:
  - (a) the lesser of:

- i. the total Certified Reserve Capacity held by the Electricity Generation Corporation; and
- ii. the Electricity Generation Corporation's peak load, as determined in accordance with clause 4.14.5 multiplied by an amount equal to:
  - 1. the Reserve Capacity Requirement; divided by
  - 2. the expected peak demand corresponding to the Reserve Capacity Requirement, as determined in accordance with clause 4.6.2; less
- (b) the Minimum Frequency Keeping Capacity.
- 4.14.5. For the purpose of clause 4.14.4, the Electricity Generation Corporation's peak load is calculated by doubling the average of the Electricity Generation Corporation's supply quantities (expressed in MWh) specified in the Bilateral Submissions that applied during the 12 peak Trading Intervals, as specified in Appendix 5, of the previous Hot Season. Prior to the completion of the first Hot Season following Energy Market Commencement:
  - (a) this value will be determined by the IMO and provided to the Electricity Generation Corporation not less than 20 Business Days prior to the date specified in clause 4.1.14.
  - (b) [Blank]
- 4.14.6. If two or more Facilities cannot simultaneously exist (for example, because more than one Market Participant is proposing to build a Facility that will be located at the same site,) then the IMO cannot accept a non-zero value provided in accordance with clause 4.14.1(c) in respect of more than one of these Facilities and must reject all but one Facility based on the following criteria:
  - (a) Facilities that are operational or are committed will be accepted ahead of other Facilities; then
  - (b) if more than one Facility remains, then Facilities that can demonstrate having secured financing will be accepted ahead of other Facilities; then
  - (c) if more than one Facility remains, then Facilities with the greatest quantity of Certified Reserve Capacity will be accepted ahead of Facilities with lower Certified Reserve Capacity; then
  - (d) if more than one Facility remains, then Facilities identified in Expressions of Interest will be accepted ahead of other Facilities; then
  - (e) if more than one Facility remains, then the IMO will accept one based on the order in which they applied for Certified Reserve Capacity, including applications for Conditional Certified Reserve Capacity.
- 4.14.7. The IMO must review the information provided by Market Participants in accordance with clause 4.14.1 to ensure that the information provided is consistent with the

Certified Reserve Capacity of each Facility and the requirements of this clause 4.14, and:

- if the information is not consistent, then the IMO must endeavour to resolve the discrepancy with the Market Participant within one Business Day of receipt;
- (b) if the information is consistent, then the IMO must inform the Market Participant within one Business Day of receipt that the information is accepted; and
- (c) if the IMO cannot establish what a Market Participant's intentions are with respect to all or part of its Certified Reserve Capacity within the time allowed for resolving discrepancies by paragraph (a), then that Market Participant's:
  - Certified Reserve Capacity corresponding to pre-existing Long Term Special Price Arrangements cannot be traded bilaterally; and
  - Certified Reserve Capacity not covered by pre-existing Long Term Special Price Arrangements will be treated as being unavailable to the market,

and the IMO must notify the Market Participant of this outcome within one Business Day of the deadline for resolving discrepancies specified in paragraph (a).

- 4.14.8. If Certified Reserve Capacity is not to be made available to the market as a result of the acceptance by the IMO of information submitted by a Market Participant in accordance with clause 4.14.1(d), or because clause 4.14.7(c)(ii) applies, then all obligations associated with that part of the Certified Reserve Capacity held by the relevant Market Participant are to terminate from the time the IMO notifies the Market Participant that it accepts the information provided in accordance with clause 4.14.1 or the application of clause 4.14.7(c)(ii) (as applicable) and that part of the Certified Reserve Capacity ceases to be Certified Reserve Capacity for the purposes of these Market Rules (including for the purposes of setting the Reserve Capacity Obligation Quantity).
- 4.14.9. The IMO must notify each Market Participant that specified a non-zero amount under clause 4.14.1(c) by the date and time specified in clause 4.1.15 of the quantity of Certified Reserve Capacity held by the Market Participant in respect of each Facility that it can trade bilaterally, where this quantity must:
  - (a) exclude Certified Reserve Capacity to which clauses 4.14.7(c)(i) and 4.14.8 relate; and
  - (b) be determined using the methodology described in Appendix 3.
- 4.14.10. A Market Participant must make available in any Reserve Capacity Auction held in accordance with clause 4.15 any Certified Reserve Capacity it holds for a Facility, except to the extent that:
  - (a) clause 4.14.8 applies;

- (b) the Certified Reserve Capacity is covered by a pre-existing Long Term Special Price Arrangement; or
- (c) IMO has notified the Market Participant in accordance with clause 4.14.9 that the Certified Reserve Capacity can be traded bilaterally.
- 4.14.11 The IMO must develop a Market Procedure documenting the process the IMO and Rule Participants must follow for the Bilateral Trade Declaration and Reserve Capacity Auction. The IMO and Rule Participants must comply with that documented Market Procedure.

# **Reserve Capacity Auctions**

### 4.15. Confirmation or Cancellation of Reserve Capacity Auctions

- 4.15.1. If the information provided under clauses 4.14 and 4.28C indicates that no Certified Reserve Capacity is to be made available in the Reserve Capacity Auction for a Reserve Capacity Cycle, or, based on the information received under clause 4.14, the IMO considers that the Reserve Capacity Requirement for the Reserve Capacity Cycle will be met without an auction, then, by the date and time specified in clause 4.1.16, the IMO must publish a notice specifying for that Reserve Capacity Cycle:
  - (a) that the Reserve Capacity Auction has been cancelled;
  - (b) the Reserve Capacity Requirement;
  - (c) the total amount of Certified Reserve Capacity;
  - (cA) the Capacity Credits assigned, by Facility, under clause 4.28C;
  - (d) the total amount of Certified Reserve Capacity that would have been made available in the Reserve Capacity Auction had one been held; and
  - (e) the total amount of Certified Reserve Capacity covered by pre-existing Special Price Arrangements;
- 4.15.2. If the Reserve Capacity Auction for a Reserve Capacity Cycle is not cancelled in accordance with clause 4.15.1, then, by the date and time specified in clause 4.1.16, the IMO must publish a notice specifying:
  - (a) that the Reserve Capacity Auction will be held;
  - (b) the Reserve Capacity Auction Requirement, where this equals the
    - i. Reserve Capacity Requirement; less
    - ii. the total amount of Certified Reserve Capacity which the IMO has notified Market Participants can be traded bilaterally under clause
       4.14.9 or is covered by a pre-existing Special Price Arrangement; less
    - iii. the amount of Capacity Credits assigned under clause 4.28C for the relevant Reserve Capacity Cycle; and

(c) the amount of Reserve Capacity required to be procured via the auction from each Availability Class.

## 4.16. The Maximum Reserve Capacity Price

- 4.16.1. For all Reserve Capacity Cycles, the IMO must publish a Maximum Reserve Capacity Price as determined in accordance with this clause 4.16 prior to the time specified in clause 4.1.4.
- 4.16.2. The Maximum Reserve Capacity Price to apply for the first Reserve Capacity Cycle is \$150,000 per MW per year.
- 4.16.3 The IMO must develop a Market Procedure documenting the methodology it uses and the process it follows in determining the Maximum Reserve Capacity Price, and:
  - (a) the IMO and Rule Participants must follow that documented Market Procedure when conducting any review and consultations in accordance with that Market Procedure and clause 4.16.6; and
  - (b) the IMO must follow the documented Market Procedure to annually review the value of the Maximum Reserve Capacity Price in accordance with this clause 4.16 and in accordance with the timing requirements specified in clause 4.1.19.

#### 4.16.4. [Blank]

- 4.16.5. The IMO must propose a revised value for the Maximum Reserve Capacity Price using the methodology described in the Market Procedure referred to in clause 4.16.3.
- 4.16.6. The IMO must prepare a draft report describing how it has arrived at a proposed revised value for the Maximum Reserve Capacity Price under clause 4.16.5. The IMO must publish the report on the Market Web-Site and advertise the report in newspapers widely distributed in Western Australia and request submissions from all sectors of the Western Australia energy industry, including end-users.
- 4.16.7. After considering of the submissions on the draft report described in clause 4.16.6 the IMO must propose a final revised value for the Maximum Reserve Capacity Price and publish that value and its final report, including submissions received on the draft report on the Market Web-Site.
- 4.16.8. A proposed revised value for the Maximum Reserve Capacity Price becomes the Maximum Reserve Capacity Price after the IMO has posted a notice on the Market Web Site of the new value of the Maximum Reserve Capacity Price with effect from the time specified in the IMO's notice.

4.16.9 At least once in every five year period, the IMO must review the Market Procedure referred to in clause 4.16.3 and must undertake a public consultation process in respect of the outcome of the review.

# 4.17. Reserve Capacity Auction Submission Process

- 4.17.1. The IMO must prescribe a Reserve Capacity Auction form and post it on the Market Web Site.
- 4.17.2. A Market Participant submitting a Reserve Capacity Offer must submit the information specified in clause 4.18, using the Reserve Capacity Auction form, to the IMO during the period specified in clause 4.1.17.
- 4.17.3. Upon receipt of a Reserve Capacity Offer, the IMO must within one Business Day contact the Market Participant to confirm receipt, and whether it has accepted the offer as valid or rejected the offer as invalid, with reasons for rejection provided.
- 4.17.4. The IMO may reject a Reserve Capacity Offer if:
  - (a) the offer is inconsistent with the requirements of these Market Rules, including clause 4.14.10;
  - (b) the offer does not contain any of the information specified in clause 4.18; or
  - (c) the offer is not in the form required by clause 4.17.2.
- 4.17.5. A Market Participant that does not receive confirmation of receipt of a Reserve Capacity Offer within the time specified in clause 4.17.3 must contact the IMO to arrange for resubmission of the Reserve Capacity Offer.
- 4.17.6. A Market Participant may not revise or resubmit a Reserve Capacity Offer after the IMO has confirmed receipt of the Reserve Capacity Offer in accordance with clause 4.17.3.
- 4.17.7. Subject to clause 4.17.8, a Market Participant may only resubmit a Reserve Capacity Offer in the event that:
  - (a) the IMO fails to acknowledge receipt of a Reserve Capacity Offer; or
  - (b) the IMO rejects the Reserve Capacity Offer under clause 4.17.3.
- 4.17.8. The IMO may not accept a Reserve Capacity Offer submitted outside the interval specified in clause 4.1.17.
- 4.17.9. The IMO must document the Reserve Capacity Auction submission and clearing process in the Reserve Capacity Procedure, and the IMO and Market Participants must follow that documented Market Procedure.

### 4.18. Reserve Capacity Offer Format

- 4.18.1. A Market Participant must ensure that its Reserve Capacity Offers include the following information:
  - (a) the identity of the Market Participant submitting the Reserve Capacity Offer;
  - (b) the identify of the Market Participant's Facility covered by the Reserve Capacity Offer; and
  - (c) for Interruptible Loads, Demand Side Programmes and Dispatchable Loads, a single Price-Quantity Pair for each block of Certified Reserve Capacity associated with the Facility; and
  - (d) for every other Facility, a single Price-Quantity Pair for each Facility.
- 4.18.2. Each Reserve Capacity Price-Quantity Pair must comprise:
  - (a) the identity of the Facility to which it relates;
  - (b) an offer price in units of dollars per MW per year expressed to a precision of \$0.01/MW between zero and the Maximum Reserve Capacity Price;
  - (c) a quantity in units of MW equal to the amount determined in accordance with clause 4.14.10 in respect of that Facility; and
  - (d) if the Facility is an Interruptible Load, Demand Side Programme or Dispatchable Load, the Availability Class of that Price-Quantity Pair, as specified by the IMO in assigning Certified Reserve Capacity to that Facility in accordance with clause 4.11.

### 4.19. Reserve Capacity Auction Clearing

- 4.19.1. The IMO, by the time and date specified in clause 4.1.18, must process the Reserve Capacity Offers applying the methodology set out in Appendix 3 and determine the Reserve Capacity Auction result in accordance with the objective set out in clause 4.19.2.
- 4.19.2. The objective of a Reserve Capacity Auction is to meet the Reserve Capacity Requirement for the Reserve Capacity Cycle, or, if it is not possible to meet the Reserve Capacity Requirement, then minimise the shortfall.
- 4.19.3. If Reserve Capacity Offers exist from two or more Facilities that cannot simultaneously be scheduled (for example, because more than one Market Participant is proposing to build a Facility that will be located at the same site), then the IMO must:
  - (a) not accept any Reserve Capacity Offer from any such Facility unless the IMO has either accepted a non-zero value for that Facility under clause 4.14.6 or has not accepted a non-zero value for any Facility under clause 4.14.6; and

- (b) Subject to paragraph (a), apply the methodology set out in Appendix 3 for each permutation of such Facilities. The Reserve Capacity Auction result will be:
  - i. if no result meets the Reserve Capacity Requirement, then the result that minimises the shortfall;
  - ii. if one or more results meets the Reserve Capacity Requirement, then, of those results, the result which produces the least value for the sum over all Reserve Capacity Offers of the offer price multiplied by the quantity of capacity scheduled from that Reserve Capacity Offer.
- 4.19.4. A Reserve Capacity Auction result comprises a list of Reserve Capacity Offers scheduled and a Reserve Capacity Price.
- 4.19.5. The IMO must publish:
  - (a) the Reserve Capacity Price included in the Reserve Capacity Auction results determined in accordance with clause 4.19.1; and
  - (b) the quantity of Certified Reserve Capacity scheduled from each Facility registered by each Market Participant in the Reserve Capacity Auction results determined in accordance with clause 4.19.1,

by the time and date specified in clause 4.1.18.

# **Capacity Credits**

### 4.20. Capacity Credits

- 4.20.1. If the IMO holds a Reserve Capacity Auction in any year, each Market Participant that has a Reserve Capacity Offer scheduled under clause 4.19.4 must, by the date and time specified in clause 4.1.20, notify the IMO of:
  - (a) the total number of Capacity Credits that it will provide from each of its Facilities during the Capacity Year commencing on 1 October of Year 3 of the Reserve Capacity Cycle. The information provided must be consistent with the requirements of paragraph (c) and (e); and
  - (b) the number of those Capacity Credits the Market Participant anticipates will be acquired by the IMO. The information provided must be consistent with the requirements of paragraph (d) and (e);
  - (c) the total number of Capacity Credits provided by all the Market Participant's Facilities must be consistent with the sum of:
    - the quantity of Certified Reserve Capacity held by the Market Participant which the IMO has notified the Market Participant it can trade bilaterally under clause 4.14.9;

- ii. the quantity of Certified Reserve Capacity held by the Market Participant scheduled by the IMO in the Reserve Capacity Auction, as published in accordance with clause 4.19.5(b);
- iii. the quantity of Certified Reserve Capacity held by the Market
  Participant which remains the subject of pre-existing Long Term
  Special Price Arrangements and which the Market Participant does not intend to trade bilaterally;
- the quantity of Certified Reserve Capacity held by the Market
   Participant for Facilities subject to Network Control Service Contracts;
   and
- v. the quantity of Capacity Credits held by the Market Participant which was assigned under clause 4.28C.10;
- (d) the total number of Capacity Credits which the Market Participant anticipates will be acquired by the IMO from the Market Participant must be consistent with
  - the quantity of Certified Reserve Capacity held by that Market
     Participant and scheduled by the IMO in the Reserve Capacity Auction,
     as published in accordance with clause 4.19.5(b);
  - ii. the quantity of Certified Reserve Capacity held by the Market
    Participant which remains the subject of pre-existing Long Term
    Special Price Arrangements and which the Market Participant intends
    not to trade bilaterally; and
  - iii. plus the quantity of Certified Reserve Capacity held by the Market Participant for Facilities to be subject to Network Control Service Contracts except where these are to be traded bilaterally as defined in clause 4.14.2.
- (e) Certified Reserve Capacity of one Facility granted approval to trade bilaterally under clause 4.14.9 or scheduled by the IMO in the Reserve Capacity Auction can be provided as Capacity Credits by another Facility registered by the Market Participant covered by a Reserve Capacity Offer submitted by the Market Participant for the auction, but which was not scheduled, provided that the Reserve Capacity is in the same Availability Class or an Availability Class with greater availability than the Availability Class of the Reserve Capacity provided by the original Facility.
- 4.20.2. The IMO must consider each notice it receives under clause 4.20.1 and notify the relevant Market Participant whether it confirms or rejects the notification within one Business Day.
- 4.20.3. The IMO may only reject a notice under clause 4.20.1 if the notice is inconsistent with these Market Rules.

- 4.20.4. If the IMO rejects a notice under clause 4.20.1, then it must give the relevant Market Participant its reasons for doing so.
- 4.20.5. If the IMO rejects a notice under clause 4.20.3, then the Market Participant must resubmit the notice as soon as practicable, incorporating any amendments suggested by the IMO, and clauses 4.20.2 to 4.20.4 also apply to the re-submitted notice.
- 4.20.5A Where a Reserve Capacity Auction is:
  - (a) cancelled under clause 4.15.1 the IMO must assign Capacity Credits to each Facility included in a notification under clause 4.14.9. The quantity of Capacity Credits assigned will equal the quantity in the notification. The IMO must publish the Capacity Credits assigned, by Facility, by the date and time specified in clause 4.1.16.
  - (b) not cancelled under clause 4.15.1 the IMO must assign Capacity Credits:
    - to each Facility for which a Market Participant lodged a notification under clause 4.20.1(a). The quantity of Capacity Credits assigned will equal the quantity notified under that clause and confirmed by the IMO under clause 4.20.2; and
    - ii. to each Facility included in a notification under clause 4.14.9. The quantity of Capacity Credits assigned will equal the quantity notified under that clause, as may be amended by a notification given under clause 4.20.1 and confirmed by the IMO under clause 4.20.2.
    - The IMO must publish the Capacity Credits assigned, by Facility, by the date and time specified in clause 4.1.21A; and
  - (c) not cancelled under clause 4.15.1 and the IMO receives no notification under clause 4.20.1 from a Market Participant, the IMO must not assign Capacity Credits to that Market Participant.
- 4.20.6. For the purpose of this clause 4.20, Capacity Credits associated with Certified Reserve Capacity issued to Western Power in accordance with clause 4.11.7 are to be associated with the generation portfolio the capacity of which contributes to the Certified Reserve Capacity issued under clause 4.11.7 rather than to the individual Facilities comprising that portfolio.
- 4.20.7. Payments for Capacity Credits under these Market Rules can only occur for the period between the time and date that the associated Reserve Capacity Obligations commence and the time and date that the associated Reserve Capacity Obligations cease.

# **Special Price Arrangements**

# 4.21. Short Term Special Price Arrangements

4.21.1.

- (a) The IMO is to grant Short Term Special Price Arrangements to a Market Participant in respect of any Capacity Credits acquired by the IMO as a result of a Reserve Capacity Auction where the offer price in the Reserve Capacity Offer for the Certified Reserve Capacity relating to those Capacity Credits exceeded the Reserve Capacity Auction Price.
- (b) The Special Reserve Capacity Price for Capacity Credits covered by the Short Term Special Price Arrangement is to equal the offer price in the Reserve Capacity Offer for the Certified Reserve Capacity relating to those Capacity Credits.
- (c) The level of coverage of the Short Term Special Price Arrangement is to equal the quantity of Capacity Credits associated with a Reserve Capacity Offer to which paragraph (a) relates (where if the IMO reduces the Capacity Credits associated with this Facility in any Trading Month then the average of the number of Capacity Credits of this Facility on each Trading Day during that Trading Month is to apply), less the quantity of Capacity Credits associated with the same Reserve Capacity Offer which are to be covered by Long Term Special Price Arrangements in accordance with clauses 4.22.1 and 4.22.4.
- (d) The term of a Short Term Special Price Arrangement is the period that the Reserve Capacity Obligations in respect of the Capacity Credits apply as specified in clause 4.1.26 and clause 4.1.30 for the Reserve Capacity Cycle relating to the Reserve Capacity Auction.

## 4.22. Long Term Special Price Arrangements

- 4.22.1. Until the date and time specified in clause 4.1.20, a Market Participant may nominate to have Capacity Credits it holds which are acquired by the IMO as a result of the Reserve Capacity Auction for the Reserve Capacity Cycle (other than Capacity Credits provided by another Facility in accordance with clause 4.20.1(e)) covered by a Long Term Special Price Arrangement.
- 4.22.2. If a Market Participant nominates to have Capacity Credits covered by a Long Term Special Price Arrangement, it must at the same time nominate:
  - (a) a level of coverage, in MW and to a precision of 0.005 MW, subject to the limits that:
    - if the Capacity Credits are provided by a Facility which has not previously provided Capacity Credits, the number of Capacity Credits covered by the arrangement is not to exceed the total Capacity Credits to be provided by the Facility acquired by the IMO as a result of the Reserve Capacity Auction for the Reserve Capacity Cycle determined in accordance with clause 4.20;
    - ii. if the Capacity Credits are provided by a Facility which has previously provided Capacity Credits, the number of Capacity Credits covered by the arrangement is not to exceed the lesser of:

- the total Capacity Credits provided by the Facility acquired by the IMO as a result of the Reserve Capacity Auction for the Reserve Capacity Cycle determined in accordance with clause 4.20; and
- the increase in the number of Capacity Credits provided by the Facility, whether acquired by the IMO or traded bilaterally, since the previous Reserve Capacity Cycle.

Where the Long Term Special Price Arrangement is conditional on evidence being provided to the IMO prior to that Long Term Special Price Arrangement taking effect that capital costs in excess of 10% of the Maximum Reserve Capacity Price have been incurred on average with respect to the provision of each Capacity Credit covered by the arrangement; and

- (b) the term for the Long Term Special Price Arrangement, which must commence on the Reserve Capacity Obligation commencement date determined in accordance with clause 4.1.26 for the Reserve Capacity Cycle, end at the completion of a Trading Day ending on 1 October and shall not exceed:
  - in the case of Long Term Special Price Arrangements nominated in respect of the first Reserve Capacity Cycle, 15 years;
  - ii. in the case of Long Term Special Price Arrangements nominated in respect of any subsequent Reserve Capacity Cycle, 10 years.
- 4.22.3. Special Reserve Capacity Price for Capacity Credits covered by a Long Term Special Price Arrangement is:
  - (a) in the first Capacity Year of the Long Term Special Price Arrangement, the Monthly Reserve Capacity Price applicable in the first Trading Month of the term of the Long Term Special Price Arrangement; and
  - (b) in each subsequent Capacity Year of the Long Term Special Price Arrangement, the price calculated in accordance with the following formula:

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P[t] = P[t-1] multiplied by the greater of unity, and (1 + ((CPI[t] – CPI[t-1]) / CPI[t-1])) for t > 0

Where
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t indicates the number of years that have elapsed since the commencement of the Long Term Special Price Arrangement where t has a value of 0 in the first Capacity Year and increases by 1 for each subsequent Capacity Year;

P[0] is the Monthly Reserve Capacity Price applicable in the first Trading Month of the term of the Long Term Special Price Arrangement;

P[t] is the Special Reserve Capacity Price applicable for the tth Capacity Year; and

CPI[t] is the weighted average of the Consumer Price Index All Groups values for the eight Australian State and Territory capital cities as determined by the Australian Bureau of Statistics for the quarter ending June 30 of the calendar year in which the tth Capacity Year commences; and

CPI[t-1] is the weighted average of the Consumer Price Index All Groups values for the eight Australian State and Territory capital cities are determined by the Australian Bureau of Statistics for the quarter ending on June 30 of the preceding calendar year.

- 4.22.4. The quantity of Capacity Credits covered by a Long Term Special Price Arrangement is the lesser of:
  - (a) the level of coverage specified in accordance with clause 4.22.2(a);
  - (b) the average of the number of Capacity Credits held by the Market Participant on each Trading Day for the associated Facility in the Trading Month; and
  - (c) the Capacity Credits allocated to the relevant Long Term Special Price Arrangement in accordance with clause 4.22.6.
- 4.22.5. A Market Participant, in relation to Certified Reserve Capacity associated with Capacity Credits covered by a Long Term Special Price Arrangement:
  - (a) must not include that Certified Reserve Capacity in Reserve Capacity Offers during the term of the Long Term Special Price Arrangement; and
  - (b) must still annually re-apply for certification in accordance with clause 4.9 during the term of the Long Term Special Price Arrangement.
- 4.22.6. If more than one Long Term Special Price Arrangement is associated with a single Facility, then:
  - (a) subject to paragraph (b), the Capacity Credits held by the Market Participant provided by the Facility in each Reserve Capacity Cycle are to be allocated to those Long Term Special Price Arrangements in order of the commencement date of each Long Term Special Price Arrangement, starting with the Long Term Special Price Arrangement with the earliest commencement date which has not expired and so on until all of the Capacity Credits have been allocated;
  - (b) the amount of the Capacity Credits provided by the Facility to be allocated to each Long Term Special Price Arrangement in each Reserve Capacity Cycle is to be set so:

- i. as not to exceed the quantity specified as being covered by that Long Term Special Price Arrangement in accordance with clause 4.22.2(a).;
   and
- ii. that the total Capacity Credits allocated across all Long Term Special Price Arrangements held by a Facility cannot exceed the average of the number of Capacity Credits held by the Market Participant on each Trading Day for that Facility in the Trading Month;

### 4.23. Capacity Credits and Force Majeure

4.23.1. There are no force majeure conditions associated with Capacity Credits.

### 4.23A. Capacity Credits and Facility Registration

- 4.23A.1. For the first Reserve Capacity Cycle, as facilities are registered, the IMO must convert the Certified Reserve Capacity, Capacity Credits and Reserve Capacity Obligation Quantities that were associated with Western Power's generation systems in accordance with clauses 4.11, 4.12, and 4.20 into Certified Reserve Capacity, Capacity Credits and Reserve Capacity Obligation Quantities associated with individual Registered Facilities.
- 4.23A.2. In performing the allocations described in clause 4.23A.1, the IMO must:
  - (a) ensure that the total Certified Reserve Capacity, Capacity Credits and Reserve Capacity Obligation Quantities of the Registered Facilities equal, respectively, the Certified Reserve Capacity, Capacity Credits and Reserve Capacity Obligation Quantities that were associated with Western Power's generation systems in accordance with clauses 4.11, 4.12, and 4.20;
  - (b) where facilities will not be registered as being Electricity Generation Corporation facilities as at Energy Market Commencement, allocate Certified Reserve Capacity, Capacity Credits and Reserve Capacity Obligation Quantities to the Market Participant to whom those facilities are to registered; and
  - (c) consult with Western Power or the Electricity Generation Corporation (as applicable) and give consideration to Western Power or the Electricity Generation Corporation (as applicable) preferences as to how clause 4.23A.1 should be implemented.
- 4.23A.3. If at any time a Market Participant holds Capacity Credits with respect to a facility (the "primary facility") that must be registered as more than one Registered Facility, either as a result of Facility aggregation not being approved by System Management or being revoked, then the IMO may re-allocate the Certified Reserve Capacity, Capacity Credits and Reserve Capacity Obligation Quantities of the primary facility between the primary facility and the Registered Facilities subject to the conditions that:

- the Registered Facilities were documented in the original application for Certified Reserve Capacity as contributing to the capacity covered by those Capacity Credits;
- (b) the IMO must not allocate more Certified Reserve Capacity, Capacity Credits or Reserve Capacity Obligation Quantity to a Registered Facility than that Registered Facility can provide based on information provided in the original application for Certified Reserve Capacity for the primary facility;
- (c) after the re-allocation the total Certified Reserve Capacity, the total number of Capacity Credits and the total Reserve Capacity Obligation Quantities, respectively, of the primary facility and the Registered Facilities must equal the Certified Reserve Capacity, the number of Capacity Credits, and the Reserve Capacity Obligation Quantity originally held by the primary facility; and
- (d) the IMO must consult with the applicable Market Participant and give consideration to its preferences in the re-allocations to the extent allowed by (a), (b) and (c).
- 4.23A.4. If at any time a Market Participant holds Capacity Credits with respect to Registered Facilities, for which the IMO has approved aggregation as a single aggregated facility in accordance with clause 2.30.7, then the IMO may re-allocate the Certified Reserve Capacity, Capacity Credits and Reserve Capacity Obligation Quantities of the Registered Facilities to the aggregated facility subject to the conditions that:
  - (a) the information submitted with the application for aggregation must demonstrate that the aggregated facility can at all times meet the sum of the full Reserve Capacity Obligation Quantities of the Registered Facilities;
  - (b) the IMO must allocate to the aggregated facility the Certified Reserve Capacity, Capacity Credits and Reserve Capacity Obligation Quantity it can provide based on information provided in the original application for Certified Reserve Capacity for the Registered Facilities;
  - (c) after the re-allocation the Certified Reserve Capacity, the number of Capacity Credits and the Reserve Capacity Obligation Quantities of the aggregated facility must equal the sum of the Certified Reserve Capacities, the total number of Capacity Credits, and the sum of the Reserve Capacity Obligation Quantities originally held by the Registered Facilities; and
  - (d) the Capacity Credits and the Reserve Capacity Obligation Quantities of the aggregated facility must at all times be capable of being disaggregated in accordance with clause 4.23A.3.

# **Addressing Shortages of Reserve Capacity**

#### 4.24. Supplementary Reserve Capacity

- 4.24.1. If, at any time after the day which is six months before the Capacity Year the IMO considers that, in its opinion, inadequate Reserve Capacity will be available in the SWIS to maintain Power System Security and Power System Reliability, using the most recent published forecasts and the methodology outlined in clauses 4.5.9(a) and (b), and the Reserve Capacity Auction intended to secure Capacity Credits for that time has already occurred or been cancelled, then it must:
  - (a) determine the expected start and end dates for the period of the shortfall;
  - (b) determine the expected amount of the shortfall; and
  - (c) seek to acquire supplementary capacity in accordance with clause 4.24.2.
- 4.24.2. If the IMO decides to seek to acquire supplementary capacity and:
  - (a) the expected start date of the shortfall is at least 12 weeks from the date the IMO becomes aware of the shortfall, then it must call for tenders from potential suppliers of supplementary capacity in an invitation to tender;
  - (b) paragraph (a) does not apply, then it must either:
    - i. call for tenders from potential suppliers of supplementary capacity in an invitation to tender; or
    - ii. negotiate directly with potential suppliers of supplementary capacity.
- 4.24.3. The only eligible sources of supplementary capacity are the following services ("Eligible Services"):
  - (a) load reduction, that is measures to reduce a consumer's consumption of electricity supplied through the SWIS, but excluding reductions associated with the operation of Registered Facilities (including registered Loads) and reductions provided by a Market Customer with a Demand Side Programme that does not satisfy its Reserve Capacity Obligations for the current Reserve Capacity Cycle in accordance with clause 4.8.3(d) at the time the IMO seeks to acquire supplementary capacity;
  - (b) the generation of electricity by generation systems that are not Registered Facilities.
  - (c) the generation of electricity by generation systems, or load reductions provided by loads, that are Registered Facilities but only to extent that the electricity is generated, or the load reduction is provided, by capacity for which the relevant Market Participant, either:
    - does not hold Capacity Credits in the current Reserve Capacity Cycle;
       and

- (ii) has not held Capacity Credits in the current Reserve Capacity Cycle or a previous Reserve Capacity Cycle; and
- (iii) holds Capacity Credits in a subsequent Reserve Capacity Cycle;

or

- (iv) provides evidence satisfactory to the IMO, prior to a Supplementary Capacity Contract taking effect, that:
  - costs have been incurred to enable the provision of the capacity through the installation of physical equipment; and
  - the capacity is in addition to the sent out capacity of the generation system, or the maximum amount of load that can be curtailed, that existed prior to the installation of the physical equipment.
- 4.24.4. A person is not required to be a Rule Participant in order to submit a tender in response to a call for tenders under clause 4.24.2 or enter into a Supplementary Capacity Contract with the IMO. However, if a Rule Participant does enter into a Supplementary Capacity Contract with the IMO, then it must comply with that contract.
- 4.24.5. The IMO must not call for tenders for supplementary capacity earlier than six calendar months prior to the calendar month in which the shortfall period is expected to start.
- 4.24.6. If the IMO decides to call for tenders for supplementary capacity, then, no earlier than 30 Business Days and no later than 10 Business Days prior to the proposed closing date for submission of tenders, the IMO must advertise the call for tenders on the Market Web Site and in major local and national newspapers. The advertisement must include:
  - (a) the date and time at which any person wishing to tender to supply Eligible Services must have completed and lodged with the IMO the form specified in clause 4.24.7;
  - (b) contact details for the IMO;
  - (c) the amount of capacity required;
  - (d) the number of hours over which the capacity is expected to be used;
  - (e) the time of the day where the capacity is expected to be required;
  - (f) the expected term of any Supplementary Capacity Contracts entered into as a result of the call for tenders;
  - (g) the maximum contract value per hour of availability for any Supplementary Capacity Contract that the IMO will accept;
  - (h) the location of copies of the standard Supplementary Capacity Contracts on the Market Web Site; and

- (i) the location on the Market Web Site of the tender form to be used in applying to provide Eligible Services.
- 4.24.7. The IMO must prescribe the tender form to be used by those applying to provide Eligible Services. This form must require the specification of:
  - (a) the name and contact details of the applicant;
  - (b) the nature of the Eligible Service to be provided;
  - (c) the amount of the Eligible Service available;
  - (d) the maximum number of hours over the term of the Supplementary Capacity Contract that the Eligible Service will be available;
  - (e) the maximum number of hours on each day during the term of the Supplementary Capacity Contract that the Eligible Service will be available;
  - (f) the time of each day during the term of the Supplementary Capacity Contract that the Eligible Service will be available;
  - (g) any information required to complete the relevant standard form Supplementary Capacity Contract for the Eligible Service and the applicant, together with full details of any amendments to the standard form Supplementary Capacity Contract required by the applicant;
  - (h) the mechanism for activating the Eligible Service;
  - (i) the mechanisms available for measuring the Eligible Service provided; and
  - (j) the values of
    - i. the availability price for the Eligible Service expressed in dollars; and
    - the activation price for the Eligible Service, expressed in dollars per hour of activation, where this price must reflect direct or opportunity costs incurred,

where the activation price plus:

- iii. the availability price; divided by
- iv. the lesser of:
  - 1. the number of hours specified in the advertisement for the call for tenders under clause 4.24.6(d); and
  - 2. the number of hours specified for the Eligible Service in accordance with paragraph (d),

must not exceed the maximum contract value per hour of availability specified in the advertisement for the call for tenders under clause 4.24.6(g).

- 4.24.8. In determining the result of a call for tenders and entering into Supplementary Capacity Contracts:
  - (a) the IMO must only accept an offer for the provision of Eligible Services;

- (b) the IMO must not accept an offer for the provision of an Eligible Service if the IMO is not satisfied that the Eligible Service will be available during times of system peak demand coinciding with the shortfall period; and
- subject to the preceding paragraphs and clause 4.24.9, the IMO is to seek to enter into the lowest cost mix of Supplementary Capacity Contracts that:
  - i. will meet the requirement for supplementary capacity; or
  - ii. will, if it is not possible to meet requirement for supplementary capacity, minimise the remaining Reserve Capacity shortfall,

where the cost of each Supplementary Capacity Contract is to be defined to be the sum of:

- iii. the availability price; plus
- iv. the product of the activation price and the lesser of:
  - 1. the number of hours specified in the advertisement for the call for tenders under clause 4.24.6(d); and
  - 2. the number of hours specified for the Eligible Service in the relevant tender form in accordance with clause 4.24.7(d).
- 4.24.9. The IMO is not under any obligation to accept any tender, or enter into a Supplementary Capacity Contract in respect of any tender, made in response to a call for tenders under clause 4.24.2.
- 4.24.10. If the IMO negotiates directly with a potential supplier of Eligible Services in accordance with clause 4.24.2(b)(ii), then it must provide the following information to the potential supplier:
  - (a) the amount of capacity required;
  - (b) the relevant standard form Supplementary Capacity Contract; and
  - (c) details of the information to be provided by the potential supplier, including:
    - i. the amount of the Eligible Service available;
    - ii. the mechanism for activating the Eligible Service;
    - iii. the mechanisms available for measuring the Eligible Service provided;
    - iv. the availability price for the Eligible Service expressed in dollars; and
    - the activation price for the Eligible Service, expressed in dollars per hour of activation, where this price must reflect direct or opportunity costs incurred.
- 4.24.11. Subject to clause 4.24.3, the IMO may at its discretion enter into any negotiated Supplementary Capacity Contract, but must employ reasonable endeavours to minimise the cost of Eligible Services acquired in this manner.

- 4.24.12. The IMO must develop and maintain a standard form Supplementary Capacity Contract which accords with the requirements in clause 4.24.13.
- 4.24.13. A standard form Supplementary Capacity Contract will require the supplier of an Eligible Service to reduce net consumption, or to increase generation, on instruction from System Management and must specify:
  - (a) that there are no force majeure conditions;
  - (b) the settlement process to be followed, including timing of payments;
  - (c) contract variation conditions;
  - (d) any conditions required to ensure that if a different person takes over the facility used to provide the Eligible Service, that the person taking over will be bound by the contract obligations (for example, by requiring the execution of a deed of assumption or novation);
  - (e) the financial consequences of failing to supply the Eligible Service in accordance with the contract, based on the arrangements which apply under clause 4.26 where a Market Participant holding Capacity Credits for a Facility fails to comply with its Reserve Capacity Obligations;
  - (f) a condition allowing the IMO to disclose the information required by clause 4.24.16 and preventing the disclosure set out in clause 4.24.17;
  - (g) the technical standards and verification arrangements which facilities used to provide Eligible Services must comply with; and
  - (h) blank schedules specifying:
    - i. the term of the Supplementary Capacity Contract, where this term is not to exceed 12 weeks;
    - ii. the sources of the net consumption reduction or generation increase;
    - iii. the amount of net consumption reduction or generation increase required;
    - iv. the notification time to be given for activation;
    - v. the method of notification of activation;
    - vi. the minimum duration of any activation;
    - vii. the maximum duration of any single activation;
    - viii. any limits on the number of times System Management can request activation;
    - ix. the basis to be used for measuring the response;
    - x. the availability price;
    - xi. the activation price;
    - xii. technical matters relating to the facility (including testing); and

- xiii. the fact that activation instructions will be given by System Management.
- 4.24.14. Despite the existence of the standard form Supplementary Capacity Contract, the IMO may enter into Supplementary Capacity Contracts in any form it considers appropriate.
- 4.24.15. The IMO must recover the full cost it incurs in respect of Supplementary Capacity Contracts in accordance with clause 4.28 and Chapter 9.
- 4.24.16. The IMO must provide the following Supplementary Capacity Contract information to System Management, so as to allow System Management to dispatch the contracted Eligible Services:
  - the identity of each contracted Eligible Service, listed in order of increasing activation price;
  - (b) the information required to contact the party which will activate the Eligible Service:
  - (c) the process to be followed in activating that Eligible Service, including required advance notification times; and
  - (d) the limitations on the availability of the Eligible Service.
- 4.24.17. The IMO must not provide the following Supplementary Capacity Contract information to System Management for any Eligible Service:
  - (a) the activation price for that Eligible Service; or
  - (b) the availability price for that Eligible Service.
- 4.24.18. The IMO must document the procedures it follows in:
  - (a) acquiring Eligible Services;
  - (b) entering into Supplementary Capacity Contracts;
  - (c) determining the maximum contract value per hour of availability for any Supplementary Capacity Contract,

in the Reserve Capacity Procedure, and the IMO and System Management must follow that documented Market Procedure.

4.24.19. Following each call for tenders for supplementary capacity or otherwise acquiring Eligible Services, the IMO must review the Supplementary Reserve Capacity provisions of this section 4.24 of the Market Rules with regard to the Wholesale Market Objectives and must undertake a public consultation process in respect of the outcome of the review.

# **Testing, Monitoring and Compliance**

#### 4.25. Reserve Capacity Testing

- 4.25.1. The IMO must take steps to verify, in accordance with clause 4.25.2, that each Facility providing Capacity Credits can:
  - (a) in the case of a generation system, during the term the Reserve Capacity Obligations apply, operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, at least once during each of the following periods and such operation must be achieved on each type of fuel available to that Facility notified under clause 4.10.1(e)(v):
    - i. 1 October to 31 March; and
    - ii. 1 April to 30 September; and
  - (b) during the six months prior to the Reserve Capacity Obligations for the first Reserve Capacity Cycle taking effect, operate at its maximum Reserve Capacity Obligation Quantity at least once and, in the case of a generating system, such operation on each type of fuel available to that Facility notified under clause 4.10.1(e)(v). This paragraph (b) does not apply to facilities that are not commissioned prior to their Reserve Capacity Obligations coming into force; and
  - (c) in the case of a Demand Side Programme, during the term the Reserve Capacity Obligations apply, and during the period specified in clause 4.10.1(f)(vi), decrease its consumption to operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, at least once during the period between 1 October to 31 March.
- 4.25.2. The verification referred to in clause 4.25.1 can be achieved by the IMO:
  - (a) in the case of a generation system:
    - observing the Facility operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, at least once as part of normal market operations as determined from Meter Data Submissions; or
    - ii. requiring System Management, in accordance with clause 4.25.7, to test the Facility's ability to operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for not less than two Trading Intervals and the Facility successfully passing that test; or
  - (b) in the case of a Demand Side Programme:
    - observing the Facility operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, at least once in response to an activation of the Facility by the relevant Market Customer as measured in metered consumption; or

- ii. requiring System Management, in accordance with clause 4.25.7, to test the Facility's ability to reduce demand to a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for not less than one Trading Interval and the Facility successfully passing that test; or
- (c) in the case of an Interruptible Load or Dispatchable Load, requiring System Management, in accordance with clause 4.25.7, to test the Facility's ability to reduce demand to a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for not less than one Trading Interval and the Facility successfully passing that test.
- 4.25.3. The IMO must not subject a Facility to more tests of Reserve Capacity than it considers are required to satisfy the verification requirements of this clause 4.25.
- 4.25.3A. The IMO must not subject a Facility to a test of Reserve Capacity if:
  - (a) that Facility is undergoing a Scheduled Outage or Opportunistic Outage which has been approved in accordance with clause 3.19, or
  - (b) the relevant Market Participant has advised System Management of a Forced Outage or Consequential Outage for that Facility in accordance with clause 3.21.4; or
  - (c) that Facility is undergoing a Commissioning Test approved in accordance with clause 3.21A.
- 4.25.3B. If a Demand Side Programme fails a Reserve Capacity test under clause 4.25.2(b)(ii) and is issued a Dispatch Instruction by System Management to decrease its consumption to a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for not less than one Trading Interval prior to a second Reserve Capacity test being undertaken in accordance with clause 4.25.4, then the activation shall be deemed to be the second Reserve Capacity test.
- 4.25.4. Subject to clause 4.25.3B, if a Facility fails a Reserve Capacity test requested by the IMO under clause 4.25.2, the IMO must require System Management to re-test that Facility in accordance with clause 4.25.2, not earlier than 14 days and not later than 28 days after the first test. If the Facility fails this second test, then the IMO must, from the second Trading Day following the Scheduling Day on which the IMO determines that the second test was failed:
  - (a) if the test related to a generation system, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to reflect the maximum capabilities achieved in either test performed (after adjusting these results to the equivalent values at a temperature of 41°C and allowing for the capability provided by operation on different types of fuels); or
  - (b) if the test related to a Dispatchable Load, Demand Side Programme or Interruptible Load, reduce the number of Capacity Credits held by the relevant

Market Participant for that Facility to the maximum level of reduction achieved in either of the two tests.

- 4.25.4A A Market Participant may apply to the IMO for a reduction in the number of Capacity Credits the Market Participant holds for a Facility.
- 4.25.4B In order for an application under clause 4.25.4A to be assessed by the IMO, it must:
  - (a) be in writing;
  - (b) relate to a Facility for which the IMO has notified the Market Participant, in accordance with clause 4.13.14, of its determination that the need to maintain the Reserve Capacity Security for that Facility has ceased;
  - (c) detail the reasons for the reduction in the number of Capacity Credits; and
  - (d) indicate whether the application relates only to the current Reserve Capacity Year or includes subsequent Capacity Years.
- 4.25.4C Upon receiving an application under clause 4.25.4A, the IMO, at its sole discretion, must:
  - (a) assess the application and any supporting documentation;
  - (b) within 10 Business Days of receiving the application inform the Market Participant of its decision whether to reduce the Capacity Credits and the reasons for its decision; and
  - (c) if applicable, reduce the amount of Capacity Credits held by the Market Participant in respect of the Facility to which the application relates.
- 4.25.4D A Market Participant may not apply to the IMO for an increase in the number of Capacity Credits for a Facility during a Capacity Year if the Facility has had its Capacity Credits reduced in accordance with clause 4.25.4C for any part of that Capacity Year.
- 4.25.4E. Where the Capacity Credits associated with a Demand Side Programme are reduced in accordance with clause 4.25.4C the Market Participant must pay a refund of an amount equal to all Reserve Capacity Payments associated with the reduced Capacity Credits for the relevant Reserve Capacity Year to the IMO calculated in accordance with the provisions of clause 4.26.
- 4.25.4F. A Market Participant may not offer a Demand Side Programme for Supplementary Capacity if the Demand Side Programme has had its Capacity Credits reduced in accordance with clause 4.25.4C for any part of that Capacity Year.
- 4.25.5. In the event that the number of Capacity Credits held by a Market Participant are reduced in accordance with clause 4.25.4, then that Market Participant may request once during the remaining Reserve Capacity Cycle that the IMO require System Management to perform a single re-test to be conducted during the seven days following that request.

- 4.25.6. If the IMO receives a request for a Reserve Capacity re-test in accordance with clause 4.25.5, then the IMO must require System Management to conduct such a retest, and must set the number of Capacity Credits held by the relevant Market Participant for that Facility to reflect the maximum capabilities achieved in the re-test (after adjusting these results to the equivalent values at a temperature of 41°C and allowing for the capability provided by operation on different types of fuel), but not to exceed the number of Capacity Credits originally confirmed by the IMO for that Facility under clause 4.20 in respect of the relevant Reserve Capacity Cycle.
- 4.25.7. In requesting System Management to conduct a test, the IMO must provide System Management with the following information:
  - (a) the Facility to be tested;
  - (b) the fuel to be used by the Facility during the test where applicable; and
  - (c) the time interval during which the test is proposed to be conducted, where this interval must begin not less than two Business Days after the time the IMO issues the request to System Management.
- 4.25.8. If the IMO requests that a test be conducted by System Management in accordance with this clause 4.25, then System Management must notify the IMO within one Business Day as to whether it is possible to conduct the test without endangering Power System Security and Power System Reliability within the time interval described in clause 4.25.7(c), and if not, System Management must provide to the IMO:
  - (a) justification as to why the test cannot be conducted; and
  - (b) an alternative time interval during which the test will be conducted, where this must be the earliest time that the test can be performed without endangering Power System Security and Power System Reliability.
- 4.25.9. In conducting a test, System Management must:
  - (a) subject to paragraphs (b), (c) and (d), endeavour to conduct the test without warning;
  - (b) allow sufficient time for the Market Participant to schedule fuel that it is not required under these Market Rules to be stored on-site;
  - (c) allow sufficient time for switching a Facility from one fuel to an alternative fuel if operation using the alternative fuel is being tested;
  - (d) in the case of an Interruptible Load or a Demand Side Programme, give at least as much notice as is specified under clause 4.10.1(f)(v) to allow for arrangements to be made for the Facility to be triggered;
  - (e) report to the IMO whether the test was successfully performed;
  - (f) maintain adequate records of the test to allow independent verification of the test results; and

- (g) conduct the test in the time interval specified by the IMO in accordance with clause 4.25.7(c) unless System Management has notified the IMO of an alternative time interval in accordance with clause 4.25.8, in which case, System Management must conduct the test in the time interval specified in accordance with clause 4.25.8(b).
- 4.25.10. Where a Facility, excluding a Demand Side Programme, is tested in accordance with this clause 4.25, the Dispatch Schedule for that Facility during the period of the test is to reflect the energy scheduled in the test.
- 4.25.11. Every three months the IMO must publish details of:
  - (a) Facilities tested during the preceding three months; and
  - (b) whether any of those tests were delayed by System Management and the reasons for the delay as given by System Management.
- 4.25.12. The IMO may use the results of tests under this clause 4.25 in respect of a Facility in assigning Certified Reserve Capacity and setting Reserve Capacity Obligation Quantities for the Facility for subsequent Reserve Capacity Cycles.
- 4.25.13. The IMO must monitor at all times the on-site fuel storage of each Scheduled Generator required to comply with clause 4.10.2. The IMO may:
  - (a) require the relevant Market Participant to submit a weekly report of the current fuel level;
  - (b) have a representative of the IMO conduct an on-site inspection to verify the fuel storage level; and
  - (c) instruct System Management to use its SCADA systems to monitor the fuel storage level and to report any failure of any Market Participant to comply with clause 4.10.2 to the IMO.
- 4.25.14. The IMO must document the procedure to be followed in performing Reserve Capacity tests in the Reserve Capacity Procedure, and the IMO, System Management, and Market Participants must follow that documented Market Procedure in the performance of Reserve Capacity tests.

#### 4.25A. Verification Test for a Demand Side Programme

- 4.25A.1. In each Reserve Capacity Year each Market Customer must undertake a Verification Test during the period specified in clause 4.10.1(f)(vi) for each Demand Side Programme registered to the Market Customer. Each test must be conducted in accordance with the Reserve Capacity Procedure and be carried out:
  - within 20 Business Days of registration, as notified by the IMO under clause 2.31.6, of the Demand Side Programme, if applicable; or

between 1 October and 30 November.

- 4.25A.2. To undertake a Verification Test a Market Customer must activate the Demand Side Programme and provide evidence satisfactory to the IMO of the Trading Intervals during which the Verification Test was conducted.
- 4.25A.3. A Demand Side Programme will be deemed to have failed the Verification Test unless a reduction in demand equal to at least 10% of the Capacity Credits, when measured against the Demand Side Programme's Relevant Demand determined under clause 4.26.2CA, is identified from the Demand Side Programme Load associated with that Demand Side Programme.
- 4.25A.4. Where a Demand Side Programme fails a Verification Test the IMO must reduce the Capacity Credits assigned to the Demand Side Programme to zero from the second Trading Day following the Scheduling Day on which the IMO determines that the Verification Test was failed under clause 4.25A.3.
- 4.25A.5. Where a Demand Side Programme fails a Verification Test the relevant Market Participant may request that a second Verification Test be undertaken. If the Demand Side Programme fails the second Verification Test then the Capacity Credits assigned to the Demand Side Programme are to remain at zero until the end of the relevant Reserve Capacity Year.

#### 4.26. Financial Implications of Failure to Satisfy Reserve Capacity Obligations

4.26.1. If a Market Participant holding Capacity Credits associated with a generation system fails to comply with its Reserve Capacity Obligations applicable to any given Trading Interval then the Market Participant must pay a refund to the IMO calculated in accordance with the following provisions.

#### **REFUND TABLE**

Dates	1 April to 1 October	1 October to 1 December	1 December to 1 February	1 February to 1 April
Business Days Off-Peak Trading Interval Rate (\$ per MW shortfall per Trading Interval)	0.25 x Y	0.25 x Y	0.5 x Y	0.75 x Y
Business Days Peak Trading Interval Rate (\$ per MW shortfall per Trading Interval)	1.5 x Y	1.5 x Y	4 x Y	6 x Y
Non-Business Days Off- Peak Trading Interval Rate (\$ per MW shortfall per Trading Interval)	0.25 x Y	0.25 x Y	0.5 x Y	0.75 x Y
Non-Business Days Peak Trading Interval Rate (\$ per MW shortfall per Trading Interval)	0.75 x Y	0.75 x Y	1.5 x Y	2 x Y

NA avrience una	Dantialaant	The total value of the Conneity Condit represents used on to be used under
Maximum	Participant	
Generation Refund		these Market Rules to the relevant Market Participant for the 12 Trading
		Months commencing at the start of the Trading Day of the previous 1
		October (excluding any payments relating to a Demand Side Programme)
		assuming the IMO acquires all of the Capacity Credits held by the Market
		Participant (excluding any Capacity Credits held for Demand Side
		Programmes) and the cost of each Capacity Credit so acquired is
		determined in accordance with clause 4.28.2(b), (c) and (d) (as
		applicable).

