

**MINUTES OF THE RULES CHANGE PANEL
27TH PANEL MEETING
HELD ON TUESDAY, 4 JULY 2006
AT 10.05AM
AT ENERGY MARKET CO. PTE LTD
9 RAFFLES PLACE #22-01
REPUBLIC PLAZA, SINGAPORE 048619**

Present: Dave Carlson (Chairman) Dallon Kay
Robin Langdale Tay Swee Lee
Kng Meng Hwee Philip Tan Pei Lip
Koh Kah Aik Francis Gomez
Henry Gan Dr. Daniel Cheng
Low Boon Tong

Absent with
apologies Lim Ah Kuan

In Attendance: Paul Poh
Poa Tiong Siaw Teo Wee Guan
Janice Leow Wang Jing

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 26th Rules Change Panel Meeting

The Minutes of the 26th Rules Change Panel meeting held on Thursday, 11 May 2006 was tabled and taken as read.

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

3.0 Matters Arising from the 26th Rules Change Panel Meeting held on 11 May 2006

The Panel noted that the matters arising as outlined had been completed except for:

- a. Imposition of Default Levy (Paper No. EMC/RCP/26/2006/254)

At the request of the Panel on issues pertaining to Default Levy, EMC held discussions with MSSL. Two possible options to integrate vesting contract settlement for retailers into the wholesale market are being studied. The study will be brought to the Panel when completed.

27th RCP Meeting – 4 July 2006

Action

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.

6.0 Consumer Representation on the Rules Change Panel (Paper No. EMC/RCP/27/2006/245)

At the 26th RCP Meeting held on 11 May 2006, the Panel gave its in-principle approval to EMC to propose changes to the market rules to add two consumer representatives to the RCP. The Panel also requested EMC to seek recommendations from panel members on consumer organizations for nominations.

The Panel was informed that the in selecting the appropriate consumer organisation, the following characteristics were deemed desirable:

1. Large number of members
2. Diversified membership base
3. Good track record
4. Suitable Organization Mission

The following guidelines were also considered to be important and adhered to in the assessment process:

1. Avoid organizations that are exclusionary along non-industrial themes such as race, religion and nationality etc.
2. Avoid organizations that consist of only a few members in narrowly defined industry or industries
3. Seek organizations that can effectively represent small or large consumers.

Mr. Robin Langdale recommended the Singapore International Chamber of Commerce "SICC". EMC met the SICC to discuss the proposal and the SICC has indicated that it supported the proposal and would be both willing and able to provide nominations.

27th RCP Meeting – 4 July 2006

Action

EMC also held discussions with the following organizations:

- i. Singapore Business Federation (SBF)
- ii. Singapore Manufacturers' Federation (SMa)
- iii. Consumer Association of Singapore (CASE)
- iv. Association of Small and Medium Enterprises (ASME)

EMC proposed the following to be on the **approved list of organizations** for nominating a consumer representative to the RCP:

- 1. Consumer Association of Singapore (CASE)**
- 2. Association of Small and Medium Enterprises (ASME)**
- 3. Singapore International Chamber of Commerce (SICC)**

Content of Rule Changes

EMC proposed the following in drafting rule changes:

1. Increase the size of the RCP to 15 members to include two representatives of electricity consumers.
2. Provide that the two representatives of electricity consumers shall be nominated by organizations from an approved list of organizations.
3. Provide that the nomination/appointment process for and requirements from these two representatives under the Market Rules shall be the same as those applying to existing members.
4. Provide that the approved list of organizations shall be annexed in Chapter 3 of the Market Rules.
5. Use of plain English in drafting changes and re-writing cumbersome rules.

Mr. Dallan Kay of Diamond Energy Pte Ltd circulated and tabled a letter dated 3 July 2006 to the Panel. In this letter, Mr. Kay expressed the view that the existing feedback channels for consumers are sufficient and the Industry & Consumer Feedback Branch for consumers has already been established by the EMA.

Mr. Kay also sought clarification on the appropriateness of having the proposed two consumer representatives or commencing initially with one consumer representative.

