

Rule Change Notice Removal of Facility Aggregation (RC_2014_02)

This notice is given under clause 2.5.7 of the Wholesale Electricity Market Rules (Market Rules).

Submitter: Paul Tetley, IMO

Date Submitted: 14 July 2014

The Proposal

The IMO proposes to remove the provisions for Facility aggregation from the Market Rules. The ability to register multiple Facilities as an aggregated Facility in the current Market Rules has become obsolete and presents high ongoing costs to the market. Since the start of the market, there has only been one Market Participant to aggregate Facilities, only to disaggregate soon after. Since then, there has been no interest shown in Facility aggregation.

It is difficult to determine the original rationale and the benefits associated with Facility aggregation. In the past, Market Participants may have perceived administrative or operational benefits relating to bidding in the Short Term Electricity Market as an aggregated Facility. However, aggregation is no longer advantageous due to the ability for Market Participants to adjust a Facility's day-ahead position in the Balancing Market.

The IMO notes that under a system that allows for aggregated Facilities, the additional development and testing requirements for aggregation and disaggregation is likely to double the time and ongoing costs of maintenance and implementing system changes. The IMO considers that the continuation of Facility aggregation does not warrant the high costs.

The IMO also proposes to remove the associated ability for Market Participants to aggregate Capacity Credits.

Appendix 1 contains the Rule Change Proposal and gives complete information about:

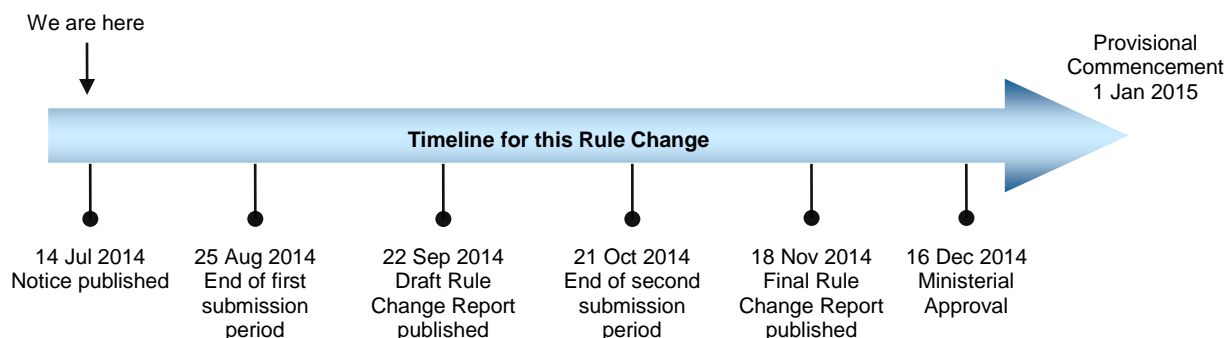
- the proposed amendments to the Market Rules;
- relevant references to clauses of the Market Rules and any proposed specific amendments to those clauses; and
- the submitter's description of how the proposed amendments would allow the Market Rules to better address the Wholesale Market Objectives.

Decision to Progress the Rule Change

The IMO has decided to progress the Rule Change Proposal on the basis that Rule Participants should be given an opportunity to provide submissions as part of the Standard Rule Change Process.

Timeline

The projected timelines for processing this proposal are:



Call for Submissions

The IMO invites interested stakeholders to make submissions on this Rule Change Proposal. The submission period is 30 Business Days from the Rule Change Notice publication date. Submissions must be delivered to the IMO by **5.00 PM on Monday, 25 August 2014**.

The IMO prefers to receive submissions by email (using the submission form available on the Market Web Site: <http://www.imowa.com.au/rule-changes>) to market.development@imowa.com.au.

Submissions may also be sent to the IMO by fax or post, addressed to:

Independent Market Operator

Attn: Group Manager, Development and Capacity
PO Box 7096
Cloisters Square, PERTH, WA 6850
Fax: (08) 9254 4399



INDEPENDENT
MARKET
OPERATOR

Wholesale Electricity Market Rule Change Proposal

Rule Change Proposal ID: RC_2014_02
Date received: 14 July 2014

Change requested by:

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Email:	paul.tetley@imowa.com.au
Organisation:	IMO
Address:	Level 17, 197 St Georges Tce, Perth WA 6000
Date submitted:	14 July 2014
Urgency:	Medium
Change Proposal title:	Removal of Facility Aggregation
Market Rule(s) affected:	Clauses 2.17.1, 2.30.1, 2.30.1A, 2.30.2, 2.30.3, 2.30.4, 2.30.5, 2.30.6, 2.30.7, 2.30.7A, 2.30.8, 2.30.9, 2.30.10, 2.30.11, 2.30B.11, 2.33.3, 4.23A.3, 4.23A.4, 5.3A.1, Appendix 1 and Appendix 2

