Executive Summary

Under the current Market Rules, proposed changes to the SOM are published for consultation with the Market Participants and the RCP at least ten days before they take effect, with PSO having the right of final approval. During the RCP Workplan Prioritization Exercise, a proposal was raised to subject amendments to the SOM to the same rule change process as changes to the Market Rules. This is to ensure consistency, as amendments to the SOM could have a material commercial impact on the relevant stakeholders.

EMC is of the view that subjecting SOM changes to go through the Rule Change process is inappropriate, as the RCP has neither the right expertise nor appropriate voting composition. Alternatively, EMC proposes that SOM amendments be subjected to EMA’s approval, which entails:

- PSO proposes changes to the SOM
- Market Participants comment on impact of changes, and possible alternatives
- PSO’s proposal and MPs’ comments are tabled to the EMA, which gives the final approval

At the 44th RCP meeting, the RCP discussed EMC’s proposal to subject PSO’s SOM changes to EMA’s approval. The Panel decided to clarify with the EMA whether PSO’s decision on SOM changes already constitutes EMA’s approval, in which case the proposal would be redundant. EMA responded subsequently that PSO’s decision does indeed constitute EMA’s approval, and that EMA is of the view that the current process for changes to the SOM is appropriate and necessary to enable EMA to discharge its functions.
At the 45th RCP meeting, based on EMA’s response, the RCP decided not to follow up with the proposal. Notwithstanding, the Panel requested PSO to look into how the consultation process for SOM changes could be enhanced, so that all stakeholders could engage PSO in a meaningful and constructive discussion on the proposed changes. In cases where SOM changes need to be implemented urgently, PSO can conduct post-implementation consultations and fine-tune the changes as appropriate based on the feedback received.
1. INTRODUCTION

This paper explores enhancements to the current approval process for amendments to the System Operations Manual (SOM), while seeking to balance system security concerns with the commercial considerations of Market Participants.

2. BACKGROUND

Under the current Market Rules, proposed changes to the SOM are published for consultation with the Market Participants and the RCP at least ten days before they take effect. However, unlike changes to the Market Rules, they are not subject to the rule change process which entails support through the RCP and EMC Board. Rather, changes to the SOM are proposed and approved by PSO.

During the RCP Workplan Prioritization Exercise, a proposal was raised to subject amendments to the SOM to the same rule change process as changes to the Market Rules. This is to ensure consistency, as amendments to the SOM could have a material commercial impact on the relevant stakeholders.

3. ANALYSIS

3.1 Guiding Principle

The SOM spells out the requirements to be met by all relevant Market Players relating to the reliable and secure operation of the power system. As PSO has the responsibility for Singapore’s power system security, it is reasonable that they have oversight of the SOM document. However, with market reform, security considerations remain paramount but there should also be some emphasis on the economic and commercial impact on other Market Players, as SOM changes could have direct, significant financial impact on them.

As with other similar documents governing operations in the SWEM, changes to the SOM will lead to outcomes that may not please every party. Accepting that as a given, emphasis should instead be on ensuring a rigorous amendment process, subject to open and transparent consultation. The final decisions should be made by the authority after balancing possibly conflicting perspectives (e.g. security and commercial concerns), and arriving at an outcome that is optimal for the market evolution. This is imperative to enhance confidence in the industry and Market Participants, who have committed sizable investments in the Singapore electricity industry.

3.2 Process Analysis

The current approval process for changes to the Market Rules is shown in Figure 1 overleaf:
As shown in Figure 1 above, any interested party can propose changes to the Market Rules, following which EMC will analyze the impact of the proposal from all relevant perspectives (e.g. system security, economic impact). After EMC has prepared an analysis paper on the rule change proposal, it then goes through three layers of approval, namely the RCP, EMC Board and EMA before it is implemented.

Pertaining to the original proposal to subject SOM amendments through the same approval process as that of Market Rule changes, EMC is of the view that this is inappropriate for the following reasons:

a) **Inappropriate Background of RCP Members** – Given the technical nature of SOM amendments, current RCP members may not have the right expertise or background to meaningfully assess and debate on them.

b) **Voting Composition of the RCP** – The SOM has important implications on system security. However, of the 14 voting members of the RCP, PSO has only 1 vote, while MPs with commercial interests (Genco / Retailer / Wholesale Trader) have 7 votes. The remaining 6 votes lie with other service providers (EMC, PowerGrid, SP Services) and independent parties (ICAPAS, CASE, ASME). The MPs with commercial interests have strong incentives not to support changes that increase costs or operational obligations, while the 6 remaining votes are likely adopt a neutral stance. Given the skewness in the voting composition of the RCP, it is not the appropriate body to assess SOM changes.

