

Notice of Market Rules Modification

Paper No.:	EMC/RCP/57/2011/302
Rule Reference:	Market Rules/Chapter 2 Section 5.6 (new)
Proposer:	Energy Market Company
Date Received by EMC:	26 April 2011
Category Allocated:	3
Status:	Approved by EMA
Effective Date:	03 July 2012

An industry player proposed for the publication of generation registered capacity by facility to facilitate transparency, especially with regards to the allocation of vesting contracts (VCs) among generation companies (gencos).

At present, gencos allocated vesting contracts are privy to each other's total registered capacity used in the determination of the VC allocation by the EMA. However, the rest of the industry and the public have access only to the registered capacities of gencos in EMC's annual NEMS market report in a chart format (without accompanying figures). This is in contrast with the level of detail for licensed capacity data, which is made publicly available on EMA's website. Generally, registered capacities could differ from licensed capacity due to generation facilities being de-rated, decommissioned for repowering or when plants are yet to be built.

As a matter of principle, data transparency should be supported as it could allow various interested parties to make better decisions and improve the competitiveness of the market. However, there are certain scenarios when transparency should be controlled, such as when it could create national security risks, cause adverse financial impact for any identified party, or has an adverse impact on market efficiency (e.g. facilitating collusion).

The concept paper was published for comments. Industry feedback received supported the proposed data release, and suggested for additional data items to be included (e.g. comparable data on load registered facilities). The RCP supported the publication and its specific contents at the 55th RCP Meeting.

The feedback received with regard to the draft rule changes as set out in **Annex 1** to effect the decisions made at the 55th RCP meeting and EMC's responses are reflected in section 6.

At the 56th RCP meeting, the panel considered the proposed rule modifications as set out in **Annex 1** and the feedback received.

The panel unanimously supported not publishing the MNN of each registered facility, given the reasons from EMC market operations.

In addition, the panel by majority vote supported:

1. publishing the identity of each registered facility as originally proposed;
2. publishing the registered capacities of the regulation and primary/secondary/contingency reserve of all registered facilities; and

At the 57th RCP meeting, the revised rules incorporating the RCP's decision at the 56th meeting was presented in **Annex 2**.

By majority vote, the RCP recommends that the EMC Board adopt the Market Rules modifications as set out in **Annex 2**.

Date considered by Rules Change Panel: 13 September 2011

Date considered by EMC Board: 25 November 2011

Date considered by Energy Market Authority: 19 December 2011

Proposed rule modification:

See attached paper.

Reasons for rejection/referral back to Rules Change Panel (if applicable):

PAPER NO. : **EMC/BD/XX/2011/XX**

RCP PAPER NO. : **EMC/RCP/57/2011/302**

SUBJECT : **PUBLICATION OF GENERATION REGISTERED
CAPACITY BY FACILITY**

FOR : **DECISION**

PREPARED BY : **HENRY WEE
SENIOR ANALYST**

REVIEWED BY : **PAUL POH LEE KONG
SVP, MARKET ADMINISTRATION**

DATE OF MEETING : **XX SEPT 2011**

Executive Summary

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As a matter of principle, data transparency should be supported as it could allow various interested parties to make better decisions and improve the competitiveness of the market. However, there are certain scenarios when transparency should be controlled, such as when it could create national security risks, cause adverse financial impact for any identified party, or has an adverse impact on market efficiency (e.g. facilitating collusion).

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In addition, the panel by majority vote supported:

1. publishing the identity of each registered facility as originally proposed;
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By majority vote, the RCP recommends that the EMC Board adopt the Market Rules modifications as set out in **Annex 2**.

1. Introduction

This paper discusses the proposal to publish the registered generation capacity by facility so as to facilitate transparency, especially with regard to the allocation of vesting quantities.

2. Background

The licensed capacity of a generation or wholesaler licensee is the authorized capacity that EMA grants to a licensee for the generation of electricity.

