

The background of the lower half of the page is a photograph of a wind farm and power lines, overlaid with a semi-transparent blue filter. On the left, several white wind turbines are visible, with their blades extending outwards. On the right, a tall, lattice-structured power transmission tower stands prominently. The overall scene is set against a clear sky and a hilly landscape.

Independent Market Operator

**Final Market Rule Change
Report**

Title: Equipment Tests

Ref: RC_2009_37

Date: 17 September 2010

Contents

1.	INTRODUCTION	3
2.	THE RULE CHANGE PROPOSAL	4
2.1	Submission Details	4
2.2	Details of the Proposal.....	4
2.3	The Proposal and the Wholesale Market Objectives	4
2.4	The Amending Rules Proposed by System Management.....	5
2.5	The IMO's Initial Assessment of the Proposal.....	5
3.	FIRST SUBMISSION PERIOD.....	5
3.1	Submissions received.....	5
3.2	Public Forums and Workshops.....	6
3.3	Additional Amendments to the Amending Rules	6
4.	THE IMO'S DRAFT ASSESSMENT.....	6
5.	THE IMO'S DRAFT DECISION.....	6
6.	SECOND SUBMISSION PERIOD.....	7
6.1	Submissions Received	7
6.2	Public Forums and Workshops.....	7
7.	THE IMO'S FINAL ASSESSMENT	7
7.1	Market Objectives	8
7.2	Practicality and cost of implementation	9
7.3	Views expressed in submissions.....	9
7.4	Views expressed by the Market Advisory Committee	9
8.	THE IMO'S FINAL DECISION.....	10
8.1	Reasons for the Decision.....	11
9.	AMENDING RULES	11
9.1	Commencement	11
9.2	Amending Rules	11
	APPENDIX 1: FULL DETAILS OF THE PROPOSAL.....	15
	APPENDIX 2: PROPOSED AMENDING RULES IN THE RULE CHANGE PROPOSAL.....	17
	APPENDIX 3: ADDITIONAL AMENDMENTS MADE BY THE IMO FOLLOWING THE FIRST SUBMISSION PERIOD.....	20

DOCUMENT DETAILS

IMO Notice No.: RC_2009_37
Report Title: Equipment Tests
Release Status: Public
Confidentiality Status: Public domain
Published in accordance with Market Rule 2.7.8

Independent Market Operator

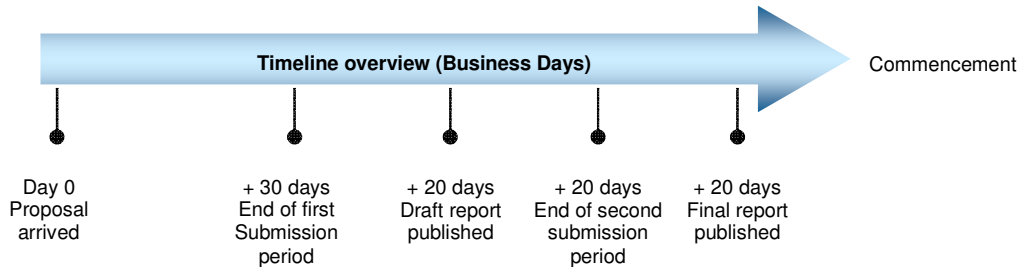
Level 3, Governor Stirling Tower
197 St George's Terrace, Perth WA 6000
PO Box 7096, Cloisters Square, Perth WA 6850
Tel. (08) 9254 4300 Fax. (08) 9254 4399
Email: imo@imowa.com.au
Website: www.imowa.com.au



