MINUTES OF THE RULES CHANGE PANEL
35TH MEETING
HELD ON TUESDAY 8 JANUARY 2008 AT 10.00AM
AT ENERGY MARKET CO. PTE LTD
9 RAFFLES PLACE #22-01
REPUBLIC PLAZA, SINGAPORE 048619

Present: Dave Carlson  Lawrence Lee
Robin Langdale  Tay Swee Lee
Dr. Kang Cheng Guan  Philip Tan Pei Lip
Dr. Daniel Cheng  Low Boon Tong
Henry Gan  Dallon Kay
Michael Lim

Absent with Dr. Goh Bee Hua

Apologies:

In Attendance: Paul Poh  Poa Tiong Siaw
(EMC)  Tan Liang Ching  Nerine Teo
Wang Jing  Henry Wee

By Invitation: Coco Choo, EMC  Joan Koh, EMC
Glenda Ong, PSO

1.0 Notice of Meeting

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

2.0 Confirmation of Minutes of the 34th Rules Change Panel Meeting

The Minutes of the 34th Rules Change Panel meeting held on Tuesday, 4 September 2007 was tabled and taken as read.

There being no amendments to the Minutes, the Rules Change Panel unanimously accepted and approved the Minutes.
## Minutes of 35th RCP Meeting – 8 January 2008

### 3.0 Matters Arising

The Panel noted that the follow-up actions were completed on the matters arising as outlined, except for the following:

#### 3.1 Adequacy of the MP Suspension Provisions

The Panel read and noted the draft letter from the RCP to the EMA on customers’ deposits upon transfer to the MSSL’s account.

Mr. Langdale asked EMC to include at the end of paragraph 3 of the letter with the following: "by for e.g. providing for the deposits to be held in trust for customers of the retailer".

EMC will make the necessary inclusion and will forward the letter to the EMA.

### 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.

### 6.0 PSO Proposed Expenditure and Fees for the Fiscal year FY08/09 commencing 1 April 2008

(Paper No. EMC/RCP/35/2007/02)

Dr. Kang Cheng Guan informed the Panel that he would abstain from the discussion on the PSO’s Budget.

The Panel invited Ms. Glenda Ong (Director (Admin) – PSOD) to the meeting.

Ms. Ong presented the PSO Proposed Expenditure and Fees for the Fiscal Year FY08/09 commencing 1 April 2008.
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The Panel reviewed and noted the PSO’s proposed budget.

The RCP noted PSO’s response that the costs associated with monitoring and planning the piped natural gas system represent approximately 10% of PSO’s budget.

Dr. Cheng reiterated the Panel’s previous year’s stance that in future when the gas market commences, the PSO should consider allocating costs associated with the piped natural gas system to the gas market rather than the electricity market.

The Panel also asked the PSO to separately account for the costs associated with monitoring and planning the piped natural gas system from other electricity system costs. This would enable the costs associated with the gas system to be allocated to the gas market when it commences.

Mr. Langdale suggested the Panel should, as previously, state that the RCP’s comments on the PSO’s Budget are based solely on the limited information provided to the RCP.

EMC advised that it would circulate the submission on the points discussed above to Panel members for confirmation prior to issuing to the EMA.

The Panel thanked Ms. Ong for her presentation.
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7.0 EMC Budget for FY 2008/2009
(Paper No. EMC/RCP/35/2007/03)

Mr. Dave Carlson, Chairman of RCP informed the Panel that he and Mr. Henry Gan of EMC would abstain from the discussion on EMC’s Budget and Proposed Fees.

Dr. Kang Cheng Guan also informed the Panel that he would abstain from the discussion on EMC’s Budget and Proposed Fees.

The Panel invited Ms. Coco Choo, Chief Financial Officer and Ms. Joan Koh, Vice President (Finance) of EMC to the meeting.


The Panel was informed that under the Market Rules and EMC’s Market Licence, EMC is obliged to consult the Rules Change Panel on its Proposed Budget and Fees for the financial year 1 April 2008 to 31 March 2009, prior to submitting it the EMC Board for consideration and subsequently to the EMA for approval.

The Panel was also informed that the information in the Appendix 3 which provides breakdown of the budget for each Capital Expenditure should be kept in strict commercial confidence. This is to avoid tenderers for the Capital Expenditure knowing the budget allocated for the project.

The Panel was requested to consider and provide its views on the Budget so that EMC may take these into account in seeking formal approval from EMA.

EMC is also required to publish the proposed Budget and Fees to invite interested parties to make submissions to the RCP on the Budget. The Panel was also informed that EMC had published the Budget and Proposed Fees for FY2008/09 on its website and received no comments.
7.1 Executive Summary of EMC’s Budget for FY2008/09

The Panel was informed that EMC’s Budget for FY2008/09 has been based on the Company’s five year strategy with key emphasis placed on its service delivery to NEMS around the following key areas:

1. Customer focussed service delivery
2. Cost effective operations
3. Reliability and compliance
4. Evolution of the market and EMC services

7.2 EMC’s Regulatory Framework

The Panel was informed that the FY2008/09 represents a new revenue cap period for EMC (to run from 2008 to 2012) and requires EMC’s licensed revenue to be reset based on:

- Approved expenses – comprised of operating expenses, depreciation and tax;
- Return – EMC is permitted to recover a “reasonable” margin on its costs (Licence Condition 18.5).

