MINUTES OF THE RULES CHANGE PANEL
94th MEETING
HELD ON TUESDAY, 9 MAY 2017 AT 10.00AM
AT ENERGY MARKET CO. PTE LTD
4 SHENTON WAY #03-01
SGX CENTRE 2, SINGAPORE 068807

Present: Paul Poh (Chairman) Priscilla Chua
Dr. Toh Mun Heng Daniel Lee
Henry Gan Luke Peacocke
Lawrence Lee Phillip Tan
Lim Han Kwang Sean Chan
Marcus Tan

Absent with Dallon Kay Soh Yap Choon
Apologies: Grace Chiam

In Attendance: Wang Jing Jo Ong
(EMC) Yap Yun Ben Lucia Loh

1. Notice of Meeting

The Chairman called the meeting to order at 10.00am. The Notice and Agenda of the meeting were taken as read.

2. Confirmation of Minutes of the 92nd RCP Meeting

The Minutes of the 92nd RCP meeting held on 7 March 2017 were noted and the RCP approved the Minutes.

3. Confirmation of Minutes of the 93rd RCP Meeting

The Minutes of the 93rd RCP meeting held on 4 April 2016 were noted and the RCP approved the Minutes.

4. Matters Arising from 92nd RCP Meeting held on 7 March 2017

4.1 Matters Arising from 91st RCP Meeting held on 10 January 2017

At the 91st RCP meeting, Mr Soh Yap Choon informed that EMA/PSO will provide an update at the MISF to be held in March or May 2017 as EMA will be liaising with SPPG to provide a joint update to the industry.

Ms. Wang Jing updated that PSO and SP Group had provided an update on the development of the West Jurong Island 400kV project at the Market Information Sharing Forum held on 21 March 2017.
4.2 Review of Mechanism to Mitigate Credit Default

Following Mr. Dallon Kay’s request at the 92nd RCP meeting, Ms. Lucia Loh presented to the Panel a summary of the default cost allocation arrangements in the jurisdictions surveyed in CP66, i.e. PJM, CAISO, NYISO, NZ, IESO and AEMO set out in Table 1 below.

Table 1: Summary of Default Cost Allocation in Other Jurisdictions

<table>
<thead>
<tr>
<th>Market</th>
<th>Credit/receivable amounts</th>
<th>Debit/payable amounts</th>
<th>Both credit/receivable and debit/payable amounts</th>
<th>Per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same billing period that the payment default relates to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AEMO</td>
<td>✓ Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NZ</td>
<td>✓ Gross</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SWEM</td>
<td></td>
<td>✓ Net</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IESO</td>
<td></td>
<td>✓ Net</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NYISO</td>
<td></td>
<td>✓ Gross</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Different billing period as which the payment default relates to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJM</td>
<td></td>
<td>✓ Gross (90% of default amount)</td>
<td>✓ (10% of default amount)</td>
<td></td>
</tr>
<tr>
<td>CAISO*</td>
<td>✓ Net (20% of default amount)</td>
<td>✓ Net (30% of default amount)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*For CAISO, the remaining 50% of default amount is allocated based on the largest value of various parameters, including energy and ancillary services schedules, metered generation, metered load, congestion revenue rights or bilateral quantities (Inter-SC trades).

It was noted that participants in most jurisdiction generally bear the costs of default of other participants similar to that in SWEM, with differences in:

- whether the default amount is entirely allocated to creditors only (i.e. generally, gencos) or both creditors and debtors,
- whether the allocation is based on net invoice amount or gross value of each charge, and
- whether the basis of allocation uses the same billing period as that which the payment default relates to.

It was also noted that EMC is still studying the proposed level of net tangible asset to be imposed as a condition of participation and will report back to the Panel when the study is completed.

4.2.1 Mr Henry Gan asked about the rationale for AEMO to allocate the cost of default only to participants with net receivables (i.e. gencos). The Chairman replied that as with a natural position of any business transaction, creditors should bear the default risks of debtors. In 2006, the RCP had considered a proposal to change SWEM’s default levy allocation such that only net creditors are allocated (similar to that in AEMO) but EMA did not approve the rule change then.

Mr. Henry Gan said that given SWEM’s current allocation of default levy to both net debtors and net creditors, the imposition of a default levy could trigger secondary defaults given that there are now many small
independent retailers registered with EMC. Mr. Lim Han Kwang commented that if there is a concern about secondary defaults, a more direct way is to increase the prudential requirement, or the level of exposure which triggers a margin call. Chairman said that EMC will bring this issue back for discussion when EMC reports back to the Panel on the proposed level of net tangible asset.

4.2.2 Mr. Philip Tan sought clarification on what “net” in Table 1 referred to. The Chairman replied that meant the net amount in an MP’s bill after considering all charges and payment to a particular MP during a given billing period.

5. Monitoring List

The RCP noted the contents of the Monitoring List.

6. Summary of Outstanding Rule Changes

The RCP noted the summary of outstanding rule changes.

7. Rules Change Work Plan Status Update

The RCP noted the update on the Rules Change Work Plan.

