

**MINUTES OF THE RULES CHANGE PANEL
17th PANEL MEETING
HELD ON TUESDAY, 11 JANUARY 2005 AT 10.10AM
AT ENERGY MARKET CO. PTE LTD
9 RAFFLES PLACE #22-01
REPUBLIC PLAZA, SINGAPORE 048619**

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

The Chairman welcomed Mr. Low Boon Tong of PowerSeraya to the Panel and to the meeting.

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 15th Rules Change Panel Meeting

The Minutes of the 16th Rules Change Panel Meeting held on Tuesday, 30th November 2004, 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.

Item 2.0 - Study of the Accuracy of the Very Short Term Load Forecast (Concept Paper No. EMC/RCP/16/2004/02)

The Panel was informed that EMC is currently working on examining the scope of study with the TWG. The Panel will be kept informed of the outcome.

EMC

4.0 Monitoring List

The Panel noted the contents of the paper.

EMC will continue to monitor the situation and will provide an update to the Panel.

Mr. Eu Pui Sun highlighted that it is not fair to treat reserve from IL providers as the same kind of reserve provided by the generators. This is because these two reserves are of different quality wherein the generators are automatically called on first to respond to a contingency event. Despite this priority use of reserve from generators, the IL providers and generators receive same quantum of payment.

Thus, monitoring only the reserve payments made to the generators when not available to provide reserve (i.e. when tripped) may not send correct economic signal. Mr. Eu proposed that reserve payments made to the IL providers, when they are not available to provide reserve, should also be monitored in a similar way.

In response, EMC informed the Panel that MAU is currently investigating the development of a framework to monitor reserve provided by IL providers.

5.0 Dispute Resolution Process (Paper No. EMC/RCP/17/2005/240)

Background

This paper assessed the rule change proposal submitted by the Dispute Resolution Counsellor on the dispute resolution process set out in Chapter 3, Section 3 of the market rules.

The RCP first considered this rule change paper at its last meeting held on 02 November 04. At that meeting, the RCP in-principle supported the following proposed changes by DRC:

- Modifications to the current dispute management system (DMS);
- Making mediation a mandatory part of the dispute resolution process (DRP) in the market rules (MR);
- Modifications to the arbitration process;
- Subject disputes between MP-MP (or MP-MSSL) arising from the MR, MM or SOM to mandatory DRP in the MR

At its last meeting, the RCP also discussed the application of the DRP in MR to disputes arising from agreements between MP-MP (or MP-MSSL).

Under the current rules, such application is optional. The DRC is proposing to make such application mandatory but this will apply only to future but not existing, agreements.

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However, the RCP was of the view that many existing agreements between MPs/MSSL, being regulatory in nature, have no specified expiry dates. Hence, a mandatory DRP that excludes such existing agreements would be of limited use. Thus, if we make the application of DRP in the MR mandatory for a certain type of agreements, then this should apply to all such agreements regardless of the time when they are signed.

The RCP requested EMC to consult MPs /MSSL on:

- the types of existing agreements to be subject to mandatory DRP in the MR
- whether they still support all of DRC's proposed changes, assuming mandatory application of DRP to the agreements

The RCP asked to defer the discussion on the rest of DRC's proposed changes until EMC has addressed these two queries.

EMC's Findings

EMC informed the RCP that it consulted the industry on the two queries by sending a questionnaire to MPs and MSSL. A total of 8 respondents (Senoko, Seraya, Tuas, NEA, SembCorp, Keppel Energy, MSSL and SPPA) completed the questionnaire.

EMC reported its findings and recommendations based on the consultation as follows:

Query 1: Types of existing agreements to be subject to mandatory application.