The Panel was also informed that the EMA had indicated that they would prefer EMC’s regulated return for the period 2008-2012 to be set using a WACC (Weighted Average Cost of Capital) approach. The regulated margin is determined by applying the WACC rate to EMC’s forecast equity plus long term debt less deferred tax. To ensure that this change in basis is commercially neutral to the earlier models used in 2003 and 2004-2007 EMC has derived an equivalent WACC rate of 14.46%.

EMC is still in talks with the EMA on the economic regulatory framework.
7.3 The table below summarises EMC’s Budget and Proposed Fees for FY2008/09.

<table>
<thead>
<tr>
<th></th>
<th>Budget FY 08/09 $’000</th>
<th>Proj FY 07/08 $’000</th>
<th>Budget FY 07/08 $’000</th>
<th>Actual FY 06/07 $’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEMS Revenue</td>
<td>28,890</td>
<td>27,894</td>
<td>28,666</td>
<td>27,945</td>
</tr>
<tr>
<td>NEMS Operating Expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manpower</td>
<td>(7,808)</td>
<td>(7,254)</td>
<td>(6,954)</td>
<td>(7,066)</td>
</tr>
<tr>
<td>Other operating expenses</td>
<td>(17,786)</td>
<td>(15,175)</td>
<td>(16,907)</td>
<td>(14,016)</td>
</tr>
<tr>
<td>Total Operating Expenses</td>
<td>(25,595)</td>
<td>(22,429)</td>
<td>(23,862)</td>
<td>(21,083)</td>
</tr>
<tr>
<td>NEMS Operating Profit (before interest and tax)</td>
<td>3,295</td>
<td>5,465</td>
<td>4,804</td>
<td>6,862</td>
</tr>
<tr>
<td>Market Fees in cents per MWh</td>
<td>36.61</td>
<td>36.39</td>
<td>37.40</td>
<td>38.11</td>
</tr>
</tbody>
</table>

7.4.1 In response to Dr. Cheng’s query on the support and maintenance of the MCE, the CEO informed that EMC have a long term contract with PSC to mitigate vendor’s risk. EMC staffs are also working and training under the PSC contractors on the MCE.

7.4.2 Mr. Philip Tan queried if the capital budget in FY2007/08 of $0.5m has been expended for adhoc rule change projects.

The CFO informed him that EMC will revert to the Panel on this.

EMC

The Panel commented that although EMC’s PIMS bonus may not have a direct impact on EMC’s budget, it will prove useful in finalising EMC’s PIMS targets with the EMA.

The Panel noted the contents of the Budget for FY 2008/09.
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7.5 RCP Comments

7.5.1 PIMS Targets

The Panel stated that the three quantitative PIMS targets set for FY2008/09 should not be increased beyond the level for FY2007/08 as the actual achievement in the past had already attained high score and to increase further may be counter motivational for EMC to perform.

7.5.2 The Panel also stated that the PIMS target for Responsiveness should be higher than 80% as it appears low in view of its 100% achievement in FY2006/07 and also does not appear in balance with the quantitative targets.

7.5.3 The Panel asked that the PIMS targets be finalized before the start of the financial year in which the targets relate.

EMC stated that it would circulate the RCP Report on EMC’s Budget and Proposed Fees for FY2008/09 to the Panel for confirmation before issuing to the EMC Board and the EMA.

The Panel thanked Ms. Choo and Ms. Koh for their attendance.

8.0 Publication of Ancillary Service Contracts
(Paper No. EMC/RCP/35/2007/235(R))

The Panel was informed that the EMC Board considered the RCP’s alternative proposal to tie the amount of information relating to the ancillary service contracts to be published by the EMC in line with the mechanism (or process) employed by EMC to procure the services.

The Panel was also informed that the EMC Board felt that relevant terms and conditions pertaining to the ancillary service contract should be published at the onset of the procurement process to promote competition. In addition doing so it would enhance transparency in the key requirements for potential ancillary service providers.

Action

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The EMC Board recommended that the following 9 key requirements be published.

1. The desired quantity (if any) of that ancillary service.
2. The desired duration of that ancillary service contract.
3. The desired situations in which that ancillary service may be called upon to be provided.
4. The desired nature and timing of any advance notice required for the PSO to call upon the provision of that ancillary service.
5. The desired timing of payment for the provision of that ancillary service.
6. The desired service standards and performance levels applicable to that ancillary service.
7. The desired situations under which some or all of the terms of the ancillary service contract may be suspended.
8. The desired process for modifying the terms of the ancillary service contract.
9. The desired terms of assignment or transfer of the ancillary service contract to another person.

The EMC Board proposed that when EMC procures the contracted ancillary services using a competitive process it would still be beneficial for the prices of individual contracted ancillary services to be published. This is due to the potential long-run or dynamic efficiency that could be achieved. The EMC Board quoted an example where unsuccessful bidders could strive to do better in future when they have knowledge of the prices of winning contract.

