MINUTES OF THE RULES CHANGE PANEL
2nd PANEL MEETING
HELD ON THURSDAY, 20 FEBRUARY 2003 AT 14.10PM
AT ENERGY MARKET CO. PTE LTD
9 RAFFLES PLACE #22-01
REPUBLIC PLAZA, SINGAPORE 048619

Present: Allan Dawson (Chairman)                      Lee Sin Chong
          Yip Pak Ling                                   Kok Shook Kwong
          Seow Kang Seng                                 Robin Langdale
          Tan Boon Leng                                  Eu Pui Sun

Absent with Francis J. Gomez
Apologies Ben Lau
                  Daniel Cheng

In Attendance: Eunice Koh (Panel Coordinator)         Chiao Yen Shong, EMC
               Paul Poh, EMC                             Christopher Ng, EMC
               Debbie Lee, EMC

1.0 Notice of Meeting

The Chairman called the meeting to order at 2.10pm. The Notice and Agenda of the meeting were taken as read.

2.0 Confirmation of Minutes of the 1st Rules Change Panel Meeting

The Minutes of the 1st Rules Change Panel Meeting held on Tuesday, 14 January 2003 was tabled and having been previously circulated was 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 1st RCP Meeting

Item 3.0 Modification Submissions to the Technical Working Group (TWG).

Mr. Paul Poh informed the meeting that the TWG had met earlier in the day (20th February) to discuss an urgent rule change modification on High MNN prices for isolated CCPs (Paper No. 199).

Rules Change Nos. 70 and 194 will be reviewed by the TWG at its next meeting and the Panel will be informed of the TWG’s findings.

Item 5.0 Rules Change Process

EMC had written to EMA to consider approving RCP supported modification submissions before the decision of the EMC Board. EMA replied stating that EMA would follow the procedures set out in the market rules to ensure transparency i.e. the EMC Board should review and adopt rules change submissions for EMA’s approval.

Approved 11 March 2003
3rd RCP Meeting
<table>
<thead>
<tr>
<th>4.0</th>
<th>Paper No.: EMC/RCP/02/2003/10 – Communication of Notice Regarding Adjustment in Final Settlement Statement</th>
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<tr>
<td><strong>EMC</strong> presented a paper on the proposed rules change submitted by EMC (Chapter 7 Section 5.5.6.4) to clarify EMC’s obligation to a market participant if additional time is required to complete an investigation regarding disagreements over a preliminary settlement statement and after investigation, the course of action to be taken by EMC.</td>
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This rule change was submitted earlier to the PTRCP in the 3rd and 5th meetings and the PTRCP then had directed EMC to work on re-drafting the text of the rule modification to reflect the intent of the rule change submission.

EMC received the following comments from Power Seraya:

“The definition of reasonable time is not clear. We would normally expect a prescribed service level from EMC and so are not comfortable with an open ended statement. We would prefer something like ‘90% of the time will respond within 15 days of issuance of final settlement and in any event no longer than 30 days’. The impact of open-ended deliberations could materially affect our cash flow and for a significant period of time. We would not accept the change but instead would recommend the setting of an achievable but firm service level”.

**EMC’s response is:**

“The current market rules, Chapter 7 Sections 5.5 and 5.5.6.4 provides that after a market participant lodges a notice of disagreement with EMC on the preliminary settlement statement and EMC is unable to complete its investigation before the issue of the Final Settlement Statement, EMC shall within 15 business days of the issue of the Final Statement arrived at a conclusion of 3 possible outcome as detailed in Chapter 7 Sections 5.5.6.4 (a), (b) and (c) respectively.

The proposed rules change is primarily to detail how EMC keeps market participant informed of its actions in the 3 possible outcomes. The requirement to complete the investigation within 15 business days of the final settlement statement remains unchanged”.

EMC recommended that the Panel consider and support the amended proposed rules change.

The Panel requested EMC to confirm that the rule is clear in that EMC only need to notify the market participant who raised the disagreement of the outcome of its investigation and not other market participants.

