MINUTES OF THE RULES CHANGE PANEL
24th PANEL MEETING
HELD ON THURSDAY 12 JANUARY 2006 AT 3.05PM
AT ENERGY MARKET CO. PTE LTD
9 RAFFLES PLACE #22-01
REPUBLIC PLAZA, SINGAPORE 048619

Present: Dave Carlson    Lim Ah Kuan
Low Boon Tong    Robin Langdale
Tay Swee Lee    Kng Meng Hwee
Philip Tan Pei Lip    Dr. Daniel Cheng
Koh Kah Aik    Francis Gomez
Henry Gan

In Attendance: Paul Poh    Poa Tiong Siaw
(EMC)    Ramon Staheli    Teo Wee Guan
Janice Leow    Wang Jing

1.0 Notice of Meeting

Mr. Jomar Eldoy, the incoming Interim CEO of EMC, was unable to attend this 24th RCP Meeting. In accordance with Section 2.3.6 of Chapter 3 of the Market Rules, Mr. Eldoy had appointed Mr. Dave Carlson, the Interim COO to chair this meeting.

The Chairman called the meeting to order at 3.05pm. The Notice and Agenda of the meeting were taken as read.

2.0 Confirmation of Minutes of the 22nd Rules Change Panel Meeting

The Minutes of the 22nd Rules Change Panel meeting held on Monday, 12 September 2005 was tabled and taken as read.

There being no amendments to the Minutes, the Rules Change Panel unanimously accepted and approved the Minutes.

3.0 Matters Arising from the 22nd Rules Change Panel Meeting held on 21 November 2005

The Panel noted that the follow-up actions on the matters arising as outlined.

4.0 Summary of Outstanding Rule Changes

The Panel noted the contents of the paper.
24th RCP Meeting – 12 January 2006

5.0 Monitoring List

The Panel noted the contents of the paper.

6.0 PSO Proposed Expenditure and Fees for the Fiscal year FY 06/07 commencing 1 April 2006

Mr. Kng Meng Hwee informed the Panel that he would abstain from the discussion on the PSO’s Budget.

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

Ms. Ong presented the PSO Proposed Expenditure and Fees for the Fiscal Year FY06/07 commencing 1 April 2006.

The Panel reviewed and noted the PSO’s proposed budget. The Panel also noted that the RCP’s comments are based solely on the information provided to the RCP in the proposed budget.

The RCP noted that the increase in Manpower Costs was mainly attributed to the provision for the filling of additional posts required for monitoring and planning of the piped natural gas system. This was said to be necessary as the security and reliability of the natural gas system would significantly impact the electricity system.

The RCP is of the opinion that it is inappropriate for the costs of monitoring and planning of the piped natural gas system to be allocated to the electricity market as this amounts to a cross-subsidy of the gas industry by the electricity industry.

The RCP noted that although a large proportion of natural gas is used for electricity generation, not all generators run on natural gas. Thus, allocating such costs to generators on $/MWh (of injection) basis through the PSO fee could potentially distort competition between generators that run on gas and generators that run on other types of fuel.

The RCP also considered that allocating such costs to load on a $/MWh (of withdrawal) basis through the PSO fee would also result in electricity consumers subsidizing gas users.

The RCP felt that it would be more appropriate for the costs of monitoring and planning of the natural gas system to be borne by buyers of natural gas on a $/MMBtu basis.
24th RCP Meeting – 12 January 2006

The Panel thanked Ms. Ong for her presentation.

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

(Mr. Koh Kah Aik extended his apologies for having to leave the meeting)

7.0 Re-Write of Sections 4 and 5 and Appendix 6F of Chapter 6
(Paper No. EMC/RCP/24/2006/251)

This paper assessed EMC’s proposal to adopt a re-draft of Sections 4 and 5 and Appendix 6F of Chapter 6 of the Market Rules in plain English. EMC concluded that the re-draft represented a significant improvement over the current Market Rules:

1. Cross-referencing has been minimised
2. Obvious and redundant statements have been removed
3. Long phrases have been replaced with more concise wording
4. Sentences are shorter and long singular sections have been broken up into multiple sections
5. Active voice rather than passive voice has been used
6. Definitions have been used to replace often repeated descriptions or concepts
7. Re-statement of conditions has been avoided
8. Use of unnecessary adverbs or adjectives to describe conditions has been avoided

The Panel supported EMC’s recommendation in the revised rule change paper and to make the necessary recommendation to the EMC Board for adoption.

