
Wholesale Electricity Market Rule Change Proposal Submission Form

RC_2013_17 Correction to estimated output of Intermittent Generation for purposes of Appendix 9

Submitted by

Name:	Ky Cao
Phone:	08 9420 0300
Fax:	08 9474 9900
Email:	k.cao@perthenergy.com.au
Organisation:	Perth Energy
Address:	Level 4, 165 Adelaide Terrace, East Perth WA 6004
Date submitted:	14 January 2014

Submission

- Please provide your views on the proposal, including any objections or suggested revisions.**

Background

The Wholesale Energy Market (WEM) operates a market for generation capacity separately to the market for energy. Providers of capacity are accredited with Certified Reserve Capacity (CRC) which can be traded bilaterally with retailers or through the Independent Market Operator (IMO) at a default price.

The amount of CRC that is awarded to Market Participants is based on a detailed methodology set out in the Market Rules and related Market Procedures. For conventional, Scheduled Generators the amount of CRC that is awarded relates to the generator's ability to produce electricity, on a sent-out basis, at 41°C. For intermittent generation technologies, such as wind farms, the Market Rules prescribe a different methodology for calculating the amount of CRC to award. The details of this methodology are contained within Appendix 9 of the Market Rules.

Currently, CRC is awarded to intermittent generators (classified as "Non-Scheduled Generators" in the Market Rules) based on their historic output in selected intervals. The

methodology makes use of the concepts “Load for Scheduled Generation” (LSG) and “Relevant Level”. LSG is derived by subtracting the total output of Non-Scheduled Generators (only those Facilities that are candidates for being treated under the Relevant Level Methodology) from the total system load (on a sent-out basis). The IMO then ranks the LSG intervals from highest to lowest in each of the preceding 5 years and selects the 12 highest LSG intervals from each of those years to form a sample of 60 intervals.

The Relevant Level for each Non-Scheduled Generator is then determined based on the individual generator’s average output during these 60 intervals less an adjustment factor to account for variability in output.

From time to time Non-Scheduled Generators receive Dispatch Instructions to reduce output. By complying with the Dispatch Instruction the output from the Non-Scheduled Generator is likely to be lower than it otherwise would have been. This may impact on the Relevant Level calculation and other important concepts within the Market Rules such as the Theoretical Energy Schedule (TES). System Management is currently required to estimate what the output of a Non-Scheduled generator would have been if no Dispatch Instruction had been issued. System Management’s estimate is used to inform the TES calculation and the Relevant Level calculation. There are no further mechanisms in the Market Rules to revise the estimated output of Non-Scheduled Generators.

On at least one occasion in the past SCADA and metering data showing a higher output for a Non-Scheduled generator than the level estimated by System Management has become available after System Management’s estimated level of output has been locked in. The IMO has been unable to use these new data points in its calculation of Relevant Level as the Market Rules do not specifically allow further update of estimates once System Management has provided the estimates for the TES calculation.

Change Proposal

Alinta Energy submitted Rule Change Proposal 2013 17 “Correction to estimated output of Intermittent Generation for purposes of Appendix 9” on 22 November 2013.

Alinta Energy proposed to amend the Market Rules to allow the IMO or a Market Participant to request that System Management revise its estimate of output from a Non-Scheduled Generator that was subject to a Dispatch Instruction. Alinta Energy also proposed that the IMO should be given discretion whether to use any updated estimates from System Management when calculating the Relevant Level for Non-Scheduled Generators.

Perth Energy’s Views

Perth Energy supports Alinta Energy’s rule change proposal.

It is important that the most reliable and up to date information is used by the IMO when making calculations that have the potential to have significant financial impact on Market Participants. The calculation of the Relevant Level is one of those types of calculations. If SCADA or Metering Data clearly shows higher output for a Non-Scheduled Generator compared to the original estimate provided by System Management then it would be inequitable and inefficient to retain the incorrect estimate for the calculation of the Relevant Level. Perth Energy therefore fully supports Alinta Energy’s proposal to amend the Market Rules to allow substitution of erroneous estimates when better information is available.

Perth Energy considers that the most accurate information available at the time of making any calculation or decision under the Market Rules should be utilised. Perth Energy therefore does not support the proposal to only use the updated estimates described in this proposal for the purposes of calculating the Relevant Level. If more accurate data is available in time for any process within the WEM, including settlement runs, it should be utilised to ensure a fair and efficient outcome for all parties in the market.

Metering Data and SCADA data are normally available close to real time for large Facilities. Perth Energy suggests that System Management and the IMO also investigate whether there is anything that can be improved within the current estimation process to take into account Metering Data and / or SCADA data that is available at the time when System Management estimates output for the purposes of informing the TES. This could reduce the need for a second attempt at estimating the output levels.

Finally, Perth Energy would like to make the following suggested amendments to the proposed text to amend the Market Rules:

Replace all of the proposed words in new clause 7.7.5G with:

“Following a revision by System Management under clause 7.7.5F it must as soon as practicable provide the IMO with its revised estimate.”

The revised wording would require System Management to report its findings to the IMO even where its revised estimate is identical to the original estimate. This will “close the loop” on the process initiated under clause 7.7.5E and ensure that the IMO and the affected Market Participant are made aware that the review has been completed and what the outcome of the review is, even in those circumstances where System Management does not change its original estimate.

Delete all of clause 7.7.5H for the reasons outlined above. Perth Energy considers the most accurate data available should always be used when making any calculations or decisions under the Market Rules. In any event, the phrase “for the avoidance of doubt” should in our view not appear in the Market Rules. The phrase is unnecessary and is likely to introduce doubt rather than avoid it.

2. Please provide an assessment whether the change will better facilitate the achievement of the Market Objectives.

Perth Energy considers that the proposed amendments to the Market Rules would improve equity in treatment of Non-Scheduled Generators. This in turn should improve the long-term efficiency of the operation of the WEM. Perth Energy therefore considers that the proposed amendments would improve the facilitation of Market Objectives¹ (a) and (c).

¹ (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;

Perth Energy has not identified any impacts on the other Market Objectives.

3. Please indicate if the proposed change will have any implications for your organisation (for example changes to your IT or business systems) and any costs involved in implementing these changes.

Perth Energy has not identified any impacts on our IT or other business systems.

4. Please indicate the time required for your organisation to implement the change, should it be accepted as proposed.

Perth Energy will not require any lead time to implement the proposed changes.

-
- (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.