Where:

For an Intermittent Generator that has:

- (a) either:
  - operated at a level equivalent to its Required Level, adjusted to 100 percent of the level of Capacity Credits currently held, in at least two Trading Intervals; or
  - ii. provided the IMO with a report under clause 4.13.10C, where this report specifies that the Facility can operate at a level equivalent to its Required Level, adjusted to 100 percent of the level of Capacity Credits currently held; and
- (b) is, following a request to the IMO by a Market Participant, considered by the IMO to be in Commercial Operation:

Y equals 0

For all other facilities: Y is determined by dividing the Monthly Reserve Capacity Price (calculated in accordance with clause 4.29.1) by the number of Trading Intervals in the relevant Trading Month.

- 4.26.1A. The IMO must calculate the Reserve Capacity Deficit refund for each Facility ("Facility Reserve Capacity Deficit Refund") for each Trading Month m as the lesser of:
  - (a) the sum over all Trading Intervals t in Trading Month m of the product of:
    - the Off-Peak Trading Interval Rate or Peak Trading Interval Rate determined in accordance with the Refund Table applicable to Trading Interval t; and
    - ii the Reserve Capacity Deficit in Trading Interval t,

where the Reserve Capacity Deficit for a Facility is equal to whichever of the following applies:

- iii. if the Facility is required to have submitted a Forced Outage under clause 3.21.4, the Forced Outage in that Trading Interval measured in MW; or
- iv. if the Facility is an Intermittent Generator which is not considered by the IMO to have been in Commercial Operation for the purposes of clause 4.26.1, the number of Capacity Credits associated with the relevant Intermittent Generator; or

- ivA. if the Facility is an Intermittent Generator which is considered by the IMO to have been in Commercial Operation, but for which Y does not equal zero in the Refund Table in clause 4.26.1, the minimum of:
  - 1. RL-  $(2 \times Max_2)$ ; or
  - 2. RL A

where:

RL is the Required Level, adjusted to 100 percent of the level of Capacity Credits currently held;

Max<sub>2</sub> is the second highest value of the output for the Facility (MWh) achieved during a Trading Interval during the relevant Trading Month, as measured in Meter Data Submissions received by the IMO in accordance with clause 8.4, that has been achieved since the date the IMO determined the Facility to be in Commercial Operation, where this value must be set equal to or greater than the Max<sub>2</sub> applied by the IMO for the previous Trading Month; and

A is the level of output (in MW) detailed in the most recent report provided by the Market Participant for the Facility under clause 4.13.10C,

where this value will be applied for the purposes of this clause for the relevant Trading Month; or

- v. if, from the Trading Day commencing on 30 November of Year 3 for Reserve Capacity Cycles up to and including 2009 or 1 October of Year 3 for Reserve Capacity Cycles from 2010 onwards, the Facility is undergoing an approved Commissioning Test and, for the purposes of permission sought under clause 3.21A.2, is a new generating system, the number of Capacity Credits associated with the relevant Facility; or
- vi. if, from the Trading Day commencing on 30 November of Year 3 for Reserve Capacity Cycles up to and including 2009 or 1 October of Year 3 for Reserve Capacity Cycles from 2010 onwards, the Facility is not yet undergoing an approved Commissioning Test and, for the purposes of permission sought under clause 3.21A.2, is a new generating system, the number of Capacity Credits associated with the relevant Facility; or
- vii. if the Facility is a Demand Side Programme:

max(0, RCOQ - max(0, (RD - MinLoad)))

where:

RCOQ is the Reserve Capacity Obligation Quantity determined for the Facility under clause 4.12.4;

RD is the Relevant Demand for the Facility determined in accordance with clause 4.26.2CA; and

MinLoad is the sum of the minimum load MW quantities provided under clause 2.29.5B(c) for the Facility's Associated Loads; and

- (b) the total value of the Capacity Credit payments associated with the relevant Facility paid or to be paid under these Market Rules to the relevant Market Participant for the 12 Trading Months commencing at the start of the Trading Day of the most recent 1 October, assuming the IMO acquires all of the Capacity Credits associated with that Facility and the cost of each Capacity Credit so acquired is determined in accordance with clause 4.28.2(b), (c) and (d) (as applicable), less all Facility Reserve Capacity Deficit Refunds applicable to the Facility in previous Trading Months falling in the same Capacity Year.
- 4.26.1B. The IMO must calculate the Generation Reserve Capacity Deficit Refund for each Market Participant for each Trading Month as the sum of the Facility Reserve Capacity Deficit Refunds for the Trading Month for each Facility registered to the relevant Market Participant, excluding any registered Demand Side Programmes.
- 4.26.2. The IMO must determine the net STEM shortfall ("Net STEM Shortfall") in Reserve Capacity supplied by each Market Participant p holding Capacity Credits associated with a generation system in each Trading Interval t of Trading Day d and Trading Month m as:

```
SF(p,m,d,t) = Max(RTFO(p,d,t), RCOQ(p,d,t) - A(p,d,t)) + Sum (f \in F, Max(0, B(f,d,t) - C(f,d,t))) - RTFO(p,d,t)
```

Where

$$\begin{split} &A(p,d,t) = Min(RCOQ(p,d,t), CAPA(p,d,t)); \\ &B(f,d,t) = Min(RCOQ(f,d,t) - RTFO(f,d,t), DSQ(f,d,t)); \\ &C(f,d,t) = Min(DSQ(f,d,t), MSQ(f,d,t)); \end{split}$$

RCOQ(p,d,t) for Market Participant p and Trading Interval t of Trading Day d is equal to:

- (a) the total Reserve Capacity Obligation Quantity of Market Participant p's unregistered facilities that have Reserve Capacity Obligations, excluding Loads that can be interrupted on request, plus
- (b) the sum of the product of:
  - i. the factor described in clause 4.26.2B as it applies to Market Participant p's Registered Facilities; and
  - ii. the Reserve Capacity Obligation Quantity for each Facility

for all Market Participant p's Registered Facilities, excluding Demand Side Programmes;

RCOQ (f,d,t) for Facility f and Trading Interval t of Trading Day d is equal to the product of the factor described in clause 4.26.2B as it applies to Facility f and the Reserve Capacity Obligation Quantity for Facility f.

CAPA(p,d,t) is for Market Participant p and Trading Interval t of Trading Day d:

- (c) equal to RCOQ(p,d,t) for a Trading Interval where the STEM auction has been suspended by the IMO in accordance with clause 6.10;
- (d) subject to paragraph (c), for the case where Market Participant p is not the Electricity Generation Corporation, the sum of:
  - the sum of the Reserve Capacity Obligation Quantities in Trading Interval t of that Market Participant's Interruptible Loads; plus
  - ii. the MW quantity calculated by doubling the net MWh quantity of energy sent out by Facilities registered by that Market Participant during that Trading Interval calculated as the Net Contract Position less the shortfall as indicated by the applicable Resource Plan; plus
  - iiA if a STEM submission does not exist for that Trading Interval, the MW quantity calculated by doubling the total MWh quantity of energy to be consumed by that Market Participant including demand associated with any Interruptible Load, but excluding demand associated with any Dispatchable Load during that Trading Interval as indicated by the applicable Resource Plan; plus
  - the MW quantity calculated by doubling the total MWh quantity covered by the STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction, determined by the IMO for that Market Participant under clause 6.9 for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus
  - iv. double the total MWh quantity to be provided as Ancillary Services as specified by the IMO in accordance with clause 6.3A.2(e)(i) for that Market Participant corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus
  - v. the greater of zero and (BSFO(p,d,t) RTFO(p,d,t)); and
- (e) subject to paragraph (c), for the case where Market Participant p is the Electricity Generation Corporation, the sum of:

- the sum of the Reserve Capacity Obligation Quantities in Trading Interval t of that Market Participant's Interruptible Loads; plus
- the MW quantity calculated by doubling the total MWh quantity of the Net Contract Position quantity of that Market Participant for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus
- the MW quantity calculated by doubling the total MWh quantity of the STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction, determined by the IMO for that Market Participant under clause 6.9 for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus
- iv. double the total MWh quantity to be provided as Ancillary Services as specified by the IMO in accordance with clause 6.3A.2(e)(i) for the Electricity Generation Corporation corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus
- v. the greater of zero and (BSFO(p,d,t) RTFO(p,d,t)).

BSFO(p,d,t) is the total MW quantity of Forced Outage associated with Market Participant p before the STEM Auction for Trading Interval t of Trading Day d, where this is the sum over all the Market Participant's Registered Facilities of the lesser of the Reserve Capacity Obligation Quantity of the Facility for Trading Interval t and the MW Forced Outage of the Facility for Trading Interval t as provided to the IMO by System Management in accordance with clause 7.3:

RTFO(p,d,t) is the total MW quantity of Forced Outage associated with Market Participant p in real-time for Trading Interval t of Trading Day d, where this is the sum over all the Market Participant's Registered Facilities of the lesser of the Reserve Capacity Obligation Quantity of the Facility for Trading Interval t and the MW Forced Outage of the Facility for Trading Interval t as provided to the IMO by System Management in accordance with clause 7.13.1A (b);

RTFO(f,d,t) is the total MW quantity of Forced Outage associated with Facility f in real-time for Trading Interval t of Trading Day d, where this is the lesser of the Reserve Capacity Obligation Quantity of the Facility f for Trading Interval t and the MW Forced Outage of the Facility f for Trading Interval t as provided to the IMO by System Management in accordance with clause 7.13.1A (b);

DSQ(f,d,t) is a MW quantity calculated by doubling the MWh value of Facility's f's Dispatch Schedule for Trading Interval t of Trading Day d;

MSQ(f,d,t) is a MW quantity calculated by doubling the MWh value of Facility's f's Metered Schedule for Trading Interval t of Trading Day d corrected for Loss Factor adjustments applicable to that Facility so as to be a sent out quantity;

F denotes the set of Scheduled Generators registered by Market Participant p, where "f" is used to refer to a member of that set.

- 4.26.2A. All values in clause 4.26.2 which are required to be corrected for Loss Factor adjustments so as to be a sent out quantity are to be adjusted based on an assumed Loss Factor of 1.
- 4.26.2B. The IMO is to set the factor described in the definition of RCOQ(p,d,t) and RCOQ(f,d,t) in clause 4.26.2 to equal one in all situations except for Scheduled Generators, Non-Scheduled Generators and Dispatchable Loads with Loss Factors less than one in which event the factor must equal the facilities Loss Factor.
- 4.26.2C. For each Capacity Year, the IMO must:
  - identify the eight consecutive Trading Intervals with the highest aggregate system demand in each month during the Hot Season of the previous Capacity Year; and
  - (b) for each Non–Dispatchable Load or Interruptible Load associated with a Demand Side Programme (Associated Load) during the Capacity Year and each of the 32 Trading Intervals identified under clause 4.26.2C(a), determine a MW quantity equal to:
    - i. the metered consumption of the Associated Load for the Trading Interval, multiplied by two to convert to units of MW; or
    - ii. where the metered consumption of the Associated Load for the Trading Interval is not available or is considered by the IMO to be inappropriate, a MW quantity determined by the IMO based on:
      - 1. available Meter Data Submissions; or
      - 2. Load information provided by the Market Customer; or
      - 3. other relevant information; or
    - iii. where a Market Customer provides evidence satisfactory to the IMO that the Associated Load was operating at below capacity due to its consumption being reduced at the request of System Management or because of maintenance, the IMO's estimate of what the consumption of the Associated Load would have been if it had not been reduced, multiplied by two to convert to units of MW.
- 4.26.2CA. The Relevant Demand of a Demand Side Programme for a Trading Day d in a Capacity Year is the median of the historical consumption quantities determined by the IMO for each of the 32 Trading Intervals identified under clause 4.26.2C(a) for the Capacity Year. The historical consumption quantity for each Trading Interval is the

sum, over all the Associated Loads associated with the Demand Side Programme during Trading Day d, of the MW quantity determined by the IMO for each Associated Load and the Trading Interval under clause 4.26.2C(b).

- 4.26.2D. The IMO must determine the capacity shortfall in Reserve Capacity ("Capacity Shortfall") supplied by each Market Participant p holding Capacity Credits associated with a Demand Side Programme in each Trading Interval t of Trading Day d and Trading Month m relative to its Reserve Capacity Obligation Quantity as:
  - (a) where System Management has issued a Dispatch Instruction under clause 7.6.6(e) to the Demand Side Programme for the Trading Interval as advised to the IMO by System Management under clause 7.13.1:

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max(0, min(RCOQ, DIMW) – max (0, RD – DSPLMW)) where
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RCOQ is the Reserve Capacity Obligation Quantity of the Demand Side Programme for Trading Interval t (in MW), determined in accordance with clause 4.12.4;

DIMW is the quantity by which the Demand Side Programme was instructed by System Management to reduce its consumption in Trading Interval t as specified by System Management in accordance with clause 7.13.1(eC), multiplied by two to convert to units of MW;

RD is the Relevant Demand of the Demand Side Programme for Trading Day d, determined by the IMO in accordance with clause 4.26.2CA; and

DSPLMW is the Demand Side Programme Load of the Demand Side Programme in Trading Interval t, multiplied by two to convert to units of MW; and

- (b) zero, where System Management has not issued a Dispatch Instruction under clause 7.6.6(e) to the Demand Side Programme for Trading Interval t as advised to the IMO by System Management under clause 7.13.1.
- 4.26.2E. For each Market Participant holding Capacity Credits, the IMO must determine the amount of the refund ("Capacity Cost Refund") to be applied for Trading Month m in accordance with clause 4.26.2F.
- 4.26.2F. The Capacity Cost Refund for Market Participant p and Trading Month m is the sum of:
  - (a) either:
    - where Market Participant p holds Capacity Credits associated with a generation system, the Generation Capacity Cost Refund for Market Participant p for Trading Month m, determined in accordance with clause 4.26.3; or

- ii. zero, otherwise; and
- (b) the sum over all Demand Side Programmes for which Market Participant p holds Capacity Credits of the Demand Side Programme Capacity Cost Refund for Trading Month m, determined in accordance with clause 4.26.3A.
- 4.26.3. The Generation Capacity Cost Refund for Trading Month m for a Market Participant p holding Capacity Credits associated with a generation system is the lesser of:
  - (a) the Maximum Participant Generation Refund determined for Market
    Participant p and Trading Month m in accordance with the Refund Table, less
    all Generation Capacity Cost Refunds applicable to Market Participant p in
    previous Trading Months falling in the same Capacity Year as Trading Month
    m; and
  - (b) the Generation Reserve Capacity Deficit Refund for Market Participant p and Trading Month m, plus the sum over all Trading Intervals t in Trading Month m of the Net STEM Refund,

where the Net STEM Refund is the product of:

- the Off-Peak Trading Interval Rate or Peak Trading Interval Rate determined in accordance with the Refund Table applicable to Trading Interval t; and
- ii. the Net STEM Shortfall for Market Participant p in Trading Interval t.
- 4.26.3A. The Demand Side Programme Capacity Cost Refund for Trading Month m for a Demand Side Programme is equal to the lesser of:
  - (a) twelve times the Monthly Reserve Capacity Price for Trading Month m multiplied by the number of Capacity Credits associated with the Facility, less all Demand Side Programme Capacity Cost Refunds applicable to the Facility in previous Trading Months falling in the same Capacity Year as Trading Month m; and
  - (b) the sum of:
    - i. the sum over all Trading Intervals t in Trading Month m of:
      - 12 \* Monthly Reserve Capacity Price \* S / (2 \* H)

Where:

S is the Capacity Shortfall in MW determined in accordance with clause 4.26.2D in any Trading Interval; and

H is the maximum number of hours that the Facility was certified to be available in accordance with clause 4.10.1(f)(ii); and

ii. the Facility Reserve Capacity Deficit Refund for Trading Month m for the Facility, determined in accordance with clause 4.26.1A.

- 4.26.4. The IMO must apply any revenue generated from the application of clause 4.26.2E to Market Customers in accordance with clause 4.28.4.
- 4.26.5. To support the calculation of the values of RCOQ(p,d,t) and RCOQ(f,d,t) required by clause 4.26.2:
  - (a) the IMO must record the following temperature data for generation systems (other than Intermittent Generators) in respect of which Market Participants hold Capacity Credits and which, in accordance with clause 4.10.1(e)(iv), indicated a valid method for measuring ambient temperature:
    - the publicly available maximum daily temperature associated with a Facility for which temperature is defined in accordance with clause 4.10.1(e)(iv)(1); and
    - ii. temperatures provided by System Management for Facilities for which temperature is defined in accordance with clause 4.10.1(e)(iv)(2).
  - (b) System Management must provide the temperatures described in clause 4.26.5(a)(ii) for a Trading Month to the IMO not later than two Business Days prior to the relevant Non-STEM Settlement Statement Date.

#### 4.27. Reserve Capacity Performance Monitoring

- 4.27.1. The IMO must monitor the total availability of capacity in the SWIS on a daily basis. The total available capacity should equal:
  - (a) the total Capacity Credits held by Market Participants on that day; less
  - (b) the maximum amount of capacity unavailable at any time due to Planned Outages.
- 4.27.2. By the twenty fifth day of each month, the IMO must assess the number of days in the preceding 12 calendar months where the total available capacity in the SWIS dropped below 80% (during the Hot Season), and 70% (in either the Intermediate Season or Cold Season), of the total Capacity Credits held by Market Participants for more than six hours on the day.
- 4.27.3. If the number of days determined in accordance with clause 4.27.2 exceeds 40, then the IMO must require reports to be filed by those Market Participants holding Capacity Credits for each Facility which:
  - (a) has been unavailable due to Planned Outages for more than 1000 hours during the preceding 12 calendar months; and
  - (b) has not been included in such a report during the preceding 12 calendar months.
- 4.27.4. The reports described in clause 4.27.3 must include:
  - (a) explanations of all Planned Outages taken by the Facility in the preceding 12 calendar months;

- (b) a statement of the expected maximum number of days of Planned Outages to be taken by the Facility in each of the next 24 months commencing from the month in which the report is requested, including adequate explanation to make clear the reason for each Planned Outage; and
- (c) measures proposed by the Market Participant to increase the availability of the Facility.
- 4.27.5. A Market Participant must provide a report described in clause 4.27.3 to the IMO in a format specified in the Reserve Capacity Procedure within 20 Business Days of being requested to do so.
- 4.27.6. The IMO must consult with System Management on the implications of the report.
- 4.27.7. If the IMO considers the number of days reported in accordance with clause 4.27.4(b) to be unjustified based on good industry practice it may, at its sole discretion, limit the number of days on which Planned Outages are to be taken by the Facility in each of the next 24 months for the purposes of clause 4.27.8 and 4.27.9 and must notify the Market Participant who filed the report described in clause 4.27.3 of the limit.
- 4.27.8. If the IMO limits the number of days in accordance with clause 4.27.7 then the modified value is to supersede the corresponding value specified in the report described in clause 4.27.4.
- 4.27.9. If the number of days determined in accordance with clause 4.27.2 exceeds 80 then the IMO must:
  - (a) notify all Market Participants that this has occurred; and
  - (b) during the 12 months commencing from the first Trading Day of the following month, cease to adjust Reserve Capacity Obligation Quantities under clause 4.12.6(b) in response to Planned Outages for Facilities:
    - i. referred to in clause 4.27.3; and
    - ii. for which the number of days of Planned Outage during that 12 month period has exceeded the total number of days of Planned Outage predicted for that 12 month period in accordance with clause 4.27.4(b), as modified by clause 4.27.8.
- 4.27.10. Market Participants holding Capacity Credits for Facilities that are yet to commence operation must file a report on progress with the IMO:
  - (a) at least once every three months from the date the Capacity Credit are confirmed under clause 4.20.5A; and
  - (b) at least once every month between the start of the calendar year in which the date referred to in clause 4.10.1(c)(iii)(7) falls and the date the IMO notifies the Market Participant, under clause 4.13.10A(b), that the need to maintain the Reserve Capacity Security for the Facility has ceased.

- 4.27.10A. [Blank]
- 4.27.11. Reports provided under clause 4.27.10 must include any changes to Key Project Dates.
- 4.27.11A Upon receipt of a report provided under clause 4.27.10(a) the IMO must revise the date referred to in clause 4.10.1(c)(iii)(7) in accordance with the report.
- 4.27.11B Upon receipt of a report provided under clause 4.27.10(b) or 4.27.11D the IMO must consult with System Management. The IMO must reject a change to the Key Project Dates if, System Management advises that in its opinion, the Facility, or part of the Facility, is unlikely to have completed all Commissioning Tests by the date. If the IMO does not reject a change to the Key Project Dates, the IMO must revise the date referred to in clause 4.10.1(c)(iii)(7) in accordance with the report.
- 4.27.11C If, in accordance with clause 4.27.11B, the IMO rejects a change to the Key Project Dates provided in accordance with clause 4.27.10(b) or 4.27.11D the IMO must, within ten business days of receiving the report, notify the Market Participant of its decision and provide reasons why the dates have been rejected.
- 4.27.11D Where the IMO rejects a change to the Key Project Dates it may require the Market Participant to provide additional information, submitted by a suitably authorised person, and may also require the Market Participant to submit further reports or revise the Key Project Dates. The provisions of clauses 4.27.11 to this clause 4.27.11D will apply to any further reports.
- 4.27.12. The IMO must document the procedure to be followed in performing Reserve Capacity monitoring in the Reserve Capacity Procedure, and the IMO, System Management, and Market Participants must follow that documented Market Procedure in the performance of Reserve Capacity monitoring. Amongst other things, the Market Procedure must list the documents and other items that may be required by the IMO as supporting evidence in accordance with clause 4.27.11D.

# **Funding Reserve Capacity Purchased by the IMO**

#### 4.28. Funding Reserve Capacity Purchased by the IMO

- 4.28.1. The IMO must separate the total costs of Capacity Credits acquired by it for a Trading Month, including Capacity Credits covered by Special Price Arrangements, into the following two sets:
  - (a) the cost of acquiring enough Capacity Credits to ensure, to the extent possible given the number of Capacity Credits the IMO has acquired, that the Reserve Capacity Requirement applicable to that Trading Month is just covered after allowing for Capacity Credits traded bilaterally in that Trading Month (so that if the IMO has not acquired adequate Capacity Credits to cover the required quantity then no cost is to be associated with the shortfall); and

(b) the cost of other Capacity Credits acquired but not allocated to the set referred to in paragraph (a) (where this cost will be zero if there is no surplus of Capacity Credits relative to the Reserve Capacity Requirement);

determined on the basis that the Capacity Credits acquired by the IMO are allocated to the set referred to in paragraph (a) in order of decreasing cost per Capacity Credit until the capacity requirements referred to in paragraph (a) are met, with the remaining Capacity Credits acquired by the IMO being allocated to the set in paragraph (b).

#### 4.28.2. For these purposes:

- (a) IMO is taken to have acquired a Capacity Credit held by a Market Participant in respect of a Trading Month if that Capacity Credit has not been allocated by that Market Participant to another Market Participant for settlement purposes under clauses 9.4 and 9.5;
- (b) the cost of a Capacity Credit acquired by the IMO which is covered by a Long Term Special Price Arrangement is the Special Reserve Capacity Price determined in accordance with clause 4.22.3;
- (c) the cost of a Capacity Credit acquired by the IMO which is covered by a Short Term Special Price Arrangement is the Special Reserve Capacity Price determined in accordance with clause 4.21.1(b); and
- (d) the cost of each other Capacity Credit acquired by the IMO is the Monthly Reserve Capacity Price determined in accordance with clause 4.29.1.
- 4.28.3. For each Trading Month, the IMO must calculate the Targeted Reserve Capacity Cost being the cost defined under clause 4.28.1(a) and the IMO must allocate this total cost to Market Customers in proportion to each Market Customer's Individual Reserve Capacity Requirement less the quantity of Capacity Credits allocated to that Market Customer in accordance with clauses 9.4 and 9.5.
- 4.28.4. For each Trading Month, the IMO must calculate a Shared Reserve Capacity Cost being the sum of:
  - (a) the cost defined under clause 4.28.1(b); and
  - (aA) the net payments to be made by the IMO under Supplementary Capacity
    Contracts less any amount drawn under a Reserve Capacity Security by the
    IMO and distributed in accordance with clause 4.13.11A(a); less
  - (b) the Capacity Cost Refunds for that Trading Month; less
  - (bA) the Intermittent Load Refunds for that Trading Month; less
  - (c) any amount drawn under a Reserve Capacity Security by the IMO and distributed in accordance with clause 4.13.11A(b)

and the IMO must allocate this total cost to Market Customers in proportion to each Market Customer's Individual Reserve Capacity Requirement.

- 4.28.5. The Shared Reserve Capacity Cost may have a negative value.
- 4.28.6. For the first Reserve Capacity Cycle the IMO must within the time limits required by clause 4.1.22 publish the date and time from which the Initial Reserve Capacity Requirement will apply.
- 4.28.7. The IMO must determine and publish an initial Individual Reserve Capacity
  Requirement for each Market Customer by the date and time specified in clause
  4.1.24 where this Individual Reserve Capacity Requirement:
  - is determined using the methodology described in Appendix 5 and clause 4.28.7A;
  - (aA) is calculated using data that may be modified in accordance with clause 4.28.11A; and
  - (b) applies from the date and time specified in clause 4.1.25.
- 4.28.7A. The IMO must set the Intermittent Load Reserve Capacity Requirement to apply for the first Trading Month of the Capacity Year for each Intermittent Load for which a Market Customer provided the IMO with the information specified in clause 4.28.8(c) in accordance with Appendix 4A.
- 4.28.8. To assist the IMO in determining Individual Reserve Capacity Requirements in accordance with clause 4.28.7 and updating Individual Reserve Capacity Requirements in accordance with clause 4.28.11, Market Customers must, by the date and time specified in clause 4.1.23 or no later than by 5:00 PM on the Business Day being twenty Business Days prior to the date and time specified in clause 4.1.28(b), provide to the IMO:
  - (a) a list of interval meters associated with that Market Customer that the Market Customer wants the IMO to treat as Non-Temperature Dependent Loads;
  - (b) details of any Demand Side Management measures that the Market Customer has implemented since the previous Hot Season, including the expected MW reduction in peak consumption resulting from those measures; and
  - (c) nominations of capacity requirements for Intermittent Loads, expressed in MW, where the nominated quantity cannot exceed the greater of:
    - i. the maximum allowed level of Intermittent Load specified in Standing Data for that Intermittent Load at the time of providing the data; and
    - ii. the maximum Contractual Maximum Demand expected to be associated with that Intermittent Load during the Capacity Year to which the nomination relates. The Market Customer must provide evidence to the IMO of this Contractual Maximum Demand level unless the IMO has previously been provided with that evidence.

where for each Capacity Year a Market Customer may only provide the IMO with the information specified in this clause once with respect to each load.

- 4.28.8A. Any Intermittent Load that was not registered by the date and time specified in clause 4.1.23 must provide the IMO with the information described in clause 4.28.8(c) no later than 5 Business Days prior to the date and time specified in clause 4.1.28(b) where that date and time relates to the Trading Month in which the Intermittent Load will first commence operation.
- 4.28.8B. The IMO must accept a nomination for capacity from a Market Customer if that nomination is made in accordance with clauses 4.28.8 or 4.28.8A provided that the IMO is satisfied of the accuracy of the data and evidence provided in accordance with clause 4.28.8(c)(ii).
- 4.28.9. The IMO must only accept the load measured by an interval meter in the list provided in accordance with clause 4.28.8(a) as a Non-Temperature Dependent Load if that load satisfies the requirements of Appendix 5A.
- 4.28.10. The IMO must only take into account a MW reduction in peak consumption resulting from Demand Side Management measures specified in accordance with clause 4.28.8(b) in applying the methodology of Appendix 5 to the extent that the IMO is satisfied that the peak consumption associated with the applicable Market Participant would have been lowered by that number of MWs had those Demand Side Management measures been in place during the preceding Hot Season.
- 4.28.11. The IMO must determine and publish an updated Individual Reserve Capacity Requirement for each Market Customer by the date and time specified in clause 4.1.28(b) where this Individual Reserve Capacity Requirement:
  - (a) is determined using the methodology described in Appendix 5 and based on Individual Reserve Capacity Requirements for Intermittent Loads determined for each Trading Month in accordance with Appendix 4A;
  - (aA) is calculated using data that may be modified in accordance with clause 4.28.11A; and
  - (b) applies from the commencement of the first Trading Month commencing after the date of publication of the updated Individual Reserve Capacity Requirement.
- 4.28.11A. For the purpose of the calculation of Individual Reserve Capacity Requirements described in Appendix 4A and Appendix 5, where those calculations make use of the Reserve Capacity Requirement and the peak demand associated with that Reserve Capacity Requirement specified in clause 4.6.2 the IMO may apply different values provided it preserves the ratio of the latter to the former so as to ensure that the total Individual Reserve Capacity Requirement across all Market Customers does not exceed the total number of Capacity Credits during that Trading Month.
- 4.28.12. The IMO must document the process to be followed in initially calculating, and subsequently revising, Individual Reserve Capacity Requirements in the Reserve

Capacity Procedure, and the IMO and Market Customers must follow that documented Market Procedure.

### **Intermittent Load Refunds**

#### 4.28A. Intermittent Load Refunds

- 4.28A.1 The IMO must determine for each Intermittent Load registered to Market Participant p the amount of the refund ("Intermittent Load Refund") to be applied for each Trading Month m in respect of that Intermittent Load as the sum over all Trading Intervals t of Trading Day d in the Trading Month m of the product of:
  - (a) the applicable value of Y in the Refund Table described in clause 4.26.1 is that which applies for Scheduled Generators; and
  - (b) [Blank]
  - (c) the Capacity Shortfall for Trading Interval t of Trading Day d and Trading Month m which is the greater of zero and:
    - double the MWh of the Intermittent Load metered during that Trading Interval, where for the purpose of this calculation the metered amount should be defined at the meter rather than being Loss Factor adjusted so as to be measured at the Reference Node, less;
    - ii. if the generating system described in clause 2.30B.2(a) is undergoing a Planned Outage or a Consequential Outage, the quantity nominated for that Intermittent Load by its Market Customer in accordance with clause 4.28.8(c); less
    - iii. 3% of the quantity nominated for that Intermittent Load by its Market Customer in accordance with clause 4.28.8(c); less
    - iv. for Trading Intervals where the temperature data described in clause 4.28A.2 shows a temperature in excess of 41°C and the generating system described in clause 2.30B.2(a) is not undergoing a Planned Outage, Forced Outage or a Consequential Outage, the capacity reduction, if any, specified in accordance with clause 2.30B.3(b)(i).

#### 4.28A.2. To support the implementation of clause 4.28A.1(c)(iv)

- (a) the IMO must record the following temperature data for generation systems in respect of which this clause 4.28A applies and for which, in accordance with clause 2.30B.3(b)(ii), a valid method for measuring ambient temperature was indicated:
  - the publicly available maximum daily temperature associated with those generating systems for which temperature is defined in accordance with clause 2.30B.3(b)(ii)(1); and

- ii. temperatures provided by System Management for those generating systems for which temperature is defined in accordance with clause 2.30B.3(b)(ii)(2).
- (b) System Management must provide the temperatures described in clause 4.28A.2(a)(ii) for a Trading Month to the IMO not later than two Business Days prior to the relevant Non-STEM Settlement Statement Date.
- 4.28A.3 The IMO must document the procedure the IMO must follow in calculating Intermittent Load Refunds in the Reserve Capacity Procedure, and the IMO must follow that documented Market Procedure when calculating Intermittent Load Refunds.

#### **Treatment of New Small Generators**

#### 4.28B. Treatment of New Small Generators

- 4.28B.1. This section 4.28B is applicable to Registered Facilities to which the following conditions apply:
  - (a) the Facility is a Non-Scheduled Generator and has commenced operation;
  - (b) the Facility has a nameplate capacity not exceeding 1 MW;
  - (c) the Facility has not previously held Capacity Credits for past Reserve Capacity Cycles and does not hold Capacity Credits for the Reserve Capacity Cycle for which Capacity Credits are sought; and
  - (d) there has been no opportunity for the Market Participant to which the Facility is registered to apply for certification of Reserve Capacity for the Facility for the Reserve Capacity Cycle for which Capacity Credits are sought in accordance with clause 4.9 since the date upon which the Facility became a Registered Facility;
- 4.28B.2. A Market Participant to which a Facility is registered that this clause 4.28B relates to may apply to the IMO for Capacity Credits for that Facility at any time between the date upon which the Facility became a Registered Facility and the earliest date upon which either:
  - (a) Reserve Capacity Obligations could apply to the Facility where such Reserve Capacity Obligations relate to Capacity Credits secured in accordance with clause 4.20 at the earliest possible opportunity following the registration of the Facility; or
  - (b) Reserve Capacity Obligations actually apply to the Facility due to Capacity Credits secured in accordance with clause 4.20 prior to the registration of the Facility.
- 4.28B.3. An application made under clause 4.28B.2 must include all the information required by clause 4.10 for a Non-Scheduled Generator, with the modification that the

- decommissioning date required by clause 4.10.1(d) is only required if the Facility will be decommissioned prior to the end date defined in clause 4.28B.6.
- 4.28B.4. The IMO must process an application made in accordance with clause 4.28B.2 so as to determine the Certified Reserve Capacity, Capacity Credits and Reserve Capacity Obligations to associate with the Facility:
  - (a) The IMO must set Certified Reserve Capacity for the Facility to that amount it would normally grant the Facility if processing an application for Certified Reserve Capacity in accordance with clause 4.11;
  - (b) The IMO must set the Capacity Credits for the facility to equal the Certified Reserve Capacity of the Facility; and
  - (c) The IMO must set the Reserve Capacity Obligations, including the initial Reserve Capacity Obligation Quantity, for the Facility in accordance with clause 4.12 as if set as part of an application for Certified Reserve Capacity made in accordance with clause 4.11.
- 4.28B.5. The IMO must process an application made in accordance with clause 4.28B.2 within 10 Business Days of receipt of the application.
- 4.28B.6. If the IMO approves the granting of Capacity Credits to the Facility then the Capacity Credits and the Reserve Capacity Obligations associated with that Facility are to apply from the commencement of the Trading Day commencing on the start date until the end of the Trading Day ending on the end date where:
  - (a) the start date is the next occurrence of the date 1 October after the date on which the IMO grants approval, or if the IMO grants approval prior to Energy Market Commencement then the date of Energy Market Commencement; and
  - (b) the end date is the earlier of:
    - the first date that Reserve Capacity Obligations could apply to the Facility where such Reserve Capacity Obligations relate to Capacity Credits secured in accordance with clause 4.20 at the earliest possible opportunity following the registration of the Facility;
    - the first date that Reserve Capacity Obligations actually apply to the Facility due to Capacity Credits secured in accordance with clause 4.20 prior to the registration of the Facility;
    - iii. the first instance of the date 1 October after the start date; and
    - iv. the decommissioning date of the Facility;
- 4.28B.7. A Market Participant may re-apply to the IMO for Capacity Credits in accordance with this clause 4.28B if Capacity Credits issued in accordance with this clause 4.28B have, or are due to, expire in accordance with clause 4.28B.6(b)(iii).
- 4.28B.8. Any Capacity Credit issued by the IMO under this clause 4.28B

- (a) is, for the purpose of settlement, to be treated as if it were traded bilaterally in accordance with clause 4.14; and
- (b) is not eligible to have a Long Term Special Price Arrangement or Short Term Special Price Arrangement associated with it.
- 4.28B.9. The IMO must document the process for applying for and approving Capacity Credits in accordance with this clause 4.28B in the Reserve Capacity Procedure, and the IMO and Market Participants must follow that documented Market Procedure.

#### 4.28C. Early Certification of Reserve Capacity

- 4.28C.1. This section 4.28C is applicable to Facilities to which the following conditions apply:
  - (a) the Facility is a new Facility;
  - (b) the Facility is a generating system; and
  - (c) the Facility is deemed by the IMO to be committed.
- 4.28C.2. A Market Participant with a Facility that meets the criteria in clause 4.28C.1 may apply to the IMO, at any time before 1 January of Year 1 of the Capacity Cycle to which the application relates, for certification of Capacity and Capacity Credits for that Facility ("Early Certified Reserve Capacity").
- 4.28C.3. Each application for Early Certified Reserve Capacity must relate to a single future Reserve Capacity Cycle. The IMO must not accept more than one application for certification of Reserve Capacity per Facility per calendar year.
- 4.28C.4. An application under clause 4.28C.2 must state that the applicant intends to trade all assigned Certified Reserve Capacity bilaterally.
- 4.28C.5. An application made under clause 4.28C.2 must include all the information required by clause 4.10 for the appropriate type of generation system for which the application pertains to.
- 4.28C.6. The IMO must process each application made in accordance with clause 4.28C.2 so as to determine the Early Certified Reserve Capacity, Capacity Credits and Reserve Capacity Obligations in connection with the Facility.
- 4.28C.7. The IMO must, within 90 days of receiving the application, set Early Certified Reserve Capacity for the Facility to that amount it would normally grant the Facility if processing an application for Certified Reserve Capacity in accordance with clause 4.11.
- 4.28C.8. Within 30 Business Days of the applicant receiving notification by the IMO of the amount of Early Certified Reserve Capacity assigned to the Facility the applicant must ensure that the IMO holds the benefit of a Reserve Capacity Security equal to the amount specified in clause 4.28C.9.

- 4.28C.8A If a Market Participant does not comply with clause 4.28C.8 in full by the time specified in clause 4.28C.8, the Early Certified Reserve Capacity assigned to that Facility will lapse.
- 4.28C.9. The amount for the purposes of clauses 4.28C.8 and 4.28C.12 is twenty-five percent of the Maximum Reserve Capacity Price included in the most recent Request for Expressions of Interest at the time and date associated with either clause 4.28C.8 or 4.28C.12 as applicable, multiplied by an amount equal to the Early Certified Reserve Capacity assigned to the Facility.
- 4.28C.10. The IMO must set the Capacity Credits for the Facility to equal the Early Certified Reserve Capacity of the Facility once the Reserve Capacity Security is provided to the IMO under clause 4.28C.8.
- 4.28C.11. The IMO must set the Reserve Capacity Obligations, including the initial Reserve Capacity Obligation Quantity, for the Facility in accordance with clause 4.12 as if set as part of an application for Certified Reserve Capacity made in accordance with clause 4.11.
- 4.28C.12. Prior to the time and date specified in clause 4.1.13, in Year 1 of the first Reserve Capacity Cycle specified in clause 4.10.1(b) in which the Facility will enter service, the IMO must recalculate the amount of Reserve Capacity Security to be provided by each Market Participant in accordance with clause 4.28C.9 and:
  - (a) If an additional amount of Reserve Capacity Security is required, the Market Participant must ensure that the IMO holds the benefit of the additional Reserve Capacity Security by the time and date specified in clause 4.1.13(a); and
  - (b) If a reduced amount of Reserve Capacity Security is required, the Market Participant may request the IMO to return any additional Reserve Capacity Security, in accordance with clause 4.13.14, provided that at all times the IMO holds a Reserve Capacity Security to the level determined in accordance with this clause 4.28C.12.
- 4.28C.12A From the time and date specified in clause 4.1.13 of Year 1 of the first Reserve Capacity Cycle in which the Facility will enter service, all of the provisions of clause 4.13 apply equally to the Reserve Capacity Security of Facilities with Early Certified Reserve Capacity.
- 4.28C.13. If the IMO approves the granting of Capacity Credits to the Facility under this clause 4.28C then the Capacity Credits and the Reserve Capacity Obligations associated with that Facility will apply from the commencement of the Trading Day commencing on the start date until the end of the Trading Day ending on the end date where:
  - (a) the start date is 1 October of year 3 of the capacity cycle the application relates to under clause 4.28C.2; and
  - (b) the end date is the earlier of:

- i. the first instance of the date 1 October after the start date; and
- ii. the decommissioning date of the Facility.
- 4.28C.14. Capacity Credits issued by the IMO under this clause 4.28C:
  - (a) are not eligible to be used in a Reserve Capacity Auction; and
  - (b) are not eligible to have a Long Term Special Price Arrangements or Short Term Special Price Arrangements associated with them.
- 4.28C.15. The IMO must document the process for applying for and approving Capacity Credits in accordance with this clause 4.28C in the Reserve Capacity Procedure, and the IMO and Market Participants must follow that documented Market Procedure.

# **Settlement Data**

### 4.29. Settlement Data

- 4.29.1. The Monthly Reserve Capacity Price to apply during the period specified in clause 4.1.29 is to equal:
  - (a) if a Reserve Capacity Auction was run for the Reserve Capacity Cycle, the Reserve Capacity Price for the Reserve Capacity Cycle divided by 12; or
  - (b) if no Reserve Capacity Auction was run for the Reserve Capacity Cycle:
    - i. prior to 1 October 2008, 85% of the Maximum Reserve Capacity Price for the Reserve Capacity Cycle divided by 12;
    - from 1 October 2008, 85% of the Maximum Reserve Capacity Price for the Reserve Capacity Cycle multiplied by the Excess Capacity Adjustment and divided by 12;
  - (c) the Excess Capacity Adjustment is equal to the minimum of:
    - i. one, and
    - ii. the Reserve Capacity Requirement for the Reserve Capacity Cycle divided by the total number of Capacity Credits assigned by the IMO in accordance with clause 4.20.5A for the Reserve Capacity Cycle.
- 4.29.2. The Monthly Special Reserve Capacity Price to apply during a Trading Month for each Special Price Arrangement associated with a Facility is to equal the Special Reserve Capacity Price for that Special Price Arrangement and Reserve Capacity Cycle divided by 12.
- 4.29.3. The IMO must prepare and provide the following information to the Settlement Systems in time for settlement of Trading Month m:
  - (a) the Monthly Reserve Capacity Price applying during that Trading Month;
  - (b) the Targeted Reserve Capacity Cost for that Trading Month as defined in clause 4.28.3;

- (c) the Shared Reserve Capacity Cost for that Trading Month as defined in clause 4.28.4;
- (d) subject to clause 4.29.4, for each Market Participant p and for Trading Month m:
  - the quantity of Capacity Credits acquired by the IMO to which no Special Price Arrangement applies, including Capacity Credits from Facilities subject to Network Control Service Contracts to which clause 4.20.1(d)(iii) does not apply;
  - ii. the quantity of Capacity Credits acquired by the IMO covered by a Special Price Arrangement;
  - iii. the total quantity of Capacity Credits covered by Special Price Arrangements;
  - iv. the quantity of Capacity Credits traded bilaterally that are not covered by Special Price Arrangements, including Capacity Credits from Facilities subject to Network Control Service Contracts to which clause 4.20.1(d)(iii) does apply;
  - v. the Individual Reserve Capacity Requirement for each Market Customer for that Trading Month; and
  - vi. the total Capacity Cost Refund to be paid by the Market Participant to the IMO;
- (dA) for each Market Participant, the Intermittent Load Refund to be paid by the Market Participant to the IMO for each of its Intermittent Loads;
- (e) for each Supplementary Capacity Contract:
  - the net payment to be made by the IMO under that contract for the Trading Month;
  - ii. to whom the payment is to be made; and
  - iii. how the payment is to be made if the party identified in (ii) is not a Market Participant.
- 4.29.4. If a Capacity Credit is terminated, created or reinstated for any reason during a Trading Month then the IMO must adjust the quantities specified in clause 4.29.3(d) to reflect the proportion of the Trading Month for which the Capacity Credit existed.

# 5 Network Control Services

#### **Network Control Service Process**

#### 5.1. Definitions

- 5.1.1. A Network Control Service is a service provided by generation or demand side management that can be a substitute for transmission or distribution network upgrades.
- 5.1.2. A Network Control Service Contract is a contract between a Network Operator and a Market Participant for the Market Participant to provide a Network Control Service.
- 5.1.3. [Blank]
- 5.1.4. [Blank]
- 5.2. [Blank]
- 5.2.1. [Blank]
- 5.2.2. [Blank]
- 5.2.3. [Blank]
- 5.2.4. [Blank]
- 5.2.5. [Blank]
- 5.2.6. [Blank]
- 5.2.7. [Blank]

#### 5.2A Registration and Certification

- 5.2A.1. Where a Market Participant enters into a Network Control Service Contract for a Facility, the Market Participant must ensure that the Facility is registered as a Registered Facility during the period for which Network Control Services are to be provided under the Network Control Service Contract.
- 5.2A.2 Where a Market Participant enters into a Network Control Service Contract for a Facility then the Market Participant must apply to the IMO for Certified Reserve Capacity in respect of the Facility, in respect of each Reserve Capacity Cycle that the Facility would be eligible to participate in over the period for which Network Control Services will be provided under the relevant Network Control Service Contract.

- 5.3. [Blank]
- 5.3.1. [Blank]
- 5.3.2. [Blank]
- 5.3.3. [Blank]
- 5.3.4. [Blank]
- 5.3.5. [Blank]
- 5.3.6. [Blank]
- 5.3.7. [Blank]
- 5.3.8. [Blank]
- 5.3.9. [Blank]

#### 5.3A Information required from the Network Operator

- 5.3A.1. When a Network Operator has entered into a Network Control Service Contract with a Market Participant, the Network Operator must as soon as practicable and not less than 20 Business Days prior to a Network Control Service Contract taking effect, provide the IMO with:
  - (a) the identity of the Market Participant;
  - (b) the identity of the Facility providing the service;
  - (c) a unique identifier for the Network Control Service Contract;
  - (d) the period over which the services are to be provided by the Network Control Service Contract; and
  - (e) whether the Network Control Service Contract requires that the Facility not be part of an aggregated Facility.
- 5.3A.2 When any change occurs to the details of a Network Control Service Contract listed in clause 5.3A.1 the Network Operator must inform the IMO as soon as practicable.
- 5.3A.3. When a Network Operator has entered into a Network Control Service Contract with a Market Participant, the Network Operator must provide System Management with the details of the Network Control Services Contract to enable System Management to dispatch the services provided under it.

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5.3A.4 When any change occurs to the details of a Network Control Service Contract provided to System Management under clause 5.3A.3 the Network Operator must inform System Management as soon as practicable.

### 5.4. [Blank]

- 5.4.1. [Blank]
- 5.4.2. [Blank]
- 5.4.3. [Blank]
- 5.4.4. [Blank]
- 5.4.5. [Blank]
- 5.4.6. [Blank]
- 5.4.7 [Blank]
- 5.4.8. [Blank]
- 5.4.9. [Blank]
- 5.4.10. [Blank]
- 5.4.11. [Blank]
- 5.4.12. [Blank]
- 5.4.13. [Blank]
- 5.4.14. [Blank]

# [Blank]

## 5.5. [Blank]

- 5.5.1. [Blank]
- 5.5.2. [Blank]
- 5.5.3. [Blank]
- 5.5.4. [Blank]

#### 5.6. [Blank]

5.6.1. [Blank]

## Chapter 5

- 5.6.2. [Blank]
- 5.6.3. [Blank]
- 5.7. Network Control Service Dispatch
- 5.7.1. [Blank]
- 5.7.2. System Management may call upon the relevant Facility to provide services under a Network Control Services Contract in accordance with the terms of the contract, as advised to it by the Network Operator in accordance with clause 5.3A.3 and amended in accordance with clause 5.3A.4.
- 5.7.3. [Blank].
- 5.7.4. System Management must document the procedure it will follow in calling on Registered Facilities to provide services under Network Control Service Contracts in the Power System Operation Procedure, and System Management must follow that documented Market Procedure when calling on Registered Facilities to provide services under Network Control Service Contracts.

## Settlement Data

- 5.8. [Blank]
- 5.8.1. [Blank]
- 5.8.2. [Blank]
- 5.8.3. [Blank]
- 5.8.4. [Blank]
- 5.8.5. [Blank]
- 5.8.6. [Blank]
- 5.8.7. [Blank]
- 5.8.8. [Blank]
- 5.9. Settlement Data
- 5.9.1. The IMO must provide the following information to the settlement system:
  - (a) [Blank]
  - (b) for each Network Control Service Contract energy payment:
    - i. [Blank]

- ii. the Market Participant to which the payment will be made.
- 5.9.2. The IMO must provide Network Operators with details of any quantities dispatched under their Network Control Service Contracts in a Trading Month by 5:00 PM on the Invoicing Date for Non-STEM Settlement Statements for that Trading Month.
- 5.9.3 The information provided by the IMO to a Network Operator under clause 5.9.2 must include, for each relevant Facility and Trading Interval:
  - (a) the unique identifier of the Network Control Service Contract under which the Dispatch Instruction was issued;
  - the MWh quantity by which the Facility was instructed by System
     Management to increase its output or reduce its consumption, as specified in clause 6.17.6(e)(i);
  - (c) the per MWh price paid by the IMO for the quantity dispatched under the Network Control Service Contract, as specified in clause 6.17.6(e)(ii); and
  - (d) the total amount paid by the IMO to the Market Participant for the quantity dispatched under the Network Control Service Contract, determined as the product of the values specified in clauses 5.9.3(b) and 5.9.3(c).

# 6. The Energy Market

## **Energy Scheduling Timetable and Process**

## 6.1. [Blank]

#### 6.2. Bilateral Submission Timetable and Process

- 6.2.1. A Market Generator may submit Bilateral Submission data for a Trading Day to the IMO between:
  - (a) 8:00 AM of the day seven days prior to the start of the Scheduling Day for the Trading Day; and
  - (b) 8:50 AM on the Scheduling Day for the Trading Day.
- 6.2.2. Where the IMO holds a Standing Bilateral Submission for a Market Generator as at the time specified in clause 6.2.1(a), where that Standing Bilateral Submission is applicable to the Trading Day to which clause 6.2.1 relates and where that Standing Bilateral Submission conforms to the requirements of clause 6.7 at that time, the IMO must make the Bilateral Submission with respect to the Trading Day as at the time specified in clause 6.2.1(a).
- 6.2.2A. When the IMO receives Bilateral Submission data from a Market Generator during the time interval described in clause 6.2.1, it must as soon as practicable communicate to that Market Generator whether or not the IMO accepts the data as conforming to the requirements of clause 6.7. Where the IMO accepts the data then the IMO must revise the Bilateral Submission to reflect that data.
- 6.2.3. By 8:30 AM on each Scheduling Day the IMO must communicate to each Market Participant a list of the Bilateral Submission quantities associated with that Market Participant for each Trading Interval on the Trading Day, including the party supplying, or being supplied by, the Market Participant., where this information must be based on Bilateral Submissions held by the IMO at a time not earlier than 8:20 AM on the Scheduling Day.
- 6.2.4. [Blank]
- 6.2.4A. [Blank]
- 6.2.4B. A Market Generator may cancel Bilateral Submission data held by the IMO for any Trading Interval of the Trading Day during the time interval specified in clause 6.2.1.
- 6.2.4C. The IMO must confirm to the Market Generator any cancellation of Bilateral Submission data made in accordance with clause 6.2.4B. Where such

cancellation is made then the IMO must remove the relevant data from the Bilateral Submission.

- 6.2.5. [Blank]
- 6.2.6. [Blank]
- 6.2.7. By making or revising a Bilateral Submission a Market Participant acknowledges that it is acting with the permission of all affected Market Participants.
- 6.2.8. By 9:00 AM on each Scheduling Day the IMO must communicate to each Market Participant a list of the Bilateral Submission quantities associated with that Market Participant for each Trading Interval on the Trading Day, including the party supplying, or being supplied by, the Market Participant.

## 6.2A. Standing Bilateral Submission Timetable and Process

- 6.2A.1. A Market Generator may submit Standing Bilateral Submission data to the IMO on any day between the times of:
  - (a) 1:00 PM; and
  - (b) 3:50 PM,

where if accepted by the IMO the data will apply from the commencement of the subsequent Scheduling Day.

- 6.2A.2. When the IMO receives Standing Bilateral Submission data from a Market Generator during the time interval described in clause 6.2A.1, it must as soon as practicable communicate to that Market Generator whether or not the IMO accepts the data as conforming to the requirements of clause 6.7. Where the IMO accepts the data then the IMO must revise the Standing Bilateral Submission to reflect that data.
- 6.2A.3. Standing Bilateral Submission data must be associated with a day of the week and when used as Bilateral Submission data will only apply to Trading Days commencing on that day of the week.
- 6.2A.4. A Market Generator may cancel Standing Bilateral Submission data held by the IMO for any Trading Interval of the Trading Day during the time interval specified in clause 6.2A.1.
- 6.2A.5. The IMO must confirm to the Market Generator any cancellation of Standing Bilateral Submission data made in accordance with clause 6.2A.4. Where such cancellation is made then the IMO must remove the relevant data from the Standing Bilateral Submission.

