

**MINUTES OF THE RULES CHANGE PANEL
32nd PANEL MEETING
HELD ON TUESDAY, 8 MAY 2007 AT 10.10AM
AT ENERGY MARKET CO. PTE LTD
9 RAFFLES PLACE #22-01
REPUBLIC PLAZA, SINGAPORE 048619**

Present:	Dave Carlson Robin Langdale Kng Meng Hwee Dr. Daniel Cheng Henry Gan Koh Kah Aik	Lim Ah Kuan Tay Swee Lee Philip Tan Pei Lip Dallon Kay Dr. Goh Bee Hua Low Boon Tong
Absent with Apologies:	Michael Lim	Francis Gomez
In Attendance: (EMC)	Paul Poh Teo Wee Guan Tan Lin Chueen	Poa Tiong Siaw Wang Jing

1.0 Notice of Meeting

The Chairman called the meeting to order at 10.10am. The Notice and Agenda of the meeting were taken as read.

2.0 Confirmation of Minutes of the 31st Rules Change Panel Meeting

The Minutes of the 31st Rules Change Panel meeting held on Monday 12 March 2007 was tabled and taken as read.

EMC was requested to make the following amendments:

Review of Price Revision - On page 11, to amend the final paragraph to read as "The following SUPPORTED that on the Singapore Wholesale Electricity Market price revision should be allowed in principle: "

EMC was also requested to include Mr. Robin Langdale as a supporter.

Subject to the amendments, the Rules Change Panel unanimously accepted and approved the Minutes.

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3.0 Matters Arising

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

Item 1 – Imposition of Default Levy
(Paper No. EMC/RCP/25/2006/254)

The Panel was informed that EMC and the MSSL will conduct and test a simulation exercise of the default process. The main objective is to determine whether the MSSL is able to transfer the customers of a defaulting retailer within the timeline to complete the suspension process.

EMC and the MSSL will revert to the Panel with the results of the exercise.

EMC

4.0 Summary of Outstanding Rule Changes

The Panel noted the contents of the paper.

5.0 Monitoring List

The Panel noted the contents of the paper.

[The Panel invited Ms. Coco Choo and Mr. Luke Peacocke of EMC to the meeting].

6.0 PIMS Performance in FY 2006/07 (Paper No. EMC/RCP/32/2007/03)

Mr. Dave Carlson and Mr. Henry Gan declared conflicts of interests on the matter and abstained from the discussions, except to provide clarifications to questions.

Mr. Luke Peacocke presented the audited PIMS results and bonus for FY2006/07 as follows:

The Panel was informed that Ernst & Young conducted an audit of the Performance Incentive Management System of EMC. A survey was carried out on:

- a. customers' responsiveness,
- b. satisfaction with the rules change service,
- c. satisfaction with the market assessment and dispute resolution services.

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Mr. Carlson, as CEO of EMC, informed the Panel that the purposes of the survey served the following:

1. to help verify the financial impact on the bonus and it helps to give good feedback from MPs and Panels on service
2. to allow EMC to understand where issues lie and to work closely with the industry and Panels to resolve all issues seriously

Performance Incentive Management System

Measurement	Target	Weight	Performance		Actual Points Allocated (Points)
			Average for period 1 April 2005 to 31 March 2006	Average for period 1 April 2006 to 31 March 2007	
Systems availability	99.85	25	99.96%	99.96%	18.33
Pricing accuracy	99.70	25	100.00%	100.00%	25.00
Settlement accuracy	99.90	25	99.99%	99.99%	22.50
Customer responsiveness	80.0	15	80.80%	100.00%	15.00
Market assessment satisfaction rating	80.0	5	94.12%	100.00%	5.00
Rule change panel satisfaction rating	80.0	5	73.90%	50.00%	-5.00
		100	NA	NA	80.83

EMC Revenue = \$27,808,574.78

Max PIMS Bonus = \$ 556,171.50

Maximum PIMS Bonus is \$600,000 or 2% of EMC revenue for FY2006/07 whichever is lower

Earned PIMS Bonus for FY2006/07 = $\frac{80.83}{100.00} \times \$556,171.50$

Earned PIMS Bonus for FY2006/07 = \$449,571.96

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The Panel noted the contents of the paper.