8.0 Imposition of Default Levy (Revised) – Concept Paper No. EMC/RCP/23/2005/CP08

The Panel was informed that the Concept Paper was first presented at the 18th RCP Meeting on 15 March 2005, further discussed at the 21st RCP Meeting on 5 July 2005 and again at the 22nd RCP Meeting on 3 September 2005. At the 21st November meeting, the Panel requested EMC to study situations where intra-class equity within the Generation Class of MPs may be compromised. It also asked that EMC obtain the Panel’s decision by way of circulating the analysis on the issue and final recommendation. However, the voting was incomplete as some members requested more analysis.
24\textsuperscript{th} RCP Meeting – 12 January 2006

Mr. Poa Tiong Siaw then revisited with the (new) Panel members how the existing default levy arrangement creates two undesirable effects on retailers.

EMC then proposed an alternative option to allocate default levy only to net creditors in proportion to their invoice amount.

At the previous Panel meeting, Panel members considered the proposed arrangement to create inequity in the following scenarios:

1. Energy Prices are negative;
2. One or more generator trip and become net debtor; and
3. Every generator did not fulfil its vesting contract quantity resulting in MSSL becoming the sole creditor in the market.

EMC analysed the first 2 scenarios and noted the proposed arrangement is not perfect. However, compared to the current arrangement, it more consistently reflects the three good design principles:

1. Creditors bear the default risk of debtors (natural position in any business transaction)
2. Arrangement is size neutral (i.e. it does not discriminate between size of MP)
3. Arrangement is credit-risk neutral (i.e. it does not discriminate between MPs of different credit-worthiness)

With regards to the third scenario, the Panel was informed that it falls under EMC’s previous analysis. Hence, its earlier conclusion about the proposed arrangement remains.

Mr Poa then illustrated the implementation difficulties in using the “historical invoice accumulation” method to allocate default levies to net creditors. These difficulties included arbitrarily determining the length of accumulation and the need to withhold for a longer period of time, the credit support from MPs that have resigned. There is also no reason to deviate from the current allocation method (trading day specific), which matches debt with the trading activity that resulted in the debt.

EMC recommended that the RCP support the proposal to allocate default levy only to net creditors and on a daily basis and to task EMC to propose a rule change to revise the default levy allocation methodology.
Mr Langdale clarified that he supported the principle of allocating default levy to creditors. However, allocating shares of default levy to sellers based on a single trading day’s trade value is not advisable. This arrangement is vulnerable to abnormal trading activity for that trading day. Mr Langdale considered that buyers do not go into default in one day. Defaults are typically a result of a prolonged period of mismanagement. Correspondingly, sellers that bear such default risks should be allocated shares that are commensurate with their “average size”. He proposed that EMC consider this “backward calculation” approach in the allocation methodology.

Mr Gomez remarked that the “backward calculation” approach may be going too far out to address scenarios that are only remotely possible. He also pointed out that where the rule change proposal is concerned, the principle (allocating to net creditors) and method of implementation (allocation methodology) cannot be assessed separately.

Mr Dave Carlson then put the proposal to a vote with the following result:

Support conceptual proposal:
1. Robin Langdale
2. Francis Gomez
3. Lim Ah Kuan
4. Henry Gan
5. Daniel Cheng

Do not support conceptual proposal:
1. Tay Swee Lee
2. Philip Tan
3. Low Boon Tong

Abstain
1. Kng Meng Hwee

In accordance with the Market Rules, the proposal is supported by a simple majority. Mr Carlson tasked EMC to propose the text of rule modifications to reflect the recommendation.
Guidelines for Compensation – Concept Paper No. EMC/RCP/24/2006/CP11

The Panel was informed that the Rules Change Panel considered the compensation regime in January 2005 and requested EMC to investigate whether the regime could be enhanced by introducing decision-making guidelines and formulae.

The Panel was also informed that the paper presents recommended guidelines and a formula to determine the amount of compensation where the request for compensation relates to energy, reserve or regulation. In these cases, it is suggested that compensation be based on the generator’s offer curve. As there have been no claims for compensation since the start of the market, it is recommended that the guidelines and formula be introduced on a non-binding basis. Once sufficient experience has been gained in their application, these could then be introduced formally into the market rules.

In a case where a generator was scheduled for both energy and reserve, the formulae provided that a generator would be paid only if it was asked to run above the energy plus reserve quantity. A member enquired that if a generator was scheduled for more than one class of reserve, which class of reserve would apply. Mr. Kng explained that if a generator was asked to run above its scheduled energy level it is likely to be required to do so for some time and likely over more than one dispatch period. Thus contingency reserve is the appropriate reserve to use. The Panel agreed that the guidelines be amended accordingly.

Mr. Kng also suggested that the definition of IQ (instructed quantity) in the guideline include specifically that it is subject to adjustment for non-compliance with instructions. The Panel agreed and the revised definition is as follows:

\[ \text{IQ}^m = \text{the quantity of energy, reserve or regulation in MW that the PSO has instructed GRF m to provide in dispatch period m. This quantity may be amended to reflect any partial compliance with the PSO’s instruction.} \]

Mr. Kng requested that the Assessment Criteria be in bullet point form to improve readability. The Panel agreed.