The registered generation capacity of a generation facility (GF) is the maximum generation capacity approved by PSO, and registered with EMC to provide one or more of the following products in the Singapore Wholesale Electricity Market (SWEM):

1. Energy;
2. Reserve (Primary, Secondary or Contingency);
3. Regulation.

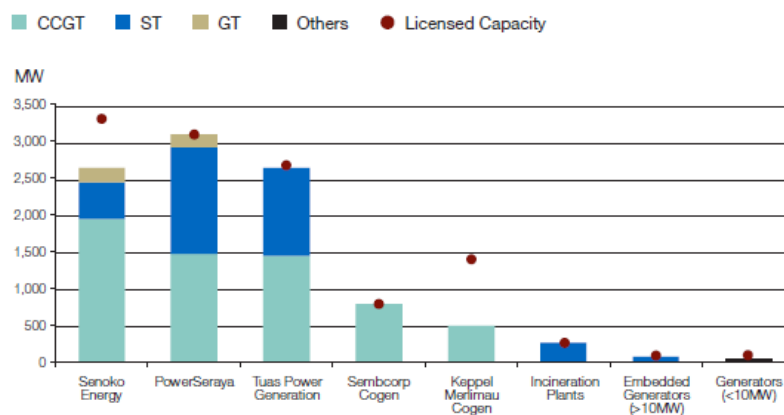
The capacity for each category is determined during the facility registration process, whereby the applicant will submit his GF's potential capability (as indicated in the PSO data form) to PSO for validation and testing. PSO will determine the standing capability data of the tested GF, including the maximum energy, reserve and regulation capacity of that GF.

Generally, the registered generation capacities of GFs do not change much or often, although they can differ from the licensed capacity due to the facility being de-rated, decommissioned for repowering or when they are yet to be built.

Currently Available Information

At present, EMA publishes on its website the licensed capacities of each GF, as and when it is updated. In contrast, the registered capacities of GFs are published in the annual NEMS market report only to the resolution of generation company (genco) and technology, at a given snapshot in time. In addition, though EMA's data on licensed capacity shows the exact capacity figure (e.g. 200MW), EMC's data on registered capacity only shows it in a chart format without accompanying figures (see chart below).

Figure 1: Generation Capacity 2010: Registered Versus Licensed



For gencos allocated vesting contracts, EMA circulates the total registered capacity by genco used to determine the allocation of vesting contract every quarter. This data is based on the registered capacities of each genco, adjusted for capacities excluded in accordance with the conditions in the vesting contract (i.e. when a GF is expected to be continuously unavailable for a period of 6 months). Notwithstanding, this data is quite close to the registered capacities.

A summary of the current data availability is given in the table below:

Table 1: Comparison of Data Availability for Licensed and Registered Capacity

Granularity of Information	Generation Licensees allocated VCs		Other MPs	
	Licensed Capacity	Registered Capacity	Licensed Capacity	Registered Capacity
By Genco	√	√ (1)	√	√ (no figures)
By Technology (e.g. combined cycle gas-fired / thermal fuel-oil fired)	√	√ (no figures)	√	√ (no figures)
By Generating Facility	√		√	

3. Analysis

As a matter of principle, we believe that with a maturing wholesale electricity market, data transparency should be supported as it could allow consumers or market players to make better decisions, and improve the competitiveness and efficiency of the market. The situations when information should be withheld are when:

- a) Its release creates national security risks
- b) Its release creates adverse financial impact for any identified party
- c) It is a trade secret
- d) Its release is legally prohibited
- e) Its release has an adverse impact on market efficiency e.g. facilitating collusion.
- f) Its release is too costly

Findings from Earlier Study

In an earlier concept paper², EMC assessed if unit-specific operational parameters should be released for publication. This stemmed from a CRA study³ which found that some centrally dispatched electricity market posted such information. These parameters include:

- a) Name of Generation
- b) Type of Generation Facility
- c) Max. Generation Capacity
- d) Max. Reserve Capacity for each reserve class

¹ More precisely, this is the adjusted registered capacity of gencos used by EMA for the allocation of vesting contract quantities.