7.0 Proposed PIMS Targets for FY 2007/08 (Paper No. EMC/RCP/32/2007/04)

EMC sought the Panel's comments on EMC's proposed FY2007/08 Performance Targets under the Performance Incentive Management System (PIMS).

EMC assessed its performance in delivering the services listed below:-

a) Quantitative measures:

- Systems availability
- Pricing and information accuracy
- Settlement accuracy

b) Qualitative measures:

- Customer responsiveness
- Satisfaction with Rule change process
- Satisfaction with Market Assessment and Dispute Resolution services

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EMC proposed the following PIMS targets, measures and weightings for FY2007/08. The key change compared to FY2006/07 is the increase in the system availability target from 99.85 percent to 99.90 percent.

<i>Service</i>	<i>Minimum performance (i)</i>	<i>Target</i>	<i>Maximum performance (ii)</i>	<i>Bonus/penalty for performance above/below target;</i>	<i>Max possible reward/ penalty Pts out of 100 points</i>
<i>Systems</i>	99.80%	99.90% availability from unplanned outages (average of % availability from trading website, clearing system, and settlement system)	100.00%	Every 0.01% = +/- 2.50 points	25 points
<i>Pricing</i>	99.40%	99.70% of all trading days free of incidents caused by EMC error	100.00%	Every 0.03% = +/- 2.50 points	25 points
<i>Settlement</i>	99.80%	99.90% of all settlement invoices and payments free of EMC error	100.00%	Every 0.02% = +/- 5 points	25 points
<i>Responsiveness</i>	70.00%	80.00% customer satisfaction	90.00%	Every 1% = +/- 1.5 points	15 points
<i>Market assessment</i>	70.00%	80.00% customer satisfaction	90.00%	Every 2% = +/- 1.0 point	5 points
<i>Rule Changes</i>	70.00%	80.00% customer satisfaction	90.00%	Every 2% = +/- 1.0 point	5 points

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EMC highlighted that in proposing targets for FY2007/08, EMC had been mindful that:

- As the quantitative targets are already close to 100 percent, a small incremental increase has a large material impact (for example, the proposed increase in the system availability from 99.85 percent to 99.90 percent makes the target effectively 33 percent more difficult to achieve.
- Increases should be made gradually so that EMC has lead time to make any necessary changes to its systems and processes.
- There is a need to balance the desire for high system availability and accuracy with the investment cost required to achieve it.
- There is a need to continue to make the targets achievable, for the financial incentive to be effective.

Mr. Robin Langdale requested EMC to review the qualitative targets because, based on historic performance, higher targets for customer responsiveness and market assessment may be warranted.

The Panel suggested that the EMA, when approving EMC's PIMS targets, consider:

- Establishing a 'maximum' achievable absolute number limit for the quantitative measures, because as the targets are increased to approach 100 percent they are no longer exceedable and are therefore no longer meaningful for incentive purposes.
- Reviewing the qualitative targets because, based on historic performance, higher targets for customer responsiveness and market assessment may be warranted.

The Rules Change Panel:

- supported EMC's PIMS results for FY2006/07 and the PIMS bonus computation;
- considered EMC's proposals for the PIMS targets for FY2007/08 and provided comments to EMC and EMA.

The Panel thanked Ms. Coco Choo and Mr. Luke Peacocke for their attendance.

[Ms. Choo and Mr. Peacocke left the meeting].

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8.0 Guiding Principles for the Rules Change Panel
(Paper No. EMC/RCP/32/2007/01)

The Panel was informed that when the Pro-tem Rules Change Panel was set up in 2002 prior to market start and the following 7 guiding principles were endorsed by the PTRCP:

- Transparency
- Accountability
- Interest of the market
- Professionalism
- Efficiency
- Integrity
- Credibility

However, following market start in 2003, there was no official confirmation of these principles by the Rules Change Panel.

