

**MINUTES OF THE RULES CHANGE PANEL
137th MEETING
HELD ON THURSDAY, 21 SEPTEMBER 2023 AT 10.00AM
AT ENERGY MARKET CO. PTE LTD
4 SHENTON WAY #03-01
SGX CENTRE 2, SINGAPORE 068807**

Present:	Toh Seong Wah (Chairman) Henry Gan Teo Chin Hau Dr Toh Mun Heng Matthijs Jan Guichelaar	Tan Chian Khong Cheong Zhen Siong Tony Tan Fong Yeng Keong
Absent with Apologies:	Soh Yap Choon Rachel Su Huifen Sherman Toh	Calvin Quek Song Jian En
In Attendance: (EMC)	Poa Tiong Siaw Li Zhenhui Vincent Wise	Wang Jing Fernanda Tham Jimmy Huang

Minutes of 137th RCP Meeting – 21 September 2023

Action

1. Notice of Meeting

The Chairman called the meeting to order at 10.12am. The Notice and Agenda of the meeting were taken as read.

2.1 Confirmation of Minutes of the 135th Rules Change Panel Meeting

The Minutes of the 135th Rules Change Panel (“RCP”) meeting, held on 20 July 2023, were approved by the RCP.

2.2 Confirmation of Minutes of the 136th Rules Change Panel Meeting

The Minutes of the 136th Rules Change Panel (“RCP”) meeting, held on 31 July 2023, were approved by the RCP.

3. Update of Monitoring List, Summary of Outstanding Rules Change Submissions, and RCP Work Plan Status Update

3.1 Ms Wang Jing presented the Update of Monitoring List, Rule Change Submission, and RCP Work Plan Status Update.

3.2 Ms Wang Jing updated the progress on the Energy Storage System (“ESS”) Modelling workstream. Ms Wang shared that the EMC has consulted ESS operator on the effort required to provide the state-of-charge (SoC) data to EMC. Recently PSO has also informed that it is feasible for PSO to include SoC in the NWSTAT file and send to EMC. EMC will seek the Technical Working Group (“TWG”)’s recommendation on which way is preferred and how the

formulation should be changed to incorporate an ESS' SoC into the market clearing engine's ("MCE") processes and report back to the RCP.

3.3 Chairman then asked when can the RCP expect to be reported on this, to which Ms Wang responded that the aim is to get the TWG's endorsement and update the RCP at the next meeting.

3.4 Ms Wang Jing updated the progress on the workstream regarding the Holistic Review of the Market Rules Related to Cessation of Business, Liquidation, and Insolvency. Ms Wang shared that EMC had consulted stakeholders and studied automatic suspension provisions that also facilitate market participants ("MPs") that would like to show cause via a voluntary request for a hearing. The Market Surveillance and Compliance Panel ("MSCP") however had expressed concerns on conducting hearings without a Leave of Court. Mr Poa added that since this workstream involves the law, EMC and its legal counsel over the past months had to thoroughly review relevant laws such as the Insolvency, Restructuring, and Dissolution Act to ascertain what is legally workable.

3.5 EMC will incorporate feedback from all stakeholders and report back to the RCP when a proposed approach is firmed. The RCP noted the updates from EMC.

(Mr Cheong Zhen Siong, Mr Teo Chin Hau and Mr Tan Chian Khong joined the meeting)

4. CP93: Enhancement of Demand Response – Calculation of Load Curtailment Quantity

4.1 Ms Wang Jing presented the paper on Enhancement of Demand Response – calculation of Load Curtailment Quantity on behalf of Mr Lim Chern Yuen.

4.2 Ms Wang Jing gave an overview on the Demand Response ("DR") scheme and how the Load Curtailment Quantity ("LCQ") is used in the scheme to determine compliance, calculate payments and penalties, and to calculate the Load Curtailment Price ("LCP").

4.3 Ms Wang also explained how the LCQ is derived from the difference between the OIEC, the load's business-as-usual consumption, and the SIEC, the load's scheduled consumption.

