Wholesale Electricity Market
Rule Change Proposal Form

Change Proposal No: *RC_2010_06*
Received date: *27 April 2010*

Change requested by:

Name:	Shane Cremin
Phone:	9261 2908
Fax:	9486 7330
Email:	shane.cremin@thegriffingroup.com.au
Organisation:	Griffin Energy
Address:	15th Floor, 28 The Esplanade, Perth, Western Australia 6000
Date submitted:	27 April 2010
Urgency:	2-medium
Change proposal title:	Application of Spinning Reserve to Aggregated Facilities
Market Rule(s) affected:	Clause 2.30; Appendix 2

Introduction

Market Rule 2.5.1 of the Wholesale Electricity 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 Independent Market Operator.

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

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

The Independent Market Operator 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 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 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:

The Market Rules currently allow Market Participants to aggregate facilities under certain circumstances. The aggregation of facilities may lead to more efficient nomination and real time generating behaviour, as Market Participants have a more flexible arrangement for engagement with the market.

Clause 2.30.6 of the Rules ensures that "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."

Spinning Reserve, an Ancillary Service, is allocated under the Rules in accordance with Appendix 2. Allocation is heavily biased towards larger facilities, with those facilities operating at a level over 200MW incurring a greater proportion of the costs.

Practically, an aggregated facility is the conceptual sum of two (or more) separate physical facilities. Each individual (physical) facility will have the same impact on the market with respect to the requirement for Ancillary Services whether it is aggregated or not. The allocation of Spinning Reserve costs to a single Facility which comprises the sum of the aggregated facilities, as currently contemplated by the Rules, may act as a disincentive for Market Participants to aggregate facilities. This may lead to a loss of a potential market efficiency, achieved by generators being able to operate their facilities more flexibly.

2. Explain the reason for the degree of urgency:

It is intended that this rule change progress via the standard rule change process

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)

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 ~~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 must be treated as an individual Facility for the purpose of the calculation of Spinning Reserve.

Appendix 2

…

For the purpose of determining the Reserve_Share(p,t) values, each applicable facility f has an applicable capacity associated with it for Trading Interval t.

- If facility f is an Intermittent Generator with an interval meter then this is double the MWh average interval meter reading for the Trading Month containing Trading Interval t.
- If facility f is a Scheduled Generator with an interval meter then this is double the MWh interval meter reading for Trading Interval t.
- If facility f is a Scheduled Generator that is the sum of more than one aggregated Facilities, each with an interval meter, then each individual Facility is treated as an individual Scheduled Generator under Appendix 2.
- If facility f is an Electricity Generation Corporation Intermittent Generator without an interval meter then this is double the average monthly MWh sent out generation of that facility based on SCADA data over the Trading Month containing Trading Interval t.
- If facility f is an Electricity Generation Corporation Scheduled Generator without an interval meter or an unmetered generation system serving Intermittent Load then this is double the MWh sent out generation of that facility based on SCADA data for Trading Interval t.

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

This proposed Rule Change would allow the Market Rules to better address the Wholesale Market 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;

Applying Ancillary Service (Spinning Reserve) costs to aggregated facilities based on the sum of their available capacity has no practical benefit to the market, but may lead to a loss in market efficiency as generators chose not to aggregate facilities to achieve operational efficiencies.

c) to avoid discrimination in the 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.

The current Rules imply that aggregating two (or more) facilities that creates an aggregated facility that is larger than 200MW incur more costs than aggregating 2 (or more) smaller facilities, the sum of which is less than 200MW. Such a disparity in cost allocation based on the size of units is a discrimination.

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

Encouraging Market Participants to aggregate facilities may lead to lower wholesale generation costs as operational efficiencies are realised.

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

Costs:

- No significant costs identified (one-off IMO system costs estimated in the order of tens of thousands of dollars)

Benefits

- Those attributed to operational efficiency gains by generators
- Efficiency gains are hard to determine in advance and will differ for each participant depending on the composition of the facilities being aggregated. It is up to each Market Participant to identify efficient operating practices for their fleet. However internal analysis suggests that simply being able to meet one resource plan using 2 units in aggregation instead of a separate resource plan per unit would realise allocative efficiencies of several hundred thousand dollars per year under normal operating circumstances (i.e. not including major constraint events which may increase the benefits). Additional benefits would be derived from lowering fuel costs, including several hundred thousand dollars per year in reduced diesel fuel.