

Draft Rule Change Report Correction to estimated output of Intermittent Generation for purposes of Appendix 9

RC_2013_17
Standard Rule Change Process

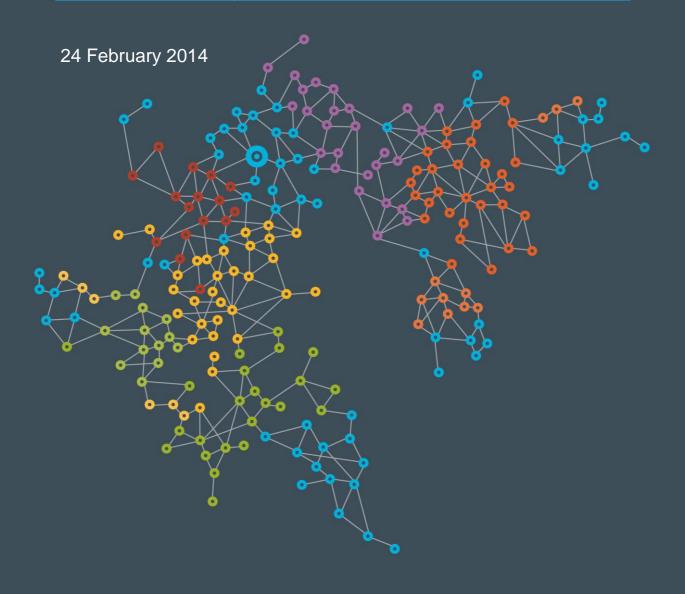


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Executive Summary

The level of Certified Reserve Capacity assigned to Intermittent Generation is currently determined in accordance with the Relevant Level Methodology specified in Appendix 9 of the Wholesale Electricity Market Rules (Market Rules). The methodology utilises the output of a candidate Facility in peak Load for Scheduled Generation Trading Intervals, selected from years prior to the certification period.

Where an Intermittent Generator receives a downward Dispatch Instruction from System Management, the amount of electricity sent out by the Facility will be lower than would have been the case in the absence of the Dispatch Instruction. When such a Dispatch Instruction is received during a peak Load for Scheduled Generation Trading Interval, to ensure that the Facility is not inappropriately penalised in the determination of its Relevant Level, an estimate of the output that could have otherwise been achieved by the Facility is provided to the IMO by System Management, and is used by the IMO in setting the Facility's Relevant Level for the purposes of certification.

Neither the Market Rules nor the Power System Operation Procedure (PSOP): Dispatch currently contemplate the possibility that these estimates may require updating to provide an estimate that better reflects the potential output of the Facility, for example where the quantity actually generated is higher than the estimate. As the intention of certification is to reflect the ability of an Intermittent Generator to produce during peak periods, it is appropriate that, where an estimate is unreasonable, the IMO should be able to take into account a revised estimate.

Proposed amendments

Alinta Energy proposes to amend Appendix 9 of the Market Rules and introduce new clauses in section 7.5 of the Market Rules to enable revisions to estimates where a Dispatch Instruction is issued by System Management, and to allow the IMO to take these revised estimates into account in the Relevant Level Methodology for the purposes of certification. However, Alinta Energy's proposal is not clear with respect to how the proposed revised estimates will be determined.

Consultation

The Market Advisory Committee (MAC) discussed the pre Rule Change Proposal at the 13 November 2013 MAC meeting. At the meeting, MAC members agreed that the proposal should be submitted into the formal rule change process. Alinta Energy formally submitted the proposal into the Standard Rule Change Process on 22 November 2013. The IMO published the Rule Change Notice and Proposal on 28 November 2013.

The first submission period was held between 29 November 2013 and 14 January 2014. Submissions were received from Community Electricity, Perth Energy and System Management. All three submissions supported the principle underpinning the Rule Change Proposal. However, System Management noted its concerns with the proposed drafting of the Amending Rules on the basis that it believed that the Market Rules already provide for the revision of the estimate.