| AGREEMENTS/ CONTRACTS | MPs'/MSSL's support for mandatory application of DRP in the MR | Legal Implications |
|---|--|--|
| Metering Service Agreement (signed between MSSL and Gencos/DMPs) | Yes (Unanimous support from all 6 relevant respondents) | No amendment of Agreement is required. |
| Vesting Contract (signed between MSSL and Gencos) | Yes (Unanimous support from all 6 relevant respondents) | No amendment of Agreement is required. |
| Market Support Services Agreement (signed between MSSL and retailers) | Yes (Majority support from relevant respondents – 4 'For'; 2 'Against'.) MSSL and Keppel Energy are against it. | No amendment of Agreement is required. |

| | | |
|---|--|---|
| Connection Agreement (signed between SPPA and Gencos) | Yes (Majority support from relevant respondents – 5 'For'; 1 'Against') SPPA against it; Reasons given: agreement deals with long-term infrastructural investment; grid charges handled outside wholesale market administered by EMC | No amendment of Agreement is required. |
| Retailer UoS Agreement (signed between SPPA and retailers) | Yes (Majority support from all relevant respondents – 4 'For'; 2 'Against') SPPA and Keppel Energy against it. | No amendment of Agreement is required. |
| Agency Agreement (signed between MSSL and SPPA) | No MSSL and SPPA are the only two parties to this Agreement. Both parties prefer to keep the application of the DRP in the MR optional. | N.A. (since both parties involved in this Agreement do not support mandatory application) |
| Conditions of Service (signed between MSSL and Contestable Consumers) | No (agreement relates to retail electricity market. Hence, it should not be subject to mandatory DRP application. In any case, MSSL prefers optional application) | N.A. (since MSSL does not support mandatory application) |
| Bilateral Financial Contracts (signed between MP and MP) | N.A. MPs indicated optional application of this. | Contracts may contain various dispute resolution mechanisms not governed by the MR; they are purely commercial, voluntary arrangements between two MPs. Thus, it is not feasible to subject this type of contracts to mandatory DRP. Best to leave application of DRP optional. |

Based on the above findings, EMC concluded that most MPs/MSSL support the following agreements to be subject to mandatory DRP in the MR:

- Metering Service Agreement
- Vesting Contract
- Market Support Services Agreement
- Connection Agreement
- Retailer UoS Agreement

EMC also informed the Panel that the above agreements are regulatory in nature. In addition, EMC's lawyers have confirmed that these agreements need not be amended if EMC were to change the MR to have mandatory DRP in the MR applied to these agreements.

In its recommendation, EMC asked the Panel to support:

- (i) mandatory application of the DRP in the MR to the following (existing as well as future) agreements:
 - **MSSL - MP Agreement;**
 - **Vesting Contract;**
 - **Market Support Services Agreement;**
 - **Connection Agreement; and**
 - **Retailer Use of System Agreement.**
- (ii) for those agreements between MPs (and between MP and MSSL) not listed in (i) above, the DRP in the MR applies only if the parties involved agree to it.

Some members of the Panel expressed their concerns with regard to subjecting the following agreements to mandatory DRP in the MR:

Market Support Services Agreement

Mr. Manohar informed the Panel that SP Services prefer to have a flexible arrangement for this agreement. He requested to keep the application of the DRP in the MR optional for this agreement since this agreement covers services which are not subject to market rules.

As there was no unanimous decision from the Panel, the vote of each member was separately recorded. All Panel members voted for mandatory application of the DRP in the MR to this agreement, except for Mr. Manohar.

Connection Agreement and Retailer UoS Agreement

Dr. Daniel Cheng (SPPA) expressed reservations over subjecting these two agreements to mandatory DRP in the MR. His main reason was that under the proposed rules by DRC, the parties are required to raise a dispute within 180 days from which the cause of action accrued. In contrast, under common law, a dispute can be raised within 6 years. In the view of SPPA the time period under the proposed MR to raise dispute is too short and not appropriate for certain agreements which deal with long-term infrastructural investment like the Connection Agreement.

In relation to the Connection Agreement, Dr Cheng explained that the implementation of a generation connection would entail physical installation of transmission assets which typically took several years to complete. A dispute raised near the end of the implementation phase of a project could potentially be traced several years back to the moment when the connection agreement was executed prior to the installation of the transmission assets.

In relation to the Retailer UoS Agreement, Dr Cheng explained that grid (i.e. Use-of-System or UoS) charges were settled based upon the same meter readings used for energy settlement, although grid charges are levied outside the energy market and the scope of the MR does not cover the settlement of grid charges. As the energy market allows for meter readings to be finalized in 250 business days, a reasonable time interval should be allowed for the retailers and SPPA to raise any dispute after such finalized meter readings were made known to the affected parties.