27th RCP Meeting – 4 July 2006

Action

Mr. Paul Poh explained that, at the initial discussion on consumer representation, it was felt that it would be beneficial to involve consumers at the beginning of the rules change process so that consumers' views can be taken into consideration. He also added that it is important to have consumer representation because about 60% of electricity costs paid by consumers is wholesale cost.

Mr. Poh also explained that the need to have representation by large consumers and small consumers is because their concerns are different and these have been discussed earlier.

Mr. Langdale opined that even if the consumer is not participating in the wholesale market, the consumer is paying for the energy and by being represented on the Panel, the consumer will be given the opportunity to look at decisions or changes to the rules on the basis of market efficiency.

Mr. Langdale also expressed concern that the RCP may grow too big and it will be difficult to manage. Mr. Poh informed the Panel that EMC had reviewed the entire structure and there is no necessity to increase the membership to more than 15.

Mr. Kay queried on the appropriateness of remunerating the consumer representatives. He stated that in the interest of cost to the market and minimizing that, the representatives should not be remunerated. Mr. Poh informed him that currently there is no proposal to remunerate these representatives. Under the market rules the EMC Board may prescribe remuneration for RCP members.

The Panel endorsed the list of approved organizations for the purpose of nominating consumer representatives on the Rules Change Panel.

The Panel supported the content of the rule changes and tasked EMC to propose changes to the text of the market rules to include two representatives of electricity consumers.

27th RCP Meeting – 4 July 2006

Action

7.0 Compensation Arising from Market Energy Price Revisions (Paper No. EMC/RCP/27/2006/253)

Mr. Paul Poh informed the Panel that, at the 26th RCP Meeting on 11 May 2006, this rule change proposal ('Proposal B') was supported by the Panel and presented to the EMC Board at its last meeting on 25 May 2006.

The rule change proposal examines compensation for generators who were paid a revised market energy price(s) (MEP) lower than their offer price(s) for the energy they had produced in real-time. Currently, the market rules do not prescribe any compensation for such affected generators

At the EMC Board meeting, the EMC Board decided to refer the matter back to the RCP for reconsideration on the following grounds:

- i. Under the current market design, it is intended that generators' offers be driven to reflect their marginal costs. This is consistent with the interpretation of offers adopted by the Market Clearing Engine (MCE) logic. In maximizing 'Net Benefit', the MCE assigns a value to each unit of fulfilled demand and takes generators' offers as the marginal costs of fulfilling that demand (see Objective Function in Section D.14 of Appendix 6D).
- ii. It is noted that uniform pricing applies under normal circumstances where there is no price revision. (This provides scarcity rents to incentivise generators to place offers that reflect their marginal costs). However, in cases where wrong MEPs have been determined by the MCE, the Market Rules provide for price revision.
- iii. The need for price revision is caused neither by the generators nor loads. MEP revision can have adverse financial impact on generators. Hence, it is fair to compensate affected generators.
- iv. However, compensation amounts to be paid to generators will be recovered from loads that, like generators, did not cause the need for a price revision. Hence, there is also a need to ensure that compensation is not more than necessary so as to safeguard consumers' interests.
- v. Thus, compensation, in such instances, is to ensure affected generators do not suffer 'out-of-pocket' losses, i.e. compensation is to enable generators to recover their marginal costs, and not to re-instate 'forgone profits'. Based on the current market design, generators' offers are the best proxies of their marginal costs of production.

27th RCP Meeting – 4 July 2006

Action

Hence, the proposal originally recommended by the EMC ('Proposal A') is consistent with market design principles.

In conclusion, uniform pricing should not be applied in determining the compensation amount for affected generator(s) arising from price revision.