Assessment against Wholesale Market Objectives

The IMO considers that the proposed amendments will better achieve Wholesale Market Objectives (a), (c) and (d). The IMO considers that the proposal is consistent with the remaining Wholesale Market Objectives.

Practicality and cost of implementation

The IMO expects that System Management will incur minor operational costs to revise its estimates for Intermittent Generators, where applicable.

The IMO also expects to incur minor operational costs associated with updates to the processes and models used in the Certification of Reserve Capacity to allow for the consideration of the revised estimates or the use of actual meter data where applicable.

No issues relating to the practicality or cost of implementation of the proposed amendments have been raised during consultation on the Rule Change Proposal.

Changes to PSOP: Dispatch and the Market Procedure for the Certification of Reserve Capacity to outline the process under which a revision will be undertaken and used in the certification process, will need to be in place for the 2014 Reserve Capacity Cycle opening on 1 May 2014. However, the IMO considers that the changes are not significant and will not impede the implementation of the proposed Amending Rules by this date.

The IMO proposed decision

The IMO's proposed decision is to accept the Rule Change Proposal as modified following the first submission period.

Next steps

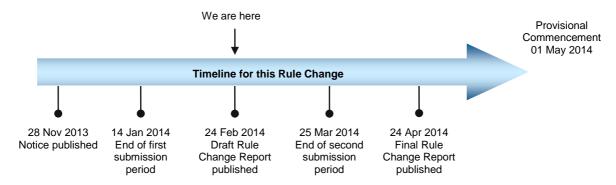
The IMO now invites interested stakeholders to make submissions on this Draft Rule Change Report by **5:00 pm, Tuesday 25 March 2014**.

1. Rule Change Process and Timetable

On 22 November 2013, Alinta Energy submitted a Rule Change Proposal regarding the introduction of new clauses 7.7.5E, 7.7.5F, 7.7.5G and 7.7.5H and amendments to Appendix 9 of the Wholesale Electricity Market Rules (Market Rules).

This proposal is being processed using the Standard Rule Change Process, described in section 2.7 of the Market Rules.

The key dates in processing this Rule Change Proposal are:



Please note that the commencement date is provisional and may be subject to change in the Final Rule Change Report.

2. Call for Second Round Submissions

The IMO invites interested stakeholders to make submissions on this Draft Rule Change Report. The submission period is 20 Business Days from the publication date of this report. Submissions must be delivered to the IMO by **5.00pm**, **Tuesday 25 March 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

3. Proposed Amendments

3.1. The Rule Change Proposal

Alinta Energy proposes to amend Appendix 9 of the Market Rules and introduce new clauses in section 7.5 of the Market Rules to enable revisions to the estimated output of an Intermittent Generator where a Dispatch Instruction is issued by System Management directing the Facility to reduce its output, and to allow the IMO to take these revised estimates into account in the



Relevant Level Methodology for the purposes of certification¹. However, Alinta Energy's proposal is not clear with respect to how the proposed revised estimate will be determined.

For full details of the Rule Change Proposal please refer to the Market Web Site: http://www.imowa.com.au/RC_2013_17.

3.2. The IMO's Initial Assessment of the Rule Change Proposal

The IMO decided to proceed with the proposal on the basis that Rule Participants should be given an opportunity to provide submissions on the Rule Change Proposal.

3.3. Protected Provisions, Reviewable Decisions and Civil Penalties

The proposed Amending Rules do not affect any Protected Provisions, Reviewable Decisions or civil penalties.

The IMO considers that the new clauses proposed in this Rule Change Proposal do not require any new Protected Provisions, Reviewable Decisions or civil penalties to be established on the basis of similar clauses in the Market Rules that currently do not.

