MINUTES OF THE RULES CHANGE PANEL
42nd MEETING
HELD ON TUESDAY, 3 MARCH 2009 AT 10.05AM
AT ENERGY MARKET CO. PTE LTD
238A THOMSON ROAD #11-01
NOVENA SQUARE, SINGAPORE 307684

Present: Dave Carlson                Kenneth Lim
              Yeo Lai Hin            Michael Lim
              Sim Meng Khuan       Philip Tan Pei Lip
              Chan Hung Kwan      Dr. Goh Bee Hua
              Annie Tan            Lawrence Lee
              Robin Langdale       Ng Meng Poh
              Dallon Kay            Yu Tat Ming

In Attendance: Paul Poh              Tan Liang Ching
(EMC)        Nerine Teo            Wang Jing

1.0 Notice of Meeting

The Chairman called the meeting to order at 10.05am. The Notice and Agenda of the meeting were taken as read.

2.0 Confirmation of Minutes of the 41st Rules Change Panel Meeting

The Minutes of the 41st Rules Change Panel meeting held on Tuesday, 6 January 2009 were tabled and taken as read.

The Panel asked EMC to amend the page headings to read “Minutes of 41st RCP Meeting – 6 January 2009”.

Dr. Goh Bee Hua confirmed that she was not present at the 41st RCP Meeting.

Subject to the above amendment to the Minutes, the Rules Change Panel unanimously accepted and approved the Minutes.
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3.0 Matters Arising

The Panel noted that the follow-up action was completed on the matters arising as outlined.

3.1 Item 2.0 - PSO Proposed Expenditure and Fees for the Fiscal year (Paper No. EMC/RCP/41/2009/05)

The Panel was informed that the PSO responded to the RCP’s comments on the PSO Expenditure and Fees for FY2009/10, a copy of which was circulated to the Panel.

The Chairman informed that the response was received on 26 February 2009, outside of the timetable that the RCP could provide constructive comments on PSO’s budget by the end of January 2009, as required under the Market Rules.

Mr. Langdale expressed his concern that the review of the PSO budget by the RCP gave the impression that the RCP provides a check and balance process over the PSO budget. However this does not seem to be the case.

The Chairman informed him that within the market rules, the PSO is required to submit their budget to the RCP for comments. The RCP’s comments will then be sent to the EMA. The RCP do not approve the PSO budget.

The Panel was requested to review the PSO’s response and this matter will be tabled for discussion at the next Panel meeting.

3.2 Item 3.0 - EMC Proposed Expenditure and Revenue and Schedule of Fees for Fiscal Year 1 April 2009 to 31 March 2010 (Paper EMC/RCP/41/2009/06)

Item 7.3.1 – NEMS Volume

Mr. Philip Tan referred to EMC’s used of Gross volume to calculate EMC fees. Mr. Philip Tan noted that EMC’s fee is charged based on net volume and not gross volume and thus it was more appropriate to compute EMC’s fees based on net volume.

The Chairman informed that EMC used Gross volume to ensure consistency with the EMA’s November 2008 Statement of Opportunities as volume projections were only based on Gross Volume. EMC will use Net Volume in future to compute EMC fees in its budget.

4.0 Monitoring List

The Panel noted the contents of the paper.
5.0 Summary of Outstanding Rule Changes

The Panel noted the contents of the paper.

Mr. Paul Poh informed that the EMA had sent a directive to EMC to revise the Regulation Cap as a result of a study by KEMA. EMC has drafted the rules change. EMA has requested that EMC circulated the proposed rule change to the industry for comments.

The Chairman informed the Panel that, with the changes to the Electricity Act in 2007, the EMA has the power to direct rule changes to the market. The RCP has no consultation role in any rule changes as directed by EMA.

Mr. Philip Tan suggested that on the EMC website EMC is to provide separate sections for rule changes reviewed by the RCP and those directed by the EMA.