² CP19 Shortlist of data types considered for release in SWEM, 5 Jan 2010

³ "Analysis of data release practices in centrally dispatched electricity markets" by CRA international 2007

- e) Max. Regulation Capacity
- f) Max. Ramp-up rate
- g) Max. Ramp-down rate
- h) Low Load
- i) Reserve Capacity at low, medium high output level for each class of reserve
- j) Maximum combined generation capacity and reserve capacity for each reserve class
- k) Reserve Proportionality Factor for each class of reserve
- l) Max. Energy output at which AGC can operate
- m) Min. Energy output at which AGC can operate
- n) Time delay before responding to contingency event

In consideration of the concern raised by an MP on the commercial sensitivity of the data and the costs of making that data available, coupled with the lack of indication from interested parties on the benefit of such data release, the RCP decided not to support the publication of those data as the costs outweighed the benefits.

Benefits of Publishing Registered Capacity

Greater data transparency on the registered capacities of generating facilities could bring about a more complete analysis of SWEM's competitiveness and shed light on the vesting contract allocation process, which might be of interest to potential investors, independent consultants, banks and members of the public. As a guiding principle, it is proposed that the data on registered capacities be published to the same resolution as that of licensed capacities.

Concerns over Publishing Registered Capacity

In deciding whether registered capacity data could be released, we need to measure it against the six criteria mentioned earlier (i.e. e.g. could create national security risks, cause adverse financial impact for any identified party, or has an adverse impact on market efficiency (e.g. facilitating collusion)).

We are of the view that registered capacity data is static data which, while giving a more complete picture of the overall industry, would not flout any of these six criteria. As is, detailed data on licensed capacity is already available on EMA's website and publishing more detailed registered capacity data simply aligns the latter to the current former's availability. In addition, gencos with allocated vesting contracts are already privy of each other's total registered capacity. Therefore, we conclude that the release of registered generation capacity is unlikely to cause any real concerns.

Proposed Format and Frequency of Publication

We propose that for timeliness, the registered capacity data is published as and when it is updated, similar to that of licensed capacity data. The data could be made available on EMC's website, in the suggested format below:

Table 2: Proposed Format of Publication (EMC's Proposal)

Genco	Generating Facility	Technology (CCGT, Steam, Gas only)	Registered Generation Capacity (MW)
ABC Power Co.	Station Stage 1, Unit 1	CCGT	300
ABC Power Co.	Station Stage 2, Unit 1	Steam	300

4. Consultation (Concept Paper)

The concept paper was published for consultation on 26 April 2011, and the following comments were received:

Comments from Diamond Energy

Diamond Energy is supportive of the proposed change for greater transparency in support of more informed investment decision making and enhancing competition. Diamond Energy agrees with the proposed timing for publication of such information and suggests for a date stamp to be included. Diamond Energy recommends for the following to be included:

1. Market Network Node for the generation unit;
2. Indicate if the generation unit is an embedded generation unit;
3. The frequency responsive status of the generation unit;
4. Facility type (i.e. GSF or GRF)
5. Extend technology fields to: OCGT, CCGT, Steam and Others
6. Indicate if the facility is entitled to vesting contract allocation

Diamond Energy sees the release of the above information consistent with international best practices and does not impede competition or create security risk. Their proposed modification to the table of information is as follow:

Table 3: Proposed Format of Publication (Diamond Energy's Recommendation)

Genco	Generating Facility (EMA License Reference)	Generating Facility (EMC MNN Reference)	Facility Status (GRF /GSF)	Technology (OCGT, CCGT, Steam, Other)	Registered Max Generation Capacity (MW)	Embedded Status (Yes/No)	Frequency Status (NFR/FR)	Entitled to Allocation of Vesting Quantities (Yes/No)
ABC Power Co.	ABC Power Station Stage1, Unit 1	ABCPC: Stage1: ABC G1	GRF	CCGT	300	No	FR	Yes
ABC Power Co.	ABC Power Station Stage2, Unit 1	ABCPC: Stage2: ABC G1	GRF	CCGT	300	No	FR	Yes