The Panel supported EMC’s recommendation on the decision-making guidelines and formulae for the calculation of compensation, subject to the necessary amendments.
24th RCP Meeting – 12 January 2006

(Mr. Francis Gomez extended his apologies for having to leave the meeting)

10.0 Treatment of Reserve Costs – Concept Paper No. EMC/RCP/24/2006/CP12

The Panel was informed that in the Singapore wholesale electricity market, the costs of reserve are currently recovered from generators.

When EMC met with industry stakeholders to establish a work plan for the Rules Change Panel in 2004/05, EMC was asked to review this treatment of reserve costs. Principally, it was argued that allocation of reserve costs to generators constrain generators to operate at sub-optimal levels (so that their reserve charges are minimised). Further, it was argued that this was inequitable since it provided load with free “insurance” as load benefited from having a highly reliable system. Lastly, it was claimed that this was inconsistent with international best practice.

EMC’s review concluded that allocating reserve costs – the costs the generators impose on the market – to generators, generators are made to face the costs they cause. This is an application of the causer-pays principle to the recovery of reserve costs. It is not only efficient, but fair. It is not inconsistent with international best practice. Thus EMC recommended that the current arrangement to allocate reserve cost remains unchanged.

The Panel supported EMC’s recommendation to continue with the current arrangement for the recovery of reserve costs.

11.0 EMC Budget for FY 2006/2007 – Paper No. EMC/RCP/24/2006/01

Mr. Dave Carlson, Chairman of RCP abstained from the discussion on EMC’s Budget.

The Panel invited Mr. Tan Zing Yuen of EMC to the meeting.

Mr. Tan Zing Yuen, Chief Financial Officer of EMC presented the Proposed Budget and Fees for FY2006/2007.
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 2006 to 31 March 2007, prior to submitting it to the Regulator for approval. 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 invited interested parties to make submissions to the RCP on the Budget. The Panel was also informed that EMC had published the Proposed Budget and Fees for FY2006 on its website and received no comments.

In October 2004, EMA imposed on EMC an Economic Regulation Framework which comprises a revenue-cap price regulation regime with a performance based regulation (PBR) regime to incentivise EMC to make cost efficiencies while maintaining service quality.


The table below summarises the budget for FY 2006/2007:

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Budget FY 06/07 $’000</th>
<th>Proj FY 05/06 $’000</th>
<th>Budget FY 05/06 $’000</th>
<th>Actual FY 04/05 $’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>27,970</td>
<td>27,250</td>
<td>28,588</td>
<td>28,681</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>23,975</td>
<td>24,153</td>
<td>26,345</td>
<td>23,852</td>
</tr>
<tr>
<td>Profit before tax</td>
<td>3,995</td>
<td>3,097</td>
<td>2,243</td>
<td>4,829</td>
</tr>
<tr>
<td>Taxation</td>
<td>(799)</td>
<td>(620)</td>
<td>(450)</td>
<td>(966)</td>
</tr>
<tr>
<td>Profit after tax</td>
<td>3,196</td>
<td>2,477</td>
<td>1,793</td>
<td>3,863</td>
</tr>
<tr>
<td>Fees(^1) in $ per MWH</td>
<td>0.38</td>
<td>0.38</td>
<td>0.39</td>
<td>0.39</td>
</tr>
</tbody>
</table>

Capital expenditure is budgeted to be $5.2M of which $1.0M will be carried forward from FY 2005/2006.

\(^1\) Refers to both IEQ & WEQ. The energy traded per month is based on 6.05 million MWh.
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<th>24th RCP Meeting – 12 January 2006</th>
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<tr>
<td>The budget assumes that the balance sheet restructuring will be carried out in April 2006. Share capital will be reduced by $4M and a fixed rate 3-year term bank loan of $8M will be taken.</td>
<td>EMC</td>
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<tr>
<td>The Panel noted the contents of the Budget for FY 2006/2007.</td>
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<td>The RCP commented on the treatment of the interest expense that EMC will incur on the bank loan to be taken in the restructuring of the balance sheet. Mr. Tan Zing Yuen informed the Panel that EMC is still in discussion with the EMA on the matter. The Panel asked that a comment to this effect be made in the RCP’s submission in respect of the EMC Budget. EMC stated that it would circulate the submission to panel members for confirmation before issuing to the EMC Board and the EMA.</td>
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There being no other matters, the meeting ended at 6.20pm with a vote of thanks to the Chair.

DAVE CARLSON
Chairman

Minutes taken by:
Eunice Koh
Market Panel Administrator