#### 6.3. [Blank]

## 6.3A. Information to Support the Bilateral and STEM Submission Process

- 6.3A.1. The IMO must publish the following information:
  - (a) by 8:00 AM of each Scheduling Day to support the Bilateral Submission process the Load Forecast in MWh and MW as measured at the Reference Node for each of the Trading Intervals of the Trading Day determined in accordance with clauses 7.2.1(a) as provided to the IMO by System Management in accordance with clauses 7.2.3B or 7.2.3C;
  - (b) by 9:00 AM of each Scheduling Day to support the STEM Submission process:
    - the total energy, in MWh as measured at the Reference Node, scheduled with the IMO under bilateral contracts for each of the Trading Intervals of the Trading Day; and
    - ii. data to allow the estimation of the residual Reserve Capacity available in each of the Trading Intervals of the Trading Day after netting off the quantity in (i).
- 6.3A.2. By 9:00 AM on the Scheduling Day the IMO must have calculated and released to each Market Participant the following parameters to be applied by that Market Participant in forming its STEM Submissions for each Trading Interval in the Trading Day:
  - (a) the Maximum Supply Capability where this equals the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be supplied during the Trading Interval based on the Standing Data of that Market Participant's Scheduled Generators and Non-Scheduled Generators and assuming the use of the fuel which maximises the capacity of each Facility:
    - less an allowance for outages of which the IMO has been made aware by System Management in accordance with clauses 7.3.4 or 7.3.6; and
    - ii. less, for each Market Participant that is a provider of Ancillary Services, the estimated Loss Factor adjusted quantity of energy, in units of MWh, that could potentially be called upon by System Management from that Market Participant after 1:00 PM on the Scheduling Day to meet Ancillary Service requirements for each Trading Interval of the Trading Day, as provided to the IMO by System Management in accordance with clauses 7.2.3B or 7.2.3C;
    - where the Maximum Supply Capability may be higher than the actual capacity available during the Trading Interval;
  - (b) the Maximum Consumption Capability where this equals the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be

consumed during a Trading Interval by that Market Participant's Non-Dispatchable Loads, Interruptible Loads and Dispatchable Loads based on the Standing Data maximum consumption quantities for those Facilities and Non-Dispatchable Loads, less an allowance for outages of which the IMO has been made aware by System Management in accordance with clauses 7.3.4 or 7.3.6;

- (c) for each Scheduled Generator and Non-Scheduled Generator that is registered as being able to run on Liquid Fuel only, the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be supplied during the Trading Interval based on the Standing Data of that Scheduled Generator or Non-Scheduled Generator less an allowance for outages of which the IMO has been made aware by System Management in accordance with clauses 7.3.4 or 7.3.6;
- (d) for each Scheduled Generator and Non-Scheduled Generator that is registered as being able to run on both Liquid Fuel and Non-Liquid Fuel, the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be supplied during the Trading Interval when run on each of Liquid Fuel and Non-Liquid Fuel based on the Standing Data of that Scheduled Generator or Non-Scheduled Generator less an allowance for outages of which the IMO has been made aware by System Management in accordance with clauses 7.3.4 or 7.3.6; and
- (e) in the case of each Market Participant that is a provider of Ancillary Services:
  - the estimated Loss Factor adjusted quantity of energy, in units of MWh, that could potentially be called upon by System Management after 1:00 PM on the Scheduling Day to meet Ancillary Service requirements for each Trading Interval of the Trading Day; and
  - ii. the list of Facilities that System Management might reasonably expect to call upon to provide the energy described in (i),

as provided to the IMO by the System Management in accordance with clauses 7.2.3B or 7.2.3C.

- 6.3A.3. By 9:05 AM on the Scheduling Day the IMO must have calculated and released to each Market Participant the following parameters for information in forming its STEM Submissions for each Trading Interval in the Trading Day:
  - (a) The total quantity of Capacity Credits held by that Market Participant for the Trading Day, in units of MW;
  - (b) The estimated Loss Factor adjusted quantity of energy that could potentially be called upon by System Management after 1:00 PM on the Scheduling Day to meet Ancillary Service requirements for each Trading Interval of the Trading Day, multiplied by 2, in units of MW;

- (c) The total quantity of Planned Outages and Consequential Outages for that Market Participant of which the IMO has been made aware by System Management in accordance with clauses 7.3.4 or 7.3.6, in units of MW;
- (d) The total quantity specified in any STEM submission Portfolio Supply Curve from that Market Participant that has been accepted by the IMO for that Trading Interval, multiplied by 2, in units of MW; and
- (e) The total quantity specified in any STEM submission Ancillary Service Declaration from that Market Participant that has been accepted by the IMO for that Trading Interval, multiplied by 2, in units of MW.
- 6.3A.4. By 9:30 AM on the Scheduling Day the IMO must have updated its calculations of the quantities specified in clause 6.3A.3 (a) to (e), and must release to each Market Participant those updated parameters applicable to that Market Participant.

#### 6.3B. STEM Submissions Timetable and Process

- 6.3B.1. A Market Participant may submit STEM Submission data for a Trading Day to the IMO between:
  - (a) 9:00 AM on the Scheduling Day; and
  - (b) 9:50 AM on the Scheduling Day.
- 6.3B.1A. Where the IMO holds a Standing STEM Submission for a Market Participant as at the time specified in clause 6.3B.1(a), where that Standing STEM Submission is applicable to the Trading Day to which clause 6.3B.1 relates and where that Standing STEM Submission conforms to the requirements of clause 6.6 at that time, the IMO must make it the STEM Submission with respect to the Trading Day as at the time specified in clause 6.3B.1(a).
- 6.3B.1B. If the Market Participant's Standing STEM Submission has not been successfully converted into a daily STEM Submission for the Trading Day in accordance with clause 6.3B.1A, then the IMO must adjust the Standing STEM Submission to make it a valid STEM Submission with respect to the Trading Day. The adjustment will be made as follows:
  - (a) if the cumulative MWh quantity over all Price-Quantity Pairs is greater than the Maximum Supply Capability as calculated under clause 6.3A.2(a), the Price-Quantity Pairs will be adjusted downward so that the cumulative MWh quantity over all Price-Quantity Pairs equals the Maximum Supply Capability. This will be achieved by deleting successively or reducing the highest price Price-Quantity Pairs until the cumulative MWh quantity over all remaining Price-Quantity Pairs equals the Maximum Supply Capability as calculated under clause 6.3A.2(a);
  - (b) available dual fuel generators shall be declared to be using the same fuel as in the existing Standing STEM Submission;

- (c) any Ancillary Services shall be declared as using Non-Liquid Fuel; and
- (d) if the number of Price-Quantity Pairs in the modified Portfolio Supply Curve is greater than that allowed by clause 6.6.4, this will be disregarded and the STEM Submission validated.
- 6.3B.2. [Blank]
- 6.3B.3. When the IMO receives STEM Submission data from a Market Participant during the time interval described in clause 6.3B.1 it must as soon as practicable communicate to that Market Participant:
  - (a) [Blank]
  - (b) whether or not the IMO accepts the received STEM Submission data as conforming to the requirements of clause 6.6;
  - (c) [Blank]

where, if the IMO accepts the data, the STEM Submission held by the IMO must be revised to reflect that data.

- 6.3B.4. [Blank]
- 6.3B.5. [Blank]
- 6.3B.6. [Blank]
- 6.3B.7. [Blank]
- 6.3B.7A. A Market Participant may cancel STEM Submission data held by the IMO for any Trading Interval of the Trading Day during the time interval specified in clause 6.3B.1.
- 6.3B.7B. The IMO must confirm to the Market Participant any cancellation of STEM Submission data made in accordance with clause 6.3B.7A. Where such cancellation is made then the IMO must remove the relevant data from the STEM Submission.
- 6.3B.8. Where the IMO does not receive a STEM Submission from a Market Participant by the time specified in clause 6.3B.1(b) on the Scheduling Day, which is accepted in accordance with clause 6.3B.3(b) then the IMO must record that no STEM Submission has been made.

## 6.3C. Standing STEM Submission Timetable and Process

- 6.3C.1. A Market Participant may submit Standing STEM Submission data to the IMO on any day between the times of:
  - (a) 1:00 PM; and

(b) 3:50 PM,

where if accepted by the IMO the data will apply from the commencement of the subsequent Scheduling Day.

- 6.3C.2. [Blank]
- 6.3C.3. When the IMO receives Standing STEM Submission data from a Market Participant during the time interval described in clause 6.3C.1 it must as soon as practical communicate to that Market Participant:
  - (a) whether or not the IMO accepts received Standing STEM Submission data as conforming to the requirements of clause 6.6;
  - (b) [Blank]

where, if the IMO accepts the data, the IMO must revise the Standing STEM Submission to reflect that data.

- 6.3C.4. [Blank]
- 6.3C.5. [Blank]
- 6.3C.6. [Blank]
- 6.3C.6A. Standing STEM Submission data must be associated with a day of the week and when used as STEM Submission data will only apply to Trading Days commencing on that day of the week.
- 6.3C.6B. A Market Participant may cancel Standing STEM Submission data held by the IMO for any Trading Interval of the Trading Day during the time interval specified in clause 6.3C.1.
- 6.3C.6C. The IMO must confirm to the Market Participant any cancellation of Standing STEM Submission data made in accordance with clause 6.3C.6B. Where such cancellation is made then the IMO must remove the relevant data from the Standing STEM Submission.
- 6.3C.7. [Blank]
- 6.3C.8. [Blank]
- 6.3C.9. If a Market Participant's ability to consume or supply energy in any Trading Interval of a Trading Day is less than the maximum level of its STEM supply or consumption as indicated by its current Standing STEM Submission then that Market Participant must either:
  - (a) submit to the IMO Standing STEM Submission data so as to revise its Standing STEM Submission to comply with this clause 6.3C.9; or

(b) for each Trading Interval for which the current Standing STEM Submission over-states the Market Participant's supply or consumption capabilities, submit valid STEM Submission data to the IMO on the Scheduling Day immediately prior to that Trading Day.

#### 6.4. The STEM Auction Timetable and Process

- 6.4.1. The IMO must undertake the process described in clause 6.9 and determine the STEM Auction results for a Trading Day no earlier than 10:00 AM, and no later than 10:30 AM, on the relevant Scheduling Day.
- 6.4.2. The IMO must communicate to System Management the total quantity of energy scheduled to be supplied under Bilateral Contracts and in the STEM Auction, by each Market Participant, for each Trading Interval of a Trading Day by 10:30 AM on the relevant Scheduling Day.
- 6.4.3. The IMO must make available to each Market Participant the following information in relation to a Trading Day by 10:30 AM on the relevant Scheduling Day:
  - (a) the Trading Intervals, if any, in which the STEM Auction was suspended;
  - (b) the STEM Clearing Price in all Trading Intervals for which the STEM Auction was not suspended;
  - (c) the quantities scheduled in respect of that Market Participant in the STEM Auction for each Trading Interval; and
  - (d) the Net Contract Position of the Market Participant in each Trading Interval, as determined in accordance with clause 6.9.13.
- 6.4.4. Market Participants to which the information described in clause 6.4.3 relates for a Trading Day must access that information by 10:45 AM on the relevant Scheduling Day.
- 6.4.5. If the IMO becomes aware that a Market Participant has been unable to access the information described in clause 6.4.3 for a Trading Day by 10:45 AM of the relevant Scheduling Day, it must use reasonable endeavours to contact the affected Market Participant to ensure that at least the information in clauses 6.4.3(c) and 6.4.3(d) is conveyed to the Market Participant in sufficient time for that Market Participant to make a Resource Plan Submission where required.
- 6.4.6. In the event of a software system failure at the IMO site or its supporting infrastructure, which prevents the IMO from completing the relevant processes, the IMO may extend one or more of the timelines prescribed in sections 6.2 6.3A, 6.3B and this section 6.4, subject to:
  - (a) any such extension not resulting in more than a two hour delay to any of the timelines prescribed in sections 6.2 6.3A, 6.3B and this section 6.4; and

- (b) any such extension maintaining a 50 minute window between the timelines prescribed in 6.3B.1(a) and 6.3B.1(b) as extended by the IMO;
- and the IMO must advise Rule Participants of any such extension as soon as practicable.
- 6.4.7. Once published under clause 6.4.3, STEM Clearing Prices cannot be altered, either through disagreement under clause 9.20.6, or through dispute under clause 9.21.

#### 6.5. Resource Plan Submission Timetable and Process

- 6.5.1. Market Participants other than the Electricity Generation Corporation may submit Resource Plan Submission data for a Trading Day to the IMO between:
  - (a) 11:00 AM on the Scheduling Day, with the exception that if the IMO has delayed any timelines in accordance with clause 6.4.6, the IMO may at its discretion extend this time up to 1:00 PM on the Scheduling Day; and
  - (b) 12:50 PM on the Scheduling Day, with the exception that if:
    - i. a software system failure at the IMO site has prevented any Market Participant from submitting a Resource Plan; or
    - ii. a software system failure at a Market Participant site has prevented that Market Participant from submitting a Resource Plan and that Market Participant has informed the IMO of this failure by 12:30 PM on the Scheduling Day; or
    - iii. the opening time for Resource Plan Submissions was delayed; the IMO may at its discretion extend the closing time up to 3:00 PM on the Scheduling Day.
- 6.5.1A. Market Generators with Registered Facilities that are not undergoing a Commissioning Test, except those with only Intermittent Generators, or Market Customers with Dispatchable Loads must provide the IMO with a Resource Plan Submission, either via submitting Resource Plan Submissions or in accordance with clause 6.5.1B.
- 6.5.1B. Where the IMO holds a Standing Resource Plan Submission for a Market Participant as at the time specified in clause 6.5.1(a) where that Standing Resource Plan Submission is applicable to the Trading Day to which clause 6.5.1 relates then, provided that Standing Resource Plan Submission data is accepted by the IMO in accordance with clause 6.5.2, it becomes the Resource Plan Submission with respect to the Trading Day as at the time specified in clause 6.5.1(a).

- 6.5.1C. Market Generators with only Intermittent Generators may provide the IMO with a Resource Plan Submission, unless undergoing a Commissioning Test, either via submitting Resource Plan Submissions or in accordance with clause 6.5.1B.
- 6.5.2. When the IMO receives Resource Plan Submission data from a Market Participant during the time interval described in clause 6.5.1 it must as soon as practicable communicate to that Market Participant whether or not the IMO accepts the data as conforming to the requirements of clause 6.11.2. Where the IMO accepts the data then the IMO must revise the Resource Plan Submission to reflect that data.
- 6.5.3. Where the IMO has issued a Market Advisory concerning an IT systems failure at the IMO, the IMO may accept Resource Plan submissions from Market Participants by email or facsimile, where this is in accordance with the applicable Contingency Market Procedure.
- 6.5.3A. Where clause 6.5.3 applies, the times at which a Market Participant may make a submission will remain in accordance with clause 6.5.1.
- 6.5.4. If the IMO has not accepted a Resource Plan Submission for a Trading Day by the closing time specified in clause 6.5.1(b) from a Market Participant that is required to make a Resource Plan Submission or a Market Participant covered by clause 6.5.1C, then it must prepare a default Resource Plan for that Market Participant which must include, for each Trading Interval on the Trading Day:
  - (a) all the Market Participant's Scheduled Generators and Non-Scheduled Generators having a scheduled output of zero;
  - (b) all Dispatchable Loads having a scheduled consumption of zero; and
  - (c) the level of the supply shortfall required pursuant to clause 6.11.1(e) equal to the total Net Contract Position.

## 6.5A. Balancing Data Submission Timetable and Process

- 6.5A.1. Market Participants other than the Electricity Generation Corporation that are Market Generators, or that are Market Customers with Dispatchable Loads or Demand Side Programmes, may submit Balancing Data Submission data for a Trading Day to the IMO between:
  - (a) 11:00 AM on the Scheduling Day, with the exception that if the IMO has delayed any timelines in accordance with clause 6.4.6, the IMO may at its discretion extend this time up to 1:00 PM on the Scheduling Day; and
  - (b) 12:50 PM on the Scheduling Day, with the exception that if:
    - i. a software system failure at the IMO site or its supporting infrastructure has prevented any Rule Participant from submitting a Balancing Data Submission; or

- ii. a software system failure at a Rule Participant site or its supporting infrastructure has prevented that Rule Participant from submitting a Balancing Data Submission and that Rule Participant has informed the IMO of this failure by 12:30 PM on the Scheduling Day; or
- iii. the opening time for Resource Plan Submissions was delayed;

the IMO may at its discretion extend the closing time to up to 3:00 PM on the Scheduling Day.

- 6.5A.1A. Where the IMO holds Standing Balancing Data for a Market Participant as at the time specified in clause 6.5A.1(a), where that Standing Balancing Data is applicable to the Trading Day to which clause 6.5A.1 relates and where that Standing Balancing Data conforms to the requirements of clause 6.11A.2, the IMO must make it the Balancing Data Submission with respect to the Trading Day as at the time specified in clause 6.5A.1(a).
- 6.5A.2. When the IMO receives Balancing Data Submission data from a Market Participant during the time interval described in clause 6.5A.1, or a Balancing Data Submission is derived from Standing Balancing Data in accordance with clause 6.5A.1A, it must as soon as practicable communicate to that Market Participant whether or not the IMO accepts the data as conforming to the requirements of clause 6.11A.2. Where the IMO accepts the data then the IMO must revise the Balancing Data Submission to reflect that data.

#### 6.5B. [Blank]

## 6.5C. Standing Resource Plan Submission Timetable and Process

- 6.5C.1. A Market Participant may submit Standing Resource Plan Submission data on any day between the times of:
  - (a) 1:00 PM; and
  - (b) 3:50 PM;

where if accepted by the IMO the data will apply from the commencement of the subsequent Scheduling Day.

- 6.5C.2. When the IMO receives Standing STEM Resource Plan data from a Market Participant during the time interval described in clause 6.5C.1 it must as soon as practicable communicate to that Market Participant whether or not the IMO accepts the received data as conforming to the requirements of clause 6.11.2; and where the IMO accepts the data then the IMO must revise the Standing Resource Plan Submission to reflect that data.
- 6.5C.3. Standing Resource Plan Submission data must be associated with a day of the week and when used as a Resource Plan Submission will only apply to Trading Days commencing on that day of the week.

- 6.5C.4. A Market Participant may cancel Standing Resource Plan Submission data held by the IMO for any Trading Interval of the Trading Day during the time interval specified in clause 6.5C.1.
- 6.5C.5. The IMO must confirm to the Market Participant any cancellation of Standing Resource Plan Submission data made in accordance with clause 6.5C.4. Where such cancellation is made then the IMO must remove the relevant data from the Resource Plan Submission.
- 6.5C.6. If a Market Participant's ability to consume or supply energy in any Trading Interval of a Trading Day is less than the maximum level of its consumption or supply as indicated by its Standing Resource Plan Submission then that Market Participant must either:
  - (a) submit to the IMO Standing Resource Plan Submission data so as to revise its Standing Resource Plan Submission to comply with this clause 6.5C.6; or
  - (b) for each Trading Interval for which the Standing Resource Plan Submission over-states the Market Participant's consumption or supply capabilities, submit valid Resource Plan Submission data to the IMO on the Scheduling Day immediately prior to that Trading Day.
- 6.5C.7. If on a Scheduling Day at the time described in clause 6.5.1(a), a Market Participant's Standing Resource Plan Submission applicable to any Trading Interval of the corresponding Trading Day is inconsistent with its Net Contract Position for that Trading Interval then that Market Participant must submit valid Resource Plan Submission data to the IMO for that Trading Interval in accordance with clause 6.5.1.

## **STEM Submission and Bilateral Submission Formats**

## 6.6. Format of STEM Submission and Standing STEM Submission Data

- 6.6.1. A Market Participant submitting STEM Submission data or a Standing STEM Submission data must include in the submission:
  - (a) the identity of the Market Participant making the submission;
  - (b) [Blank]
  - (c) for STEM Submission data, for each Trading Interval included in the submission:
    - i. a Fuel Declaration;
    - ii. an Availability Declaration;
    - iii. if the Market Participant is a provider of Ancillary Services, an Ancillary Service Declaration;

- iv a Portfolio Supply Curve; and
- v. a Portfolio Demand Curve;
- (d) for Standing STEM Submission data, the day of the week to which the submission relates, where data provided for a day of the week relates to the Trading Day commencing on that day, and for each Trading Interval included in the submission:
  - i. a Fuel Declaration;
  - ii. an Availability Declaration;
  - iii. if the Market Participant is a provider of Ancillary Services, an Ancillary Service Declaration;
  - iv. a Portfolio Supply Curve; and
  - v. a Portfolio Demand Curve.

## 6.6.2. [Blank]

#### 6.6.2A For:

- (a) a Fuel Declaration:
  - the Market Participant must declare for each of its dual fuel Facilities whether or not that Facility is assumed to be operating on Liquid Fuel or Non-Liquid Fuel in forming the Portfolio Supply Curve;
- (b) an Availability Declaration:
  - the Market Participant must declare for each of its Scheduled Generators and Non-Scheduled Generators:
    - the maximum Loss Factor Adjusted energy available from that Facility based on its Standing Data reduced to account for any energy committed to provide Ancillary Services or which is unavailable due to an outage (where such an outage should only be considered where that outage is reported to the Market Participant by the IMO); less
    - the quantity of energy assumed to be available from that Facility in forming the Portfolio Supply Curve for the Trading Interval,

if this quantity is greater than zero. The quantity declared must be in units of MWh;

- (c) an Ancillary Service Declaration:
  - a Market Participant which is a provider of Ancillary Services must declare:

- the MWh quantity of energy from Non-Liquid Fuelled Facilities (as defined by the Fuel Declaration) that the Market Participant has not committed for inclusion in the Portfolio Supply Curve because it expects to have to maintain surplus capacity with which to provide Ancillary Services;
- the MWh quantity of energy from Liquid Fuelled Facilities (as defined by the Fuel Declaration) that the Market Participant has not committed for inclusion in the Portfolio Supply Curve because it expects to have to maintain surplus capacity with which to provide Ancillary Services,

where the sum of the quantities in 1 and 2 must equal the amount specified in clause 6.3A.2(e)(i) for that Market Participant;

- (d) a Portfolio Supply Curve:
  - i. one or more Price-Quantity Pairs may be specified;
  - ii. the cumulative MWh quantity over all Price-Quantity Pairs must not exceed the greater of zero; and
    - 1. the Market Participant's Maximum Supply Capability as described in clause 6.3A.2(a); less
    - 2. the total MWh quantity specified by the Market Participant in its Availability Declaration;
    - 3. [Blank]
  - iii. the cumulative MWh quantity over all Price-Quantity Pairs with prices exceeding the Maximum STEM Price must not exceed:
    - the sum over all Facilities declared in the Fuel Declaration to be operating on Liquid Fuel of the MWh quantity specified in clause 6.3A.2(d); less
    - the total MWh quantity specified by the Market Participant in its Availability Declaration as being unavailable from Facilities declared in its Fuel Declaration to be operating on Liquid Fuel; less
    - the MWh quantity declared in its Ancillary Service
       Declaration as being unavailable from Liquid Fuelled Facilities;
- (e) a Portfolio Demand Curve:
  - i. one or more Price-Quantity Pairs may be specified; and
  - ii. the cumulative quantity included in the Price-Quantity Pairs must not exceed the Market Participant's Maximum Consumption Capability as described in clause 6.3A.2(b).

- 6.6.3. A Market Generator must not, for any Trading Interval, offer prices within its Portfolio Supply Curve that do not reflect the Market Generator's reasonable expectation of the short run marginal cost of generating the relevant electricity when such behaviour relates to market power.
- 6.6.3A. For the purpose of Regulation 37(a) of the Electricity Industry (Wholesale Electricity Market) Regulations 2004, where a civil penalty is imposed for a contravention of clause 6.6.3, the civil penalty amount should be distributed amongst all Market Customers in proportion to their Market Fees calculated over the previous full 12 months, or part thereof if Market Commencement was less than 12 months prior to the date the civil penalty is received.
- 6.6.4. The maximum number of Price-Quantity Pairs which a Market Participant may include in a Portfolio Supply Curve is the greater of:
  - (a) 10; and
  - (b) the value of:
    - i. the limit on the cumulative MWh quantity over all Price-Quantity Pairs as defined in clause 6.6.2A(d)(ii);
    - ii. divided by 30 MW,

rounded down to the nearest integer.

- 6.6.5. For Price-Quantity Pairs in Portfolio Supply Curves:
  - (a) each Price-Quantity Pair must comprise one price and one quantity;
  - (b) each Price-Quantity Pair price must be:
    - i. in units of \$/MWh expressed to a precision of \$0.01/MWh;
    - ii. [Blank]
    - iiA. set such that:
      - 1. the sum of the Price-Quantity Pair quantities from Price-Quantity Pairs in the Portfolio Supply Curve with prices exceeding the Maximum STEM Price must not exceed the cumulative MWh quantity that the Market Participant can offer at the Alternative Maximum STEM Price, as defined in clause 6.6.2A(d)(iii);
      - the prices for the Price-Quantity Pairs in the Portfolio Supply Curve to which 1 does not relate must not exceed the Maximum STEM Price;
    - iii. greater than or equal to the Minimum STEM Price;
    - iv. [Blank]

- v. set such that no two Price-Quantity Pairs in a Portfolio Supply Curve have the same price;
- (c) each Price-Quantity Pair quantity must be
  - i. in units of MWh expressed to a precision of 0.001 MWh;
  - ii. Loss Factor adjusted; and
- (d) a Price-Quantity Pair means that the Market Participant is prepared to sell a quantity of energy into the STEM for that Price-Quantity Pair equal to:
  - i. 0 MWh if the STEM Clearing Price is less than the Price-Quantity Pair price;
  - ii. the Price-Quantity Pair quantity if the STEM Clearing Price is greater than the Price-Quantity Pair price; and
  - iii. an amount between 0 MWh and the Price-Quantity Pair quantity if the STEM Clearing Price equals the Price-Quantity Pair price.
- 6.6.6. [Blank]
- 6.6.7. The maximum number of Price-Quantity Pairs to be included in a Portfolio Demand Curve is to be the greater of:
  - (a) 10; and
  - (b) the integer value of:
    - i. the Market Participant's Maximum Consumption Capability as described in clause 6.3A.2(b);
    - ii. divided by 30 MW.
- 6.6.8. For Price-Quantity Pairs in Portfolio Demand Curves:
  - (a) each Price-Quantity Pair price must be:
    - i. in units of \$/MWh expressed to a precision of \$0.01/MWh;
    - ii. less than or equal to the Alternative Maximum STEM Price;
    - iii. greater than or equal to the Minimum STEM Price; and
    - iv. set such that no two Price-Quantity Pairs in a Portfolio Demand Curve have the same price;
  - (b) each Price-Quantity Pair quantity must be
    - i. in units of MWh expressed to a precision of 0.001 MWh;
    - ii. Loss Factor adjusted; and
  - (c) a Price-Quantity Pair means that the Market Participant is prepared to buy a quantity of energy from the STEM for that Price-Quantity Pair equal to:

- i. 0 MWh if the STEM Clearing Price is greater than the Price-Quantity Pair price;
- ii. the Price-Quantity Pair quantity if the STEM Clearing Price is less than the Price-Quantity Pair price; and
- iii. an amount between 0 MWh and the Price-Quantity Pair quantity if the STEM Clearing Price equals the Price-Quantity Pair price.
- 6.6.9. A Market Generator may apply to the IMO for all or part of the capacity of one of its Scheduled Generators that is not Liquid Fuel capable to be treated as if it was dual-fuel capable where one fuel is Liquid Fuel for the purposes of the STEM, Balancing and Settlement. The Market Generator must submit to the IMO an application in a form specified by the IMO, including supporting evidence of the relevant arrangements, and specifying the dates over which the application will apply.
- 6.6.10. The IMO must assess an application made under clause 6.6.9 and inform the Market Participant whether or not the application is approved. The IMO must approve the application only where the Market Participant provides evidence satisfactory to the IMO that:
  - (a) the Market Participant has an arrangement with a user of fuel ("Fuel User") to release a quantity of fuel for use in a Scheduled Generator which is not Liquid Fuel capable and is registered by the Market Participant;
  - (b) the use of fuel released under the arrangement would result in the Fuel User using Liquid Fuel in a Facility or other equipment; and
  - (c) as a consequence of paragraphs (a) and (b), the short run marginal cost of generating electricity using the Scheduled Generator using fuel released under the arrangement would be above the Maximum STEM Price.
- 6.6.11. Where the IMO approves an application under clause 6.6.9, the IMO must:
  - (a) notify the Market Participant that the application has been approved as soon as practicable; and
  - (b) update the relevant Standing Data in accordance with clause 2.34.
- 6.6.12. When the IMO does not approve an application under clause 6.6.9, the IMO must notify the Market Participant as soon as practicable.

#### 6.7. Format of Bilateral Submission Data

- 6.7.1. A Market Generator submitting Bilateral Submission data or Standing Bilateral Submission data must include in the submission:
  - (a) the identity of the Market Generator making the submission;
  - (b) in the case of:

- i Bilateral Submission data, the Trading Day to which the submission relates; and
- ii Standing Bilateral Submission data, the day of the week to which the submission relates, where data provided for a day of the week relates to the Trading Day commencing on that day;
- (c) for each Trading Interval included in the submission:
  - i. the net quantity of energy to be sold by the submitting Market Generator;
  - ii. the identity of each Market Participant purchasing the energy covered by the Bilateral Submission;
  - iii. the net quantity of energy sold to each Market Participant identified in (ii); and
  - iv. the sum of the quantities in (i) and (iii) must be zero.
- (d) [Blank]
- 6.7.2. All quantities specified in a Bilateral Submission or a Standing Bilateral Submission:
  - (a) must be in units of MWh;
  - (b) must equal or exceed 0 MWh for net supply (that is, sold) by the relevant Market Participant;
  - (c) must be less than 0 MWh for net consumption (that is, purchased) from the relevant Market Participant;
  - (d) must be expressed to a precision of 0.001 MWh; and
  - (e) must be Loss Factor adjusted.
- 6.7.3. A Market Generator must not specify quantities in a Bilateral Submission or a Standing Bilateral Submission which exceed the quantity of energy that the Market Generator is contracted to supply to the relevant Market Customer.
- 6.7.4. A Market Customer must not significantly over-state its consumption as indicated by its Net Contract Position with a regularity that cannot be explained by a reasonable allowance for forecast uncertainty or the impact of Loss Factors.

### 6.8. [Blank]

## The STEM Auction Process

#### 6.9. The STEM Auction

6.9.1. The IMO must undertake the process described in this clause 6.9 for each Trading Interval in a Trading Day.

- 6.9.2. The Net Bilateral Position for Market Participant p in Trading Interval t is:
  - the sum of the quantities of energy referred to in clauses 6.7.1(c)(i) and
     6.7.1(c)(iii) for the Market Participant in all Bilateral Submissions for
     Trading Interval t; or
  - (b) zero if no Bilateral Submissions for Trading Interval t refer to the Market Participant.
- 6.9.3. Subject to clause 6.9.4, the IMO must determine STEM Offers and STEM Bids for each Market Participant for each Trading Interval in accordance with Appendix 6 using the valid STEM Submissions and Bilateral Submissions relating to that Trading Interval.
- 6.9.4. Where the IMO has recorded in accordance with clause 6.3B.8 that a Market Participant has not made a STEM Submission for a Trading Interval the IMO must not determine STEM Offers, STEM Bids or MCAP Price Curves for that Market Participant in that Trading Interval.
- 6.9.5. The IMO must determine an aggregate STEM bid curve for each Trading Interval from the STEM Bids where this aggregate STEM bid curve:
  - (a) describes the quantity that Market Participants in aggregate wish to purchase from the IMO through the STEM at every price between, and including, the Minimum STEM Price and the Alternative Maximum STEM Price; and
  - (b) passes through the point indicating zero consumption at the Alternative Maximum STEM Price.
- 6.9.6. The IMO must determine an aggregate STEM offer curve for each Trading Interval from the STEM Offers where this aggregate STEM offer curve:
  - (a) describes the quantity that Market Participants in aggregate wish to sell to the IMO through the STEM at every price between, and including, the Minimum STEM Price and the Alternative Maximum STEM Price; and
  - (b) passes through the point indicating zero supply at the Minimum STEM Price.
- 6.9.7. The IMO will determine the STEM Clearing Price for a Trading Interval as the lowest price at which the STEM offer curve for a Trading Interval intersects the STEM bid curve for the Trading Interval.
- 6.9.8. The IMO will determine the STEM Clearing Quantity for a Trading Interval as the greatest quantity at which the STEM offer curve for the Trading Interval intersects the STEM bid curve for the Trading Interval.
- 6.9.9. All STEM Bid Price-Quantity Pairs for the Trading Interval with a price greater than the STEM Clearing Price for the Trading Interval must be scheduled by the IMO.

- 6.9.10. A STEM Bid Price-Quantity Pair with a price equal to the STEM Clearing Price for the Trading Interval must be scheduled by the IMO up to the Price-Quantity Pair quantity multiplied by:
  - (a) the STEM Clearing Quantity less the total quantity for STEM Bid Price-Quantity Pairs scheduled by the IMO in accordance with clause 6.9.9; divided by
  - (b) the total quantity for all STEM Bid Price-Quantity Pairs with a price equal to the STEM Clearing Price.
- 6.9.11. All STEM Offer Price-Quantity Pairs for a Trading Interval with a price less than the STEM Clearing Price for the Trading Interval must be scheduled by the IMO.
- 6.9.12. A STEM Offer Price-Quantity Pair for a Trading Interval with a price equal to the STEM Clearing Price for the Trading Interval must be scheduled by the IMO up to the Price-Quantity Pair quantity multiplied by:
  - (a) the STEM Clearing Quantity less the total quantity for STEM Offer Price-Quantity Pairs scheduled by the IMO in accordance with clause 6.9.11; divided by
  - (b) the total quantity for all STEM Offer Price-Quantity Pairs with a price equal to the STEM Clearing Price.
- 6.9.13. The Net Contract Position for Market Participant p in Trading Interval t is:
  - (a) the Net Bilateral Position for Market Participant p in Trading Interval t; minus,
  - (b) the amount of energy purchased by the Market Participant from the IMO through the STEM at the STEM Clearing Price, which is the total quantity associated with Price-Quantity Pairs for Market Participant p scheduled by the IMO under clause 6.9.9 or 6.9.10 for Trading Interval t where this energy purchased is represented as a positive value; plus
  - (c) the amount of energy sold by the Market Participant to the IMO through the STEM at the STEM Clearing Price, which is the total quantity associated with Price-Quantity Pairs for Market Participant p scheduled by the IMO under clause 6.9.11 or 6.9.12 for Trading Interval t where this energy sold is represented as a positive value.

## 6.10. Suspension of the STEM

6.10.1. The IMO must suspend the STEM auction for a Trading Interval if the IMO considers that it will not be in a position to undertake the process described in clause 6.9 and publish a valid STEM auction result under clauses 6.4.3(b), (c) and (d) for that Trading Interval by the time specified in clause 6.4.3.

- 6.10.2. In the event that the STEM auction for a Trading Interval is suspended under clause 6.10.1, no Market Participant can purchase energy from or sell energy to the IMO through the STEM for that Trading Interval and no STEM Clearing Price is to be declared for that Trading Interval.
- 6.10.3. No compensation is due or payable to any Market Participant in the event that the STEM auction for a Trading Interval is suspended under clause 6.10.1.

## **Resource Plans and Balancing Data**

#### 6.11. Format of Resource Plans

- 6.11.1. A Market Participant submitting Resource Plan Submission data or Standing Resource Plan Submission data must include in the submission:
  - (a) the identity of the Market Participant making the submission;
  - (aA) in the case of:
    - i Resource Plan Submission data, the Trading Day to which the submission relates; and
    - ii Standing Resource Plan Submission data, the day of the week to which the submission relates, where data provided for a day of the week relates to the Trading Day commencing on that day;
  - (b) for each Scheduled Generator and Dispatchable Load registered by the Market Participant:
    - i. the name of the Facility;
    - ii. for a Scheduled Generator, the intended times of synchronisation and de-synchronisation, expressed to the nearest minute, during the Trading Day;
    - iii. the energy to be sent-out or consumed during each Trading Interval of the Trading Day included in the submission, where this amount:
      - 1. must be expressed in units of MWh;
      - 2. must be expressed to a precision of 0.001 MWh;
      - 3. must be zero if the Facility is expected not to operate during the Trading Interval; and
      - 4. must not exceed the expected capability of the Facility at that time, allowing for de-ratings and outages; and
    - iv. the target megawatt output of each Facility at the end of each Trading Interval included in the submission;
  - (c) for each Non-Scheduled Generator registered by the Market Participant:
    - i. the name of the Facility;

- ii. the expected energy to be sent-out during each Trading Interval of the Trading Day included in the submission, where this amount:
  - 1. must be expressed in units of MWh;
  - 2. must be expressed to a precision of 0.001 MWh; and
  - 3. must not exceed the expected capability of the Facility at that time, allowing for de-ratings and outages;
- (d) the total Loss Factor adjusted demand to be consumed by that Market Participant for each Trading Interval including demand associated with any Interruptible Load, but excluding demand associated with any Dispatchable Load; and
- (e) any shortfall for each Trading Interval between the net energy scheduled in the Resource Plan Submission and the Net Contract Position of the Market Participant.
- 6.11.2. For Resource Plan Submission data or Standing Resource Plan Submission data to be valid:
  - (a) it must conform to the format specified in clause 6.11.1;
  - (aA) 48 Trading Intervals of data must be submitted for each Trading Day;
  - (aB) no energy must be scheduled from a Facility that is a Scheduled Generator for any Trading Interval in which the Facility is not synchronised as indicated by the times specified in clause 6.11.1(b)(ii);
  - (b) it must only include Facilities registered by the submitting Market Participant;
  - (bA) it must not include a Generator for any Trading Interval if that Generator is under going a Commissioning Test during that Trading Interval;
  - (c) it must not include Interruptible Loads; and
  - (d) the net energy scheduled in the Resource Plan Submission data (or Resource Plan Submission data derived from Standing Resource Plan Submission data), after Loss Factor adjusting the Scheduled Generator, Non-Scheduled Generator, and Dispatchable Load energy, and taking into account shortfalls indicated in accordance with clause 6.11.1(e), for each Trading Interval included in the submission must equal the Net Contract Position of the Market Participant for that Trading Interval.

#### 6.11A. Format of Balancing Data

- 6.11A.1. A Market Participant submitting Balancing Data Submission data must include in the submission:
  - (a) the identity of the Market Participant making the submission;
  - (b) for each Scheduled Generator registered by the Market Participant:

- i. the name of the Facility;
- ii. if the Facility is registered as being capable of running on Non-Liquid Fuel, the following prices to apply for the Trading Day:
  - 1. a Non-Liquid Supply Increase Price for Peak Trading Intervals;
  - a Non-Liquid Supply Decrease Price for Peak Trading Intervals, where this price must be not greater than that in (1);
  - 3. a Non-Liquid Supply Increase Price for Off-Peak Trading Intervals; and
  - 4. a Non-Liquid Supply Decrease Price for Off-Peak Trading Intervals, where this price must be not greater than that in (3),

where these prices must be not less than the Minimum STEM Price, not more than the Maximum STEM Price, and must be expressed in units of \$/MWh to a precision of \$0.01/MWh; and

- iii. if the Facility is registered as being capable of running on Liquid Fuel, the following prices to apply for the Trading Day:
  - 1. a Liquid Supply Increase Price for Peak Trading Intervals;
  - 2. a Liquid Supply Decrease Price for Peak Trading Intervals, , where this price must be not greater than that in (1);
  - 3. a Liquid Supply Increase Price for Off-Peak Trading Intervals; and
  - 4. a Liquid Supply Decrease Price for Off-Peak Trading Intervals, where this price must be not greater than that in (3),

where these prices must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be expressed in units of \$/MWh to a precision of \$0.01/MWh;

- (c) for each Dispatchable Load registered by the Market Participant:
  - i. the name of the Facility;
  - ii. the following prices to apply for the Trading Day:
    - 1. a Consumption Increase Price for Peak Trading Intervals;
    - 2. a Consumption Decrease Price for Peak Trading Intervals, where this price must be not less than that in (1);
    - 3. a Consumption Increase Price for Off-Peak Trading Intervals; and

4. a Consumption Decrease Price for Off-Peak Trading Intervals, where this price must be not less than that in (3),

where these prices must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be expressed in units of \$/MWh to a precision of \$0.01/MWh; and

- (d) for each Demand Side Programme registered to the Market Participant:
  - i. the name of the Facility;
  - ii. the following prices to apply for the Trading Day:
    - 1. A Consumption Decrease Price for Peak Trading Intervals;
    - 2. A Consumption Decrease Price for Off-Peak Trading Intervals.

where these prices must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be expressed in units of \$/MWh to a precision of \$0.01/MWh.

- 6.11A.2. For Balancing Data Submission data to be valid:
  - (a) it must conform to the format specified in clause 6.11A.1; and
  - (b) it must only include Facilities registered by the submitting Market Participant.

## The Dispatch Merit Order

#### 6.12. The Dispatch Merit Order

6.12.1.

- (a) By 1:30 PM on the Scheduling Day, (or within 40 minutes of a closing time extended in accordance with clause 6.5.1(b) or clause 6.5A.1(b)), the IMO must determine the Dispatch Merit Orders identified in paragraphs (b) to (g). A Dispatch Merit Order lists the order in which the Scheduled Generators, Dispatchable Loads and Demand Side Programmes of Market Participants other than the Electricity Generation Corporation will, in the absence of transmission limitations or limitations necessary to maintain Power System Security, be issued Dispatch Instructions by System Management to increase or decrease output.
- (b) A Dispatch Merit Order for an increase in generation or decrease in consumption relative to the quantities included in the applicable Resource Plan (or the current operating level of a Facility not included in a Resource Plan) during Peak Trading Intervals. The IMO must take into account the following principles when determining this Dispatch Merit Order:

- this Dispatch Merit Order must list all Scheduled Generators,
   Demand Side Programmes and Dispatchable Loads registered by
   Market Participants other than the Electricity Generation
   Corporation;
- ii. this Dispatch Merit Order must be determined applying the Market Participant Balancing Data applicable to the Trading Day by ranking the Registered Facilities referred to in (i) in increasing order of the:
  - 1. Non-Liquid Supply Increase Price for Peak Trading Intervals;
  - 2. Liquid Supply Increase Price for Peak Trading Intervals; or
  - 3. Consumption Decrease Price for Peak Trading Intervals, as applicable;
- iii. dual fuelled Facilities must appear in the position determined by the prices referred to in paragraph (ii) when the Facility is not running on Liquid Fuel and again in the position determined by those prices when the Facility is running on Liquid Fuel; and
- iv. Liquid Fuelled Facilities, including dual fuelled Facilities running on Liquid Fuel, must be indicated with a flag.
- (c) A Dispatch Merit Order for a decrease in generation or increase in consumption relative to the quantities included in the applicable Resource Plan (or the current operating level of a Facility not included in a Resource Plan) during Peak Trading Intervals. The IMO must take into account the following principles when determining this Dispatch Merit Order:
  - this Dispatch Merit Order must list all Scheduled Generators, Non-Scheduled Generators and Dispatchable Loads registered by Market Participants other than the Electricity Generation Corporation;
  - ii. this Dispatch Merit Order must be determined applying the Market Participant Balancing Data applicable to the Trading Day by ranking the Registered Facilities referred to in paragraph (i) in decreasing order of the:
    - Non-Liquid Supply Decrease Price for Peak Trading Intervals;
    - 2. Liquid Supply Decrease Price for Peak Trading Intervals; or
    - 3. Consumption Increase Price for Peak Trading Intervals, as applicable.
  - iii. dual fuelled Facilities must appear in the position determined by the prices referred to in paragraph (ii) when the Facility is not running on Liquid Fuel and again in the position determined by those prices when the Facility is running on Liquid Fuel; and

- iv. Liquid Fuelled Facilities, including dual fuelled Facilities running on Liquid Fuel, must be indicated with a flag;
- (d) A Dispatch Merit Order for decommitment of Scheduled Generators relative to the unit commitment indicated by the applicable Resource Plan during Peak Trading Intervals. The IMO must take into account the following principles when determining this Dispatch Merit Order:
  - this Dispatch Merit Order must list all Scheduled Generators registered by Market Participants other than the Electricity Generation Corporation;
  - ii. this Dispatch Merit Order must be determined applying the Standing Data described in Appendix 1(c)(i)(2) by ranking the Registered Facilities referred to in paragraph (i) in increasing order of the dollar amount paid to the Market Participant for a decommitment of the Facility.
- (e) A Dispatch Merit Order for an increase in generation or decrease in consumption relative to quantities included in the applicable Resource Plan (or the current operating level of a Facility not included in a Resource Plan) during Off-peak Trading Intervals. The IMO must take into account the following principles when determining this Dispatch Merit Order:
  - this Dispatch Merit Order must list all Scheduled Generators,
     Demand Side Programmes and Dispatchable Loads registered by
     Market Participants other than the Electricity Generation
     Corporation;
  - ii. this Dispatch Merit Order must be determined applying the Market Participant Balancing Data applicable to the Trading Day by ranking the Registered Facilities referred to in paragraph (i) in increasing order of the:
    - 1. Non-Liquid Supply Increase Price for Off-Peak Trading Intervals;
    - Liquid Supply Increase Price for Off-Peak Trading Intervals;
       or
    - 3. Consumption Decrease Price for Off-Peak Trading Intervals, as applicable;
  - iii. dual fuelled facilities must appear in the position determined by the prices referred to in paragraph (ii) when the Facility is not running on Liquid Fuel and again in a position determined by those prices when the Facility is running on Liquid Fuel; and
  - iv. Liquid Fuelled Facilities, including dual fuelled Facilities running on Liquid Fuel, must be indicated with a flag.

- (f) A Dispatch Merit Order for a decrease in generation or increase in consumption relative to the quantities included in the applicable Resource Plan (or zero where the quantity was not included in a Resource Plan Submission) during Off-peak Trading Intervals. The IMO must take into account the following principles when determining this Dispatch Merit Order:
  - this Dispatch Merit Order must list all Scheduled Generators, Non-Scheduled Generators and Dispatchable Loads registered by Market Participants other than the Electricity Generation Corporation;
  - ii. this Dispatch Merit Order must be determined applying the Market Participant Balancing Data applicable to the Trading Day by ranking the Registered Facilities referred to in paragraph (i) in decreasing order of the:
    - Non-Liquid Supply Decrease Price for Off-Peak Trading Intervals;
    - Liquid Supply Decrease Price for Off-Peak Trading Intervals; or
    - 3. Consumption Increase Price for Off-Peak Trading Intervals; as applicable.
  - iii. dual fuelled Facilities must appear in the position determined by the prices referred to in paragraph (ii) when the Facility is not running on Liquid Fuel and again in a position determined by those prices when the Facility is running on Liquid Fuel; and
  - iv. Liquid Fuelled Facilities, including dual fuelled Facilities running on Liquid Fuel, must be indicated with a flag.
- (g) A Dispatch Merit Order for decommitment of Scheduled Generators relative to the unit commitment indicated by the applicable Resource Plan during Off-Peak Trading Intervals. The IMO must take into account the following principles when determining this Dispatch Merit Order:
  - this Dispatch Merit Order must list all Scheduled Generators registered by Market Participants other than the Electricity Generation Corporation;
  - ii. this Dispatch Merit Order must be determined applying the Standing Data described in Appendix 1(c)(i)(2) by ranking the Registered Facilities referred to in paragraph (i) in increasing order of the dollar amount paid to the Market Participant for a decommitment of the Facility during Off-Peak Trading Intervals.
- (h) Where the prices in Balancing Data or payments described in Standing Data, as applicable, for two or more Registered Facilities are equal, then

for the purpose of determining the ranking in any Dispatch Merit Order other than those for decommitment, the IMO must rank a Registered Facility with a greater sent out capacity registered in Standing Data before a Registered Facility with a lesser sent out capacity. For a Dispatch Merit Order for decommitment, the IMO must rank a Registered Facility with a greater name plate capacity registered in Standing Data before a Registered Facility with a lesser name plate capacity.

## **Balancing Pricing and Quantities**

### 6.13. Real Time Dispatch Information

6.13.1. System Management must provide the IMO with dispatch data for settlement purposes in accordance with clause 7.13.

## 6.14. Calculation of MCAP, UDAP and DDAP

- 6.14.1. Subject to clause 6.14.1A, by 3 PM on the first Business Day following the end of a Trading Day, the IMO must calculate and publish for each Trading Interval on the Trading Day:
  - (a) the Marginal Cost Administered Price (MCAP);
  - (b) the Upward Deviation Administered Price (UDAP); and
  - (c) the Downward Deviation Administered Price (DDAP),

in accordance with this clause 6.14.

- 6.14.1A. If System Management advises the IMO that it has been prevented from completing the relevant processes that enable the provision of the data described in clause 7.13.1, the IMO may extend the timeline prescribed in clause 6.14.1, subject to any such extension not resulting in a delay of that timeline of more than two business days, and must advise Rule Participants of any such extension as soon as practicable.
- 6.14.2. The value of MCAP for a Trading Interval is calculated as follows:
  - (a) If the STEM Auction was suspended for the Trading Interval under clause 6.10.1, and the process described in clause 6.9 cannot subsequently be completed by the time MCAP must be published under clause 6.14.1, the IMO must determine MCAP for the Trading Interval to be the value of MCAP for the equivalent Trading Interval:
    - if the IMO is determining MCAP for a Business Day, MCAP will be the value for the most recent Trading Day in the past which is a Business Day and commenced on the same day of the week;

- ii. if the IMO is determining MCAP for a day which is not a Business Day, MCAP will be the value for the most recent Trading Day in the past which is not a Business Day.
- (b) If the STEM Auction was not suspended for the Trading Interval under clause 6.10.1, or was suspended but the process described in clause 6.9 can subsequently be completed for the purposes of this clause by the time MCAP must be published under clause 6.14.1, then MCAP must be calculated in accordance with clause 6.14.3.
- 6.14.3. Where MCAP is to be calculated in accordance with this clause under clause 6.14.2(b):
  - (a) subject to clause 6.9.4 the IMO must determine MCAP Price Curves for each Market Generator for the relevant Trading Interval in accordance with Appendix 6 using the valid STEM Submissions and Bilateral Submissions relating to that Trading Interval;
  - (b) the IMO must determine an Aggregate MCAP Price Curve for each Trading Interval from the MCAP Price Curves determined in accordance with paragraph (a) where this Aggregate MCAP Price Curve:
    - i. describes the quantity included in the MCAP Price Curves for all Market Generators at every price between, and including, the Minimum STEM Price and the Alternative Maximum STEM Price; and
    - ii. passes through the point indicating zero supply at the Minimum STEM Price.
  - (c) the IMO will determine MCAP as:
    - the Alternative Maximum STEM Price, where the Relevant Quantity determined according to clause 6.14.4 exceeds the total quantity in the Aggregate MCAP Price Curve; and otherwise
    - ii. the lowest price applying for the Relevant Quantity determined according to clause 6.14.4 on the Aggregate MCAP Price Curve.
- 6.14.4. For the purposes of clause 6.14.3:
  - (a) the "Operational System Load Estimate" for a Trading Interval is the estimate that the IMO receives from System Management of the total Loss Factor adjusted MWh consumption supplied via the SWIS during that Trading Interval. This estimate equals the total loss adjusted generator sent out energy as estimated from generator operational meter data and the use of state estimator systems;
  - (b) [Blank]
  - (c) the "Scheduled System Load" for a Trading Interval is the sum of:

- i. the sum over all Resource Plans for that Trading Interval of the total Loss Factor adjusted generation scheduled in each Resource Plan;
- ii. the sum over all Resource Plans of the shortfall quantity for that Trading Interval as described in clause 6.11.1(e); and
- iii. the Net Contract Position of the Electricity Generation Corporation for that Trading Interval.
- (d) the "Relevant Quantity" equals:
  - i. the Operational System Load Estimate for the Trading Interval; plus
  - ii. IMO's estimate of the total MWh demand curtailed during that Trading Interval (if any); minus
  - iii. the IMO's estimate of the amount by which energy provided by Market Generators other than the Electricity Generation Corporation deviates from the relevant Resource Plan quantities. This estimate equals:
    - the Operational System Load Estimate for the Trading Interval; minus
    - the total Loss Factor adjusted generator sent out energy of the Electricity Generation Corporation based on SCADA data for the Trading Interval; minus
    - the sum over all Resource Plan Submissions of the total Loss Factor adjusted sent out energy included in each Resource Plan for the Trading Interval; minus
    - the sum over all Resource Plan Submissions of the absolute value of each shortfall included in accordance with clause 6.11.1(e) for the Trading Interval
- 6.14.5. The value of UDAP for a Trading Interval equals:
  - (a) 0.5 x MCAP during Peak Trading Intervals; and
  - (b) zero during Off-Peak Trading Intervals.
- 6.14.6. The value of DDAP for a Trading Interval equals the lesser of:
  - (a) the Alternative Maximum STEM Price; and
  - (b) the greater of:
    - i. the Minimum STEM Price; and
    - ii. the price that is:
      - 1. 1.3 x MCAP for Peak Trading Intervals; and
      - 2. 1.1 x MCAP for Off-peak Trading Intervals.