4. Consultation

4.1. The Market Advisory Committee

The Market Advisory Committee (MAC) discussed the pre Rule Change Proposal at the 13 November 2013 MAC meeting. The following comments and questions were raised by MAC members:

- Mr Clayton James noted that System Management supported the proposal but had some concerns with the proposed wording. Mr James offered to meet with Alinta to discuss System Management's concerns.
- Mr Will Bargmann proposed that where the IMO has been provided a more accurate estimate
 of the potential output of an Intermittent Generator that was dispatched downwards by System
 Management, the IMO should be obliged (rather than have the discretion) to use that estimate,
 should that estimate differ from the current estimate by more than a specified amount. In
 response, the Chair invited Mr Bargmann to propose what the specified amount should be.
- In response to a suggestion that System Management could routinely reassess its estimates, the Chair noted that such an approach could be inefficient and that the commercial incentive should be on Market Participants to check the estimates themselves.
- Mr Bargmann noted that Market Participants may choose not to notify the IMO where there has been an overestimate in their favour and queried whether the IMO had the resources to identify such instances. In response Ms Kate Ryan noted that an overestimate may get noticed during the certification process. Ms Jenny Laidlaw noted that it would be difficult to identify instances where an estimate of what an Intermittent Generator would have produced is over estimated, except where the estimate was above the maximum capacity of the generator.

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¹ It should be noted that Alinta Energy's proposed amendments contain the ability for the IMO to use revised estimates for the purposes of the Relevant Level Methodology calculations and does not consider its application for the purposes of the Minimum Theoretical Energy Schedule calculation under clause 6.15.2(b) or settlements under Chapter 9 of the Market Rules.

At the meeting, MAC members agreed that the proposal should be submitted into the formal rule change process. Alinta Energy formally submitted the proposal into the Standard Rule Change Process on 22 November 2013. The IMO published the Rule Change Notice and Proposal on 28 November 2013.

Further details are available in the MAC meeting minutes available on the Market Web Site: http://www.imowa.com.au/MAC.

4.2. Submissions Received During the First Submission Period

The first submission period was held between 29 November 2013 and 14 January 2014. Submissions were received from Community Electricity, Perth Energy and System Management. The issues raised in submissions and the IMO's responses to those issues have been detailed in section 4.3 of this report.

The assessment by submitting parties as to whether the proposal would better achieve the Wholesale Market Objectives is summarised below:

Submitter	Wholesale Market Objective Assessment	
Community Electricity	Considers that the proposed amendments are consistent with all Wholesale 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 Wholesale Market Objectives (a) and (c). Has not identified any impacts on the other Market Objectives.	
System Management	Questions whether the proposed amendments will better achieve Wholesale Market Objective (a) on the basis that System Management's assessment of the contribution of intermittent generation to meet peak demand is based on longer duration observations. Is of the view that the Market Rules and PSOPs already facilitate	
	Wholesale Market Objective (c).	
	Considers that the proposed amendments are inconsistent with Wholesale Market Objective (d) on the basis that it will increase System Management's costs.	

A copy of all submissions in full received during the first submission period is available on the Market Web Site: http://www.imowa.com.au/RC_2013_17.

4.3. The IMO's Response to Submissions Received During the First Submission Period

All three submissions supported the principle underpinning the Rule Change Proposal.

System Management noted its concerns with the proposed drafting of the Amending Rules on the basis that it believed that the Market Rules already provide for the revision of the estimates and use in the certification process.

The IMO's response to each of the issues identified during the first submission period is presented in the table over the page:

	Submitter	Comment/Change Requested	IMO's Response
1.	System Management	System Management's reasons for not supporting the proposed amendments are based on its view that the Market Rules already provide a mechanism for a Market Participant to seek a revision of the estimates in concern (Market Rules 9.19.5 and 9.20 concerning settlement disagreements) and for this information to be taken into account in the certification process (Appendix 9 of the Market Rules).	The IMO notes that clause 9.20 of the Market Rules allows for Rule Participants to lodge a disagreement only in relation to the information contained in a Settlement Statement. For the purposes of settlement, this estimate is used in calculating a Facility's Theoretical Energy Schedule, which under clause 6.15.4 cannot be altered by disagreement or dispute. Furthermore, the Market Rules currently do not provide the IMO with the discretion to use any value other than the estimate provided by System Management under clause 7.13.1(eF) for the purposes of certifying a Facility under the Relevant Demand methodology contained in Appendix 9 of the Market Rules.
2.	System Management	System Management contends that the term "most accurate" is problematic and hard to determine. By its nature the data provided is an estimate with a large confidence band. That is the estimate may be +/- 30% for some ambient conditions. System Management suggests the proposed wording may lead to no change in estimate.	The IMO notes that the requirement for System Management to revise data based on more recent or accurate inputs may not result in a changed estimate. The IMO understands that where the issue has arisen to date, the input values have not changed, but rather the estimation methodology has resulted in an estimate that is lower than the actual output of the Facility. As such, the IMO has proposed changes to the Amending Rules to allow for: 1. a Market Participant to, in consultation with System Management change the estimation methodology used by System Management to calculate the estimate for that Trading Interval; and 2. the IMO to use the actual quantity produced for that Facility for that Trading Interval in place of the estimate provided by System Management where it is higher.

	Submitter	Comment/Change Requested	IMO's Response
3.	System Management	System Management believes the proposed amendments do not restrict the duration of the obligation on System Management to revise the data in Market Rule 7.13.1(eF), and so the cost is potentially unlimited.	The IMO does not expect a significant increase in the workload of System Management or the IMO on the basis of this Rule Change Proposal. This is because the requirement to revise data is limited to the estimates that System Management produces for the purposes of the certification of an Intermittent Generator where it has been dispatched downward on one of the Trading Intervals used to calculate its Relevant Level.
4.	Perth Energy	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.	The IMO acknowledges Perth Energy's suggestion that more recent and accurate data could be used for other purposes including settlement. The IMO also notes that Alinta Energy specifically did not extend the Rule Change Proposal to allow revisions of data for purposes other than certification to ensure that the Amending Rules would be in place for the 2014 Reserve Capacity Cycle. The IMO agrees with the principle that the most accurate and recent data should be used for all purposes. However, based on the extensive system changes that would be required, the IMO does not believe that it is prudent to extend the scope of this Rule Change Proposal to cover settlement.

	Submitter	Comment/Change Requested	IMO's Response
5.	Perth Energy	Perth Energy suggested to 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.	The IMO agrees with Perth Energy that regardless of the outcome of the revision, System Management should provide the outcomes to the IMO. The IMO considers that, in line with the IMO's approach to ensuring that the Market Rules are principles-based, these more process related items should be included in amendments to relevant procedures.
6.	Perth Energy	Perth Energy suggested to delete all of clause 7.7.5H. 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.	The IMO agrees with Perth Energy that the phrase 'for the avoidance of doubt' should not be introduced in the Market Rules. The IMO has amended the proposed Amending Rules to remove this phrase. See Appendix 1 for further amendments to the Amending Rules proposed in the Rule Change Proposal.

4.4. Public Forums and Workshops

No public forums or workshops were held with regard to this Rule Change Proposal.

5. The IMO's Draft Assessment

In preparing its Draft 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 or any technical studies commissioned in respect of this Rule Change Proposal. A summary of the views expressed in submissions and by the MAC is available in section 4 of this report.

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

5.1. Additional Amendments to the Proposed Amending Rules

Following the first public submission period, the IMO has made additional changes to the Amending Rules proposed in the Rule Change Proposal to:

- improve the overall clarity of the process for revisions of estimates provided by System Management and used by the IMO for the purposes of certification; and
- reflect suggestions received during the first submission period.

The changes the IMO has made to the Amending Rules proposed in the Rule Change Proposal are outlined in detail in Appendix 1 of this Draft Rule Change Report.

5.2. Wholesale Market Objectives

The IMO considers that the Market Rules as a whole, if amended as presented in section 7, will not only be consistent with the Wholesale Market Objectives but also allow the Market Rules to better achieve Wholesale Market Objective (a), (c) and (d).