The other Panel members agreed with Dr Cheng's views. They felt that special provisions should be made in the MR to allow for a longer time period for the relevant parties to raise disputes relating to these two agreements. Dr Cheng told the Panel that SPPA would be agreeable to subject these two agreements to mandatory DRP in the MR if exceptions are made for additional time commensurate with the nature and scope of the agreements at hand to raise disputes between the corresponding counter-parties.

The Chairman requested EMC to work with SPPA in allowing parties a longer time period to raise disputes relating to these two agreements.

EMC

RCP's conclusion

The RCP supported EMC's recommendation to subject:

- **MSSL - MP Agreement;**
- **Vesting Contract;**
- **Market Support Services Agreement;**
- **Connection Agreement; and**
- **Retailer Use of System Agreement**

to mandatory DRP in the MR (subject to provisions for longer and reasonable time periods to raise disputes relating to generation connection agreement and retailer UoS agreement). As for all other agreements between MPs/MSSL not listed above, the application of the DRP in the MR is optional.

Query 2: Whether MPs/MSSL still support all the DRC's proposed changes, assuming mandatory DRP were to apply to existing agreements.

EMC informed the Panel that majority of the respondents have re-indicated that they still support DRC's proposed changes. Specifically, these proposed changes are:

#1 – Modifications to the current Dispute Management System

#2 – Making Mediation a mandatory part of the dispute resolution process

#3 – Modifying the arbitration process and

#4 – Providing parties with a one-stop centre for dispute resolution

#5 – Dispute Resolution process is not applicable to disputes regarding the PSO fees

#6 – Functions and Duties of the DRC

#7 – Modifying composition of the DCRP

#8 – Appointment, Removal and Tenure of DRC and DCRP

#9 – Removing discretionary power of DRC

#10 – Power in extending time period

#11 – Time period to raise disputes

#12 – Review of dispute resolution process

#13 – Publication of summary of dispute

#14 – Removing restrictions on the form of notices

Proposed changes #1 to #4 had been discussed by the RCP its last RCP meeting. The RCP re-affirmed its support for these changes at this meeting.

EMC then presented the rest of the proposed changes to the Panel, i.e. from #5 to #14. The RCP supported all these changes.

The RCP tasked EMC to work on the drafting of changes to the MR to give effect to all the proposed changes supported by the RCP in this meeting.

EMC will table the draft rule changes to the RCP in due course.

6.0 Information Policy (Paper No.: EMC/RCP/17/2005/241)

The rule modification submission is to provide for an RCP-endorsed information policy to be applied when determining if EMC-generated information is suitable for disclosure. It also modifies the confidentiality provision in the Market Rules to exclude information determined by the information policy to be releasable. It potentially allows efficiency-enhancing information to be made available to the market and enhance its efficiency.

The Panel was informed that the proposed text of modifications was posted on EMC's website and Senoko Power Ltd had sent their comments in their letter dated 10 January 2004. Senoko's letter was circulated to the Panel.

The RCP's view was that the thrusts of Senoko's concerns were:

- a) EMC's subjective discretion in deciding based on the tests in the information policy if certain information is releasable.
- b) the absence of safeguards to ensure EMC is diligent and thorough in evaluating if information can be released, and
- c) the subjective nature of the tests used in the information policy.
- d) without seeing the tests applied there was concern over the robustness of the application of the subjective tests

The Panel was also concerned that the proposed rule change seemed to provide EMC with the power to decide on what information is confidential without prior consultation with market participants.

EMC replied that the information policy requires that if any market participant can be identified in the information being assessed, the identified market participant(s) must be consulted.

The Panel supported this submission subject to the following amendments:

- The application and conclusions of the tests carried out under the information policy be published before the release of the information.
- Market participants should be allowed to bring their disagreement to EMC's assessment before the Market Surveillance and Compliance Panel.
- The National Security Test be the first test to be applied
- The policy will be reviewed annually and refined in the light of experience gained in its implementation.

The Panel requested EMC to circulate the above changes to the Panel.