Note: Categories in italics above are new categories proposed by Diamond Energy

Response from EMC

EMC is agreeable to extend the publication to include the categories below, as they are unlikely to flout any of the six criteria earlier mentioned:

- Market Network Node for the GF
- Indicate if the GF is an embedded generator
- The frequency responsive status of the generation unit⁴
- Facility type (i.e. GSF or GRF)
- Extend technology fields to: OCGT, CCGT, Steam and Others

EMC is also agreeable to include a date stamp to each publication. However, EMC is not agreeable to publishing whether the GF is eligible for vesting contract allocation, as it is further subjected EMA's determination (e.g. whether the GF is expected to be continuously unavailable for a period of 6 months)

Comments from Senoko Energy Pte Ltd

We generally support the move toward greater data transparency in the NEMS.

In this respect, we believe that the concept paper could be enhanced by including within its scope the publishing of capacity data for all generation units connected to the transmission system and the facilities capacities of wholesale market traders (including ILs). We note that some of this information is already published on the EMA's website, but it would be useful to publish an up-to-date consolidated package of data on EMC's website.

Response from EMC

We agree with Senoko Energy's suggestion to include the registered capacity data of all facilities⁵ connected to the transmission system, and all wholesale traders (including ILs).

5. Discussion at 55th RCP Meeting

At the 55th RCP meeting, EMC recommended to:

- Publish the data categories shown in Table 3, excluding the category on whether the facility is entitled to vesting contract allocation;
- Publish the registered capacity data of all facilities connected to the transmission system and all wholesale traders (including ILs); and
- Publish the above data as and when updated, with a corresponding time-stamp.

On the issue of whether a facility is frequency responsive, Mr Kng Meng Hwee (PSO) affirmed that a facility is frequency responsive if it is able to provide either primary or secondary reserve, which is reflected in its standing capability data form which is provided to EMC.

With regards to the date stamping of the data release, Mr Henry Gan recommended using the existing method whereby a user could select a desired date and access the information updated as of that date.

⁴ Subject to PSO agreeing to provide this data to EMC, as EMC currently does not have this data.

⁵ Please note that this only includes facilities belonging to Market Participants and exclude, for example, legacy units exempt from participating in SWEM.

The panel gave in-principle support to EMC's recommendations, and will make a final decision pending the cost of implementation and proposed rule changes to be presented at the next meeting.

6. Consultation (Draft Rule Changes)

The draft rule changes as set out in Annex 1 based on the decisions made by the panel at the 55th RCP meeting were published for consultation on 31 May 2011, and the following feedback was received:

Comments from Diamond Energy

- 1) For LRFs, Diamond agrees to publish the MP's identity but not the LRF's identity as it is confidential and commercially sensitive since IL providers are not owners of the facilities. Publishing it is akin to publishing the list of contestable consumers under each MP retailers.
- 2) For completeness and reconciliation against the cap on NFR that has been introduced, Diamond recommends the RCP to consider adding:
 - a. Generation Transmission Planning Zone (A/B/C/D/E); and the corresponding zone for each generation facility
 - b. The registered regulation, Pri/Sec/Con reserve capacity of frequency responsive units

Response from EMC

EMC disagrees with Diamond's request not to publish the identities of LRFs on the basis that IL providers are not owners of the facilities as this would be discriminatory. For example, doing so would mean that Air Product's facility ID will be published but not Diamond's. Similarly, as Gencos could register facilities that they do not own, the identity of these facilities would not be published in this case, if Diamond's proposal were accepted. We recommend that the RCP decide whether the identity of facility should be published at all, without differentiating whether the facilities are owned by the MP.

EMC disagrees with Diamond's request to publish information on generation transmission planning zones and the corresponding zone for each generation facility. This data resides with the EMA and they are not bound by the market rules to provide this data to EMC. In any case, this information is already published by the EMA (as referenced by Diamond Energy in its letter) and could also be found in EMA's "Statement of Opportunities 2009".