6.14.7. Once published under clause 6.14.1, MCAP, UDAP and DDAP cannot be altered, either through disagreement under clause 9.20.6, or through dispute under clause 9.21.

## 6.15. The Dispatch Schedule

- 6.15.1. For a Market Participant other than the Electricity Generation Corporation, the Dispatch Schedule for a Trading Interval for a Scheduled Generator (excluding those to which clauses 3.21.2, 3.21A.14 or 4.25.10 apply) or Dispatchable Load is:
  - (a) where no Dispatch Instructions were issued in respect of the Registered Facility for the Trading Interval, equal to the energy to be generated and sent out or consumed by the Registered Facility indicated in the applicable Resource Plan (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity of energy so that the result is measured at the Reference Node) for that Trading Interval plus;
    - where the Metered Schedule for the Trading Interval is higher than or equal to the applicable Resource Plan value, the Facility's Facility Dispatch Tolerance as a positive value to the extent that the resulting Dispatch Schedule does not exceed the Metered Schedule or
    - ii. where the Metered Schedule for the Trading Interval is lower than the applicable Resource Plan value, the Facility's Facility Dispatch Tolerance as a negative value to the extent that the resulting Dispatch Schedule is not lower than the Metered Schedule;
  - (b) where one or more Dispatch Instructions that specified a target MW output level or an instruction under a Network Control Service Contract were issued to the Market Participant in respect of the Registered Facility for the Trading Interval, equal to:

#### i. where:

1. the Metered Schedule plus the Facility's Facility Dispatch Tolerance is greater than or equal to the amount calculated in accordance with Appendix 7 plus the quantities under a Network Control Service Contract instructions plus Balancing Support Contract energy dispatched (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the amount calculated in accordance with Appendix 7, to the Facility Dispatch Tolerance, to the quantities under a Network Control Service Contract and to the quantities under a Balancing Support Contract so that in each case the result is measured at the Reference Node); and

2. the Metered Schedule less the Facility's Facility Dispatch
Tolerance is less than or equal to the amount calculated in
accordance with Appendix 7 plus the quantities under a
Network Control Service Contract instructions plus
Balancing Support Contract energy dispatched (where for
the purpose of this calculation a Loss Factor adjustment is to
be applied to the amount calculated in accordance with
Appendix 7, to the Facility Dispatch Tolerance, to the
quantities under a Network Control Service Contract and to
the quantities under a Balancing Support Contract so that in
each case the result is measured at the Reference Node);

then the Metered Schedule; or

- ii. otherwise, the amount calculated in accordance with Appendix 7 plus the quantities under a Network Control Service Contract instructions plus Balancing Support Contract (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the amount calculated in accordance with Appendix 7, to the quantities under a Network Control Service Contract and to the quantities under a Balancing Support Contract so that the result is measured at the Reference Node).
- 6.15.2. The Dispatch Schedule for a Trading Interval equals the corresponding Metered Schedule for any of the following Facilities:
  - (a) a Non-Scheduled Generator;
  - (aA) a Scheduled Generator to which clauses 3.21.2, 3.21A.14 or 4.25.10 apply;
  - (b) a Non-Dispatchable Load;
  - (c) [Blank]
  - (d) an Interruptible Load;
  - (e) a Scheduled Generator or Dispatchable Load registered by the Electricity Generation Corporation; and
  - (f) a Scheduled Generator or Dispatchable Load registered by a Market Participant (other than the Electricity Generation Corporation) where a Dispatch Instruction of the type described in clause 7.7.3(d)(ii) was issued to the Market Participant in respect of the Facility.

## 6.16. The Metered Schedule

6.16.1. Subject to clause 9.3.3, the IMO must determine the Metered Schedule for a Trading Interval for a Registered Facility or Non-Dispatchable Load in accordance with clause 9.3.4.

6.16.2. The IMO must determine the Demand Side Programme Load for a Demand Side Programme for a Trading Interval as the total net MWh quantity of energy consumed by the Associated Loads of that Demand Side Programme during the Trading Interval, determined from Meter Data Submissions and expressed as a positive non-loss adjusted value.

## 6.17. Balancing Settlement Quantities

- 6.17.1. The IMO must determine for each Market Participant and each Trading Interval of each Trading Day:
  - (a) the Authorised Deviation Quantity;
  - (b) the Upward Unauthorised Deviation Quantity;
  - (c) the Downward Unauthorised Deviation Quantity; and
  - (d) [Blank]
  - (e) the Dispatch Instruction Payment,

in accordance with this clause 6.17.

- 6.17.2. The Authorised Deviation Quantity, ADQ(p,d,t), for Market Participant p and Trading Interval t of Trading Day d equals:
  - (a) the net sum of all the Dispatch Schedules for Trading Interval t for the Registered Facilities registered by Market Participant p and Non-Dispatchable Loads associated with Market Participant p as indicated in Standing Data,
  - (b) less, the Net Contract Position of Market Participant p in Trading Interval t;
  - (c) less, the sum over all of Market Participant p's Facilities of the Balancing Support Contract energy dispatched from them in Trading Interval t as specified by System Management in accordance with clause 7.13(dA) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node);
  - (cA) less, the sum over all of Market Participant p's Facilities of the Network Control Service Contract energy dispatched from them in Trading Interval t as specified by System Management in accordance with clause 7.13.1(dB) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node);
  - (d) plus, if the Market Participant is the Electricity Generation Corporation, the sum over all Market Participants (excluding the Electricity Generation Corporation) of the Balancing Support Contract energy dispatched from their Facilities in Trading Interval t as specified by System Management in accordance with clause 7.13(dA) (where for the purpose of this calculation

a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node);

- 6.17.3. The Upward Unauthorised Deviation Quantity, UUDQ(p,d,t), for Market Participant p and Trading Interval t of Trading Day d equals the sum over all that Market Participant's Registered Facilities, other than those to which clauses 3.21A.14 or 4.25.10 apply, of the greater of:
  - (a) the quantity that is:
    - i. the Facility's Metered Schedule for Trading Interval t; less
    - ii. the Facility's Dispatch Schedule for Trading Interval t; and
  - (b) zero.
- 6.17.4. The Downward Unauthorised Deviation Quantity, DUDQ(p,d,t), for Market Participant p and Trading Interval t of Trading Day d equals the sum over all that Market Participant's Registered Facilities, other than those to which clauses 3.21A.14 or 4.25.10 apply, of the lesser of:
  - (a) the quantity that is:
    - i. the Facility's Metered Schedule for Trading Interval t; less
    - ii. the Facility's Dispatch Schedule for Trading Interval t; and
  - (b) zero.
- 6.17.5. [Blank]
- 6.17.6. The Dispatch Instruction Payment, DIP(p,d,t), for Market Participant p and Trading Interval t of Trading Day d equals either:
  - (a) zero, if Market Participant p:
    - i. is the Electricity Generation Corporation; or
    - ii. was issued no Dispatch Instructions for Trading Interval t;

or the sum of:

- (b) the sum over all Scheduled Generators and Dispatchable Loads registered by the Market Participant of the following amounts for Trading Interval t:
  - i. if the Dispatch Schedule for the Registered Facility is set in accordance with clause 6.15.1(a)for Trading Interval t, the Balancing Support Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13.1(dA) is zero (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node) and the Network Control Service

Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13.1(dB) is zero (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node), the amount for the Registered Facility is zero;

- iA. if clauses 3.21A.14 or 4.25.10 apply to the Registered Facility during the Trading Interval, the amount for the Registered Facility is zero;
- ii. if neither paragraph (i) nor (iA) applies, the amount for the Registered Facility is the product of:
  - the qualifying quantity for Trading Interval t as calculated in accordance with clause 6.17.8, less the sum of the quantity indicated in the applicable Resource Plan (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity so that the result is measured at the Reference Node) for the Registered Facility for Trading Interval t and the Balancing Support Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13.1(dA) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node) and the Network Control Service Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13.1(dB) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node); and
  - 2. the price defined as:
    - the contracted price, if the Dispatch Instruction is for the purposes of an Ancillary Services Contract for System Restart, Dispatch Support or Load Rejection;
    - ii. zero, if the Dispatch Instruction is for the purposes of an Ancillary Services Contract other than for System Restart, Dispatch Support or Load Rejection; or
    - iii. the applicable price as defined by clause 6.17.7 less MCAP for Trading Interval t; and
- (c) the sum over all Non-Scheduled Generators registered by the Market Participant of the amount that is the product of:

- the quantity, defined as a negative value, by which the Non-Scheduled Generator was instructed by System Management to reduce its output, as provided to the IMO by System Management under clause 7.13.1(eB) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node); and
- ii. the Standing Data price defined in Appendix 1(e)(v) that was current at the time of the Trading Interval for the Non-Scheduled Generator for a decrease in generation, (accounting for whether the Trading Interval is a Peak Trading Interval or an Off-Peak Trading Interval) less MCAP for the Trading Interval; and
- (d) the sum over all Demand Side Programmes registered to the Market Participant of the amount that is the product of:
  - the quantity (in MWh) by which the Demand Side Programme reduced its consumption in response to a Dispatch Instruction, excluding any instructions given under a Network Control Service Contract, where this quantity is equal to the least of:
    - 1. half of the Facility's Capacity Credits;
    - 2. the Dispatch Instruction amount provided by System Management in accordance with clause 7.13.1(eC); or
    - the greater of zero and the difference between half of the Relevant Demand set in clause 4.26.2CA and the Demand Side Programme Load measured in the Trading Interval; and
  - ii. the price defined in the Market Participant's Balancing Data Submission provided in accordance with clause 6.5A, that was current at the time of the Trading Interval, for the Demand Side Programme (accounting for whether the Trading Interval is a Peak Trading Interval or an Off-Peak Trading Interval); and
- (e) if the participant is given an instruction under a Network Control Service Contract then the sum over all Network Control Service Contract Facilities registered by the Market Participant of the amount that is the product of:
  - i. the quantity by which the Facility was instructed by System Management to increase its output as specified by System Management in accordance with clause 7.13.1(dB) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node) or reduce its consumption as specified by System Management in accordance with clause 7.13.1(dB); and

- ii. the price defined as:
  - 1. MCAP for Trading Interval t, if the Facility was instructed to increase its output; or
  - 2. zero, if the Facility was instructed to reduce its consumption.

#### 6.17.7. For the purpose of clause 6.17.6:

- (a) if the Dispatch Schedule for a Registered Facility for Trading Interval t is greater than the sum of the Resource Plan schedule for the Registered Facility (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity so that the result is measured at the Reference Node)for Trading Interval t and the Balancing Support Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13(dA) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node), then the applicable price is the Balancing Data price or the price defined in Appendix 1(e)(v) (depending on the context) that was current at the time of Trading Interval t for the Registered Facility, based on Fuel Declarations as modified by data provided by System Management in accordance with clause 7.13.1(eA), for an increase in generation or decrease in consumption, accounting for:
  - i. whether Trading Interval t is a Peak Trading Interval or an Off-Peak Trading Interval; and
  - ii. whether the Registered Facility was running on Liquid Fuel at any time during Trading Interval t.
- (b) if paragraph (a) does not apply, then the applicable price is the Balancing Data price that was current at the time of Trading Interval t for the Registered Facility, based on Fuel Declarations as modified by data provided by System Management in accordance with clause 7.13.1(eA), for a decrease in generation or increase in consumption, accounting for:
  - i. whether Trading Interval t is a Peak Trading Interval or an Off-Peak Trading Interval; and
  - ii. whether the Registered Facility was running on Liquid Fuel at any time during Trading Interval t.

#### 6.17.8. For the purpose of clause 6.17.6:

- (a) if the applicable Balancing Data or Standing Data price for a Registered Facility for Trading Interval t is greater than or equal to MCAP, then the qualifying quantity is the lesser of:
  - the Metered Schedule quantity for the Registered Facility for Trading Interval t; and

- ii. the Dispatch Schedule quantity for the Registered Facility for Trading Interval t; and
- (b) if paragraph (a) does not apply, then the qualifying quantity is the greater of:
  - the Metered Schedule quantity for the Registered Facility for Trading Interval t; and
  - ii. the Dispatch Schedule quantity for the Registered Facility for Trading Interval t.
- 6.17.9. The IMO must determine a Facility Dispatch Tolerance for each Scheduled Generator and Dispatchable Load, where this Facility Dispatch Tolerance is equal to the lesser of:
  - (a) 3 MWh; and
  - (b) the greater of:
    - i. 0.5 MWh; and
    - ii. 3% of the Facility's:
      - 1. sent out capacity in the case of a Scheduled Generator; or
      - 2. nominated maximum consumption quantity in the case of a Dispatchable Load,

as set out in Standing Data.

#### 6.18. Commitment Compensation

- 6.18.1. Subject to clause 6.18.3, Commitment Compensation will be payable by the IMO to a Market Participant (other than the Electricity Generation Corporation) in the event that:
  - (a) the Market Participant is instructed by System Management to start up a Scheduled Generator registered by the Market Participant more times than indicated in the applicable Resource Plan for that Scheduled Generator.
- 6.18.2. Subject to clause 6.18.3, the Commitment Compensation equals the sum of for each additional start up required of a Scheduled Generator during a Peak Trading Interval or Off-Peak Trading Interval the dollar amount for a commitment of the Facility specified in Standing Data, as defined in Appendix 1(c)(i).
- 6.18.3. No Commitment Compensation will be payable:
  - (a) to the Electricity Generation Corporation;
  - (b) for the first start in the Trading Day of a Scheduled Generator if the relevant Market Participant has Reserve Capacity Obligations in respect of that Facility; or

(c) for any start-up instructed by System Management in connection with any Ancillary Services Contract, Balancing Support Contract or Network Control Service Contract.

# Market Advisories and Energy Price Limits

#### 6.19. Market Advisories

- 6.19.1. A Market Advisory is a notification by the IMO to Market Participants, Network Operators and System Management of an event that will, or is likely to, significantly impact on market operations.
- 6.19.2. The IMO must issue a Market Advisory for future potential events described in clause 6.19.1 if the IMO considers there to be a high probability that the event will occur within 48 hours of the time of issue.
- 6.19.3. Market Advisories must be released as soon as practicable after the IMO becomes aware of a situation requiring the release of a Market Advisory.
- 6.19.4. The IMO must inform Market Participants, Network Operators and System Management of the withdrawal of a Market Advisory as soon as practicable once the situation that the Market Advisory relates to has finished.
- 6.19.5. The types of Market Advisories are:
  - (a) Market systems outages for situations where the scheduling or communication systems required for the normal conduct of the scheduling processes under these Market Rules are, or are expected to be, unavailable; and
  - (b) Market suspension for situations where any component of the Market Rules, or the entire Market Rules, have been, or are about to be, suspended for any reason.
- 6.19.6. A Market Advisory must contain the following information:
  - (a) the type of Market Advisory;
  - (b) the date and time that the Market Advisory is released;
  - (c) the time period for which the Market Advisory is expected to apply;
  - (d) details of the situation that the Market Advisory relates to, including the extent and seriousness of the situation;
  - (e) any actions the IMO plans to take in response to the situation;
  - (f) any actions Market Participants or Network Operators are required to take in response to the situation, including whether any Contingency Market Procedure is applicable; and

- (g) any actions Market Participants or Network Operators may voluntarily take in response to the situation.
- 6.19.7. Subject to clause 6.19.8 Market Participants and Network Operators must comply with directions that the IMO issues in any Market Advisory under clause 6.19.6(f).
- 6.19.8. A Market Participant or Network Operator is not required to comply with clause 6.19.7 if such compliance would endanger the safety of any person, damage equipment, or breach any applicable law.
- 6.19.9. Market Participants, Network Operators and System Management must inform the IMO as soon as practicable if they become aware of any circumstances that might reasonably be expected to result in the IMO issuing a Market Advisory.
- 6.19.10. The IMO may create one or more Contingency Market Procedures, and:
  - (a) Market Participants must follow that documented Market Procedure after receiving a relevant Market Advisory; and
  - (b) the IMO and System Management must follow that documented Market Procedure after the IMO has issued a relevant Market Advisory.

#### 6.20. Energy Price Limits

- 6.20.1. The Energy Price Limits are:
  - (a) the Maximum STEM Price;
  - (b) the Alternative Maximum STEM Price; and
  - (c) the Minimum STEM Price.
- 6.20.2. The Maximum STEM Price is the value published on the Market Web Site and revised in accordance with clauses 6.20.6 and 6.20.11.
- 6.20.3. Subject to clause 6.20.11, the Alternative Maximum STEM Price is to equal:
  - (a) from 8 AM on September 1, 2006, \$480/MWh; and
  - (b) from 8 AM on the first day of each subsequent month the sum of:
    - i. \$440/MWh multiplied by the amount determined as follows:
      - the average of the Singapore Gas Oil (0.5% sulphur) price, expressed in Australian dollars, for the three months ending immediately before the preceding month as published by the International Energy Agency in its monthly Oil Market Report, or the average of another suitable published price as determined by the IMO, divided by;
      - 2. the average of the Singapore Gas Oil (0.5% sulphur) price, expressed in Australian dollars, for May, June and July 2006

or, if a revised Alternative Maximum STEM Price takes effect in accordance with clause 6.20.11, for the three months ending immediately before the month preceding the month in which the revised Alternative Maximum STEM Price takes effect, as published by the International Energy Agency in its monthly Oil Market Report, or the average of another suitable published price as determined by the IMO; and

ii from 8 AM on September 1, 2006, to 8 AM on 1 September, 2007, \$40/MWh, and for each subsequent 12-month period \$40/MWh multiplied by the CPI for the June quarter of the relevant 12-month period divided by CPI for the 2006 June quarter or, if a revised Alternative Maximum STEM Price takes effect in accordance with clause 6.20.11, the June quarter of the year in which the revised Alternative Maximum STEM Price takes effect, where CPI is the weighted average of the Consumer Price Index All Groups value of the eight Australian State and Territory capital cities as determined by the Australian Bureau of Statistics;

rounded to the nearest whole dollar, where a half dollar is rounded up, with the exception that from the date and time that a revised Alternative Maximum STEM Price takes effect in accordance with clause 6.20.11, the revised values supersede the values in 6.20.3(b)(i) and 6.20.3(b)(ii), and are to be the values used in calculating the Alternative Maximum STEM Price for each month subsequent to the month in which the revised Alternative Maximum STEM Price takes effect.

- 6.20.4. The Minimum STEM Price to apply at any time is to be the Maximum STEM Price multiplied by negative one.
- 6.20.5. [Blank]
- 6.20.6. The IMO must annually review the appropriateness of the value of the Energy Price Limits.
- 6.20.7. In conducting the review required by clause 6.20.6 the IMO:
  - (a) may propose revised values for the following:
    - i. the Maximum STEM Price, where this is to be based on the IMO's estimate of the short run marginal cost of the highest cost generating works in the SWIS fuelled by natural gas and is to be calculated using the formula in paragraph (b); and
    - the Alternative Maximum STEM Price, where this is to be based on the IMO's estimate of the short run marginal cost of the highest cost

generating works in the SWIS fuelled by distillate and is to be calculated using the formula in paragraph (b);

(b) must calculate the Maximum STEM Price or Alternative Maximum STEM Price using the following formula:

(1 + Risk Margin)× (Variable O&M +(Heat Rate  $\times$  Fuel Cost))/Loss Factor Where

- Risk Margin is a measure of uncertainty in the assessment of the mean short run average cost for a 40 MW open cycle gas turbine generating station, expressed as a fraction;
- ii. Variable O&M is the mean variable operating and maintenance cost for a 40 MW open cycle gas turbine generating station, expressed in \$/MWh, and includes, but is not limited to, start-up related costs;
- iii. Heat Rate is the mean heat rate at minimum capacity for a 40 MW open cycle gas turbine generating station, expressed in GJ/MWh;
- Fuel Cost is the mean unit fixed and variable fuel cost for a 40 MW open cycle gas turbine generating station, expressed in \$/GJ; and
- v. Loss Factor is the marginal loss factor for a 40 MW open cycle gas turbine generating station relative to the Reference Node.

Where the IMO must determine appropriate values for the factors described in paragraphs (i) to (v) as applicable to the Maximum STEM Price and Alternative Maximum STEM Price.

#### 6.20.8. [Blank]

- 6.20.9. In conducting the review required by clause 6.20.6 the IMO must prepare a draft report describing how it has arrived at a proposed revised value of an Energy Price Limit. The draft report must also include details of how the IMO determined the appropriate values to apply for the factors described in clause 6.20.7 (b)(i) to (v). The IMO must publish the draft report on the Market Web Site and advertise the report in newspapers widely published in Western Australia and request submissions from all sectors of the Western Australia energy industry, including end-users, within six weeks of the date of publication.
- 6.20.9A. Prior to proposing a final revised value to an Energy Price Limit in accordance with clause 6.20.10, the IMO may publish a request for further submissions on the Market Web Site. Where the IMO publishes a request for further submissions in accordance with this clause, it must request submissions from all sectors of the Western Australia energy industry, including end-users.

- 6.20.10. After considering the submissions on the draft report described in clause 6.20.9, and any submissions received under clause 6.20.9A, the IMO must propose a final revised value for any proposed change to an Energy Price Limit and submit those values and its final report, including any submissions received, to the Economic Regulation Authority for approval.
- 6.20.11. A proposed revised value for any Energy Price Limit replaces the previous value after:
  - (a) the Economic Regulation Authority has approved that value in accordance with clause 2.26; and
  - (b) the IMO has posted a notice on the Market Web Site of the new value of the applicable Energy Price Limit,

with effect from the time specified in the IMO's notice.

## **Settlement Data**

#### 6.21. Settlement Data

- 6.21.1. The IMO must provide the following information to the settlement system for each STEM Auction:
  - a flag for each Trading Interval indicating if the STEM Auction was suspended for that Trading Interval;
  - (b) the STEM Clearing Price in each Trading Interval in units of \$/MWh; and
  - (c) for each Market Participant participating in the STEM Auction, the STEM quantity scheduled in each Trading Interval, in units of MWh, where this amount must be positive for a sale of energy to the IMO and negative for a purchase of energy from the IMO.
- 6.21.2. The IMO must provide the following information to the settlement system for each Trading Interval in a Trading Day:
  - (a) MCAP, UDAP and DDAP; and
  - (b) for each Market Participant:
    - i. the Authorised Deviation Quantity;
    - ii. the Upward Unauthorised Deviation Quantity;
    - iii. the Downward Unauthorised Deviation Quantity;
    - iv. [Blank]
    - v. the Dispatch Instruction Payment; and
    - vi. any Commitment Compensation due to the Market Participant.

# 7 Dispatch

## **Data used in the Dispatch Process**

#### 7.1. Data Used in the Dispatch Process

- 7.1.1. System Management must maintain the following data set, and must use this data set when determining which Dispatch Instructions it will give:
  - (a) Standing Data on Registered Facilities determined in accordance with clause 2.34;
  - (b) Loss Factors determined in accordance with clause 2.27;
  - expected Scheduled Generator and Non-Scheduled Generator capacities by Trading Interval determined in accordance with clauses 3.17.5, 3.17.6 and 3.17.8;
  - (d) transmission Network configuration and capacity by Trading Interval determined in accordance with clauses 3.17.5, 3.17.6 and 3.17.8;
  - (e) forecasts of load and Non-Scheduled Generation by Trading Interval determined in accordance with clause 7.2;
  - (f) Ancillary Service Requirements for each Trading Interval determined in accordance with clause 7.2.4;
  - schedules of approved Planned Outages for generating works and transmission equipment by Trading Interval determined in accordance with clause 3.19;
  - (h) transmission Forced Outages and Consequential Outages by Trading Interval received from Network Operators in accordance with clause 3.21;
  - (i) Scheduled Generator, Non–Scheduled Generator, Dispatchable Load and Interruptible Load Forced Outages and Consequential Outages by Trading Interval received from Market Participants in accordance with clause 3.21;
  - (j) Resource Plans by Trading Interval received from the IMO in accordance with clause 7.4;
  - (jA) the Fuel Declarations received from the IMO and notifications received from Market Participants in accordance with clause 7.5;
  - (k) the Dispatch Merit Order received from the IMO in accordance with clause 7.5;
  - (I) Supplementary Capacity Contract data, if any, received from the IMO in accordance with clause 4.24; and
  - (m) Network Control Service Contract data, if any, received from a Network Operator in accordance with clause 5.3A.3 and 5.3A.4.

- 7.1.2. System Management must continually modify its records of the data described in clause 7.1.1 as System Management becomes aware of changes in that data.
- 7.1.3. System Management may, but is not required to, revise its earlier Dispatch Instructions when advised of Forced Outages during the Trading Day.

#### 7.2. Load Forecasts and Ancillary Service Requirements

- 7.2.1. System Management must prepare:
  - (a) a Load Forecast for a Trading Day by 7:30 AM on the Scheduling Day for the Trading Day, where this Load Forecast is for information purposes; and
  - (b) a Load Forecast for a Trading Day by 1:30 PM on the Scheduling Day for the Trading Day, where this Load Forecast is to be used in the dispatch process.
- 7.2.2. The Load Forecasts for a Trading Day described in clause 7.2.1 must:
  - (a) represent Non-Dispatchable Load and Interruptible Load net of forecast Non-Scheduled Generation;
  - (b) predict values for both MWh and MW total demand for each Trading Interval in the Trading Day; and
  - (c) be Loss Factor adjusted to the Reference Node.
- 7.2.3. System Management must update the Load Forecast for a Trading Day described in clause 7.2.1(b), as required, to reflect:
  - (a) revised weather forecasts;
  - (b) higher or lower actual demand than predicted; and
  - (c) higher or lower Non-Scheduled Generation than predicted.
- 7.2.3A. By 8:30 AM on the Scheduling Day, System Management must determine for each Market Participant that is a provider of Ancillary Services:
  - (a) an estimate of the Loss Factor adjusted MWh of energy that could potentially be called upon by System Management after 1:00 PM on the Scheduling Day to meet Ancillary Service requirements for each Trading Interval of the Trading Day where these estimates must reflect the Ancillary Service standards described in clause 3.10; and
  - (b) a list of Facilities that it might reasonably expect to call upon to provide the energy described in (a).
- 7.2.3B. System Management must provide:
  - (a) the information determined in clause 7.2.1(a) to the IMO by 7:30 AM on the Scheduling Day; and

- (b) the information determined in clause 7.2.3A to the IMO by 8:30 AM on the Scheduling Day.
- 7.2.3C. If the IMO does not receive information described in clause 7.2.3B by the required time, it must arrange for System Management to provide the information by alternative means prior to 7:50 AM in the case of the information described in clause 7.2.3B(a) and 8:50 AM in the case of the information described in clause 7.2.3B(b) and extend the timeframes in clauses 7.2.3B (a) and 7.2.3B (b) accordingly.
- 7.2.3D. The IMO must confirm receipt of the submissions described in clauses 7.2.3B and 7.2.3C to System Management within five minutes of receiving the submission.
- 7.2.4. System Management must determine the actual quantity of Ancillary Services required by location for each Trading Interval of the Trading Day in accordance with the Ancillary Service standards described in clause 3.10.
- 7.2.5. Unless otherwise directed by System Management, each Market Generator must by 10 AM each day provide to System Management for each of its Intermittent Generators with capacity exceeding 10 MW its most current forecast of the MWh energy output of the Intermittent Generator for each Trading Interval between noon of the current Scheduling Day and the end of the corresponding Trading Day in a format and by a method specified in the Power System Operation Procedure.
- 7.2.6. System Management may only use forecasts provided to it in accordance with clause 7.2.5 for the purpose of setting and revising requirements for Ancillary Service and to update its dispatch plans during the Trading Day.

#### 7.3. Outages

- 7.3.1. System Management must take account of Planned Outages in determining Dispatch Instructions.
- 7.3.2. System Management must, from the time it is notified of a Forced Outage or Consequential Outage in accordance with clause 3.21.4, take account of the Forced Outage or Consequential Outage in determining Dispatch Instructions.
- 7.3.3. [Blank]
- 7.3.4. System Management must provide to the IMO the following information:
  - (a) a schedule of Planned Outages, Forced Outages and Consequential
     Outages for each Registered Facility of which System Management is
     aware at that time where outages are calculated in accordance with clause
     3.21.6;
  - (b) [Blank]

for each Trading Interval of a Trading Day, between 8:00 AM and 8:30 AM on the Scheduling Day prior to the Trading Day.

#### 7.3.5. [Blank]

- 7.3.6. If the IMO does not receive the information described in clause 7.3.4 by the required time, it must arrange for System Management to provide the information by alternative means prior to 9:00 AM and extend the timeframes in clause 7.3.4 accordingly.
- 7.3.7. The IMO must confirm receipt of the submissions described in clauses 7.3.4 and 7.3.6 to System Management within five minutes of receiving the submission.

#### 7.4. Resource Plans

- 7.4.1. The IMO must provide System Management with the Resource Plans for a Trading Day it has accepted from Market Participants by 1.30 PM, or by 3:30 PM where the time for submitting Resource Plans is extended by the IMO under clause 6.5.1(b), of the Scheduling Day.
- 7.4.2. Upon receipt of the Resource Plans for a Trading Day, System Management must within 5 minutes confirm to the IMO that it has received the Resource Plans.
- 7.4.3. In the event that the IMO does not receive confirmation of receipt of the Resource Plans for a Trading Day from System Management within five minutes of providing them under clause 7.4.1, the IMO must contact System Management by telephone. If System Management has not received the Resource Plans, then the IMO must make alternative arrangements to communicate the information.
- 7.4.4. At any time between the time that it receives the Resource Plans for a Trading Day from the IMO and the end of the Trading Intervals covered by the Resource Plans, System Management may request that a Market Participant confirm that it can conform to its Resource Plan for the relevant Trading Intervals and, if not, to indicate what lesser level of compliance the Market Participant is capable of achieving.

## 7.5. Dispatch Merit Orders and Fuel Declarations

- 7.5.1. The IMO must provide System Management with the Dispatch Merit Orders and Fuel Declarations for a Trading Day by 1:30 PM on the Scheduling Day.
- 7.5.2. Upon receipt of the Dispatch Merit Orders and Fuel Declarations for a Trading Day, System Management must within 5 minutes confirm to the IMO that it has received the Dispatch Merit Orders and Fuel Declarations.
- 7.5.3. In the event that the IMO does not receive confirmation of receipt of the Dispatch Merit Orders and Fuel Declarations for a Trading Day from System Management

within 5 minutes of submission, then the IMO must contact System Management. If System Management has not received the Dispatch Merit Orders and Fuel Declarations, then the IMO must make alternative arrangements to communicate the information.

- 7.5.4. Subject to clause 7.5.5, a Market Participant other than the Electricity Generation Corporation may at any time between 1:30 PM on the Scheduling Day and 30 minutes prior to the commencement of the Trading Interval described in (b) notify System Management that the Market Participant will change the fuel upon which a Scheduled Generator registered to it will operate on from a Liquid Fuel to a Non-Liquid Fuel, or vice versa, where the notification must include:
  - (a) the identity of the Scheduled Generator;
  - (b) the first Trading Interval in the Trading Day from which the fuel change will take effect;
  - (c) the last Trading Interval in the Trading Day for which the fuel change will apply; and
  - (d) the fuel (Liquid Fuel or Non-Liquid Fuel) to be used;
- 7.5.5. A Market Participant may only issue a notification in accordance with clause 7.5.4 for a Scheduled Generator if:
  - (a) the Scheduled Generator is switching from Non-Liquid Fuel to Liquid Fuel because it has lost its supply of Non-Liquid Fuel; or
  - (b) the Scheduled Generator is switching from Liquid Fuel to Non-Liquid Fuel because it has obtained a new supply of Non-Liquid Fuel.
- 7.5.6. System Management must retain a record of all notifications provided to it in accordance with clause 7.5.4.
- 7.5.7. In employing the Dispatch Merit Orders, System Management must assume that a Facility is operating on the fuel indicated for that Facility in the applicable Fuel Declaration except for Trading Intervals where the most recent notification received in accordance with clause 7.5.4 implies an alternative fuel is being used.

# **Dispatch Process**

#### 7.6. The Dispatch Criteria

- 7.6.1 When scheduling and dispatching the Registered Facilities of the Electricity Generation Corporation and issuing Dispatch Instructions to other Market Participants, System Management must seek to meet the following criteria, in descending order of priority:
  - (a) to enable operation of the SWIS within the Technical Envelope parameters appropriate for the applicable Operating State;

- (b) to minimise involuntary load shedding on the SWIS; and
- (c) to maintain Ancillary Services to meet the Ancillary Service standards appropriate for the applicable Operating State.
- 7.6.1A Notwithstanding clauses 7.6.2 and 7.6.3, System Management must give priority to the dispatch of a Registered Facility under a Network Control Service Contract over the dispatch of a Registered Facility under any other arrangement, if the Network Control Service provided under that contract would assist System Management to meet the criteria in clause 7.6.1.
- 7.6.2. Subject to clauses 7.6.1, 7.6.1A, 7.6.2A, 7.6.3, 7.6.4, 7.6.6, System Management must schedule and dispatch the Registered Facilities of the Electricity Generation Corporation and Registered Facilities covered by any Balancing Support Contract or Ancillary Service Contract in such a way as to allow the implementation of the Resource Plans that it has received from the IMO for Market Participants other than the Electricity Generation Corporation.
- 7.6.2A. Where the Dispatch Criteria requires System Management to alter the Dispatch Plan of the Electricity Generation Corporation, subject to the limitations imposed by this clause 7.6, System Management must employ reasonable endeavours to minimise the change in the Dispatch Plan and to have regard for the merit order of Electricity Generation Corporation Facilities.
- 7.6.3. Where meeting the criteria in clause 7.6.1 would otherwise require the use of Liquid Fuelled Registered Facilities of the Electricity Generation Corporation or Liquid Fuelled Registered Facilities covered by any Balancing Support Contract, or Ancillary Service Contract, then System Management may issue Dispatch Instructions to Market Participants other than the Electricity Generation Corporation that, if followed, will allow it to meet the criteria in clause 7.6.1, provided that in issuing such Dispatch Instructions System Management does not issue Dispatch Instructions with respect to a Facility that:
  - (a) would result in that Facility using Liquid Fuel, or
  - (b) is registered as a Demand Side Programme or Dispatchable Load.
- 7.6.4. Where System Management cannot meet the criteria in clause 7.6.1 by scheduling and dispatching the Registered Facilities of the Electricity Generation Corporation and Registered Facilities covered by any Balancing Support Contract, or Ancillary Service Contract in such a way as to allow the implementation of the Resource Plans that it has received from the IMO for Market Participants other than the Electricity Generation Corporation, System Management must issue Dispatch Instructions to Market Participants other than the Electricity Generation Corporation that will allow it to meet the criteria in clause 7.6.1.
- 7.6.5. Where System Management has issued a Dispatch Instruction in accordance with clause 7.6.3 or clause 7.6.4, but subject to clause 7.6.5A circumstances have

changed, and it would not be able to issue the Dispatch Instruction under the relevant clause in the changed circumstances, System Management must cancel the Dispatch Instruction and issue directions to the relevant Market Participant in respect of the relevant Registered Facility to return to its Resource Plan for the relevant Trading Interval.

- 7.6.5A. System Management must not issue a Dispatch Instruction solely because a Market Participant has notified it of a change in fuel in accordance with clause 7.5.4, with the exception that if a Market Participant notifies System Management of a change in fuel after System Management has issued a Dispatch Instruction then System Management may change that Dispatch Instruction accordingly.
- 7.6.6. System Management may issue Dispatch Instructions to Market Participants other than the Electricity Generation Corporation:
  - (a) in accordance with any Ancillary Service Contract;
  - (b) in accordance with any Balancing Support Contract;
  - in accordance with the details of any Network Control Service Contract, as advised to System Management by a Network Operator in accordance with clause 5.3A.3 or updated by a Network Operator in accordance with clause 5.2A.4;
  - (d) in connection with any test of equipment allowed under these Market Rules; or
  - (e) under clause 7.6.3 or clause 7.6.4.
- 7.6.7. System Management and the Electricity Generation Corporation may each enter into Balancing Support Contracts with Market Participants other than the Electricity Generation Corporation to assist them in meeting their obligations under this Chapter 7.
- 7.6.8. Where it intends to enter into a Balancing Support Contract, System Management must:
  - (a) seek to minimise the cost of meeting its obligations under clause 7.6.2; and
  - (b) give consideration to using a tender process, unless System Management considers that this would not meet the requirements of paragraph (a).
- 7.6.9. Where System Management has entered into a Balancing Support Contract, System Management must report the capacity contracted and the terms for calling on the capacity to the IMO.
- 7.6.10. Where a Market Participant has Capacity Credits granted in respect of a Demand Side Programme:

- (a) the IMO must provide System Management with the details of the Reserve Capacity Obligations to enable System Management to dispatch the Demand Side Programme; and
- (b) any Dispatch Instructions issued by System Management to the Demand Side Programme under clause 7.6.6(e) must be in accordance with those Reserve Capacity Obligations.
- 7.6.11. Where the IMO has entered into Supplementary Capacity Contracts:
  - (a) the IMO must provide System Management with the details of the Supplementary Capacity Contract to enable System Management to dispatch the services provided under it. Despite this, the IMO must not provide System Management with the payments terms of the contracts, which must be kept confidential.
  - (b) System Management may call upon the relevant resource to provide services under any Supplementary Capacity Contract in accordance with the terms of the contract.
- 7.6.12. System Management may give a direction to a Market Participant (other than the Electricity Generation Corporation) in respect of a Scheduled Generator or Non-Scheduled Generator registered by the Market Participant with regard to the reactive power output of that Facility in accordance with any power factor required under the Technical Rules applying to the relevant Network.
- 7.6.13. System Management must document in the Power System Operation Procedure the procedure to be followed, and must follow that documented Market Procedure, when scheduling and dispatching Registered Facilities covered by any Balancing Support Contract or Ancillary Service Contract in a form sufficient for audits and investigations under these Market Rules.

#### 7.6A. Scheduling and Dispatch of the Electricity Generation Corporation

- 7.6A.1. This clause 7.6A describes the rules governing the relationship between System Management and the Electricity Generation Corporation for the purpose of scheduling and dispatching the Registered Facilities of the Electricity Generation Corporation.
- 7.6A.2. With respect to the scheduling of the Electricity Generation Corporation Facilities
  - (a) At least once every month, the Electricity Generation Corporation must provide to System Management the following information in regard to the subsequent month:
    - A plant schedule describing the merit order in which the Facilities are to be called upon and any restrictions on the operations of such Facilities;

- ii. A plan for which fuels will be used in each Facility and guidance as to how that plan might be varied depending on circumstance; and
- iii. A description as to how Ancillary Services are to be provided; where the format and time resolution of this data is to be described in a procedure.
- (b) System Management must provide to the Electricity Generation Corporation by 8:30 AM on the Scheduling Day associated with a Trading Day a forecast of total system demand for the Trading Day where the format and time resolution of this data is to be described in a procedure.
- (c) System Management must provide to the Electricity Generation Corporation by 12:30 PM on the Scheduling Day associated with a Trading Day:
  - a forecast of the requirements for the Electricity Generation
     Corporation energy, being a forecast of the whole of system energy requirement less the aggregate Net Contract Positions of other Market Participants, for the Trading Day;
  - ii. the Dispatch Plan for each Facility for the Trading Day;
  - iii. a forecast of the detailed Ancillary Services required from each Facility;

where the format and time resolution of this data is to be described in a procedure.

- (d) System Management must consult with the Electricity Generation Corporation in developing the information described in (c) and the Electricity Generation Corporation must provide System Management with any information required by System Management in accordance with a procedure to support the preparation of the information in (c). In the event of any failure by the Electricity Generation Corporation to provide information required by System Management in a timely fashion then System Management may use its reasonable judgement to substitute its own information.
- (e) By 2:30 PM on the Scheduling Day associated with a Trading Day System Management must either confirm the Dispatch Plan specified in (c) with the Electricity Generation Corporation or notify the Electricity Generation Corporation of changes to the Dispatch Plan and forecast fuel requirement to reflect any changes required to accommodate Resource Plans or any changes in conditions.
- (f) If after 2:30 PM on the Scheduling Day but prior to the start of a Trading Interval on the corresponding Trading Day, System Management becomes aware of a change in conditions which will require a significant change in

- the Dispatch Plan it may make such change but must notify the Electricity Generation Corporation of such change.
- (g) The Electricity Generation Corporation must notify System Management as soon as practicable if it becomes aware that is unable to comply with a Dispatch Plan, providing reasons as to why it cannot comply.
- 7.6A.3. With respect to the dispatch of Electricity Generation Corporation Facilities during a Trading Day:
  - (a) System Management may instruct Facilities to deviate from the Dispatch Plan, or to change their commitment or output, in accordance with the Dispatch Criteria or in response to System Management's powers under a High Risk Operating State or an Emergency Operating State; and
  - (b) System Management must provide adequate notice to the Electricity Generation Corporation, based on Standing Data, before a Facility is required to respond to an instruction given under (a).
  - (c) The Electricity Generation Corporation must notify System Management as soon as practicable if it becomes aware that is unable to comply with an instruction given under (a).
- 7.6A.4. With respect to the dispatch compliance of the Electricity Generation Corporation:
  - (a) System Management may deem the Electricity Generation Corporation to be in non-compliance for a Trading Interval if the Electricity Generation Corporation fails to comply with the Dispatch Plan, its obligations to provide Ancillary Services, or an instruction given under clause 7.6A.3(a), to an extent that could endanger Power System Security;
  - (b) In determining whether or not to deem the Electricity Generation Corporation to be in non-compliance, System Management must give due regard to any reasonable mitigating circumstances of which the Electricity Generation Corporation has notified it in accordance with clause 7.6A.3(c);
  - (c) In determining whether or not to deem the Electricity Generation
    Corporation to be in non-compliance, System Management may only
    consider a deviation by an individual Electricity Generation Corporation
    facility from an output level specified in any instruction from System
    Management to be non-compliance if the deviation at any time exceeds 10
    MW; and
  - (d) In the event that System Management deems the Electricity Generation Corporation to be in non-compliance for a Trading Interval then System Management must determine a single MWh quantity describing the total non-compliance of the Electricity Generation Corporation for that Trading Interval.
- 7.6A.5. With respect to administration and reporting:

- (a) Representatives of System Management and the Electricity Generation Corporation must meet at least once per month to review the procedures operating under this clause 7.6A. The minutes of these meetings must be recorded by System Management;
- (b) At the meetings described in (a), System Management and the Electricity Generation Corporation must use best endeavours to address any issues arising from the application of the procedures operating under this clause 7.6A. Where agreement cannot be reached either party may seek arbitration by the IMO;
- (c) System Management must report to the IMO any instance where it believes that the Electricity Generation Corporation has failed to meet its obligations under this clause 7.6A;
- (d) The Electricity Generation Corporation may report to the IMO any instance where it believes that System Management has failed to meet its obligations under this clause 7.6A;
- (e) Upon request by the IMO, the Electricity Generation Corporation and System Management must make available to the IMO records created because of the operation of this clause 7.6A and procedures required by this clause 7.6A.
- 7.6A.6. The Electricity Generation Corporation and System Management must retain all records, including meeting minutes, created because of the operation of this clause 7.6A and procedures required by this clause 7.6A.
- 7.6A.7. Subject to clause 7.6A.8, System Management must document the procedures System Management and the Electricity Generation Corporation must follow to comply with this clause 7.6A, including the process to follow in developing the confidential procedure described in clause 7.6A.8, in the Power System Operation Procedure, and System Management and the Electricity Generation Corporation must follow that documented Market Procedure.
- 7.6A.8. Any procedure created or data exchanged in accordance with this clause 7.6A which is commercially sensitive information of the Electricity Generation Corporation must not be included in the Power System Operation Procedure. Instead, such information must be included in a confidential procedure developed by System Management in consultation with the Electricity Generation Corporation.
- 7.6A.9. System Management must obtain the approval of the IMO prior to the confidential procedure described in clause 7.6A.8, or any amendments to that private procedure, being enacted.
- 7.6A.10. The IMO may only decline to approve the confidential procedure, or an amendment to that procedure, if that document is inconsistent with the Market

Rules or the market objectives or if it contains material which, in the reasonable view of the IMO, should be in the Power System Operation Procedure.

### 7.7. Dispatch Instructions

- 7.7.1. A Dispatch Instruction is an instruction issued by System Management to a Market Participant other than the Electricity Generation Corporation directing that the Market Participant vary the output or consumption of one of its Registered Facilities from the level indicated in its Resource Plan, or to vary the output of any Registered Facility holding Capacity Credits but not included in a Resource Plan, for specified Trading Intervals.
- 7.7.2. Each Dispatch Instruction must:
  - (a) be consistent with the latest data described in clause 7.1.1 available to System Management at the time the Dispatch Instruction is determined;
  - (b) be applicable to a specific Registered Facility;
  - (c) be issued at a time that takes into account the Standing Data minimum response time for the Registered Facility.
- 7.7.3. Each Dispatch Instruction must contain the following information:
  - (a) the Registered Facility to which the Dispatch Instruction relates;
  - (b) the time the Dispatch Instruction was issued;
  - (c) the time by which response to the Dispatch Instruction is required to commence (which must not be earlier than the time it was issued, except as contemplated by clause 7.7.7(b));
  - (d) the required level of sent out generation or consumption which may be any one of the following:
    - i. a target MW output;
    - ii. a minimum MW level; or
    - iii. a required decrease in consumption (in MW) for a Demand Side Programme; and
  - (e) the ramp-rate to maintain until the required level of sent out generation or consumption is reached, if a ramp rate has been identified in Standing Data.
- 7.7.4. System Management must determine which Facilities will be the subject of Dispatch Instructions by applying the Dispatch Merit Order relevant to the action required, except where:
  - (a) System Management believes it is not feasible to do so having regard to:
    - i. the Standing Data minimum response times; or

- ii. transmission, ramping or other operational constraints; or
- the Dispatch Instruction is issued in connection with an Ancillary Service Contract, a Network Control Service Contract, a Balancing Support Contract or any test of equipment allowed under these Market Rules; or
- (c) the Dispatch Merit Order would otherwise require that System Management dispatch a Demand Side Programme when, due to limitations on the availability of the Demand Side Programme, such dispatch would prevent that Demand Side Programme from being available to System Management at a later time when it would have greater benefit with respect to maintaining Power System Security and Power System Reliability.
- 7.7.4A. When selecting Demand Side Programmes from the Dispatch Merit Order System Management must select them in accordance with the Power System Operation Procedure, where the selection process specified in the Power System Operation Procedure must only discriminate between Demand Side Programmes based on size of the capacity, response time and availability of different Demand Side Programmes.
- 7.7.5. A Dispatch Instruction for a Trading Interval must not be issued earlier than 2:00 PM on the Scheduling Day for the Trading Day on which the Trading Interval falls or later than the end of the Trading Interval.
- 7.7.5A. System Management must develop, in a Power System Operation Procedure, the information that must be provided by a Market Participant to System Management for each of the Market Participant's Non-Scheduled Generators for each Trading Interval to enable an estimation of the output of each Facility (in MWh) to be undertaken by:
  - (a) System Management, as required under clauses 7.7.5B(a) and 7.13.1C(e); and
  - (b) the IMO, as required by the Relevant Level Methodology.
- 7.7.5B. The quantity reduction in the output of a Non-Scheduled Generator as a result of a Dispatch Instruction from System Management (in MWh) for each Trading Interval to be used in clause 6.17.6(c)(i) is:
  - (a) where information has been made available to System Management in accordance with the Power System Operation Procedure developed under clause 7.7.5A, System Management's estimate, determined in accordance with the Power System Operation Procedure, of the decrease in output of the Non-Scheduled Generator (in MWh) during the Trading Interval; or
  - (b) in the case of a Non-Scheduled Generator included in a Resource Plan, for which System Management has not been provided with information in accordance with the Power System Operation Procedure developed under

clause 7.7.5A, the greater of zero and the difference between the Resource Plan quantity of the Non-Scheduled Generator (in MWh) less the output of the Non-Scheduled Generator (in MWh) over the Trading Interval derived from its Dispatch Instruction.

#### 7.7.6. Subject to clause 7.7.7:

- (a) System Management must issue a Dispatch Instruction by communicating it to the relevant Market Participant by telephone, allowing sufficient time for the Market Participant to confirm and to respond to that Dispatch Instruction; and
- (b) when issued a Dispatch Instruction in accordance with (a), a Market Participant must confirm receipt of the Dispatch Instruction and as soon as practicable confirm its ability to comply with the Dispatch Instruction.

## 7.7.7. Clause 7.7.6 does not apply where:

- (a) System Management has operational control of the relevant Registered Facility in accordance with clause 7.8, in which case System Management may communicate the Dispatch Instruction at a later time and by a method agreed with the Market Participant; or
- (b) the Dispatch Instruction is deemed to have been issued in respect of a Registered Facility in accordance with an Ancillary Service Contract or Network Control Service Contract and relates to the automatic activation of the Ancillary Service or Network Control Service in which case System Management may communicate the Dispatch Instruction to the relevant Market Participant at a later time in accordance with the Ancillary Services contract or Network Control Service Contract.
- 7.7.8. System Management must record all Dispatch Instructions, including confirmations of receipt received from Market Participants, in a form sufficient for independent audit and for settlement purposes.
- 7.7.9. System Management must develop, in a Power System Operation Procedure, the procedure System Management and Market Participants must follow in forming, issuing, recording, receiving and confirming Dispatch Instructions and that System Management must follow in determining the quantities described in clause 7.7.5A(a).
- 7.7.10. When System Management has issued a Dispatch Instruction to a Demand Side Programme to decrease its consumption System Management may issue a further instruction terminating the requirement for the Demand Side Programme to decrease its consumption providing that:
  - (a) the further instruction is issued at least four hours before it is to come into effect, and

(b) the minimum period for which the Demand Side Programme is instructed to decrease its consumption is not less than two hours.

### 7.8. Dispatch Instructions Implemented by System Management

- 7.8.1. System Management may, by agreement with a Market Participant, maintain operational control over aspects of a Registered Facility, including, but not limited to:
  - (a) the starting, loading and stopping of one or more of that Market Participant's Scheduled Generators;
  - (b) limiting the output of one or more of that Market Participant's Non-Scheduled Generators.
- 7.8.2. The maintenance of operational control of a Registered Facility by System

  Management does not remove the obligation on System Management to produce

  Dispatch Instructions for those Registered Facilities.
- 7.8.3. A Market Participant's rights and obligations under these Market Rules in respect of a Facility are not affected or modified where System Management maintains operational control over the Facility in accordance with this clause 7.8. In particular, the compliance obligations described in clause 7.10 remain with the Market Participant responsible for the Registered Facilities to which clause 7.8.1 relates.

