MINUTES OF THE RULES CHANGE PANEL
113TH MEETING
HELD ON TUESDAY, 21 JANUARY 2020 AT 10.00AM
AT ENERGY MARKET COMPANY PTE LTD
4 SHENTON WAY #03-01
SGX CENTRE 2, SINGAPORE 068807

Present
Toh Seong Wah (Chairman) Henry Gan
Soh Yap Choon Marcus Tan
Tony Tan Senthil Kumar
Sean Chan Matthew Yeo
Ho Yin Shan Dr. Toh Mun Heng
Fong Yeng Keong

Absent with Apologies:
Mark New Tan Chian Khong
Teo Chin Hau Carol Tan

In Attendance: Poa Tiong Siaw Wang Jing
(EMC) Li Zhenhui Qin Weixiao
Joash Seng Clarissa Ooi

1. Notice of Meeting

The Chairman called the meeting to order at 10.10am. The Notice and Agenda of the meeting were taken as read.

2. Confirmation of Minutes of the 112th RCP Meeting

The Minutes of the 112th RCP meeting, held on 12 November 2019, were noted and the RCP approved the Minutes.

4. Monitoring List

The RCP noted the content of the Monitoring List.

5. Summary of Outstanding Rule Changes

The RCP noted the summary of outstanding rule changes.

6. Rules Change Work Plan Status Update

The RCP noted the update on the Rules Change Work Plan.
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7. **Review of Timelines in Relation to Provision of Credit Support**  
   (Paper No. EMC/RCP/113/2020/362)

Ms. Qin Weixiao presented the paper to provide clarification and align the various timelines in relation to provision of credit support in the market rules. She gave the background of the issues and the respective proposals and presented a summary of the proposed rule modifications.

7.1 Ms. Qin went on to present a summary of the proposed modifications to the market manual. The proposed modifications were published on 13 December 2019 for consultation and one comment received from Seraya Energy was responded to.

7.4 The RCP **unanimously supported** the proposed modifications to the market rules and market manual and recommended that the EMC Board adopts the proposed modifications and for the proposed modifications to come into effect 25 calendar weeks after the date on which the approval of the Authority is published by EMC.

8. **Invalidation of Offers following Forced Outage**  
   (Paper No. EMC/RCP/113/2020/CP80)

Mr. Li Zhenhui presented the conceptual proposal for the Market Clearing Engine (“MCE”) to automatically invalidate offers of a Generation Registered Facility (“GRF”) after it experiences a forced outage. He gave the background of the proposal and presented EMC’s analysis.

8.1 Mr. Li went on to present the impact of the current situation on the NEMS, practices in other jurisdictions with regards to offer invalidation, the proposed solution and alternative methods to invalidate offers.

8.2 Mr. Li informed the RCP that the concept paper was published on 9 December 2019 for consultation. EMC has responded to comments received from Keppel Merlimau Cogen, PSO, Senoko Energy and EMC’s Market Operations.

8.3 Mr. Marcus Tan said that based on EMC’s preferred approach to invalidate offers whereby units on a start profile will be exempted from the automatic invalidation rule, he proposed that all units generating below minimum stable load be excluded from the invalidation rule instead of having to include additional field in the offers to indicate whether the unit is on “start profile / synchronising” profile which will result in high implementation cost. Mr. Li replied that EMC will explore this option but will continue to work with PSO and the market participants on the preferred method.

8.4 Mr. Henry Gan opined that the NEMS should remain adhering to the market design principle of self-commitment. Instead of automatic offer invalidation following a forced outage, he would prefer to discuss how market participants can be encouraged and provided with a quick ‘zero capacity offer’ function to revise offers in a timely manner. The practice in other jurisdictions may not be applicable in the SWEM as the PSO
and EMC are separate entities and the transfer of power system information may not be as efficient as compared to these other markets. He reiterated that Gencos, who are the operator for their plants, will be the most knowledgeable on the status of their plants. He added that market rules should generally be written for normal scenarios and not specifically for exceptional scenarios such as the 18 September 2018 partial blackout incident. Mr Soh Yap Choon also highlighted that PSO always checked with Gencos whenever PSO received a tripping alarm from the Genco to confirm if indeed a generating unit had tripped or a false alarm. Genco should be responsible to adhere to the market rule whenever a generating unit trips.

8.5 Mr. Sean Chan asked if there was any determination made by the Market Surveillance and Compliance Panel (“MSCP”) for the incident on 18 September 2018. Mr. Poa Tiong Siaw said that no determination was made for that case. Mr. Soh Yap Choon added that there could be events (eg tripping of multiple generating units), where the impact on market could be big with no impact on security. The MSCP should be allowed to continue with investigation and compliance enforcement. Mr. Soh also commented that there will always be a ten-minute “blindspot” in which a forced outage will not be captured in the determination of the real-time schedule.

8.6 Mr. Poa said that the proposal is not targeted at market participants’ inability to comply with the rules but instead to address the concern of severe price distortion which can happen following a forced outage. As shown in one of the MSCP’s determination, the impact could be as high as $1.6 to $1.7 million. Such distortions are of concern. In addition, the proposal also addresses technical difficulties faced by gencos where they are not able to immediately revise their offers immediately following a forced outage.

8.7 Mr. Tony Tan asked if demand side participants will be incentivised to participate and respond to those contingency, if reruns were introduced for such incidents. Ms. Wang Jing replied that it is unlikely as prices will remain low and demand response would not be activated in real-time.