EMC have no objections to publishing the registered capacities for regulation, primary/secondary/contingency reserve of frequency responsive units, as it is also static data. However, if this information is published, it should be applied to all registered facilities (i.e. GFs and LRFs).

Comments from Senoko Energy

Senoko Energy supports the proposal for market transparency but suggests that rule change drafting in section 5.6.2.8 of Chapter 2 specify that information relating to frequency response refers to standing capability data rather than specific unit status that could be temporary in off-mode for various reasons (e.g. testing).

Response from EMC

The section 5.6.2.8 was already drafted with respect to **registered** information of the facility that EMC most currently holds, which could be obtained during facility registration or when PSO updates via the standing capability data form. It is different from the instantaneous or

current operating status of a unit as mentioned. Even during instances of off-mode (or testing), a unit's registered information does not change until testing is completed and PSO sends the revised standing capability data to EMC.

Comments from EMC Market Operations

The format and naming convention of i) the identity of all generation facility (GFs) or load registered facility (LRF) and ii) their corresponding market network node (MNN) is exactly the same. It is also the same as the identity used in energy offers as required in section 5.2.2.1 of chapter 6 of the market rules. EMC (market operations) thus suggests that only one of them needs to be published.

A sample of how the publication looks like is shown below:

Market Participant	Facility Name	Facility Registration Status	Under going Commissioning	Facility Type	Embedded Status	Registered Max Capacity*	Frequency Responsive Status	Effective Date
ABC Genco	ABC : Stage1 : ST1	GRF	-	ST	No	250	FR	01-Jun-2003
ABC Genco	ABC : Stage1 : GT1	GRF	-	GT	No	100	NFR	01-Jun-2003
ABC Genco	ABC : Stage2 : CCP1	GRF	Yes	CCGT	No	300	NFR	02-Jun-2011

For LRFs, it is the largest maximum reserve capacity across all classes of reserve that the facility is registered to provide.

Response from EMC (Market Admin)

Since the identity of a generation facility and its MNN contain the same information, we support MO's recommendation not to publish the MNN of each registered facility.

7. Discussion at RCP Meetings

At the 56th RCP meeting, the panel unanimously supported the decision not to publish the MNN of each registered facility, given the reasons from EMC market operations. In addition, the following decisions were put to a vote:

1. to publish the identity of each registered facility as originally proposed; and
2. to publish the registered capacities of regulation and primary/secondary/contingency reserve of all registered facilities.

The details of the votes are as follows:

Those who voted for:

- | | |
|-----------------------|---|
| 1. Mr. Chan Hung Kwan | Representative of Transmission Licensee |
| 2. Mr. Daniel Lee | Representative of Generation Licensee |
| 3. Dr Goh Bee Hua | Representative of Consumers of Electricity in Singapore |
| 4. Mr. Henry Gan | Representative of EMC |
| 5. Mr. Kng Meng Hwee | Representative of the PSO |
| 6. Mr. Lawrence Lee | Representative of Market Support Services Licensee |
| 7. Mr. Loh Chin Seng | Representative of Retail Electricity Licensee |
| 8. Mr. Luke Peacocke | Representative of Generation Licensee |
| 9. Mr. Philip Tan | Representative of Generation Licensee |

- | | |
|------------------------|--|
| 10. Mr. Robin Langdale | Person experienced in Financial Matters in Singapore |
| 11. Mr. Sean Chan | Representative of Retail Electricity Licensee |

Those who abstained:

- | | |
|-------------------|---|
| 1. Mr. Dallon Kay | Representative of the Wholesale Electricity Market Trader |
|-------------------|---|

At the 57th RCP meeting, the draft rules incorporating the RCP's decisions above were presented. The proposed rule changes were put to a vote.