#### 7.9. Commitment

- 7.9.1. Subject to clauses 7.9.2 and 7.9.1A, if a Market Participant intends to synchronise a Scheduled Generator, then it must confirm with System Management the expected time of synchronisation
  - (a) at least one hour before the expected time of synchronisation; and
  - (b) must update this advice immediately if the time confirmed pursuant to clause 7.9.1(a) changes.
- 7.9.1A Clause 7.9.1(a) does not apply, where a Market Participant intends to synchronise a Scheduled Generator within an hour of desynchronisation, in which case it must confirm with System Management the expected time of synchronisation:
  - (a) immediately it is known; and
  - (b) update this advice immediately if the time advised pursuant to clause 7.9.1A(a) changes.
- 7.9.2. Clause 7.9.1(a) does not apply where System Management has issued a Dispatch Instruction, or an instruction given under clause 7.6A.3(a), to the Facility that requires synchronisation within one hour of the Dispatch Instruction, or an instruction given under clause 7.6A.3(a), being issued.

- 7.9.3. System Management may request that a Market Participant who has given a confirmation under clause 7.9.1 provide further notification to System Management immediately before synchronisation of the Facility, and the relevant Market Participant must comply with the request.
- 7.9.4. System Management must grant permission to synchronise unless:
  - (a) the synchronisation is not in accordance with the relevant Resource Plan or Dispatch Instruction or an instruction issued under clause 7.6A.3(a); or
  - (b) System Management considers that it would not be able to meet the criteria set out in clause 7.6.1 were synchronisation to occur; or
  - (c) in the case of a Facility that is undergoing Commissioning Tests, synchronisation is not in accordance with the Commissioning Test plan for the Facility approved by System Management pursuant to clause 3.21A.
- 7.9.5. Subject to clauses 7.9.6 and 7.9.6A, if a Market Participant intends to desynchronise a Scheduled Generator, then it must confirm with System Management the expected time of desynchronisation
  - (a) at least one hour before the expected time of desynchronisation; and
  - (b) must update this advice immediately if the time confirmed pursuant to clause 7.9.5(a) changes.
- 7.9.6. Clauses 7.9.5(a) and 7.9.6A do not apply where System Management has issued a Dispatch Instruction, or an instruction given under clause 7.6A.3(a), to the Facility that requires desynchronisation within one hour of the Dispatch Instruction, or an instruction given under clause 7.6A.3(a), being issued.
- 7.9.6A. If a Market Participant intends to decommit a Facility to such an extent that it will not be available to be synchronised for four hours or more after the time of desynchronisation then the Market Participant must have been granted permission by System Management to do this in accordance with clause 3.21B.
- 7.9.7. System Management may request that a Market Participant who has given a confirmation under clause 7.9.5 provide further notification to System Management immediately before desynchronisation of the Facility, and the relevant Market Participant must comply with the request.
- 7.9.8. System Management must grant permission to desynchronise unless:
  - (a) the desynchronisation is not in accordance with the relevant Resource Plan or Dispatch Instruction or an instruction issued under clause 7.6A.3(a); or
  - (b) System Management considers that it would not be able to meet the criteria set out in clause 7.6.1 were desynchronisation to occur.

## Chapter 7

- 7.9.9. A Market Participant must comply with a decision of System Management under clause 7.9.4.
- 7.9.10. Subject to clause 7.9.11, a Market Participant must comply with a decision of System Management under clause 7.9.8.
- 7.9.11. A Market Participant is not required to comply with clause 7.9.5 or with clause 7.9.10 if such compliance would endanger the safety of any person, damage equipment, or breach any applicable law.
- 7.9.12. Where a Market Participant cannot comply with clause 7.9.5, in accordance with clause 7.9.11, or with a decision of System Management under clause 7.9.8:
  - (a) the Market Participant must inform System Management as soon as practicable; and
  - (b) if System Management did not confirm the expected time of desynchronisation or refused to allow desynchronisation of a Facility but the Market Participant did desynchronise that Facility then System Management must record the desynchronisation as a Forced Outage.

## **Dispatch Compliance**

## 7.10. Compliance with Resource Plans and Dispatch Instructions

- 7.10.1. Subject to clause 7.10.2, a Market Participant other than the Electricity Generation Corporation must comply with:
  - (a) subject to paragraph (b), its Resource Plan except where it relates to Intermittent Generators;
  - (b) if a Dispatch Instruction has been issued for a Registered Facility for a Trading Interval, the most recently issued Dispatch Instruction applicable to the Registered Facility for the Trading Interval; and
  - (c) a direction given to the Market Participant under clauses 7.6 or 7.10.7(a).
- 7.10.2. A Market Participant is not required to comply with clause 7.10.1 if such compliance would endanger the safety of any person, damage equipment, breach any applicable law, or is subject to an approved Equipment Test pursuant to clause 3.21AA.
- 7.10.3. Where a Market Participant cannot meet its Resource Plan, Dispatch Instruction, or direction given under clauses 7.6 or 7.10.7(a), as applicable, it must inform System Management as soon as practicable.
- 7.10.4. System Management must monitor the behaviour of Market Participants with Registered Facilities to assess whether they are complying with clause 7.10.1 in

accordance with its Monitoring and Reporting Protocol, except where it relates to a Demand Side Programme.

- 7.10.5. Subject to clause 7.10.5A, where System Management considers that a Market Participant has not complied with clause 7.10.1 in relation to any of its Registered Facilities in a manner that:
  - (a) threatens Power System Security or Power System Reliability;
  - (b) would require System Management to issue instructions to the Registered Facilities of the Electricity Generation Corporation or Registered Facilities covered by any Balancing Support Contract or Ancillary Service Contract; or
  - (c) would require System Management to issue Dispatch Instructions to other Registered Facilities in accordance with clauses 7.6.3 or 7.6.4; and
  - (d) is outside:
    - i. the Tolerance Range determined in accordance with clause 2.13.6D; or
    - ii. a Facility Tolerance Range determined in accordance with clause 2.13.6E, or, if applicable, varied in accordance with clause 2.13.6H;

System Management must warn the Market Participant about the deviation and request an explanation for the deviation; and cessation of the behaviour within a time that System Management considers reasonable.

- 7.10.5A System Management is not required to follow the process in clause 7.10.5 where:
  - (a) it considers that a failure to comply with clause 7.10.1 does not threaten Power System Security or Power System Reliability;
  - (b) the Market Participant has notified System Management in advance that it expects to deviate from its Resource Plan:
    - (i) in order to subject the relevant Facility to testing, to enable it to enter full commercial operation for the first time; or
    - (ii) where System Management has approved an Equipment Test in accordance with clause 3.21AA for the Facility for the Trading Interval;
  - (c) the Market Participant has provided System Management with a testing plan;
  - (d) System Management has notified the Market Participant that it approves the plan; and
  - (e) the deviation is in System Management's opinion consistent with the activities detailed in the approved testing plan.
- 7.10.5B Where clause 7.10.5 applies, it is deemed to apply for the entire Trading Interval.

- 7.10.6. A Market Participant must comply with a request under clause 7.10.5.
- 7.10.6A. A Market Participant that cannot comply with a request under clause 7.10.5 must notify System Management as soon as practicable and must include an explanation in that notification.
- 7.10.7. Where the Market Participant does not comply with the request referred to in clause 7.10.5, System Management:
  - (a) may issue directions to the Market Participant in respect of the output of that Registered Facility, without regard for the Dispatch Merit Order, with the objective of minimising the dispatch deviations of the Facility;
  - (b) unless the deviation is within the Tolerance Range, must report the failure to comply with the request referred to in clause 7.10.5, to the IMO. System Management must include in the report:
    - i. the circumstances of the failure to comply with clause 7.10.1 and the request referred to in clause 7.10.5;
    - ii. any explanation offered by the Market Participant as provided in accordance with clause 7.10.6A;
    - iii. whether System Management issued instructions to the Registered Facilities of the Electricity Generation Corporation or Registered Facilities covered by any Balancing Support Contract or Ancillary Service Contract or issued Dispatch Instructions to other Registered Facilities as a result of the failure; and
    - iv. an assessment of whether the failure threatened Power System Security or Power System Reliability; and
  - (c) if the deviation is within the Tolerance Range, may provide a report to the IMO containing the same information as specified in subclause (b).

# **Advisories, Balancing Suspension and Reporting**

#### 7.11. Dispatch Advisories

- 7.11.1. A Dispatch Advisory is a communication by System Management to Market Participants, Network Operators and the IMO that there has been, or is likely to be, an event that will require a significant deviation from Resource Plans or will restrict communication between System Management and any of the Market Participants, Network Operators, or the IMO.
- 7.11.2. System Management must issue a Dispatch Advisory for future potential events if it considers there to be a high probability that the event will occur within 48 hours of the time of issue.

- 7.11.3. Dispatch Advisories must be released as soon as practicable after System Management becomes aware of a situation requiring the release of a Dispatch Advisory.
- 7.11.3A For the avoidance of doubt, where System Management must respond to an unexpected and sudden event, System Management may issue a Dispatch Advisory after the event has occurred.
- 7.11.4. System Management must inform Market Participants, Network Operators and the IMO of the withdrawal of a Dispatch Advisory as soon as practicable once the situation that the Dispatch Advisory relates to has finished.
- 7.11.5. System Management must release a Dispatch Advisory in the event of, or in anticipation of situations where:
  - (a) involuntary load shedding is occurring or expected to occur;
  - (b) committed generation at minimum loading is, or is expected to, exceed forecast load;
  - (c) Ancillary Service Requirements will not be fully met;
  - (d) significant outages of generation transmission or customer equipment are occurring or expected to occur;
  - fuel supply on the Trading Day is significantly more restricted than usual, or if fuel supply limitations mean it is not possible for some Market Participants to supply in accordance with their Resource Plans;
  - scheduling or communication systems required for the normal conduct of the scheduling and dispatch process are, or are expected to be, unavailable; or
  - (g) [Blank]
  - (h) [Blank]
  - (i) the system is in, or is expected to be in, a High Risk Operating State or an Emergency Operating State.
- 7.11.6. A Dispatch Advisory must contain the following information:
  - (a) [Blank]
  - (b) the date and time that the Dispatch Advisory is released;
  - (c) the time period for which the Dispatch Advisory is expected to apply;
  - (cA) the operating state to be applicable, or expected to be applicable, at different times during the time period to which the Dispatch Advisory relates;
  - (d) details of the situation that the Dispatch Advisory relates to, including the location, extent and seriousness of the situation;

- (e) any actions System Management plans to take in response to the situation;
- (f) any actions Market Participants and Network Operators are required to take in response to the situation; and
- (g) any actions Market Participants may voluntarily take in response to the situation.
- 7.11.6A. If System Management must issue directions to a Market Participant or a Network Operator under a High Risk Operating State or an Emergency Operating State prior to issuing a Dispatch Advisory then System Management may issue such directions as if a Dispatch Advisory had been issued provided that it informs the relevant Market Participant or Network Operator of the applicable operating state as soon as practicable.
- 7.11.7. Subject to clause 7.11.8, Market Participants and Network Operators must comply with directions that System Management issues in any Dispatch Advisory under clause 7.11.6(f), or directly to the Market Participant or Network Operator under clause 7.11.6A.
- 7.11.8. A Market Participant or Network Operator is not required to comply with clause 7.11.7 if such compliance would endanger the safety of any person, damage equipment, or breach any applicable law.
- 7.11.9. Market Participants, Network Operators and the IMO must inform System Management as soon as practicable if they become aware of any circumstances that might reasonably be expected to result in System Management issuing a Dispatch Advisory.

#### 7.12. Status Reports

- 7.12.1. System Management must provide a report to the IMO once every three months on the performance of the market with respect to the dispatch process. This report must include details of:
  - (a) the incidence and extent of issuance of Dispatch Instructions;
  - (b) the incidence and extent of non-compliance with Dispatch Instructions;
  - (c) the incidence and extent of transmission constraints;
  - (d) the incidence and extent of shortfalls in Ancillary Services, involuntary curtailment of load, High Risk Operating States and Emergency Operating States, together with:
    - a summary of the circumstances that caused each such incident;
       and
    - ii. a summary of the actions that System Management took in response to the incident in each case; and

- (e) the incidence of any Equipment Test approved in accordance with clause 3.21AA, including the date the Equipment Test occurred and the Facility details.
- 7.12.2. The IMO must publish the report described in clause 7.12.1 after removing any information that cannot be made public under these Market Rules or which it considers should not be made public.

# **Settlement and Monitoring Data**

## 7.13. Settlement and Monitoring Data

- 7.13.1. System Management must provide the IMO with the following data for a Trading Day by noon on the first Business Day following the day on which the Trading Day ends:
  - (a) the Operational System Load Estimate in each Trading Interval in the Trading Day;
  - (b) Load Forecasts prepared by System Management in accordance with clause 7.2.1(b);
  - (c) a schedule of all of the Dispatch Instructions other than instructions with respect to Registered Facilities to which clauses 3.21A.14 or 4.25.10 apply, that System Management issued for each Trading Interval in the Trading Day by Market Participant and Facility, including the information specified in clause 7.7.3, or as agreed between the IMO and System Management;
  - (cA) a schedule of the MWh output of each generating system monitored by System Management's SCADA system for each Trading Interval of the Trading Day;
  - (cB) the maximum daily ambient temperature at the site of each generating system monitored by System Management's SCADA system for the Trading Day;
  - (d) a description of the reasons for each Dispatch Instruction issued, including a flag indicating where a Dispatch Instruction was issued in connection with:
    - i. any Ancillary Service Contract;
    - ii. any Balancing Support Contract;
    - iii. any Network Control Service Contract;
    - iv. any test of equipment allowed under these Market Rules; or
    - v. any failure of an Electricity Generation Corporation Facility to follow the scheduling and dispatch procedures relating to clause 7.6A;

- (dA) The MWh energy dispatched under a Balancing Support Contract for each Trading Interval in the Trading Day by Facility;
- (dB) The MWh quantity by which the Facility was instructed by System Management to increase its output or reduce its consumption under a Network Control Service Contract for each Trading Interval in the Trading Day by Facility;
- (e) [Blank]
- (eA) details of notifications received by System Management in accordance with clause 7.5.4;
- (eB) the estimated decrease, in MWh, in the output of each Non-Scheduled Generator, by Trading Interval, as a result of System Management Dispatch Instructions, as determined in accordance with clause 7.7.5B;
- (eC) the required decrease, in MWh, in the consumption of each Demand Side Programme, by Trading Interval, as a result of System Management Dispatch Instructions. This is to be used in settlement as the quantity described in clause 6.17.6(d)(i)(2).
- (f) [Blank]
- (g) details of the instructions provided to:
  - Demand Side Programmes that have Reserve Capacity Obligations; and
  - ii. providers of Supplementary Capacity;
  - on the Trading Day; and
- (h) the identity of the Facilities that were subject to a Commissioning Test, a test of Reserve Capacity or an Equipment Test for each Trading Interval of the Trading Day.
- 7.13.1A. System Management must provide the IMO with the following data for a Trading Day by noon on the fifteenth Business Day following the day on which the Trading Day ends:
  - (a) the MWh quantity of non-compliance by the Electricity Generation Corporation by Trading Interval;
  - (b) the schedule of all Planned Outages, Forced Outages and Consequential Outages relating to each Trading Interval in the Trading Day by Market Participant and Facility;
- 7.13.1B. If System Management advises the IMO that it has been prevented from completing the relevant processes that enable the provision of the data described in clause 7.13.1, the IMO may extend the timeline prescribed in clause 7.13.1, subject to any such extension not resulting in a delay of that timeline of more than

two business days, and must advise System Management of any such extension as soon as practicable.

- 7.13.1C The IMO may request, and System Management must provide, within 10 Business Days of receipt of a request from the IMO:
  - (a) for each Facility, all information made available to System Management under the Power System Operation Procedure developed under clause 7.7.5A;
  - (b) an estimate of the total quantity of energy not served (in MWh) due to involuntary load shedding (manual and automatic);
  - (c) an estimate of the reduction in energy consumption (in MWh) of any Interruptible Loads in accordance with the terms of an Ancillary Service Contract;
  - (d) a schedule of all instructions provided to the Electricity Generation Corporation's Non-Scheduled Generators to deviate from the Dispatch Plan or change their commitment or output in accordance with clause 7.6A.3; and
  - (e) an estimate of the decrease in the output (in MWh) of each Electricity Generation Corporation Non-Scheduled Generator as a result of an instruction from System Management to deviate from the Dispatch Plan or change their commitment or output in accordance with clause 7.6A.3(a),

for each Trading Interval during the time period specified by the IMO in its request.

- 7.13.2. System Management must maintain systems capable of providing the data described in clause 10.5.1(y) to the Market Web Site as soon as practicable following the completion of a Trading Interval.
- 7.13.3 System Management must document in the Power System Operation Procedure the procedure to be followed in providing settlement and monitoring data to the IMO. System Management and Rule Participants must comply with that documented Market Procedure.

# 7A. Balancing Market

## 7A.1. Balancing Market

- 7A.1.2. The IMO must determine the Balancing Market Commencement Day.
- 7A.1.16. With effect on and from the Trading Interval commencing at 8:00 AM on the Balancing Market Commencement Day, the IMO must determine a point in time immediately before the commencement of a Trading Interval for the purpose of setting the Balancing Gate Closure. The point in time must be no shorter than two hours and no longer than six hours before the commencement of a Trading Interval and must be published on the Market Web Site.

The remainder of this chapter will commence on the Balancing Market Commencment Day, for more information please refer to RC\_2011\_10.

# 8 Wholesale Market Metering

# **Metering Data Agents**

#### 8.1. Metering Data Agents

- 8.1.1. There must be a Metering Data Agent for each Network.
- 8.1.2 Subject to clause 8.1.4, the Network Operator is also the Metering Data Agent for any Network registered by that Network Operator.
- 8.1.3. A Metering Data Agent must operate to the relevant Metering Protocol.
- 8.1.4. If the Network Operator in respect of a Network notifies the IMO and the Network business unit of the Electricity Network Corporation that it does not wish to be the Metering Data Agent for a Network registered by that Network Operator, the Network business unit of the Electricity Network Corporation will be the Metering Data Agent for that relevant Network.

### 8.2. Duties of a Metering Data Agent

- 8.2.1. A Metering Data Agent must:
  - (a) keep the Meter Registry updated in accordance with clause 8.3; and
  - (b) provide metering data to the IMO in accordance with clause 8.4.

# **Meter Registry**

#### 8.3. Meter Registry

- 8.3.1. Each Metering Data Agent must maintain a separate Meter Registry for each Network it serves. At a minimum, the Meter Registry for a Network must:
  - (a) record each meter connected to the Network;
  - record the Market Participant(s) whose generation or consumption is measured by the meter;
  - facilitate changes to the identity of the Market Participant(s) whose generation or consumption is measured by a meter as of a specified time;
  - (d) record how metered quantities are to be allocated between Market Participants if more than one Market Participant's generation or consumption is measured by that meter.
- 8.3.2. In processing a Facility registration application under clause 2.31, the IMO must notify the applicable Metering Data Agent that it requires confirmation that all Meter Registry information associated with that application is correct.

- 8.3.3. A Metering Data Agent must within five Business Days from the day of being notified by the IMO in accordance with clause 8.3.2 confirm the Meter Registry information.
- 8.3.4 If the IMO accepts a Facility registration or Facility deregistration, it must notify the Metering Data Agent for the relevant Network and the Metering Data Agent must, within five Business Days, ensure that the Meter Registry is adjusted accordingly.
- 8.3.5. A Metering Data Agent must notify the IMO of any changes to the identities of the Market Participants whose supply or consumption is measured by a meter not less than 10 Business Days prior to the Meter Data Agent making a Meter Data Submission that reflects the changed metering arrangements.
- 8.3.6. The IMO must provide a Metering Data Agent with confirmation of a notification made in accordance with clause 8.3.5 within one Business Day.
- 8.3.7. If a Metering Data Agent fails to receive a confirmation of receipt in accordance with clause 8.3.6 it must contact the IMO within one Business Day to appraise the IMO of the failure of the IMO to provide confirmation of receipt and, if necessary, to make alternative arrangements for the submission of the information.

## **Meter Data Submissions**

#### 8.4. Meter Data Submission

- 8.4.1. A Metering Data Agent must provide Meter Data Submissions to the IMO in accordance with the times specified in clauses 9.16.2(a) and 9.16.3.
- 8.4.2. A Meter Data Submission must be in the format described in clause 8.6.
- 8.4.3. A Meter Data Submission must be made using the Settlement Submission System.
- 8.4.4. Upon receipt of a Meter Data Submission, the IMO must provide a Metering Data Agent with confirmation of receipt of a Meter Data Submission made in accordance with clause 8.4.1 within one hour.
- 8.4.5. If a Metering Data Agent fails to receive confirmation of receipt of a Meter Data Submission in accordance with clause 8.4.4, it must contact the IMO by telephone within one hour of failing to receive confirmation in accordance with clause 8.4.4 to appraise the IMO of the failure of the IMO to provide confirmation of receipt and, if necessary to make alternative arrangements for the submission of the information.

### 8.5. Notices of Disagreement and Disputed Meter Data

- 8.5.1. In the event of a Notice of Disagreement or Notice of Dispute that relates to meter data, the IMO must notify the Metering Data Agent responsible for that data of the Notice of Disagreement or Notice of Dispute.
- 8.5.2. A Metering Data Agent must respond to the notification described in clause 8.5.1 in accordance with the Metering Protocol referred to in clause 8.1.3 and must include any revised meter data in the first Meter Data Submission made to the IMO following any correction of the meter data.

#### 8.6. Format of Meter Data Submissions

- 8.6.1. A Meter Data Submission must comprise:
  - (a) the identity of the Metering Data Agent;
  - (b) the Trading Month to which the meter data relates;
  - (c) for each interval meter and each Trading Interval in the Trading Month described in (b):
    - i. the identity of the meter;
    - ii. the MWh quantity measured by the meter; and
    - iii. whether the quantity described in (ii) is based on an actual meter reading or an estimate, and if based on an estimate, the applicable code describing the reason for the estimate;
  - (d) [Blank]; and
  - (e) meter adjustments that stem from actual meter data becoming available or from the resolution of a dispute concerning meter data ("Meter Dispute") in accordance with the dispute resolution process in the applicable Metering Protocol, including:
    - for each interval meter and each Trading Interval in the calendar month to which a Meter Dispute has resulted in changes to meter data:
      - 1. the MWh quantity for that meter;
      - whether the quantity described in paragraph (1) is based on an actual meter reading or an estimate, and if based on an estimate, the applicable code describing the reason for the estimate; and
      - 3. the applicable code describing the reason for the change in the MWh quantity relative to the previously stated value.
  - (f) the number of non-interval or accumulation meters that existed at the end of the Trading Month to which the meter data relates;

- (g) the number of new non-interval or accumulation meters connected during the Trading Month to which the meter data relates; and
- (h) the number of non-interval or accumulation meters abolished during the Trading Month to which the meter data relates.

#### 8.6.2. The IMO must document:

- (a) the format of Meter Data Submissions;
- (b) [Blank]

in the Settlement Procedure, and Metering Data Agents must comply with that documented Market Procedure when developing and submitting Meter Data Submissions.

## **Metering Protocol Requirements**

## 8.7. Metering Protocol Requirements

- 8.7.1. A Metering Data Agent must operate in accordance with a Metering Protocol. As a minimum a Metering Protocol must prescribe:
  - (a) that the Metering Data Agent maintains a Meter Registry tracking a unique identifying number for each meter and the location of that meter, and indicating which Market Participant, if any, is associated with that meter;
  - (b) that interval meter data is recorded for a 30 minute period starting on the hour and on the half-hour;
  - (c) a process for replacing missing or inaccurate metering data with estimated data to be included in Meter Data Submissions;
  - (d) a process for addressing metering data errors stemming from errors in meter reading, failure to read a meter and falsification;
  - (e) a dispute resolution process pertaining to actions taken in accordance with that Metering Protocol; and
  - (f) a process for modification of the Metering Protocol in the event of changes to the Market Rules.

## **Support of Calculations**

#### 8.8. Support of Calculations

8.8.1. Each Metering Data Agent must provide to the IMO within five Business Days of being requested, any of the meter information held by the Metering Data Agent that is required by the IMO for the purposes of these Market Rules.

# 9 Settlement

## Introduction

#### 9.1. Conventions

- 9.1.1. Settlement is to be based on whole Trading Days, though partial Trading Days are to be facilitated on the first and last day of a financial year and at the commencement of the market. For this purpose, the IMO may declare that part of a Trading Day is to be treated as if that part was a full Trading Day by notice published on the Market Web Site.
- 9.1.2. With respect to the treatment of GST:
  - (a) all prices, fees and other charges under these Market Rules (other than under this clause 9.1.2) are exclusive of GST;
  - (b) in this clause 9.1.2, "GST", "GST group", "input tax credit", "member", "recipient created tax invoice", "representative member", "supply", "tax invoice" and "taxable supply" each have the meaning given to the relevant term in the legislation under which GST is imposed;
  - (c) where a Rule Participant makes a taxable supply to another Rule
    Participant or person under these Market Rules, the other Rule Participant
    or person must also pay the first Rule Participant making the supply an
    additional amount equal to the GST payable in respect of that supply;
  - (d) the IMO must include in Settlement Statements and Invoices issued under these Market Rules the additional amounts contemplated by paragraph (c);
  - (e) Rule Participants must, if requested by the IMO, do everything necessary (including the entering into of recipient created tax invoice agreements) to enable the IMO to issue valid tax invoices, recipient created tax invoices and adjustment notes in respect of all taxable supplies made by or to the IMO under these Market Rules;
  - (f) however, if the additional amount paid or payable to a Rule Participant or another person under this clause 9.1.2 in respect of a taxable supply differs from the actual amount of GST payable by the Rule Participant under the relevant legislation in respect of the relevant supply, then adjustments must be made under clause 9.21 so as to ensure the additional amount paid under this clause in respect of the supply is equal to the actual amount of GST payable under the relevant legislation in respect of the supply;
  - (g) if the IMO determines that:

- i. a party is entitled to payment of any costs or expenses by way of reimbursement or indemnity; or
- ii. a price, fee or other charge payable under these Market Rules (other than Market Fees, System Operation Fees and Regulator Fees) is calculated with reference to a cost or expense incurred by a party,

then the payment or cost or expense (as the case may be) must exclude any part of the cost or expense which is attributable to GST for which the party (or a representative member of any GST group of which the party is a member) is entitled to an input tax credit.

- 9.1.3. Where these Market Rules indicate interest is payable on an amount, interest accrues daily at the Bank Bill Rate from (and including) the date that payment was due up to (but excluding) the date of payment, or in the case of an adjusted Settlement Statement provided under clause 9.19 from (and including) the payment due date for the Invoice issued for the original Settlement Statement up to (but excluding) the actual date of payment for the Invoice issued for the adjusted Settlement Statement.
- 9.1.4. Except where otherwise stated, the IMO will perform all calculations described in this chapter.

#### 9.2. Settlement Procedure

9.2.1. The IMO must document the settlement process, including the application of taxes and interest, in the Settlement Procedure, and the IMO and Market Participants must follow that documented Market Procedure.

#### **Settlement Data**

#### 9.3. Data Collection

- 9.3.1. The following information is to be used by the IMO in performing its settlement obligations:
  - (a) the Ancillary Service, and outage compensation settlement data described in clause 3.22;
  - (b) the Reserve Capacity settlement data described in clause 4.29;
  - (c) the Network Control Service settlement data described in clause 5.9; and
  - (d) the Energy Market Settlement data described in clause 6.21.
- 9.3.2. Metering Data Agents must provide to the Settlement System, settlement ready metering data in accordance with Chapter 8.

- 9.3.3. The IMO must determine the Metered Schedule for each of the following Facilities for each Trading Interval in accordance with clause 9.3.4:
  - (a) Non-Dispatchable Loads;
  - (b) Interruptible Loads;
  - (c) Dispatchable Loads;
  - (d) Scheduled Generators; and
  - (e) Non-Scheduled Generators.
- 9.3.4. Subject to clause 2.30B.10, the Metered Schedule for a Trading Interval for each of the following Facilities:
  - (a) Non-Dispatchable Loads, excluding those Non-Dispatchable Loads referred to in clause 9.3.4A;
  - (b) Interruptible Loads;
  - (c) Dispatachable Loads;
  - (d) Scheduled Generators; and
  - (e) Non-Scheduled Generators,

is the net quantity of energy generated and sent out into the relevant Network or consumed by the Facility during that Trading Interval, Loss Factor adjusted to the Reference Node, and determined from Meter Data Submissions received by the IMO in accordance with clause 8.4 or SCADA data received from System Management in accordance with clause 7.13.1(cA) where interval meter data is not available.

- 9.3.4A. The IMO must determine a single Metered Schedule for a Trading Interval for those Non-Dispatchable Loads without interval meters or with meters not read as interval meters that are served by the Electricity Retail Corporation where:
  - (a) the Metered Schedule equals the Notional Wholesale Meter value for that Trading Interval;
  - (b) the Notional Wholesale Meter value for a Trading Interval equals negative one multiplied by:
    - the sum of the Metered Schedules with positive quantities for that Trading Interval; plus
    - ii. the sum of the Metered Schedules with negative quantities for that Trading Interval;

where the Metered Schedules referred to in (i) and (ii) exclude the Metered Schedule for the Notional Wholesale Meter.

- 9.3.5 For the purpose of clauses 9.3.4 and 9.3.4A, a quantity of energy generated and sent out into the relevant Network has a positive value and a quantity of energy consumed has a negative value.
- 9.3.6. Market Participants may provide the Capacity Credit Allocation Submissions described in clause 9.4. to the IMO.
- 9.3.7. The IMO must determine the Consumption\_Share(p,m) for Market Participant p in each Trading Month m, to equal
  - (a) the Market Participant's contributing quantity; divided by
  - (b) the total contributing quantity of all Market Participants,

where the contributing quantity for a Market Participant for Trading Month m is the sum of the Metered Schedules for the Non-Dispatchable Loads, Interruptible Loads and Dispatchable Loads registered to the Market Participant for all Trading Intervals during Trading Month m.

## 9.4. Capacity Credit Allocation Process

- 9.4.1. A Market Participant holding Capacity Credits may make a single Capacity Credit Allocation Submission applicable for a full Trading Month to the IMO between the dates and times specified in clauses 9.16.2(b)(i) and 9.16.2(b)(ii).
- 9.4.2. The IMO must prescribe a Capacity Credit Allocation Submission form and publish it on the Market Web Site.
- 9.4.3. A Market Participant making a Capacity Credit Allocation Submission must provide to the IMO the information specified in clause 9.5.1 using the form prescribed by the IMO and the method prescribed in the Settlement Procedure.
- 9.4.4. By making a Capacity Credit Allocation Submission, a Market Participant acknowledges that:
  - (a) it is acting with the permission of all affected Market Participants; and
  - (b) the IMO has the right to reverse any Capacity Credit Allocations if any affected Market Participant, other than the submitting Market Participant, objects to the allocation prior to the deadline for disputes in relation to Non-STEM Settlement Statements.
- 9.4.5. As soon as practicable, and not later than noon on the Business Day following receipt of a Capacity Credit Allocation Submission, the IMO must notify the submitting Market Participant:
  - (a) that the Capacity Credit Allocation Submission has been received; and
  - (b) whether the Capacity Credit Allocation Submission has been accepted or rejected, including reasons for rejecting the submission (if appropriate).

- 9.4.6. If a submitting Market Participant does not receive a notice in accordance with clause 9.4.5, or is notified that the submission is rejected, then the submitting Market Participant must arrange with the IMO to provide a valid Capacity Credit Allocation Submission, by mutually agreed means, not later than the date and time specified in clause 9.16.2(b)(ii).
- 9.4.7. The IMO must confirm receipt, by telephone, of a Capacity Credit Allocation Submission from a Market Participant made in accordance with clause 9.4.6 within 30 minutes of receiving the submission, indicating the matters referred to in paragraphs 9.4.5(a) and (b).
- 9.4.8. The IMO must accept a Capacity Credit Allocation Submission unless the submission is not consistent with the requirements of clause 9.5.
- 9.4.9. Once all Capacity Credit Allocation Submissions have been received by the IMO it must identify each Market Participant which has had more Capacity Credits allocated to it than are required to cover its Individual Reserve Capacity Requirements.
- 9.4.10. The IMO must, by the time and date specified in clause 9.16.2(b)(iii) contact any Market Participant referred to in clause 9.4.9 and request the Market Participant to nominate modifications to the total number of Capacity Credits allocated to it under each individual Capacity Credit Allocation Submission to ensure that the total Capacity Credits allocated do not exceed the Market Participant's Individual Reserve Capacity Requirement.
- 9.4.11. A Market Participant requested to nominate modifications in accordance with clause 9.4.10 must respond by the time and date specified in clause 9.16.2(b)(iv).
- 9.4.12. If a Market Participant requested to nominate modifications in accordance with clause 9.4.10 does not comply with clause 9.4.11, all Capacity Credit Allocation Submissions, insofar as they allocate Capacity Credits to that Market Participant, will be revoked and will be disregarded by the IMO.
- 9.4.13. By the time and date specified in clause 9.16.2(b)(v), the IMO must notify each Market Participant from which the IMO has received a Capacity Credit Allocation Submission which has been accepted of the following information (for each Market Participant allocated Capacity Credits in the submission):
  - (a) the Capacity Credits allocations accepted as submitted; and
  - (b) if the IMO has contacted the Market Participant under clause 9.4.10:
    - i. the Capacity Credit allocations that have been reduced in accordance with responses made by that Market Participant under clause 9.4.11, where the IMO must allocate reductions between the sets of Capacity Credits specified in clause 9.5.1(c) so as to maximise the settlement payments to be made by the IMO for the

- unallocated Capacity Credits held by the submitting Market Participant.
- ii. the Capacity Credit allocations that have been revoked in accordance with clause 9.4.12 due to the IMO not receiving a response from a Market Participant.

#### 9.5. Format of Capacity Credit Allocation Submissions

- 9.5.1. A Capacity Credit Allocation Submission must set out:
  - (a) the identity of the submitting Market Participant, which must be the holder of Capacity Credits:
  - (b) the identity of each Market Participant to which the Capacity Credits are to be allocated for settlement purposes, which may include the submitting Market Participant;
  - (c) the number of Capacity Credits to be allocated for settlement purposes to each other Market Participant from each of the following sets:
    - i. the set consisting of Capacity Credits held by the submitting Market Participant that are covered by Special Price Arrangements but which are allowed to be traded bilaterally under clause 4.14.9, where the total number of Capacity Credits in this set is the number of Capacity Credits specified under clause 4.29.3(d)(iii), less the number of Capacity Credits specified under clause 4.29.3(d)(ii), for the Market Participant for the Trading Month; and
    - ii. the set consisting of Capacity Credits held by the submitting Market Participant which are allowed to be traded bilaterally under clause 4.14.9 that are not covered by Special Price Arrangements, as specified under clause 4.29.3(d)(iv) for the Market Participant for the Trading Month.
- 9.5.2. A Capacity Credit Allocation Submission may allocate part of a Capacity Credit provided that the number of Capacity Credits allocated is specified to a precision of 0.005 MW.
- 9.5.3. A Capacity Credit Allocation Submission will only be accepted by the IMO if:
  - (a) the total number of Capacity Credits allocated in accordance with clause 9.5.1(c)(i) for a Trading Month does not exceed the number of Capacity Credits specified under clause 4.29.3(d)(iii), less the number of Capacity Credits specified under clause 4.29.3(d)(ii), for the Market Participant for the Trading Month; and
  - (b) the total number of Capacity Credits allocated in accordance with clause 9.5.1(c)(ii) for a Trading Month does not exceed the number of Capacity

Credits specified under clause 4.29.3(d)(iv) for the Market Participant for the Trading Month.

## **Settlement Calculations**

#### 9.6. STEM Settlement Calculations for a Trading Week

9.6.1. The STEM settlement amount for the IMO to Market Participant p for Trading Week w is:

STEMSA(p,w) = Sum( $d \in D, t \in T$ , STEM Price(d,t) × STEM Quantity(p,d,t) × SSF(d,t));

#### Where

STEM Price(d,t) is the STEM Clearing Price for Trading Interval t of Trading Day d within Trading Week w;

STEM Quantity(p,d,t) is the quantity of electricity purchased from, or sold to, the IMO through the STEM by Market Participant p for Trading Interval t of Trading Day d where a quantity sold through the STEM has a positive value, and a quantity purchased through the STEM has a negative value;

SSF(d,t) is the STEM suspension flag where this has a value of zero if the STEM was suspended for Trading Interval t of Trading Day D and a value of one otherwise;

D is the set of all Trading Days in Trading Week w where "d" is used to refer to a member of that set: and

T is the set of all Trading Intervals in Trading Day d, where "t" is used to refer to a member of that set.

#### 9.7. The Reserve Capacity Settlement Calculations for a Trading Month

9.7.1. The Reserve Capacity settlement amount for Market Participant p for Trading Month m is:

```
RCSA(p,m) =
```

Monthly Reserve Capacity Price(m)  $\times$  (CC NSPA(p,m)

 $-Sum(q \in P,CC\_ANSPA(p,q,m)))$ 

- + Sum( $a \in A$ , Monthly Special Price(p,m,a) × (CC\_SPA(p,m,a)
  - $-Sum(q \in P,CC\_ASPA(p,q,m,a))))$
- Capacity Cost Refund(p,m)
- Intermittent Load Refund(p,m)
- + Supplementary Capacity Payment(p,m)
- Targeted Reserve Capacity Cost(m) × Shortfall Share(p,m)
- Shared Reserve Capacity Cost(m) × Capacity Share(p,m)
- + Capacity\_LF(m) × Capacity Share(p,m)

Where

```
\begin{split} \text{Shortfall Share}(p,m) = \\ 0, \text{ if } Sum(n \in P, (IRCR(n,m) - Sum(q \in P, CC\_ANSPA(q,n,m) \\ &\quad + Sum(a \in A, CC\_ASPA(q,n,m,a))))) = 0 \\ \text{otherwise}, \\ (IRCR(p,m) - Sum(q \in P, CC\_ANSPA(q,p,m) \\ &\quad + Sum(a \in A, CC\_ASPA(q,p,m,a)))) / \\ Sum(n \in P, (IRCR(n,m) - Sum(q, CC\_ANSPA(q,n,m) \\ &\quad + Sum(a \in A, CC\_ASPA(q,n,m,a))))) \end{split}
```

Capacity Share(p,m) =  $IRCR(p,m) / Sum(n \in P, IRCR(n,m))$ 

Monthly Reserve Capacity Price(m) is the Monthly Reserve Capacity Price which applies for Trading Day d defined in accordance with clause 4.29.1;

CC\_NSPA(p,m) is the number of Capacity Credits held by Market Participant p in Trading Month m that are not covered by Special Price Arrangements;

CC\_ANSPA(p,q,m) is the number of Capacity Credits held by Market Participant p in Trading Month m that are not covered by Special Price Arrangements and which are allocated to another Market Participant q for Trading Month m under clauses 9.4 and 9.5;

A is the set of all Special Price Arrangements associated with a Facility where "a" is used to refer to a member of that set;

P is the set of all Market Participants, where "p", "n", and "q" are all used to refer to a member of that set;

Monthly Special Price(p,m,a) is the Monthly Special Reserve Capacity Price for Special Price Arrangement for Market Participant p defined in accordance with clause 4.29.2 which applies for Trading Day d;

CC\_SPA(p,m,a) is the number of Capacity Credits held by Market Participant p in Trading Month m that are covered by Special Price Arrangement a;

CC\_ASPA(p,q,m,a) is the number of Capacity Credits held by Market Participant p in Trading Month m that are covered by Special Price Arrangement a and which are allocated to Market Participant q for Trading Month m under clauses 9.4 and 9.5;

IRCR(p,m) is the Individual Reserve Capacity Requirement for Market Participant p and Trading Month m expressed in units of MW;

Capacity Cost Refund(p,m) is the Capacity Cost Refund payable to the IMO by Market Participant p in respect of that Market Participant's Capacity Credits for Trading Month m, as specified in clause 4.29.3(d)(vi):

Intermittent Load Refund(p,m) is the sum over all of Market Participant p's Intermittent Loads of the Intermittent Load Refund payable to the IMO by

Market Participant p in respect of each of its Intermittent Loads for Trading Month m, as specified in clause 4.28A.1;

Supplementary Capacity Payment(p,m) is the net payment to be made by IMO under a Supplementary Capacity Contract to Market Participant p for Trading Month m, as specified by the IMO in accordance with clause 4.29.3(e)(i);

Targeted Reserve Capacity Cost(m) is the cost of Reserve Capacity to be shared amongst those Market Customers who have not had sufficient Capacity Credits allocated to them for Trading Month m where this cost is specified for Trading Month m under clause 4.29.3(b);

Shared Reserve Capacity Cost(m) is the cost of Reserve Capacity to be shared amongst all Market Customers for Trading Month m where this cost is specified for Trading Month m under clause 4.29.3(c);

Capacity\_LF(m) is the total Load Following service capacity payment cost for Trading Month m as specified by IMO under clause 3.22.1(a).

9.7.2. The net payment to be made by IMO under a Supplementary Capacity Contract to a person who is not a Market Participant will be settled by the IMO in accordance with contract conditions which are not required to be consistent with other settlement processes or prudential processes under these Market Rules.

## 9.8. The Balancing Settlement Calculations for a Trading Day

9.8.1. The balancing settlement amount for Market Participant p for Trading Interval t of Trading Day d is:

```
\begin{aligned} \mathsf{BSA}(\mathsf{p},\mathsf{d},\mathsf{t}) &= \mathsf{MCAP}(\mathsf{d},\mathsf{t}) \times \mathsf{ADQ}(\mathsf{p},\mathsf{d},\mathsf{t}) + \mathsf{UDAP}(\mathsf{d},\mathsf{t}) \times \mathsf{UUDQ}(\mathsf{p},\mathsf{d},\mathsf{t}) \\ &+ \mathsf{DDAP}(\mathsf{d},\mathsf{t}) \times \mathsf{DUDQ}(\mathsf{p},\mathsf{d},\mathsf{t}) + \mathsf{DIP}(\mathsf{p},\mathsf{d},\mathsf{t}) \end{aligned}
```

Where

ADQ(p,d,t), is the Authorised Deviation Quantity for Market Participant p for Trading Interval t of Trading Day d calculated in accordance with clause 6.17.2;

UUDQ(p,d,t) is the Upward Unauthorised Deviation Quantity for Market Participant p for Trading Interval t of Trading Day d calculated in accordance with clause 6.17.3;

DUDQ(p,d,t) is the Downward Unauthorised Deviation Quantity, for Market Participant p for Trading Interval t of Trading Day d calculated in accordance with clause 6.17.4;

MCAP(d,t) is the Marginal Cost Administered Price for Trading Interval t of Trading Day d calculated in accordance with clause 6.14.2;

UDAP(d,t) is the Upward Deviation Administered Price for Trading Interval t of Trading Day d calculated in accordance with clause 6.14.5;

DDAP(d,t) is the Downward Deviation Administered Price for Trading Interval t of Trading Day d calculated in accordance with clause 6.14.6;

DIP(d,t) is the Dispatch Instruction Payment for Market Participant p for Trading Interval t of Trading Day d calculated in accordance with clause 6.17.6.

#### 9.9. The Ancillary Service Settlement Calculations for a Trading Month

9.9.1. The Ancillary Service settlement amount for Market Participant p for Trading Month m is:

ASSA(p,m) = Electricity Generation Corporation AS Provider Payment(p,m)

- + ASP\_Payment(p,m)
- Load\_Following\_Share(p,m)
- × (Capacity\_LF(m) + Availability\_Cost\_LF(m))
- Reserve Cost Share(p,m)
- Consumption\_Share(p,m) × Cost\_LRD(m)

#### Where

the Electricity Generation Corporation AS Provider Payment(p,m) =
0 if Market Participant p is not the Electricity Generation Corporation and
(Availability\_Cost\_R(m) + Availability\_Cost\_LF(m) + Cost\_LRD(m))
- ASP Balance Payment(m) otherwise;

ASP\_Payment(p,m) is the total payment to Market Participant p for Contracted Ancillary Services in Trading Month m, determined in accordance with clause 9.9.3;

ASP\_Balance\_Payment(m) is the amount determined in accordance with clause 9.9.3A for Trading Month m;

Load\_Following\_Share(p,m) is the share of the Cost\_LF(m) allocated to Market Participant p in Trading Month m, where this is to be determined by the IMO using the methodology described in clause 3.14.1;

Reserve Cost Share(p,m) is defined in clause 9.9.2(b);

Consumption\_Share(p,m) is the proportion of consumption associated with Market Participant p for Trading Month m determined by the IMO in accordance with clause 9.3.7;

Capacity\_LF(m) is the total Load Following Service capacity payment cost for Trading Month m as specified by the IMO under clause 3.22.1(a);

Availability\_Cost\_R(m) is the total Spinning Reserve Service availability payment costs, excluding Load Following costs, for Trading Month m, as calculated under clause 9.9.2(c);

Availability\_Cost\_LF(m) is the total Load Following Service availability payment cost for Trading Month m, as calculated under clause 9.9.2(d); and

Cost\_LRD(m) is the total Load Rejection Reserve Service, System Restart Service and Dispatch Support Service payment cost for Trading Month m as specified by the IMO under clause 3.22.1(g).

- 9.9.1A. The Ancillary Service settlement amount for Trading Month m for Rule Participant i where Rule Participant i is not a Market Participant is ASP\_Payment(i,m), determined in accordance with clause 9.9.3.
- 9.9.2. The following terms relate to Ancillary Service availability costs:
  - (a) the total availability cost for Trading Month m:

```
\label{eq:availability_Cost(m) = 0.5 x (Margin_Peak(m) x Sum(t \in Peak, MCAP(t) \\ \times (Capacity_R_Peak(m) - Sum(c \in CAS_SR, ASP_SRQ(c,t))))) \\ + 0.5 \times (Margin_Off-Peak(m) \times Sum(t \in Off-Peak, MCAP(t) \\ \times (Capacity_R_Off-Peak(m) - Sum(c \in CAS_SR, ASP_SRQ(c,t))))) \\ + Sum(c \in CAS_SR, ASP_SRPayment(c,m)) \\ + Sum(c \in CAS_LF, ASP_LFPayment(c,m)) \\ \end{aligned}
```

(b) the Spinning Reserve cost share for Market Participant p, which is a Market Generator, for Trading Month m:

```
Reserve_Cost_Share(p,m) =  0.5 \times (Margin\_Peak(m) \times Sum(t \in Peak,MCAP(t)) \\ \times Reserve\_Share(p,t) \\ \times (Capacity\_R\_Peak(m) - Sum(c \in CAS\_SR,ASP\_SRQ(c,t)) - 0.5 \times LFR(m)))) \\ + 0.5 \times (Margin\_Off-Peak(m) \times Sum(t \in Off-Peak,MCAP(t)) \\ \times Reserve\_Share(p,t) \\ \times (Capacity\_R\_Off-Peak(m) - Sum(c \in CAS\_SR,ASP\_SRQ(c,t)) \\ - 0.5 \times LFR(m)))) \\ + Sum(t \in T, Reserve\_Share(p,t)) \\ \times Sum(c \in CAS\_SR,ASP\_SRPayment(c,m) / TITM))
```

(c) the total Spinning Reserve availability cost for Trading Month m:

```
Availability_Cost_R(m) = Sum(p \in P, Reserve\_Cost\_Share(p,m))
```

(d) the total Load Following availability cost for Trading Month m:

```
Availability_Cost_LF(m) =

Availability Cost(m) - Availability Cost R(m)
```

Where

t denotes a Trading Interval in Trading Month m;

T is the set of Trading Intervals in Trading Month m;

c denotes a Contracted Ancillary Service;

CAS\_SR is the set of Contracted Spinning Reserve Services;

CAS\_LF is the set of Contracted Load Following Services;

P is the set of all Market Participants;

ASP\_SRQ(c,t) is the quantity provided by System Management in accordance with clause 3.22.3(b)(ii) for Contracted Spinning Reserve Service c in Trading Interval t multiplied by 2, in units of MW;

ASP SRPayment(c,m) is defined in clause 9.9.4;

ASP\_LFPayment(c,m) is defined in clause 9.9.4;

TITM is the number of Trading Intervals in Trading Month m (excluding any Trading Intervals prior to Energy Market Commencement);

Reserve\_Share(p,t) is the share of the Spinning Reserve Service payment costs allocated to Market Participant p in Trading Interval t, where this is to be determined by the IMO using the methodology described in clause 3.14.2;

Margin\_Peak(m) is the reserve availability payment margin applying for Peak Trading Intervals for Trading Month m as specified by the IMO under clause 3.22.1(c);

Margin\_Off-Peak(m) is the reserve availability payment margin applying for Off-Peak Trading Intervals for Trading Month m as specified by the IMO under clause 3.22.1(d);

Capacity\_R\_Peak(m) is the capacity necessary to cover the Ancillary Services Requirement for Spinning Reserve for Peak Trading Intervals for Trading Month m as specified by the IMO under clause 3.22.1(e);

Capacity\_R\_Off-Peak(m) is the capacity necessary to cover the Ancillary Services Requirement for Spinning Reserve for Off-Peak Trading Intervals for Trading Month m as specified by the IMO under clause 3.22.1(f);

LFR(m) is the capacity necessary to cover the Ancillary Services Requirement for Load Following for Trading Month m as specified by the IMO under clause 3.22.1(fA);

MCAP(t) is the greater of zero and the Marginal Cost Administered Price for Trading Interval t calculated in accordance with clause 6.14.2;

Peak is the set of Peak Trading Intervals in Trading Month m; and

Off-Peak is the set of Off-Peak Trading Intervals in Trading Month m.

9.9.3. The value of ASP\_Payment(i,m) for Rule Participant i in Trading Month m is the sum of:

- the sum over all Contracted Spinning Reserve Services c provided by Rule Participant i of ASP\_SRPayment(c,m);
- (b) the sum over all Contracted Load Following Services c provided by Rule Participant i of ASP\_LFPayment(c,m);
- (c) the sum over all Contracted Load Rejection Reserve Services c provided by Rule Participant i of ASP\_LRPayment(c,m);
- (d) the sum over all Contracted System Restart Services c provided by Rule Participant i of ASP\_BSPayment(c,m); and
- (e) the sum over all Contracted Dispatch Support Services c provided by Rule Participant i of ASP\_DSPayment(c,m),

where each of the terms ASP\_SRPayment(c,m), ASP\_LFPayment(c,m), ASP\_LRPayment(c,m), ASP\_BSPayment(c,m) and ASP\_DSPayment(c,m) is determined in accordance with clause 9.9.4.

9.9.3A. The value of ASP\_Balance\_Payment(m) for Trading Month m is:

```
ASP_Balance_Payment(m) =
Sum(c∈CAS_SR, ASP_SRPayment(c,m)) +
Sum(c∈CAS_LF, ASP_LFPayment(c,m)) +
Min(Cost_LR(m), Sum(c∈CAS_LR, ASP_LRPayment(c,m))
+ Sum(c∈CAS_BS, ASP_BSPayment(c,m))), +
Sum(c∈CAS_DS, ASP_DSPayment(c,m))
```

#### where

c denotes a Contracted Ancillary Service;

CAS SR is the set of Contracted Spinning Reserve Services;

CAS LF is the set of Contracted Load Following Services:

CAS LR is the set of Contracted Load Rejection Reserve Services;

CAS BS is the set of Contracted System Restart Services;

CAS\_DS is the set of Contracted Dispatch Support Services;

Cost\_LR(m) is the amount specified by the IMO for Trading Month m under clause 3.22.1(g)(i) for Load Rejection Reserve Service and System Restart Service, and Dispatch Support Services except those provided through clause 3.11.8B, and

each of the terms ASP\_SRPayment(c,m), ASP\_LFPayment(c,m), ASP\_LRPayment(c,m), ASP\_BSPayment(c,m) and ASP\_DSPayment(c,m) is determined in accordance with clause 9.9.4.