EMC

7.0 PSO BUDGET (Paper No.: EMC/RCP/17/2005/07)

Mr. Kok Shook Kwong informed the Panel that he would abstain from the discussion on the PSO's Budget.

The Panel invited Ms. Glenda Ong (Head Admin – PSOD) to the meeting.

Ms. Ong presented the PSO Proposed Expenditure and Fees for the Fiscal Year FY05/06 commencing 1 April 2005.

The Panel noted the contents of the paper and had no comments on the Proposed Expenditure and Fees.

The Panel thanked Ms. Ong for her presentation.

The Panel was informed that it is required by the Market Rules to submit a report of its review of the PSO budget to both the PSO and the EMA for consideration. This report is to be submitted 60 days before the start of the new fiscal year. EMC would prepare this report on behalf of the Panel for submission to the PSO and EMA.

EMC

8.0 EMC Budget and PIMS for FY 2005/06

(Paper No.: EMC/RCP/17/2005/07)

Mr. Allan Dawson, Chairman of RCP and Mr. Kok Shook Kwong informed the Panel that they would abstain from the discussion on EMC's Budget.

The Panel invited Mr. Tan Zing Yuen and Mr. Gan Bock Yeng of EMC to the meeting.

Mr. Tan Zing Yuen, Chief Financial Officer of EMC presented the Proposed Budget and Fees for FY2005/06 and the Performance Incentive Targets for FY2005/06 to the Panel.

The Panel was informed that under the Market Rules and EMC's Market Licence, EMC is obliged to consult the Rules Change Panel on its Proposed Budget and Fees for the financial year 1 April 2005 to 31 March 2006, prior to submitting it to the Regulator for approval. The Panel was requested to consider and provide its views on the Budget so that EMC may take these into account in seeking formal approval from EMA.

EMC is also required to publish the proposed Budget and Fees to invited interested parties to make submissions to the RCP on the Budget. The Panel was also informed that EMC had published the Proposed Budget and Fees for FY2005 on its website and received comments from PowerSeraya Limited. EMC had responded to PowerSeraya in its letter dated 11 January 2005. Copies of both letters were circulated to the Panel for information.

New Economic Regulation Regime

The Panel was informed that the Proposed Budget and Fees are prepared based on the new economic regulation regime approved by the EMA. The new economic regulation regime took effect from 1 October 2004.

The new regime incorporates a revenue cap and a performance incentive ("PIMS") bonus. The revenue cap comprises the EMC budgeted operating expenses and a profit margin that gives a post-tax return on EMC's assets of 9.9%. Assets include both EMC's non-current and current assets but exclude cash and the receivables derived from trades conducted in the NEMS.

The revenue cap for FY 2004/2005 is the first year of the new regime and is based on the budget approved by EMA on 2 March 2004.

The revenue cap for FY 2005/2006 will be based on the budget as proposed in this paper.

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The revenue cap for FY 2006/2007 and FY 2007/2008 will be based on the cap for FY 2005/2006, adjusted by CPI – X. CPI is the change in consumer price index published by the Department of Statistics and X is the efficiency factor which is set at 0.6%.

The proposed budget does not include any exogenous activity. Any expenditure arising from exogenous factors will be subject to a separate budget which will be approved separately.

The expenditure for the Market Surveillance and Compliance Panel and the Dispute Resolution Counsellor under the Market Assessment Unit are subject to periodic review by EMA and any variation in between actual and planned Panel activities may result in a change in the revenue for the year.

Rule change as a result of the change in the economic regulation regime

EMA has advised EMC that under the new economic regulation framework for EMC, it may not be necessary for EMC to seek EMA's approval for its annual budget starting from FY 2006/2007. EMA has requested that EMC seeks the RCP's views on this matter.

EMC recommends that the market rules be amended so that EMC need not seek RCP's comments or EMA's approval for its budget starting from FY 2006/2007. EMC propose that EMC will instead advise the RCP and EMA annually.

The Panel's comments

The Panel agreed to EMA's proposal to propose a rule change to make it unnecessary for EMC to seek the RCP's comments and EMA's approval of its annual budget and fees except in the year the revenue cap is to be reset.