The Panel was informed that, given the MSCP’s role as an independent body, there are existing market rules governing potential conflict of interest (COI) for MSCP members. However, given the small pool of suitable and interested candidates to the MSCP, there are concerns that the rules could be overly restrictive. This paper analyzes various rule change proposals to balance the theoretical considerations on the independence of the MSCP, with the practical realities of not being overly restrictive.

After considering the proposals from both EMC and MSCP, the RCP made the following decisions following their discussions at the 39th and 41st RCP Meetings:

- To not consider COI arising from relatives as a reason for disqualification of MSCP candidates/members from the MSCP
- To require a MSCP member to declare any possible conflict arising from relatives and all other sources (e.g. good friend) with regards to a specific case that the MSCP is dealing with
- To require the conflicted MSCP member to cease involvement in the specific case, unless other non-conflicted MSCP members decide by a simple majority that the conflict is immaterial, and the conflicted member chooses to stay on
- To include a provision for the MSCP, if they choose to, to request the EMC Board to appoint a temporary MSCP member for a specific matter, if a MSCP member steps down from a specific matter due to conflict
- To revise the threshold for beneficial interest from 0.005% to 5% of shareholding
- Conflict of interest relating to spouse to be treated the same as all members for both appointment and subsequent to appointment
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Mr. Tan Liang Ching presented the rule changes needed to give effect to the RCP’s decisions.

The Panel supported EMC’s recommendation to amend Chapter 3 and the respective Sections and Appendix B and D and would make the necessary recommendation to the EMC Board for adoption.

7.0 Rule Change Work Plan 2009/10
(Paper No. EMC/RCP/42/2009/01)


Out of the 11 issues placed in the “within 12 months” category, the RCP has met the target of completing/commencing work.

In addition, the Panel also addressed the following issues that were not in the work plan:

- Submission Timeline for Bilateral Contract Data,
- Auditing of Contracted Ancillary Services Proposals,
- Review of Qualifications for Members of the Dispute Resolution and Compensation Panel,
- Composition of the RCP
- Update of Market Administration Market Manual - Registration and Authorisation Part 2

Prioritisation for 2009/10

The Panel was informed that EMC presented stakeholders with a list of 20 issues that remained in the work plan agreed to by the RCP in March 2008. Stakeholders brought up 18 additional issues to be included in the Work plan for 2009/10 and these are:

1) Redefine Market Clearing Engine (MCE) methodology for determining regulation offers’ eligibility
2) Proposed retention and extension of Type 4 price re-runs
3) Modelling of fault level contributions into the MCE
4) MCE to automatically change reserve limits on Interruptible Loads (IL) when the intertie status with TNB changes
5) Modelling of a dynamic adjustment of GTs/CCPs’ capacity into the MCE that changes with on-site ambient temperature
6) Shortening of PSO budget process
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8) Obligation to revise offers in the event of a complete system outage at EMC
9) Reserve compensation for Interruptible Loads (IL)
10) Contingency activation for Interruptible loads
11) Conflict of interest for dispatch coordinator
12) Allocate 5% of reserve costs to loads and require GSFs to pay for reserve cost
13) Amendments to the System Operation Manual (SOM) to be put through the same approval process as Rule Changes
14) Allocate regulation costs to generators using the Runway method
15) Differentiation in probability of failure computation for multi-shaft plants and single-shaft plants
16) Publication of historical dispatch schedules
17) Overhaul of reserves arrangements
18) Transparency of transmission constraint and compensation for must-run units

EMC applied 2 methods to determine the overall prioritization ranking for each issue namely:

1. Simple Average Methodology: Take the simple average of the scores for ‘importance’ and ‘urgency’;
2. Group-weighted Methodology\(^1\): Calculate the simple average of the scores for ‘importance’ and urgency for each of the 4 groups of representatives/stakeholders namely, the generation licensee group, the retail licensee group, the wholesale trader licensee group and the service provider group. Total the simple average scores of the 4 groups and divide this total by 4.

