

## Notice of Market Rules Modification

**Paper No:** EMC/RCP/40/2008/276  
**Rule reference:** Chapter 5 Section 4.11  
**Proposer:** Agnes Tan, EMA  
**Date received by EMC:** 18 March 2008  
**Category allocated:** 3  
**Status:** Approved by EMA  
**Effective Date:** 09 January 2009

### Summary of proposed rule modification:

This proposal introduces a provision for the independent audit of the proposals by prospective ancillary service providers, to ensure that their proposals do not over-provide and are cost effective. This audit will be conducted for cases where the PSO or EMC would like an independent view on their proposals, and be carried out by a consultant engaged by EMC, with inputs from PSO and the respective PASP. The consultant fees will be recovered from the market through the Monthly Energy Uplift Charges (MEUC).

**Date considered by Rules Change Panel:** 4 November 2008  
**Date considered by EMC Board:** 27 November 2008  
**Date considered by Energy Market Authority:** 19 December 2008

### Proposed rule modification:

See attached paper.

**Reasons for rejection/referral back to Rules Change Panel (if applicable):**

PAPER NO. : **EMC/BD/06/2008/05(c)**

RCP PAPER NO. : **EMC/RCP/40/2008/276**

SUBJECT : **AUDITING OF CONTRACTED ANCILLARY SERVICES PROPOSALS**

FOR : **DECISION**

PREPARED BY : **TAN LIANG CHING  
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DATE OF MEETING : **27 NOVEMBER 2008**

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### **Executive Summary**

This paper assesses PSO's rule change proposal to introduce an audit provision for contracted ancillary services proposals from prospective ancillary service providers (PASPs). These services include black-start, fast-start, reliability must-run, reactive support and voltage control.

Currently, EMC, on behalf of the PSO, procures contracted ancillary services to ensure system security. Where practicable, EMC will conduct a competitive tender or negotiate with multiple PASPs to determine competitive prices and the terms for such services, under Section 8.3.2.1 of Chapter 5 of the Market rules. Where this is not feasible, EMC will negotiate ancillary service contracts directly with a single PASP (Section 8.3.2.2 of Chapter 5).

As future contracted ancillary services could entail significant capital investment, there is merit in introducing a provision for the independent audit of the PASPs' proposals, to ensure that their proposals do not over-provide and are cost effective. This audit will be conducted for cases where the PSO or EMC would like an independent view on their proposals, and be carried out by a consultant engaged by EMC, with inputs from PSO and the respective PASP. The consultant fees will be recovered from the market through the Monthly Energy Uplift Charges (MEUC).

The guidelines for the audit provision are set forth in Section 8.3.4 of Chapter 5 of the Market Rules.

The RCP recommend that the EMC Board **adopt** this proposal.

## 1. INTRODUCTION

This paper assesses the Power System Operator's (PSO) rule change proposal to introduce a provision to audit the proposed expenditure requirements (e.g. capital investment) of prospective ancillary service providers (PASPs) providing contracted ancillary services through both competitive tenders or direct negotiations (Sections 8.3.2.1 and 8.3.2.2 of Chapter 5 of the Market Rules). These services include black-start, fast-start, reliability must-run, reactive support and voltage control.

## 2. BACKGROUND

### 2.1 Existing Rules on Procurement of Contracted Ancillary Service Contracts

Currently, EMC, on behalf of the PSO, procures contracted ancillary services from PASPs to ensure system security. The EMC will conduct a competitive tender under Section 8.3.2.1 to contract ancillary services where feasible; if not, EMC will negotiate ancillary service contracts directly with a single PASP.