8. Review of Mechanisms to Mitigate Credit Default
(Paper No. EMC/RCP/94/2017/341)

Ms. Lucia Loh recapped the three issues examined in CP66, which was presented at the 91st RCP meeting, arising from the review of the current mechanisms to mitigate credit default in the Singapore Wholesale Electricity Market (“SWEM”).

8.1 She recapped the Panel’s decisions on two of the issues. The Panel had unanimously supported a revised formula to calculate Estimated Average Daily Exposure (“ADE”) of new MPs using Option 2 for Issue 2, by majority vote supported the revised deadline for submission of bilateral contract quantities for Issue 3, and tasked EMC to draft the relevant modifications.

8.1.1 The Panel had proposed to include a clause for EMC to refer to the Market Surveillance and Compliance Panel any intentional under-declaration of ADE by new MPs. Ms. Lucia Loh informed that it was not necessary to draft additional rules as Chapter 3 section 6.2.2 of the market rules already require parties providing information to do so truthfully.

8.1.3 With respect to the revised deadline for submission of bilateral contract quantities for Issue 3, Ms. Lucia Loh informed the Panel that EMC’s assessment is that revised deadline would have to be applied to all MPs (instead of only defaulting MPs).
8.2 Ms. Lucia Loh then presented a summary of the proposed modifications to implement the Panel’s decision on Issues 2 and 3.

8.2.1 Mr. Henry Gan noted that the new section 3.1.2 of the Prudential Requirements Market Manual allows new MPs to revise their forecast quantities up until one business day prior to the First Assessment Day (i.e. the first day on which a MP is issued a non-zero preliminary settlement statement). Mr. Henry Gan asked if the credit support required from that MP will be revised accordingly if forecast quantities are changed. The Chairman replied that it would be.

Mr. Henry Gan felt that if a revised forecast leads to a higher ADE, the new MP should be required to top up its credit support at that same time as the forecast is provided, in order to safeguard the financial integrity of SWEM. Chairman replied that the current market rules provide MPs with 2 business days to satisfy margin calls; the new MP in the scenario described by Mr. Gan should be given the same lead time.

8.2.1.1 Mr. Luke Peacocke opined that a MP is expected to be sophisticated enough to be able to anticipate potential increases in their exposure, whether due to higher volumes or changes in prices, which would require them to top up their collaterals. He is comfortable with the current practice of 2 business days.

8.2.1.2 Dr Toh Mun Heng asked if the change will make it more difficult for new MPs to enter the market. Mr. Peacocke replied that it will not make a difference as new MPs will be required to provide the same amount of credit support for the same trading exposure.

8.2.1.3 As there were no further comments, the Chairman concluded that no additional rule changes, pertaining to the timeline for provision of additional credit support due to revisions in a new MP’s forecast withdrawal, are needed.

8.3 Ms Lucia Loh then presented the comments received from Buri Energy and PacificLight Power on the proposed rule modifications which were published for industry consultation on 7 April 2017.

8.4 Ms. Loh informed the Panel that the total time required to implement the proposed modifications is 52 calendar weeks.

8.4.1 Mr. Sean Chan queried on the reason for the long implementation lead time. Mr. Peacocke concurred, noting that the proposal addresses some of EMC’s concern regarding the prudential framework.

The Panel asked if the changes for the two proposals can be carried out concurrently to reduce the implementation lead time since this issue has been ranked high on the Panel’s work plan. Mr. Henry Gan replied that the changes involved are complex but will discuss with EMC’s IT department to explore shortening the lead time.
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8.5 To Mr. Luke Peacocke's question on when the market would be notified of the occurrence of a default, Ms. Lucia Loh replied that EMC will check and update the Panel at the next meeting.

8.6 The Panel **unanimously supported** the proposed modifications to the market rules and market manual, subject to Mr. Henry Gan's update on the implementation timeline.

8.7 Post Meeting Note:

Arising from the RCP’s request (Para 8.4.1 above), EMC circulated to the Panel a revised implementation approach which entails employing additional resources (incuring an additional $28,723.20 in Total Additional Costs) to speed up the implementation (from 12 months to 7.5 months). The table below compares the two approaches for the RCP’s decision.

<table>
<thead>
<tr>
<th></th>
<th>Initial Estimation Approach A</th>
<th>Revised Estimation Approach B</th>
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<tbody>
<tr>
<td><strong>Total implementation time</strong></td>
<td>52 calendar weeks (i.e. 12 months) from the date that EMA’s approval is published</td>
<td>7.5 months from either the date that EMA’s approval is published or 1 August 2017, whichever is later</td>
</tr>
<tr>
<td><strong>Internal PSC Resource/EMC Manpower (within EMC’s budget)</strong></td>
<td>$66,200 + $17,975 = $84,175</td>
<td>$66,200 + $17,975 = $84,175 (Remains unchanged)</td>
</tr>
<tr>
<td><strong>Total Additional Costs required (for external resources to support)</strong></td>
<td>$62,568 + $9,240 = $71,808</td>
<td>$62,568 + $9,240 + $28,723.20 = $100,531.20</td>
</tr>
</tbody>
</table>

