
Wholesale Electricity Market Rule Change Proposal Form

Change Proposal No: RC_2009_30

Received date: 22 October 2009

Change requested by

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|---------------------------------|---|
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| Address: | Level 3, Governor Stirling Tower, 197 St George's Terrace |
| Date submitted: | 22 October 2009 |
| Urgency: | Low |
| Change Proposal title: | Correction of minor and typographical errors |
| Market Rule(s) affected: | 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(b)(i), 2.34.7, 3.10.2(a)(i), 3.18.11A(a), 3.18.11A(b), 4.10.1(e), 4.11.1(a), 3.18.11(aA), 3.19.6(a), 4.12.6(b), 6.3A.2, 6.5.1(b), 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, 9.16.2, 9.9.1, 9.23.4(b), 9.24.1, 9.24.2, 10.5.1, the Glossary, Appendix 4A and Appendix 5. |

Introduction

Clause 2.5.1 of the Wholesale Electricity Market Rules (Market Rules) provides that any person (including the Independent Market Operator (IMO)) may make a Rule Change Proposal by completing a Rule Change Proposal Form that must be submitted to the IMO.

This Change Proposal can be posted, faxed or emailed to:

Independent Market Operator

Attn: Troy Forward, Manager Market Development and System Capacity
PO Box 7096
Cloisters Square, Perth, WA 6850

Fax: (08) 9254 4399

Email: market.development@imowa.com.au

The IMO will assess the proposal and, within 5 Business Days of receiving this Rule Change Proposal form, will notify you whether the Rule Change Proposal will be progressed further.

In order for the proposal to be progressed, all fields below must be completed and the rule change proposal must explain how it will enable the Market Rules to better contribute to the achievement of the wholesale electricity market objectives. The objectives of the market are:

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

Details of the proposed Market Rule Change

1. Describe the concern with the existing Market Rules that is to be addressed by the proposed Market Rule change:

As part of its ongoing review of the Market Rules, the IMO has committed to submitting three Rule Change Proposals per year to address minor and typographical errors that have been identified. This Rule Change Proposal is the third and final minor and typographical proposal for 2009.

This Rule Change Proposal includes amendments identified by the IMO to improve the language and punctuation used in the Market Rules, correct Market Rule references and removes unnecessary ambiguity in identified clauses. The IMO considers that this will enhance the integrity of the Market Rules.

The minor and typographical corrections proposed are:

- Clause 1.4.1: delete subclause (q), the interpretation of Loss Factor Adjusted, as this is replicated in the glossary. The IMO considers that the glossary is the more appropriate place for this definition as clause 1.4.1 is about general interpretation clauses;
- Clause 1.5.1: change “rules” to “Market Rules”;

- Clause 2.1.2: change “Reserve Capacity mechanism” to “Reserve Capacity Mechanism”;
- Clause 2.5.7: change “Website” to “Web Site”;
- Clause 2.5.14: add “,” after “...clause 2.6”;
- Clause 2.5.15: add “,” after “...clause 2.7”;
- Clause 2.7.6 and 2.7.8: change “draft Rule Change Report” to “Draft Rule Change Report”;
- Clause 2.8.9: add “a” before “notice of the Minister’s decision...” and “.” to the end of the clause;
- Clause 2.8.11: change “For” to “for” for both sub clauses;
- Clause 2.13.10: change reference to clause “2.23.10(d)” to “2.13.10(d)”;
- Clause 2.14.1: change “clause” to “clauses”;
- Clause 2.14.3: add “and” to the end of sub clause (b);
- Clause 2.16.2: change “.” to “,” for sub clause (hA);
- Clause 2.28.16B(b): change “that” to “than” before “5 MWh”;
- Clause 2.29.9: Add “the” before “IMO” in the second sentence;
- Clause 2.30.5: change “power system Security and Reliability” to “Power System Security and Power System Reliability”;
- Clause 2.30B.3(a): add “the” before “generating system can be..”;
- Clause 2.30B.3(aA): change “,” to “.”;
- Clause 2.30B.3(b): change “,” to “.”;
- Clause 2.30B.3(c): change “,” to “.”;
- Clause 2.30B.5 and 2.30C.1: change “Facility Registration” to “Facility registration”;
- Clause 2.30B.9: add “,” after “...date of transfer”, deleted “to be” before “automatically transferred...”, and add “to the Market Customer” after “...automatically transferred”;

