MINUTES OF THE RULES CHANGE PANEL
67th MEETING
HELD ON TUESDAY, 7 MAY 2013 AT 9.35AM
AT ENERGY MARKET CO. PTE LTD
238A THOMSON ROAD #11-01
NOVENA SQUARE, SINGAPORE 307684

Present: Dave Carlson
 Michael Wong
 Luke Peacocke
 Dallon Kay
 Kng Meng Hwee
 Daniel Lee

Toh Seong Wah
 Dr. Toh Mun Heng
 Sean Chan
 Phillip Tan
 Chan Hung Kwan

Absent with apologies: Pak-Juan Koe
 Low Cheong Kee

Loh Chin Seng
 Lawrence Lee

In Attendance: Paul Poh
 Lucia Loh
 Wang Jing

Tan Liang Ching
 Serena Ho
 Nerine Teo

1.0 Notice of Meeting

The Chairman called the meeting to order at 9.35am. The Notice and Agenda of the meeting were taken as read.

2.0 Confirmation of Minutes of the 66th Rules Change Panel Meeting

The Minutes of the 66th Rules Change Panel meeting held on 5 March 2013 were tabled.

As there were no amendments to the Minutes, the Rules Change Panel approved the Minutes.

2.1 Matters Arising

Item 1 – Proposed Provision for Price Revision

Ms. Serena Ho presented a brief description of price revision practices in two other ex-ante markets, namely the Australian National Electricity Market and the Argentina Wholesale Electricity Market.
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Mr. Michael Wong noted that the price revision practices in other markets covered cases for which incorrect inputs have been used to determine the ex-ante spot energy price. He said that the proposed price revision when generating units fail to revise their offers to accurately reflect their physical capabilities should be covered under the current Type 2 price reruns in the Singapore Wholesale Electricity Market (SWEM). Mr. Paul Poh clarified that such cases are not considered as incorrect inputs during the review of price revisions in 2008, it had been agreed that inputs used by the MCE will be taken as correct as of T-5 minutes, and that bids and offers from market participants that have been validated and accepted by the MCE are deemed to be correct. When EMC recommended that price be revised where an Emergency operating state occurs and there is significant variance of generators output from its dispatch instruction it is because significant impact on prices is expected rather than because the offers are considered to be input errors.

Mr. Wong then proposed that, in view of the 13 December 2011 episode, coupled with the findings from practices of other markets where price rerun should take place during such episode, and the member’s view at 66th RCP meeting that we should not be consistently wrong in price reruns, another review of price revision in the SWEM should be conducted again, five years after the one done in 2008. The Chairman recommended that, unless Mr. Wong strongly feels that it is an urgent issue, he could raise this proposal during the next RCP work plan prioritisation exercise instead, as the current work plan had just been agreed upon at the last RCP meeting.

3.0 Summary of Outstanding Rule Changes

The Panel noted the summary of outstanding rules change proposals.

4.0 Monitoring List

Under Item 5 – Cases of Non-Compliance with Dispatch Instructions Referred by the PSO to the MSCP for Investigation, Mr. Dallon Kay suggested that the column on “Reasons for non-compliance of dispatch instructions” be deleted as it may contain confidential information. Mr. Paul Poh pointed out that under the Market Rules Panel members are required to keep information received by them confidential. Mr. Daniel Lee suggested that confidential details regarding the reasons for non-compliance of dispatch instructions can be omitted but the reasons should still be made known.

The Panel noted the other contents of the paper.
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5.0 Rules Change Workplan Status Update

Under Item 1 – Demand side bidding in the Energy market, the Panel was informed that a determination paper from EMA is expected in June 2013.

The Panel noted the other contents of the Rules Change Workplan Status Update.

6.0 Publication of Total Available Offer for all Classes
(Paper No. EMC/RCP/67/2013/316)

Ms. Nerine Teo presented the proposed Market Rules to publish Total Available Offer Capacity for all products across all schedules. This was to give effect to the RCP’s decision at the 66th RCP Meeting to release this set of data for reasons described below:

- Market power risk is likely to reduce with new capacity entering the SWEM by 2013.
- Publication of data will enhance efficiencies in Futures Market and Demand Response initiatives.

Ms. Teo also informed that the proposed rule changes are in Chapter 6 Sections 7.7.3.5 to 7.7.3.7 and Chapter 6 Sections 9.2.4.5 to 9.2.4.7

The Implementation Time required for the rule change will be 19 man-weeks and the Total Cost required will be $57,000, coming from EMC’s Budget – RCP Contingency Budget.

The RCP unanimously supported the rules modification and the EMC will make its recommendation to the Board.

7.0 Review of Constraint Violation Penalties
(Paper No. EMC/RCP/67/2013/CP41)

Ms. Lucia Loh presented the concept paper reviewing the constraint violation penalty (CVP) structure, an initiative triggered by a contingency event on 15 August 2011 where reserve was prioritized over energy in an energy deficit situation. In addition, the paper also examined whether an increasing proportion of Non-Frequency Responsive (NFR) units could lead to deficits in ancillary services procurement. She informed the Panel that, following the review, EMC proposed introducing Stepwise CVP for ancillary services deficit.
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Mr. Kay asked for the rationale for setting the CVP level for contingency reserve deficit lower than that of primary reserve and secondary reserve, when contingency reserve can be activated manually and would contribute to normalising the system. Ms. Loh clarified that primary reserve is considered more critical for the system, since it is meant to arrest falls in system frequency and has a shorter response time. Moreover, the CVP levels are meant to prioritise the scheduling of reserve, which is independent of whether they are activated in real-time.