The Panel agreed to represent the Market in reviewing EMC's Budget and Fees in determining EMC's revenue cap in the year when the revenue cap is to be reset.

The Panel requested the EMA to propose a rule change for the Panel's consideration.

EMC

Strategy and Key Initiatives

Strategic Commitments

The Panel was informed that the EMC Board had approved Management's strategic direction for the business as outlined in the Strategic Business Plan 2004-2009 and IT Roadmap 2004-2009.

In addition to this, Management has mapped out a Market Clearing Engine Roadmap to guide the evolution of the MCE development.

Key initiatives for the year

The following key initiatives are included in the budget:

- Re-platforming of the database and application servers (IT Roadmap)
 - Existing hardware and operating systems at end of technological lives.
 - will not be supported by end 2005
 - risk of the application software not being supported.
- Data delivery project (IT Roadmap)
 - to improve the quality of business information
 - second phase of our database project
- Enhancement of MCE functionalities to improve capability and usability for users (MCE Roadmap)
- Restructuring of EMC balance sheet to provide a balance between equity and external debt in accordance with the agreement between EMC's Shareholders.

Budget Assumptions

The Budget for FY 2005/06 is based on the following assumptions.

- Business as Usual - no major changes in the scope of EMC's business in 2005/06.
- Operational Efficiencies - Business processes and systems reaching a steady operating state.

Profit and Loss

| | Budget 2004/05 \$M | Budget 2005/06 \$M | Variance \$M |
|---------------------------------|-----------------------------------|-----------------------------------|-------------------------|
| Revenue Cap | 29.59 | 28.59 | (1.00) |
| Operating expenses | | | |
| Manpower | 8.23 | 8.69 | 0.46 |
| Depreciation & amortisation | 7.09 | 6.34 | (0.75) |
| Other operating expenses | 11.82 | 11.31 | (0.51) |
| Total operating expenses | 27.14 | 26.34 | (0.80) |
| Profit before taxation | 2.45 | 2.25 | (0.20) |
| Taxation | 0.54 | 0.45 | 0.09 |
| Profit after taxation | 1.91 | 1.80 | (0.11) |

Reconciliation of EMC net projected efficiency gains for FY 2004/2005 and FY 2005/2006

| | |
|---|---------------------------|
| Projected efficiency gain over FY 2004/2005 | \$1.49M |
| <i>Less:</i> | |
| Projected increase in budgeted operating costs over FY2004/2005 | (\$0.64M) |
| EMC efficiency gain | <u>\$0.85M</u> |
| Increase in market licence fee | <u>\$0.05M</u> |
| Net efficiency gain delivered to the market in FY 2005/2006 budget | <u>\$0.80M</u> |

For FY 2005/06 compared to FY 2004/05, EMC will achieve efficiency gains in the following areas:

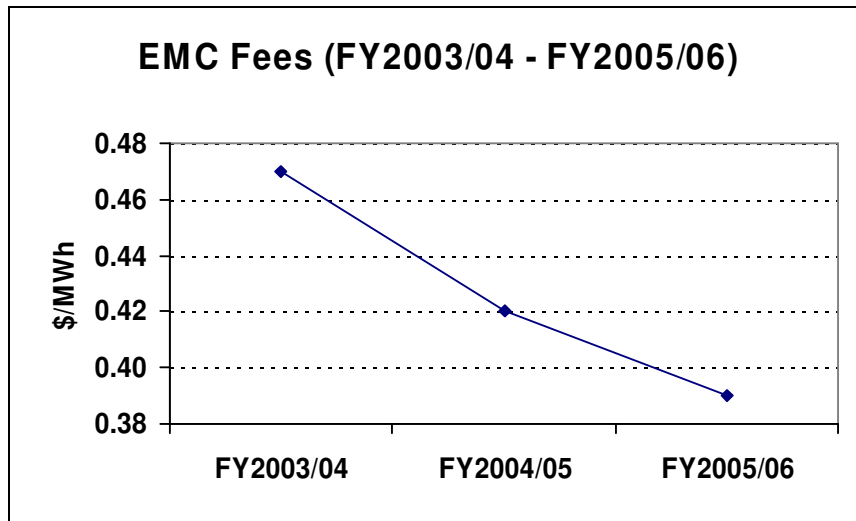
| Areas of Efficiency gain | Amount \$M | Reasons |
|--|---------------|--|
| Depreciation | 0.75 | Fixed assets, predominantly hardware, that are to be replaced this year are expected to be made at lower cost |
| Insurance | 0.19 | A reduction was achieved as a result of a review of the various policies to optimize the structure of the insurance program |
| Professional fees | 0.25 | As EMC develops, there is less need for professional and consultants' assistance. This is in line with EMC's in-source policies. It should be noted that this efficiency gain will significantly off-set the increase in our salary cost as a result of in-sourcing policy change. |
| Rental | 0.20 | EMC renegotiated the lease of the office premises at Republic Plaza ahead of current lease's expiry to take advantage of the soft office rental market. The revised lease took effect from 1 June 2004. |
| NEMS System costs | 0.10 | With replacement of the servers to be made towards the later part of the next FY and continuous incremental upgrades and enhancements to keep the systems up to date, cost savings are expected. |
| Total projected efficiency gain | 1.49 | |

