

**MINUTES OF THE RULES CHANGE PANEL
18th PANEL MEETING
HELD ON TUESDAY, 15 MARCH 2005 AT 10.10AM
AT ENERGY MARKET CO. PTE LTD
9 RAFFLES PLACE #22-01
REPUBLIC PLAZA, SINGAPORE 048619**

Present:	Allan Dawson (Chairman) Yip Pak Ling Ben Lau Dr. Daniel Cheng	Eu Pui Sun Low Boon Tong Robin Langdale Kok Shook Kwong
Absent with Apologies:	Francis J. Gomez T P Manohar	Tan Boon Leng
In Attendance:	Paul Poh, EMC Ramon Staheli, EMC Teo Wee Guan, EMC	Poa Tiong Siaw, EMC Shashank Swan, EMC Janice Leow, EMC

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 17th Rules Change Panel Meeting

The Minutes of the 17th Rules Change Panel Meeting held on Tuesday, 11 January 2005, having previously been circulated, 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 16th Rules Change Panel Meeting

The Panel noted that the matters arising as outlined in the "Matters Arising" had been completed except.

Point 5.0 **Dispute Resolution Process** (Paper No. EMC/RCP/17/2005/240)
– The Panel was informed that EMC aims to table the detailed rule changes at the RCP meeting in May 2005.

Point 6.0 **Information Policy** (Paper No. EMC/RCP/17/2005/241) – The Panel was informed that EMC is in discussion with the EMA and will report to the Panel when a conclusion is reached.

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Point 8.0 **EMC Budget and PIMS for FY2005/06** (Paper No. EMC/RCP/17/2005/07) – The Panel was informed that EMC will submit a rule change proposal to allow the RCP to represent the market in reviewing EMC's Budget and Fees when the revenue cap is to be reset. This will be done once EMC has finalised its revenue cap arrangement with the EMA.

4.0 **Monitoring List**

The Panel noted the contents of the paper.

5.0 **Publication of Ancillary Services Contracts** (Paper No. EMC/RCP/18/2005/235)

This rule change proposal submitted by the Market Surveillance & Compliance Panel seek to amend Sections 8.7.1.3 and 8.7.1.4, Chapter 5 of the market rules on the publication of information relating to the procurement of contracted ancillary services.

The MSCP stated that it is anomalous for the rules to require the MSCP to determine the existence (or absence) of market power in relation to contracted ancillary services. MSCP's role is to assist the EMA by providing information and highlighting to EMA any potential anti-competitive behaviour. EMA is the body who makes final determination on anti-competition matters.

To overcome the above problem, MSCP proposed the following two solutions:
(1) delete sections 8.7.1.3 and 8.7.1.4 completely; or
(2) replace sections 8.7.1.3 and 8.7.1.4 with an entire new section which provides for the publication of the key terms and conditions of each class of contracted ancillary service.

In its analysis, EMC concluded that MSCP's proposed solutions were not appropriate. EMC pointed out that sections 8.7.1.3 and 8.7.1.4 serve a specific purpose, i.e. they govern what should (or should not) be published by the EMC relating to ancillary service contracts under specified circumstances. Hence, they should not be removed from the market rules, as proposed under MSCP's first solution. As for MSCP's second proposed solution, the rule intention differs from that of the existing rules. Specifically, the proposed rules are unclear on what the EMC should (or should not) publish in relation to the ancillary service contracts under different market conditions.

Instead, the EMC has proposed that the function of determining the presence (or absence) of market power be performed by the EMA. This is consistent with the changes made to the draft market rules prior to market start removing MSCP's responsibility to monitor anti-competitive conduct. Thus, under the current arrangement, EMA is the only body with authority to adjudicate on anti-competition matters. Given that most responsibilities with regard to anti-competitive matters now rest with EMA, it would therefore be more efficient for EMA to also make the determination on whether market power exists or not in relation contracted ancillary services.

EMC

PowerSeraya commented on EMC's proposed solution. Specifically, it suggested amending the phrase "in the absence/presence of market power" in section 8.7.1.3 / 8.7.1.4 to read as "*in the absence/presence of evidence that market power is being exercised*". In response to this comment, EMC clarified that the rules in context are concerned with the existence of market power in the structural sense, and not in the behavioural sense. IMO Ontario, whose rules in context are very similar to ours, shared the same view.

Further, PowerSeraya also commented inserting a clause which read "*The EMC shall publish Standard Terms and Conditions for each class of Ancillary Service*". However, Mr. Yip Pak Ling informed the Panel that these 'standard terms and conditions' had already been published on EMC's website.

The Panel then deliberated on the EMC's proposed solution. In its view, the Panel felt that the publication of contract information relating to contracted ancillary services should depend on how these services were procured by the EMC in the first place. Specifically, if EMC is able to procure the services competitively, then it makes sense for EMC to keep the commercial terms of the contracts confidential. On the contrary, if the services cannot be procured competitively by EMC, then EMC shall use a contract with a payment methodology approved by EMA. In this case EMC shall publish the relevant terms and conditions of the contract.