These providers have to comply with the performance standards set out in Chapter 5, Appendix 5A, A.3-7 of the Market Rules, which outline the technical requirements of respective contracted ancillary services. They are also subjected to Section 4.11.1 of Chapter 5 of the Market Rules, *Auditing and Testing of Ancillary Services*, which states that:

4.11.1 Prior to the *market commencement date*, the *PSO* shall develop requirements for the testing of facilities that will provide *ancillary services* to the *PSO controlled system*. The *PSO* shall use such tests to determine whether to register a facility as a *registered facility* for the provision of *ancillary services* and to ensure that each such *registered* continues to meet the requirements for registration to provide the applicable *ancillary services*. Such requirements:

4.11.1.1 shall not be inconsistent with any applicable *reliability standards*; and

4.11.1.2 shall be included in the *system operation manual*.

### 2.2 PSO's Proposed Changes to Existing Rules

The Market Rules in Section 4.11.1 were drafted prior market commencement; now that the market is already in operation, it would be appropriate to remove the phrase "*Prior to the market commencement date*".

In addition, although the heading of Section 4.11 is "*Auditing and Testing of Ancillary Services*", the scope and implementation details of the audit are not specified within the section. The rest of the paper analyzes the merit in having an audit for contracting ancillary services, and consequently the scope and rule changes required for such an audit.

**3. ANALYSIS**

**3.1 Procurement of Contracted Ancillary Services**

Contracted ancillary services (black-start, fast-start, reliability must-run, reactive support and voltage control service) play an integral role in the security of the electricity network. Given their public good characteristics of non-rivalry and non-excludability, they are usually contracted through a single entity (i.e. the EMC in Singapore’s case), with the costs levied from the overall market for cost recovery (i.e. the MEUC in Singapore’s case).

Notwithstanding the uniform need for these ancillary services across various deregulated markets, their pricing mechanisms differ significantly. In Singapore’s case, the only ancillary service currently contracted is black start. As such, the rest of analysis focuses on black start, although the principle and proposed rule changes apply uniformly to other contracted ancillary services.

The table below shows the various methods to procuring black start service by various deregulated Independent System Operators (ISOs):

Table 1: Procurement of Black-Start Service by Various ISOs<sup>1</sup>

ISO	Payment Basis	Procurement Details
California ISO	Cost-of-Service (COS)	<ul style="list-style-type: none"> <li>• Rolls the cost of procuring black start services into reliability must run (RMR) contracts with selected generators, which are COS-based.</li> <li>• The total RMR costs are allocated to the participating transmission owner (PTO) in whose service territory the RMR units reside</li> <li>• The PTOs in turn recover these costs from the customers (loads).</li> </ul>
PJM	Cost-of-Service	<ul style="list-style-type: none"> <li>• Generators establish an annual COS-based black start revenue requirement with their regulators and are paid on a monthly basis</li> <li>• Owners of black start units commit to providing black start service for a 2-year period</li> <li>• The formula to calculate a generator’s annual black start service revenue requirement is a function of the unit’s fixed costs, variable costs, personnel training costs, fuel storage and carrying costs, plus an incentive factor to encourage participation</li> <li>• Cost allocation is based on load ratio share, without any regionalization</li> </ul>
NYISO	Cost-of-Service	<ul style="list-style-type: none"> <li>• Each year, generators with black start capability provide the NYISO with the following cost information:                             <ul style="list-style-type: none"> <li>○ Capital and fixed operation and maintenance</li> </ul> </li> </ul>

<sup>1</sup> Source: Information extracted from “*The Viability of the Competitive Procurement of Black Start: Lessons from the RTOs*”, Allan G. Isemonger, The Electricity Journal, 2007.