The IMO's assessment is presented below:

(a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the SWIS

The IMO considers that the proposed amendments allow estimates to better reflect the potential output of an Intermittent Generator for the purposes of the certification of Reserve Capacity. This promotes overall economic efficiency by ensuring that the IMO does not unnecessarily procure additional capacity in the event of a 'false' shortfall in capacity resulting from lower estimates of an Intermittent Generator's capacity than what is achievable.

(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

The ability for Rule Participants to request a revision of System Management's estimate of the output of an Intermittent Generator where it is dispatched downwards will ensure that the IMO is able to use the estimate most reflective of its potential output for the purposes of the certification of Reserve Capacity. This will ensure that Intermittent Generators are not unduly penalised where the estimate is used to determine its Certified Reserve Capacity under the Relevant Level Methodology in Appendix 9 of the Market Rules. It should be noted that Scheduled Generators do not bear the same risk with respect to certification as a result of such Dispatch Instructions.

The proposed amendments will ensure that Intermittent Generators are fairly compensated under the Reserve Capacity Mechanism.

(d) to minimise the long-term cost of electricity supplied to customers from the SWIS

The proposed amendments will ensure that the long-term cost of electricity supplied is minimised by avoiding higher costs associated with procuring capacity in the event of a 'false' shortfall in capacity and by ensuring equitable compensation for Intermittent Generators.

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

5.3. Practicality and Cost of Implementation

5.3.1. Cost:

The IMO expects that System Management will incur minor operational costs associated with the requirements to update its estimates.

The IMO expects to incur minor operational costs associated with updates to the processes and models used in the Certification of Reserve Capacity to allow for the revised estimates or actual meter data to be taken into account.

5.3.2. Practicality:

The IMO does not consider that there are any issues with the practicality of implementation of the proposed changes prior to the proposed commencement of the Amending Rules.

5.3.3. Amendments to Associated Market Procedures:

The IMO notes that amendments are required to the Market Procedure for Certification of Reserve Capacity, PSOP: Dispatch and any associated internal procedures and processes.

Changes to PSOP: Dispatch and the Market Procedure for the Certification of Reserve Capacity to outline the process under which a revision will be undertaken and used in the certification process, will need to be in place for the 2014 Reserve Capacity Cycle opening on 1 May 2014. However, the IMO considers that the changes are not significant and will not impede the implementation of the proposed Amending Rules by this date.

6. The IMO's Proposed Decision

The IMO's proposed decision is to accept the Rule Change Proposal as modified by the amendments outlined in section 5.1.

6.1. Reasons for the Decision

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

- will better achieve Wholesale Market Objectives (a), (c) and (d);
- are consistent with the remaining Wholesale Market Objectives;
- have the general support of MAC members; and
- received in-principle support of all submissions received during the first submission period.

6.2. Proposed Commencement Details

The Amending Rules are proposed to commence at 8:00 AM on 1 May 2014.

7. Proposed Amending Rules

The proposed Amending Rules as presented in the Rule Change Proposal and amended following the first submission period are as follows (deleted text, added text):

6.15.2 The Minimum Theoretical Energy Schedule in a Trading Interval equals:

- (b) for a Balancing Facility which is a Non-Scheduled Generator:
 - i. if a Dispatch Instruction was issued to the Balancing Facility to decrease its output and the Loss Factor Adjusted Price of the Balancing Price-Quantity Pair in respect of the Balancing Facility is less than the Balancing Price, then System Management's estimate of the maximum amount of sent out energy, in MWh, which the Balancing Facility would have <u>supplied generated</u> in the Trading Interval had the Dispatch Instruction not been issued; and

. . .

. . .