The Panel requested EMC to study the above suggested alternative and to revise the rule change paper accordingly.

6.0 Study on Accuracy of Very Short Term Loan Forecast (Paper No. EMC/RCP/18/2005/CP07)

The RCP had commissioned a "Study of the accuracy of very short term load forecast" to address an issue raised by market participants (MPs) regarding the accuracy of the load forecast prepared by the PSO. As the accuracy of the load forecast is pivotal in determining the accuracy of dispatch and prices in the market, MPs tasked EMC to examine the accuracy of the current load forecast methodology. EMC then tasked the TWG to review the scope of study.

The TWG proposed the scope to be expanded to include evaluation of three areas i.e.

- (1) The need to change the existing generation forecast methodology to that of directly forecasting the load;
- (2) Comparison of the accuracy of the loss factor with the physical losses;
- (3) Comparison of the scheduled gross generation from the Real Time Schedule against actual gross generation from SCADA data for 2004.

The results of the expanded analysis will be presented to the RCP.

The Panel requested the TWG to consider possible impact of an average 1% load forecast error to the system security, while evaluating the results of the expanded scope of this study.

EMC

7.0 Imposition of Default Levy (Paper No. EMC/RCP/18/2005/CP08)

The Panel was informed that under the Market Rules, a Market Participant (MP) is in default when it is unable to pay its invoice. When the default persists, a default levy (unpaid invoice less credit support of the defaulting MP) is imposed on all non-defaulting MPs. Each non-defaulting MP's share of the default levy is directly proportional to its absolute net invoice amount for the trading day to which the default relates. This arrangement gives no regard to each non-defaulting MP's status as a debtor or creditor in the wholesale electricity market.

EMC's study concluded that the current default levy arrangement did not reflect the design principle on risk allocation. It advocated that default levy should only be allocated to creditors. However, EMC also noted that changing the rules given the current generator-retailer ownership structure would not result in much practical impact. Coupled with the "still pending" decision to implement FRC, EMC recommended a change to the rules when that decision has been made.

EMC

The Panel noted Senoko' Power Ltd's letter dated 15 March 2005 which was received at 9.00 am.

The Panel decided that the crux of the issue is whether allocating default levies to debtors is in line with the design principle on risk allocation. If it is concluded that allocation default levies to debtors is not in line with this design principle then the market rules should be changed.

The Panel requested EMC to conduct further study and

- a) draw parallels from other electricity markets, commodity or financial markets; and
- b) evaluate whether generators are indeed better-placed to mitigate third-party default risks than retailers.
- c) determine if the current default levy allocation method was not in line with the risk allocation design principle.

8.0 Rule Change Work Plan (Paper No. EMC/RCP/18/2005/WP01)

This paper outlines a draft work plan for the Rules Change Panel for the next 12-24 month period. The prioritisation of the market design issues to be included in the work plan has incorporated comments by key stakeholders received during consultations.

The revised draft work plan discussed with stakeholders includes 16 issues comprising 9 remaining issues contained in the previous work plan and 7 additional issues raised by stakeholders.

The additional issues raised by stakeholders during the consultation phase are:

- q Providing Historical Genco Offer Prices: The transparency of the market could be enhanced by providing historical offer prices and greater transparency. The publication of historical offer information is intended to provide a surveillance tool for the market to collectively monitor behaviour and to dispel the notion of market power or the abuse of market power. It has been suggested that the provision of historical information such as the previous day's offer prices is a standard feature of other established energy markets.
- q Allocation of Costs for Reserves / Ancillary Services: The current method of allocating reserve costs to generators could be constraining efficient generating units to operate at sub-optimal loads to minimise their reserve charge. This charge can be significant as shown during the 29 June 2004 blackout event. Operating the most efficient CCGTs at a sub-optimal level imposes additional fuel costs through the need to burn more natural gas or fuel oil than is necessary. In addition, it has been suggested that this method of charging the reserve cost to generators is not equitable in that it essentially provides free insurance to consumers. It has also been suggested that the current system does not account for the benefit that consumers receive through having a highly reliable system.
- q Review of Violation Penalty Costs: The violation penalty costs specified in the Market Clearing Engine are designed to ensure that, where shedding is required, regulation is shed first, followed by contingency reserve, secondary reserve, primary reserve and, as a last resort, energy. However, in some circumstances, the Market Clearing Engine will sum the violation penalty costs for all types of reserve, meaning that energy may be shed before reserve. There is a need to investigate options for ensuring that the intended order of violating constraints is achieved.
- q Accurate Profiling of Regulation Requirement: Currently a 100MW regulation requirement is used for all dispatch periods. There is a need to investigate whether accurate profiling of the regulation requirement could be introduced to properly reflect the specific regulation requirement in each dispatch period.
- q Review of 2-hour Gate Closure: In May 2004, the RCP agreed that the gate closure period be changed from 4 hours to 2 hours. As part of its decision to support shortening the gate closure period, the RCP agreed that the EMC should review whether the 2-hour gate closure period could be shortened further. The review should be carried out after the 2-hour gate closure period had been in operation for 9 months.
- q Review the Need to Resubmit Offers Immediately after a Forced Outage: Generators currently need to resubmit offers immediately after a forced outage. This is onerous for the generator as its priority is to handle operational issues and problems.