The Panel also authorised the amendment of the words “the market participant” to “the disputing market participant” in Chapter 7 Section 5.5.6.4, if it is unclear that the rule only requires that the market participant raising the disagreement needs to be informed.

Subject to the confirmation of the rule interpretation and amendment above, the Panel supports EMC’s recommendation and to make the necessary recommendation to the EMC Board for endorsement.
2nd Rules Change Panel Meeting

Post meeting note:

Chapter 7 Section 5.5.6 provides as follows:

Following receipt of a notice of disagreement and after informing the market participant of its intended actions and providing the market participant an opportunity to respond, the EMC shall do one of the following:

It is clear from the above the market participant referred to in Section 5.5.6.4 is the market participant that raised the disagreement. Therefore, no amendment to Section 5.5.6.4 is required.

5.0 Paper No.: EMC/RCP/02/2003/132 – To publish emergency and system restoration plans

EMC presented a paper on the proposed rules change submitted by the PSO (Chapter 5 Sections 12.2.1 and 12.3.1) to replace “publish” with “maintain” emergency and system restoration plans.

According to the PSO, emergency plans are not to be published for national security reasons as these emergency plans contain highly sensitive information. Market participants have also raised concerns that the publication of these plans would also disclose confidential information on their facilities.

The Panel was informed that an overview of the emergency plan is published in the System Operations Manual but not the details of emergency plans of individual market participants.

EMC recommended that the Panel consider and support the amended proposed rules change.

The Panel supports EMC’s recommendation and to make the necessary recommendation to the EMC Board for endorsement.

6.0 Paper No.: EMC/RCP/02/2003/173 – To inform MSSL when a retailer is under suspension process

EMC presented a paper on the proposed rules change submitted by the EMA (Chapter 3 Sections 7.3.3.3, 7.3.10.2 and 7.3.12) that requires EMC and the Market Surveillance & Compliance Panel to inform MSSL (being the provider of last resort) when a retailer has an event of default and/or faces possible suspension.

EMC recommended that the Panel consider and support the amended proposed rules change.

The Panel supports EMC’s recommendation and to make the necessary recommendation to the EMC Board for endorsement.
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#### 7.0 Paper No.: EMC/RCP/02/2003/195 – To appoint an additional member to the Rules Change Panel from potential market participants

EMC presented a paper on the proposed rules change submitted by the EMC (Chapter 3 Sections 2.3, 2.4, 2.5) to include a representative from potential market participants in the Rules Change Panel. A potential market participant means a generation or retail electricity licensee that is not registered as a market participant.

EMC recommended that the Panel consider and support the amended proposed rules change.

The Panel, in welcoming the expansion of the membership in the RCP, suggested that to improve the workings of the Panel, new members (trading or non-trading) should have the experience and expertise in the electricity industry.

The discussion also prompted members to raise other issues such as:

1. should the nominated member have a voting right
2. proposed expanded size of the Panel (to be compact)
3. difficulty in ensuring that there is no conflict of interest or perceived advantage given to such non-registered market participant by other non-registered market participants or potential new investors

The Panel requested EMC to look at the expanded scope on membership of the RCP to include both market membership and other stakeholder groups to ensure the right mix.

#### 8.0 Paper No.: EMC/RCP/02/2003/196 – Allocation of Regulation Cost

EMC presented a paper on the proposed rules change submitted by the EMC Market Operations (Chapter 7 Section 3.2.2) to amend the formula of FEQ (total energy that is subject to regulation payments). The intent of the proposal is to ensure that the computed FEQ would result in an equitable allocation of regulation cost for those market participants who are subject to regulation payment.

EMC recommended that the Panel consider and support the amended proposed rules change.

The Panel supports EMC’s recommendation and to make the necessary recommendation to the EMC Board for endorsement.