Introduction

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

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

Independent Market Operator

Attn: Group Manager, Development and Capacity
PO Box 7096
Cloisters Square, Perth, WA 6850
Fax: (08) 9254 4339
Email: market.development@imowa.com.au

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

In order for the proposal to be progressed, all fields below must be completed and the change proposal must explain how it will enable the Market Rules to better contribute to the achievement of the Wholesale 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 Rule Change

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

Background

Section 2.30 of the Market Rules allows a Rule Participant or an applicant for rule participation to register multiple Facilities as an aggregated Facility. Since the start of the market, only one participant has ever exercised its right to register aggregated Facilities. However, the Market Participant disaggregated the Facilities soon after.

It is difficult to identify the original rationale for permitting Facility aggregation, other than to avoid the scenario (which has not arisen as an issue) where individual turbines within a wind farm need to be separately registered.

Implementation of Facility aggregation capabilities in the Wholesale Electricity Market System (WEMS) is complex and has an impact on other components including STEM, Balancing, LFAS and Settlements. Furthermore, it is interlinked with manual processes such as Registration and the Assignment of Capacity Credits. During implementation and subsequent system updates, individual components of the system need to be developed, redesigned and tested for all possible scenarios to ensure functional cohesion with current systems for both aggregation and disaggregation. The IMO notes that the cost of ongoing maintenance and system changes under a system that allows for aggregated Facilities could as much as double the cost and implementation time of some system changes due to the additional development and testing requirements.

The IMO notes that in the absence of any successfully aggregated Facilities, it is difficult to recognise any advantages associated with the relevant Market Rules. Prior to the

introduction of the Balancing Market, Market Participants may have perceived that benefits relating to bidding in STEM as an aggregated Facility may have provided operational flexibility. However, with the introduction of the Balancing Market, those benefits are no longer advantageous due to the ability for Market Participants to adjust a Facility's day-ahead position in the Balancing Market.

The IMO therefore considers that as no perceived benefits to Market Participants can be derived from these Market Rules, the continuation of Facility aggregation does not warrant the high costs of ongoing system changes and maintenance, as they pose unnecessary costs to the market.

The IMO also notes that the functionality introduced in the Rule Change Proposal: Capacity Credits and Facility Aggregation (RC_2008_10)¹ to allow Market Participants with aggregated Facilities to also aggregate Capacity Credits assigned to those Facilities (or reallocate Capacity Credits as a result of disaggregation) will become redundant. Together with the one attempted Facility aggregation, that Market Participant also aggregated its Capacity Credits but disaggregated them soon after.

The IMO also proposes to correct a minor and typographical error in the Market Rules.

Proposed Amendments

The IMO proposes to delete the clauses in section 2.30 of the Market Rules that relate to the ability for Rule Participants or applicants for rule participation to aggregate Facilities. The IMO also proposes to amend clauses 2.30B.11, 2.33.3, 5.3A.1, Appendix 1 and Appendix 2 that provide for scenarios where Facilities are aggregated and clause 2.17.1 to remove clauses 2.30.4 and 2.30.8 from the list of Reviewable Decisions.

In addition, the IMO proposes to delete clauses 4.23A.3 and 4.23A.4 to remove the ability for Market Participants to aggregate Capacity Credits.

Reviewable Decisions and Protected Provisions

The IMO notes that clauses 2.30.4 and 2.30.8 are listed as Reviewable Decisions under clause 2.17.1(j) of the Market Rules. Given that clause 2.17.1(j) is a Protected Provision which needs to be deleted as a result of the proposed amendments, clause 2.8.3 of the Market Rules requires the Amending Rules in this Rule Change Proposal to be approved by the Minister.

Consequential amendments to clause 1 of Schedule 2 of the *Electricity Industry (Wholesale Electricity Market) Regulations 2004* (Regulations) will also be required.

The IMO will engage with the Public Utilities Office to progress the proposed amendments.

Consultation

The IMO presented the pre Rule Change Proposal to the Market Advisory Committee (MAC) at its 25 June 2014 meeting. The following points were raised:

- Mr Michael Zammit asked whether the proposal should be delayed until the Electricity Market Review has concluded. The Chair noted that since the proposal was purely administrative and not dependent on the outcomes of the review, the IMO considered the proposal should be progressed.