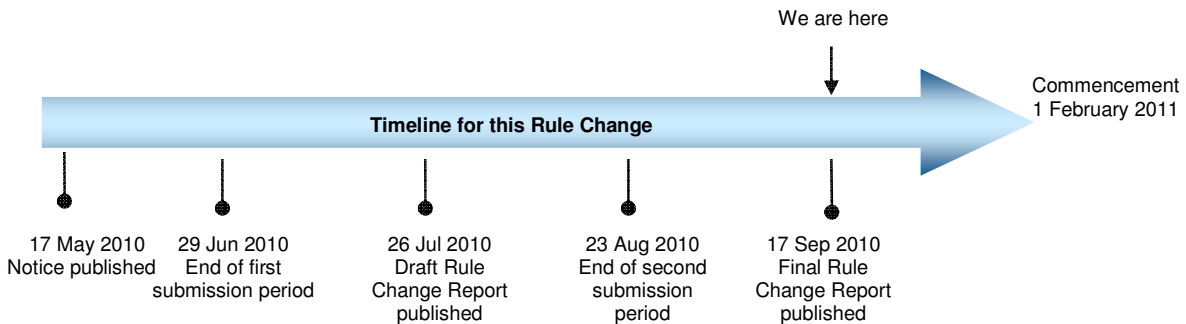
1. INTRODUCTION

On 13 May 2010 System Management initiated a Rule Change Proposal regarding amendments to clauses 7.10.2, 7.10.5A(b), 7.12.1, 7.13.1, chapter 11 and new clause 3.21AA of the Wholesale Electricity Market Rules (Market Rules).

This Rule Change Proposal was processed using the Standard Rule Change Process, described in section 2.7 of the Wholesale Electricity Market (Wholesale Electricity Market) Rules (Market Rules). The standard process adheres to the following timelines:



The key dates in processing this Rule Change Proposal were:



The IMO's final decision is to implement the Rule Change Proposal in the modified form outlined in section 6.2 of this report. The decision is based on the IMO's assessment of the Rule Change Proposal against the:

- Wholesale Market Objectives;
- practicality and cost of implementing the proposal;
- Market Advisory Committee's (MAC) recommendations; and
- outcomes from the public consultation period.

The amendments to the Market Rules made as a result of this Rule Change Proposal will commence at 8.00am on 1 February 2011.

All documents related to this Rule Change Proposal can be found on the IMO website: http://www.imowa.com.au/RC_2009_37

2. THE RULE CHANGE PROPOSAL

2.1 Submission Details

Name:	Alistair Butcher
Phone:	(08) 9427 5787
Fax:	(08) 9427 4228
Email:	Alistair.butcher@westernpower.com.au
Organisation:	System Management
Address:	
Date submitted:	13 May 2010
Urgency:	Standard Rule Change Process
Change Proposal title:	Equipment Tests
Market Rules affected:	New clause 3.21AA, clauses 7.10.2, 7.10.5A(b), 7.12.1, 7.13.1 and chapter 11

2.2 Details of the Proposal

System Management's proposal intended to introduce the concept of an "Equipment Test" into the Market Rules. A Market Participant would be able to utilise this option to seek System Management's approval, in advance, of a deviation from its Resource Plan. When an Equipment Test has been approved the Market Participant would be exempted from enforcement action in respect of the obligation of comply with its Resource Plan for the duration of the test. Market Participants would however remain liable for commercial penalties as a result of deviations from their Resource Plans during this time (i.e. UDAP, DDAP and Forced Outage refunds).

System Management considered that the introduction of the concept will allow for greater transparency associated with real-time deviations from Resource Plans, as presented in the Equipment Test plan. This will ensure greater visibility of participant's intended behaviour and result in significant benefits to real-time power system operations.

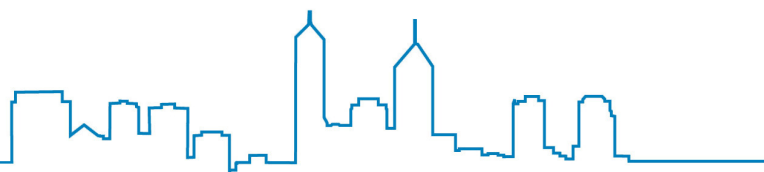
Further details of System Management's proposal are provided in Appendix 1 of this report.

2.3 The Proposal and the Wholesale Market Objectives

System Management submitted that the proposed changes would allow the Market Rules to better address Wholesale Market Objective (a).

a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;

System Management considered that allowing Market Participants to have approved Equipment Tests under a Resource Plan will increase the system operator's visibility of likely real-time deviations which might affect the power system, significantly improving the ability to plan for supply needs and contingencies. This will aid the economically efficient, safe and reliable



production and supply of electricity and electricity related services in the South West interconnected system.

