MINUTES OF THE RULES CHANGE PANEL
19th PANEL MEETING
HELD ON TUESDAY, 3 MAY 2005 AT 10.15AM
AT ENERGY MARKET CO. PTE LTD
9 RAFFLES PLACE #22-01
REPUBLIC PLAZA, SINGAPORE 048619

Present:  Allan Dawson (Chairman)  Eu Pui Sun
Yip Pak Ling  Low Boon Tong
Ben Lau  Robin Langdale
Dr. Daniel Cheng  Kok Shook Kwong
Francis J. Gomez  Tan Boon Leng
T P Manohar

In Attendance:  Paul Poh, EMC  Poa Tiong Siaw, EMC
Ramon Staheli, EMC  Shashank Swan, EMC
Teo Wee Guan, EMC  Janice Leow, EMC

1.0 Notice of Meeting

The Chairman called the meeting to order at 10.15am. The Notice and Agenda of the meeting were taken as read.

2.0 Confirmation of Minutes of the 18th Rules Change Panel Meeting

The Minutes of the 18th Rules Change Panel Meeting held on Tuesday, 15 March 2005, having previously been circulated, were 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 18th Rules Change Panel Meeting

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

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

The Panel was informed that EMC is still working on the solution proposed by the RCP.
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Point 7.0 **Imposition of Default Levy** (Paper No. EMC/RCP/18/2005/CP08)

The Panel was informed that EMC would revert with its findings to the Panel at the next meeting.

4.0 **Monitoring List**

The Panel noted the contents of the paper.

5.0 **Dispute Resolution Process** (Paper No. EMC/RCP/19/2005/240(R))

**Matters Arising – Time Period to Raise Disputes for the Connection Agreement and Retailer UoS Agreement**

At the 17th RCP Meeting, the Panel agreed to subject the Connection Agreement and Retailer UoS Agreement to the dispute resolution provisions in the Market Rules, with exceptions being made for a longer and reasonable time period (compared to the 120 business days proposed by the Dispute Resolution Counsellor (DRC) to raise disputes relating to these two agreements.

EMC had consulted SPPA on the appropriate time period to raise disputes for these two agreements. Following its consultation, EMC tabled the following recommendations at the 19th RCP meeting for the Panel’s approval:

- **Connection Agreement** - a party to the agreement will be given 750 business days to raise a dispute from the time when the party became aware or ought, with the exercise of due diligence, to have become aware of the event that gave rise to the dispute.

- **Retailer UoS Agreement** - a party to the agreement will be given 370 business days to raise a dispute from the date which the cause of action accrued.

EMC cited the reasons given by SPPA for the above recommendations. Specifically, SPPA proposed that 750-business days be set aside for the affected party to raise disputes for the Connection Agreement pertaining to a generation facility. This was because the typical duration for the implementation of a generation connection project is 3 years (= 3 x 250 = 750 business days) and a dispute could arise at the tail end of the project due to causes at the front end. As for the Retailer UoS Agreement, SPPA required a party be given a total of 370 business days to raise a dispute. This is because 250 business days are required for the wholesale metering data to be finalized, and an additional 120 business days – the same time period allowed for other agreements under the proposed dispute resolution regime - will need to be set aside to give the party some time to raise the dispute.
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Mr T. Manohar sought clarification on the additional 120 business days to raise a dispute relating the Retailer UoS Agreement. He asked if this would mean that a dispute could be raised on the finalised wholesale metering data after the cut-off date for wholesale settlement re-run (i.e. after the 250 business days). To that, Dr Daniel Cheng replied that the additional 120 business days were not intended for raising disputes relating to the wholesale metering data after it has been finalised. It could, however, apply to other disputes which are non-metering related such as methodology used to calculate UoS charges. Mr Paul Poh also clarified that the 120 business days were intended to give the party involved a reasonable time to take actions in raising a dispute after the wholesale metering data has been finalised but not on the finalised wholesale metering data.

The RCP noted the above and supported EMC’s recommendations.

**Further modifications proposed by the DRC**

The Panel was informed that the DRC had made a further modification to the proposed change on the review of dispute resolution process.

Currently, under the Market Rules, the EMC Board is required to initiate a review of the dispute resolution process within 2 years of the market commencement date, i.e. 1 January 2003. The DRC had originally proposed to change the 2 years to 4 years instead. This was to take into account the current review undertaken by the DRC. This proposed change was supported by the RCP at its 17th RCP meeting on 11 January 2005.

However, subsequent to the 17th RCP meeting, the DRC had sought to amend the proposed 4 years to 5 years instead. This is because the current proposed changes would only be implemented at the earliest in October 2005, if the proposed rules were adopted by the Board and approved by the EMA in July 2005 (the DRC would need another 3 months to implement the proposed changes). Sticking to the proposed 4-year review period would mean that the next review is due on 1 January 2007. This is less than 2 years after implementing the rule changes on dispute resolution. Hence, it makes sense to allow for a longer time period for implementing these rule changes before the Board initiates another round of review of the dispute resolution process.