Mr. Michael Wong questioned on the logic in MCE clearance to use the value of Energy as 5000-4500=$500/MWh rather than the CVP value of $5000/MWh when prioritizing against other items such as Reserves. He suspected that this was the main cause of the incident where Reserves were dispatched rather than Energy albeit CVP for Energy was higher; and he requested the team to revisit the logic. Mr. Paul Poh explained that this is how the MCE works to determine Net benefit. The Chairman urged this to be discussed offline.

Mr. Michael Wong questioned on the proposed CVP values for Reserves. He noted that the Reserves were proposed to split into two or three blocks – with the first one a ‘Core’ Reserve which should come with a higher CVP value. Since the ‘non-core’ blocks were calculated to have much lower CVP values below $200/MWh, the ‘Core’ block should be valued higher than $4500/4000/3500/MWh for primary/secondary/contingency reserves respectively, so that the average reserve CVPs would be kept whole at the current values.

Mr. Tan Liang Ching replied that stepwise CVPs better reflect the value of various reserve/regulation quantities to the system, where the first CVP block is the core quantity and thus valued highly at levels between $3000 - $4500. He added that the original CVP levels for reserve were set at market start, taking alignment from deficit energy CVP, and was set to accurately reflect the valuation of reserve at that time.

The Chairman queried that if the system is under stress and energy prices approach the price cap, what products would be procured before energy requirements are met. Mr. Paul Poh replied that, in such situations, core reserve will be prioritized before energy.

The Panel was then informed that at the 20th Meeting of the Technical Working Group (TWG) the TWG:

• unanimously recommended that the RCP support Stepwise CVP Option 6 over Option 5R and the Current CVP formulation; and

• by majority vote, recommended that the RCP support applying Option 6 consistently across all periods.

Action

Approved at the 68th RCP Meeting
Held on 9 July 2013

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Mr. Michael Wong noticed from the simulation dispatch outcomes of the recommended Option 6 that the energy deficit has not been reduced effectively and that there remained a significant energy deficit of about 300 to 400MW; and as such the Option 6 seemed to be not effective in achieving the objective of the stepwise CVP proposal. He questioned whether the TWG was clear of the objectives of the proposal when they evaluated and recommended Option 6, Ms. Loh replied that the TWG’s recommendation was made on the basis of energy deficit reduction and proportion of reserve requirements met.

Mr. Wong further questioned whether Option 6 achieved the desired optimal outcomes. If the desired outcomes should reflect the correct prioritization, we should observe core reserve requirements to be dispatched first, followed by energy requirements next, and finally balanced by other remaining reserve quantities. As such, his view was that Option 6 does not seem optimal. He suggested that the TWG team should work out the set of desired outcomes first and then compare the simulation outcomes of Options 1 to 6 to see which option gives the most optimal results i.e. the one giving outcomes closest to the desired outcomes.

Mr. Kng Meng Hwee noted that none of the options could eliminate energy deficits entirely during the 15 August incident, and every option entails some form of compromise. He added that while Option 5R minimizes energy deficit, it led to extremely high reserve deficits. Hence, Option 6 was crafted to strike a balance.

Mr. Kay noted that the introduction of demand side bidding and the resulting potential impact has not been considered. He suggested deferring this proposal until the implementation of demand side bidding in the market. Mr. Tan opined that while demand side bidding could reduce the occurrence of certain contingency situations, the key of the proposal was that the MCE currently prioritises all reserve over energy, contrary to design intentions. Thus, he recommended implementing the proposal now as a complementary tool to demand side bidding.

Mr. Chan Hung Kwan queried if there was a risk of not implementing the proposed changes to the CVPs, or if consideration of the proposal could be deferred given that energy deficit situations do not happen frequently. Mr. Tan said that implementing the proposal would help the PSO manage energy deficit situations similar to that of 15 August, and is intended to mitigate the severity of such events in the future were they to occur again.

Mr. Peacocke said that he supports progressing with the proposal as there is an improvement with Stepwise CVPs. He requested that the intent of prioritising core ancillary services before Energy be documented, as it was not clear from Table 6.
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A. The following Panel members voted to support the implementation of Option 6:

- Luke Peacocke (Representative of Generation Licensee)
- Phillip Tan (Person experienced in Financial Matters)
- Kng Meng Hwee (Representative of the PSO)
- Toh Seong Wah (Representative of the EMC)
- Toh Mun Heng (Representative for the interests of consumers of Electricity in Singapore)
- Sean Chan (Representative of Retail Electricity Licensee)
- Chan Hung Kwan (Representative of Transmission Licensee)
- Daniel Lee (Representative of Generation Licensee)

The following Panel members voted not to support the implementation of Option 6:

- Michael Wong (Representative of Retail Electricity License)
- Dallon Kay (Representative of the Wholesale Electricity Market Trader)

B. The following Panel members voted to support applying Option 6 consistently across all periods:

- Luke Peacocke (Representative of Generation Licensee)
- Phillip Tan (Person experienced in Financial Matters)
- Kng Meng Hwee (Representative of the PSO)
- Toh Seong Wah (Representative of the EMC)
- Toh Mun Heng (Representative for the interests of consumers of Electricity in Singapore)
- Chan Hung Kwan (Representative of Transmission Licensee)
- Daniel Lee (Representative of Generation Licensee)

The following Panel member voted not to support applying Option 6 consistently across all periods:

- Dallon Kay (Representative of the Wholesale Electricity Market Trader)

The following Panel members abstained from voting:

- Michael Wong (Representative of Retail Electricity Licensee)
- Sean Chan (Representative of Retail Electricity Licensee)

Thus, the Panel, by majority vote, supported the proposal to apply Option 6 consistently across all periods.
There being no other matters, the meeting ended at 11.55am.

David E. Carlson
Chairman

Minutes taken by:
Eunice Koh
Sr. Executive, Corporate Secretariat