The details of the votes are as follow:

Those who voted for:

- | | |
|------------------------|---|
| 1. Mr. Chan Hung Kwan | Representative of Transmission Licensee |
| 2. Mr. Daniel Lee | Representative of Generation Licensee |
| 3. Dr. Goh Bee Hua | Representative of Consumers of Electricity in Singapore |
| 4. Mr. Henry Gan | Representative of EMC |
| 5. Mr. Kng Meng Hwee | Representative of the PSO |
| 6. Mr. Lawrence Lee | Representative of Market Support Services Licensee |
| 7. Mr. Michael Lim | Representative of Consumers of Electricity in Singapore |
| 8. Mr. Luke Peacocke | Representative of Generation Licensee |
| 9. Mr. Philip Tan | Representative of Generation Licensee |
| 10. Mr. Robin Langdale | Person experienced in Financial Matters in Singapore |
| 11. Mr. Sean Chan | Representative of Retail Electricity Licensee |

Those who voted against:

- | | |
|-------------------|---|
| 1. Mr. Dallon Kay | Representative of the Wholesale Electricity Market Trader |
|-------------------|---|

By majority vote, the RCP support the draft rules in Annex 2.

8. Impact to Market Systems

The system will be modified to publish the following data:

For each generation facility registered with EMC:

1. Identity of the MP of that facility
2. The identity of the facility
3. Whether the facility is a GRF, GSF or CGF
4. The type of generation facility (i.e. technology)
5. Whether the facility is an embedded generation facility
6. The maximum generation capacity
7. The maximum reserve capacity for each class of reserve (primary/secondary/contingency) that the facility is registered to provide
8. The maximum regulation capacity that the facility is registered to provide
9. Whether the facility is frequency responsive

For each load registered facility:

1. The identity of the MP of that facility
2. The identity of the facility
3. The maximum reserve capacity for each class of reserve that the facility is registered to provide

9. Implementation

Implementing the proposal to publish the proposed data will incur an estimated cost of \$10,800, and an implementation timeline of 3 months to prepare, test and implement the changes required.

10. Legal Sign-Off

The draft rules are included in **Annex 2**. The text of the rule modification has been vetted by EMC's external legal counsel, whose opinion is that the modification reflects the intent of the rule modification proposal as expressed in **Annex 2**.

11. Recommendation

By majority vote, the RCP recommends that the EMC Board:

1. adopt the rule modification proposal to add a new section 5.6 of Chapter 3 into the market rules as set out in **Annex 2**;
2. seek the EMA's approval of the rule modification proposal as set out in **Annex 2**; and
3. recommend that the rule modification proposal as set out in **Annex 2** come into force 3 months after the date on which the approval of the Authority is published by the EMC.

Annex 1 – Draft Rules Published for Consultation on 31 May 2011

Existing Market Rules	Proposed Rule Changes (Deletions represented by strikethrough text and additions represented by double-underlined text)	Reasons for Rule Change
<u>CHAPTER 2</u>	<u>CHAPTER 2</u>	
New Section	<p><u>5.6 PUBLICATION OF FACILITY DATA</u></p> <p><u>5.6.1 The EMC shall establish, maintain, update and <i>publish</i> a list containing the information specified in sections 5.6.2 and 5.6.3.</u></p>	To require the EMC to establish, maintain, update and publish a list containing certain specific information pertaining to generation facilities and load facilities registered with EMC. Such information is specified in sections 5.6.2 and 5.6.3 below.
New Section	<p><u>5.6.2 The list referred to in section 5.6.1 shall contain the following information most currently available to the EMC in respect of each <i>generation facility</i> registered with the EMC under sections 5.2, 5.3 and 5.4:</u></p> <p><u>5.6.2.1 the identity of the <i>market participant</i> under which such <i>generation facility</i> is registered;</u></p> <p><u>5.6.2.2 the identity of such <i>generation facility</i>;</u></p> <p><u>5.6.2.3 the <i>market network node</i> for such <i>generation facility</i>;</u></p> <p><u>5.6.2.4 the type of registration of such <i>generation facility</i>, that is whether such <i>generation facility</i> is registered as a:</u></p> <p><u>a. <i>generation registered facility</i>;</u></p> <p><u>b. <i>commissioning generation facility</i>; or</u></p>	To specify the information in respect of generation facilities registered under sections 5.2, 5.3 and 5.4 to be included in the list specified in the new section 5.6.1.