9.9.3B. The value of Cost LR Shortfall(m) for Trading Month m is:

```
Cost_LR_Shortfall(m) = 
Max(0, Sum(c∈CAS_LR, ASP_LRPayment(c,m))
```

- + Sum(c∈CAS\_BS, ASP\_BSPayment(c,m))
- Cost\_LR(m))

#### where

c denotes a Contracted Ancillary Service;

CAS\_LR is the set of Contracted Load Rejection Reserve Services;

CAS BS is the set of Contracted System Restart Services;

Cost\_LR(m) is the amount specified by the IMO for Trading Month m under clause 3.22.1(g)(i) for Load Rejection Reserve Service and System Restart Service, and Dispatch Support Services except those provided through clause 3.11.8B, and

each of the terms ASP\_LRPayment(c,m) and ASP\_BSPayment(c,m) is determined in accordance with clause 9.9.4.

- 9.9.4. For each Contracted Ancillary Service c, the payment ASP\_SRPayment(c,m) for Spinning Reserve Service, ASP\_LFPayment(c,m) for Load Following Service, ASP\_LRPayment(c,m) for Load Rejection Reserve Service, ASP\_BSPayment(c,m) for System Restart Service or ASP\_DSPayment(c,m) for Dispatch Support Service, as applicable, for Trading Month m is:
  - (a) the applicable monthly dollar value specified by System Management for that Trading Month in accordance with clause 3.22.3(b)(iii)(1); or
  - (b) where no value is specified under clause 9.9.4(a), the product of the applicable price specified in clause 3.22.3(b)(iii)(2) for that Trading Month and the sum over Trading Intervals in that Trading Month of the applicable quantities specified in clause 3.22.3(b)(ii).

# 9.10. The Commitment and Outage Compensation Settlement Calculations for a Trading Month

9.10.1. The Commitment and Outage Compensation settlement amount for Market Participant p for Trading Month m is:

 $COCSA(p,m) = (Com\_Compensation(p,m) + Out\_Compensation(p,m))$ 

- Consumption Share(p,m) × Sum(q, Com Compensation(q,m)
- + Out\_Compensation(q,m))

#### Where

Com\_Compensation(x,m) is the sum over all Trading Days in the Trading Month of the Commitment Compensation calculated for Market Participant x (denoted by either p or q) under clause 6.18.1 of the Trading Month;

Out\_Compensation(x,m) is the Outage Compensation specified for Market Participant x (denoted by either p or q) for the Trading Month under clause 3.22.1(h); and

Consumption\_Share(p,m) is the proportion of consumption associated with Market Participant p for Trading Month m determined by the IMO in accordance with clause 9.3.7.

## 9.10A. Non-Compliance Charge

9.10A.1. The Non-Compliance Charge settlement amount for Market Participant p for Trading Month m is:

If Market Participant p is the Electricity Generation Corporation

$$NCC(p,m) = -Sum(t \in T, CP(t) \times ABS[NCQ(p,t)])$$

Otherwise

$$NCC(p,m) = 0$$

Where

T is the set of all Trading Intervals in Trading Month m, where "t" refers to a member of that set;

CP(t) is the non-compliance cost applicable in Trading Interval t as specified in clause 9.10A.2;

NCQ(p,t) is the MWh quantity of non-compliance for Market Participant p for Trading Interval t as specified by System Management in accordance with clause 7.13.1A(a); and

ABS[NCQ(p,t)] means the mathematical absolute value of NCQ(p,t).

9.10A.2. The value of the non-compliance cost is to equal the Alternative Maximum STEM Price.

## 9.11. The Reconciliation of Settlement Calculations for a Trading Month

9.11.1. The Reconciliation Settlement amount for Market Participant p for Trading Month m is:

 $RSA(p,m) = (-1) \times Consumption\_Share(p,m) \times (Sum(q \in P, d \in D, t \in T, BSA(q,d,t)) + Sum(q \in P, NCC(q,m)) + Cost\_LR\_Shortfall(m))$ 

Where

Consumption\_Share(p,m) is the proportion of consumption associated with Market Participant p for Trading Month m determined by the IMO in accordance with clause 9.3.7:

BSA(q,d,t) is the Balancing Settlement Amount for Market Participant q for Trading Day d and Trading Interval t;

NCC(q,m) is the Non-Compliance Charge settlement amount for Market Participant q for Trading Month m;

Cost\_LR\_Shortfall(m) is determined is accordance with clause 9.9.3B;

P is the set of all Market Participants, where "p" and "q" are both used to refer to a member of that set;

D is the set of all Trading Days in Trading Month m, where "d" is used to refer to a member of that set; and

T is the set of all Trading Intervals in Trading Day d, where "t" refers to a member of that set.

## 9.12. [Blank]

- 9.12.1. [Blank]
- 9.12.2. [Blank]

# 9.13. The Market Participant Fee Settlement Calculations for a Trading Month

9.13.1. The applicable Market Participant Fee settlement amount for Market Participant p for Trading Month m is:

#### Where

Market Fee rate is the charge per MWh for IMO's services determined in accordance with clause 2.24.2 for the year in which Trading Month m falls;

System Operation Fee rate is the charge per MWh for System Management's services determined in accordance with clause 2.24.2 for the year in which Trading Month m falls;

Regulator Fee rate is the charge per MWh for funding the Economic Regulation Authority's activities with respect to the Wholesale Electricity Market determined in accordance with clause 2.24.2 for the year in which Trading Month m falls;

Monthly Participant Load(p,m) =  $(-1) \times Sum(d \in D, t \in T, Metered Load(p,d,t))$ ;

#### where

Metered Load(p,d,t) for a Market Participant p for a Trading Interval t is the sum of the mathematical absolute values of the Metered Schedules for the Non-Dispatchable Loads, Dispatchable Loads and Interruptible Loads, registered to the Market Participant for Trading Interval t; and

Monthly Participant Generation(p,m)

= Sum(d∈D,t∈T, Metered Generation(p,d,t));

where

Metered Generation(p,d,t) for Market Participant p for Trading Interval t is the sum of the mathematical absolute values of the Metered Schedules for Scheduled Generators and Non-Scheduled Generators, registered to the Market Participant for Trading Interval t; and

D is the set of all Trading Days in Trading Month m, where "d" is used to refer to a member of that set;

T is the set of all Trading Intervals in Trading Day d, where "t" is used to refer to a member of that set.

## 9.14. The Net Non-STEM Settlement Amount for a Trading Month

9.14.1. The Net Monthly Non-STEM Settlement amount for the IMO to Market Participant p for Trading Month m is:

$$NMNSSA(p,m) = RCSA(p,m) + Sum(d,BSA(p,d,t)) + ASSA(p,m) + COCSA(p,m) + RSA(p,m) + MPFSA(p,m)$$

9.14.2. [Blank]

#### 9.15. The Service Fee Settlement Amount for a Trading Month

9.15.1 The Service Fee Settlement amount for the IMO to party u in Trading Month m is:

$$RRSA(u,m) = k(u) \times Sum(p \in P, MPFSA(p,m))$$

Where

u indicates a member of the set comprising the IMO, System Management, or the Economic Regulation Authority;

k(u) is the proportionality factor for party u determined in accordance with clause 2.25.4

P is the set of all Market Participants, where "p" is used to refer to a member of that set; and

MPFSA(p,m)) is the Market Participant Fee settlement amount for Market Participant P for Trading Month m.

## **Settlement Statements**

#### 9.16. Settlement Cycle Timelines

- 9.16.1. The settlement cycle timeline for the STEM is:
  - (a) On the first Business Day commencing after the end of a Trading Week, the IMO must issue to each Market Participant participating in the STEM:

- i. a STEM Settlement Statement for each of the Trading Days in the Trading Week; and
- ii. an Invoice for the STEM Settlement Statements described in paragraph (i);
- (b) The STEM Settlement Date is the date upon which transactions covered by a STEM Settlement Statement are settled and is the second Business Day following the date of the Invoice described in paragraph (a)(ii) in relation to the STEM Settlement Statement is issued;
- (c) The STEM Settlement Disagreement Deadline is 5pm on the twentieth Business Day following the date the Invoice described in paragraph (a)(ii) in relation to the STEM Settlement Statement is issued. A Market Participant has until this time to lodge a Notice of Disagreement with the IMO pertaining to any amount included in the relevant STEM Settlement Statement.
- 9.16.2. For all Financial Years other than the first Financial Year of energy market operations, the settlement cycle timeline for settlement of other amounts payable under these Market Rules for all Trading Days within a Financial Year must be published by the IMO at least one calendar month prior to the commencement of that Financial Year. For the first Financial Year of energy market operation, the settlement cycle timeline must be published one calendar month prior to Energy Market Commencement. This settlement cycle timeline must include for each settlement cycle:
  - (a) The Interval Meter Deadline, being the Business Day by which Meter Data Submissions for a Trading Month must be provided to the IMO. This date must be the first Business Day of the second month following the month in which the Trading Month commenced.
  - (b) The Capacity Credit Allocation Submission timeline, including:
    - the earliest date and time at which Capacity Credit Allocation Submissions for a Trading Month can be made, where this is to be a Business Day after the end of the Trading Month to which the Capacity Credit Allocation Submission relates but not less than 10 Business Days prior to the Non-STEM Settlement Statement Date;
    - ii. the latest date and time at which Capacity Credit Allocation Submissions for a Trading Month can be made to the IMO, where this is to be not less than five Business Days prior to the Non-STEM Settlement Statement Date;
    - iii. the time and date by which the IMO must contact any Market
      Participant identified under clause 9.4.9 where this is to be not less
      than four Business Days prior to the Non-STEM Settlement
      Statement Date:

- iv. the time and date by which a Market Participant must respond to any request made by the IMO in accordance with clause 9.4.10 where this is to be not less than two Business Days prior to the Non-STEM Settlement Statement Date; and
- v. the time and date by which the IMO will notify Market Participants from which the IMO has accepted Capacity Credit Allocation Submissions where this is to be not less than two Business Days prior to the Non-STEM Settlement Statement, but later than the time specified in (iv).
- (c) The Non-STEM Settlement Statement Date, being the Business Day by which Non-STEM Settlement Statements for a Trading Month must be issued by the IMO. This date must be not less than three Business Days and not more than five Business Days after the Interval Meter Deadline defined in (a).
- (d) The Invoicing Date being the Business Day by which the IMO must issue Invoices for Non-STEM Settlement Statements for a Trading Month. This date must be the sixth Business Day of the second month following the month in which the Trading Month being settled commenced.
- (e) The Non-STEM Settlement Date being the Business Day on which the transactions covered by a Non-STEM Settlement Statement are settled. This date must be the eighth Business Day of the second month following the month in which the Trading Month being settled commenced.
- (f) The Non-STEM Settlement Disagreement Deadline, being 5:00pm on the twentieth Business Day following the date on which a Non-STEM Settlement Statement was issued. A Market Participant has until this time to lodge a Notice of Disagreement with the IMO in relation to any amount included in the Non-STEM Settlement Statement.
- 9.16.3. The IMO must undertake a process for adjusting settlements ("Adjustment Process") in accordance with clause 9.19. The purpose of the process is to review the relevant Settlement Statements which were issued in the nine months prior to the commencement of the Adjustment Process ("Relevant Settlement Statements") to facilitate corrections resulting from Notices of Disagreement, the resolution of Disputes, revised metering data provided by Metering Data Agents and any revised Market Fee rate, System Operation Fee rate or Regulator Fee rate (as applicable). Adjustments may only be made to Relevant Settlement Statements. Adjustments may not be made to Settlement Statements outside of an Adjustment Process.

#### 9.16.3A A Relevant Settlement Statement is:

(a) Any STEM Settlement Statement or Non-STEM Settlement Statement that requires correction as the result of the resolution of a dispute raised under

- clause 2.19, or where the IMO has indicated under clause 9.20.7 that it will revise information in response to a Notice of Disagreement; and
- (b) Any Non-STEM Settlement Statement for which the Invoicing Date occurred in the month that is three, six or nine months prior to the start of the Adjustment Process, and for which the IMO has received revised metering data from a Metering Data Agent.
- 9.16.4. The following dates for each Adjustment Process to be undertaken during a Financial Year must be published by the IMO at least one calendar month prior to the commencement of that Financial Year or, only in the case of the first Financial Year of energy market operation, one calendar month prior to Energy Market Commencement:
  - (a) the commencement date for the settlement adjustment process,
  - (b) the date by which adjusted STEM Settlement Statements and Non-STEM Settlement Statements will be released, where this must be not less than 20 Business Days after the date set for the purposes of paragraph (a);
  - (c) the date by which Invoices reflecting the adjusted STEM Settlement Statements and Non-STEM Settlement Statements will be released, where this must be not less than two Business Days after the date set for the purposes of paragraph (b);
  - (d) the settlement date for the Invoices described in paragraph (c), where this must be not less than two Business Days after the date set for the purposes of paragraph (c); and
  - (e) subject to clause 9.19.7, the deadline for Notices of Disagreement pertaining to an adjusted Settlement Statement, where this must be not more than 20 Business Days after the adjusted Settlement Statement is released.

#### 9.17. STEM Settlement Statements

- 9.17.1. The IMO must provide STEM Settlement Statements to Market Participants in accordance with the settlement cycle timeline for the STEM.
- 9.17.2. A STEM Settlement Statement must include:
  - (a) details of the Trading Day to which the STEM Settlement Statement relates;
  - (b) details of the Market Participant to which the STEM Settlement Statement relates;
  - (c) for each Trading Interval in the Trading Day to which the STEM Settlement Statement relates:
    - i. the STEM clearing Price;

- ii. the STEM quantity scheduled for that Market Participant; and
- iii. the STEM settlement amount for the Market Participant for the Trading Interval calculated in accordance with clause 9.6.1, where this may be a positive or negative amount.
- (d) the aggregate of the STEM settlement amounts calculated in accordance with clause 9.6.1 for the Market Participant for the Trading Day, where this may be a positive or negative amount;
- (e) whether the statement is an adjusted STEM Settlement Statement and replaces a previously issued STEM Settlement Statement;
- (f) in the case of an adjusted STEM Settlement Statement, details of all adjustments made relative to the first STEM Settlement Statement issued for that Trading Week with an explanation of the reasons for the adjustments;
- (g) any interest applied in accordance with clause 9.1.3; and
- (h) [Blank]
- (i) all applicable taxes.
- 9.17.3. A STEM Market Participant may under clause 9.20 issue a Notice of Disagreement in respect of a STEM Settlement Statement by the STEM Settlement Disagreement Deadline.

#### 9.18. Non-STEM Settlement Statements

- 9.18.1. The IMO must provide Non-STEM Settlement Statements to Market Participants in accordance with the settlement cycle timeline published under clause 9.16.2.
- 9.18.2. The IMO must provide a Non-STEM Settlement Statement to each:
  - (a) Market Generator; and
  - (b) Market Customer.
- 9.18.3. A Non-STEM Settlement Statement must contain the following information:
  - (a) details of the Trading Days covered by the Non-STEM Settlement Statement;
  - (b) the identity of the Market Participant to which the Non-STEM Settlement Statement relates;
  - (c) for each Trading Interval of each Trading Day:
    - i. the Bilateral Contract quantities for each Market Participant;
    - ii. the Net Contract Position of the Market Participant;
    - ii(A). the MWh quantity of energy scheduled from each of the Market Participants Facilities;

- iii. the energy scheduled to be provided in accordance with a Resource Plan issued by, or applicable to, that Market Participant provided under clause 6.5;
- iv. the Dispatch Schedule data for each of the Market Participant's Registered Facilities;
- v. the meter reading for each Registered Facility associated with the Market Participant and to which paragraph (vii) is not applicable;
- vi. in the case of the Electricity Generation Corporation, the total quantity of energy deemed to have been supplied by the Electricity Generation Corporation's Registered Facilities.
- vii. in the case of the Electricity Retail Corporation, Notional Wholesale Meter values;
- viii. the values of MCAP, UDAP, and DDAP;
- viii(A). in the case of the Electricity Generation Corporation the MWh quantity of non-compliance; and
- ix. details of amounts calculated for the Market Participant under clauses 9.7 to 9.14 with respect to:
  - Reserve Capacity settlement;
  - 2. Balancing settlement;
  - 3. Ancillary Services settlement
  - 4. Commitment and outage compensation settlement
  - 4A. Non-Compliance Cost settlement;
  - 5. Reconciliation settlement;
  - 6. [Blank]
  - 7. Fee settlement; and
  - 8. Net Monthly Non-STEM Settlement Amount;
- (cA) details of any Capacity Credits allocated to the Market Participant in a Capacity Credit Allocation Submission made by another Market Participant in accordance with clauses 9.4 and 9.5;
- (cB) details of any Capacity Credits allocated to another Market Participant in a Capacity Credit Allocation Submission made by the Market Participant in accordance with clauses 9.4 and 9.5;
- (cC) details of any reductions in payments in the preceding Trading Month under clause 9.24.3A as a result of a Market Participant being in default;
- (cD) details of any payments to the Market Participant as a result of the IMO recovering funds not paid to the Market Participant in previous Trading

- Months under clause 9.24.3A as a result of a Market Participant being in default;
- (cE) in regard to Default Levy re-allocations, as defined in accordance with clause 9.24.9:
  - i. the total amount of Default Levy paid by that Market Participant during the Financial Year, with supporting calculations;
  - ii. the adjusted allocation of those Default Levies to be paid by that Market Participant, with supporting calculations; and
  - iii. the net adjustment be made;
- (d) whether the statement is an adjusted Non-STEM Settlement Statement and replaces a previously issued Non-STEM Settlement Statement;
- (e) in the case of an adjusted Non-STEM Settlement Statement, details of all adjustments made relative to the first Non-STEM Settlement Statement issued for that Trading Month with an explanation of the reasons for the adjustments;
- (f) any interest applied in accordance with clause 9.1.3;
- (g) the net dollar amount owed by the Market Participant to the IMO for the billing period (i.e. the Trading Days covered by the Non-STEM Settlement Statement) where this may be a positive or negative amount; and
- (h) all applicable taxes.
- 9.18.4. A Market Participant may under clause 9.20 issue a Notice of Disagreement in respect of a Non-STEM Settlement Statement by the Non-STEM Settlement Disagreement Deadline.

#### 9.19. Adjusted Settlement Statements

- 9.19.1. When undertaking an Adjustment Process the IMO must:
  - (a) recalculate the amounts included in the Relevant Settlement Statements in accordance with this Chapter but taking into account any:
    - revised metering data which has been provided by Metering Data Agents;
    - ii. actions arising from a Notice of Disagreement; and
    - iii. the resolution of any Dispute; and
  - (b) provide adjusted STEM Settlement Statements and adjusted Non-STEM Settlement Statements to Rule Participants in accordance with the timeline specified under clause 9.16.4 in respect of the relevant Adjustment Process.

- 9.19.2. Subject to clause 9.19.3, an adjusted Settlement Statement must be in the same form as the original Settlement Statement, but where data is modified between the issuance of the original Settlement Statement and the adjusted Settlement Statement, the IMO must record both values and provide an explanation of the change.
- 9.19.3. An adjusted Settlement Statement must include details of the adjustment to be paid by or to the Market Participant, being:
  - (a) the adjustment which will need to be paid by or to the Market Participant to put the Market Participant in the position it would have been in at the time payment was made in respect of the original Settlement Statement if the adjusted Settlement Statement had been issued as the original Settlement Statement (but taking into account any adjustments previously made under this clause 9.19); plus
  - (b) interest on the amount referred to in paragraph (a) calculated in accordance with clause 9.1.3.
- 9.19.4. In recalculating amounts as part of an Adjustment Process, the IMO may use the version of the settlement calculation software current at the time of the recalculation.
- 9.19.5. A Rule Participant may under clause 9.20 issue a Notice of Disagreement in respect of an adjusted Settlement Statement by the deadline specified under clause 9.16.4(e) in respect of the relevant Adjustment Process.
- 9.19.6. Subject to clause 9.19.7, a Rule Participant may only issue a Notice of Disagreement for an adjusted Settlement Statement with respect to information in the adjusted Settlement Statement which differs from information in the previously released version of that Settlement Statement and which has not been changed in accordance with the resolution of a Notice of Disagreement issued by the relevant Market Participant or a Dispute in relation to which the relevant Market Participant was a Dispute Participant.
- 9.19.7. A Notice of Disagreement with respect to an adjusted Settlement Statement may not be issued more than nine months after the issuance of the original Settlement Statement.

#### 9.20. Notices of Disagreement

- 9.20.1. A Notice of Disagreement must be submitted to the IMO in writing and may be mailed, sent by facsimile, e-mailed or submitted electronically to the IMO.
- 9.20.2. Upon receipt of a Notice of Disagreement, the IMO must confirm receipt within one Business Day.

- 9.20.3. If a Rule Participant fails to receive a confirmation in accordance with clause 9.20.2, then it must contact the IMO within one Business Day of the deadline for receipt of the confirmation described in clause 9.20.2 to appraise the IMO of the failure of the IMO to confirm receipt and, if necessary, to make alternative arrangements for the submission of the Notice of Disagreement.
- 9.20.4. A Notice of Disagreement must include:
  - (a) details of the Settlement Statement and Trading Day to which the Notice of Disagreement relates;
  - (b) details of the Rule Participant to which the Notice of Disagreement relates; and
  - (c) a list of information in the Settlement Statement with which the Market Participant disagrees, including:
    - i. the reason for the disagreement; and
    - ii. what the Rule Participant believes the correct value should be, if this is known.
- 9.20.5. If a Notice of Disagreement relates to information provided to the IMO by a Metering Data Agent or System Management then as soon as practicable, but not later than five Business Days after the IMO confirms receipt of the Notice of Disagreement, the IMO must;
  - (a) notify the Metering Data Agent or System Management (as applicable) of any item of information provided by them to which the Notice of Disagreement relates;
  - (b) notify the Metering Data Agent or System Management (as applicable) of the time and date by which the IMO requires a response, where the date is to be no later than 60 days after the date on which the IMO confirmed receipt of the Notice of Disagreement; and
  - (c) require the Metering Data Agent or System Management (as applicable) to investigate the accuracy of the item and to provide a response by the time specified under paragraph (b):
    - i. reporting on the actions taken to investigate the accuracy of the item; and
    - ii. if applicable, a revised value for the item that the Metering Data Agent or System Management (as applicable) considers to be in compliance with these Market Rules and accurate.
- 9.20.6. If a Notice of Disagreement relates to any item of information developed by the IMO, then:

- (a) if the information relates to values that are inputs to the settlement process the IMO must determine a value for the item, which may be revised value, that it considers to be in compliance with these Market Rules and accurate;
- (b) if the information relates to values that are outputs to the settlement process the IMO must review its settlement calculations and assess whether any errors were made.
- 9.20.7. The IMO must, as soon as practicable, but within three months of confirming receipt of a Notice of Disagreement respond to a Market Participant who issued a Notice of Disagreement indicating the actions (if any) the IMO will take in response to the Notice of Disagreement, where such actions may include:
  - (a) revising information provided to the IMO by Metering Data Agents and System Management (as applicable), and the reasons provided to the IMO for those revisions, in accordance with clause 9.20.5;
  - (b) revising information developed by the IMO and used as an input to the settlement process, and the reason for the revision, as determined in accordance with clause 9.20.6; and
  - (c) whether the IMO considers an error was made in the settlement calculations that has produced an incorrect Settlement Statement.
- 9.20.8. If a Market Participant is not satisfied with the IMO's response to a Notice of Disagreement given by the Market Participant, it may issue a Notice of Dispute to the IMO in accordance with clause 9.21.

#### 9.21. Settlement Disputes

- 9.21.1. A Market Participant may only issue a Notice of Dispute in regard to a Settlement Statement after:
  - (a) having raised a Notice of Disagreement with respect to a Settlement Statement; and
  - (b) the IMO having given a response under clause 9.20.7 in respect of the Notice of Disagreement with which the Market Participant is not satisfied.

# **Invoicing and Payment**

#### 9.22. Invoicing and Payment

- 9.22.1. Invoices must be issued to Rule Participants by the IMO in accordance with the timelines specified under clauses 9.16.1, 9.16.2, and 9.16.4.
- 9.22.2. An Invoice must include:
  - (a) all Settlement Statements (including adjusted Settlement Statements) to which the Invoice relates;

- (b) the net amount to be paid to or by the IMO (including applicable taxes). A positive amount is to be paid by the Market Participant to the IMO and a negative amount is to be paid by the IMO to the Market Participant;
- (c) the payment date and time; and
- (d) any amounts outstanding from overdue payments in relation to previous Settlement Statements.
- 9.22.3. The IMO must maintain an account with an institution that meets either of the requirements specified in clause 2.38.6(a) for the sole purpose of settling market transactions, where this account is to be maintained at a branch of the institution located in Western Australia.
- 9.22.4. The IMO must nominate that an electronic funds transfer ("EFT") facility is to be used by all Market Participants and Rule Participants for the purpose of some or all settlements under these Market Rules.
- 9.22.5. Unless otherwise authorised by the IMO, all Rule Participants must use the EFT facility nominated by the IMO under clause 9.22.4 for the purpose of settlements under these Market Rules and the payment of Market Participant Fees to the IMO to the extent nominated by the IMO.
- 9.22.6. If an Invoice indicates that a Rule Participant owes an amount to the IMO, then the Rule Participant must pay the full amount to the IMO (in cleared funds) by 10 AM on the date specified in the Invoice in accordance with clause 9.16.1(b), 9.16.2(e), and 9.16.4(d) (as applicable), whether or not it disputes the amount indicated to be payable.
- 9.22.7. Late payments by Market Participants accrue interest calculated in accordance with clause 9.1.3.
- 9.22.8. If an Invoice indicates that the IMO owes an amount to a Rule Participant, then the IMO must pay the full amount to the Rule Participant (in cleared funds) by 2 PM on the date specified in the Invoice in accordance with clause 9.16.1(b), 9.16.2(e), and 9.16.4(d) (as applicable), except as provided for in clause 9.24.
- 9.22.9. The IMO must establish, in its books, a separate fund in which it will credit all Service Fee Settlement Amounts payable to the IMO under these Market Rules.
- 9.22.10. The Service Fee Settlement Amount owing to the IMO will be taken to have been paid when it is transferred into the account established by the IMO for the purpose of meeting its obligations under clause 9.22.9.
- 9.22.11. The IMO may apply money from the fund established under clause 9.22.9 to meet the costs incurred in carrying out its functions or obligations under these Market Rules and performing the services contemplated by clause 2.22.1 or in connection with doing so.

## **Default and Settlement in Default Situations**

#### 9.23. Default

- 9.23.1. For the purposes of these Market Rules, a "**Suspension Event**" occurs in relation to a Market Participant if:
  - (a) the Market Participant fails to make a payment under these Market Rules before the time it is due;
  - (b) the Market Participant is in breach of a Prudential Obligation;
  - (c) the IMO has drawn on a Credit Support in relation to the Market Participant and payment under the Credit Support is not received by the IMO within 90 minutes of being requested;
  - it is unlawful for the Market Participant to comply with any of its obligations under the Market Rules or any other obligation owed to the IMO or the Market Participant claims that it is unlawful for it to do so;
  - (e) it is unlawful for a provider of Credit Support in relation to the Market Participant to comply with any of its obligations under the Credit Support or any other obligation owed to the IMO or the provider claims that it is unlawful for it to do so;
  - (f) an authorisation from a government body necessary to enable the Market Participant to carry on a business or activity related to its participation in the Wholesale Electricity Market ceases to be in full force and effect;
  - (g) an authorisation from a government body necessary for the provider of Credit Support in relation to the Market Participant to carry on the business of providing credit support ceases to be in full force and effect;
  - (h) the Market Participant ceases or threatens to cease to carry on its business or a substantial part of its business related to its participation in the Wholesale Electricity Market;
  - the provider of Credit Support in relation to the Market Participant ceases or threatens to cease to carry on its business of providing Credit Support;
  - (j) the Market Participant is insolvent within the meaning of clause 9.23.2;
  - (k) a provider of Credit Support in relation to the Market Participant is insolvent within the meaning of clause 9.23.2;
  - a resolution is passed or any steps are taken to pass a resolution for the winding up or dissolution of the Market Participant or a provider of Credit Support in relation to that Market Participant; or
  - (m) the Market Participant or a provider of Credit Support in relation to the Market Participant is dissolved.
- 9.23.2. A person is insolvent for the purposes of clause 9.23.1 if:

- (a) the person states that it is insolvent or insolvent under administration (each as defined in the Corporations Act) or that it is unable to pay from its own money its debts when they fall due for payment;
- (b) the person is protected from creditors under any statute or enters into an arrangement (including a scheme of arrangement), composition or compromise with, or assignment for the benefit of, all or any class of its creditors or members or a moratorium involving any of them;
- (c) an application or order for winding up or dissolution is made in respect of the person;
- (d) a controller (as defined in the Corporations Act), administrator, provisional liquidator, liquidator, trustee in bankruptcy or person having a similar or analogous function under the laws of any relevant jurisdiction is appointed in respect of the person or any of the person's property (as the case may be);
- (e) the person is taken to be unable to pay its debts when they fall due for payment under any applicable legislation;
- (f) any action is taken by, or in connection with, the person which is preparatory to, or could result in, any of the events described in paragraphs (b), (c), (d) or (e) above;
- (g) the person is the subject of an event described in section 459C(2) or section 585 of the Corporations Act (or the person makes a statement from which the IMO reasonably deduces the person is so subject); or
- (h) notice under section 601AB(3) of the Corporations Act is given in relation to the person.
- 9.23.3. If a Rule Participant becomes aware that a suspension event has occurred in relation to it, then the Rule Participant must promptly notify the IMO, giving full details of the event.
- 9.23.4. If the IMO becomes aware that a suspension event has occurred in relation to a Rule Participant, then the IMO must as soon as practicable:
  - subject to clause 9.23.5, issue a notice ("Cure Notice"), requiring that the default be remedied within 24 hours from the time the Cure Notice is issued; and
  - (b) if it has not already done so, Draw Upon Credit Support held in relation to that Market Participant for the amount which the IMO determines is actually or contingently owing by the Market Participant to the IMO under these Market Rules.
- 9.23.5. Where the IMO has given a Cure Notice to a Market Participant in respect of a Suspension Event described in clause 9.23.1(a) or (b), the IMO may extend the

deadline for remedying the Suspension Event by up to five Business Days from the date on which the Suspension Event occurred if the IMO considers that:

- (a) the Market Participant can pay all outstanding amounts, and comply in full with the Prudential Obligations, before the end of the extended deadline; and
- (b) the Market Participant is not capable of doing so within the 24 hours following the issuance of the Cure Notice.
- 9.23.6. Where the IMO has given a Cure Notice to a Market Participant in respect of a suspension event described in any of clauses 9.23.1(c) to (m), the IMO may extend the deadline for remedying the suspension event for such period as the IMO considers appropriate if the IMO considers that:
  - (a) the Market Participant will be able to remedy the suspension event before the end of the extended deadline; and
  - (b) the Market Participant is not capable of doing so within the 24 hours following the issuance of the Cure Notice.
- 9.23.7. If a Market Participant does not remedy a suspension event before the deadline specified in clause 9.23.4(a) (as extended, if applicable, under clause 9.23.5 or 9.23.6), then the IMO may issue a Suspension Notice to the relevant Market Participant in which case clause 2.32 applies.

#### 9.24. Settlement in Default Situations

- 9.24.1. If a Market Participant fails to make a payment under these Market Rules to the IMO before it is due, then the IMO may Draw Upon any Credit Support in relation to that Market Participant to meet the payment.
- 9.24.2. If, under Part 5.7B of the Corporations Act or another law relating to insolvency or the protection of creditors or similar matters, the IMO is required to disgorge or repay an amount, or pay an amount equivalent to an amount, paid by a Market Participant under the Market Rules:
  - (a) the IMO may Draw Upon any Credit Support held by the IMO in relation to the Market Participant for the amount disgorged, repaid or paid ("Repaid Amount"); and
  - (b) if the IMO is not able to recover all or part of the Repaid Amount by drawing upon Credit Support held by the IMO in relation to the Market Participant, then the IMO must take the Repaid Amount into account the next time it calculates the Reconciliation Settlement amount under clause 9.11.1 as if it was a positive Balancing Settlement Amount for a Market Participant for a Trading Day during the relevant Trading Month.

- 9.24.3. Notwithstanding anything else in these Market Rules, if at any time the total amount received by the IMO from Rule Participants in cleared funds ("Total Amount") is not sufficient to make the payments which the IMO is required to make under these Market Rules (for example, as a result of default by one or more Rule Participants), then the IMO's liability to make those payments is limited to the Total Amount.
- 9.24.3A The IMO must apply the Total Amount as follows.
  - (a) First, the IMO must apply the Total Amount to satisfy:
    - i. payment of Service Fee Settlement Amounts to the IMO, System Management and the Economic Regulation Authority (including as contemplated by clause 9.22.10);
    - ii. payments which the IMO is required to make under Supplementary Capacity Contracts or to a provider of Ancillary Services holding an Ancillary Service Contract with System Management, up to a maximum for any party of the net amount which, if sufficient funds were available, would be payable to that party; and
    - iii. [Blank]
    - iv. funds required to be disgorged or repaid by the IMO as contemplated by clause 9.24.2;

but if the Total Amount is not sufficient to satisfy all of these payments then the IMO must reduce the payments proportionally. Each payment will be based on the proportion that the Total Amount bears to the amount that would have been required to make all payments.

(b) Second, the IMO must apply the remainder to pay the net amounts (after the application of clause 9.24.3A(a)) which, if sufficient funds were available, it would owe to Rule Participants in accordance with clause 9.22, where those amounts are reduced by applying the following formula:

$$AAP = (NAP / TNAP) \times MAA$$

where:

AAP is the reduced amount actually payable by the IMO to a Rule Participant in respect of the relevant Trading Week, in the case of an Invoice relating to a STEM Settlement Statement, and the relevant Trading Month, in the case of an Invoice relating to a Non-STEM Settlement Statement;

NAP is the net amount that would have been payable by the IMO to the Rule Participant (after the application of clause 9.24.3A(a)) but for the application of this clause 9.24.3A(b), in respect of the relevant Trading Week or Trading Month (as applicable);

TNAP is the total net amount payable by the IMO to all Rule Participants (after the application of clause 9.24.3A(a)) but for the application of this clause 9.24.3A(b), in respect of the relevant Trading Week or Trading Month (as applicable), calculated by summing all values of NAP; and

MAA is the remainder of the Total Amount available for payment by the IMO after the application of clause 9.24.3A(a).

- 9.24.4. If the IMO has reduced any payment under clause 9.24.3Aas a result of a Payment Default and, within five Business Days of the Payment Default, it has received full or partial payment of the overdue amount, then the IMO must within one Business Day apply the amount received (including any interest paid under clause 9.22.7 in respect of the Payment Default) as follows.
  - (a) First, the IMO must apply the amount received to pay parties who suffered a reduction under clause 9.24.3A(a). The amount payable by the IMO to each party is equal to the amount by which that party's payment was originally reduced under clause 9.24.3A(a), adjusted to reflect interest accrued in accordance with clause 9.1.3 and any payments already made under this clause 9.24.4. However, if the amount received by the IMO is less than the total amount payable to these parties then the IMO must reduce the payments proportionally. Each payment will be based on the proportion that the amount received by the IMO bears to the total amount payable under this clause 9.24.4(a).
  - (b) Second, the IMO must apply the remainder on a pro-rata basis to all Market Participants who suffered a reduction under clause 9.24.3A(b). The amount to be paid to each Market Participant is determined by applying the formula in clause 9.24.3A(b), but as if:

AAP referred to the amount to be paid to each Market Participant;

MAA referred to the remainder of the full or partial payment after the application of clause 9.24.4(a); and

NAP and TNAP have the same values as when the reduction was calculated.

9.24.5. If, five Business Days after a Payment Default, the IMO is yet to recover in full the overdue amount, then it must raise a Default Levy from all Market Participants (other than Market Participants with unrecovered Payment Defaults) to cover the remaining shortfall (including interest calculated in accordance with clause 9.22.7). The IMO will determine the amount to be paid by each Market Participant, having regard to the absolute value of the MWh of generation or consumption, determined in accordance with the Metered Schedules, for each Market Participant for Trading Intervals during the most recent Trading Month for which Non-STEM Settlement Statements have been issued, as a proportion of the total

- of those values for all Market Participants (other than Market Participants with unrecovered Payment Defaults).
- 9.24.6. The IMO must notify each Market Participant of the amount it must pay in respect of the Default Levy as determined in accordance with clause 9.24.5 within six Business Days of the Payment Default occurring.
- 9.24.7. A Market Participant must pay the full amount notified by the IMO under clause 9.24.6 to the IMO (in cleared funds) by 10 AM of the 8th Business Day following the date of the Payment Default, whether or not it disputes the amount notified.
- 9.24.8. By 2 PM on the 8th Business Day following the date of a Payment Default, the IMO is to allocate the total of the Default Levy amounts received under clause 9.24.7 as follows.
  - (a) First, the IMO must apply the total amount received to pay parties who suffered a reduction under clause 9.24.3A(a). The amount payable by the IMO to each party is equal to the amount by which that party's payment was originally reduced under clause 9.24.3A(a), adjusted to reflect interest accrued in accordance with clause 9.1.3 and any payments already made under clause 9.24.4 or this clause 9.24.8. However, if the amount received by the IMO is less than the total amount payable to these parties then the IMO must reduce the payments proportionally. Each payment will be based on the proportion that the total amount received by the IMO bears to the total amount that would have been required to make all payments under this clause 9.24.8(a).
  - (b) Second, the IMO must apply the remainder on a pro-rata basis to all Market Participants who suffered a reduction under clause 9.24.3A(b). The amount to be paid to each Market Participant is determined by applying the formula in clause 9.24.3A(b), but as if:

AAP referred to the amount to be paid to each Market Participant;

MAA referred to the remainder of the total of the Default Levy amounts received under clause 9.24.7 after the application of clause 9.24.8(a); and

NAP and TNAP have the same values as when the reduction was calculated.

- 9.24.8A If a Market Participant pays part or all of a Default Levy after the date and time prescribed in clause 9.24.7 but within five Business Days of that date, then the IMO must within one Business Day apply the amount received in accordance with clause 9.24.8 as if it was an amount received under clause 9.24.7.
- 9.24.9. By the end of the second month following the end of a Financial Year, the IMO must re-allocate any Default Levies raised during that Financial Year as follows:

- (a) the IMO will determine the aggregate of the shortfalls in respect of which it raised Default Levies during the Financial Year less any subsequent amounts recovered and refunded under clause 9.24.10;
- (b) the IMO will determine the aggregate Default Levy amount which should have been paid by each Market Participant, having regard to the absolute value of the MWh of generation or consumption, as determined in accordance with the Metered Schedules for each Market Participant (excluding Market Participants with unrecovered Payment Defaults) for Trading Intervals during the Financial Year as a proportion of the total of those values for all these Market Participants;
- the IMO must compare the amount determined for the Market Participant under clause 9.24.9(b) with the total of the amounts which the Market Participant actually paid under clause 9.24.7;
- (d) the IMO must determine an appropriate adjustment to put each Market Participant in the position it would have been in had it paid the amount determined under clause 9.24.9(b) instead of the amounts actually paid under clause 9.24.7; and
- (e) the IMO must include that adjustment in the Non-STEM Settlement Statement for the most recently completed Trading Month.
- 9.24.10. If, after raising a Default Levy in respect of a Payment Default in accordance with clause 9.24.5, the IMO recovers all or part of the relevant shortfall from the defaulting Market Participant, then it must use the amount recovered to refund Default Levy amounts paid under clause 9.24.7 in respect of the Payment Default as soon as practicable but not later than the end of the calendar month following the month in which the amount is recovered. The IMO will determine the amount to be refunded to each Market Participant which paid a Default Levy amount under clause 9.24.7 in respect of the Payment Default (as adjusted, if applicable, under clause 9.24.9). In determining the amount to be refunded to a Market Participant, the IMO must have regard to:
  - (a) the amount recovered; and
  - (b) the Default Levy amount paid by the Market Participant under clause 9.24.7 (as adjusted, if applicable, under clause 9.24.9) as a proportion of the total of those amounts paid by all Market Participants.

## 10 Market Information

# **Information Policy**

#### 10.1. Record Retention

- 10.1.1. The IMO must develop and publish a list of all information and documents that relate to the Wholesale Electricity Market activities that Rule Participants must retain.
- 10.1.2. Effective from the date that the IMO publishes a list containing the relevant information or document, Rule Participants must retain any information or documents of that kind for a period of seven years from the date it is created, or such longer period as may be required by law.

## 10.2. Information Confidentiality Status

- 10.2.1. The IMO must, in accordance with the Market Rules and Market Procedures, set and publish the confidentiality status for each type of market related information and document produced or exchanged in accordance with the Market Rules or Market Procedures.
- 10.2.2. The classes of confidentiality status are:
  - (a) Public, in which case the relevant information or documents may be made available to any person by any person;
  - (b) SWIS Restricted, in which case the relevant information or documents may only be made available to:
    - i. Rule Participants;
    - ii. the Market Advisory Committee;
    - iii. the IMO;
    - iv. the Electricity Review Board;
    - v. the Economic Regulation Authority; and
    - vi. other Regulatory or Government Agencies in accord with applicable laws;
  - (c) Rule Participant Market Restricted, in which case the relevant information or documents may only be made available to:
    - i. a specific Rule Participant;
    - ii. the IMO;
    - iii. the Electricity Review Board;

- iv. the Economic Regulation Authority; and
- v. other Regulatory or Government Agencies in accord with applicable laws;
- (d) Rule Participant Dispatch Restricted, in which case the relevant information or documents may only be made available to:
  - i. a specific Rule Participant;
  - ii. System Management
  - iii. the IMO;
  - iv. the Electricity Review Board;
  - v. the Economic Regulation Authority; and
  - vi. other Regulatory or Government Agencies in accord with applicable laws;
- (e) System Management Confidential, in which case the relevant information or documents may only be made available to:
  - i. System Management;
  - ii. the IMO;
  - iii. the Electricity Review Board;
  - iv. the Economic Regulation Authority; and
  - v. other Regulatory or Government Agencies in accord with applicable laws;
- (f) IMO Confidential, in which case the relevant information or documents may only be made available to:
  - i. the IMO;
  - ii. the Electricity Review Board;
  - iii. the Economic Regulation Authority; and
  - iv. other Regulatory or Government Agencies in accord with applicable laws; and
- (g) Rule Participant Network Restricted, in which case the relevant information or documents may only be made available to:
  - i. a specific Rule Participant;
  - ii. the relevant Network Operator;
  - iii. System Management;
  - iv. the IMO;
  - v. the Electricity Review Board;

- vi. the Economic Regulation Authority; and
- vii. any other Regulatory or Government Agencies in accord with applicable laws.
- 10.2.3. In setting the confidentiality status of a type of market related information or document under clause 10.2.1, the IMO must have regard to the following principles:
  - (a) commercially sensitive or potentially defamatory information pertaining to a Rule Participant is not made public or revealed to other Rule Participants except in accordance with legal requirements or requirements of these Market Rules;
  - (b) subject to paragraph (a), Rule Participants are to have access to information pertaining to current and expected future conditions of the power system that may impact on their ability to trade, deliver, or consume energy;
  - (c) the IMO can make available to a person information if the IMO is required to do so by law or these Market Rules;
  - (d) the IMO can restrict the availability of information to a person where this is required by law, or these Market Rules;
  - the IMO can declare incomplete working documents to be IMO Confidential;
  - (f) the IMO can declare incomplete working documents of System Management to be System Management Confidential; and
  - (g) subject to this clause 10.2.3, the confidentiality status must maximise the number of parties that may view the information or document.
- 10.2.4. Subject to clauses 10.2.5, 10.2.6 and 10.4.1, a Rule Participant must not provide information or documents of a given confidentiality status to any person.
- 10.2.5. Clause 10.2.4 does not apply to information or documents:
  - (a) in the public domain;
  - (b) already known to the person receiving it;
  - (c) required to be provided by law or a stock exchange having jurisdiction over the Rule Participant; or
  - (d) required in connection with resolving a dispute.
- 10.2.6. A Rule Participant may disclose information or a document to:
  - (a) any person (including another Rule Participant) where the confidentiality status of the information or document is set as Public by the IMO under clause 10.2.1;

- (b) any other Rule Participant where the confidentiality status of the information or document is set as SWIS Restricted by the IMO under clause 10.2.1;
- (c) the specific Rule Participant able to receive the information or document in accordance with the confidentiality status, where the confidentiality status of the information or document is set as either Rule Participant Market Restricted or Rule Participant Dispatch Restricted by the IMO under clause 10.2.1; or
- (d) a Representative of the Rule Participant or a Representative of any person able to receive the information or document under paragraphs (a), (b) or (c).
- 10.2.7 The IMO must document the Market Procedure it follows in setting and publishing the confidentiality status of information in clause 10.2. The IMO must comply with that documented Market Procedure.

#### 10.3. The Market Web Site

- 10.3.1. The IMO must maintain a Market Web Site for the purpose of:
  - (a) providing information on the nature and operation of the market;
  - (b) providing information on market performance; and
  - (c) disseminating reports and documents.
- 10.3.2. Subject to clause 10.4.2, the IMO must not require a fee for information or documents released by the IMO via the Market Web Site.
- 10.3.3. Where these Market Rules require System Management to provide information and documents to the IMO to be published on the Market Web Site, and the IMO is not required to approve or alter such information or documents, then, with System Management's agreement, the IMO may delegate to System Management the authority to directly post such information or documents on the Market Web Site. The IMO retains the right to cancel such delegation without consultation with System Management.
- 10.3.4. Where the IMO allows System Management to post information or documents on the Market Web Site in accordance with clause 10.3.3 the IMO's obligation under these Market Rules to publish such information or documents will transfer to System Management.
- 10.3.5. The IMO must document the protocols by which System Management and the IMO can change the Market Web Site in a Market Procedure and the IMO and System Management must comply with that documented Market Procedure in respect of changing the Market Web Site.

### 10.4. Information to be Released on Application

- 10.4.1. The IMO must make information and documents available on application by any person subject to that person being a member of the class of persons able to receive information or documents in accordance with the relevant confidentiality status.
- 10.4.2. The IMO may charge a person a fee for providing information or documents provided in accordance with clause 10.4.1, where that fee may not exceed the IMO's costs, not otherwise included in the IMOs budget, of:
  - (a) collating and transmission of information or documents; and
  - (b) preparing documents not otherwise required by the Market Rules, applicable law or regulation.

## Information to be Released via the Market Web Site

#### 10.5. Public Information

- 10.5.1. The IMO must set the class of confidentiality status for the following information under clause 10.2.1, as Public and the IMO must make each item of information available from the Market Web Site after that item of information becomes available to the IMO:
  - (a) the following Market Rule and Market Procedure information and documents:
    - i. information on the records that must be maintained by Rule Participants;
    - ii. the list of the confidentiality status of information and documents pertaining to the Wholesale Electricity Market developed by the IMO in accordance with clause 10.2.1;
    - iii. the current version of the Market Rules;
    - iv. information on any Amending Market Rules that have been made in accordance with the Rule Change Process but are yet to commence or to be included in the current version of the Market Rules, including the date those Amending Rules will take affect;
    - v. any Rule Change Proposals that are open to public comment;
    - vi. the current version of Market Procedures;
    - vii. information on any changes to any Market Procedures that have been made in accordance with the Procedure Change Process but are yet to commence or to be included in the current version of the applicable Market Procedure, including the date those Market Procedure changes will take affect;

- viii. any Procedure Change Proposals that are open to public comment; and
- ix. a document summarising all Rule Change Proposals and Procedure Change Proposals that are no longer open to public comment and whether or not those proposals were accepted or rejected;
- (b) instructions as to how to initiate a Rule Change Process and Procedure Change Process.
- (c) details of all Rule Participants including:
  - i. name;
  - ii. mailing address, telephone and facsimile number;
  - iii. the name and title of a contact person;
  - iv. details of applicable licenses held;
  - v. applicable Rule Participant classes;
  - vi. applicable Market Participant classes; and
  - vii. names and capacities of Registered Facilities;
- (d) the precise basis for determining the Bank Bill Rate;
- (e) details of bid, offer and clearing price limits as approved by the Economic Regulation Authority including:
  - i. the Maximum Reserve Capacity Price;
  - ii. the Maximum STEM Price;
  - iii. the Alternative Maximum STEM Price; and
  - iv. the Minimum STEM Price,

including rules that could cause different values to apply at different times;

- (f) the following Reserve Capacity information (if applicable):
  - Requests for Expressions of Interest described in clause 4.2.3 for the previous five Reserve Capacity Cycles;
  - ii. the summary of Requests for Expressions of Interest described in clause 4.2.7 for the previous five Reserve Capacity Cycles;
  - the Reserve Capacity Information Pack published in accordance with clause 4.7.2 for the previous five Reserve Capacity Cycles;
  - iiiA. for each Market Participant that was assigned Certified Reserve Capacity, the level of Certified Reserve Capacity assigned to each to Facility for each Reserve Capacity Cycle;

- iv. for each Market Participant holding Capacity Credits, the Capacity Credits provided by each Facility for each Reserve Capacity Cycle;
- v. the identity of each Market Participant from which the IMO procured Capacity Credits in the most recent Reserve Capacity Auction, and the total amount procured, where this information is to be published by January 7th of the year following the Reserve Capacity Auction;
- vi. for each Special Price Arrangement for each Registered Facility:
  - 1. the amount of Reserve Capacity covered;
  - 2. the term of the Special Price Arrangement; and
  - 3. the Special Reserve Capacity Price applicable to the Special Price Arrangement,

where this information is to be current as at, and published on, January 7th of each year;

- vii. all Reserve Capacity Offer quantities and prices, including details of the bidder and facility, for a Reserve Capacity Auction, where this information is to be published by January 7th of the year following the Reserve Capacity Auction; and
- viii. reports summarising facility tests and reasons for delays in those tests, as required by clause 4.25.11.
- ix. The following annually calculated and monthly adjusted ratios:
  - NTDL\_Ratio as calculated in accordance with Appendix 5, STEP 8;
  - 2. TDL\_Ratio as calculated in accordance with Appendix 5, STEP 8; and
  - Total\_Ratio as calculated in accordance with Appendix 5, STEP 10: and
- x. The following information identified for a Reserve Capacity Cycle under the Relevant Level Methodology:
  - the Existing Facility Load for Scheduled Generation for each Trading Interval in the five year period determined under step 1(a) of the Relevant Level Methodology; and
  - the 12 Trading Intervals occurring on separate Trading Days with the highest Existing Facility Load for Scheduled Generation for each12 month period in the five year period.
- (g) the Ancillary Service report referred to in clause 3.11.11;
- (h) for each Trading Interval in each completed Trading Day in the previous 12 calendar months:

- the sum of the Metered Schedule generation for Scheduled Generators and Non-Scheduled Generators registered to the Electricity Generation Corporation;
- ii. the sum of the Metered Schedule generation for Scheduled Generators and Non-Scheduled Generators registered to Market Participants other than the Electricity Generation Corporation; and
- iii. the sum of the Resource Plan schedule generation for Scheduled Generators and Non-Scheduled Generators registered to Market Participants other than the Electricity Generation Corporation;
- (i) the following STEM summary information:
  - i. for each Trading Interval in each completed Trading Day in the previous 12 calendar months:
    - 1. the total STEM Offer quantity;
    - 2. the total STEM Bid quantity;
    - 3. whether the STEM was suspended in relation to the relevant Trading Interval;
    - 4. where the STEM was not suspended, the STEM quantity purchased by the IMO; and
    - 5. where the STEM was not suspended, the STEM Clearing Price;
  - ii. for each Trading Interval in each Trading Day during the 12 calendar months, before the end of the seventh day from the start of the Trading Day:
    - 1. the STEM Offers by Market Participant;
    - 2. the STEM Bids by Market Participant;
    - 3. the quantity bought or sold in the STEM by Market Participant; and
    - the Fuel Declaration, Availability Declaration and, if applicable, Ancillary Service Declaration made by the Market Participant;
- (j) for each Trading Interval in each completed Trading Day in the previous 12 calendar months the following dispatch summary information:
  - i. the values of MCAP, UDAP and DDAP;
  - ii. the Load Forecasts prepared by System Management in accordance with clause 7.2.1;
  - iii. the sum of the Metered Schedule load for all Non-Dispatchable Load, Dispatchable Load and Interruptible Load;

- iv. estimates of the energy not served due to involuntary load curtailment; and
- v. any shortfalls in Ancillary Services;
- (k) any Market Advisories and Dispatch Advisories released in the previous 12 months;
- (I) Loss Factors for each network connection point in accordance with clause 2.27:
- (m) the most current Statement of Opportunities Report;
- (n) the medium term PASA report described in clause 3.16.9;
- (o) the Short Term PASA report described in clause 3.17.2;
- (p) details of resolved Disputes, including all Public Information associated with the dispute, but not aspects of the resolution or information associated with the resolution which, in accordance with its confidentiality status class, cannot be made public
- (q) public consultation proceedings;
- (r) Public Reports pertaining to the Wholesale Electricity Market issued by:
  - i. the IMO;
  - ii. System Management;
  - iii. the Electricity Review Board;
  - iv. the Economic Regulation Authority; or
  - v. the Minister;
- event reports explaining what happened during unusual market or dispatch events but not aspects of such reports which, in accordance with its confidentiality status class, cannot be made public;
- (t) the IMO and System Management budget information for the current financial year;
- (u) a schedule of fees for services provided by the IMO;
- summary information pertaining to the account maintained by the IMO for market settlement for the preceding 24 calendar months, including;
  - i. the end of month balance;
  - ii. the total income received for transactions in each of the Reserve Capacity Mechanism, the STEM, Balancing, Market Fees, System Operation Fees, Regulator Fees and a single value for all other income;
  - iii. the total outgoings paid for transactions in each of the Reserve Capacity Mechanism (excluding Supplementary Capacity

- Contracts), Supplementary Capacity Contracts, the STEM, Balancing and a single value for all other expenses; and
- iv. Service Fee Settlement Amount paid to the IMO, System Management and the Economic Regulation Authority;
- (vA) the non-compliance cost described in clause 9.10A.2;
- (vB) reports providing the MWh of non-compliance of the Electricity Generation Corporation by Trading Interval, as specified by System Management in accordance with clause 7.13.1A(a), for each Trading Month which has been settled;
- (vC) reports providing the MWh quantities of energy dispatched under Balancing Support Contracts by Facility and Trading Interval, as specified by System Management in accordance with clause 7.13.1(dA), for each Trading Month which has been settled;
- (vD) reports providing the MWh quantities of energy dispatched under Network Control Service Contracts by Facility and Trading Interval, as specified by System Management in accordance with clause 7.13.1(dB), for each Trading Month which has been settled;
- (w) the STEM Price for each Trading Interval of the current Trading Month for which STEM auction results have been released to Market Participants;
- (x) for each Trading Interval of the current Trading Month for which balancing price results have been released to Market Participants;
  - i. the values of MCAP, UDAP and DDAP; and
  - ii. the Load Forecast prepared by System Management in accordance with clause 7.2.1(b).
- (y) as soon as practicable after a Trading Interval:
  - i. the total generation in that Trading Interval;
  - ii. the total Spinning Reserve in that Trading Interval;
  - iii. an initial value of the Operational System Load Estimate, taken directly from System Management's EMS/SCADA system.

where these values are to be available from the IMO Web Site for each Trading Interval in the previous 12 calendar months;

- (z) as soon as practicable after real-time:
  - i. the total generation;
  - ii. the total Spinning Reserve;
  - iii. an initial value of the Operational System Load Estimate, taken directly from System Management's EMS/SCADA system;

- where these values are not required to be maintained on the IMO Web Site after their initial publication;
- (zA) the current Tolerance Range determined by System Management in accordance with clause 2.13.6D, including the information provided to the IMO in accordance with clause 2.13.6D; and
- (zB) any Facility Tolerance Ranges determined by System Management in accordance with clause 2.13.6E, including the information provided to the IMO in accordance with clause 2.13.6E, and, if applicable, any Facility Tolerance Ranges which System Management has been directed to vary by the IMO in accordance with clause 2.13.6H.