2.4 The Amending Rules Proposed by System Management

The amendments to the Market Rules originally proposed by System Management are available in the Rule Change Notice and presented in Appendix 2 of this report.

2.5 The IMO's Initial Assessment of the Proposal

The IMO decided to proceed with the proposal on the basis that Market Participants should be given an opportunity to provide submissions as part of the rule change process.

3. FIRST SUBMISSION PERIOD

The first submission period for this Rule Change Proposal was between 18 May 2010 and 29 June 2010.

3.1 Submissions received

The IMO received submissions from Landfill Gas & Power (LGP), Perth Energy, and Synergy. The full text of the submissions received is available on the IMO website.

In summary, all the submissions received during the first submission period support the Rule Change Proposal. Synergy however noted concern that Equipment Testing could result in changes to Marginal Cost Administered Price (MCAP), potentially exposing Market Participants to higher than expected Balancing costs. Synergy noted that it would be wary of facility testing at times and under circumstances that could result in liquid MCAP. Synergy would therefore prefer that, when System Management decides whether or not to approve an Equipment Test request, it takes into account the likelihood of such an MCAP outcome.

All submitting parties considered that the proposal would better achieve Wholesale Market Objective (a).

The IMO's response to issues raised in Synergy's submission

Equipment Tests may impact on MCAP in the case where additional units are required to cover supply variations from units undertaking Equipment Tests in real time, thereby increasing the relevant quantity and consequently MCAP during these intervals. However, MCAP is inherently unpredictable and System Management is required to make a decision to approve a request for an Equipment Test by 4pm on the Scheduling Day. As such the IMO does not consider it practicable to explicitly require System Management to consider likely forecasted impacts on MCAP when approving Equipment Tests.

The IMO notes that System Management will be required to consider the impacts on system security and reliability and any outage approved in accordance with clause 3.19 of the Market Rules when deciding whether to approve an Equipment Test. The IMO considers that these requirements should ensure that Equipment Tests are not approved to take place during periods when they might have a large impact on MCAP.



3.2 Public Forums and Workshops

No public forums or workshops were held in relation to this Rule Change Proposal.

3.3 Additional Amendments to the Amending Rules

Following the first public submission period the IMO has made some changes to the proposed Amending Rules:

- to include an amendment to take into account Equipment Test rates as well as Planned Outage and Forced Outage rates when assigning Certified Reserve Capacity (Clause 4.11.1(h)). This will ensure that reliable capacity is encouraged on the SWIS. The IMO notes that there will be further amendments to System Management's Power System Operation Procedure: Facility Outages required to specify how the Equipment Test rate will be calculated; In updating this PSOP, System Management will need to ensure that any double counting of facilities undertaking an Equipment Test and also experiencing a Forced Outage is taken into account;
- to clearly specify that System Management will not approve an Equipment Test for a Facility which is undergoing a test of Reserve Capacity during the proposed Trading Intervals (Clause 3.21.AA6); and
- minor and typographical amendments to improve the overall integrity of the proposed changes.

These additional amendments are contained in Appendix 3 of this paper.

4. THE IMO'S DRAFT ASSESSMENT

The IMO's draft assessment, against clauses 2.4.2 and 2.4.3 of the Market Rules, and analysis of the Rule Change Proposal can be viewed in the Draft Rule Change Report (available on the IMO's website).

5. THE IMO'S DRAFT DECISION

Based on the matters set out in the Draft Rule Change Report, the IMO's draft decision, in accordance with clause 2.7.7(f), was to accept the Rule Change Proposal as modified following the first submission period.

The IMO made its decision on the basis that the Amending Rules:

- will allow the Market Rules to better address Wholesale Market Objectives (a);
- are consistent with the remaining Wholesale Market Objectives;
- have the general support of the MAC members; and



- have the general support of the majority of submissions received during the first submission period.

6. SECOND SUBMISSION PERIOD

Following the publication of the Draft Rule Change Report on the IMO website, the second submission period was between 27 July 2010 and 23 August 2010.

6.1 Submissions Received

The IMO received a submission from Synergy during the second submission period. The full submission is available on the IMO website.