- Clause 2.30B.11(d): replace “expect” with “expected”;
- Clause 2.30B.11(h): replace “;” with “.” at the end of the sub clause;
- Clause 2.31.3: change reference in clause from “2.31.2” to “2.31.1”;
- Clause 2.32.4(b)(i): change “Submissions” to “submissions”;
- Clause 2.34.7: change “tests” to “test” and “is” to “was”;
- Clause 3.10.2(a)(i), 3.18.11A(a), 3.18.11A(b), 4.10.1(e) and 4.11.1(a): change “parasitic load” to “Parasitic Load”;
- Clause 3.18.11A(b): change “;” to “.”;
- Clause 3.18.11(aA) and 3.19.6(a): change “The” to “the”;
- Clause 4.12.6(b): add “and” to the end of the sub clause;
- Clause 6.3A.2: align the paragraph with clause 6.3A.2(a);
- Clause 6.5.1(b): change “Scheduled Day” to “Scheduling Day”;
- Clause 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, 9.16.2: change “meter data submission” to “Meter Data Submission”;
- Clause 8.6.1: “meter dispute” to “Meter Dispute”;
- Clause 9.9.1: align the formula to the equals sign;
- Clause 9.23.4(b), 9.24.1 and 9.24.2: change “draw upon” to “Draw Upon”;
- Clause 10.5.1: replace the incorrect reference to clause “7.13.1(cC)” with “7.13.1A(a)”;
- Chapter 11: change the first letter of each word from lower case to upper case for the following glossary terms: “draw upon”, “meter dispute” and “parasitic load”;
- Appendix 4A: amend “Reserve Capacity Target” to “Reserve Capacity Requirement”;¹
- Appendix 5: amend “days” to “Trading Days”.²

¹ For additional detail please refer to attachment 1 for details

² For additional detail please refer to attachment 2 for details

2. Explain the reason for the degree of urgency:

The IMO submits that these proposed changes consist of minor and typographical amendments which will improve the integrity of the Market Rules. The changes do not seek to amend the operation of the Market Rules. As such, the proposal fulfils sub-clause 2.5.9(a), in that it is of a procedural nature, and therefore may be fast-tracked:

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;

3. Provide any proposed specific changes to particular Rules: (for clarity, please use the current wording of the Rules and place a ~~strike through~~ where words are deleted and underline words added)

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

...

(q) [Blank] ~~(Loss Factor adjusted): In these Market Rules, "Loss Factor adjusted" in respect of a quantity of electricity means that the quantity must be multiplied by any applicable Loss Factor; and~~

...

1.5.1. The following documents are subservient to the ~~rules~~ Market Rules:

...

2.1.2. The functions of the IMO are:

...

(b) to operate the Reserve Capacity ~~mechanism~~ Mechanism, the Short Term Energy Market and the balancing process;

...

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 ~~Website~~ Web Site. The notice must include:

...

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 2.7.1 and clause 2.6 does not apply.
- 2.7.6. Within 20 Business Days following the close of submissions, the IMO must:
- (a) prepare and publish a ~~draft~~ Draft Rule Change Report on the Rule Change Proposal; and
 - (b)
- 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~~ 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;
- 2.13.10. If the IMO becomes aware of an alleged breach of the Market Rules or Market Procedures, then:
- ...
- (e) it must record the response of the Rule Participant to any warning issued under clause ~~2.23.10(d)~~ 2.13.10(d).
- 2.14.1. The IMO must appoint one or more Market Auditors that may be used to conduct the audits described in ~~clause~~ clauses 2.14.2 and 2.14.6(b).
- 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:
- ...
- (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.
- ...
- 2.16.2. 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:
- ...
- (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;

...

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:

...

- (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 that~~ 5 MWh in any Trading Interval in the event of an outage of that generating system;

...

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.

2.30.5. 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~~ Power System Security and Power System Reliability;

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:

1. 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
2. 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.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~~ registration (for an Interruptible Load or Curtailable Load).

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 ~~to be~~ automatically transferred to the Market Customer.

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:

...