- 7.7.5A. System Management must develop, in a Power System Operation Procedure, the information that must be provided by a Market Participant to System Management for each of the Market Participant's Non-Scheduled Generators for each Trading Interval to enable an estimation of the output of each Facility, in MWh, to be undertaken by:
 - (a) System Management, as required under clauses 6.15.2(b)(i), 7.7.5B and 7.13.1C(e); and
 - (b) the IMO, as required by the Relevant Level Methodology.
- 7.7.5A. System Management must develop a Power System Operation Procedure specifying:
 - (a) information that a Market Participant must provide to System Management, for each of the Market Participant's Non-Scheduled Generators, and for each Trading Interval, for the purposes of:
 - the estimate referred to in clause 7.7.5A(b);
 - ii. the revised estimate referred to in clause 7.7.5A(c); or
 - iii. step 6 of Appendix 9.
 - (b) for the purposes of clause 7.7.5B and the Relevant Level Methodology one or more methods that may be used to estimate the maximum quantity of sent out energy (in MWh) that a Non-Scheduled Generator would have generated in a Trading Interval had a Dispatch Instruction not been issued for that Facility and for that Trading Interval;
 - (c) for the purposes of the Relevant Level Methodology only the process for revising an estimate that was made strictly in accordance with one of the methods that, under clause 7.7.5A(b), must be specified in the Power System Operation Procedure; and
 - (d) for the purposes of clause 7.13.1C(e) one or more methods that may be used to estimate the decrease in the output (in MWh) of each of Synergy's Non-Scheduled Generators as a result of an instruction from System Management to deviate from the Dispatch Plan or change their commitment or output in accordance with clause 7.6A.3(a).

System Management and Market Participants must comply with the Power System Operation Procedure.

7.7.5B The quantity to be used in for the purposes of clauses 6.15.2(b)(i) and 7.13.1(eF) is System Management's estimate, determined in accordance with the Power System Operation Procedure, of the maximum amount of sent out energy, in MWh, which each

Non-Scheduled Generator, by Trading Interval, would have <u>supplied generated</u> in the Trading Interval had a Dispatch Instruction not been issued.

. . .

Appendix 9: Relevant Level Determination

. . .

- Step 4: For each Candidate Facility and Trading Interval identified in step 3(a) use the estimate provided by System Management to the IMO under clause 7.13.1(eF) as the quantity of energy (in MWh) that would have been sent out by the Facility during the Trading Interval had a Dispatch Instruction not been issued for that Trading Interval.
- Step 4: For each Candidate Facility and Trading Interval identified in step 3(a):
 - (a) identify the actual quantity as determined in step 2 if:
 - System Management has provided the IMO with a revised estimate of the maximum quantity in accordance with clause 7.7.5A(c) and the Power System Operation Procedure; and
 - ii. the revised estimate of the maximum quantity is lower than the actual quantity as determined in step 2;
 - (b) identify the actual quantity as determined in step 2 if:
 - i. step 4(a) does not apply; and
 - ii. the estimated maximum quantity provided by System Management to the

 IMO under clause 7.13.1(eF) is lower than the actual quantity (as

 specified in a Meter Data Submission covering the Facility and the

 Trading Interval); and
 - (c) if steps 4(a) and (b) do not apply:
 - i. identify the revised estimate of the maximum quantity provided by System

 Management to the IMO in accordance with the Power System Operation

 Procedure specified in clause 7.7.5A; or
 - ii. if there is no revised estimate, identify the estimate provided by System

 Management under clause 7.13.1(eF).

- Step 9: Identify, for each 12 month period identified in step 1(c), the following:
 - (a) the Existing Facility Load for Scheduled Generation previously determined under this Appendix 9 for each Trading Interval in the 12 month period;

- (b) the sent out generation (in MWh) for each Candidate Facility for each Trading
 Interval in the 12 month period that was used in the determination of the Existing
 Facility Load for Scheduled Generation for that Trading Interval; and
- (b) subject to step 9A, the sent out generation (in MWh) for each Candidate Facility and for each Trading Interval in that 12 month period, where that sent out generation was used to determine the CF_Generation (which is one of the variables used to determine the Existing Facility Load for Scheduled Generation in step 7) for that Trading Interval; and
- (c) the 12 Trading Intervals occurring on separate Trading Days that were previously determined to have the highest Existing Facility Load for Scheduled Generation in the 12 month period.