In summary, Synergy supports the Rule Change Proposal and the additional amendments to the Market Rules proposed by the IMO in its Draft Rule Change Report. Synergy agreed that the proposed amendments would better address Wholesale Market Objective (a).

6.2 Public Forums and Workshops

No public forums or workshops were held in relation to this Rule Change Proposal during the second submission period.

7. THE IMO'S FINAL ASSESSMENT

In preparing its Final Rule Change Report, the IMO must assess the Rule Change Proposal in light of clauses 2.4.2 and 2.4.3 of the Market Rules.

Clause 2.4.2 outlines that 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*”.

Additionally, clause 2.4.3 states, when deciding whether to make Amending Rules, the IMO must have regard to the following:

- Any applicable policy direction from the Minister regarding the development of the market;
- The practicality and cost of implementing the proposal;
- The views expressed in submissions and by the MAC; and
- Any technical studies that the IMO considers necessary to assist in assessing the Rule Change Proposal.

The IMO notes that there has not been any applicable policy direction from the Minister in respect of this Rule Change Proposal nor has it commissioned a technical review in respect of this Rule Change Proposal.

The IMO's assessment is outlined in the following sections.



7.1 Market Objectives

The IMO considers that the Market Rules as a whole, if amended, will be consistent with the Wholesale Market Objectives.

Wholesale Market Objective	Consistent with objective
(a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system	Yes
(b) to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors	Yes
(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	Yes
(d) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system	Yes
(e) to encourage the taking of measures to manage the amount of electricity used and when it is used	Yes

Further, the IMO considers that the Market Rules if amended would not only be consistent with the Wholesale Market Objectives but also allow the Market Rules to better address Wholesale Market Objective (a):

Impact	Wholesale Market Objectives
Allow the Market Rules to better address objective	a
Consistent with objective	b, c, d, e
Inconsistent with objective	-

(a) *to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West Interconnected System*

The IMO considers that the introduction of the concept of Equipment Tests into the Market Rules will promote the safe and reliable supply of electricity in the SWIS. In particular, the IMO considers that by ensuring transparency when Market Participants plan to undertake Equipment Tests, System Management will be able to plan for supply needs and contingencies.

The IMO also considers that by removing System Management's obligation to instruct Market Participants undertaking tests to return to their Resource Plans, the proposed changes may encourage greater allocative efficiency of System Management resources.

The IMO considers that the proposed changes are consistent with the remaining Wholesale Market Objectives.



7.2 Practicality and cost of implementation

Cost: The proposed amendments will require changes to both the Wholesale Electricity Market Systems operated by the IMO and the SMMITS system operated by System Management. Costs are estimated to be approximately \$5,000 and \$20,000 respectively.

Practicality: The IMO has not identified any issues with the practicality of implementing the proposed changes.

7.3 Views expressed in submissions

The IMO received three submissions in favour of the proposal during the first submission period. LGP, Perth Energy and Synergy were generally supportive of the proposal on the grounds that it will allow for a Market Participant to test its equipment outside the normal maintenance cycle without distorting commercial incentives. Synergy noted some concerns around the impact of Equipment Tests on MCAP values which are discussed in section 3.1 of this report.

During the second submission period the IMO received a submission from Synergy in support of the Rule Change Proposal and the additional amendments made by the IMO in the Draft Rule Change Report.

7.4 Views expressed by the Market Advisory Committee

The MAC discussed the proposal at a number of meetings:

- 14 October 2010: General Business;
- 11 November 2009: Pre Rule Change Discussion Paper; and
- 12 May 2010: Pre Rule Change Discussion Paper.

An overview of the discussions from the various MAC meetings is presented below. Further details are available in the MAC meeting minutes available on the IMO website: <http://www.imowa.com.au/market-advisory-committee>

October 2009 MAC meeting

System Management noted its intent to provide a Pre Rule Change Discussion Paper about creating a regime for equipment tests that do not meet the definition of Commissioning Tests. Verve Energy noted that it had been unable to conduct equipment tests except by applying for outages, which is not an ideal solution. Alinta agreed that extra flexibility would be useful.

November 2009 MAC meeting

System Management first presented its proposal at the 11 November 2009 MAC meeting. During the meeting the following points were raised.