(d) the generation system must have no Capacity Credits associated with it for the Capacity Year during which it is ~~expect~~ expected to commence operation;

...

(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;

...

2.30C.1. The IMO must not require that an applicant for Rule Participant registration or Facility Registration ~~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.

2.31.3. 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 ~~2.31.2~~ 2.31.1.

2.32.4. From the time the IMO issues a Suspension Notice to a Rule Participant:

...

(b) the IMO may do all or any of the following to give effect to the notice:

- i. reject any ~~Submissions~~ submissions from, or on behalf of, the Market Participant, and cancel any existing ~~Submissions~~ submissions; and

...

2.34.7. The IMO may reject a change:

...

(b) in any other Standing Data if it considers that an inadequate explanation, including ~~tests~~ test results, ~~is~~ was provided to justify the change in Standing Data.

...

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:

- i. 70% of the total output, including ~~parasitic load~~ Parasitic Load, of the generation unit synchronised to the SWIS with the highest total output at that time; and

...

3.18.11A. The Ready Reserve Standard requires that the available generation and demand-side 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~~ Parasitic Load, of the generation unit synchronized to the SWIS with the highest total output at that time;
 - ...
 - (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:
 - i. 70% of the total output, including ~~parasitic load~~ Parasitic Load, of the generation unit synchronized to the SWIS with the second highest total output at that time;
 - ...
- 4.10.1. The information to be submitted with an application for certification of Reserve Capacity must pertain to the Reserve Capacity Cycle to which the certification relates and must include:
- ...
 - (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~~ 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~~ 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;
 - ...
- 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:
- (a) subject to paragraphs (d) and (e) and clause 4.11.2, the Certified Reserve Capacity for a Facility for a Reserve Capacity Cycle is not to exceed the IMO's reasonable expectation as to the amount of capacity likely to be available from that Facility, after netting off capacity required to serve Intermittent Loads, embedded loads and ~~parasitic loads~~ Parasitic Loads, at daily peak demand times in the period from the start of December 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;
 - ...

- 3.18.11. System Management must apply the following criteria when evaluating Outage Plans:
- ...
- aA) ~~The~~ 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;
- ...
- 3.19.6. System Management must use the following criteria when considering approval of Scheduled Outages or Opportunistic Maintenance:
- (a) ~~The~~ 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-;
- ...
- 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, or 4.28B.4 is to be reduced once the Reserve Capacity Obligations take effect, as follows:
- ...
- (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 Facility is subject to a Commissioning Test during a Trading Interval then the Reserve Capacity Obligation Quantity for that Facility must be zero during that Trading Interval.
- 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 respected 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:
- ...
- where the Maximum Supply Capability may be higher than the actual capacity available during the Trading Interval;
- 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:
- ...
- (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 ~~Scheduled Day~~ Scheduling Day.

- 8.4.1. A Metering Data Agent must provide ~~meter data submissions~~ 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~~ Data Submission must be in the format described in clause 8.6.
- 8.4.3. A ~~Meter data submission~~ Data Submission must be made using the Settlement Submission System.
- 8.4.4. Upon receipt of a ~~meter data submission~~ Meter Data Submission, the IMO must provide a Metering Data Agent with confirmation of receipt of a ~~meter data submission~~ 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~~ 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.
- 8.5.2. 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~~ Meter Data Submission made to the IMO following any correction of the meter data.
- 8.6.1. A ~~meter data submission~~ Meter Data Submission must comprise:
 - ...
 - (e) meter adjustments that stem from actual meter data becoming available or from the resolution of a dispute concerning meter data ("~~meter dispute~~ **Meter Dispute**") in accordance with the dispute resolution process in the applicable Metering Protocol, including:
 - i. for each interval meter and each Trading Interval in the calendar month to which a ~~meter dispute~~ Meter Dispute has resulted in changes to meter data:

1. the MWh quantity for that meter;
- ...

8.6.2. The IMO must document:

- (a) the format of ~~meter data submissions~~ 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~~ Meter Data Submissions.

9.3.4. Subject to clause 2.30B.10, the Metered Schedule for a Trading Interval for a Facility or Non-Dispatchable Load, excluding those Non-Dispatchable Loads referred to in clause 9.3.4A, is the net quantity of energy generated and sent out into the relevant Network or consumed by the Facility or Non-Dispatchable Load (as applicable) during that Trading Interval, Loss Factor adjusted to the Reference Node, and determined from ~~meter data submissions~~ 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.