Mr Kng requested that EMC review the PTRCP principles and present them to the current RCP. In its review, EMC proposed to refine the guiding principles and taking into account the RCP's obligations under the Market Rules and also the original market design principles. EMC proposed that the principles be categorized as follows:

Outcome-based Principles

1. **(Required under Section 5.11.1 of Chapter 3 of the Market Rules)** Consider the EMA's functions and duties, where they relate to the operation of the wholesale electricity market, under sub-section 3(3) of the Electricity Act:
 - (a) to protect the interests of consumers with regard to
 - (i) the prices charged and other terms for the supply of electricity;
 - (ii) the reliability, availability and continuity of supply of electricity; and
 - (iii) the quality of electricity services provided;
 - (b) to promote
 - (i) the efficient use of electricity by consumers; and
 - (ii) economic efficiency and the maintenance of such efficiency in the electricity industry;
 - (c) to secure that electricity licensees whose prices are controlled by the Authority are able to provide an efficient service and maintain financial viability;

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(d) to ensure security of supply of electricity to consumers and to arrange for the secure operation of the transmission system in accordance with the market rules or other codes of practice;

(e) to create an economic regulatory framework in respect of the generation, transmission, import, export, trading and retail of electricity, the provision of market support services and the operation of any wholesale electricity market which

(i) promotes and safeguards competition and fair and efficient market conduct or, in the absence of a competitive market, prevents the misuse of monopoly or market power; and

(ii) provides non-discriminatory access to any wholesale electricity market and to transmission services and market support services;

2. Adhere to the design principles written in the Memorandum on Wholesale Market Design (2 August 2000) by PHB Hagler Bailly:

- a. Prices will be reflective of marginal costs
- b. Those that cause costs must face the costs they cause
- c. Risk will be allocated to the party best able to manage it
- d. These principles, and in particular unbundled marginal pricing, will be applied to the extent that the long-term gains outweigh the costs of implementing and maintaining the measure
- e. Equity, when it is addressed, must be a secondary consideration

Process-based Principles

3. Any decision made by a majority vote shall be final and not subject to review unless a recommendation has been referred back to the Panel for reconsideration by the EMC Board.
4. **(Required under Section 6.6 of Chapter 3 of the Market Rules)** Each Panel Proceeding must observe confidentiality provisions as set out in Section 6 of Chapter 3 of the Market Rules.
5. Each member must uphold integrity and professionalism at all times.
6. All Panel proceedings must be conducted in a time/cost-efficient manner.

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Regarding Point 2(a), Mr. Robin Langdale requested EMC to explain what price should be reflective of “marginal costs” meant. EMC explained that this is a generic economic concept that when prices are reflective of marginal costs, resources are most efficiently utilized.

The Panel felt that as market conditions has changed since the design principles were set in 2000 by PHB, it would be too rigid if they had to adhere to the design principles. In addition, the Panel felt that the principle is not fully explained and that could lead to arguments of what they meant. Thus the Panel decided the PHB design principles i.e. Point 2 be removed altogether from the new Guiding Principles.

EMC

On Point 3(1), Mr. Low Boon Tong stated that the EMC Board should not have the absolute right to reject a RCP recommendation on rule change. He suggested that in such cases, there should be a process for feedback to EMA or to RCP for the EMC Board's reasons behind that. EMC advised that rule changes rejected by the EMC Board are submitted to EMA for information.

Mr. Low was informed that the EMC Board has responsibilities under the market rules in relation to the rule changes.

Mr. Low noted that while MPs can take comfort from the fact that EMA now has majority ownership of EMC, this issue may need to be revisited if there are ownership changes. The Panel was informed that changes in legislation may be required if there is a need to change the role of the EMC Board. This is because also it is stated in the Electricity Act that the Market Company may propose market rule changes to the EMA for approval.

Subject to the deletion of Point 2, the Panel endorsed the Guiding Principles for the Rules Change Panel.

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9.0 Identification of Rule Changes required (arising from review of price revision in SWEM)

(Paper No. EMC/RCP/32/2007/02)

The paper listed identified changes that are required in the Market Rules in order to give effect to the recommendations supported by the Panel on the Review of Price Revision in the SWEM.