ISO	Payment Basis	Procurement Details
		<p>costs associated solely with the provision of black start capability</p> <ul style="list-style-type: none"> <li>○ Annual costs associated with training the generator operators in system restoration</li> <li>● The costs are allocated to the entire system on a load ratio share basis.</li> </ul>
ISO-NE	Flat-Rate	<ul style="list-style-type: none"> <li>▪ Previously, ISO-NE had a COS method whereby unit owners volunteer to be black start units, and then received cost compensation based on the documented and audited costs of providing the service similar to other COS systems</li> <li>▪ This process was believed to be cumbersome and expensive due to onerous documentation requirements; consequently owners had poor incentives to maintain black start capability or encourage further black start capability on new units once existing units were retired</li> <li>▪ In 2003, the methodology was revised to become a flat rate payment which increased black start remuneration to encourage provision.</li> <li>▪ The new monthly compensation paid to a generator is determined multiplying a flat rate (\$/KW-yr) by the unit's monthly claimed capability for that month</li> <li>▪ The flat rate was determined based on: <ul style="list-style-type: none"> <li>○ Actual payments made to black start generators from 1998-2001</li> <li>○ Recent study of the cost of equipping a new diesel generator with black start capabilities</li> <li>○ Information from generators as to what they consider appropriate levels of compensation</li> </ul> </li> <li>▪ Based on the above inputs, the black start fee was US\$4.50/kW-yr in 2006, which were higher than the pre-2003 rate.</li> <li>▪ The cost allocation is based on the load ratio share</li> </ul>
ERCOT	Competitive Procurement	<ul style="list-style-type: none"> <li>▪ The system is tender-based, with a request for proposals (RFP) posted on the ERCOT website detailing the relevant technical specifications every year.</li> <li>▪ Participants submit hourly standby cost in \$/hr, and selected units are paid as bid</li> <li>▪ Black start bids are evaluated according to the following criteria: <ul style="list-style-type: none"> <li>○ Minimum cost</li> <li>○ Ability to restore power within four hours</li> <li>○ Proximity to major cities – If ERCOT sees the need for extra units close to major cities, it can</li> </ul> </li> </ul>

ISO	Payment Basis	Procurement Details
		make a specific unit selection <ul style="list-style-type: none"> <li>▪ The cost allocation is based on the load ratio share</li> </ul>
NZ System Operator	Competitive Procurement	<ul style="list-style-type: none"> <li>▪ The NZ System Operator procures the black start capability via competitive tender.</li> <li>▪ It solicits closed tenders from potential providers and enters into contracts with those parties that it identifies</li> <li>▪ Tenders are based on a fixed monthly price for the service, essentially an availability charge and an optional event fee</li> </ul>

The table above shows a spectrum of COS-based, Flat-Rate and Competitive Procurement models. Singapore's model adopts a competitive tender-based approach where it is feasible to achieve competitive prices and terms, and a direct negotiation approach with a single PASP where there are inadequate potential providers.

### 3.2 Benefits of Market-Based Competitive Procurement

Based on economic principles, a market-based procurement mechanism is generally preferred to a traditional COS structure because of the following:

- A) **Reduced Procurement Costs** - Competitive solutions are generally perceived to be more efficient than cost-based solutions, with competition promoting lower-cost technologies and driving prices down. In contrast, COS systems have no efficiency incentive as the rate of return is often fixed and based on the capital employed. This counter-productively favours greater capital deployment.
- B) **Institutional Efficiencies** – Cost-based systems are often very long term and perceived to be vulnerable to complacency. In contrast, the competitive allocation of ancillary contracts are often subjected to frequent contracting cycles (e.g. every 2-3 years), which forces a periodic re-examination of system restoration studies by the utilities that counteracts any complacency. Such periodic re-examinations can lead to a more efficient restoration program in the long run, by ensuring an efficient resources outlay.

While the benefits of competitive procurement are generally acknowledged, it is attainable only if there are multiple providers for the same uniform product. Unfortunately, this may be difficult to achieve in Singapore's context for some contracted ancillary service due to the paucity of PASPs, which is further compounded by the location-specific requirements of some contracted ancillary services. Even if there are proposals from more than one PASP in response to EMC's open tender, it may still not be adequate to ensure a competitive outcome. To ameliorate the deficiencies of such uncompetitive outcomes and instill a discipline for efficiency incentives, there is merit in introducing an independent audit on the proposals.