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- Compensation for Excess Regulation: In some cases, the amount of regulation provided by a generator exceeds the scheduled quantity. Should generators who provide regulation above the cleared quantity be compensated for doing so.

EMC recommended to the Panel on the work plan for the next 12 – 24 month period as follows:

Expected completion/ commencement date	Activity
Within 9 Months	19. Incremental Enhancement of Rulebook Drafting*
	2. Improving Transparency in Transmission Planning and Augmentation **
	8. Whether Default Levy Should be Charged to Retailers **
	4. Review the Need for Detailed Design and Implementation of a Financial Transmission Rights (FTR) Regime **
	17. Expanded Review of Accuracy of Load Forecast**
	18. Investigation of Guidelines and Formulae for Compensation**
	15. Review of Violation Penalty Costs
Within 10 - 15 months	7. Allocation of Reserve Cost – Generation Unit Constrained On
	5. Regulation Anomaly – Generators “Trapped” at Regulation Minimum and Being Constrained On for Energy Generation and Being Paid at Market Clearing Price Below its Offer Price
	14. Allocation of Costs for Ancillary Services / Reserves
	10. Review of 2-hour Gate Closure
Within 16-24 months	16. Accurate Profiling of Regulation Requirement
	13. Providing Historical Genco Offer Prices
	9. Review of RCP Structure
	12. Compensation for Excess Regulation
	3. Review the Need for a Rewrite of the Rulebook
Within 16-24 months	6. The RTS no Longer Reflects Energy Shortfall after EMC Adjusts Nodal Load Forecasts Following PSO Energy Shortfall Forecast

* Ongoing workstream

** EMC has already commenced work on these workstreams, or they arise from previous workstreams. They are ranked highly in the recommended list of priorities for this reason rather than due to the feedback received from stakeholders.

The Panel raised issues on the intent of the need to rewrite the rulebook and the cost benefit in the study before it was started. Mr. Dawson informed that the initial work was to investigate whether it was a viable project and the consultation process was undertaken by EMC at the request of the EMC Board. It was found that a complete rewrite was not appropriate now as EMA's view was that the rewrite can only take place after EMA's review of the NEMS is completed and if market participants support it. Market participants had accorded low priority to the rewrite. The EMC Board requested that EMC review the need for a rulebook rewrite at a later stage. Therefore, the item appears as a workstream to be completed within 16 to 24 months. In the interim, EMC would seek incremental improvements to the rulebook, primarily through adopting simple language drafting on new rule changes. This ongoing workstream is represented as Item 19 on the workplan.

The Panel was informed that Item 1 – Review of Existing Compensation Regime – has been considered by the Panel and the new workstream arising from the review is now represented by Item 18 – Investigation of Guidelines and Formulae for Compensation and Item 12 – Compensation for Excess Regulation addresses a related, but separate issue. The Panel requested EMC to include items 17, 18 and 19 of the workplan in annex 1 of the paper which only has 16 items.

The Panel discussed the issue of how to represent stakeholder feedback in the paper and agreed that after the consultation meetings what was recorded by EMC be reviewed by the participants.

The Panel agreed to the recommended workplan and agreed that the paper should be published without the annex.

9.0 Improvement to Methodology for Determination of Load Participation Factors (Paper No. EMC/RCP/18/2005/02)

The Panel was informed that Dynamic load participation factors were incorporated in the Market Clearing Engine (MCE) in May 2004. A load participation factor (LPF) allocates a fraction of the system-wide non-dispatchable load forecast to the individual off-take nodes. Essentially, these LPFs are derived using the actual load values of the off-take nodes from the network status file. In every period, the EMC receives these load values.

The methodology to calculate LPFs using these load values is published on the EMC website. The methodology also specifies the way the LPF is calculated for a unit transformer associated with a generating unit. For unit transformers, the values provided in the network status file are computed values (not read by PSO's SCADA system) and cannot be used by the MCE to calculate LPFs. This proposal is to improve LPF calculation methodology only for unit transformers.

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With this change, modeling the relationship between generating unit energy output and its unit transformer makes LPF calculation dynamic and more reflective of reality. This would result in more accurate nodal load forecasts.

The Panel noted the contents of the paper.

10.0 Date of Next Meeting

The next Panel meeting is scheduled to be held on 3rd May 2005 at 10.00am at the EMC Board Room.

There being no other matters, the meeting ended at 12.30pm with a vote of thanks to the Chair.

ALLAN DAWSON
Chairman

Minutes taken by:
Eunice Koh
Market Panel Administrator