EMC's Indicative Fees

The fee income is based on the recently approved revenue cap regime. It comprises the total budgeted operating expenses plus a profit margin based on an agreed formula.

This revenue cap for a particular fiscal year may be adjusted for any exogenous factors that may arise during the budget period.

The revenue for 2005/06 is projected to be \$28.6M, \$1M lower than the revenue cap for FY2004/05.



The above revenue translates to \$0.39¹ per MWh fee levied on NEMS participants. The fee for FY 2004/2005 is approximately \$0.42 per MWh. This therefore represents a reduction of \$0.03 per MWh compared to FY2004/05.

Increase in expenses

EMC will increase its operating expenses in the following areas:

| Areas of projected increase | |
|------------------------------------|----------------|
| Manpower | \$0.46M |
| Interest | \$0.16M |
| Market licence fee payable to EMA | \$0.05M |
| Others | \$0.02M |
| Total projected increase | \$0.69M |

¹ The fee is based on the projected energy traded per month of 6.13 million MWh. The energy traded for FY 2004/2005 is approximately 5.81 million MWh per month.
 Approved at the 18th RCP Meeting held on 15th March 2005

The increase of expenditure within EMC’s budget include the following:

Manpower Costs (\$0.46m) – Manpower costs increase reflect the changes in strategy to insource key functionalities in IT, development and training, directors’ fees and other manpower related costs.

Interest Expenses (\$0.16m) – This is due to projected increase in interest rates and the refinancing of external bank loans.

Market Licence Fee (\$0.05m) – EMC’s annual market licence fee is set by the EMA and it is projected to increase by 2.4% over last year’s budget.

The Panel’s comments

The Panel requested Management to elaborate on the areas of in-sourcing and the benefits to be derived from in-sourcing. Management referred the Panel to the reply given to PowerSeraya Ltd/Seraya Energy Pte Ltd as follows:

“The key functions to be in-sourced will be in the IT and Communications areas. Insourcing will allow the knowledge capital and expertise gained to be retained in the Company. It reduces the risks of over-dependence on external expertise and allows EMC to manage its key personnel retention. While the overall costs in FY 2005/06 will increase slightly, the EMC Board and Management believe that costs savings will be evident in future years”.

Capital Expenditure

| Description | \$M | |
|---|------------|--|
| NEMS system hardware replacement | 2.5 | Replatforming of database and application servers |
| Database split and delivery project | 0.8 | 2nd phase of database split project. Improve tools, enhance quality of information |
| Enhancement of MCE in line with MCE Roadmap | 1.0 | Enhancement of functionalities |
| Enhancement of settlement functionalities | 0.2 | Enhancement of functionalities |
| Market evolution subject to RCP approval | 0.5 | Systems changes as a result of rule changes. |
| Others | 0.5 | |
| Total | 5.5 | |

The incurring expenditure will be subject to the EMC sourcing and approval process with detailed justification based on the merits of each project’s business case.

Benchmarking/Cost comparison against other markets

There is not much published information that is currently available for EMC to make a comparison. To obtain comparative information from more markets, EMC is leading a benchmarking exercise with members of APeX. 15 markets have indicated that they are likely to participate in the survey. This survey should provide a far more effective means of comparing EMC's performance with its counterparts in other countries from next year.