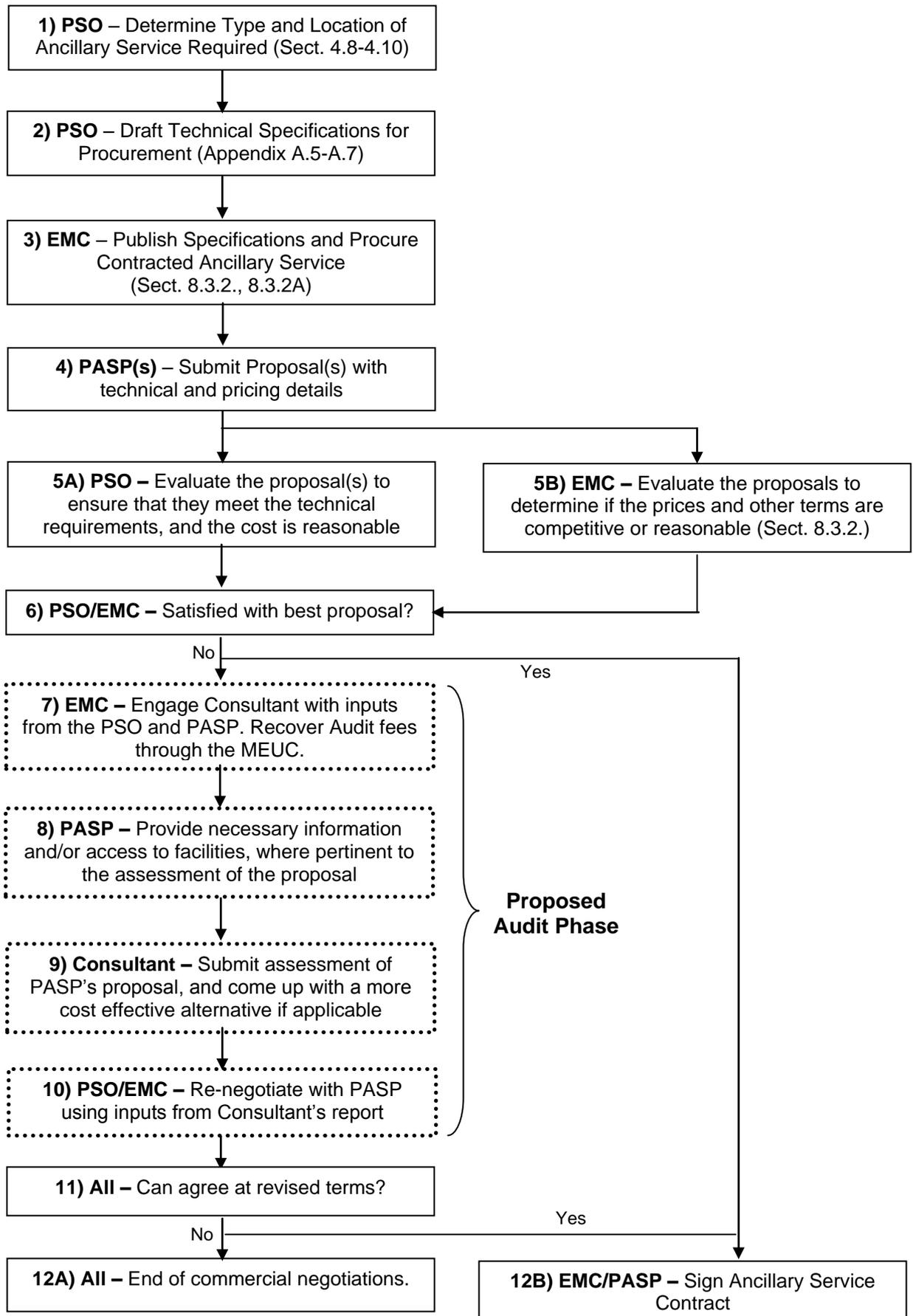
### **3.3 Audit Implementation**

The aim of the proposed audit is to ensure that the PASP's proposal is cost efficient, promotes lower-cost technology and/or have a reasonable level of capital deployment needed to meet the performance standards. The audit is not meant to reduce the contracted ancillary service costs as such; rather, it is intended to serve as an objective and independent input, safeguarding the interests of both the PASPs and loads who bear the cost of contracted ancillary service.