Mr. Philip Tan commented that one should exercise care in the use of the term "uniform marginal prices". To him, the compensation amount determined under Proposal B is not based on paying affected generator(s) the 'uniform marginal price'. He understands the 'uniform marginal price' to mean the 'system marginal price' (i.e. the clearing price for the whole market). He stated that under Proposal B, an affected generating unit will be compensated based on its 'highest cleared offer price' of that generator, which is not equivalent to the 'system marginal price'. Mr Paul Poh clarified that paying a uniform marginal price meant paying a generator a uniform price for all quantities it produces. The offers in the diagram being illustrated refer to each generator's offer and not generator's offers of all generators in each generating company. Thus there is no misunderstanding of what paying a uniform marginal price meant.

Mr. Phillip Tan further pointed out that Proposal A potentially has an undesirable effect – it may make generators raise their offers since compensation amount determined under Proposal A is based on the offer stacks associated with the affected quantities of energy. If this happens, the offers put in by generators will be 'higher' than what the actual underlying costs of generators are and consequently, the market may generally clear with a higher price. Mr. Paul Poh explained that this concern was misplaced. Generators can submit high offers regardless of whether there is a re-run or not. Competition and measures against the exercise of market power should discipline against generators' offering uncompetitive prices. Compensation payments should not be used to ensure that generators do not offer high prices.

Mr. Koh Kah Aik referred the Panel to the PHB Report on "Unrestricted Energy Prices" (page 7) where it was stated that "since peaking generation plant may only run infrequently, it is important that when they do run, they receive sufficient revenue to ensure their viability". He believed this statement has relevance to the rule change proposal being discussed because it arose due to a peaking plant being run but was paid a revised price lower than its offer price. He reminded that affected (peaking) generators must be paid sufficiently to ensure their viability. In his view, the proposal of paying an affected generator based on its marginal costs (i.e. Proposal A) may not ensure such viability.

27th RCP Meeting – 4 July 2006

Action

Mr. Paul Poh explained that the peaking generator have full freedom to offer. It can offer in multiple bands or a single band and at prices that it decides will remunerate it adequately. For example, if a generator offers only one band, both proposal A and B will yield the same result. A peaking generator is free to offer in one band if that is the best way to recover its cost. Thus proposal A is workable for a peaking plant.

Mr. Robin Langdale commented that:

1. Proposal A is unsound because it is arbitrary in that it is not based on a gencos offer or on any measurement of a genco's cost, marginal or otherwise.
2. Any system of compensating gencos, other than Proposal B should ensure that no genco LOOSES from being dispatched and then paid less than their offer as a result of a rerun.

Mr. Paul Poh explained that generator's revised nodal price would have to be compared against its short run marginal cost to determine if the generator is making a loss. However, there will be endless disputes on what a generator's SRMC is. Who can then meaningfully decide on what the SRMC should be. Since the market design is intended to incentivise generators to offer their marginal cost, generators' offers are still the best proxy of their marginal cost.

Mr. Tay Swee Lee felt that the principle of determining compensation should be consistent with uniform pricing used in settlement. He contended that generators submit their offers based on the understanding that uniform pricing is used in settlement. Additionally, offers submitted by generators do not necessarily reflect their marginal costs in. As the generators would not know in advance that there would be a re-run, generators do not have the opportunity to revise the offers if the re-run compensation is different from the uniform pricing used in settlement. practice, even though the market design purports as such. His view was also shared by several other panel members.

Some RCP members also felt that Proposal B offers a 'middle-ground' solution between paying a generator based on the original price (i.e. equivalent to no re-run) and paying it based on the revised price. However, EMC disagreed with this. The rules currently require EMC to conduct a re-run to obtain the revised price for settlement if the original price determined initially was wrong.

27th RCP Meeting – 4 July 2006

Action

Hence, a comparison which involves using the original price is inappropriate. Instead, the comparison should involve what an affected generator currently gets ie the revised price, versus what it would get if Proposal A and Proposal B were put in place. Seen this light, Proposal A would instead offer the ‘middle-ground’ solution. However, EMC feels that there are other more important considerations (i.e. the main one being that affected generators should be compensated based on costs and not ‘lost profits’) in determining what is the appropriate amount of compensation to pay generators.