- The IMO queried whether Equipment Testing is a new concept. System Management noted that it is, but had previously been included the Power System Operation Procedure (PSOP): Commissioning and Testing. The provisions in this PSOP to allow for Equipment Tests had been removed under PPCL0009 due to a lack of heads of power in the Market Rules.
- System Management agreed to clarify the day ahead nature of Equipment Tests in the proposed Amending Rules.
- Members agreed that transparency of Equipment Test information would be valuable to Market Participants.
- The IMO noted that details around the application, approval and publication process should be included in the Market Rules. System Management agreed to amend the proposal to reflect this.
- Members discussed whether there are procedural aspects that could be included in a PSOP. System Management agreed to discuss at the PSOP Working Group and if necessary include a specific heads of power in the Rule Change Proposal to allow for the concept of Equipment Tests to be included in the PSOP.
- System Management agreed to provide an estimate of implementation costs associated with using SMMITS for the registration of Equipment Tests to the IMO.

The MAC agreed that the proposal should be progressed subject to the agreed changes.

May 2010 MAC meeting

System Management presented its revised proposal at the 12 May 2010 meeting. During the meeting System Management noted that the proposal exempts a Market Participant from enforcement action for deviations from its Resource Plan during an approved Equipment Test. However, the Market Participant would remain liable for UDAP, DDAP and Capacity Cost Refunds.

The MAC supported the progression of the Rule Change Proposal.

8. THE IMO'S FINAL DECISION

Based on the matters set out in this report, the IMO's final decision, in accordance with clause 2.7.8 (e), is to accept the Rule Change Proposal as modified in the Draft Rule Change Report.

The IMO notes that the necessary updates required to both the PSOP: Facility Outages and PSOP: Commissioning and Testing will be developed by System Management in conjunction with the System Management Procedure Change and Development Working Group. Both PSOP's will be developed via the formal Procedure Change Process prior to the commencement of the Amending Rules on 1 February 2011. The IMO considers that this will ensure that Market Participants are not exposed to any regulatory uncertainty around how the Equipment Test rate to be used in the Certification of Reserve Capacity will be determined. The IMO notes that the proposed amendments to the PSOP: Commissioning and Testing have been previously presented to Market Participants by System Management as an appendix to its Rule Change Proposal.



8.1 *Reasons for the Decision*

The IMO has made its decision on the basis that the Amending Rules:

- will allow the Market Rules to better address Wholesale Market Objective (a);
- are consistent with the other Wholesale Market Objectives;
- have the general support of the MAC members; and
- have the general support of the majority of submissions received in the first and second submission periods.

Additional detail outlining the analysis behind the IMO's decision is outlined in section 7 of this Final Rule Change Report.

9. **AMENDING RULES**

9.1 *Commencement*

The amendments to the Market Rules resulting from this Rule Change Proposal will commence at **8.00am** on **1 February 2011**.

9.2 *Amending Rules*

The IMO's final decision is to amend the Market Rules. The following clauses are amended (~~deleted wording~~, new wording):

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:

- verify Standing Data for a Facility in accordance with clause 2.34.6;
- resolve technical performance issues; or
- 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:

- 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.

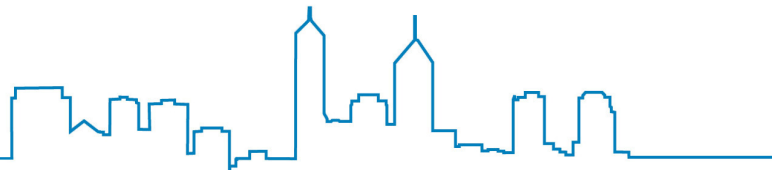
3.21AA.7 System Management must document the procedure it follows in approving Equipment Tests in the Power System Operation Procedure and System Management and Market Participants must follow that documented Market Procedure when planning and conducting Equipment Tests.

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.

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 to which the application relates:

...

- (h) the IMO may decide not to assign Certified Reserve Capacity to a Facility if:
 - i. 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 rate₁ ~~and~~ 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 rate₁ ~~and~~ Forced Outage rate and Equipment Test rate of greater than 30%,

where the Planned Outage rate₁ ~~and~~ 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); and

...

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, ~~or~~ breach any applicable law, or is subject to an approved Equipment Test pursuant to clause 3.21AA.