#### 10.6. SWIS Restricted Information

- 10.6.1. The IMO must set the class of confidentiality status for the following information under clause 10.2.1, as SWIS Restricted Information and the IMO must make this information available from the Market Web Site:
  - (a) summary information on Disputes in progress that may impact other Rule Participants;
  - (b) schedules of Planned Outages;
  - (c) the current Dispatch Merit Order;
  - (d) audit reports;
  - (e) documentation of the functionality of :
    - i. any software used to run the Reserve Capacity Auction;
    - ii. the STEM Auction software; and
    - iii. the Settlement System software; and
  - (f) information relating to Commissioning Tests which is supplied under clause 3.21A.16 by System Management.

## 10.7. Rule Participant Market Restricted Information

- 10.7.1. The IMO must set the class of confidentiality status for the following information under clause 10.2.1, as Rule Participant Restricted Information and the IMO must make this information available from the Market Web Site:
  - (a) all Reserve Capacity Offer information issued by that Market Participant and all details of Special Price Arrangements for that Market Participant prior to the publication of that information in accordance with clause 10.5.1(f);
  - (b) Market Participant specific Reserve Capacity Obligations;

- (c) Market Customer specified Individual Reserve Capacity Requirements partitioned into those associated with Intermittent Loads and those not associated with Intermittent Loads;
- (d) for each completed Trading Day for the past 12 months:
  - Market Participant specific Bilateral Submissions, Resource Plan Submissions, Balancing Data Submissions and Standing Balancing Data submissions used in the absence of a Balancing Data Submission;
  - ii. Market Participant specific STEM Submissions and Standing STEM Submissions used in the absence of a STEM Submission except that information published in accordance with clause 10.5.1(i);
- (e) for the past 12 months:
  - i. Non-STEM Settlement Statements; and
  - ii. STEM Settlement Statements

### 10.8. Rule Participant Dispatch Restricted Information

- 10.8.1. The IMO must set the class of confidentiality status for a Market Participant Specific Dispatch Schedules under clause 10.2.1, as Rule Participant Dispatch Restricted Information and the IMO must make this information available from the Market Website for each Trading Interval in completed Trading Months for the past 12 Trading Months.
- 10.8.2. The IMO must set the class of confidentiality status for all Electricity Generation Corporation information specified in clause 7.6A as Rule Participant Dispatch Restricted Information with the exception of information specified by the Electricity Generation Corporation under clauses 7.6A.2(g) and 7.6A.3(c).

# 11 Glossary

Acceptable Credit Criteria: The criteria set out in clause 2.38.6.

**Access Code**: The code established by the Minister under section 104 of the Electricity Industry Act 2004.

**Access Proposal**: Has the meaning given in clause 4.2.7(b)(ii)(1).

Adjustment Process: Has the meaning given in clause 9.16.3.

**Administration Procedure**: The Market Procedure developed by the IMO in accordance with clause 2.9.5.

**Allowable Revenue**: With respect to the IMO, the allowable revenue for the IMO in providing the services set out in clause 2.22.1 as approved by the Economic Regulation Authority in accordance with clause 2.22.12. With respect to System Management, the allowable revenue for System Management in providing the services set out in clause 2.23.1 as approved by the Economic Regulation Authority in accordance with clause 2.23.12.

**Alternative Maximum STEM Price**: The maximum price set in accordance with clause 6.20.3 that may be associated with a Portfolio Supply Curve for a portfolio including Facilities expected to run on Liquid Fuel or any Portfolio Demand Curve forming part of a STEM Submission or Standing STEM Submission.

Amending Rules: Has the meaning given in clause 2.4.1(c).

**Ancillary Service**: A service, including those described in clause 3.9, that is required to maintain Power System Security and Power System Reliability, facilitate orderly trading in electricity and ensure that electricity supplies are of acceptable quality.

**Ancillary Service Contract**: A contract between System Management and a Market Participant for the provision by that Market Participant of an Ancillary Service or Ancillary Services to System Management.

**Ancillary Service Declaration**: A declaration included with a STEM Submission or Standing STEM Submission made by a Market Participant which is a provider of Ancillary Services and which includes the information described in clause 6.6.2A(c).

**Ancillary Service Provider**: A Rule Participant registered as an Ancillary Service Provider under clause 2.28.11A.

Ancillary Service Requirements: Are as determined in accordance with clause 3.11.

Application Fee: A fee determined by the IMO under clause 2.24.2.

**Appointed Day**: Means the day fixed by the Minister by order published in the Government Gazette.

Arrangement for Access: When used in the context of a "covered network" (as that term is defined in the Access Code) means an "access contract" (as that term is defined in the Access Code). When used in the context of a network which is not a "covered network" (as that term is defined in the Access Code) means any commercial arrangement through which "access" (as that term is defined in the Access Code) to that network is obtained.

**Associated Load:** Has the meaning given in clause 2.29.5G.

**Association Period:** Has the meaning given in clause 2.29.5G.

**Authorised Deviation Quantity (ADQ(p,d,t))**: For a Market Participant p for a given Trading Interval t, is as calculated under clause 6.17.2.

**Authorised Officer**: In respect of a Market Participant, and Officer as defined in Section 9 of the Corporations Act.

**Availability Class**: Any one of 4 classes of annual availability of Reserve Capacity set out in clause 4.5.12(c), where each class corresponds to Reserve Capacity being available from a Facility for not more than a specified number of hours per year.

Availability Curve: A curve developed by the IMO under clause 4.5.10(e).

**Availability Declaration**: A declaration included with a STEM Submission or Standing STEM Submission and which includes the information described in clause 6.6.2A(b).

**Balancing**: The process for meeting supply and consumption deviations from contracted bilateral and STEM positions in each Trading Interval.

**Balancing Data**: A set of prices to be used in forming Dispatch Merit Orders and in settling Balancing transactions for a Trading Day as provided by a Market Participant to the IMO in a Balancing Data Submission or as Standing Balancing Data.

**Balancing Data Submission**: A submission of Balancing Data to the IMO made in accordance with clause 6.5A.

Balancing Support Contract: A contract between either the Electricity Generation Corporation or System Management and a Market Participant (other than the Electricity Generation Corporation), entered into pursuant to clause 7.6.7, that allows System Management to call upon the Facilities registered by the relevant Market Participant to assist System Management and the Electricity Generation Corporation in meeting their obligations under Chapter 7.

**Bank Bill Rate**: The rate set by the IMO:

- (a) at approximately 10:00am on any given Business Day to apply for that day; or
- (b) if the relevant day is not a Business Day, or the IMO does not set a rate for that day, on the previous Business Day on which a rate was set under paragraph (a),

(based on an industry standard market indicator, details of which must be published by the IMO).

**Bilateral Contract**: A contract formed between any two persons (excluding System Management) for the sale of electricity by one of those persons to the other.

**Bilateral Submission**: A submission by a Market Generator to the IMO made in accordance with clause 6.2.

**Business Day**: A day that is not a Saturday, Sunday, or a public holiday throughout Western Australia. For the purpose of clauses 9.16.1(b), 9.16.2(e) and 9.16.4(d), a Business Day is a day that is not a Saturday, Sunday, or a public holiday (including a bank holiday) throughout Western Australia and/or Sydney (New South Wales).

**Capacity Cost Refund**: Has the meaning given in clause 4.26.2E.

Capacity Credit: A notional unit of Reserve Capacity provided by a Facility during a Capacity Year. The total number of Capacity Credits provided by a Facility is determined in accordance with clause 4.20, clause 4.28B, or clause 4.28C. Each Capacity Credit is equivalent to 1MW of Reserve Capacity. The Capacity Credits to be provided by a Facility are held by the Market Participant registered in respect of that Facility. The number of Capacity Credits to be provided by a Facility may be reduced in certain circumstances under the Market Rules, including under clause 4.25.4 or adjusted under clause 4.25.6.

**Capacity Credit Allocation**: The number of Capacity Credits allocated to a Market Participant for settlement purposes through the allocation process in clauses 9.4 and 9.5.

**Capacity Credit Allocation Submission**: A submission from a Market Participant to the IMO in accordance with clause 9.4.1.

**Capacity Year**: A period of 12 months commencing at the start of the Trading Day which commences on 1 October and ending on the end of the Trading Day ending on 1 October of the following calendar year.

**Category A**: The class of Market Rules classified as Category A Market Rules in the Regulations for the purposes of the imposition of civil penalties under the Regulations.

**Category B**: The class of Market Rules classified as Category B Market Rules in the Regulations for the purposes of the imposition of civil penalties under the Regulations.

**Category C**: The class of Market Rules classified as Category C Market Rules in the Regulations for the purposes of the imposition of civil penalties under the Regulations.

**Certified Reserve Capacity**: For a Facility, and in respect of a Reserve Capacity Cycle, is the quantity of Reserve Capacity that the IMO has assigned to the Facility for the Reserve Capacity Cycle in accordance with clause 4.11 or clause 4.28B, as adjusted under these Market Rules including clause 4.14.8. Certified Reserve Capacity assigned to a Facility registered by a Market Participant is held by that Facility.

Chief Executive Officer: In respect of a Rule Participant other than System Management, the chief executive officer of the relevant Rule Participant, or if that Rule Participant has no chief executive officer, then the individual nominated by the Rule Participant and holding a similar position to that of chief executive officer of the Rule Participant. With respect to System Management, the most senior of the persons designated by the Board of the Electricity Network Corporation as having responsibility for the management of System Management.

**Co-ordinated Universal Time:** Co-ordinated Universal Time is determined by the International Bureau of Weights and Measures and maintained under section 8AA of the National Measurement Act 1960 of the Commonwealth.

**Cold Season**: The period commencing at the start of the Trading Day beginning on 1 April and ending at the end of the Trading Day finishing on the following 1 October.

**Commercial Operation:** The status determined by the IMO under clause 4.13.10B that a Facility is operating in the Wholesale Electricity Market.

**Commissioning Test**: Has the meaning given in clause 3.21A.1.

**Commissioning Test Period:** The proposed period during which Commissioning Tests will be conducted, as provided to System Management under clause 3.21A.3.

Commitment Compensation: The amount calculated in accordance with clauses 6.18.2.

Conditional Certified Reserve Capacity: Has the meaning given in clause 4.9.5.

**Consequential Outage**: Has the meaning given in clause 3.21.2.

**Consumption Decrease Price**: A price specified in Balancing Data to apply in forming the Dispatch Merit Order for a Trading Interval for a Dispatchable Load and in the calculation of the Dispatch Instruction Payment for that Dispatchable Load for that Trading Interval. Different values apply for Peak Trading Intervals and Off-Peak Trading Intervals.

**Consumption Increase Price**: A price specified in Balancing Data to apply in forming the Dispatch Merit Order for a Trading Interval for a Dispatchable Load and in the calculation of the Dispatch Instruction Payment for that Dispatchable Load for that Trading Interval. Different values apply for Peak Trading Intervals and Off-Peak Trading Intervals.

**Contestable Customer**: A person that may purchase electrical energy from any retailer, including the Electricity Retail Corporation.

**Contracted Ancillary Service:** An Ancillary Service provided by a Rule Participant under an Ancillary Service Contract.

**Contracted Dispatch Support Service:** A Dispatch Support Service provided by a Rule Participant under an Ancillary Service Contract.

**Contracted Load Following Service:** A Load Following Service provided by a Rule Participant under an Ancillary Service Contract.

**Contracted Load Rejection Reserve Service:** A Load Rejection Reserve Service provided by a Rule Participant under an Ancillary Service Contract.

**Contracted Spinning Reserve Service:** A Spinning Reserve Service provided by a Rule Participant under an Ancillary Service Contract.

**Contracted System Restart Service:** A System Restart Service provided by a Rule Participant under an Ancillary Service Contract.

**Corporations Act**: The Corporations Act 2001 (Cwlth).

**Credit Limit**: In respect of a Market Participant, the amount determined by the IMO in accordance with clause 2.37.4.

**Credit Support**: Has the meaning given in clause 2.38.4.

**Cure Notice**: Has the meaning given in clause 9.23.4(a).

**Customer**: Means a person to whom electricity is sold for the purpose of consumption.

**Declared Market Project**: A major market development project declared by the IMO in accordance with clauses 2.22.13 and approved by the Economic Regulation Authority in accordance with clause 2.22.14.

**Default Levy**: The amount, in respect of a given Market Participant and in the circumstance of a particular Payment Default, determined by the IMO in accordance with clause 9.24.5.

**Demand Side Management**: A type of capacity held in respect of a Facility connected to the SWIS; specifically, the capability of a Facility connected to the SWIS to reduce its consumption of electricity through the SWIS, as measured at the connection point of the Facility to the SWIS.

Demand Side Programme: Means a Facility registered in accordance with clause 2.29.5A.

**Demand Side Programme Capacity Cost Refund:** Has the meaning given in clause 4.26.3A.

Demand Side Programme Load: Has the meaning given in clause 6.16.2.

**De-registration Notice:** means the notice issued by the IMO under clause 2.32.7E(b).

**Derogation**: An exemption or modification to the Market Rules applicable to one or more Rule Participants set out in Chapter 11 of these Market Rules.

**Dispatch Advisory**: Has the meaning given in clause 7.11.1.

**Dispatch Instruction**: Has the meaning given in clause 7.7.1.

**Dispatch Instruction Payment (DIP)**: Has the meaning given in clause 6.17.6.

**Dispatch Merit Order**: An ordered list of Scheduled Generators and Dispatchable Loads registered by Market Participants, other than the Electricity Generation Corporation, determined by the IMO in accordance with clause 6.12.1, indicating the order in which those Scheduled Generators and Dispatchable Loads should receive Dispatch Instructions from System Management in the circumstances to which the relevant Dispatch Order applies.

**Dispatch Plan**: Means the schedule of energy and Ancillary Services to be provided, or to be available to be provided on request, by the Registered Facilities of the Electricity Generation Corporation during a Trading Day, where this schedule may be revised by System Management during the course of the corresponding Scheduling Day and the Trading Day.

**Dispatch Schedule**: Has the meaning given in clause 6.15.1 or 6.15.2, as applicable.

**Dispatch Support Service**: Has the meaning given in clause 3.9.9.

**Dispatchable Load**: A Load, with a rated capacity of not less than 0.2 MW, through which electricity is consumed where such consumption can be increased or decreased to a specified level upon instruction to do so by System Management to the person managing the Load, and registered as such in accordance with clause 2.29.5(c).

**Dispute Participants**: The parties to a relevant dispute described in clause 2.18.2.

**Downward Deviation Administered Price (DDAP):** The amount calculated under clause 6.14.6.

**Downward Unauthorised Deviation Quantity (DUDQ (p, d, t)):** The amount calculated in accordance with clause 6.17.4.

**Draft Rule Change Report**: The draft report published under clause 2.7.6(a) by the IMO in relation to a Rule Change Proposal.

**Draw Upon**: In relation to Credit Support or Reserve Capacity Security held by the IMO in relation to a Market Participant, means that the IMO:

- (a) in relation to a Security Deposit, applies the Security Deposit to satisfy amounts owing by the relevant Market Participant; or
- (b) in relation to other Credit Support, exercises its rights under the Credit Support, including by drawing or claiming an amount under it.

**Early Certified Reserve Capacity**: Reserve Capacity which is certified and assigned to a new Facility by the IMO for a future Reserve Capacity Cycle under clause 4.28C.

**Economic Regulation Authority**: The body established under section 4(1) of the Economic Regulation Authority Act, responsible under these Market Rules for market monitoring and surveillance.

**Electricity Corporations Act**: Electricity Corporations Act 2005 (WA).

**Electricity Generation Corporation**: Means the body established by section 4(1)(a) of the Electricity Corporations Act.

**Electricity Networks Corporation**: Means the body established by section 4(1)(b) of the Electricity Corporations Act.

**Electricity Retail Corporation**: Means the body established by section 4(1)(c) of the Electricity Corporations Act.

**Electricity Review Board**: The Board within the meaning of the Electricity Industry Act.

**Eligible Services:** Has the meaning given in clause 4.24.3.

**Emergency Operating State**: The state of the SWIS defined in clause 3.5.1.

**Energy Market Commencement**: The date and time at which the first Trading Day commences, as published by the Minister in the Government Gazette.

**Energy Price Limits**: The set of price limits comprising the Maximum STEM Price, the Alternative Maximum STEM Price and the Minimum STEM Price.

**Environmental Approval**: In respect of a Facility is a licence, consent, certificate, notification, declaration or other authorisation required under any law relating to the protection or conservation of the environment for the lawful construction of the Facility or the development of the site on which the Facility is to be constructed.

**Equipment Limit**: Any limit on the operation of a Facility's equipment that is provided as Standing Data for the Facility to System Management by the IMO in accordance with clause 2.34.1(b).

**Equipment Test**: has the meaning given in clause 3.21AA.1.

**Existing Facility Load for Scheduled Generation**: Means the MWh quantity determined for a Trading Interval under step 7 of the Relevant Level Methodology.

**Facility**: Any of the facilities described in clause 2.29.1.

Facility Classes: Any one of the classes of Facility specified in clause 2.29.1A.

**Facility Dispatch Tolerance**: The quantity by which the Metered Schedule of a Scheduled Generator registered by a Market Participant other than the Electricity Generation Corporation can deviate from the Dispatch Schedule for that Scheduled Generator before the Upward Deviation Administered Price (UDAP) or the Downward Deviation Administered Price (DDAP) will be applied to that deviation in settlement as determined under clause 6.17.9.

Facility Forced Outage Refund: Has the meaning given in clause 4.26.1A.

Facility Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.1A.

**Facility Tolerance Range** The amount, determined by System Management under clause 2.13.6E (b) of the Market Rules in relation to a specific Facility, by which a Market Participant may deviate from the obligations imposed on it under clause 7.10.1 or clause 3.21 before System Management must report an alleged breach of that clause under clause 2.13.6A.

**Fast Track Rule Change Process**: The process for dealing with Rule Change Proposals set out in clause 2.6.

**Final Rule Change Report**: In respect of a Rule Change Proposal to which the Fast Track Rule Change Process applies, the report published by the IMO in accordance with clause 2.6.4. In respect of a Rule Change Proposal to which the Standard Rule Change Process applies, the report published by the IMO in accordance with clause 2.7.8.

Financial Year: A period of 12 months commencing on 1 July.

**Forced Outage**: Has the meaning given in clause 3.21.1.

**Fuel Declaration**: A declaration included with a STEM Submission or Standing STEM Submission and which includes the information described in clause 6.6.2A(a).

**Generation Capacity Cost Refund:** Has the meaning given in clause 4.26.3.

Generation Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.1B.

**High Risk Operating State**: The state of the SWIS described in clause 3.4.

**Hot Season**: The period commencing at the start of the Trading Day beginning on 1 December and ending at the end of the Trading Day finishing on the following 1 April.

**IMO**: The Independent Market Operator, established under the Regulations to administer and operate the Wholesale Electricity Market.

**IMO Confidential**: An information confidentiality status whereby information or documents may only be made available to the parties described in clause 10.2.2(f).

**IMO Deposit Rate:** A rate equal to the rate received by the IMO for the Security Deposit. (The IMO must use reasonable endeavours to obtain a rate which reflects reasonable commercial terms as regards to other deposit rates available at the time.)

**Individual Reserve Capacity Requirement**: The MW quantity determined by the IMO in respect of a Market Customer, in accordance with clause 4.28.7 and, if applicable, as revised in accordance with clause 4.28.11.

Initial Time: Has the meaning given in clause 4.1.25.

**Intermediate Season**: The interval commencing at the start of the Trading Day beginning on 1 October and ending at the end of the Trading Day finishing on the following 1 December of the same year.

**Intermittent Generator**: A Non-Scheduled Generator that cannot be scheduled because its output level is dependent on factors beyond the control of its operator (e.g. wind).

**Intermittent Load**: A type of Load defined under clause 2.30B.1.

**Intermittent Load Refund**: Has the meaning given in clause 4.28A.1.

**Interruptible Load**: A Load through which electricity is consumed, where such consumption can be curtailed automatically in response to a change in system frequency, and registered as such in accordance with clause 2.29.5(a).

Interval Meter Deadline: The date determined in accordance with clause 9.16.2(a).

**Invoice:** An invoice requesting payment for transactions under these Market Rules issued under Chapter 9. An Invoice may relate to STEM Settlement Statements, Non-STEM Settlement Statements or adjusted Settlement Statements.

**Invoicing Date**: The Business Day, determined in accordance with clauses 9.16.1(a), 9.16.2(d) or 9.16.4(c), on which the IMO must release Invoices for STEM Settlement Statements for a Trading Week, Non-STEM Settlement Statements for a Trading Month and the Adjustment Process respectively.

**Key Project Dates:** Means the dates most recently provided to the IMO under clause 4.10.1(c)(iii) or in reports provided under clause 4.27.10.

Liquid Fuel: Means distillate, fuel oil, liquid petroleum gas, or liquefied natural gas.

**Liquid Supply Decrease Price**: A price specified in Balancing Data to apply in forming the Dispatch Merit Order for a Trading Interval for a Scheduled Generator declared to be operating on Liquid Fuel and in the calculation of the Dispatch Instruction Payment for that Scheduled Generator when declared to be operating on Liquid Fuel during that Trading Interval. Different values apply for Peak Trading Intervals and Off-Peak Trading Intervals.

**Liquid Supply Increase Price**: A price specified in Balancing Data to apply in forming the Dispatch Merit Order for a Trading Interval for a Scheduled Generator declared to be operating on Liquid Fuel and in the calculation of the Dispatch Instruction Payment for that Scheduled Generator when declared to be operating on Liquid Fuel during that Trading Interval. Different values apply for Peak Trading Intervals and Off-Peak Trading Intervals.

**Load**: Has the meaning given in clause 2.29.1(d).

**Load Following Service**: Has the meaning given in clause 3.9.1.

**Load Forecast**: An expectation of the demand levels in the SWIS or in a region of the SWIS in future Trading Intervals.

**Load Rejection Reserve Service**: Has the meaning given in clause 3.9.6.

**Local Black Start Procedures:** The procedures developed under clause 3.7.4, by each Scheduled Generator and Non-Scheduled Generator in accordance with the guidelines published by System Management under clause 3.7.3.

**Long Term PASA**: A PASA study conducted in accordance with clause 4.5 in order to determine the Reserve Capacity Target for each year in the Long Term PASA Study Horizon and prepare the Statement of Opportunities Report for a Reserve Capacity Cycle.

**Long Term PASA Study Horizon**: The ten year period commencing on 1 October of Year 1 of a Reserve Capacity Cycle.

**Long Term Special Price Arrangement**: A Special Price Arrangement that applies for more than one Reserve Capacity Cycle.

**Loss Factor**: A factor defining the annual average marginal network loss between any given node and the Reference Node where the Loss Factor at the Reference Node is 1, determined in accordance with clause 2.27.2.

**Loss Factor adjusted**: In respect of a quantity of electricity, means that quantity multiplied by any applicable Loss Factor.

**Margin Call**: The amount determined in accordance with clause 2.42.3.

**Margin Call Notice**: A notification by the IMO to a Market Participant that the Market Participant's Trading Margin has dropped below zero, and requiring the payment of a Margin Call.

**Marginal Cost Administered Price (MCAP):** The dollar per MWh price calculated in accordance with clause 6.14.2.

**Market Advisory**: Has the meaning given in clause 6.19.1.

**Market Advisory Committee:** An advisory body to the IMO comprised of industry representatives established under clause 2.3.1.

Market Auditor: An auditor appointed by the IMO under clause 2.14.1.

**Market Customer:** A Rule Participant registered as a Market Customer under clauses 2.28.10, 2.28.11 or 2.28.13.

**Market Fees:** The fees determined by the IMO in accordance with clauses 2.24, and calculated for each Market Participant in accordance with clause 9.13.1.

**Market Generator**: A Rule Participant registered as a Market Generator under clauses 2.28.6, 2.28.7, 2.28.8 or 2.28.13.

Market Participant: A Rule Participant that is a Market Generator or a Market Customer.

**Market Procedure**: The procedures developed by IMO and System Management in accordance with clause 2.9, (including the Power System Operation Procedures developed by System Management) as amended in accordance with the Procedure Change Process.

**Market Rules**: These rules relating to the Wholesale Electricity Market and to the operation of the SWIS.

**Market Surveillance Data Catalogue**: The catalogue developed by the IMO under clause 2.16.2.

**Market Web Site**: Has the meaning given in the Regulations, and includes any website operated by the IMO to carry out its functions under these Market Rules.

**Maximum Consumption Capability**: For each Market Participant is as calculated in accordance with clause 6.3A.2(b).

Maximum Participant Generation Refund: Has the meaning given in clause 4.26.1.

**Maximum Reserve Capacity Price**: In respect of a given Reserve Capacity Cycle, the price in clause 4.16.2 as revised in accordance with clause 4.16.

**Maximum STEM Price**: The price determined in accordance with clause 6.20.2 as the maximum price that may be associated with a Portfolio Supply Curve for a portfolio including

no Facilities expected to run on Liquid Fuel forming part of a STEM Submission or Standing STEM Submission.

**Maximum Supply Capability**: For each Market Participant is as calculated in accordance with clause 6.3A.2(a).

**Medium Term PASA**: A PASA study conducted in accordance with clause 3.16 in order to assist System Management in determining Ancillary Service Requirements, outage planning for Registered Facilities and also assessing the availability of Facilities in respect of which Capacity Credits are held.

**Meter Data Submission**: A submission of meter data by a Metering Data Agent to the IMO in accordance with clause 8.4.

Meter Dispute: Has the meaning given in clause 8.6.1(e).

**Meter Registry**: A registry maintained by a Metering Data Agent containing information about meters and the persons with which those meters are associated including the information listed in clause 8.3.1.

**Metered Schedule**: Has the meaning given in clause 9.3.4.

Metering Data Agent: The person identified under clause 8.1.2 or clause 8.1.4.

**Metering Protocol**: A combination of the Metering Data Rules as specified by the Economic Regulation Authority and a Network Operator's metering requirements as a condition of access. The metering requirement means in the context of a "covered network" (as that term is defined in the Access Code) the "Metering Rules" as defined in the Access Code while when used in the context of a network which is not a "covered network" (as that term is defined in the Access Code) means any commercial arrangement for metering energy.

The definition of the Metering Protocol is subject to finalisation of the Metering Rules arrangements.

Minimum Frequency Keeping Capacity: Has the meaning given in clause 3.10.1(a).

**Minimum STEM Price**: The price determined in accordance with clause 6.20.4 as the minimum price that may be associated with a Portfolio Supply Curve or a Portfolio Demand Curve forming part of a STEM Submission or Standing STEM Submission.

**Minister**: The Minister responsible for administering the Electricity Industry Act.

**Monitoring and Reporting Protocol**: The procedure developed by System Management and approved by the IMO in accordance with clauses 2.15.4 and 2.15.7 and, if applicable, as amended in accordance with clauses 2.9 and 2.10.

**Monitoring Protocol**: The procedure developed by the IMO in accordance with clause 2.15.1, 2.15.7 and, as amended from time to time in accordance with clauses 2.9 and 2.10.

**Monthly Reserve Capacity Price**: The dollar per megawatt per Trading month price calculated in accordance with clause 4.29.1.

**Monthly Special Reserve Capacity Price**: The dollar per megawatt per Trading Month price calculated in accordance with clause 4.29.2.

MW: Means megawatt.

MWh: Means megawatt-hour.

**Net Contract Position**: In respect of a Market Participant for a Trading Interval is calculated in accordance with clause 6.9.13.

**Net STEM Refund:** Has the meaning given in clause 4.26.3.

**Net STEM Shortfall:** Has the meaning given in clause 4.26.2.

**Network**: A transmission system or distribution System registered as a Network under clause 2.29.3.

**Network Control Service**: Has the meaning given in clause 5.1.1.

**Network Control Service Contract**: A contract between a Network Operator and a Market Participant to provide a Network Control Service.

**Network Operator**: A person who registers as a Network Operator, in accordance with clause 2.28.2, 2.28.3 or 2.28.4.

**New Facility Load for Scheduled Generation**: Means, for a new or upgraded Facility that has applied to be assigned Certified Reserve Capacity under clause 4.11.2(b), the MWh quantity determined for a Trading Interval under step 11 of the Relevant Level Methodology for that Facility and the relevant Reserve Capacity Cycle.

**Non-Business Day**: A day that is a Saturday, Sunday, or a public holiday throughout Western Australia.

Non-Dispatchable Load: A Load which is not a Dispatchable Load or an Interruptible Load.

**Non-Liquid Fuel**: Means all fuels other than Liquid Fuel.

**Non-Liquid Supply Decrease Price**: A price specified in Balancing Data to apply in forming the Dispatch Merit Order for a Trading Interval for a Scheduled Generator declared to be operating on Non-Liquid Fuel and in the calculation of the Dispatch Instruction Payment for that Scheduled Generator when declared to be operating on Non-Liquid Fuel during that

Trading Interval. Different values apply for Peak Trading Intervals and Off-Peak Trading Intervals.

**Non-Liquid Supply Increase Price**: A price specified in Balancing Data to apply in forming the Dispatch Merit Order for a Trading Interval for a Scheduled Generator declared to be operating on Non-Liquid Fuel and in the calculation of the Dispatch Instruction Payment for that Scheduled Generator when declared to be operating on Non-Liquid Fuel during that Trading Interval. Different values apply for Peak Trading Intervals and Off-Peak Trading Intervals.

**Non-Scheduled Generator**: A generation system that can be self-scheduled by its operator (with the exception that System Management can require it to decrease its output subject to its physical capabilities) and which is registered as a Non-Scheduled Generator in accordance with clause 2.29.4(a) or (d).

**Non-STEM Settlement Date**: The Business Day, determined under clause 9.16.2(e), on which the IMO issues Non-STEM Settlement Statements relating to a Trading Month.

**Non-STEM Settlement Statement**: A settlement statement for a Trading Month containing the information described in clause 9.18.3.

Non-STEM Settlement Statement Date: Has the meaning given in clause 9.16.2(c).

**Non-STEM Settlement Disagreement Deadline**: Has the meaning given in clause 9.16.2(f).

**Non-Temperature Dependent Load**: A Load accepted by the IMO as a Non-Temperature Dependent Load under clause 4.28.9.

Normal Operating State: The state of the SWIS defined in clause 3.3.1.

**Notice of Disagreement**: A notice issued by a Market Participant under any of clause 9.17.3, clause 9.18.4 or clause 9.19.5, to the IMO indicating a disagreement with either a STEM Settlement Statement or a Non-STEM Settlement Statement.

**Notice of Dispute**: A notice issued under clause 2.19.1 and containing the information described in clause 2.19.3.

**Notional Wholesale Meter**: A notional interval meter quantity associated with a Market Customer's aggregate consumption not metered by Trading Interval. This value will be an estimate produced by the IMO.

Off-Peak Trading Interval: A Trading Interval occurring between 10 PM and 8 AM.

Operational System Load Estimate: Has the meaning given in clause 6.14.4(a).

**Opportunistic Maintenance**: Has the meaning given in clause 3.19.2.

**Outage Contingency Plan**: Part of an Outage Plan specifying contingency plans for returning the relevant item of equipment to service before the time when the outage or derating is planned to finish.

**Outage Plan**: Has the meaning given in clause 3.18.4A and includes a revised Outage Plan submitted under clause 3.18.9.

Outstanding Amount: The amount calculated in accordance with clause 2.40.1.

**PASA**: See Projected Assessment of System Adequacy.

**Parasitic Load**: Energy consumption that occurs behind the connection point at which a generation system is connected to the Network, and which consequently reduces the energy sent-out by the generation system relative to the energy actually generated by the generation system.

**Payment Default**: Any failure to make a payment in respect of an Invoice in accordance with clause 9.22 or 9.24.7 or pay any other amount owing under these Market Rules by the time it is due.

Peak Trading Interval: A Trading Interval occurring between 8 AM and 10 PM.

**Planned Outage**: Has the meaning given in clause 3.19.11.

Planning Criterion: Has the meaning given in clause 4.5.9.

**Portfolio Demand Curve**: A curve describing the STEM Price at which a Market Participant will purchase different levels of energy from the market having the form given in clause 6.6.2A(e).

**Portfolio Supply Curve**: A curve describing the STEM Price at which a Market Participant will provide the market with different levels of energy supply having the form given in clause 6.6.2A(d).

**Power System Adequacy**: The ability of the SWIS to supply all demand for electricity in the SWIS at the time, allowing for scheduled and unscheduled outages of generation, transmission and distribution equipment and secondary equipment.

Power System Operation Procedure: See Market Procedure.

**Power System Reliability**: The ability of the SWIS to deliver energy within reliability standards while maintaining Power System Adequacy and Power System Security.

**Power System Security**: The ability of the SWIS to withstand sudden disturbances, including the failure of generation, transmission and distribution equipment and secondary equipment.

**Price-Quantity Pair**: In the context of Reserve Capacity Offers, Supply Portfolio Curves and STEM Offers, a quantity that will be provided to the IMO by a Market Participant for a price equalling or exceeding the specified price. In the context of Demand Portfolio Curves and STEM Bids, a quantity that will be purchased from the IMO by a Market Participant for a price equalling or less than the specified price.

**Procedure Amendment**: The specific wording of a proposed or accepted change to a Market Procedure.

**Procedure Change Process**: The process for amending a Market Procedure as set out in clauses 2.10 and 2.11.

**Procedure Change Proposal**: A proposal developed by the IMO or System Management to initiate a Procedure Change Process.

**Procedure Change Report**: A final report prepared by the IMO or System Management in relation to a Procedure Change Proposal, containing the information described in clause 2.10.13.

**Procedure Change Submission**: A submission made in relation to a Procedure Change Proposal submitted in accordance with clause 2.10.7.

**Projected Assessment of System Adequacy (PASA):** A forecasting study, undertaken by the IMO in the case of a Long Term PASA, and undertaken by System Management in the case of a Short Term PASA and a Medium Term PASA.

Protected Provision: A chapter or clause of the Market Rules, identified in clause 2.8.13.

**Prudential Obligations**: In respect of a Market Participant, the obligations set out in clauses 2.37 to 2.43.

**Public**: When used in reference to information confidentiality, an information confidentiality status whereby information or documents may be made available to any person.

**Ready Reserve Standard**: Has the meaning given in clause 3.18.11A.

**Reassessment Fee:** A fee determined by the IMO under clause 2.24.2.

Reference Node: The Muja 330 bus-bar (relative to which Loss Factors are defined).

**Refund Table**: The table titled "Refund Table" and set out in Chapter 4.

**Registered Facility**: In respect of a Rule Participant, a Facility registered by that Rule Participant with the IMO under Chapter 2.

Registration Correction Notice: means a notice issued by the IMO under clause 2.32.7B.

**Regulations**: Any regulations made under the Electricity Industry Act 2004 (WA) but excluding the Electricity Industry (Wholesale Market) Regulations 2004 (WA).

**Regulator Fees**: The fees determined by the IMO in accordance with clause 2.24, and payable by Market Participants for the services provided by the Economic Regulation Authority in undertaking its Wholesale Electricity Market related functions and other functions under these Market Rules.

**Relevant Demand:** The consumption of a Demand Side Programme as determined in clause 4.26.2CA. Relevant Demand is used to determine Reserve Capacity shortfalls.

**Relevant Level**: Means the MW quantity determined by the IMO in accordance with the Relevant Level Methodology.

**Relevant Level Methodology**: Means the method of determining the Relevant Level specified in Appendix 9.

**Relevant Quantity**: Has the meaning given in clause 6.14.4(d).

**Relevant Settlement Statements**: Has the meaning given in clause 9.16.3A.

**Repaid Amount:** Has the meaning given in clause 9.24.2(a).

**Representative:** In relation to a person means a representative of that person, including an employee, agent, officer, director, auditor, adviser, partner, consultant, joint venturer or subcontractor, of that person.

**Request for Expression of Interest**: In respect of a Reserve Capacity Cycle, the request for expression of interest made available in accordance with clause 4.2.2.

**Required Level:** The level of output (expressed in MW) required to be met by a Facility as determined in clause 4.11.3B.

Reserve Capacity: Capacity associated with a Facility. Capacity may be:

- (a) the capacity of generation Systems to generate electricity and send it out into a network forming part of the SWIS; or
- (b) Demand Side Management, being the capability of a Facility registered by the Market Customer at a connection point to a Network forming part of the SWIS to reduce the consumption of electricity at that connection point.

**Reserve Capacity Auction**: The process for determining the Reserve Capacity Price for a Reserve Capacity Cycle and the quantity of Reserve Capacity scheduled by the IMO for each Market Participant under clause 4.19.

**Reserve Capacity Auction Requirement**: The quantity of Reserve Capacity calculated in accordance with clause 4.15.2(b), which is the target quantity to be procured in a Reserve Capacity Auction.

Reserve Capacity Cycle: The cycle of events described in clause 4.1.

Reserve Capacity Deficit: Has the meaning give in clause 4.26.1A.

**Reserve Capacity Information Pack**: A package of information, including the information described in clause 4.7.3, pertaining to a Reserve Capacity Auction.

Reserve Capacity Mechanism: Chapter 4 of the Market Rules.

**Reserve Capacity Obligations**: For a Market Participant holding Capacity Credits, determined in accordance with clause 4.12.1, clause 4.28B or clause 4.28C.

**Reserve Capacity Obligation Quantity**: The specific amount of capacity required to be provided in a Trading Interval as part of a Reserve Capacity Obligation set by the IMO in accordance with clauses 4.12.4 and 4.12.5 or clauses 4.28B or 4.28C as adjusted from time to time in accordance with these Market Rules, including under clause 4.12.6.

**Reserve Capacity Offer**: A submission from a Market Participant to the IMO, in the format and including the information described in clause 4.18.1.

**Reserve Capacity Price**: In respect of a Reserve Capacity Cycle, the price for Reserve Capacity determined in accordance with clause 4.29.1 and multiplied by 12, where this price is expressed in units of dollars per megawatt per year and has a value between zero and the Maximum Reserve Capacity Price.

**Reserve Capacity Requirement**: Has the meaning given in clause 4.6.1.

**Reserve Capacity Security**: The reserve capacity security to be provided for a Facility as calculated and re-calculated under clause 4.13 and clause 4.28C.

**Reserve Capacity Target**: In respect of a Capacity Year, the IMO's estimate of the total amount of generation or Demand Side Management capacity required in the SWIS to satisfy the Planning Criterion for that Capacity Year determined in accordance with clause 4.5.10(b).

**Resource Plan**: A detailed schedule for all Trading Intervals in a relevant Trading Day, based on a Resource Plan Submission containing the information in clause 6.11 accepted by the IMO under clause 6.5.2 (as part of an accepted Resource Plan Submission) or set in accordance with clause 6.5.4 (in the case of a default Resource Plan).

**Resources Plan Submission**: A submission by a Market Participant to the IMO made in accordance with clause 6.5.

**Review Period**: In the case of the first Review Period, the 3 year period commencing on 1 July in the calendar year following the calendar year in which Energy Market Commencement occurs. For each subsequent Review Period, the 3 year period commencing on the third anniversary of the commencement of the previous Review Period.

**Reviewable Decision**: Decisions made by the IMO in respect of which an eligible person may apply to the Electricity Review Board in accordance with section 125 of the Electricity Industry Act and the Regulations, and does not include any decisions of a class specified for this purpose in the Regulations under section 125 of that Act.

**Rule Change Proposal**: A proposal made in accordance with clause 2.5 proposing that the IMO make Amending Rules.

**Rule Participant**: Any person registered as a Rule Participant in accordance with Chapter 2, the IMO and System Management.

**Rule Participant Dispatch Restricted**: An information confidentiality status whereby information or documents may only be made available to the parties described in clause 10.2.2(d).

**Rule Participant Market Restricted**: An information confidentiality status whereby information or documents may only be made available to the parties described in clause 10.2.2(c).

**Scheduled Generator**: A generation system that can increase or decrease the quantity of electricity it generates and sends out into a network forming part of the SWIS (subject to limits on its physical capabilities) in response to instructions from System Management and is registered as such in accordance with clause 2.29.4(b) and (c).

**Scheduled Outages**: Has the meaning given in clause 3.19.1.

**Scheduled System Load**: Has the meaning given in clause 6.14.4(c).

**Scheduling Day**: In respect of a Trading Day, the calendar day immediately preceding the calendar day on which the Trading Day commences.

**Season:** As the context requires, any of the Cold Season, Intermediate Season or Hot Season.

**Secretariat**: The secretariat of the Market Advisory Committee.

**Security Deposit**: Has the meaning given in clause 2.38.4(b).

**Security Limit**: Any technical limit on the operation of the SWIS as a whole, or a region of the SWIS, necessary to maintain the Power System Security, including both static and dynamic limits.

Service Fee Settlement Amount: Has the meaning given in clause 9.15.

**Settlement Statement**: A STEM Settlement Statement, a Non-STEM Settlement Statement, an adjusted STEM Settlement Statement or an adjusted Non-STEM Settlement Statement.

**Shareholding Minister**: The Minister responsible for administering the Electricity Corporation Act.

**Short Term Energy Market (STEM):** A forward market operated under Chapter 6 in which Market Participants can purchase electricity from, or sell electricity to, the IMO.

**Short Term PASA**: A PASA study conducted in accordance with clause 3.17.

**Short Term Special Price Arrangement**: A Special Price Arrangement that applies for not more than one Reserve Capacity Cycle.

**South West interconnected system (SWIS)**: Has the meaning given in the Electricity Industry Act.

**Special Price Arrangement**: An arrangement under clause 4.21 or 4.22 whereby a Market Participant can secure a price for Reserve Capacity that may differ from the Reserve Capacity Price.

**Special Reserve Capacity Price**: The dollar per megawatt per year price applicable to Capacity Credits held by a Market Participant in respect of a Registered Facility and subject to a Special Price Arrangement.

**Spinning Reserve**: Supply capacity held in reserve from synchronised Scheduled Generators, Dispatchable Loads or Interruptible Loads, so as to be available to support the system frequency in the event of an outage of a generating works or transmission equipment or to be dispatched to provide energy as allowed under these Market Rules.

Spinning Reserve Service: Has the meaning given in clause 3.9.2.

**Standard Rule Change Process**: The process for dealing with Rule Change Proposals set out in clause 2.7.

**Standing Balancing Data**: Balancing Data stored by the IMO reflecting the information described in Appendix 1 provided to the IMO in accordance with clause 2.33.3(c)(x) or clause 2.34.

**Standing Bilateral Submission**: A submission by a Market Generator to the IMO made in accordance with clause 6.2A.

**Standing Data**: Data maintained by the IMO under clause 2.34.1.

**Standing Resource Plan**: A submission related in Resource Plans by a Market Generator to the IMO made in accordance with clause 6.5C.

**Standing STEM Submission**: A submission by a Market Participant to the IMO made in accordance with clause 6.3C.

**Statement of Corporate Intent**: The statement of corporate intent as agreed by the Minister or otherwise deemed to apply by Division 2 of Part 5 of the Electricity Corporations Act.

**Statement of Opportunities Report**: A report prepared in accordance with clause 4.5.13 presenting the results of the Long Term PASA study, including a statement of required investment if Power System Security and Power System Reliability are to be maintained.

**STEM**: See Short Term Energy Market.

**STEM Auction**: The process, described in clause 6.9, used to clear the STEM.

**STEM Bid**: A bid to purchase energy from the IMO via the STEM Auction for a Trading Interval.

STEM Clearing Price: Has the meaning given in clause 6.9.7.

**STEM Clearing Quantity**: Has the meaning given in clause 6.9.8.

STEM Invoice: An Invoice issued in accordance with clause 9.16.1(a)(ii).

**STEM Offer**: An offer to provide energy through the STEM Auction for a Trading Interval determined by the IMO in accordance with clause 6.9.3.

**STEM Settlement Date**: The date determined in accordance with clause 9.16.1(b) for settling transactions covered by STEM Settlement Statements.

**STEM Settlement Disagreement Deadline**: The time determined in accordance with clause 9.16.1(c) by which Notices of Disagreement concerning a STEM Settlement Statement for a Trading Week must be submitted to the IMO.

**STEM Settlement Statement**: A settlement statement for STEM transactions during a Trading Day issued under clause 9.16.1(a)(i) and containing the information described in clause 9.17.2.

**STEM Submission**: A submission by a Market Participant to the IMO made in accordance with clause 6.3B containing the information set out in, and in the format prescribed by, clause 6.6.

**Supplementary Capacity Contract**: An agreement under which a service provider agrees to supply one or more Eligible Services to the IMO, entered into in accordance with clause 4.24.

**Suspension Event**: An event described in clause 9.23.1.

**Suspension Notice**: A notice issued by the IMO in accordance with clause 2.32 or 9.23.7 that a Market Participant is suspended from trading in the Wholesale Electricity Market.

**SWIS**: See the South West interconnected system.

**SWIS Operating Standards**: The standards for the operation of the SWIS including the frequency and time error standards and voltage standards set out in clause 3.1.

**SWIS Operating State**: One or any of the Normal Operating State, High Risk Operating State or Emergency Operating State.

**SWIS Restricted**: An information confidentiality status whereby information or documents may only be made available to the parties described in clause 10.2.2(b).

**System Management**: A segregated business unit of Western Power Corporation responsible for dispatching the power system.

**System Management Confidential**: An information confidentiality status whereby information or documents may only be made available to the parties described in clause 10.2.2(e).

**System Operation Fees**: The fees determined by the IMO in accordance with clause 2.24, and payable by Market Participants for the services provided by System Management.

**System Restart Service**: Has the meaning given in clause 3.9.8.

**Technical Code**: A code prescribing technical rules and requirements for access arrangements, established under the Access Code.

**Technical Envelope:** The limits for the operation of the SWIS in each SWIS Operating State.

**Temperature Dependent Load**: A Load that is not a Non-Temperature Dependent Load.

**Total Amount**: Has the meaning given in clause 9.24.3.

**Tolerance Range**: The amount, determined by System Management under clause 2.13.6D of the Market Rules, by which a Market Participant may deviate from the obligations imposed on it under clause 7.10.1 or clause 3.21 before System Management must report an alleged breach of that clause under clause 2.13.6A.

**Trading Day**: A period of 24 hours commencing at 8:00 AM on any day after Energy Market Commencement, except where the IMO declares that part of a Trading Day is to be treated as a full Trading Day under clause 9.1.1, in which case that part is a Trading Day.

**Trading Interval**: A period of 30 minutes commencing on the hour or half-hour during a Trading Day.

**Trading Limit**: Has the meaning given in clause 2.39.1.

**Trading Margin**: Has the meaning given in clause 2.41.1.

**Trading Month**: A period from the beginning of a Trading Day commencing on the first day of a calendar month to the end of the Trading Day that finishes on the first day of the following calendar month.

**Trading Week**: A period from the beginning of a Trading Day commencing on a Thursday, to the end of the Trading Day that finishes on the following Thursday.

**Typical Accrual**: The amount determined in accordance with clause 2.42.2.

**Upward Deviation Administered Price (UDAP):** The amount calculated under clause 6.14.5.

**Upward Unauthorised Deviation Quantity (UUDQ):** The amount calculated under clause 6.17.3.

**Western Power**: The body corporate established under the Electricity Corporation Act (1994) as Western Power Corporation.

Western Standard Time: Co-ordinated Universal Time + 8 hours.

**Wholesale Electricity Market**: The market established under section 122 of the Electricity Industry Act.

**Wholesale Market Objectives**: The market objectives set out in Section of 122(2) of the Electricity Industry Act and repeated in clause 1.2.1.

**Working Group:** A working group as established under clause 2.3.17 of these Market Rules.

# **Appendix 1: Standing Data**

This Appendix describes the Standing Data to be maintained by the IMO for use by the IMO in market processes and by System Management in dispatch processes.

Standing Data required to be provided as a pre-condition for Facility Registration, and which is to be updated by Rule Participants as necessary, is described by clauses (a) to (j).

Standing Data not required to be provided as a pre-condition for Facility Registration but that which is required to be maintained by the IMO includes the data described in clauses (k) onwards.

### (a) for a Network:

- i. positive, negative and zero sequence network impedances for the network elements;
- ii. information on the network topology;
- iii. information on transmission circuit limits;
- iv. information on security constraints;
- v. overload ratings, including details of how long overload ratings can be maintained; and
- vi. the short circuit capability of facility equipment.