#### 9.0 Paper No.: EMC/RCP/02/2003/197 – Rule Change Process

EMC presented a paper on the proposed rules change submitted by EMC (Chapter 3 Section 5) to review and streamline the rule change process of the market rules. The proposal is to remove the requirement on the Rules Change Panel to notify the EMC Board of its initial classification of a rule change a) as warrant consideration b) does not warrant consideration c) is a minor modification d) only requires an interpretation before it can consider a rule change. This streamlining would improve the timeline required to process a rule change substantially.
The proposal would also require EMC to publish all rules modification submissions for comments from market participants and others before these are being considered by the RCP and RCP reports to the EMC Board unless deemed inappropriate by the RCP.

EMC recommended that the Panel consider and support the amended proposed rules change.

The Panel was informed that an Urgent Rule Modification Committee was set up on 27 November 2002 and the Committee comprise the Chief Executive Officer of EMC, a Director of the EMC Board (as Chairman of the Committee) and a representative from the PSO.

The Panel would like EMC to continue to look at improving the rules change process and to look for efficiency gains where processes can run concurrently

EMC was requested to amend Chapter 3, Section 5.6.1 the words “the director of the PSO” to read as “a representative of the PSO”.

Subject to the above amendments, the Panel supports EMC’s recommendation and to make the necessary recommendation to the EMC Board for endorsement.

10. **Paper No.: EMC/RCP/02/2003/169 – Operational Integrity Issue**

EMC presented a proposed rules change submitted by EMC Market Operations (Chapter 6 Section 4.4) to clarify that standing capability data does not have an expiry date

The Panel supports EMC’s recommendation and to make the necessary recommendation to the EMC Board for endorsement.

11. **Paper No.: EMC/RCP/02/2003/172 – Clarify Provider of Intertie Schedules and Define Energy Bid**

EMC presented a proposed rules change submitted by EMC Market Operations (Chapter 6 Appendix 6B, Section B.4) to amend drafting error and clarify that scheduled energy for intertie is provided by PSO.

The Panel supports EMC’s recommendation and to make the necessary recommendation to the EMC Board for endorsement.

12. **Paper No.: EMC/RCP/02/2003/183/198 – Final/Provisional Prices**

EMC presented a proposed rules change submitted by EMC Market Operations (Chapter 6 Section 9.3) to clarify that a price warning advisory notice does not necessarily result in price revision. For provisional prices which were confirmed to be subject to revision, and if no subsequent price revision advisory notices were issued by the stipulated deadline, provisional prices shall be deemed as final prices.

The Panel supports EMC’s recommendation and to make the necessary recommendation to the EMC Board for endorsement.
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13. Paper No.: EMC/RCP/02/2003/200 – Cross Referencing Issue

EMC presented a proposed rules change submitted by EMC Market Operations (Chapter 5 Sections 8.7.1.1 and 8.7.1.2) to amend erroneous cross referencing.

The Panel supports EMC’s recommendation and to make the necessary recommendation to the EMC Board for endorsement.

Comments from Power Seraya

The Panel was informed that an urgent rule change proposal was submitted by EMC Market Operations to check high MNN prices for isolated CCPs (Paper No. 199). This urgent rule change proposal was processed under the Urgent Modifications rules (Chapter 3, Section 5.6) and was approved by EMA and took effect from 5 February for one year. The paper was sent to the TWG for consideration on 20 February 2003.

The Panel was advised in writing by EMC of an email received from Power Seraya with their comments on this proposed rule change:

“This rule is intended to correct the wrong Nodal Prices seen in January where a unit not offering energy sees a price of $4,500. The rule change, however, rather than stating it will remove the problem, defines the maths of the solution. Whether said maths is correct or not needs to be tested. This is a bug that needs fixing rather than a rule change. If the rule change does not fix the problem then the MCE will still be in line with the rules but again both will be wrong”.

EMC response is as follows:

“EMC wishes to point out that a rule change and a modification to the MCE to reflect the revised rule was required to resolve the issue of high MNN price of $4500 for CCPs which was not offering energy, and not a bug in the MCE The formulation of the MCE was consistent with the rules concerned prior to 5 February 2003. This rule change was processed under the Urgent Modifications rules (section 5.6, chapter 3) and was approved by EMA and took effect from 5 February for one year. The revised formulation of MCE is consistent with the revised rules, after it took effect.