7.10.5A System Management is not required to follow the process in clause 7.10.5 where it considers that:

...

- (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;

...

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:

...

- (d) the incidence and extent of shortfalls in Ancillary Services, involuntary curtailment of load, High Risk Operating States and Emergency Operating States, together with:

- i. 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.

7.13.1 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:

...

- (h) the identity of the Facilities which were subject to ~~either~~ a Commissioning Test, ~~or~~ a test of Reserve Capacity or an Equipment Test for each Trading Interval of the Trading Day.

Chapter 11 **Equipment Test**: has the meaning given in clause 3.21AA.1.



APPENDIX 1: FULL DETAILS OF THE PROPOSAL

Background

Generation facilities at times require ongoing testing (eg for environmental approvals) which is unable to satisfy the requirements of a Commissioning Test as provided for in clause 3.21A.

There is no ability under the Market Rules to undertake a test of equipment except via production consistent with a Resource Plan or Commissioning Test. Where a participant endeavours to perform a test under a Resource Plan there may on occasion be undisclosed deviations. To ensure Power System Security and Power System Reliability it is imperative that Market Participants consult with System Management before undertaking tests which may see the facility deviate from its Resource Plan, to allow System Management to plan system operations accordingly during the relevant period.

However, under the current Market Rules, if a facility notified System Management of the intention to perform such a test, and the test would result in deviation from a Resource Plan, System Management would be obliged to order the facility to return to the Resource Plan. Non-compliance with this instruction would expose the Participant to enforcement action.

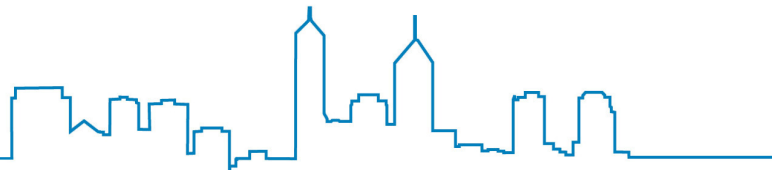
System Management noted that its proposal intends to provide an option to Market Participants called an "Equipment Test". A participant could utilise this option to seek System Management approval, in advance, of a deviation from Resource Plan. The participant would be exempted from enforcement action in respect of the obligation to comply with Resource Plan for the duration of the test, but participants would still remain liable for commercial penalties (ie. UDAP, DDAP, Forced Outage refunds).

Advance notification must be given to System Management in the form of a proposed testing plan, which if approved, removes System Management's obligation to order the facility back to its Resource Plan in accordance with clause 7.10.5 of the Market Rules for the duration of the test.

System Management notes that the advantage of the proposal is a higher degree of transparency associated with real-time deviations from Resource Plans. If Market Participants are given the opportunity to provide their test plans to System Management in advance, and are exempt from compliance (but not commercial) penalties this will afford a significant benefit to real-time power system operations through greater visibility of a participant's intended behaviour.

Because participants will be relieved of the risk of compliance action during the period of the Equipment Test, System Management considered that publication of the existence of such a test is appropriate. Consequently, a change to clause 7.12 (a report on the performance of the market with respect to the dispatch process) was proposed by System Management to provide this visibility.

Finally, System Management noted the anticipated amendments to Power System Operation Procedure: Commissioning and Testing to provide for the mechanics of seeking an Equipment Test (consistent with new clauses 3.21AA.3 and 3.21AA.7) as follows:



5.6 Other Tests

1. Testing which does not conform to the Commissioning Test requirements in the Market Rules must be by way of Resource Plan, or variation to the plant schedule pursuant to first commissioning or an approved Equipment Test [MR 7.6A.2(a) and MR 3.21AA].
2. Where a Market Participant wishes System Management to use the process stipulated in Market Rules **[MR 7.10.5A or 3.21AA]**, the Market Participant must provide System Management with a testing plan equivalent to Appendix I and must specifically request that System Management exercise its powers under clause 7.10.5A or approves an Equipment Test under clause 3.21AA.
3. System Management may vary the requirements set out in Appendix I for a particular Market Participant as required by the circumstances.
4. System Management will advise Market Participants of contact details and modes of communication for the submission of commissioning test plans as provided for under this section 5.6.
5. A Market Participant must comply with the communication requirements set by System Management pursuant to section 5.6.4 of this Procedure.
6. System Management may prepare a communication protocol to apply between System Management and a Market Participant concerning a commissioning test being carried out on the Trading Day.
7. A Market Participant must comply with the communication requirements established in the relevant communication protocol.