4.4 Ms Wang Jing shared an incident where a Load Registered Facility was found to have negative LCQ, which has no meaningful physical interpretation.

4.5 EMC's analysis revealed that there were two main causes to this. Firstly, the load registered facility's ("LRF") ramp rate was insufficient to reach the required level at the end of the period during the incident. In contrast, OIEC and SIEC formulation assumes that the LRF's ramp rates will always be sufficient; this assumption did not hold during the incident. Secondly, when scheduling an LRF for DR, ramping constraints are only applied for dispatchable load, while in OIEC and SIEC formulation, the same

ramp rates are applied on both dispatchable and non-dispatchable load, revealing another inconsistency.

4.6 To remedy this inconsistency, Ms Wang Jing shared EMC's proposal:

- 1) To separately calculate consumption attributed to dispatchable and non-dispatchable load;
- 2) To assume that dispatchable load will ramp up/down based on indicated ramp rate, plateauing thereafter; and
- 3) To assume that non-dispatchable load will ramp up/down instantly to its indicated level during the period.

4.7 Dr Toh Mun Heng asked if the assumption on non-dispatchable load behaviour holds in reality. Mr Teo Chin Hau concurred, pointing out the need for sufficient understanding on non-dispatchable load behaviour given this affects DR compliance. Ms Wang Jing responded that while loads may not in reality instantly ramp up/down, this change places the onus on the LRF operator to estimate the average non-dispatchable load level during the period, and to bid in accordingly to ensure compliance. Mr Poa added that compared to the current assumption, EMC sees this as the more reasonable assumption.

4.8 Dr Toh and Mr Tan Chian Khong asked if this approach has been back-tested against past data, to which Ms Wang shared that EMC has tried this approach on the negative LCQ incident where it has yielded a positive LCQ, which is the more appropriate outcome.

4.9 Mr Tony Tan opined if the RCP should look at getting accurate ramp rates, with Mr Teo Chin Hau asking if it is worthwhile to model the ramp rates of non-dispatchable load to account for various load patterns.

4.10 In response, Mr Cheong Zhen Siong expressed concerns that this will increase the complexity of the already complicated DR scheme, making DR participation overly onerous. Given DR participation is typically not a load's core business, increased complexity may discourage DR participation.

4.11 Mr Teo, further pointed out the importance of robust compliance checking given the ongoing DR Sandbox which relaxes compliance thresholds for DR and has seen increased DR participation, with implications on grid stability. And given that there will be a more holistic review of the DR scheme following the DR Sandbox, Mr Teo opined that a more informed decision on the assumptions on non-dispatchable load behaviour can be deferred until then, to which Mr Cheong agreed.

4.12 Mr Matthijs Jan Guichelaar opined that he would be in favour of EMC's proposed approach as he sees no detrimental implications in its adoption, and the instant ramp up/down assumption would mean that the loads would need to curtail more than usual and

better contribute during system stress events. Ms Wang Jing notes Mr Guichelaar's point.

4.13 Ms Wang Jing proceeded to share an additional proposed safeguard in the remote event where the MP's declared ramp rates are insufficient to achieve the MCE-scheduled dispatchable load. Under such scenario, it is proposed to assume an unconstrained linear ramp rate for dispatchable load to ensure the targeted load level can be achieved.

4.14 In response, Mr Teo Chin Hau expressed concerns with overriding ramp rates previously approved by the Power System Operator and opined that should such drastic changes in load consumption arise due to the load's own operations, it would not be appropriate to have adjustments for this to flow into LCQ calculations.

4.15 Ms Wang Jing informed the RCP that this paper was published on 25 August 2023 for consultation and EMC responded to comments received from Just Electric, PacificLight Power, Senoko Energy, and comments received from Mr Soh Yap Choon via email prior to the meeting.