Existing Market Rules	Proposed Rule Changes (Deletions represented by strikethrough text and additions represented by double-underlined text)	Reasons for Rule Change
	<p><u>c. generation settlement facility;</u></p> <p><u>5.6.2.5 whether such generation facility is classified as an embedded generation facility;</u></p> <p><u>5.6.2.6 the type of generation facility;</u></p> <p><u>5.6.2.7 the maximum generation capacity of such generation facility; and</u></p> <p><u>5.6.2.8 whether such generation facility is frequency responsive, that is, whether it has a positive maximum reserve capacity for either primary or secondary reserve.</u></p>	
	<p><u>5.6.3 The list referred to in section 5.6.1 shall contain the following information most currently available to the EMC in respect of each load registered facility:</u></p> <p><u>5.6.3.1 the identity of the market participant under which such load registered facility is registered;</u></p> <p><u>5.6.3.2 the identity of such load registered facility; and</u></p> <p><u>5.6.3.3 the largest maximum reserve capacity for each class of reserve that such load registered facility is registered to provide.</u></p>	<p>To specify the information in respect of load registered facilities to be included in the list specified in the new section 5.6.1.</p>

Existing Market Rules	Proposed Rule Changes (Deletions represented by strikethrough text and additions represented by double-underlined text)	Reasons for Rule Change
<u>Appendix 6E</u>	<u>Appendix 6E</u>	
<p>E.1.1 The <i>standing capability data</i> pertaining to a <i>generation facility</i> shall include:</p> <p>...</p> <p>E.1.1.2 the maximum generation capacity, in MW, of the <i>generation facility</i>;</p> <p>...</p>	<p>E.1.1 The <i>standing capability data</i> pertaining to a <i>generation facility</i> shall include:</p> <p>...</p> <p>E.1.1.2 the maximum generation capacity <u>generation capacity</u>, in MW, of the <i>generation facility</i>;</p> <p>...</p>	<p>To correct an existing formatting error in E1.1.2</p>

Annex 2 – Draft Rules Incorporating RCP’s Decision at 56th RCP Meeting

Existing Market Rules	Proposed Rule Changes (Deletions represented by strikethrough text and additions represented by double-underlined text)	Reasons for Rule Change
<u>CHAPTER 2</u>	<u>CHAPTER 2</u>	
New Section	<p><u>5.6 PUBLICATION OF FACILITY DATA</u></p> <p><u>5.6.1 The EMC shall establish, maintain, update and <i>publish</i> a list containing the information specified in sections 5.6.2 and 5.6.3.</u></p>	To require the EMC to establish, maintain, update and publish a list containing certain specific information pertaining to generation facilities and load facilities registered with EMC. Such information is specified in sections 5.6.2 and 5.6.3 below.
New Section	<p><u>5.6.2 The list referred to in section 5.6.1 shall contain the following information most currently available to the EMC in respect of each <i>generation facility</i> registered with the EMC under sections 5.2, 5.3 and 5.4:</u></p> <p><u>5.6.2.1 the identity of the <i>market participant</i> under which such <i>generation facility</i> is registered;</u></p> <p><u>5.6.2.2 the identity of such <i>generation facility</i>;</u></p> <p><u>5.6.2.3 the type of registration of such <i>generation facility</i>, that is whether such <i>generation facility</i> is registered as a:</u></p> <p style="margin-left: 40px;"><u>a. <i>generation registered facility</i>;</u></p> <p style="margin-left: 40px;"><u>b. <i>commissioning generation facility</i>; or</u></p> <p style="margin-left: 40px;"><u>c. <i>generation settlement facility</i>;</u></p> <p><u>5.6.2.4 whether such <i>generation facility</i> is classified as</u></p>	To specify the information in respect of generation facilities registered under sections 5.2, 5.3 and 5.4 to be included in the list specified in the new section 5.6.1.