8.7.1 The Panel **by majority vote** supported Approach B.

The following Panel members voted to support Approach B:
1. Ms. Priscilla Chua (Representative of Generation Licensee)
2. Mr. Marcus Tan (Representative of Generation Licensee)
3. Mr. Lim Han Kwang (Representative of Transmission Licensee)
4. Mr. Sean Chan (Representative of Retail Electricity Licensee)
5. Mr. Daniel Lee (Representative of Retail Electricity Licensee)
6. Mr. Luke Peacocke (Representative of Retail Electricity Licensee)
7. Mr. Lawrence Lee (Representative of the market support services licensee)
8. Dr. Toh Mun Heng (Representative of Consumers of Electricity in Singapore)

The following Panel members abstained from voting on the implementation approach:
1. Mr. Henry Gan (Representative of EMC)
2. Mr. Phillip Tan (Person experienced in Financial Matters in Singapore)
9. **Review of Market Participants’ Classification and Rules Change Panel’s Composition**

(Paper No. EMC/RCP/94/2017/CP65)

Ms. Jo Ong presented the paper which reviews the classification of MPs and the composition of the Rules Change Panel (“RCP”) in SWEM.

9.1 Ms. Jo Ong took the Panel through the current MPs’ classification and EMC’s assessment on the said classification. It was noted that the MPs’ classes defined in the Market Rules are aligned with licensee types, in line with legislation of higher hierarchy such as the Electricity Act, exemption orders & licenses, and a change in the MPs’ classification will risk misalignment with the rest of the regulatory framework. Further, there are currently no Market Rules that apply specifically to any sub-type of the existing licensee types or MP classes. As such, EMC recommends that no change be made to the MPs’ classification.

9.2 Ms. Jo Ong briefed the Panel on how the governance arrangement complements the representation model to achieve the desirable characteristics of a RCP, and presented on the equivalents of the RCP in other jurisdictions.

9.3 Ms Jo Ong shared with the Panel that observations from the RCP equivalents in other jurisdictions support EMC’s recommendations to not deviate from the current version of the representation model, as well as to retain the current composition of the RCP, after EMC’s assessment of the following four issues raised by the stakeholders:

- **Issue 1:** Should the RCP include a dedicated seat for an independent retailer representative?
- **Issue 2:** Should the RCP include a dedicated seat for a member experienced in futures trading or a FSC holder?
- **Issue 3:** Representation of wholesale traders on the RCP
- **Issue 4:** Representation of consumers on the RCP

9.3.1 It was concluded that no change to the RCP’s composition is needed due to the following:

- **Issue 1:** The existing three seats for retailer representatives are sufficient to accommodate varying business models and interests within the retailer category.
- **Issue 2:** Both electricity futures and FSC are derivatives that have no direct impact on how the wholesale electricity market should function or operate
- **Issue 3:** The varying interests within the wholesale trader class, inherently a residual class whose authorized activities are a subset of that of generator and retailer classes, should already be represented on the panel as a whole

As for **Issue 4**, with no nominations received from the approved nominating organisations for the vacant consumer representative seat, it was recommended for a review of the eligible nominees and nominating organisations for consumer representatives on the RCP.
9.4 Ms Jo Ong then presented the comments received from the industry on the concept paper which were published for industry consultation on 24 February 2017.

9.5 Mr Luke Peacocke expressed support for addressing Issue 4, stating that it is pertinent that all vacancies on the RCP be promptly filled given the keen interest of MPs in being represented on the Panel.

9.6 In relation to Issue 1, Mr Lawrence Lee wanted to seek clarification on the argument against changing the RCP’s composition on the basis of low market share (“market share argument”) and whether EMC had a view of what the ‘reference’ market share should be before this argument is challenged. Ms Jo Ong explained that the paper summarises the arguments for and against Issue 1 based on feedback obtained from the industry consultation. She highlighted that however, from EMC’s assessment of the issue, the key driver for retaining the RCP’s composition is that the current arrangement suffices to accommodate varying interests within the retailer and wholesaler classes, and hence, MPs keen to have their nominees appointed should nominate highly qualified persons since appointment to the RCP within each class is merit-based.

9.7 The Panel also noted the comments of Mr. Soh Yap Choon (who was unable to attend the meeting) on the PSO’s suggestion to rotate the representative of the Wholesale Trader class so that the RCP can better handle issues on Demand Response and Intermittent Generation Sources.

9.8 EMC recommends that the Panel:
   a) do not support dedicating a seat on the RCP for an independent retailer representative (Issue 1);
   b) do not support dedicating a seat on the RCP for a person experienced in electricity futures market trading and/or a forward sales contract (FSC) holder representative (Issue 2);
   c) do not support changing the wholesale trader representation on the RCP (Issue 3); and
   d) support reviewing the eligible nominees and nominating organisations for consumer representatives on the RCP (Issue 4).

9.9 The Panel **unanimously supported** EMC’s recommendations above in relation to the RCP’s composition.
10. Date of Next Meeting

The 95th RCP Meeting will be held on Tuesday, 18 July 2017.

There being no other matters, the meeting ended at 11.30a.m.

Paul Poh
Chairman

Minutes taken by:
Angeline Tan
Corporate Secretarial Executive