The proposed implementation process of the audit provision is given in Figure 1 overleaf:

Figure 1: Proposed Implementation Process to Introduce Audit Provision

Note: All referenced rules are from Chapter 5 of the Market Rules unless otherwise stated



### **Phase A: Request for Proposal (Steps 1 – 6)**

In this existing process, the PSO decides on the type, location and other technical specifications for the ancillary service required, following which the EMC will publish them and request for proposals. Once the proposals are received from the PAsPs, the PSO will evaluate if the proposals meet the technical requirements and do not over-provide, while the EMC will evaluate if the prices and other terms of the proposals are competitive or reasonable. If both the PSO and EMC are satisfied with the proposals, the EMC will sign the contract with the PAsP offering the most cost effective proposal. If not, the EMC may, of its own accord or at the request of the PSO, initiate the proposed audit phase.

### **Phase B: Proposed Audit (Steps 7 - 10)**

In this proposed phase, the EMC will choose a consultant suitable for the given audit with inputs from the PSO and the PAsP. The consultant selected should be an independent professional consultant of good repute and having relevant skill and expertise, and should not have any conflict of interests with the conduct of the audit. EMC will then engage and pay the chosen consultant, with the audit fees paid to be recovered through the Monthly Energy Uplift Charges (MEUC).

The terms of reference and scope of the audit shall be determined jointly between the PSO and EMC, with inputs from the PAsP. This could vary depending on the case, and some possible audit parameters include:

- Is the proposed capital investment sized reasonably in relation to the technical requirements of the PSO?
- Are the key financial parameters (e.g. lifespan and depreciation of existing plant) reasonable?
- Is the categorisation of capital and operating expenses appropriate?

The proposed Market Rule changes will require the PAsP to cooperate fully with the consultant by providing all necessary information and/or access to facilities, where pertinent in assessing the proposal. All information and data received by the consultant in the process will be bounded by strict confidential guidelines. The consultant will take into account inputs from both the PAsP and PSO/EMC before finalizing and submitting the report at the end of the audit.

### **Phase C: Negotiation Phase (Steps 11 – 12)**

In this phase, PSO/EMC and the PAsP will reconvene to discuss the PAsP's proposal in view of additional inputs from the consultant's report. Notwithstanding, the consultant's recommendations (e.g. required size of black start machine) will **not**, under the Market Rules, be binding onto the PAsP nor PSO/EMC.

If all parties can agree to the revised ancillary service contract terms, EMC will proceed to sign the ancillary service contract with the PAsP. If not, commercial negotiations for the procurement of ancillary service will be called off as the ancillary contract contemplated in the Market Rules is on a commercial "willing buyer-willing seller" basis, and EMC cannot compel the PAsP to enter into a contract under the Market Rules.

Depending on system security needs, there are provisions in the Transmission Code for the PSO to compel the generating station to have, for example, black start capability (Section 6.11.2b of Transmission Code). In such cases, the PASP can be required to enter into the ancillary service contract, in accordance with its license conditions.

### 3.5 Related Proposed Rule Changes

A summary of the proposed rule changes is given in the table below, with the detailed rule changes given in the **Annex**.