In summary, the Panel supported in principle that price revision should be allowed in SWEM. Further, the Panel also supported EMC's recommendations on price revision relating to Type 1, Type 2, Type 3 and Type 5 cases.

For Type 4 cases, Mr. Philip Tan proposed that price revision relating to such cases should be retained. He was concerned that consumers might end up paying higher prices should price revision relating to such cases be removed as recommended by the EMC. He requested that EMC first assess what would be the price impact on various parties had there been no such price revision using historical data.

Mr. Tay Swee Lee commented that to retain price revision relating to Type 4 cases would be inconsistent with Panel's decision to support price revision relating to Type 2 cases. This is because there should not be any price revision for Type 2 cases if all information/data used by the MCE were correct and deemed to be reflective of the prevailing conditions at the time when the MCE ran to produce the real-time schedules (RTS) (currently at T-5 minutes),

Mr. Teo added that in the Review paper, it was said that the only justification to have price relating to Type 4 cases is where the inputs used by the MCE are deemed incorrect or not reflective of the prevailing conditions at the time when the MCE runs to produce the RTS (of which such price revision will fall into Type 2 cases accordingly).

Mr. Robin Langdale asked what could be the possible reasons for no load shedding in real-time when the MCE predicted line violation(s) ex-ante. To that, Mr. Teo explained that it could be due a few possibilities. These included: load variation (i.e. actual load could vary from the forecast load), the lines have been loaded above their limits temporarily, load shifting has occurred in real-time or the line limits specified in the MCE might already have a 'safety buffer' built in. Mr Teo added that, notwithstanding these, if the MCE has used the most current valid information when it runs to produce the RTS, then as a matter of principle, there should not be any price revision simply because the MCE showed line violations (ex-ante) but there was no load shed (ex-post).

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Mr. Kay also asked if the price revision advisory notice issued to market participants could include information on the type of cases which the price revision relates to (i.e. Type 1, 2, etc.) and the procedures used by EMC in conducting the re-run. EMC agreed to explore this suggestion further.

EMC

10.0 Cancellation Procedures for Registered Facility
(Paper No. EMC/RCP/32/2007/268)

EMC proposed to amend the procedures pertaining to cancelling (de-registering) the registration of registered facilities.

The Panel was informed that a registered facility is required to be disconnected from the transmission system before the facility can be deregistered by EMC. For a load registered facility, physical disconnection could lead to termination of power supply to the load. This is not appropriate if the load facility is to continue withdrawing electricity from the grid. Thus, the EMC has proposed to amend the deregistration procedures so that physical disconnection is only required for deregistering a generation facility (i.e. Generation Registered Facility or Generation Settlement Facility).

EMC recommended that the RCP support the rule modification.

The Panel **supported** EMC's recommendation and to make the necessary recommendation to the EMC Board for adoption.

11.0 Removal of Registration Application Fee
(Paper No. EMC/RCP/32/2007/269)

EMC proposed to remove the registration application fee payable by an applicant to participate in the Singapore Wholesale Electricity Market. EMC concluded that the registration application fee:

1. is seen by some small producers as a high cost to participate in SWEM;
2. has negligible impact on portion of EMC fees collected on a per Mwh basis; and
3. if removed, is unlikely to result in undesirable behavior such as frivolous applications

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The following Panel members **SUPPORTED** the recommendations contained in the review paper:

Mr. Philip Tan	Mr. Lim Ah Kuan
Dr. Daniel Cheng	Mr. Kng Meng Hwee
Mr. Tay Swee Lee	Mr. Koh Kah Aik
Dr. Goh Bee Hua	Mr. Robin Langdale
Mr. Low Boon Tong	Mr. Henry Gan

The following **DID NOT SUPPORT** the recommendations contained in the review paper:

Mr. Dallon Kay

By majority of votes, the Panel **supported** EMC's recommendation and to make the necessary recommendation to the EMC Board for adoption.

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

Dave E Carlson
Chairman

Minutes taken by:
Eunice Koh
Senior Executive - Corporate Secretariat