Step 9A: For the purposes of step 9(b), if:

- (a) System Management has provided the IMO with a revised estimate of the maximum quantity in accordance with the Power System Operation Procedure specified in clause 7.7.5A;
- (b) the revised estimate relates to a Candidate Facility and a Trading Interval in a 12 month period identified in step 1(c); and
- (c) the IMO determined the sent out generation for that Candidate Facility and for that Trading Interval in accordance with step 4 before it received the revised estimate from System Management,

then the IMO must redetermine the sent out generation for that Candidate Facility and that Trading Interval in accordance with step 4.

. .

Appendix 1. Further Amendments to the Proposed Amending Rules

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

6.15.2 The Minimum Theoretical Energy Schedule in a Trading Interval equals:

. . .

- (b) for a Balancing Facility which is a Non-Scheduled Generator:
 - i. if a Dispatch Instruction was issued to the Balancing Facility to decrease its output and the Loss Factor Adjusted Price of the Balancing Price-Quantity Pair in respect of the Balancing Facility is less than the Balancing Price, then System Management's estimate of the maximum amount of sent out energy, in MWh, which the Balancing Facility would have supplied generated in the Trading Interval had the Dispatch Instruction not been issued; and

. . .

- 7.7.5A. System Management must develop, in a Power System Operation Procedure, the information that must be provided by a Market Participant to System Management for each of the Market Participant's Non-Scheduled Generators for each Trading Interval to enable an estimation of the output of each Facility, in MWh, to be undertaken by:
 - (a) System Management, as required under clauses 6.15.2(b)(i), 7.7.5B and 7.13.1C(e); and
 - (b) the IMO, as required by the Relevant Level Methodology.
- 7.7.5A. System Management must develop a Power System Operation Procedure specifying:
 - (a) information that a Market Participant must provide to System Management, for each of the Market Participant's Non-Scheduled Generators, and for each Trading Interval, for the purposes of:
 - the estimate referred to in clause 7.7.5A(b);
 - ii. the revised estimate referred to in clause 7.7.5A(c); or
 - iii. step 6 of Appendix 9.
 - (b) for the purposes of clause 7.7.5B and the Relevant Level Methodology one or more methods that may be used to estimate the maximum quantity of sent out energy (in MWh) that a Non-Scheduled Generator would have generated in a Trading Interval had a Dispatch Instruction not been issued for that Facility and for that Trading Interval;

- (c) for the purposes of the Relevant Level Methodology only the process for revising an estimate that was made strictly in accordance with one of the methods that, under clause 7.7.5A(b), must be specified in the Power System Operation Procedure; and
- (d) for the purposes of clause 7.13.1C(e) one or more methods that may be used to estimate the decrease in the output (in MWh) of each of Synergy's Non-Scheduled Generators as a result of an instruction from System Management to deviate from the Dispatch Plan or change their commitment or output in accordance with clause 7.6A.3(a).

System Management and Market Participants must comply with the Power System Operation Procedure.

7.7.5B The quantity to be used in-for the purposes of clauses 6.15.2(b)(i) and 7.13.1(eF) is System Management's estimate, determined in accordance with the Power System Operation Procedure, of the maximum amount of sent out energy, in MWh, which each Non-Scheduled Generator, by Trading Interval, would have supplied-generated in the Trading Interval had a Dispatch Instruction not been issued.