4.16 Mr Poa Tiong Siaw pointed out the need for a robust safeguard against a repeat of the negative LCQ incident in the interim, and the resulting erroneous negative penalty imposed. This incident occurred during the Demand Side Management Sandbox directed by the Energy Market Authority ("EMA"). Noting several RCP members' view that there is a need to further study the characteristics of non-dispatchable load and that a long-term solution for LCQ calculation should be considered during the review of the Sandbox, Mr Poa suggested exploring with the EMA amendments to the current Sandbox provisions as a temporary solution. Chairman agreed with Mr Poa's suggestion.

EMC

5. **Holistic Review of the Current Prudential Requirement Obligations**

5.1 Ms Fernanda Tham presented EMC's holistic approach to reviewing the current prudential requirements, categorising measures into pre-emptive assessment, credit support monitoring, and default recovery, keeping in mind an ongoing EMA workstream on the Enhancements to Regulatory Regime for Electricity Retailers.

5.2 Ms Tham shared that EMA's measures overlap with an ongoing rule change workstream on the "Imposition of Minimum Net Tangible Assets as a Condition for Participation for Retailers", and therefore recommends removing this proposal from the work plan.

5.3 Ms Tham then presented the following proposals to the Panel:

- 1) Proposal 1: Shortening of the Settlement Cycle
(By streamlining of processes within the Settlement Cycle)
- 2) Proposal 2: Adjustment of Average Daily Exposure Calculation

- 3) Proposal 3: Reconfiguration of Credit Support (To consider insurance bonds and mandating a mix of credit support instruments)
- 4) Proposal 4: Residual Default Risk Insurance (Guarding against potential default levy)

Ms Tham further shared that as Proposals 2 and 4 have dependencies on EMA's announced measures on Enhancements to Regulatory Regime for Electricity Retailers, EMC intends to defer analysis on these proposals until such measures have been implemented and their effects have been analysed. Ms Tham added that EMC will first focus on Proposals 1 and 3.

- 5.4 Ms Tham shared that EMC has engaged in discussions with EMA on Proposal 1 and that a dedicated task force led by EMA, with EMC and SP, will be established to drive the implementation of Proposal 1.
- 5.5 Mr Teo Chin Hau commented that for Proposal 1, it is essentially reducing T+20 and T+21 payment cycle and Mr Poa Tiong Siaw added that that is the intent and that hopefully it can be done.
- 5.6 On Proposal 3, Mr Matthijs Jan Guichelaar queried that the wording in the BG could be looked into to possibly prevent a delay or any other issue with BG. He commented that if the wording in the BG is drafted correctly then the funds should be received without being delayed and added that the governing credit rating of the issuing bank should suffice, hence there is no valid reason why a fixed percentage of cash should be mandated.
- 5.7 Mr Poa explained that this is a relevant point for assessment and clarified that this presentation merely sets out the options that will be considered. EMC has not arrived at any conclusion and would take RCP's views into account.
- 5.8 Mr Tan Chian Khong commented that there could still be risks with BG and cited case where BGs provided by a client, which has been served an injunction, was not paid out by the issuing bank.
- 5.9 Mr Cheong Zhen Siong queried if Treasury Bills are no longer considered as part of the collateral. Mr Poa responded that the treasury bills are indeed valid though that is not mentioned in the slides.
6. Ms Tham further summarised EMC's Recommendations as follows:
 - a) Remove the rule change proposal on "Imposition of Minimum Net Tangible Assets as a Condition for Participation for Retailers" from the Rule Change Panel Work Plan.
 - b) Prioritize Proposals 1 and 3 and promptly update the RCP regarding these initiatives; and
 - c) Defer the consideration of Proposals 2 and 4 until EMA completes Measures on Enhancements to Regulatory Regime for Electricity Retailers.

- 6.1 The RCP **unanimously supported** EMC's recommendations above.

There being no other matters, the meeting ended at 11.54am.

Toh Seong Wah
Chairman

Minutes taken by:
Ivy Leong
Legal, Compliance & Corporate Secretarial Executive