In view of the reasons above, the RCP supported DRC’s proposal to amend the proposed 4 years to 5 years instead.

**Detail Proposed Rule Modifications**

The Panel then proceeded to discuss the detailed rule modifications tabled by the EMC at the meeting. The Panel was informed that these rule modifications gave effect to the RCP’s decisions on the DRC’s rule change proposal made at the 16th and 17th RCP meetings. These rule modifications have also assumed that the RCP support EMC’s recommendations outlined in the minutes above (i.e. under matters arising and further modifications proposed by the DRC).
The Panel requested EMC to make the following amendments to the proposed rule modifications:

(i) Delete the words “that arises” in section 3.2.1.5. This is to remove redundant words and to improve the drafting, as proposed by Mr Kok.

(ii) For section 3.6.8, Dr. Daniel Cheng queried about the rationale for giving the DRC the sole discretion to decide whether or not to replace a mediator who has potential conflict of interest or bias and has disclosed such to the DRC and the parties involved. In relation to Dr Cheng’s comments, the Panel felt that it is important that a mediator acts in a fair and independent manner. Hence, the Panel decided that the proposed rule modifications should be drafted to reflect that if a mediator discloses that he has becomes aware of any potential conflict of interest or bias, the DRC shall replace that mediator with another person from the mediation panel unless the DRC obtains agreement from the parties that such replacement is not necessary.

(iii) To replace the word ‘informs’ with ‘requests’ in section 3.7.10.2. as suggested by Mr Langdale.

In addition,

(iv) Mr. Kok Shook Kwong sought clarification on whether the unit of measurement for time period should be ‘business days’ or ‘calendar days’. He noted that sections 3.12.2 and 3.13.1 of the proposed rule modifications use ‘calendar days’, whereas other sections use ‘business days’. To that, Mr Paul Poh informed the Panel that the two sections pointed out by Mr Kok relate to the compensation payable by the PSO/EMC and that the ‘90 calendar days’ used in these two sections reflect the time required for EMC to recover the monies via MEUC before making compensation payments. Replying to RCP’s query whether other parts of the rules also use calendar days, Mr Paul Poh explained that the settlement payment cycle uses ‘calendar days’. Nonetheless, the Panel requested EMC to clarify what other sections of the market rules use ‘calendar days’ and whether using ‘calendar days’ in sections 3.12.2 and 3.13.1 is appropriate.

(v) Mr Robin Langdale sought clarification on the definition of the term ‘relative’ which appeared under Appendix B – Declaration for Nomination as a Member of the Market Surveillance and Compliance Panel, as Dispute Resolution Counsellor or as a member of a Dispute Resolution and Compensation Panel. Mr Langdale felt that the term ‘relative’ can be vague and all-encompassing if it is undefined. The Chairman requested that EMC study whether the term ‘relative’ should be defined in the Market Rules in future for clarity.

Subject to the above amendments made and clarifications sought by the Panel, the Panel supported EMC’s recommendations to amend the market rules to reflect the decisions of the Panel and to make the necessary recommendations to the EMC Board for adoption.
6.0 Rewrite of Section 5, Chapter 3 (Paper No. EMC/RCP/19/2005/242)

This paper is to assess the re-written Section 5 of Chapter 3 of the Market Rules.

- The Panel was informed that several sections of the Market Rules were re-written as part of EMC’s evaluation of the resource requirement of the proposal to re-write the rulebook.

Since the re-drafts have been carried out and are a significant improvement over the corresponding sections of the current version of the Market Rules, it makes sense to adopt them to realize the benefits of improved drafting. One section that has been rewritten is section 5 of Chapter 3.

Section 5 of Chapter 3 governs the rule change process. The following principles were applied in the re-drafting:

1. Minimising the use of cross-referencing, directly describing the requirement
2. Removing obvious or redundant references
3. Replacing long phrases with more concise wording
4. Shorter sentences covering a maximum of two points in one sentence
5. Using active voice instead of passive voice
6. Use of definitions to replace often repeated descriptions or concepts
7. Avoiding the restatement of conditions
8. Avoiding unnecessary adverbs or adjectives to describe conditions

For the proposed new draft, several notable improvements have been made over the original draft as follows:

1. Removal of obvious and redundant statements
2. Removal of unnecessary cross-referencing
3. Use of simple language and short sentences
4. Breaking up of long singular sections into multiple sections
5. Use of active voice
6. Re-ordering of sections for structural/logical flow rather than procedural flow

The new draft achieved the objectives of making Section 5 of Chapter 3 clearer, simpler and therefore more easily understood by a person outside the electricity market. In addition, the new proposed draft contains 18% fewer words than the original draft.

In addition, the following criteria were satisfied:

1. All obligations and rights of any party to the Market Rules must not be materially different.
2. All processes and requirements with regards to timing and sequence of events are preserved.
3. The language of the new draft should be superior to the current drafting in terms of clarity, simplicity and accessibility to the public.