EMC had carried out a comprehensive set of tests to verify that the rule change and the associated change to the MCE would produce appropriate results

As required by the market rules, EMC has submitted this urgent rule change to the Rules Change Panel (RCP) for consideration. As the rule change involves the formulation of the MCE, the Technical Working Group will be considering it first and then reporting to RCP”
Power Seraya also commented on a paper (No. 70) on various minor changes to the definition sections. This paper will be sent to the TWG for their consideration.

Power Seraya’s comments:

“The NETBENEFIT defined as the objective of the optimisation, is both ambiguous and dangerous. It can be interpreted to mean that the optimiser result is correct in accordance with the market rules regardless of what answer it provides. It should refer to the definition of net benefit as already defined in the rules.

NETBENEFIT should say that it is the measure of the lowest cost of the optimisation as defined in the market formulation appendix to the market rules”.

EMC’s comments is as follows

“Appendix 6D, D14.1 of the market rules specifies when “Net Benefit is maximized. In response to the comments, EMC would recommend to the TWG and the RCP that the variable Net Benefit in Appendix 6D, D.4 be cross-reference to Appendix 6D, D14.1 to ensure that, there is no ambiguity when Net Benefit is maximize. EMC has considered not including Net Benefit as one of the variables in Appendix 6D, D.4 but EMC’s view is that to ensure completeness it should be included as other variables used in the MCE formulation is also included in Appendix 6D, D.4.

Note that the above rule change has not been deliberated by the TWG and the RCP. Power Seraya’s comments will be provided to the RCP and the TWG and would be considered as part of their deliberations on the rule change”.

EMC has offered to present its software modification process to the Panel. The Panel accepts EMC’s offer and the presentation is scheduled for the next RCP meeting.

EMC’S BUDGET AND INDICATIVE FEES

The Panel members noted the conflict of interests from Messrs. Allan Dawson and Yip Pak Ling in relation to discussions regarding EMC’s Budget and they both abstained from the discussions. Mr. Allan Dawson stepped down as Chairman of this meeting at this point.

Mr. Seow Kang Seng proposed that Mr. Robin Langdale be the Chairman at this point of the meeting. Mr. Eu Pui Sun seconded the proposal.

Mr. Robin Langdale took the Chair of the meeting.

The Panel invited Mr. Tan Zing Yuen and Mr. Gan Bock Yeng to the meeting.
EMC is required by market rules to obtain EMA approval for its budget and indicative fees for the next financial year. 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 required to provide:
- Statement of forecast revenues
- Statement of forecast costs
- Statement of forecasts costs broken down by service
- Key drivers of these costs

The Key Initiatives of the Budget are planned to build on the excellent start of the market to provide a professional and efficient service as the market operator. These are:
- Data Management Project
- Development and retention of human capital
- Ongoing support of further liberalisation of Singapore Electricity Market

EMC’s Budget for period ending 31 March 2004:

<table>
<thead>
<tr>
<th></th>
<th>3 months Jan 03-Mar 03</th>
<th>12 months Apr 03-Mar 04</th>
</tr>
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<tbody>
<tr>
<td>Operating Expenses</td>
<td>$9.07 mn</td>
<td>$27.54 mn</td>
</tr>
<tr>
<td>Profit Margin</td>
<td>$0.80 mn</td>
<td>$2.72 mn</td>
</tr>
<tr>
<td>PIMS bonus</td>
<td>To be determined</td>
<td>To be determined</td>
</tr>
<tr>
<td>Total fees</td>
<td>$9.87mn</td>
<td>$30.26 mn</td>
</tr>
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These figures include the costs required by EMC to provide the following:
- Systems
- Pricing and Information
- Settlement
- Ancillary Services
- Market Assessment
- Rules Changes
- Panel Administration support

The costs of Registrations and Derogations are items excluded from the above as these costs are recovered off applicants at the time of their applications.
The comparison for the above two periods indicate:

- 3 mths Jan – Mar 03: $ 9.1m
- 12 mths Apr 03 – Mar 04: $ 27.5m

Reasons for difference:
- Initial licence fee payable over 3 mths Jan-Mar03; Annual licence fee payable over 12 months Apr 03-Mar 04
- Systems activities to be spread over a longer period in new FY
- Most start up activities completed

Under EMC’s fee methodology approved by the EMA, EMC’s Indicative Fees are:

<table>
<thead>
<tr>
<th>Individual fees to Market Participants</th>
<th>3 months Jan 03-Mar 03 Estimated Fee (S$)</th>
<th>12 months Apr 03-Mar 04 Estimated Fee (S$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injection</td>
<td>0.63</td>
<td>0.49</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>0.63</td>
<td>0.49</td>
</tr>
<tr>
<td>Registration</td>
<td>5,500</td>
<td>5,500</td>
</tr>
<tr>
<td>Derogation</td>
<td>5,500</td>
<td>5,500</td>
</tr>
</tbody>
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EMC and EMA are currently undergoing negotiations on:
- Rate of return methodology
- PIMS bonus regime

EMC is to seek EMA’s approval for its budget and fees and EMC is to issue the fee schedule once EMA has approved the fee methodology and Budget commencing 1 April 2003

EMC
- Will publish the Panel’s views
- Will consider them in finalising budget
- Will provide report to EMA
## 2nd Rules Change Panel Meeting

### Panel’s Comments

The Panel enquired why the budgeted annual cost for communications of $0.77m is much higher than the annualized cost for the January 2003 to March 2003 quarter which is expected to be $92K. The Panel was informed by EMC that several activities are planned for the new year and these include a formal launch of the NEM, several seminars for market participants in the coming year. The apparently low cost for the Jan-March 2003 quarter was because most of the activities for the current year occurred prior to the market start on 1 January 2003. These costs were then capitalized under “Project Costs”. The Panel suggested that more details are to be provided to EMA when the budget is submitted for approval.

On Depreciation - The Panel was informed that capitalised costs are amortised over 10 years. Fixed assets are in general depreciated over 10 years, but substantial portion is related to computer hardware and systems that is depreciated over three years. The Panel queried if 5 years could be used if the life of the new system could last 5 years to reduce the cost of EMC recovery charge. EMC was of the view that the system could last a maximum of three years. As such the Panel agreed that 3 years depreciation for computer hardware and system is appropriate.

On Manpower Costs – The Panel queried that the average manpower cost per employee is very high. The Panel was informed that these include directors’ fees and expenses and that the total headcount for the year is expected to be 56. The Panel was also informed that salary levels are based on independent surveys done by Towers Perrin and that for new positions, a check is made through Towers Perrin on the appropriate level and this is subject to approval by the Remuneration & Appointment Committee of the EMC Board.

On Systems costs - The Panel was informed that these include the maintenance and support costs for software, including the MCE software, various audits, software licences and leased lines for data communication.

The Panel was advised that the Company has begun to review the lease for the present premises at Republic Plaza with a view to negotiate with the landlord to extend the lease to tie in with the period of the market licence. The Panel agreed that this is a good time to review and negotiate with the landlord to tie down to a longer lease period at a good rate.

The Panel acknowledged the difficulties in making a comparison with other markets. It felt that the Comparative Costs as compared to the NZEM was most useful as benchmarks because of several similarities and noted that it is only half that of EMC proposed charge rate. The Panel suggested that EMC continue to work on identifying the services provided and the comparative costs and to arrive at a more accurate comparison.

Subject to the comments made by the Panel and within the limits of the information available to the Rules Change Panel, the Panel **supports** EMC’s Budget and to make the necessary recommendation to the EMC Board for endorsement.
15.0 Date of Next Panel Meeting

The next Panel meeting is scheduled to be held on 11\textsuperscript{th} March 2003 at 10.00am at the EMC Board Room.

There being no other matters, the meeting ended at 4.50pm with a vote of thanks to the Chair.

ALLAN DAWSON
Chairman

EUNICE KOH
Panel Coordinator