9.16.2. 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~~ 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.

...

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

$$\begin{aligned}
 \text{ASSA}(p,m) = & \text{Electricity Generation Corporation AS Provider Payment}(p,m) \\
 & + d(p,i) \times \text{ASP_Payment}(i,m) \\
 & - \text{Load_Following_Share}(p,m) \\
 & \times (\text{Capacity_LF}(m) + \text{Availability_Cost_LF}(m)) \\
 & - \text{Reserve_Cost_Share}(p,m) \\
 & - \text{Consumption_Share}(p,m) \times \text{Cost_LRD}(m)
 \end{aligned}$$

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:

- ...
- (b) if it has not already done so, ~~draw upon~~ 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.
- 9.24.1. In the event that 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~~ 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~~ 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
- ...
- 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:
- ...
- (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 ~~7.13.1(cC)~~ 7.13.1A(a), for each Trading Month which has been settled;
- ...

Chapter 11 – Glossary

~~draw upon~~ 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:

...

~~meter dispute~~ Meter Dispute: Has the meaning given in clause 8.6.1(e).

~~parasitic load~~ 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.

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 Target for the relevant Capacity Year as described in clause 4.6.1 ~~4.5.10(b)(i)~~ and the expected peak demand for the relevant Capacity Year as described in clause 4.6.2 ~~4.5.10(b)(ii)~~;

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:

...

Appendix 5: Individual Reserve Capacity Requirements

...

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 ~~days~~ Trading Days with the highest daily demand, where demand refers to total demand, net of embedded generation, in the SWIS.

...

4. Describe how the proposed Market Rule change would allow the Market Rules to better address the Wholesale Market Objectives:

The IMO considers that the proposed changes, which will improve the integrity of the Market Rules, are consistent with the operation of the Wholesale Market Objectives.

5. Provide any identifiable costs and benefits of the change:

Costs:

No costs associated with implementing these proposed changes have been identified.

Benefits:

The proposed changes will improve the clarity of the Market Rules by removing minor and typographical errors. They are consistent with the Wholesale Market Objectives, as indicated in section 4 of this proposal.

Attachment 1: Additional detail regarding the proposed amendments to Appendix 4A

Background

The Reserve Capacity Requirement is used by the IMO to perform some key functions such as:

- procuring Capacity Credits equal to the Reserve Capacity Requirement; and
- determining the Individual Reserve Capacity Requirement (IRCR) for each Market Customer.

The Reserve Capacity Requirement (RCR) for the relevant Capacity Year is the Reserve Capacity Target as reported in the Statement of Opportunities (SOO) Report. The setting of RCR values by the SOO is outlined in Market Rule clause 4.6.1. The SOO can be found on the IMO website:

<http://www.imowa.com.au/soo>

In brief, in 2007, for the 2009/2010 Capacity Year, the Reserve Capacity Requirement is set at the Reserve Capacity Target of 4,609MW (as required by clause 4.6.1). In 2009, the Reserve Capacity Requirement for 2009/2010 Capacity Year remains at 4609MW however the Reserve Capacity Target has changed to 4623MW.

The total Individual Reserve Capacity Requirement (IRCR) is the sum of the Intermittent Load Reserve Capacity Requirement (ILRCR), the Non-Temperature Dependent Load Reserve Capacity Requirement (NTDLRCR) and the Temperature Dependent Load Reserve Capacity Requirement (TDLRCR).

The sum of the ILRCR, NTDLRCR and TDLRCR will equal the Reserve Capacity Requirement. The value of new meters is then added to this. Each Market Customer's IRCR is then scaled down so the sum of IRCRs is equal to the Reserve Capacity Requirement.

For an Intermittent Load, the IRCR is based on the facility's nominated capacity requirement which contributes to the reserve margin (excess capacity above the forecast load to meet the security and reliability criteria for the SWIS). The Intermittent Load has the ability to generate power for its own load and it only draws power from the network to supplement a shortfall from its own energy generation. Intermittent Loads are afforded additional power security and reliability by being connected to the network, and therefore are required to contribute towards the payment for reserve margin.