Although points a) and b) above could possibly be addressed by setting up a specialized panel with the appropriate background and technical expertise, and of a suitable voting composition to approve SOM changes, it is difficult in practice to source for such knowledgeable individuals who are independent and free from bias. Rather, EMC proposes that SOM amendments be subjected to EMA's approval, as shown in Figure 2 overleaf:
In the process above, PSO proposes changes to the SOM, with reasons on why these changes are necessary. Based on this, Market Participants will provide their comments on how these changes would impact them, financially or otherwise, and provide possible alternatives to PSO’s proposals. PSO will then table their proposals to the EMA.

EMA will make the final decision on PSO’s proposal, after taking into consideration the different perspectives of the issues. This is reasonable as EMA is tasked under the Electricity Act to, among other functions, a) promote economic efficiency and the maintenance of such efficiency in the electricity industry and b) ensure security of supply of electricity to consumers and to arrange for the secure operation of the transmission system in accordance with the market rules or other codes of practice. Requiring SOM changes to be approved by the EMA is also consistent with other key documents governing SWEM operations (e.g. Metering Code, Market Rules), which are subject to EMA’s final approval.

While the above process may take a slightly longer time, EMC feels that it strikes a good balance between ensuring a reasonably streamlined process (by subjecting it to only one level of approval – EMA), while providing Market Participants with a fair platform for their comments and counter-proposals to be heard by the Authority. The decision made by the EMA would then have already taken into account arguments from all sides. The proposal will come into effect only when approved by EMA, and on a date approved by EMA.

4. INDUSTRY COMMENTS

EMC published the rule change proposal on 23 April 2009 to seek inputs from all interested parties on the proposal, including but not limited to:

a) What issues are encountered with the current amendment procedures for the SOM?

b) What proposed improvements/changes will enhance the current amendment procedures for the SOM?

c) What impact would the proposed improvements/changes have on:
   • System Security
   • Commercial Interests of Market Participants
• Others
Comments were received in the provided template from PSO, Sembcorp and Seraya, which are shown verbatim in Annex 1.

5. CONCLUSION

This paper explores enhancements to the current approval process for amendments to the SOM, while seeking to balance system security concerns with the commercial considerations of Market Participants. EMC does not agree with the original proposal to subject SOM changes through the same process as Market Rule changes and instead, proposes the revised approval process as follows:

- PSO proposes changes to the SOM
- Market Participants comment on impact of changes, and possible alternatives
- PSO’s proposal and MP comments are tabled to the EMA, which gives the final approval

6. RECOMMENDATION

EMC recommends that the RCP:

a) support the revised SOM amendment procedures as set out in Figure 2; and

b) task EMC to draft the rule changes necessary to effect the revised SOM amendment procedures.

7. DISCUSSION BY THE RCP

At the 44th RCP meeting, the RCP discussed EMC’s proposal to subject PSO’s SOM changes to EMA’s approval. Under Chapter 8, Section 1.1.195 of the market rules, the PSO is defined as the Authority acting in its capacity as the person responsible for ensuring the security of supply of electricity to consumers. Therefore, the Panel decided to clarify with the EMA whether PSO’s decision on SOM changes already constitutes EMA’s approval, in which case the proposal would be redundant. EMA responded subsequently that PSO’s decision does indeed constitute EMA’s approval, and that EMA is of the view that the current process for changes to the SOM is appropriate and necessary to enable EMA to discharge its functions.

At the 45th RCP meeting, based on EMA’s response, the RCP decided not to follow up with the proposal. Notwithstanding, the Panel requested PSO to look into how the consultation process for SOM changes could be enhanced, so that all stakeholders could engage PSO in a meaningful and constructive discussion on the proposed changes. In cases where SOM changes need to be implemented urgently, PSO can conduct post-implementation consultations and fine-tune the changes as appropriate based on the feedback received.
Table A2-1: Industry Consultation (PSO Comments)