Mr. Henry Gan informed the Panel that the compensation payout has to be fair to the parties involved. There is a need to balance the interests of generators and consumers who both have not caused the need for reruns. Under most normal circumstances, generators will be paid based on the uniform system marginal price. However, they will be paid the revised price only when there is rerun, which rarely happens. The rule change proposal now offers compensation to generators adversely affected by a rerun, but the Panel should be mindful that the money will be recovered from consumers who are also not at fault. Additionally, the views of consumers are not represented in this rule change proposal discussion. Hence, the Panel needs to take into account the interests of consumers too. To him, Proposal B could include ‘lost profits’ for the generators at the expense of the consumers.

The Panel was asked if they would want to assess the financial impact under both proposals before making its final decision.

However, majority of the Panel decided not to have the assessment and to move forward with recommending Proposal B to the EMC Board.

Following the discussion, the rule change proposal was put to a vote. The record of vote is as follows:

FOR Proposal B:

Dr. Daniel Cheng
Mr. Low Boon Tong
Mr. Tay Swee Lee
Mr. Philip Tan
Mr. Robin Langdale

AGAINST Proposal B:

Mr. Francis Gomez
Mr. Henry Gan

27th RCP Meeting – 4 July 2006

Action

ABSTAINED:

Mr. Kng Meng Hwee
Mr. Dallon Kay

By majority vote, the Panel still recommends that the EMC Board adopt the rule change giving effect to Proposal B.

8.0 Treatment of Negative IEQ in Price Neutralisation (Paper No. EMC/RCP/27/2006/256)

The Panel was briefed on EMC's rule modification proposal for negative IEQs (Injection Energy Quantities) to be ignored in determining price neutralisation payments for each group of Embedded Generation Facilities and its associated load.

The Panel was informed that under the rule modification proposal:

- Negative IEQs are treated in the same way no matter which type of price neutralisation payment is due
- Charging for negative IEQ (at the relevant MEP) is consistent with the treatment of negative IEQ for all other (non-embedded) generators

The Panel was also informed that EMC's settlement systems would have to be modified to implement this change and the rule change can be implemented five business days after EMC publishes the EMA's approval of the change.

The Panel noted the contents of the paper.

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

9.0 Rewrite of Sections 3 and 6 of Chapter 2 (Paper No. EMC/RCP/27/2006/257)

EMC proposed to re-write Section 3 and 6 of Chapter 2 of the Market Rules. These sections were identified to be unnecessarily long and complex, complicated in drafting and potentially ambiguous. The paper concludes that the plain English re-write enhances the readability and accessibility of these sections of the Market Rules.

In addition, as part of this rewrite, some rule changes and clarifications have been made to improve clarity and remove ambiguities of the rules.

27th RCP Meeting – 4 July 2006

Action

The Panel noted the contents of the paper.

The Panel **supported** EMC's recommendation to re-write Section 3 and 6 of Chapter 2 of the Market Rules and the associated rule changes and would make the necessary recommendation to the EMC Board for adoption.

10.0 Rewrite of Sections 7.5 and 11 of Chapter 1
(Paper No. EMC/RCP/27/2006/258)

EMC proposed to re-write Sections 7.5 and 11 of Chapter 1 of the Market Rules. Section 7.5 of Chapter 1 governs the computation of time between two events, while section 11 of Chapter 1 governs the methods and timeline by which a notice is effected under the Market Rules, any Market Manual and the System Operation Manual.

In addition, as part of this rewrite, some rule changes and clarifications have been made to improve clarity and remove ambiguities of the rules

These sections were identified as being unnecessarily complex, and thus difficult for the readers to understand. Consequently, EMC proposes that these sections be rewritten in plain English.

The Panel noted the contents of the paper.

The Panel **supported** EMC's recommendation to re-write Section 3 and 6 of Chapter 2 of the Market Rules and the associated rule changes and would make the necessary recommendation to the EMC Board for adoption.

There being no other matters, the meeting ended at 12.40pm with a vote of thanks to the Chair.

Dave E Carlson
Chairman

Minutes taken by:
Eunice Koh
Market Panel Administrator