Table 2: Summary of Rule Changes to Introduce Audit Provision

Chapter	Sections	Reason for Rule Change
5	4.11.1	To delete the phrase “Prior to the <i>market commencement date</i> ” in the existing rules requiring the PSO to develop testing requirements for facilities providing ancillary services, now that the market has already started.
5	8.3.3	With the introduction of new rules in Section 8.3, to take this opportunity to re-number the existing Section 8.3.2A to 8.3.3
5	8.3.4, 8.3.4.1, 8.3.4.2, 8.3.4.3, 8.3.4.4, 8.3.4.5, 8.3.4.6	These new sections will introduce the provision of an audit and its implementation details, including: <ul style="list-style-type: none"> <li>• Who can initiate the audit process</li> <li>• The selection of the consultant and scope of the audit</li> <li>• The need for the consultant to enter into a confidentiality agreement</li> <li>• The payment and recovery of fees from the MEUC</li> <li>• The full cooperation of the prospective ancillary service provider with the audit, including providing necessary information</li> <li>• The non-binding nature of the audit results</li> </ul>
5	8.3.5, 8.3.6	With the renumbering of section 8.3.2A to 8.3.3, and the inclusion of the new section 8.3.4, the existing sections 8.3.3 and 8.3.4 will be re-numbered to 8.3.5 and 8.3.6 respectively.
5	8.3.1, 8.6.1	To correct the cross-references to the previous section 8.3.3, which is now re-numbered to 8.3.5.
7	4.1.1.5	To include an additional component to the Monthly Energy Uplift Charges, to cater for the cost recovery of audit fees incurred under Section 8.3.4.4.

#### 4. Conclusion

This paper supports PSO's rule change proposal to introduce an audit provision for contracted ancillary service proposals, given the limited number of prospective ancillary service providers in Singapore, and that future contracts could entail significant capital investment. The paper further proposes for EMC and PSO to determine the selection of consultant and scope of audit, with inputs from the prospective ancillary service provider. The audit report will serve as a useful input in the contract negotiation process, although it will not be binding onto the prospective ancillary service provider to compel it into a contract.

#### 5. Impact on Market Systems

If the proposed audit provision is implemented, there will be no changes required to EMC's production system.

#### 6. Implementation Process

The time required to implement the audit proposal is estimated by EMC to be **five business days** after the EMA has approved the proposed rule changes.

#### 7. Consultation

The proposed audit provision was first published for comments on 02 September 2008, with PowerSeraya and Senoko Power providing inputs.

The following comments were received from PowerSeraya:

##### PowerSeraya

1) The paper section 2.1 suggests that the audit provision is a clarification of section 4.11.1 of the market rules. This appears to be a new requirement for financial cost based audit of services rather than a 'clarification of rules'. Section 4.11.1 refers to audit and test of capability to provide services and not of their cost worthiness.

##### EMC's response

*The proposed audit is a new provision independent of Section 4.11.1. The reference to this Section is only because its title mentions auditing without defining the scope of the audit, technical or otherwise. In any case, the proposed audit is not a "new requirement for financial cost based audit of services" as under the Market Rules, the audit findings will not be binding on the PASPs and they will not be compelled into ancillary service contracts based on the audit findings.*

2) The paper in section 3.1 states that 'Singapore is a combination of Cost Based remuneration and competitive procurement for contracted ancillary services'. Nowhere in the market rules is it stated that Singapore employs cost based payment for services. Section 8.3.2 refers to two approaches to procurement - competitive tender, or by negotiation, but not by cost based remuneration.

EMC's response

*We have revised the paper accordingly to reflect that Singapore adopts a competitive tender-based approach where it is feasible to achieve competitive prices and terms, and a direct negotiation approach with a single Market Participant where there are inadequate potential providers to achieve reasonable prices.*

a) Based on the above, PowerSeraya's opinion is that the proposed amendment represents a change to the process of ancillary service provision and not a clarification of existing rules. The change infers that Ancillary Services should be procured at cost of service based and not market based prices. Since the Singapore market is designed to be competitive both for market procured and contracted services we seek clarification as to why EMA is now suggesting that Ancillary Services that are contracted be subject to cost based tests and in this event, who will be the party bearing the costs?

b) With reference to a detailed point w.r.t. Figure 1 of proposed change step 7: PowerSeraya wishes to clarify how on what basis can EMC decide that it is unsatisfied with proposals for ancillary services (especially where procured in competitive tender) This appears to be a value judgment and we feel that there must be a clear and auditable process for EMC to make such a decision.