However if EMC is not able to procure the services competitively, then prices and quantities of individual winning contracts should not be disclosed as doing so may facilitate collusion and gaming amongst suppliers which could be detrimental to the market.
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The diagram below summarises the amendments proposed by the EMC Board.

The Panel noted the contents of the paper.

The Panel **supported** EMC’s recommendation and to make the necessary recommendation to the EMC Board for adoption.
9.0 Modification to Market Manual for EMC to perform self-billing
(Paper No. EMC/RCP/35/2007/271)

The Panel was informed that EMC intend to implement self-billing for goods and services traded or settled in the SWEM. As all settlement information in the SWEM is determined or centralized at EMC, it is more convenient for EMC to issue tax invoices on behalf of market participants who are supplying goods or services to the SWEM. This will simplify the invoicing process.

The proposed modification to Market Operations Market Manual (Settlement) would ensure that EMC meet with the conditions required by the Inland Revenue Authority of Singapore (IRAS) for self-billing.

The Panel was informed that EMC consulted the IRAS and it was determined that EMC must fulfill conditions set out by the IRAS. The conditions require agreement from market participants/service providers and these are as follows:

- The supplier will not issue tax invoices for goods and services purchased by the customer,
- Each supplier agrees in writing that it will notify the customer immediately if its GST registration is cancelled or it is issued a new GST registration number.

In response to Mr. Philip Tan’s query on whether it would be better for EMC to have individual bilateral agreement with every market participant and service provider to fulfill the above two conditions rather than amend the market manual, the Panel was informed that, from a market operator’s point of view, a market manual change was preferred as with bilateral agreements some MPs may not sign it. This would mean that EMC would have to run 2 systems.

Mr. Carlson informed that EMC as the market operator will ensure full compliance with the conditions of IRAS subject to market participants advising EMC of their changes in GST registration status as well as not issuing tax invoices for services they have supplied to SWEM where EMC has implemented self-billing.

The Panel supported EMC’s recommendation and to make the necessary recommendation to the EMC Board for adoption.
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10.0 Publishing Generation Offers and Dispatch Quantities
(Paper No. EMC/RCP/35/2007/CP16)

The Panel was informed that Generation facility-level offers and dispatch quantities for the Singapore wholesale electricity market (SWEM) are currently not published.

Given the SWEM’s high level of market concentration, EMC considered that, on balance, the risks associated with implementing this proposal are more well-established and pertinent compared to the potential benefits sought.

The Panel was also informed that EMC was unable to recommend that generation facility-level offer/dispatch information be published. EMC suggested that the subject be reviewed when the market achieves a good level of balance between supply side concentration and demand-side participation.

The Panel noted the contents of the paper.

Mr. Philip Tan noted that the concept paper did not contain analysis on other types of information such as network data. EMC has to take into account other dimensions of the market with respect to the types of data and timeliness in order to decide on what information to be released.

Mr. Tan also asked EMC to consider complete transparency with regards to information in the network status file. Mr. Paul Poh informed the Panel that EMA has on previous occasions emphasized that, as a matter of policy, information related to the grid should be kept confidential.

Dr. Kang noted that instead of concluding categorically that offer and dispatch information should not be released, more analysis can be done on whether it is possible to arrive at a suitable level of aggregation and/or delay such that the risks considered would be immaterial.

Mr. Poa informed the Panel that in EMC’s review of practices in other advanced markets, it noted that even renowned consultants engaged by the PJM were unable to make recommendations on such parameters. Individual market practices are often a result of philosophical choice.
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The Panel asked EMC to consider what other types of information would be useful for release and what level of aggregation and delay would be appropriate.

Mr. Tay Swee Lee asked, given the current Singapore context, what would be the minimum number of new entrants into the market in order for the HHI to go below 1800.

Mr. Poa Tiong Siaw responded that it would not be possible to get a definite number. This is because the HHI is influenced primarily by relative sizes rather than the number of firms. Theoretically, if all firms are of equal size, then a market with 6 firms will give a HHI score that is under 1800. To arrive at the requested number would require assumptions to be made about the size of each new entrant, which is unrealistic because there would be no firm basis to make assumptions.

11.0 Any Other Business

On the issue of addressing inequity between gencos and interruptible loads in reserved provision (RCP Paper EMC/RCP/33/2007/CP15), Mr. Philip Tan asked EMC to explore with academic institutions on whether they are able to propose an alternative payment methodology for reserve providers.

The Panel was informed that EMC will explore and revert back to the Panel with the cost impact.

Mr. Kay was concerned that continuing to dwell on issues that the RCP has concluded will impact the resolution of outstanding issues on the RCP Workplan. Mr. Kay asked and the Panel agreed that the issue raised by Mr. Tan should be included in 2008 RCP Work Plan prioritization for the EMC to seek the industry’s views on the priority of this issue.

There being no other matters, the meeting ended at 12.40pm with a vote of thanks to the Chair.

Dave E Carlson
Chairman

Minutes taken by:
Eunice Koh
Senior Executive - Corporate Secretariat

Approved at the 36th RCP Meeting held on 11 March 2008