Appendix 4A outlines the method used to determine an Intermittent Load's IRCR.

Appendix 5 outlines the method used to determine the IRCR for all other loads.

This Rule Change Proposal focuses on the calculation used to determine an Intermittent Load's ILCR.

Issue

Appendix 4A specifies that the reserve margin for Intermittent Loads is determined using the Reserve Capacity Target and the corresponding expected peak demand. The IMO contends that this is incorrect because, after the Reserve Capacity Requirement is set for the relevant year (year 3 of the Reserve Capacity Cycle), the Reserve Capacity Target is updated in subsequent years. Consequently, this incorrectly changes the reserve margin values used to determine ILCR for Intermittent Loads (ILCR) for the relevant year.

Moreover, Temperature Dependent Loads (TDL) and Non-Temperature Dependent Loads (NTDL) use the value of Reserve Capacity Requirement (not the Reserve Capacity Target) to determine their ILCR.

To illustrate this issue, the following example determines the ILCR values for an Intermittent Load for the 2009/10 Capacity Year when the SOO is released in the years of 2007 and 2009. It also provides a comparison between the current Market Rules definition and proposed amendments. The differences in the comparison are the input values (in bold) used to determine the ILCR values.

Determine ILCR for an Intermittent Load for 2009/10 Capacity Year

| ILCR = Nominated Load for IL X reserve margin | | |
|---|---|---|
| Nominated Load for IL = 10MW | | |
| | Current Market Rule Definition | Proposed Amendments |
| 2007 SOO | Reserve Capacity Target = 4609 Peak Demand = 4233 $\text{reserve margin} = \frac{\text{Reserve Capacity Target}}{\text{Peak Demand}} - 1$ $= \frac{4609}{4233} - 1$ $= 0.0888$ Therefore ILCR = Nominated Load for IL X reserve margin $= 10\text{MW} \times 0.0888$ $= \mathbf{0.8882\text{ MW}}$ | Reserve Capacity Requirement = 4609 Peak Demand = 4233 $\text{reserve margin} = \frac{\text{Reserve Capacity Requirement}}{\text{Peak Demand}} - 1$ $= \frac{4609}{4233} - 1$ $= 0.0888$ Therefore ILCR = Nominated Load for IL X reserve margin $= 10\text{MW} \times 0.0888$ $= \mathbf{0.8882\text{ MW}}$ |
| 2009 SOO | Reserve Capacity Target = 4623 Peak Demand = 4200 $\text{reserve margin} = \frac{\text{Reserve Capacity Target}}{\text{Peak Demand}} - 1$ $= \frac{4623}{4200} - 1$ $= 0.1007$ Therefore ILCR = Nominated Load for IL X reserve margin $= 10\text{MW} \times 0.1007$ $= \mathbf{1.0071\text{ MW}}$ | Reserve Capacity Requirement = 4609 Peak Demand = 4233 $\text{reserve margin} = \frac{\text{Reserve Capacity Requirement}}{\text{Peak Demand}} - 1$ $= \frac{4609}{4233} - 1$ $= 0.0888$ Therefore ILCR = Nominated Load for IL X reserve margin $= 10\text{MW} \times 0.0888$ $= \mathbf{0.8882\text{ MW}}$ |

In the above example, the current Market Rules definition uses the Reserve Capacity Target and its corresponding peak demand for the 2009/10 Capacity Year to determine the IRCR for an Intermittent Load. These values are different in the 2007 and 2009 SOO documents. This effectively changes the reserve margin values for the Intermittent Load for the 2009/10 Capacity Year and hence changes the IRCR for the Intermittent Load.

With the proposed amendments, the Reserve Capacity Requirement and its corresponding peak demand do not change for the 2009/10 Capacity Year. Hence the reserve margin values for the Intermittent Load remain the same for the 2009/10 Capacity Year in 2007 and 2009. In this example, the Reserve Capacity Requirement for the 2009/10 Capacity Year equals the Reserve Capacity Target set in the SOO in 2007.

The IMO submits that the reserve margin values determined for the 2009/10 Capacity Year for Intermittent Loads should be the same in 2007 and 2009.