The approach to prioritization and the recommended work plan are based on:

1. ranking
2. on-going issues which are already in progress;
3. view of the RCP members; and
4. proposed issues to be reviewed.

The Panel was informed that generally it makes sense for EMC to continue to work on issues which work has already commenced or in-progress with an aim to complete them before embarking on new issues. Also, there were requests to include either identities of the parties who raised the respective issues on the Workplan or list the class of market participant in which these parties represent since specific rule change already disclose the identity of stakeholders. This would facilitate transparency.

\(^1\) A market participant has proposed that this method be used to prioritise issues instead.

Approved at the 43rd RCP Meeting held on 5 May 2009
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Some stakeholders proposed for the removal of a number of issues to help ease the resource allocation arising from the sharp increase in the number of new issues raised. 17 issues were proposed to be removed from the work plan.

For Item 33 – Amendments to the System Operation Manual (SOM), Mr. Yeo Lai Hin informed that the whole intent of the SOM is to ensure system security and reliability and this responsibility is with the PSO itself. He stressed that it is not necessary for the Rules Change Panel to endorse changes in the SOM. The Market Rules already required PSO to seek comments from RCP members and market participants whenever changes are to be made. To place changes to the SOM through the Rules Change Panel for endorsement may compromise security of the power system since proposed rules changes are typically debated by RCP over many months and may not even be surfaced to EMC Board and EMA for approval.

The Chairman informed the Panel that clearly the PSO has concerns with the proposed rule change and he asked the Panel to note that it is the highest ranked rule change according to the prioritisation process and it is assumed that it has broad industry support.

Mr. Philip Tan stated that the removal of issues is a grave matter because a lot of time and resources have been put in to prioritise issues.

Mr. Philip Tan asked if there is a rule to stop the RCP from examining this rule change. Mr. Paul Poh informed that currently the RCP, based on the rules, is to provide comments but not to debate and/or vote on changes to the SOM. The proposed rule change is to change the RCP’s role in changes to the SOM.

Mr. Yeo Lai Hin also added that there should be some form of filtering in the prioritisation exercise. The filtering process would allow better management of RCP and Market Admin resources else EMC might spend resources on issues that are clearly beyond the mandate of the RCP. For example, Item 30 - Contingency activation for ILs by EMC, Mr. Yeo questioned the need for such rule change proposal since system security and reliability is the responsibility of PSO. Such proposal amounts to EMC taking over the role of PSO and surely this is not the intent of the Market Design.

Mr Dallon Kay suggested that EMC provide the stakeholders with a standardised template for the proposed issues in the next work plan prioritisation exercise. This template, which should include the problem definition and the rationale for the proposal, will facilitate in the understanding of the proposed new issues.
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<tr>
<td><strong>1. Decision to include the identities of the proposers</strong></td>
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The RCP agreed that it would be unfair to retrospectively release the identities of the proposers of existing issues under the current Rule Change Workplan Prioritisation Exercise. This is because the proposers may have submitted proposals on the understanding that their identity would not be disclosed. Thus, the RCP will decide on whether to include the identity of proposers of the new issues prior to the next Rule Change Workplan Prioritisation Exercise, taking into account the pros and cons of releasing these identities. Mr. Sim Meng Khuan suggested perhaps identifying the class of market participant, service provider and the regulator.

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<tr>
<td><strong>2. Decision on issues to be removed</strong></td>
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To enable the RCP to better assess whether an issue should be removed, EMC will include a check box for removal of issues in the next Rule Change Workplan Prioritisation Exercise. As such, stakeholders may then decide if they would like to remove the issue with valid reasons for the RCP’s deliberation on issues to be placed on the Workplan.

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<td><strong>3. Decision on the ranking methodology</strong></td>
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The RCP noted that there is only one item that is reflected under the “within 12 months” category based on the group-weighted methodology but not placed in the “within 12 months” under the simple average methodology, namely, issue 27 (Review of Data Releases studied in the CRA 2007 survey “Analysis of Data Release Practices in Centrally-Dispatched Electricity Markets”). As such, the RCP decided to include this item into the “within 12 months” category under the simple average methodology.