<table>
<thead>
<tr>
<th>S/N</th>
<th>Issues Encountered with Current SOM Amendment Procedures</th>
<th>Proposed Improvements/Changes</th>
<th>System Security</th>
<th>Commercial Interests of Market Participants</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PSO wishes to register its strongest objection to this rule change proposal. If the RCP and the EMC Board endorse this rule change proposal, it will severely undermine EMA/PSO's ability to ensure secure operation of the power system as vested by the Electricity Act and the Market Rules. Power system security and reliability is of utmost importance to our national interest, commercial interest of the electricity market participants should not override Power System Security. The National Electricity Market of Singapore (NEMS) can only function properly when security of the Power System is not compromised by say commercial interest. The System Operation Manual (SOM) spells out requirements to be met by all relevant Market Players relating to the reliable and secure operation of the power system. The Market Rules recognised that modifications to the SOM is the prerogative of the PSO, and thus it is intentional that changes to the SOM not be subject to RCP or EMC Board endorsements, i.e. The PSO reserves the sole right to revise or edit the SOM. Hence, the Market Rules only requires changes to the SOM be submitted to the RCP and Market Participants for comments and would come into effect 10 days after such consultation. Furthermore, it has not been uncommon for the RCP to debate on rules change proposal for months and sometimes even years. This proposal, if passed would likely delay implementation of all future SOM changes, hence compromising system security, especially so if the RCP does not endorse proposed SOM changes citing eg commercial reasons, etc. In which case, the RCP would be held responsible for any degradation in power system...</td>
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reliability/security related to the yet to be endorsed proposed SOM changes.

We would like to reiterate that power system security is the function of PSO and should not be transferred to the RCP or the EMC Board (refer to Market Rules Chapter 1 Section 5).

In addition, to ensure transparency of the market rules change process, EMC is urged to clearly identify the proposer of all rule changes, especially this particular one so that all interested parties (including Market Participants and Service Providers) will have clear understanding of the commercial interests that prompted such proposal.
Table A2-2: Industry Consultation (Sembcorp Cogen Comments)

<table>
<thead>
<tr>
<th>S/N</th>
<th>Issues Encountered with Current SOM Amendment Procedures</th>
<th>Proposed Improvements/Changes</th>
<th>Impact of Proposed Improvements/Changes on:</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>System Security</td>
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<tr>
<td>1</td>
<td>The SOM amendments are currently in the hands of the PSO. Although PSO is required to publish the changes for industry &amp; RCP to comment, no proper evaluation process is established to maintain industry confidence. Thus, it would be prudent to have a committee guided by a transparent process to review the proposed SOM amendments.</td>
<td>To subject SOM amendments under the scrutiny of a principled committee e.g. RCP.</td>
<td>No, PSO is represented in RCP and EMA is the final decision-maker for any proposed changes.</td>
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<tr>
<td>2</td>
<td>PSO modified the regulation reserve market to period-based via existing procedure. Even though it was published for industry comments, Market Participants felt that no due diligence was carried out to study its impact on market efficiency.</td>
<td>Same as above.</td>
<td>Same as above.</td>
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Submitted by

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Company: Sembcorp Cogen Pte Ltd

Date: 14 May 2009
<table>
<thead>
<tr>
<th>S/N</th>
<th>Issues Encountered with Current SCOM Amendment Procedures</th>
<th>Proposed Improvements/Changes</th>
<th>Impact of Proposed Improvements/Changes on:</th>
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<tbody>
<tr>
<td></td>
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<td>System Security</td>
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<tr>
<td>1</td>
<td>PSO is required to consult for changes to the SCOM but there are no explicit guidelines for what needs to be considered unlike for the Market Rules. PSO's focus is on system security and reliability but commercial considerations are also important.</td>
<td>Modifications to the SCOM should go through the same amendment process as for the Market Rules. Using the same procedures for amendments as for the Market Rules would allow for a more robust, holistic review before any changes are made.</td>
<td>For system security, changes may need to be made quickly to the SCOM. In the event when urgent changes need to be made to the SCOM, if similar procedures such as for urgent rule modifications for the Market Rules are adopted, changes could be made even faster than under the current procedures which require at least 10 days. The ability to make changes faster to the SCOM would be beneficial to system security. The urgent changes to the SCOM can be valid for up to 1 year subject to the outcome of the changes going through the normal modification process same as for urgent modifications to the Market Rules.</td>
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<td>Commercial Interests of Market Participants</td>
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<td>With the process for changes to the SCOM same as for the Market Rules, commercial interests of market participants would be required to be taken into consideration in deciding whether modifications should be accepted or rejected.</td>
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