The IMO considers that the current Market Rules definition introduces an inconsistency in the way IRCR obligations are placed on Market Customers with Intermittent Loads when compared with Market Customers with Temperature Dependent Loads and Non-Temperature Dependent Loads.

Furthermore, the IMO notes that, because the Reserve Capacity Target is set partway through the Reserve Capacity Year, the IRCR value for Intermittent Loads will also change partway through the Reserve Capacity Year which is not the intention. After the Reserve Capacity Requirement is set for Intermittent Loads for a Capacity Year, the reserve margin values should not change for that Capacity Year.

Appendix 5 stipulates that the Reserve Capacity Requirement should be used to determine the IRCR for all other types of loads.

Proposal

The IMO proposes that Appendix 4A should determine the reserve margin by using the values of Reserve Capacity Requirement and the corresponding expected peak demand.

The IMO considers that this change will ensure that Market Rules definition of IRCR for Intermittent Loads is determined in a manner consistent with that for other loads.

MAC discussion

The IMO initially presented this as a separate Rule Change Proposal to the Market Advisory Committee. The Market Advisory Committee met on the 14 October 2009 and agreed:

- that the changes to Appendix 4A are minor and typographical; and
- to progress these rule amendments as part of this RC_2009_30.

Attachment 2: Additional detail regarding the proposed amendments to Appendix 5

Background

The Reserve Capacity Requirement is the number of Capacity Credits that the IMO is trying to obtain for each Capacity Year. Its objective is to ensure that there is enough generation and Demand Side Management to provide for the forecast peak total load on the South West interconnected system (SWIS), plus a margin for contingencies.

A Market Customer's Individual Reserve Capacity Requirement (IRCR) is its share of the total Reserve Capacity Requirement, and reflects its contribution to peak load.

Appendix 5 of the Wholesale Electricity Market Rules (Market Rules) sets out the method by which IRCRs are calculated. In Step 1, the 12 peak Trading Intervals of the preceding Hot Season are identified. These are the three highest-demand Trading Intervals during each of the four highest-demand days. Subsequent steps use Market Customers' metered consumption during these 12 Trading Intervals (and other data) to calculate IRCRs.

Issue

Step 1 of Appendix 5 refers simply to "days", which clause 1.4.1(b) requires be taken to mean calendar days. This is inconsistent with other references in Appendix 5 (and in the Market Rules generally), which specify Trading Days.