EMC's response

*The proposed amendment does not materially change the process of ancillary service provision. It simply introduces the provision of an audit, which serves as an independent, non-binding input for both parties during the negotiation phase. Specifically, as the Market Rules place the responsibility on EMC to procure based on reasonable rate and terms, EMC can use the findings to evaluate the proposal (e.g. if the capital investment is reasonable). EMC will thus have to make a value judgment if independent information provided by the audit will enable it to carry out its responsibilities better. As mentioned in the paper, the cost of the audit will be recovered from the MEUC.*

c) Additionally, we wish to enquire what will be the terms of reference for a consultant evaluation of Ancillary Service Provisions?

EMC's response

*As mentioned in the paper, the terms of reference for the consultant could vary depending on the case, and some possible audit parameters include:*

- *Is the proposed capital investment sized reasonably in relation to the technical requirements of the PSO?*
- *Are the key financial parameters (e.g. lifespan and depreciation of existing plant) reasonable?*
- *Is the categorisation of capital and operating expenses appropriate?*

The following comments were received from Senoko Power:

The paucity of PASPs is a market signal to the industry that an appropriate market structure is required to adequately reward the PASPs and attract entrants. The proposed introduction of an independent audit will not resolve this issue. Instead, it may unnecessarily raise the MEUC (Monthly Energy Uplift Charges) chargeable to customers.

EMC's response

*The paucity of potential PASPs could be a reflection of the economies of scale and locational specific requirements of ancillary services, not necessarily that PASPs are inadequately rewarded. The audit can provide useful insights to both PSO/EMC and the potential PASP, to ensure that value-for-money investments are made and consumers will benefit, given the significant financial costs of ancillary service contracts.*

When EMC on behalf of the PSO publishes the technical specifications for procuring ancillary services, it is expected that the specifications are drawn up professionally that correctly reflect the system security needs taking into account commercial conditions as well as cost considerations of the providers. We expect that the EMC/PSO would have done a thorough analysis of the various parameters before publishing the technical specifications to procure the services.

At this stage we do not see any tangible benefit for conducting the audit. We would like to understand in detail why the EMC/PSO believes that an audit is necessary and beneficial to the market, including any cost-benefit analysis done prior to this rule change proposal. Introducing the audit process will not address the heart of the issue which is a shortage of ancillary service providers. However, it does suggest a change in the procurement procedure from a market-based to a cost-based approach which suggests that EMC/PSO intend to amend the way PASPs are compensated for providing ancillary services. We would like EMC/PSO to clarify this point.

EMC's response

*PSO and EMC believe that an audit is useful by providing an independent viewpoint on the ancillary service proposal and catalyzing the negotiation process. As the proposed audit provision will be executed only where the costs are justified, it is not meaningful at this juncture to conduct a cost-benefit analysis of the audit provision per se. This audit provision in no way suggests a transition from a market-based approach to a cost-based one, as the Market Rules will not specify that the PASP is bound by the audit findings into signing a contract based on specific terms, cost-based or otherwise.*

On institutional efficiencies, we wish to raise a point on cost recovery of capex incurred by PASP. Some capex will be large and the uncertainties of the contract due to its very short contracting cycle of one year will force capex to be recovered by PASP within that contractual period, causing the cost of providing ancillary services to increase sharply. If the contracting period is lengthened, the cost of providing ancillary services can possibly be lowered.