8.8 Mr Fong sought clarification on the impact on consumers. He asked what would the prices likely have been if the proposed offer invalidation was effected for the 18 Sep 2018 incident.

Mr Poa replied that the price for period 4 would most likely be higher but the price for period 5 may not be lower.

Mr Fong commented that from the consumer’s perspective, he would like to keep the status quo. He opined that as a consumer he would prefer a lower price. He added that not all consumers can vary their demand in response to changing real-time market conditions. He cited his company as an example, operating 24/7 on a flat consumption profile. Therefore, he would prefer for the PSO to investigate the root cause of the outage rather than to invalidate the GRF’s offers.
8.9 Mr. Soh Yap Choon proposed to impose, as a deterrent, a performance standard on Gencos where Gencos fails to re-bid within a certain timeline.

8.10 In response to Dr. Toh Mun Heng’s query about how the forward capacity market will impact this proposal, Mr. Poa said that the introduction of the Forward Capacity Market (“FCM”) does not help to correct this inefficiency. Instead, if the proposal is implemented, changes could be made to the offer submission mechanism. He explained that changes to the offer submission mechanism is anticipated arising from the FCM and this proposal could have an impact on those changes.

8.11 Mr. Marcus Tan noted that on 18 September 2018, the price for period 4 was not reflective of the market supply condition. He added that PSO’s manual intervention is usually required for extreme system events. In such events, only fast-start units rather than the typical CCGTs are able to save the system from a full blackout. Consumers, Interruptible Load (IL) and Demand Response (DR) are unlikely to be able to respond in real time even if high price is published, but the MCE’s forecast prices would allow them to better adjust their future consumption behaviour. Mr. Henry Gan said that since the SWEM is moving towards a shorter dispatch interval, this proposal may not be relevant in the longer term. He opined that efforts should be spent on other more urgent issues.

8.12 EMC recommended that the RCP
   a) support the principles for and approaches to invalidate a GRF’s offers following its forced outage; and
   b) task EMC to draft the required market rules after rules for the Forward Capacity Market and the required changes to the real-time market are finalised.

8.12.1 The Chairman called for a vote on in-principle support of the proposal

The following RCP members gave in-principle support of the proposal:

- Mr. Tony Tan (Representative of Generation Licensee)
- Mr. Matthew Yeo (Representative of Wholesale Electricity Trader)
- Ms. Ho Yin Shan (Representative of the market support services licensee)
- Dr. Toh Mun Heng (Representative of Consumers of Electricity in Singapore)

The following members did not support:

- Mr. Henry Gan (Representative of EMC)
- Mr. Soh Yap Choon (Representative of the PSO)
- Mr. Senthil Kumar (Representative of Retail Electricity Licensee)
- Mr. YK Fong (Representative of Consumers of Electricity in Singapore)
The following RCP member abstained from voting:
- Mr. Marcus Tan (Representative of Generation Licensee)
- Mr. Sean Chan (Representative of Retail Electricity Licensee)

8.12.2 Mr. Sean Chan suggested that the RCP vote again when there is more clarity on the FCM market rules so as to better assess the solutions and the relevant cost. Mr. Soh Yap Choon shared that there are only 50 forced outage incidents a year.

8.12.3 The Chairman suggested that EMC review and revert to the RCP with the following items:
- Clarity on proposed solution taking into account changes associated with the FCM; and
- Cost of implementation of the proposed change

The RCP agreed with the Chairman’s suggestion.

Post Meeting Note:
In his feedback on this minutes of meeting, Mr. Soh Yap Choon raised the point that under the market rules, this proposal should not proceed because there was no majority of votes on it as reported in 8.12.1. The Chairman concurs that pursuant to Section 2.5.2 of Chapter 3 of the market rules, Paper No. EMC/RCP/113/2020/CP80 does not proceed. EMC is hence instructed not to undertake further work on the proposal arising from 8.12.3.

9. Appointment of Technical Working Group member
(Paper No. EMC/RCP/113/2020/07)

Ms. Clarissa Ooi informed the RCP that two of the current Technical Working Group (“TWG”) members, Mr. Liu Jidong (Market Participant Representative) and Ms. Chu Xiao En (Transmission Licensee Representative) have resigned from the TWG.

9.1 It was noted that EMC had invited MPs who are not the nominating organisation of any current TWG member, to nominate a Market Participant Representative to replace Mr. Li Jidong. EMC has also received nomination by SP PowerGrid to replace Ms. Chu Xiao En as the Transmission Licensee Representative.

Mr. Terence Ang was nominated by YTL PowerSeraya to replace Mr. Liu Jidong as Market Participant Representative and Ms. Tan Hui Xin was nominated by SP PowerGrid to replace Ms. Chu Xiao En as the Transmission Licensee Representative. Candidates to be appointed to fill these vacancies will serve the remaining term of the current TWG, from 21 January 2020 to 31 December 2020.

9.2 EMC recommended that the RCP appoint the following to the TWG for period from 21 January 2020 to 31 December 2020:
- Mr. Terence Ang (Market Participant Representative)
- Ms. Tan Hui Xin (Transmission Licensee Representative)
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9.3 The Panel **unanimously supported** EMC’s recommendation.

There being no other matters, the meeting ended at 11.35pm.

**Toh Seong Wah**
Chairman

Minutes taken by:
Angeline Tan
Executive, Legal and Corporate Secretariat