Restructuring of Balance Sheet

Under the Shareholders' Agreement, the shareholders agreed that the operation of EMC should be funded equally by shareholders' funds and external bank borrowing.

Management has recommended that in order to meet the terms of the Shareholders' Agreement, the Company should reduce the share capital by \$4m and refinance the long-term funding from bank loans.

The bank loan will be \$8m and the shareholders' funds comprising share capital and accumulated reserves are projected to be approximately \$8m. This is EMC's intended long-term financial structure of the Company.

PERFORMANCE INCENTIVE MANAGEMENT SYSTEM – TARGETS AND MEASURES FOR FY 2005/06

The Panel was informed that EMA, in May 2004, approved EMC's performance incentive management system ("PIMS") and a set of targets and measures for the year commencing 1 April 2004 for FY2004/05.

Under the approved PIMS, EMC is eligible to earn a bonus of up to \$600,000 or 2% of its revenue for performance above the approved targets. However, performance below any of the targets counts against any potential bonus. EMC's performance management system only covers incentives to improve the quality of its service provision.

Submission by interested parties – the Panel was informed that there were no submissions by interested persons when the PIMS targets and measures were published. PowerSeraya Ltd/Seraya Energy Pte Ltd submitted two comments to EMC and these comments together with EMC's responses were provided to the RCP.

EMC's Performance to date

| Measure | 2004/05 approved target | Average performance for the 12 months ending Sept 2004 | Proposed targets for 2005/06 |
|---|--------------------------------|---|-------------------------------------|
| System availability | 99.60% | 99.95% | 99.75% |
| Pricing accuracy | 99.40% | 99.79% | 99.60% |
| Settlement accuracy | 99.90% | 99.92% | 99.90% |
| Customer responsiveness: satisfaction rating: | 70% | N/a | 75% |
| Market assessment: satisfaction rating | 70% | N/a | 70% |
| Rule changes: satisfaction rating | 80% | N/a | 80% |

Proposed PIMS target for FY05/06

| Service | Minimum perfm (i) | Target | Maximum perfm(ii) | Bonus/penalty for performance above/below target; | Max possible reward/ Penalty out of 100 points |
|--------------------------|--------------------------|---|--------------------------|--|---|
| <i>Systems</i> | 99.5% | 99.75% availability from unplanned outages | 100.0% | Every 0.01% = +/- 1 point | 25 points |
| <i>Pricing</i> | 99.2% | 99.6% of all trading days free of incidents caused by EMC error | 100.0% | Every 0.1% = +/- 6.25 points | 25 points |
| <i>Settlement</i> | 99.8% | 99.9% of all settlement invoices and payments free of EMC error | 100.0% | Every 0.02% = +/- 5 points | 25 points |
| <i>Responsiveness</i> | 60% | 75% customer satisfaction with EMC | 90% | Every 5% = +/- 5 points | 15 points |
| <i>Market assessment</i> | 60% | 70% customer satisfaction | 80% | Every 5% = +/- 2.5 points | 5 points |
| <i>Rule Changes</i> | 70% | 80% customer satisfaction | 90% | Every 5% = +/- 2.5 points | 5 points |

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Under the process previously outlined to the RCP, the RCP will be asked to appoint an independent third party to audit EMC's performance against its quantitative targets and administer the customer survey required to assess its performance against the qualitative targets, following the end of each financial year ending March 31, 2005.

Should EMC be awarded a bonus under its PIMS, EMC will recover that bonus via an adjustment of its fees collected from market participants (on a per MWh basis) for the remainder of that subsequent financial year, following its determination.

The Panel's comments

The Panel suggested that the PIMS bonus, once determined, should be collected over a twelve-month period, thereby any increase in fees will be gradual.

EMC

While EMC is sympathetic with the suggestion, EMC would have to submit the Panel's suggestion to the EMA for consideration as this deviates from the approved methodology.

Involvement of the RCP in determining EMC's annual revenue cap, budget and PIMS targets and measures – the Panel also informed that it should still be involved in reviewing EMC's annual revenue cap, budget and PIMS targets and measures. The EMA will be informed.