- 7.7.5E. A request for System Management to revise an estimate previously provided under clause 7.13.1(eF) for a Trading Interval may be made by either:
 - (a) a Market Participant, with respect to any or all of its Non-Scheduled Generators; or
 - (b) the IMO.
- 7.7.5F. Following a request under clause 7.7.5E or when System Management has information available to it and application of that information may mean that an estimate previously provided under clause 7.13.1(eF) for a Trading Interval will no longer be accurate, System Management must, as soon as practicable and using the most accurate information available to it, revise the estimate of the maximum amount of sent out energy, in MWh, which the Non-Scheduled Generator would have supplied in the Trading Interval had a Dispatch Instruction not been issued.
- 7.7.5G. Where the revision by System Management under clause 7.7.5F determines a different value to that provided previously to the IMO under clause 7.13.1(eF), System Management must as soon as practicable provide the revised estimate to the IMO for the purposes of the Relevant Level Methodology.

7.7.5H. For the avoidance of doubt any revised estimates provided under clause 7.7.5G must not be used for the purposes of clause 6.15.2(b)(i) or settlement under Chapter 9.

Appendix 9: Relevant Level Determination

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- Step 4: For each Candidate Facility and Trading Interval identified in step 3(a) use either:
 - (a) the estimate provided by System Management to the IMO under clause 7.13.1(eF); or
 - (b) if a revised estimate has been provided by System Management under clause 7.7.5G, the last such revised estimate where considered appropriate by the IMO,

as the quantity of energy (in MWh) that would have been sent out by the Facility during the Trading Interval had a Dispatch Instruction not been issued for that Trading Interval.

. .

Step 4: For each Candidate Facility and Trading Interval identified in step 3(a):

- (a) identify the actual quantity as determined in step 2 if:
 - i. System Management has provided the IMO with a revised estimate of the maximum quantity in accordance with clause 7.7.5A(c) and the Power System Operation Procedure; and
 - ii. the revised estimate of the maximum quantity is lower than the actual quantity as determined in step 2;
- (b) identify the actual quantity as determined in step 2 if:
 - i. step 4(a) does not apply; and
 - ii. the estimated maximum quantity provided by System Management to the

 IMO under clause 7.13.1(eF) is lower than the actual quantity (as

 specified in a Meter Data Submission covering the Facility and the

 Trading Interval); and
- (c) if steps 4(a) and (b) do not apply:
 - i. identify the revised estimate of the maximum quantity provided by System

 Management to the IMO in accordance with the Power System Operation

 Procedure specified in clause 7.7.5A; or
 - ii. if there is no revised estimate, identify the estimate provided by System Management under clause 7.13.1(eF).

...

Step 9: Identify, for each 12 month period identified in step 1(c), the following:

- (a) the Existing Facility Load for Scheduled Generation previously determined under this Appendix 9 for each Trading Interval in the 12 month period;
- (b) the sent out generation (in MWh) for each Candidate Facility for each Trading Interval in the 12 month period that was either:
 - i. used previously in the determination of the Existing Facility Load for Scheduled Generation for that Trading Interval; or
 - ii. revised since the IMO's last determination of the Facility's Relevant Level, where the IMO considers it is appropriate to use the last such revised estimate provided by System Management under clause 7.7.5G; and
- (b) subject to step 9A, the sent out generation (in MWh) for each Candidate Facility and for each Trading Interval in that 12 month period, where that sent out generation was used to determine the CF_Generation (which is one of the variables used to determine the Existing Facility Load for Scheduled Generation in step 7) for that Trading Interval; and
- (c) the 12 Trading Intervals occurring on separate Trading Days that were previously determined to have the highest Existing Facility Load for Scheduled Generation in the 12 month period.

Step 9A: For the purposes of step 9(b), if:

- (a) System Management has provided the IMO with a revised estimate of the maximum quantity in accordance with the Power System Operation Procedure specified in clause 7.7.5A;
- (b) the revised estimate relates to a Candidate Facility and a Trading Interval in a 12 month period identified in step 1(c); and
- (c) the IMO determined the sent out generation for that Candidate Facility and for that Trading Interval in accordance with step 4 before it received the revised estimate from System Management,

then the IMO must redetermine the sent out generation for that Candidate Facility and that Trading Interval in accordance with step 4.