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<td><strong>4. Decision on the updated workplan for 2009-2011 arising from the prioritisation exercise 2009</strong></td>
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Given the above considerations, the RCP agreed upon the updated workplan below and tasked EMC to monitor the progress of the agreed workplan:
<table>
<thead>
<tr>
<th>Expected completion/commencement date</th>
<th>Issue No.</th>
<th>Issue Title</th>
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<tbody>
<tr>
<td>Within 12 Months (by March 2010)</td>
<td>5</td>
<td>Mixed Integer Programming (MIP) for Reserves*</td>
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<td></td>
<td>2</td>
<td>Simultaneous/Consecutive Tripping of Multiple GRFs*</td>
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<td></td>
<td>3</td>
<td>Reserve Requirement to meet the largest risk, not just the largest (scheduled output + reserve) online GRF: Power Station with only one remaining generation connection to the Grid.*</td>
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<td></td>
<td>4</td>
<td>Shortening of Settlement Cycle*</td>
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<td></td>
<td>33</td>
<td>Amendments to the System Operation Manual (SOM) to be put through the same approval process as Rule Changes</td>
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<td></td>
<td>9</td>
<td>Compensation for Excess Regulation</td>
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<td></td>
<td>1</td>
<td>Review of Price Disparity between MNNs</td>
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<td></td>
<td>22</td>
<td>Proposed Retention and Extension of Type 4 Dispatch Re-runs</td>
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<td></td>
<td>38</td>
<td>Transparency of transmission constraint and compensation for must-run units</td>
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<td></td>
<td>20</td>
<td>Review EMC Fee Methodology to Charge Fee to Interruptible Loads (IL) Providers</td>
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<td></td>
<td>36</td>
<td>Publication of Historical Dispatch Schedule</td>
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<td></td>
<td>23</td>
<td>Modelling of Fault Level Contributions into the MCE</td>
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<td></td>
<td>32</td>
<td>Allocate 5% of reserve costs to loads and require GSFs to pay for reserve cost</td>
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*Indicates issues to be resolved by the next meeting.

**Indicates issues to be followed up on by the next meeting.
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<th>Action</th>
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<tr>
<td>Conflict of Interest for Dispatch Coordinator</td>
<td>31</td>
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<tr>
<td>Review of Scarcity Pricing</td>
<td>8</td>
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<tr>
<td>Differentiation in probability of failure computation for multi-shaft plants and single-shaft plants</td>
<td>35</td>
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<tr>
<td>Overhaul of reserves arrangements</td>
<td>37</td>
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<tr>
<td>De-registration of Generation Facilities Within a Market Participant’s Premises</td>
<td>7</td>
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<tr>
<td>Composition of RCP</td>
<td>15</td>
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<tr>
<td>Obligation to revise offers in the event of complete system outage at EMC</td>
<td>28</td>
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<tr>
<td>New Forms of Collaterals</td>
<td>12</td>
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<tr>
<td>Redefine MCE methodology for determining regulation offers’ eligibility</td>
<td>21</td>
</tr>
<tr>
<td>Engaging Academic Institutions to look at alternative reserve payment methodologies between Interruptible Loads (ILs) and Gencos</td>
<td>6</td>
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<tr>
<td>Number of Business Days for Suspension Order Hearing</td>
<td>10</td>
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<tr>
<td>Electricity Vending System’s (EVS) Impact on Market Rule Changes</td>
<td>13</td>
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<tr>
<td>Modelling of on-site ambient temperature into the MCE such that GTs/CCPs’ maximum capacity are adjusted dynamically</td>
<td>25</td>
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<tr>
<td>Guidelines for Registration and Settlement of GRF/GSF with Alternative Fuels</td>
<td>16</td>
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<tr>
<td>Contingency Activation for Interruptible Loads (ILs)</td>
<td>30</td>
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<tr>
<td>Allocate regulation costs to generators using the Runway method</td>
<td>34</td>
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<tr>
<td>Generating units scheduled by the MCE to provide regulation reserve must have a minimum scheduled regulation reserve of 5MW</td>
<td>11</td>
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<tr>
<td>Introduction of Tie Breaking</td>
<td>14</td>
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<tr>
<td>Review the Need for Detailed Design and Implementation of a Financial Transmission Rights (FTR) Regime</td>
<td>17</td>
</tr>
<tr>
<td>Reserve Compensation for Interruptible Loads (ILs)</td>
<td>29</td>
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<tr>
<td>Incremental Enhancement of Rulebook Drafting</td>
<td>18</td>
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<tr>
<td>Shortening of PSO budget process</td>
<td>26</td>
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The Panel was informed that EMC will provide the Panel in May 2009 an indicative of the issues it will be working on in the next few months.