APPENDIX 2: PROPOSED AMENDING RULES IN THE RULE CHANGE PROPOSAL

System Management proposed the following amendments to the Market Rules in its Rule Change Proposal (~~deleted text~~, added text):

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.

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 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 revoke its approval 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.

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, ~~or~~ breach any applicable law, or is subject to an approved Equipment Test pursuant to clause 3.21AA.

7.10.5A System Management is not required to follow the process in clause 7.10.5 where it considers that:

...

- (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 a the Trading Interval;

...

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:

...

- (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.

7.13.1 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:

...

- (h) the identity of the Facilities which were subject to either a Commissioning Test or a test of Reserve Capacity or an Equipment Test for each Trading Interval of the Trading Day.

Chapter 11 **Equipment Test:** has the meaning given in clause 3.21AA.1.



APPENDIX 3: ADDITIONAL AMENDMENTS MADE BY THE IMO FOLLOWING THE FIRST SUBMISSION PERIOD

The IMO has made some amendments to the Amending Rules following its assessment of the first submission period responses. These changes are as follows (~~deleted text~~, added text):

The proposed amendment to clause 3.21AA.2 will clarify that an Equipment Test will be granted by System Management for a whole Trading Day. If a Market Participant wishes to undertake Equipment Test's for a number of days these will require individual approval by System Management.

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.

The proposed amendment to clause 3.21AA.6 will clarify that System Management will not approve a Equipment Test if it has already approved a Reserve Capacity test during the Trading Intervals proposed in the indicative test programme in accordance with clause 4.25.8.

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.

The proposed amendment to clause 3.21AA.8 will ensure that System Management can revoke an Equipment Test even if it has already begun, in the case where it becomes aware that the test poses a threat to system security or reliability or if the test is no longer required.

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 ~~revoke~~ 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.



The proposed amendment to clause 4.11.1(h) will ensure that the IMO takes into account a Facilities Equipment Test rate when determining to assign Certified Reserve Capacity to a Facility. This will ensure that unreliable Facilities which undertake a large number of Equipment Tests will be discouraged in the SWIS.

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 to which the application relates:

...

- (h) the IMO may decide not to assign Certified Reserve Capacity to a Facility if:
 - i. 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, ~~and~~ 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, ~~and~~ Forced Outage rate and Equipment Test rate of greater than 30%,

where the Planned Outage rate, ~~and~~ the Forced Outage rate and the 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); and

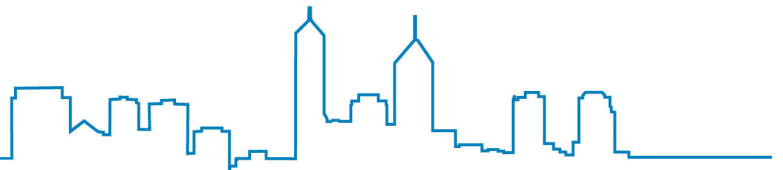
...

The proposed minor amendment to clause 7.10.5A will improve the integrity of the Amending Rules.

7.10.5A System Management is not required to follow the process in clause 7.10.5 where it considers that:

...

- (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 a the Trading Interval;

...

The proposed minor amendment to clause 7.12.1 will improve the integrity of the Amending Rules.

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:

...

- (d) the incidence and extent of shortfalls in Ancillary Services, involuntary curtailment of load, High Risk Operating States and Emergency Operating States, together with:
 - i. 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
- (de) the incidence of any Equipment Test approved in accordance with clause 3.21AA, including the date the Equipment Test occurred and the Facility details.

The proposed minor amendment to clause 7.13.1 will improve the integrity of the Amending Rules.

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:

...

- (h) the identity of the Facilities which were subject to ~~either~~ a Commissioning Test, ~~or~~ a test of Reserve Capacity or an Equipment Test for each Trading Interval of the Trading Day.