Existing Market Rules	Proposed Rule Changes (Deletions represented by strikethrough text and additions represented by double-underlined text)	Reasons for Rule Change
	<p>an <i>embedded generation facility</i>;</p> <p><u>5.6.2.5</u> the type of <i>generation facility</i>;</p> <p><u>5.6.2.6</u> the maximum <i>generation capacity</i> of such <i>generation facility</i>;</p> <p><u>5.6.2.7</u> the maximum <i>reserve capacity</i> for each <i>reserve class</i> that such <i>generation facility</i> is registered to provide;</p> <p><u>5.6.2.8</u> the maximum <i>regulation capacity</i> that such <i>generation facility</i> is registered to provide; and</p> <p><u>5.6.2.9</u> whether such <i>generation facility</i> is frequency responsive, that is, whether it has a positive maximum <i>reserve capacity</i> for either primary or secondary <i>reserve</i>.</p>	
	<p><u>5.6.3</u> The list referred to in section 5.6.1 shall contain the following information most currently available to the <i>EMC</i> in respect of each <i>load registered facility</i>;</p> <p><u>5.6.3.1</u> the identity of the <i>market participant</i> under which such <i>load registered facility</i> is registered;</p> <p><u>5.6.3.2</u> the identity of such <i>load registered facility</i>; and</p> <p><u>5.6.3.3</u> the maximum <i>reserve capacity</i> for each <i>reserve class</i> that such <i>load registered facility</i> is registered to provide.</p>	<p>To specify the information in respect of load registered facilities to be included in the list specified in the new section 5.6.1.</p>

Existing Market Rules	Proposed Rule Changes (Deletions represented by strikethrough text and additions represented by double-underlined text)	Reasons for Rule Change
<u>Appendix 6E</u>	<u>Appendix 6E</u>	
<p>E.1.1 The <i>standing capability data</i> pertaining to a <i>generation facility</i> shall include:</p> <p>...</p> <p>E.1.1.2 the maximum generation capacity, in MW, of the <i>generation facility</i>;</p> <p>...</p>	<p>E.1.1 The <i>standing capability data</i> pertaining to a <i>generation facility</i> shall include:</p> <p>...</p> <p>E.1.1.2 the maximum generation capacity <u>generation capacity</u>, in MW, of the <i>generation facility</i>;</p> <p>...</p>	<p>To correct an existing formatting error in E1.1.2.</p>
<p>...</p> <p>E.1.1.7 if the <i>generation facility</i> is or seeks to be registered to provide any <i>reserve class</i>, the reserve proportion, which constrains the maximum reserve that may be scheduled from the <i>generation registered facility</i> to the specified ratio of energy scheduled for the <i>generation registered facility</i>. The reserve proportion should be specified to minimise the likelihood of the <i>generation registered facility</i> being scheduled to provide reserve in excess of what can reliably be provided at any given level of scheduled energy;</p> <p>...</p>	<p>...</p> <p>E.1.1.7 if the <i>generation facility</i> is or seeks to be registered to provide any <i>reserve class</i>, the reserve <u>reserve</u> proportion, which constrains the maximum reserve <u>reserve</u> that may be scheduled from the <i>generation registered facility</i> to the specified ratio of energy <u>energy</u> scheduled for the <i>generation registered facility</i>. The reserve <u>reserve</u> proportion should be specified to minimise the likelihood of the <i>generation registered facility</i> being scheduled to provide reserve <u>reserve</u> in excess of what can reliably be provided at any given level of scheduled energy <u>energy</u>;</p> <p>...</p>	<p>To correct existing formatting errors in E1.1.7.</p>
<p>...</p> <p>E.1.1.11 the time delay in seconds before the <i>generation facility</i> begins to respond</p>	<p>...</p> <p>E.1.1.11 the time delay in seconds before the <i>generation facility</i> begins to respond following the standard contingency</p>	<p>To correct an existing formatting error in E1.1.11.</p>

Existing Market Rules	Proposed Rule Changes (Deletions represented by strikethrough text and additions represented by double-underlined text)	Reasons for Rule Change
following the standard contingency event specified in the <i>system operation manual</i> ;	event <u><i>contingency event</i></u> specified in the <i>system operation manual</i> ; ...	