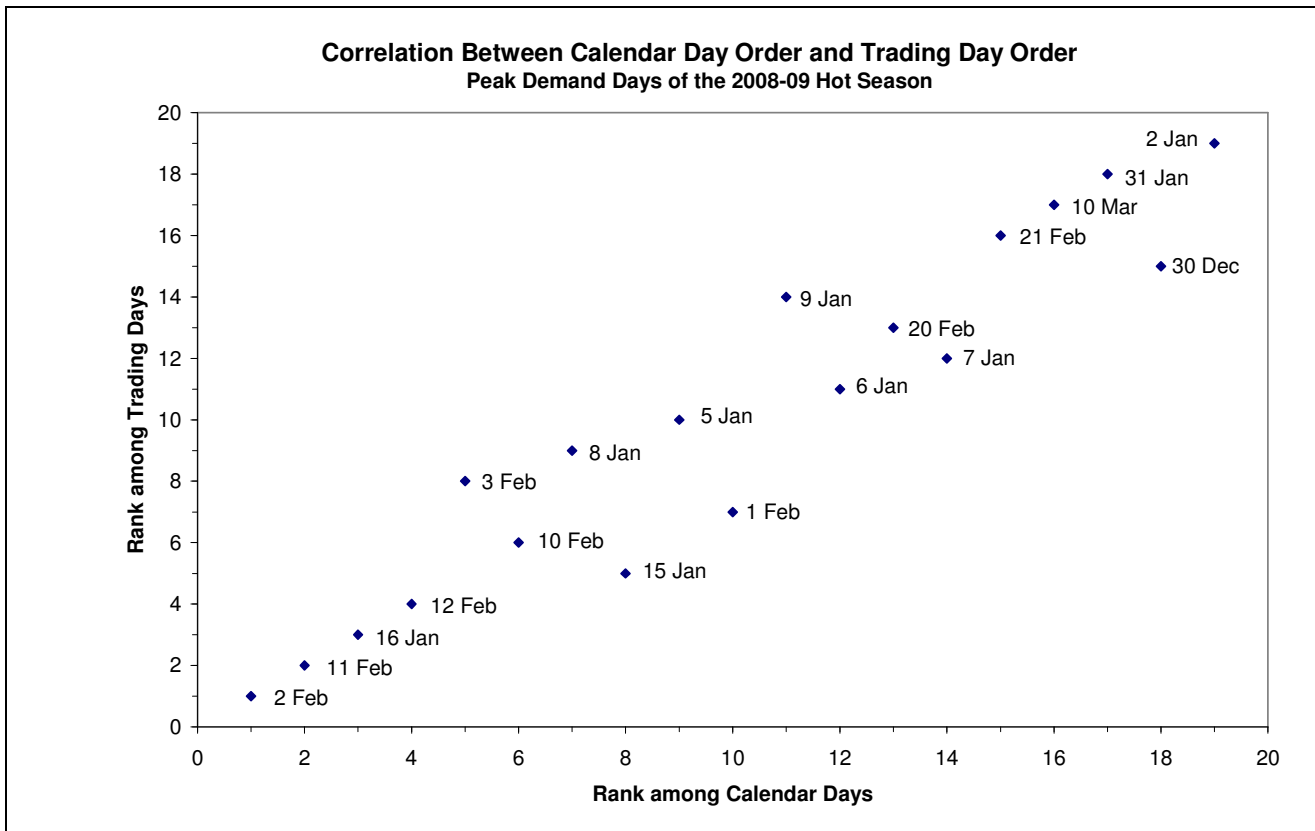
Proposed Solution

The IMO considers that it would be preferable for Step 1 of Appendix 5 to specify that Trading Days are to be used. This change would eliminate any ambiguity and would achieve greater consistency within the Market Rules.

Effect of the Proposed Change

The IMO has examined data on total demand in the SWIS by Trading Interval for the last three Hot Seasons. It found that, in 2006-07 and 2008-09, the four highest-demand Trading Days coincided with the four highest-demand calendar days, so the proposed change would not have affected the calculation of IRCRs for the Reserve Capacity Cycles following those Hot Seasons.

The following chart shows the 20 highest-demand days of the 2008-09 Hot Season. There is a strong correlation between calendar day order and Trading Day order; in particular, the ranks of the first four days are the same regardless of whether defined by calendar day or by Trading Day.



In 2007-08, the three highest-demand Trading Days coincided with the three highest-demand calendar days. The fourth-highest Trading Day (4 February 2008) and the fourth-highest calendar day (6 February 2008) had load profiles that were almost identical during the Peak Trading Intervals; the main difference between these two days occurred during the Off-Peak Trading Intervals. Therefore any given Market Customer’s consumption during the three highest-demand Trading Intervals probably did not differ greatly between those two days, so the proposed change would have had minimal effect on the IRCR calculation.

Steps 2 and 3 of Appendix 5 stipulate that a Market Customer’s median consumption during the 12 peak Trading Intervals is to be used in the IRCR formula. Using the median (instead of the mean, for example) makes it less likely that any change in the identity of the four highest-demand days will result in a change in an IRCR.

To illustrate this, suppose that the change from calendar days to Trading Days causes a change in the identity of one of the four highest-demand days (as would have happened in 2007-08 – 4 February 2008 would have replaced 6 February 2008). As a result, three Trading Intervals would be dropped from the group of 12 and would be replaced by three others. It is possible (and indeed quite likely) that a Market Customer’s consumption during the outgoing and incoming Trading Intervals is lower than that during most of the nine other Trading Intervals in the group. That is, the outgoing and incoming values may all lie in the bottom half of the rank order. Now, the median of a group of numbers is the one that lies in the middle when they are sorted by size. It does not matter how small the small numbers

are, only that they are smaller than the middle number. Therefore replacing some small numbers with some other small numbers will not change the value of the median.

MAC discussion

The IMO initially presented this as a separate Rule Change Proposal to the Market Advisory Committee. The Market Advisory Committee met on the 14 October 2009 and agreed:

- that the changes to Appendix 4A are minor and typographical; and
- to progress these rule amendments as part of this RC_2009_30.