EMC

The Rules Change Panel supported EMC's Budget and Fees and the PIMS targets and measures for FY2005/06 and would make the necessary recommendation to the EMC Board for consideration.

RCP Report

EMC will draft the RCP Report for the Panel's review and this report will be circulated to the Panel members for their agreement and submission to the EMC Board. The written report must be submitted to the EMC Board by 14 January 2005.

With apologies to the Panel, Mr. Kok Shook Kwong and Mr. Francis Gomez left the meeting at 12.40pm.

9.0 Review of Compensation Regime (Paper No. EMC/RCP/17/2005/02)

This paper review the compensation regime provided in the Singapore Electricity Market Rules (MR) against applicable design criteria and evaluate whether the regime should be enhanced.

Essentially the compensation regime in the MR covers events describe in section 3.2.1.4 of Chapter 3 and section 10.2.9 of Chapter 6.

The review evaluated 2 main issues:-

- a) whether compensation should be payable for more events than currently provide in the MR.
- b) whether the MR should provide guidelines /formulae to determine the quantum of compensation payable

Issue a)

To evaluate this issue, a study of over- or under-generation (i.e. comparing expected generation (determine from RTS) to actual generation (from IEQs)) for the first quarter of 2004 was carried out. The study showed that, on average, the quantity of over- or under-generation is relatively small.

The Total Measured Over-/Under-Generation as % of Total Energy Produced showed that the over- or under-generation does not constitute a particularly large percentage of energy produced; however the distribution across stations is uneven. Some stations are more affected than others, which is likely to be the result of the technical characteristics of individual plant. Overall the average over- or under generation is not particularly significant at 0.16MWh per trading period.

Therefore, no additional compensation need be for over- or under-generation The Panel endorsed this conclusion

Mr. Ben Lau requested further clarification on why the AGC affected the generators differently. The Panel was informed that the study results were discussed with the PSO. The query would be raised with the PSO.

EMC

Issue b)

Section 3.11 of Chapter 3 of the Market Rules states that requests for compensation from the EMC or PSO may be made in respect of the types of events referred to in Section 3.2.1.4 of Chapter 3.

In addition, Section 10.2.9 of Chapter 6 requires that the EMC calculate and make compensation payments to certain market participants if revised settlement prices are calculated pursuant to Section 10.2.8 of Chapter 6.

In general terms, the compensation regime allows market participants to request compensation under specified conditions where they have responded to a PSO direction to:

- provide energy or ancillary services; or
- cancel or defer a planned outage, or return equipment to service.

A request for compensation may also be submitted under defined circumstances where:

- load shedding has occurred;
- a dispatch error has occurred; or
- a market participant has responded to an abnormal frequency excursion in accordance with the System Operation Manual.

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Action

Except for compensation relating to section 10.2.9 of Chapter 6, the current compensation rules provide no guidance to the EMC or PSO on how to decide whether compensation should be paid or the amount of compensation that should be paid for events describe in section 3.2.1.4 of Chapter 3.

The economic and administrative efficiency of the rules could be enhanced by introducing, where possible, rules to guide the EMC or PSO's decisions and to prescribe the amount of compensation that is to be paid. Such rules would also provide greater certainty that the process complies with the principles of natural justice and incentive compatibility.

Designing and implementing such rules is likely to be time consuming, primarily due to the need to reach agreement on efficient levels of compensation between all affected parties.

EMC recommends that the RCP agree that the EMC investigate as a separate workstream how the current compensation rules could be amended to provide decision-making guidelines and/or formulae for determining the quantum of compensation payable

The Panel endorsed this approach, noted the contents and supported the paper.

10. Rule Change Achievement Report (Paper No. EMC/RCP/17/2005/03)

The Panel noted the contents of the paper.

11. Date of Next Panel Meeting

The next Panel meeting is scheduled to be held on 15th March 2005 at 10.00am at the EMC Board Room

There being no other matters, the meeting ended at 1.15pm with a vote of thanks to the Chair.

ALLAN DAWSON

Chairman

Minutes taken by:
Eunice Koh
Market Panel Administrator