8.0 Modeling of Multi-Unit Contingency Risk
(Paper No. EMC/RCP/42/2009/CP17)

EMC provided an update of the progress of the Modeling of Multi-Unit Contingency to the Panel.

The PSO raised concerns about insufficient reserve being procured against some types of contingency events that could cause the system to lose multiple generation facilities at the same time. This could potentially result in physical load shedding.

The Panel was informed that EMC had published a concept paper to present PSO’s and EMC’s proposal to modify the existing reserve regime to address the system security concern of the PSO.

It was proposed that a) multi-unit contingency (“MUC”) risk be modelled into the market system when setting reserve requirements and b) the reserve cost allocation to be revised.

The industry was briefed on the Conceptual Proposal on 9 July 2008. Most market participants commented that the materiality of the MUC needs to be justified and a cost-benefit analysis needs to be performed.

EMC proposed a cost-benefit analysis framework and briefed the industry of the approach on 9 December 2008. The PSO commented that the proposal should also be evaluated against the option to use Risk Adjustment Factor to increase reserve requirement during multi-unit contingencies.

The Panel was informed that currently EMC is in the process of preparing for the simulation required for the cost-benefit analysis. EMC has requested PSO to provide data on historical MUC events.

Mr Kay asked whether failure point at any upstream of the gas supply will be considered possible to trigger type 3 MUC. Mr. Yeo replied that the proposal only intend to consider failure points up to the Onshore Receiving Facility level.

Mr. Yu commented that although it is proposed that the reserve cost attributable to MUC be allocated to the causers only, however, it seems that the reserve charge to other generators would also be higher if the reserve prices increase as a result of higher reserve requirements. Mr. Poh replied that this is possible. However this situation is no difference from what could also happen under the current regime when say a generator decides run at higher loading and reserve prices rises.
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Mr. Chan Hung Kwan informed that SP Assets had written a letter to EMC, with a copy to the EMA on the proposed cost allocation method regarding the transmission risk. Mr Chan reiterated SP Assets’ position that SPPA operates under a regulated regime and the regulated revenue control does not take into account any wholesale electricity market cost. SP Assets are still waiting for a response from EMC. Mr. Poh replied that EMC will provide the response to each market participant’s comment in the final concept paper.

On the actual cost and theoretical cost, Mr. Kay asked for the basis in terms of system reliability. Mr. Poh informed that doing the cost-benefit analysis will be backward-looking basis and the system reliability improvement will be measured as reduced load shedding.

Mr. Kay asked if the cost-benefit analysis can be compared to other markets, to which he was informed that the reserve regime is different in Singapore.

Ms Annie Tan stated that the presence of commissioning activities may affect the outcome of the impending study and requested that periods where generators are under commissioning be excluded from the assessment.

There being no other matters, the meeting ended at 1.10pm with a vote of thanks to the Chair.

Dave E Carlson
Chairman

Minutes taken by:
Eunice Koh
Senior Executive - Corporate Secretariat