#### (b) for a Scheduled Generator:

- i. evidence that the communication and control systems required by clause 2.36 are in place and operational;
- ii. the name plate capacity of the generator, expressed in MW;
- iiA. the minimum load at the connection point of the generator that will automatically trip off if the generator fails, expressed in MW;
- iii. the sent out capacity of the generator, expressed in MW;
- iiiA. the dependence of capacity on the type of fuel used by the facility for each fuel described in (xi);
- iv. the dependence of capacity on temperature at the location of the facility;
- v. the normal ramp up and ramp down rates as a function of output level;
- vi. emergency ramp up and ramp down rates;
- vii. the over-load capacity of the generator, if any, expressed in MW;
- viii. the AGC capabilities of the facility;
- ix. the Black Start capability of the facility;

- x. the capability to provide each of the following Ancillary Services, including information on trade-off functions when more than one other type of Ancillary Service and/or energy is provided simultaneously:
  - 1. Load Following;
  - 2. Spinning Reserve;
  - 3. [Blank]; and
  - 4. Load Rejection Reserve;
- xi. details of the fuel or fuels that the facility can use, including dual fuel capabilities and the process for changing fuels;
- xii. details of any potential energy limits of the facility;
- xiii. the minimum stable loading level of the generator, expressed in MW:
- xiv. the minimum dispatchable loading level of the generator, expressed in MW;
- any output range between minimum dispatchable loading level and name plate capacity in which the facility is incapable of stable or safe operation;
- xvi. sub-transient, transient and steady state impedances (positive, negative and zero sequence) for the facility;
- xvii. the minimum time to synchronisation from each of the following states:
  - 1. cold;
  - 2. warm;
  - 3. hot;

and the number of hours that must have elapsed since the facility last ran for it to be considered in each of these states;

- xviii. the minimum time before the facility can be restarted after it is shut down;
- xix. the minimum response time before the facility can begin to respond to an instruction from System Management to change its output;
- xx. the Metering Data Agent for the facility;
- xxi. the single line diagram for the facility, including the locations of transformers, switches, operational and settlement meters;
- xxii. the network nodes at which the facility can connect; and
- xxiii. the short circuit capability of facility equipment.

- (c) for a Scheduled Generator not registered to the Electricity Generation Corporation:
  - i. a commitment and decommitment cost data comprising:
    - a whole dollar amount representing the cost of committing the facility, where this amount must represent reasonable costs incurred in the typical start-up as justified by supporting evidence.
    - 2. a whole dollar amount representing the cost of decommitting the facility;
  - ii. [Blank]
  - iii. [Blank]
  - iv. [Blank]
  - v. Standing Balancing Data for Scheduled Generators registered as being capable of running on Non-Liquid Fuel comprising:
    - a Non-Liquid Supply Increase Price for Peak Trading Intervals;
    - 2. a Non-Liquid Supply Increase Price for Off-Peak Trading Intervals:
    - a Non-Liquid Supply Decrease Price for Peak Trading Intervals;
    - 4. a Non-Liquid Supply Decrease Price for Off-Peak Trading Intervals;

where these prices must be not less than the Minimum STEM Price, not more than the Maximum STEM Price, and must be expressed in units of \$/MWh to a precision of \$0.01/MWh; and

- vi. Standing Balancing Data for Scheduled Generators registered as being capable of running on Liquid Fuel comprising:
  - 1. a Liquid Supply Increase Price for Peak Trading Intervals;
  - a Liquid Supply Increase Price for Off-Peak Trading Intervals;
  - 3. a Liquid Supply Decrease Price for Peak Trading Intervals;
  - 4. a Liquid Supply Decrease Price for Off-Peak Trading Intervals;

where these prices must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be expressed in units of \$/MWh to a precision of \$0.01/MWh;

(d) [Blank]

- (e) for a Non Scheduled Generator:
  - i. evidence that the communication and control systems required by clause 2.36 are in place and operational;
  - ii. the name plate capacity of the generator, expressed in MW;
  - iiA. the minimum load at the connection point of the generator that will automatically trip off if the generator fails, expressed in MW;
  - iii. the ramp down rates;
  - iv. the capability to provide Load Rejection Reserve, including information on trade-off functions when energy is provided simultaneously;
  - v. for a facility not registered to the Electricity Generation Corporation a price between the Minimum STEM Price and the Maximum STEM Price in units of \$/MWh expressed to a precision of \$0.01/MWh to be the basis for payments by the Market Participant for decreases in generation in response to a Dispatch Instruction where a different price may be specified for Peak Trading Intervals and Off-Peak Trading Intervals;
  - vi. the minimum response time before the facility can begin to respond to an instruction from System Management to change its output;
  - vii. the Metering Data Agent for the facility;
  - viii. the single line diagram for the facility, including the locations of transformers, switches, operational and settlement meters;
  - ix. the network nodes at which the facility can connect;
  - x. the short circuit capability of facility equipment; and
  - xi. sub-transient, transient and steady state impedances (positive, negative and zero sequence) for the facility;
- (f) for a Market Customer serving Non-Dispatchable Load:
  - the connection points at which electricity is delivered to the Market Customer including for supply to Customers;
  - ii. the connection points at which the Market Customer holds
    Arrangements for Access, where evidence of such Arrangements
    for Access must be provided to the IMO;
  - iii. the Market Customer's nominated maximum consumption quantity, in units of MWh per Trading Interval for each connection point referred to in paragraph (i);
  - iv. the Metering Data Agent for the Market Customer;
  - v. the metering points at which the quantity of electricity, delivered to the Market Customer is to be measured;

- vi. the identity of metering points serving Intermittent Loads that are Non-Dispatchable Loads;
- vii. for each metering point identified in (vi) the maximum allowed level of Intermittent Load, where this cannot exceed the quantity in (iii);
- viii. for each metering point identified in (vi) the maximum level of net consumption at that meter which is not separately metered and which is not Intermittent Load; and
- ix. for each metering point identified in (vi) the separately metered generating systems and loads behind that meter which are not to be included in the definition of that Intermittent Load.

#### (g) for an Interruptible Load:

- the Market Customer's nominated maximum consumption quantity, in units of MWh per Trading Interval;
- ii. evidence that the communication and control systems required by clause 2.36 are in place and operational;
- iii. real-time telemetry capabilities;
- iv. the maximum amount of load that can be interrupted;
- v. the maximum duration of any single interruption;
- vi. the capability to provide each of the following Ancillary Services as a function of consumption:
  - 1. Spinning Reserve.
  - 2. [Blank]
- vii. the Metering Data Agent for the facility;
- viii. the single line diagram for the facility, including the locations of transformers, switches, operational and settlement meters;
- ix. the network nodes at which the facility can connect;
- x. the short circuit capability of facility equipment;
- xi. whether the Interruptible Load is an Intermittent Load;
- xii. if the Interruptible Load is an Intermittent Load, the maximum allowed level of Intermittent Load, where this cannot exceed the quantity in (i);
- xiii. if the Interruptible Load is an Intermittent Load, the maximum level of net consumption behind the meter associated with the Interruptible Load which is not separately metered and which is not Intermittent Load; and
- xiv. if the Interruptible Load is an Intermittent Load, the separately metered generating systems and loads behind that meter

associated with the Interruptible Load which are not to be included in the definition of that Intermittent Load.

- (h) for a Demand Side Programme:
  - i. [Blank]
  - ii. evidence that the communication and control systems required by clause 2.35 are in place and operational;
  - iii. the maximum amount of load that can be curtailed;
  - iv. the maximum duration of any single curtailment;
  - v. [Blank]
  - vi. for a Demand Side Programme that is registered to a Market Participant other than the Electricity Generation Corporation, Standing Balancing Data comprising;
    - a Consumption Decrease Price for Peak Trading Intervals; and
    - 2. a Consumption Decrease Price for Off-Peak Trading Intervals;

where these prices must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be expressed in units of \$/MWh to a precision of \$0.01/MWh;

- vii. the minimum response time before the Demand Side Programme can begin to respond to an instruction from System Management to change its output;
- viii. the maximum number of hours per year the Demand Side Programme can be curtailed;
- ix. the Trading Intervals where the Demand Side Programme can be curtailed:
- x. any restrictions on the availability of the Demand Side Programme;
- xi. the normal ramp up and ramp down rates as a function of output level, if applicable;
- xii. emergency ramp up and ramp down rates, if applicable; and
- xiii. the maximum number of times that the Demand Side Programme can be curtailed during the term of its Capacity Credits.
- (i) for a Dispatchable Load:
  - the Market Customer's nominated maximum consumption quantity, in units of MWh per Trading Interval;
  - ii. evidence that the communication and control systems required by clause 2.36 are in place and operational;

- iii. the dispatchable capacity of the load, expressed in MW;
- iv. the normal ramp up and ramp down rates as a function of output level;
- v. emergency ramp up and ramp down rates;
- vi. the AGC capabilities of the facility;
- vii. details of any potential Energy Limits of the facility;
- viii. the minimum dispatchable load level of the facility, expressed in MW;
- ix. the maximum dispatchable load level of the facility, expressed in MW;
- x. the capability to provide each of the following Ancillary Services, including information on trade-off functions when more than one other type of Ancillary Service and/or energy is provided simultaneously:
  - Load Following;
  - 2. Spinning Reserve;
  - 3. [Blank]; and
  - 4. Load Rejection Reserve;
- xA. for a facility that is registered to a Market Participant other than the Electricity Generation Corporation, Standing Balancing Data comprising:
  - 1. a Consumption Increase Price for Peak Trading Intervals;
  - 2. a Consumption Increase Price for Off-Peak Trading Intervals;
  - 3. a Consumption Decrease Price for Peak Trading Intervals; and
  - 4. a Consumption Decrease Price for Off-Peak Trading Intervals;

where these prices must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be expressed in units of \$/MWh to a precision of \$0.01/MWh;

- xi. the minimum response time before the facility can begin to respond to an instruction from System Management to change its output;
- xii. the Metering Data Agent for the facility;
- xiii. the single line diagram for the facility, including the locations of transformers, switches, operational and settlement meters;
- xiv. the network nodes at which the facility can connect; and

- xv. the short circuit capability of facility equipment.
- (j) [Blank]
- (k) For each Registered Facility:
  - i. Reserve Capacity information including:
    - 1. the most recent Certified Reserve Capacity of the facility;
    - 2. the Capacity Credits held by the facility;
    - 3. the Reserve Capacity Obligation Quantity of the facility at 41°C (if applicable);
    - 4. the Reserve Capacity Obligation Quantity of the facility at 45°C (if applicable);
    - for Interruptible Loads and Demand Side Programmes, the maximum number of times that interruption can be called during the term of the Capacity Credits;
    - 6. the method to be used for determining the ambient temperature at the site of the facility (if applicable); and
    - 7. for each Short Term Special Price Arrangement and Long Term Special Price Arrangement associated with the facility, the number of Capacity Credits covered, the Special Reserve Capacity Price to be applied, and the expiration date and time of the Special Price Arrangement.
  - ii. Network Control Service information including:
    - the identity of any Network Operator that has entered into a Network Control Service Contract in relation to the Facility;
    - the unique identifier for any Network Control Service Contract applicable to the Facility provided by a Network Operator in accordance with clause 5.3A.1(c); and
    - whether the Facility is subject to a Network Control Service Contract that requires the Facility not to be part of an aggregated Facility; and
  - iii. the Facility Dispatch Tolerance;
- (I) For each Market Customer:
  - the Individual Reserve Capacity Requirement for the Market Customer;
  - ii. a list of Non-Temperature Dependent interval meters; and
  - iii. a Standing STEM Submission (if provided by the Market Participant) comprising for each Trading Interval for a Trading Week:

- 1. a Fuel Declaration;
- 2. an Availability Declaration;
- 3. if the Market Participant is a provider of Ancillary Services, an Ancillary Service Declaration;
- 4. a Portfolio Supply Curve; and
- 5. a Portfolio Demand Curve; and
- (m) For each Intermittent Facility, whether it is exempted from funding Spinning Reserve costs.

## **Appendix 2: Spinning Reserve Cost Allocation**

This Appendix determines the value of Reserve\_Share(p,t) of the Spinning Reserve service payment costs in Trading Interval t to be borne by Market Participant p.

In this Appendix the relevant Market Participant p is the Market Participant to whom a facility is registered, with the exception that in the case of unregistered generation systems serving Intermittent Loads, the relevant Market Participant p is the Market Participant to whom the Intermittent Load is registered..

The calculations in this Appendix are based on data for a set of applicable facilities (indexed by f) where this set comprises all Scheduled Generators and all Non-Scheduled Generators registered during Trading Interval t, except those Intermittent Generators exempted under clause 2.30A.2. This set also includes all unregistered generation systems serving Intermittent Loads.

For the purpose of determining the Reserve\_Share(p,t) values, each applicable facility f has an applicable capacity associated with it for Trading Interval t.

- If facility f is an Intermittent Generator with an interval meter then this is double the MWh average interval meter reading for the Trading Month containing Trading Interval t.
- If facility f is a Scheduled Generator with an interval meter then this is double the MWh interval meter reading for Trading Interval t.
- If facility f is a Scheduled Generator that is the sum of more than one aggregated Facility, each with an interval meter and each injecting energy at an individual network connection point to the South West interconnected system, then each individual Facility is treated as an individual Scheduled Generator under Appendix 2.
- If facility f is an Electricity Generation Corporation Intermittent Generator
  without an interval meter then this is double the average monthly MWh sent
  out generation of that facility based on SCADA data over the Trading Month
  containing Trading Interval t.
- If facility f is an Electricity Generation Corporation Scheduled Generator
  without an interval meter or an unmetered generation system serving
  Intermittent Load then this is double the MWh sent out generation of that
  facility based on SCADA data for Trading Interval t.

The methodology makes use of the data in Table 1.

Block Number	Block Range (MW)	Block Size (MW)
1	> 200	100

2	>125 and ≤ 200	75
3	>65 and ≤ 125	60
4	>45 and ≤ 65	20
5	>10 and ≤ 45	35

Table 1: Data for Determine Reserve Share(p,t)

For each Block, indicated by block number b, in Table 1, the Reserve Block Share is:

If  $Sum(f(i \le)) > 0$ 

 $RBS(b) = [Block Size(b) / Sum(i, Block Size(i))] / Sum(f(i \le), TIS(f))$ 

If  $Sum(f(i \le)) = 0$ 

RBS(b) = 0

#### Where

Block Size(i) is the size of the Block with block number i listed in Table 1.

f(i≤) is the subset of applicable facilities that had applicable capacities for Trading Interval t lying within the block range of any Block with a block number value of b or less.

TIS(f) is 1 if the applicable facility f was synchronised to the SWIS during Trading Interval t, and is zero otherwise.

For each Block b in Table 1, the Reserve Generator Share is:

$$RGS(b) = Sum(i \ge, RBS(i))$$

Where

i≥ is the set of Blocks listed in Table 1 that have a block number i greater than or equal to b.

For each Market Participant p, its unadjusted share of the Spinning Reserve service payment costs for the Trading Interval is:

$$USHARE(p) = Sum(f(p), RGS(b(f)) \times TIS(f))$$

Where

f(p) is the set of applicable facilities for the Market Participant p that have applicable capacities within one of the block ranges listed in Table 1.

b(f) is the block number of the Block in Table 1 that has a block range that corresponds to the applicable capacity of the applicable facility f.

TIS(f) is 1 if the applicable facility f was synchronised to the SWIS during Trading Interval t, and is zero otherwise.

## Appendix 2

For each Market Participant p, its adjusted share of the Spinning Reserve services payment costs for Trading Interval t is:

 $\label{eq:Reserve_Share} Reserve\_Share(p,t) = USHARE(p) \, / \, sum(q, \, USHARE(q))$  Where

q is the index of the set of all Market Participants.

# **Appendix 3: Reserve Capacity Auction & Trade Methodology**

This appendix describes a single algorithm which performs two functions. One version of the algorithm is used to prevent the IMO accepting bilateral trades that have insufficient availability to usefully address the Reserve Capacity Requirement. Another version of the algorithm is used in the conduct of the Reserve Capacity Auction as required by clause 4.19.1.

The parameter "a" denotes the active Availability Class where "a" can have a value of {1, 2, 3, 4}. Availability Class 1 has the highest availability requirement, followed by Availability Class 2, Availability Class 3 and then Availability Class 4. All Certified Reserve Capacity is assigned an Availability Class. However the algorithms in this appendix allow capacity from an Availability Class with higher availability to be used in place of capacity from an Availability Class with lower availability. For example, any capacity accepted from Availability Class 1 that is in excess of the capacity requirement for Availability Class 1 will be available to meet the capacity requirement for Availability Class 2.

All Certified Reserve Capacity associated with Interruptible Loads, Demand Side Programmes or Dispatchable Loads is assigned an Availability Class according to the following table, where "Hours of Availability" is the maximum number of hours of availability per year specified for the relevant Facility under clause 4.10.1(f)(ii).

<u>Hours of</u> <u>Availability</u>	Availability Class (i.e. value of "a")
<u>&gt;= 72</u>	<u>2</u>
>=48 and <72	<u>3</u>
>=24 and <48	<u>4</u>

All other Certified Reserve Capacity is automatically in Availability Class 1.

The following algorithm applies for both the testing of bilateral trades and for the auction. Terminology that differs in each case is

- "offers"
  - For the testing of bilateral trades the "offer" is a proposed bilateral transaction (as specified in clause 4.14.1 for each Facility or block).
  - o For an auction an "offer" is a "Reserve Capacity Offer".
- the capacity requirements of Availability Class "a

For the testing of bilateral trades, for Availability Class a = 1 this is the greater of zero and Q[a] – X[a] while for Availability Classes a = 2, 3 or 4, this is the greater of zero and (Q[a] – X[a] - Y[a-1]) where

Q[a] is the quantity associated with Availability Class "a" in clause 4.5.12(c).

X[a] is the total quantity of

- Certified Reserve Capacity to be provided by Facilities subject to Network Control Service Contracts and by Facilities under Long Term Special Price Arrangements during the period to which the Reserve Capacity Requirement applies; plus
- the amount of Capacity Credits assigned under clause 4.28C for the period to which the Reserve Capacity Requirement applies

where the capacity is certified as belonging to Availability Class "a" and is not subject to a bilateral trade.

Y[a] represents the amount by which (X[a] + Y[a-1]) exceeds Q[a], with the exception that Y[0] = 0.

 For an auction this is the same as the capacity requirement for the case of bilateral trades except that it is reduced by the amount of capacity accepted as a bilateral trade.

The algorithm is as follows:

Step 1: Start with a = 1

Step 2: Let the set of active offers comprise all offers from Availability Class "a".

Step 2A: In the case of bilateral trade offers, accept offers from operating facilities and committed facilities and remove them from the set of active offers.

Step 3: Accept offers from the set of active offers in order of

- In the case of testing bilateral schedules, decreasing availability.
- In the case of the reserve capacity auction, increasing price

until the capacity requirements of Availability Class "a" are fully covered or until there are no offers left unaccepted in the set of active offers.

Where two or more offers are tied with respect to the selection criteria such that accepting all but one of them would result in the total capacity selected exceeding the total capacity requirement of the Availability Class then the tied offers are to be accepted according to the following rules until the tie is resolved.

- In the case of the reserve capacity auction, offers from operating facilities and committed facilities are to be accepted ahead of facilities that are not yet committed; then
- Offers are to be accepted in decreasing order of capacity offered; then
- Offers for capacity that was included in an Expression of Interest are to be accepted ahead of capacity that was not; then
- Offers are to be accepted in the order of the time the offers were received, with the earlier offer being taken first; and then
- Offers are to be accepted in the order the capacity secured Certified Reserve Capacity;

Step 4: If all offers in the set of active offers have been accepted but the capacity requirements of Availability Class "a" have not been covered, then record the difference as the capacity shortfall for Availability Class "a".

Step 5: Remove all offers accepted in Step 3 from the set of active offers.

Step 6: If a = 4 then go to Step 8A otherwise increase a by 1.

Step 7: Add all offers from Availability Class "a" to the set of active offers.

Step 8: Return to Step 2A.

Step 8A: In the case of the auction only:

- The Reserve Capacity Price must equal the price of the highest priced offer accepted; and
- In the special case where the Reserve Capacity Price is zero and there are
  offers with a price of zero that have not been accepted, then accept those
  offers with zero price.

Step 9: Report the offers accepted

Step 10: For each Availability Class report the capacity shortfall:

- In the case of testing bilateral schedules, this indicates the amount to be procured in the auction.
- In the case of the Reserve Capacity Auction, this indicates the amount to be procured through supplementary capacity.

Step 11: End.

In the case of the auction only:

- While leaving the Reserve Capacity Price unchanged, the IMO must exchange one or more offers not accepted for one or more offers accepted in the auction if
  - the total capacity scheduled in the auction exceeds the Reserve Capacity Auction Requirement by more than 100 MW;
  - o the Reserve Capacity Price exceeds zero,
  - the exchange produces the maximum possible reduction in the total value of offers accepted;
  - the exchange does not create an overall Reserve Capacity shortfall where none existed;
  - o in the event that a capacity shortfall exists in one or more Availability Classes, the exchange will not shift a shortfall from an Availability Class with low availability to an Availability Class with high availability; and
  - this would not result in an existing facility, or a committed facility being excluded.

## Appendix 4: [Blank]

## **Appendix 4A: Intermittent Load Individual Reserve Capacity Requirements**

This Appendix describes how Individual Reserve Capacity Requirements are derived for Intermittent Loads.

#### Define:

- MaxL(k) is the nominated load level for Intermittent Load k as specified in clause 4.28.8(c);
- RM is the reserve margin for the Reserve Capacity Cycle defined as negative one plus the ratio of the Reserve Capacity Requirement for the relevant Capacity Year as described in clause 4.6.1 and the expected peak demand for the relevant Capacity Year as described in clause 4.6.2;

Calculate Req(k), which equals MaxL(k) multiplied by RM.

When setting the Intermittent Load Reserve Capacity Requirements in accordance with clause 4.28.7A:

- If Intermittent Load k is registered and operating or the IMO reasonably
  expects it to be registered and operating during the first Trading Month of
  the Capacity Year (based on information provided to the IMO in accordance
  with clause 4.28.8(c)), then set the Intermittent Load Reserve Capacity
  Requirement for Intermittent Load k equal to Req(k).
- If IMO reasonably expects Intermittent Load k not to be registered or operating during the first Trading Month of the Capacity Year (based on information provided to the IMO in accordance with clause 4.28.8(c)), then set the Intermittent Load Reserve Capacity Requirement for Intermittent Load k equal to zero.

When revising Intermittent Load Reserve Capacity Requirements in accordance with clause 4.28.11, and after allowing for additional nominations by Intermittent Loads that have commenced operation during the Capacity Year:

- If Intermittent Load k is registered and operating or the IMO reasonably expects it to be registered and operating during the next Trading Month to commence during the Capacity Year (based on information provided to the IMO in accordance with clause 4.28.8A), then set the Intermittent Load Reserve Capacity Requirement for Intermittent Load k equal to Reg(k).
- If IMO reasonably expects Intermittent Load k not to be registered or operating during the next Trading Month to commence during the Capacity

Year (based on information provided to the IMO in accordance with clause 4.28.8A), then set the Intermittent Load Reserve Capacity Requirement for Intermittent Load k equal to zero.

## **Appendix 5: Individual Reserve Capacity Requirements**

This Appendix presents the method for annually setting and monthly adjusting Individual Reserve Capacity Requirements.

For the purpose of this Appendix:

- Steps 1 to 10 are repeated every month.
- All references, apart from those in Step 5A, to meters are interval meters.
- The Notional Wholesale Meter is to be treated as a registered interval meter measuring Temperature Dependent Load. This meter is denoted by Temperature Dependent Load meter v=v\*.
- The New Notional Wholesale Meter, determined in accordance with Step 5A, is to be treated as a registered interval meter measuring Temperature Dependent Load.
- The meter registration data to be used in the calculations is to be the most current complete set of meter registration data as at the time of commencing the calculations.
- The values of RR (the Reserve Capacity Requirement) and FL (forecast peak demand associated with that Reserve Capacity Requirement as specified in clause 4.6.2) may be modified from their standard values in accordance with clause 4.28.11A.
- In the case of the first Reserve Capacity Cycle, the IMO may use meter data relating to periods prior to Energy Market Commencement as if the energy market had commenced prior to the time periods covered by that meter data.

STEP 1: Define the 12 peak Trading Intervals during the Hot Season preceding the initial calculation of Individual Reserve Capacity Requirements for a Reserve Capacity Cycle (the "preceding Hot Season")as corresponding to the 3 highest demand Trading Intervals on each of the 4 Trading Days with the highest daily demand, where demand refers to total demand, net of embedded generation, in the SWIS.

STEP 2: For each meter, u, measuring Non-Temperature Dependent Load determine NTDL(u) and d(u,i), where:

NTDL(u) is the contribution to the system peak load of meter u during the preceding Hot Season where this contribution is double the median value of the metered consumption during the 12 peak Trading Intervals

STEP 3: For each meter, v, measuring Temperature Dependent Load determine TDL(v) and d(v,i), where:

TDL(v) is the contribution to the system peak load of meter v during the preceding Hot Season where this contribution is double the median value of the metered consumption during the 12 peak Trading Intervals

STEP 4: For each Intermittent Load meter w set its Individual Intermittent Load Reserve Capacity Requirement, IILRCR(w), to equal the amount defined in accordance with clause 4.28.7A.

STEP 5: When determining the Individual Reserve Capacity Requirements for Trading Month n identify meters that were not registered with the IMO during one or more of the 12 peak Trading Intervals in the preceding Hot Season but which were registered by the end of Trading Month n-3.

Identify the 4 Peak SWIS Trading Intervals of Trading Month n-3, being the 4 highest demand Trading Intervals, where demand refers to total demand, net of embedded generation, in the SWIS.

For a new meter u that measures Non-Temperature Dependent Load set NMNTCR(u) to be 1.1 times the MW figure formed by doubling the median value of the metered consumption for that meter during the 4 Peak SWIS Trading Intervals of Trading Month n-3.

For a new meter v that measures Temperature Dependent Load set NMTDCR(v) equal to be 1.3 times the MW figure formed by doubling the median value of the metered consumption for that meter during the 4 Peak SWIS Trading Intervals of Trading Month n-3.

For a new meter w that measures Intermittent Load set IILRCR(w) in accordance with Appendix 4A to the value applicable to Trading Month n.

STEP 5A: When determining the Individual Reserve Capacity Requirements for Trading Month n.

Find the MW figure formed by doubling the median value of the metered consumption for the Notional Wholesale Meter v\*, during the 4 Peak SWIS Trading Intervals of Trading Month n-3 ("Median Notional Wholesale Meter").

Divide the Median Notional Wholesale Meter by the number of non-interval or accumulation meters that existed at the end of Trading Month n-3 ("Average Non-Interval Meter").

Subtract the number of non-interval or accumulation meters disconnected during Trading Month n-3 from the number of non-interval or accumulation meters connected during Trading Month n-3 ("Non-Interval Meter Growth").

Multiply the Non-Interval Meter Growth and the Average Non-Interval Meter. ("New Notional Wholesale Meter").

For the New Notional Wholesale Meter set NMTDCR(v) equal to be 1.3 times the New Notional Wholesale Meter.

STEP 6: Calculate the values of d(u,i) for Non-Temperature Dependent Load, d(v,i) for Temperature Dependent Loads and d(w,i) for Intermittent Loads such that:

- d(u,i) has a value of zero if meter u measures Intermittent Load or was not registered to Market Customer i during Trading Month n-3, otherwise it has a value equal to the number of full Trading Days the meter was registered to Market Customer i in Trading Month n-3 divided by the number of days in Trading Month n-3.
- d(v,i) has a value of zero if meter v measures Intermittent Load or was not registered to Market Customer i during Trading Month n-3, otherwise it has a value equal to the number of full Trading Days the meter was registered to Market Customer i in Trading Month n-3 divided by the number of days in Trading Month n-3.
- d(w,i) has a value of zero if meter w was not registered to Market Customer i during Trading Month n, otherwise it has a value of one if Market Customer i nominated capacity for the Intermittent Load measured by meter w in accordance with clause 4.28.8(c), with the exception that if the Intermittent Load was for Load at a meter registered to Market Customer i for only part of Trading Month n, then it has a value equal to the number of full Trading Days that meter was registered to Market Customer i in Trading Month n divided by the number of days in Trading Month n.

STEP 7: Identify the set NM of all those new meters v that measured consumption that was measured by meter v=v\* during the preceding Hot Season and set TDLn(v) for meter v=v\* to equal:

```
TDLn(v^*) = TDL(v^*) - Sum(v \in NW, NMTDCR(v) \times d(v,q))
Where
```

q denotes a Market Customer to which the new meter is associated.

d(v,q) is the number of days the new meter is registered to Market Participant q divide by number of days in the trading month n-3.

STEP 8: For each Market Customer, i, calculate:

NTDLRCR(i) = Sum(u, NTDL(u) × d(u,i)) × NTDL\_Ratio  
TDLRCR(i) = 
$$(Sum(v,MTDL(v) \times d(v,i)) - DSM(i)) \times TDL$$
 Ratio

```
ILRCR(i) = Sum(w, IILRCR(w) \times d(w,i))
NRR = RR - Sum(i, ILRCR(i))
```

where

NTDL Ratio = NRR/FL

 $TDL\_Ratio = (NRR - Sum(j, NTDLRCR(j)))/Sum(j,Sum(v, MTDL(v) x d(v,j)) - DSM(j))$ 

j indicates Market Customers

ILRCR(i) is the Intermittent Load Reserve Capacity Requirement for Market Customer i.

MTDL(v) = TDL(v) for all v except v\* and MTLD(v) = TDLn(V\*) for v=v\*

RR is the Reserve Capacity Requirement (potentially modified in accordance with clause 4.28.11A).

FL is the peak demand associated with that Reserve Capacity Requirement as specified in clause 4.6.2 (potentially modified in accordance with clause 4.28.11A).

DSM(i) is the MW quantity of additional Demand Side Management demonstrated and agreed by the IMO to be available by the next Hot Season

STEP 9: For each Market Customer, i, calculate

$$X(i) = Sum(i, ILRCR(i) + NTDLRCR(i) + TDLRCR(i)))) + Sum(u, NMNTCR(u) \times d(u,i)) + Sum(v, NMTDCR(v) \times d(v,i))$$

STEP 10: The Individual Reserve Capacity Requirement of Market Customer i for Trading Month n of a Capacity Year equals (X(i) × Total\_Ratio) where

Total\_Ratio = RR/Y

Y = Sum(i,X(i))

RR is the Reserve Capacity Requirement (as modified in accordance with clause 4.28.11A).

## **Appendix 5A: Non-Temperature Dependent Load Requirements**

This Appendix presents the method and requirements for accepting, in accordance with clause 4.28.9, a load measured by an interval meter in the list provided in accordance with clause 4.28.8(a) as a Non-Temperature Dependent Load.

For the purpose of this Appendix the meter data to be used in any calculations is to be the most current set of meter data as at the time of commencing the calculations.

The IMO must perform the following steps in deciding whether to accept, in accordance with clause 4.28.9, a load measured by an interval meter in the list provided in accordance with clause 4.28.8(a) as a Non-Temperature Dependent Load:

#### Step 1:

- If, in accordance with clause 4.28.8(a), the IMO is provided by a Market Customer in Trading Month (n-2) with a list that includes an interval meter associated with that Market Customer that it wants the IMO to treat as a Non-Temperature Dependent Load from Trading Month (n); and
- If the list including the interval meter is provided by the date and time specified in clause 4.1.23; and
- If the load was treated as a Non-Temperature Dependent Load in Trading Month (n-8),

then the IMO must accept the load as a Non-Temperature Dependent Load if:

- (a) the median value of the metered consumption for that load was in excess of 1.0MWh, calculated over the set of Trading Intervals defined as the four peak SWIS intervals in each of the Trading Months starting from the start of Trading Month n-11 to the end of Trading Month n-3; and
- (b) the load did not deviate downwards from the median consumption in paragraph (a) by more than 10% for more than 10% of the time during the period from the start of Trading Month (n-11) to the end of Trading Month (n-3) except during Trading Intervals where:
  - i. the consumption was 0 MWh; or
  - ii consumption was reduced at the request of System Management; or
  - iii evidence is provided by the Market Customer that the source of the consumption was operating at below capacity due to maintenance or a Saturday, Sunday or a public holiday throughout Western Australia.

#### Step 2:

- If, in accordance with clause 4.28.8(a), the IMO is provided by a Market Customer in Trading Month (n-2) with a list that includes an interval meter associated with that Market Customer that it wants the IMO to treat as a Non-Temperature Dependent Load from Trading Month (n); and
- If the load is not treated as a Non-Temperature Dependent Load in Trading Month (n-1); and
- If the load was not treated as a Non-Temperature Dependent Load for any of the Trading Months in the Capacity Year in which Trading Month (n) falls,

then the IMO must accept the load as a Non-Temperature Dependent Load for Trading Month (n) if:

- (a) the median value of the metered consumption values for that load during the 4 Peak SWIS Trading Intervals in Trading Month (n-3) was in excess of 1.0MWh; and
- (b) the load did not deviate downwards from the median consumption in paragraph (a) by more than 10% for more than 10% of the time during Trading Month (n-3) except during Trading Intervals where:
  - i. the consumption was 0 MWh; or
  - ii consumption was reduced at the request of System Management; or
  - iii. evidence is provided by the Market Customer that the source of the consumption was operating at below capacity due to maintenance or a Saturday, Sunday or a public holiday throughout Western Australia.

#### Step 3:

- If a load was not accepted under Step 1 as a Non-Temperature Dependent Load for Trading Month (n); and
- If the load was accepted under Step 2, or previously under this Step 3, as a Non-Temperature Dependent Load for Trading Month (n-1),

then the IMO must accept the load as a Non-Temperature Dependent Load for Trading Month (n) if:

(a) the median value of the metered consumption for that load was in excess of 1.0MWh, calculated over the set of Trading Intervals defined as the four peak SWIS intervals in each of the Trading Months commencing at the start of the Trading Month for which metered consumption values were used by the IMO to accept the load as a Non-Temperature Dependent Load under Step 2 to the end of Trading Month (n-3); and

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- (b) the load did not deviate downwards from the median consumption in paragraph (a) by more than 10% for more than 10% of the time during the period from the start of the Trading Month for which metered consumption values were used by the IMO to accept the load as a Non-Temperature Dependent Load under Step 2 to the end of Trading Month (n-3) except during Trading Intervals where:
  - i. the consumption was 0 MWh; or
  - ii consumption was reduced at the request of System Management; or
  - iii. evidence is provided by the Market Customer that the source of the consumption was operating at below capacity due to maintenance or a Saturday, Sunday or a public holiday throughout Western Australia.

#### Step 4:

Otherwise, the IMO must treat a load as a Temperature Dependent Load.

## **Appendix 6: STEM Bid ,STEM Offer and MCAP Price Curve Determination**

The first part of this appendix describes a process for converting a Market Participant's Portfolio Supply Curve and Portfolio Demand Curve into a single STEM Price Curve and to then convert a Market Participant's STEM Price Curve into STEM Bids and STEM Offers relative to its Net Bilateral Position.

For each Market Participant and for each Trading Interval in the Trading Day except those for which the IMO has recorded that the Market Participant has not made a STEM Submission:

- (a) Determine for every price between the Minimum STEM Price and the Alternative Maximum STEM Price:
  - the maximum cumulative quantity the Market Participant is prepared to sell into the STEM from all of its Price-Quantity Pairs in its Portfolio Supply Curve;
  - the minimum cumulative quantity the Market Participant is prepared to sell into the STEM from all of its Price-Quantity Pairs in its Portfolio Supply Curve;
  - iii. the maximum cumulative quantity the Market Participant is prepared to buy from the STEM from all of its Price-Quantity Pairs in its Portfolio Demand Curve;
  - the minimum cumulative quantity the Market Participant is prepared to buy from the STEM from all of its Price-Quantity Pairs in its Portfolio Demand Curve;
  - v. the STEM Price Curve quantity for that price where
    - 1. the minimum STEM Price Curve quantity for that price equals the value in (ii) less the value in (iii);
    - 2. the maximum STEM Price Curve quantity for that price equals the value in (i) less the value in (iv); and
    - 3. the STEM Price Curve for that price includes all quantities between those in (1) and (2).
- (b) If the minimum quantity in a STEM Price Curve is greater than the Net Bilateral Position of the Market Participant then extend the STEM Price Curve to include the range between the Net Bilateral Position and the minimum quantity in the STEM Price Curve where this range is priced at the Minimum STEM Price.
- (c) If the maximum quantity in a STEM Price Curve is less than the Net Bilateral Position of the Market Participant then extend the STEM Price

- Curve to include the range between the maximum quantity in the STEM Price Curve and the Net Bilateral Position where this range is priced at the Alternative Maximum STEM Price.
- (d) If the Net Bilateral Position equals the minimum STEM Price Curve quantity then there are no STEM Bids, otherwise:
  - for the STEM Price Curve between the minimum STEM Price Curve quantity and the Net Bilateral Position of that Market Participant identify each price for which more than one STEM Price Curve quantity is defined;
  - ii. for each price identified in (i) identify the minimum STEM Price
    Curve quantity for which that price applies, such that the STEM
    Price Curve quantity lies between the minimum STEM Price Curve
    quantity and the Net Bilateral Position;
  - iii. for each price identified in (i) identify the maximum STEM Price
    Curve quantity for which that price applies, such that the STEM
    Price Curve quantity lies between the minimum STEM Price Curve
    quantity and the Net Bilateral Position;
  - iv. for each price identified in (i) set a Price-Quantity Pair price equal to that price;
  - v. for each price identified in (i) set a Price-Quantity Pair quantity equal to the quantity defined in (iii) less the quantity defined in (ii);
  - vi. set the Market Participant's STEM Bids to be the set of Price-Quantity Pairs defined in (iv) and (v) where each Price-Quantity Pair means that the Market Participant is prepared to buy a quantity of energy from the STEM for that Price-Quantity Pair equal to:
    - 1. 0 MWh if the STEM Clearing Price is greater than the Price-Quantity Pair price;
    - 2. the Price-Quantity Pair quantity if the STEM Clearing Price is less than the Price-Quantity Pair price;
    - an amount between 0 MWh and the Price-Quantity Pair quantity if the STEM Clearing Price equals the Price-Quantity Pair price;
- (e) If the Net Bilateral Position equals the maximum STEM Price Curve quantity then there are no STEM Offers, otherwise:
  - for the STEM Price Curve between the Net Bilateral Position of that Market Participant and the maximum STEM Price Curve quantity identify each price for which more than one STEM Price Curve quantity is defined;

- for each price identified in (i) identify the minimum STEM Price
   Curve quantity for which that price applies, such that the STEM
   Price Curve quantity lies between the Net Bilateral Position and the
   maximum STEM Price Curve quantity;
- iii. for each price identified in (i) identify the maximum STEM Price
  Curve quantity for which that price applies, such that the STEM
  Price Curve quantity lies between the minimum STEM Price Curve
  quantity and the Net Bilateral Position;
- iv. for each price identified in (i) set a Price-Quantity Pair price equal to that price;
- v. for each price identified in (i) set a Price-Quantity Pair quantity equal to the quantity defined in (iii) less the quantity defined in (ii);
- vi. set the Market Participant's STEM Offers to be the set of Price-Quantity Pairs defined in (iv) and (v) where each Price-Quantity Pair means that the Market Participant is prepared to sell a quantity of energy into the STEM for that Price-Quantity Pair equal to:
  - 0 MWh if the STEM Clearing Price is less than the Price-Quantity Pair price;
  - 2. the Price-Quantity Pair quantity if the STEM Clearing Price is greater than the Price-Quantity Pair price;
  - an amount between 0 MWh and the Price-Quantity Pair quantity if the STEM Clearing Price equals the Price-Quantity Pair price;

The second part of this appendix describes a process for converting all Market Participant Portfolio Supply Curves into a single MCAP Price Curve.

For each Trading Interval in the Trading Day:

- (f) Determine for every price between the Minimum STEM Price and the Alternative Maximum STEM Price:
  - the sum over all Market Participants except those recorded as not making a STEM Submission for the Trading Interval of the maximum cumulative quantity the Market Participant is prepared to sell into the STEM from all of its Price-Quantity Pairs in its Portfolio Supply Curve;
  - ii. the sum over all Market Participants except those recorded as not making a STEM Submission for the Trading Interval of the minimum cumulative quantity the Market Participant is prepared to sell into the STEM from all of its Price-Quantity Pairs in its Portfolio Supply Curve;
  - iii. the MCAP Price Curve quantity for that price where

- 1. the minimum MCAP Price Curve quantity for that price equals the value in (ii);
- 2. the maximum MCAP Price Curve quantity for that price equals the value in (i); and
- 3. the MCAP Price Curve for that price includes all quantities between those in (1) and (2).

## **Appendix 7: Dispatch Schedule Calculation**

The process in this appendix defines the Dispatch Schedule for a Market Participant, other than the Electricity Generation Corporation, that has received a Dispatch Instruction from System Management during a Trading Interval.

Where the IMO must calculate the Dispatch Schedule for a Market Participant's Scheduled Generator or Dispatchable Load under clause 6.15.1(b), it must use the following process.

Each Dispatch Instruction can be considered as having two ramp rates

- The ramp rate specified in the Dispatch Instruction that applies from the time when response to the Dispatch Instruction is required to commence until the time when the target output level is reached; and
- A ramp-rate of zero once the target output level is reached.

For each Trading Interval, define a set of time intervals within the Trading Interval during which different ramp-rates apply.

From n=0 to n=N, t(n) is the time in minutes from which Ramp Rate(n), in MW/minute applies

- t(0) = 0
- if a new Dispatch Instruction is issued its ramp-rate applies from the time when response to the Dispatch Instruction is required to commence, overriding a previous Dispatch Instruction
- t(N) = 30

FOL(0) is the initial net output level in MW as at the start of the Trading Interval, where FOL(0) is positive valued for supply and negative valued for consumption.

FOL(0) is determined from either:

- the Resource Plan value, or
- where a Dispatch Instruction applied at the beginning of the Trading Interval, from the previous Trading Interval's FOL(N) calculation

$$FOL(n+1) = FOL(n) + Ramp Rate(n) x (t(n+1) - t(n))$$

Then:

Dispatch Schedule =  $0.5 \times Sum[n=1 \text{ to N}, (FOL(n-1) + FOL(n)) \times (t(n) - t(n-1))/60]$ 

## Appendix 8: [Blank]

## **Appendix 9: Relevant Level Determination**

This Appendix presents the methodology for determining the Relevant Levels for Facilities that have applied for certification of Reserve Capacity under clause 4.11.2(b) for a given Reserve Capacity Cycle ("Candidate Facility").

For the purposes of the Relevant Level determination in this Appendix 9:

- the full operation date of a Candidate Facility for the Reserve Capacity Cycle ("Full Operation Date") is:
  - the date provided under clause 4.10.1(c)(iii)(7) or revised in accordance with clause 4.27.11A or clause 4.27.11B, where at the time the application for certification of Reserve Capacity is made the Facility, or part of the Facility (as applicable) is yet to enter service; or
  - the date most recently provided for a Reserve Capacity Cycle under clause 4.10.1(k) otherwise; and
- a Candidate Facility will be considered to be:
  - a new candidate Facility, if the five year period identified in step 1(a) of this Appendix commenced before 8:00 AM on the Full Operation Date for the Facility ("New Candidate Facility"); or
  - an existing Candidate Facility ("Existing Candidate Facility"), otherwise.

The IMO must perform the following steps to determine the Relevant Level for each Candidate Facility:

#### Determining Existing Facility Load for Scheduled Generation

#### Step 1: Identify:

- the five year period ending at 8:00 AM on 1 April of Capacity Year 1 of the relevant Reserve Capacity Cycle;
- (b) any 12 month period, from 1 April to 31 March, occurring during the five year period identified in step 1(a), where the 12 Trading Intervals with the highest Existing Facility Load for Scheduled Generation in that 12 month period have not previously been determined under this Appendix 9; and
- (c) any 12 month period, from 1 April to 31 March, occurring during the five year period identified in step 1(a), where the 12 Trading Intervals with the highest Existing Facility Load for Scheduled Generation in that 12 month period have previously been determined under this Appendix 9.

- Step 2: Determine the quantity of electricity (in MWh) sent out by each Candidate Facility using Meter Data Submissions for each of the Trading Intervals in the period identified in step 1(b).
- Step 3: For each Candidate Facility, identify any Trading Intervals in the period identified in step 1(b) where the Facility:
  - (a) was owned, controlled or operated by a Market Participant other than the Electricity Generation Corporation and was issued a Dispatch Instruction from System Management as notified under clause 7.13.1(c); or
  - (b) was owned, controlled or operated by the Electricity Generation Corporation and was issued an instruction from System Management to deviate from its Dispatch Plan or change its commitment or output as notified under clause 7.13.1C(d); or
  - (c) was affected by a Consequential Outage as notified by System Management to the IMO under clause 7.13.1A.
- Step 4: For each Candidate Facility and Trading Interval identified in step 3(a) use:
  - (a) the estimate provided by System Management to the IMO under clause 7.13.1(eB); and
  - (b) the quantity determined for the Facility and Trading Interval in step 2,

to estimate the quantity of energy (in MWh) that would have been sent out by the Facility had it not complied with the Dispatch Instruction during the Trading Interval.

- Step 5: For each Candidate Facility and Trading Interval identified in step 3(b) use:
  - (a) the estimate provided by System Management to the IMO under clause 7.13.1C(e); and
  - (b) the quantity determined for the Facility and Trading Interval in step 2, to estimate the quantity of energy (in MWh) that would have been sent out by the Facility had it not complied with System Management's instruction to change its commitment or output during the Trading Interval.
- Step 6: For each Candidate Facility and Trading Interval identified in step 3(c) use:
  - (a) the schedule of Consequential Outages provided by System Management to the IMO under clause 7.13.1A;
  - (b) the quantity determined for the Facility and Trading Interval in step 2; and
  - (c) the information provided by System Management under clause 7.13.1C(a),

to estimate the quantity of energy (in MWh) that would have been sent out by the Facility had it not been affected by the notified Consequential Outage during the Trading Interval.

where

Step 7: Determine for each Trading Interval in each 12 month period identified in step 1(b) the Existing Facility Load for Scheduled Generation (in MWh) as:

(Total\_Generation + DSP\_Reduction + Interruptible\_Reduction + Involuntary\_Reduction) – CF\_Generation

Total\_Generation is the total sent out generation of all Facilities, as determined from Meter Data Submissions;

DSP\_Reduction is the total quantity by which all Demand Side Programmes reduced their consumption in response to a Dispatch Instruction, as determined under clause 6.17.6(d)(i)(3);

Interruptible\_Reduction is the total quantity by which all Interruptible Loads reduced their consumption in accordance with the terms of an Ancillary Service Contract, as provided by System Management to the IMO under clause 7.13.1C(c);

Involuntary\_Reduction is the total quantity of energy not served due to involuntary load shedding (manual and automatic), as provided by System Management to the IMO under clause 7.13.1C(b); and

CF\_Generation is the total sent out generation of all Candidate Facilities, as determined in step 2 or estimated in steps 4, 5 or 6 as applicable.

- Step 8: Determine for each 12 month period identified in step 1(b) the 12 Trading Intervals, occurring on separate Trading Days, with the highest Existing Facility Load for Scheduled Generation.
- Step 9: Identify, for each 12 month period identified in step 1(c), the following:
  - (a) the Existing Facility Load for Scheduled Generation previously determined under this Appendix 9 for each Trading Interval in the 12 month period;
  - (b) the sent out generation (in MWh) for each Candidate Facility for each Trading Interval in the 12 month period that was used in the determination of the Existing Facility Load for Scheduled Generation for that Trading Interval; and
  - (c) the 12 Trading Intervals occurring on separate Trading Days that were previously determined to have the highest Existing Facility Load for Scheduled Generation in the 12 month period.

#### Determining New Facility Load for Scheduled Generation

Step10: For each New Candidate Facility determine, for each Trading Interval in the period identified in step 1(a) that falls before 8:00AM on the Full Operation Date for the Facility, an estimate of the quantity of energy (in MWh) that would have been sent out by the Facility in the Trading Interval, if it had been in operation with the

configuration proposed under clause 4.10.1(dA) in the relevant application for certification of Reserve Capacity. The estimates must reflect the estimates in the expert report provided for the Facility under clause 4.10.3, unless the IMO reasonably considers the estimates in the expert report to be inaccurate.

- Step11: For each New Candidate Facility determine, for each Trading Interval in the period identified in step 1(a), the New Facility Load for Scheduled Generation (in MWh) as:
  - (a) if the Trading Interval falls before 8:00 AM on the Full Operation Date for the Facility:

EFLSG + Actual\_CF\_Generation – Estimated\_CF\_Generation where

EFLSG is the Existing Facility Load for Scheduled Generation for the Trading Interval, determined in step 7 or identified in step 9(a) as applicable;

Actual\_CF\_Generation is the sent out generation of the New Candidate Facility for the Trading Interval, as identified in step 9(b), determined in step 2 or estimated in steps 4, 5 or 6 as applicable; and

Estimated\_CF\_Generation is the quantity determined for the New Candidate Facility and the Trading Interval in step 10;

or

- (b) the Existing Facility Load for Scheduled Generation for the Trading Interval, otherwise.
- Step 12: For each New Candidate Facility determine, for each 12 month period identified in step 1(a), the 12 Trading Intervals, occurring on separate Trading Days, with the highest New Facility Load for Scheduled Generation.

#### Determining the Facility Average Performance Level

- Step 13: For each Existing Candidate Facility, determine the 60 quantities comprising:
  - (a) the MWh quantities determined in step 2 or estimated in steps 4, 5 or 6 as applicable for each of the Trading Intervals determined in step 8, multiplied by 2 to convert to units of MW; and
  - (b) the MWh quantities determined in step 9(b) for each of the Trading Intervals identified in step 9(c), multiplied by 2 to convert to units of MW.
- Step 14: For each New Candidate Facility, determine the 60 quantities comprising:
  - (a) the MWh quantities identified in step 9(b), determined in step 2 or estimated in steps 4, 5 or 6 as applicable for each of the Trading Intervals

- identified in step 12 that fall after 8:00 AM on the Full Operation Date for the Facility, multiplied by 2 to convert to units of MW; and
- (b) the MWh quantities determined in step 10 for each of the Trading Intervals identified in step 12 that fall before 8:00 AM on the Full Operation Date of the Facility, multiplied by 2 to convert to units of MW.
- Step 15: Determine the average performance level (in MW) for each Candidate Facility f ("Facility Average Performance Level") as the mean of the 60 quantities determined for Facility f in step 13 or step 14 as applicable.

#### Determine the Facility Adjustment Factor

- Step 16: Determine the variance (in MW) for each Candidate Facility f ("Facility Variance") as the variance of the MW quantities determined for Facility f in step 13 or step 14 as applicable.
- Step17: Determine the facility adjustment factor (in MW) for each Candidate Facility f ("Facility Adjustment Factor") in accordance with the following formula:

Facility Adjustment Factor = min (G x Facility Variance (f), Facility Average Performance Level (f) /3 + K x Facility Variance (f))

Where

G = K + U/Facility Average Performance Level (f)

K is determined in accordance with the following table:

Reserve Capacity Cycle	Capacity Year	K value
2012	2014/15	0.001
2013	2015/16	0.002
2014	2016/17	0.003
2015 onwards	From 2017/18 onwards	To be determined by the IMO in accordance with clause 4.11.3B.

U is determined in accordance with the following table:

Reserve Capacity Cycle	Capacity Year	U
2012	2014/15	0.211
2013	2015/16	0.422
2014	2016/17	0.635
2015 onwards	From 2017/18	To be determined by the IMO

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onwards	in accordance with clause
	4.11.3B.

#### Determining the Relevant Level for a Facility

Step 18: Determine the Relevant Level for each Candidate Facility f (in MW) in accordance with the following formula:

Relevant Level (f) = max(0, Facility Average Performance Level (f) - Facility Adjustment Factor (f))

#### Publication of information

- Step 19: Publish on the Market Web Site by 1 June of Year 1 of the relevant Reserve Capacity Cycle:
  - (a) the Trading Intervals identified in step 8; and
  - (b) the Existing Facility Load for Scheduled Generation quantities determined in step 7.