¹ Further information is available at http://www.imowa.com.au/RC_2008_10.

- Mr Geoff Gaston queried which Market Participant had previously aggregated some of its Facilities. The Chair noted that it was Alinta Energy and that the Facilities had been disaggregated shortly after aggregation.
- Mr Shane Cremin queried whether changes would have to be made with respect to allocating Spinning Reserve Costs to aggregated Facilities. Ms Jacinda Papps responded that the IMO had proposed changes to Appendix 2 to address this. Ms Erin Stone confirmed this was the case.
- Mr Andrew Stevens noted that given the lack of benefits associated with Facility aggregation he did not see any reason to retain it.

MAC members agreed that the IMO should submit the Rule Change Proposal into the formal process and progress it using the Standard Rule Change Process.

2. Explain the reason for the degree of urgency:

The IMO considers that the proposed amendments are of medium urgency and proposes that this Rule Change Proposal be progressed through the Standard Rule Change Process. The impact of this Rule Change Proposal is to eliminate an unnecessary ongoing cost to the market of system changes and maintenance relating to Facility aggregation. The IMO therefore proposes to commence the proposed Amending Rules at its earliest convenience.

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

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2.30. [Blank]Facility Aggregation

...

2.17.1. Decisions by the IMO or System Management, as applicable, made under the following clauses are Reviewable Decisions:

...

(j) [Blank]clauses ~~2.30.4 and 2.30.8;~~

...

...

2.30. [Blank]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 or 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:~~

- ~~(a) 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.~~

...

2.30B.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 or part of the Load commencing to be an Intermittent Load:

...

- ~~(f)~~ e the generation system must be constructed with the intention of serving the Intermittent Load; and
- ~~(g)~~ the generation system must not be part of an Aggregate Facility with other generation systems; and
- ~~(h)~~ f 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.

...

2.33.3. The IMO must prescribe a Facility registration form that requires an applicant for Facility registration to provide the following:

...

(c) for each Facility to be registered:

...

v. [Blank]if the Facility is aggregated or not and details of any proposed aggregation;

...

...

~~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:~~

~~(a) 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 immediately prior to the re-allocation; 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 clause 4.23A.3(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 immediately prior to the aggregation; 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.~~

...

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:

...

- (c) a unique identifier for the Network Control Service Contract; and
- (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.~~

...

Appendix 1: Standing Data

...

- (k) for each Registered Facility:
 - i. Reserve Capacity information including:
 - ...
 - 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; i
 - ii. Network Control Service information including:
 - 1. the identity of any Network Operator that has entered into a Network Control Service Contract in relation to the Facility; and

2. 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
3. ~~whether the Facility is subject to a Network Control Service Contract that requires the Facility not to be part of an aggregated Facility; and~~

...

...

Appendix 2: Spinning Reserve Cost Allocation

...

- ~~• 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.~~

...

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 amendments in this Rule Change Proposal better achieve Wholesale Market Objective (d) and are consistent with the remaining Wholesale Market Objectives.

- (d) *to minimise the long-term cost of electricity supplied to customers from the South West interconnected system*

The IMO considers that the proposed amendments will better achieve Wholesale Market Objective (d) by removing the ongoing cost of system changes and maintenance of an unnecessary service to the market where there are no commensurate benefits derived.

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

Costs

The IMO expects to incur minor costs to modify the WEMS to disable the Facility aggregation and disaggregation features. It is estimated that this will be around \$5,000.

Benefits

The IMO expects to make annual savings in maintenance costs of approximately \$15,000. This is because at each WEMS release, these features will now not need to be regression tested and therefore reduces combination testing of Facility related features such as Registration.

In addition, the IMO also considers that Facility aggregation would (in the absence of this Rule Change Proposal) continue to impact most rule changes that require system changes.

Those changes would have to be tested with aggregation and disaggregation as well as ordinary Facilities, and as such this process increases the cost of each of these rule changes.

The IMO therefore expects ongoing operational savings with the removal of this unnecessary functionality.

Implementation

The IMO will need to undertake minor system changes and testing to remove the functionality for Facility aggregation.

This Rule Change Proposal will also result in changes to Market Procedures.

As the proposed Amending Rules contain changes to Protected Provisions as a result of the removal of Reviewable Decisions in clause 2.17.1(j) of the Market Rules, Ministerial approval will be required.

Consequential amendments to clause 1 of Schedule 2 of the Regulations will also be required.

The IMO will engage with the Public Utilities Office to progress this Rule Change Proposal.