A comprehensive legal opinion was obtained from EMC’s external legal counsel that endorsed the above conditions.
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The Panel supported EMC’s recommendation to amend the market rules to reflect the changes and to make the necessary recommendation to the EMC Board for adoption.

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

The RCP considered a study of the accuracy of very short term load forecast at its 16th meeting on 2 November 2004. The Panel was informed that the Technical Working Group (TWG) met on 17 February 2005 and proposed the following scope of the study:

(i) Compare the schedule gross generation from the Real Time Schedule (RTS) against actual gross generation from SCADA data for 2004
(ii) Compare the accuracy of the loss factor used in the MCE with the physical losses for a 12-month period
(iii) Analyse the need to change the existing generation forecast methodology to that of directly forecasting the load

The results of the comparison between RTS values and gross generation values from SCADA data showed a mean absolute percentage forecast error of 0.82% compared to the value of 0.93% obtained using metered IEQ/Auxiliary load. Also, although the EMC noted possible errors in the metering data, the average physical loss factor of 0.43% is quite close to the existing loss factor of 0.6% set in the MCE. Further analysis indicates that there seems to be no compelling reason to change the existing generation forecast methodology to directly forecasting the load.

Therefore, the TWG recommended no change to the use of existing generation forecast methodology as well as to the existing 0.6% loss factor used in the MCE. Further, the TWG proposed that the MSSL be requested to investigate the presence of negative losses inferred from the metering data for certain dispatch periods in 2004.

The Panel was informed that whenever there are metering errors, there are meter tolerances to be also considered. Mr. Eu Pui Sun informed the Panel that the metering error is not just due to the meter tolerance band. This means that even if the meter calibration is within the prescribed meter tolerance band, the meter could still read power flow from a different time frame (i.e. different from the prescribed half hour period). This is the case when the meter reading time frame is not synchronised with the start and end time of a period.

EMC would like to take this opportunity to thank the MSSL and the PSO for providing data for the study that added greatly to the understanding of this issue.

8.0 Allocation of Reserve Cost (Paper No. EMC/RCP/19/2005/CP09)

The Panel was informed that when EMC met with market participants in 2003 to establish the yearly RCP work plan, they expressed a need for EMC to review whether IEQ was the right basis for allocating reserve cost.
This was because the current allocation of reserve cost based on IEQ was seen as inequitable, penalising generators with a larger share of reserve cost when they contribute to system security by providing more generation.

The deficiencies of using IEQ as the basis for allocating reserve cost

Compared against the market’s design principles, the paper found the use of IEQ as the basis for allocating reserve cost to be inefficient and inequitable.

As the reserve requirement in each dispatch period was determined based on the scheduled energy of generators, IEQ is not a measure of how generators created the need for reserve. Hence, allocating reserve cost based on IEQ is inconsistent with the causer-pays principle for efficient cost allocation.

Allocating reserve cost based on IEQ is inequitable because generators that create the same need for reserve (by having equal scheduled energy) will typically be allocated different shares of reserve cost due to their having different IEQs. Moreover, generators that trip, causing a contingency requiring reserve, are allocated smaller shares of reserve cost for the period. Further, generators that provide increased generation in a contingency are penalised with a greater share of reserve cost.

An alternative basis for allocating reserve cost

The paper proposed that reserve cost be allocated based on scheduled energy (from the Real-Time Schedule) instead of IEQ. This would be more efficient as there would be a closer matching of cost to causer, and more equitable as generators would pay for the reserve they create the need for.

The one-off cost of the required modification to settlement IT systems was estimated at $69,000, small (about 36%) compared to the degree of inefficiency and inequity that was estimated to be corrected each year with such a change.

Mr Eu Pui Sun was concerned that after some contingencies the price of reserve increased above the price of energy. He felt that this did not reflect that energy was more important than reserve.

It was explained that when there is a shortage of reserve, the cleared price of reserve will increase to reflect its shortage. Due to co-optimisation, the resultant dispatch (which is derived from offers) to simultaneously meet energy, reserve and regulation requirements would represent the least-cost dispatch for Singapore. This is in line with economic principles of minimizing cost and therefore it did not matter that reserve prices were higher than energy prices.
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Mr Ben Lau noted that the need for reserve may need to take into account risk factors that are not caused by generators. The Chairman informed that the issue of whether reserve cost should be borne by generators alone is an issue on the RCP workplan.

EMC was requested to provide a detailed analysis of three forced outages, highlighting the financial impact of the two different cost allocation bases and taking into account the period after the outage where reserve price was higher than the energy price.

EMC

9.0 Date of Next Meeting

The next Panel meeting is scheduled to be held on 5 July 2005 at 10.00am at the EMC Board Room.

There being no other matters, the meeting ended at 12.10pm with a vote of thanks to the Chair.

ALLAN DAWSON
Chairman

Minutes taken by:
Eunice Koh
Market Panel Administrator