EMC's response

*This issue is not directly pertinent to the rule change proposal, and we have responded by email to Senoko Power.*

The proposed process also did not address the timeline issue. It appears that all future capex for ancillary services will have to be agreed upon with EMC/PSO before a PASP enters into a contract with EPC or OEM. Hence, if issues are not thrashed out between potential PASP and EMC/PSO before the commencement of the next contracting cycle, a situation may arise such that the PASPs are not able to offer a bid that meets EMC/PSO specification.

EMC's response

*Yes, the cost recovery for all capex (past or future) for the purpose of providing ancillary services will have to be agreed upon with PSO/EMC before a PASP enters into a commercial ancillary service contract with PSO/EMC, as is currently the case. When the PASP enters into a contract with its EPC or OEM is a decision of the PASP.*

The proposal mentioned that depending on system security needs, PSO may use the provisions in Transmission Code to compel generating station to have a blackstart capability and PASPs will be required to enter into ancillary service contract in accordance with the License conditions. However, it did not mention how the commercial terms for such "forced contracting" (for want of a better term) will be settled. In general we believe that contracts should be entered into on commercial terms and regulatory interventions should be reduced to a minimum. We request further clarity on this provision as any uncertainty poses regulatory risks for our operations.

EMC's response

*The "forced contracting" referred to is a requirement of the generation license issued by EMA. The terms of such regulatory contracts will also be determined by EMA. The current blackstart ancillary contracts entered into between EMC and market participants are regulatory contracts.*

In conclusion many questions remain as to the benefits and the actual principles to be adopted via this proposed process and we request further clarity from the EMC/PSO before this proposed rule change is considered.

EMC's Response

*The idea behind the proposed audit is to provide an independent viewpoint and catalyze negotiations. It does not imply a material change in the way ancillary services are procured, nor how PASPs will be compensated.*

**8. Legal sign off**

The text of the rule modification has been vetted by EMC's external legal counsel whose opinion is that the modification reflects the intent of the rule modification proposal as expressed in the analysis section of this paper.

## 9. Recommendations

The RCP unanimously recommend that the EMC Board

- a. **adopt** the rule modification proposal to introduce an audit provision, as set out in Annex 1;
- b. **seek** EMA's approval of the rule modification proposal; and
- c. **recommend** that the rule modification proposal come into force **five business days** after the date on which the approval of the Authority is published by the EMC.

**Proposed Rule Changes to Introduce Provision to Audit Contracted Ancillary Service Proposals**

Existing Rules (Release: 1 April 2008)	Proposed Rules Changes (Deletions represented by strikethrough text and additions represented by double underlined text)	Remarks
<b><u>CHAPTER 5</u></b>	<b><u>CHAPTER 5</u></b>	
<p><b>4.11 AUDITING AND TESTING OF ANCILLARY SERVICES</b></p> <p>4.11.1 Prior to the <i>market commencement date</i>, the <i>PSO</i> shall develop requirements for the testing of facilities that will provide <i>ancillary services</i> to the <i>PSO controlled system</i>. The <i>PSO</i> shall use such tests to determine whether to register a facility as a <i>registered facility</i> for the provision of <i>ancillary services</i> and to ensure that each such <i>registered facility</i> continues to meet the requirements for registration to provide the applicable <i>ancillary services</i>. Such requirements:</p> <p>4.11.1.1 shall not be inconsistent with any applicable <i>reliability standards</i>; and</p> <p>4.11.1.2 shall be included in the <i>system operation manual</i>.</p>	<p><b>4.11 AUDITING AND TESTING OF ANCILLARY SERVICES</b></p> <p>4.11.1 <del>Prior to the <i>market commencement date</i>, the</del> <u>The</u> <i>PSO</i> shall develop requirements for the testing of facilities that will provide <i>ancillary services</i> to the <i>PSO controlled system</i>. The <i>PSO</i> shall use such tests to determine whether to register a facility as a <i>registered facility</i> for the provision of <i>ancillary services</i> and to ensure that each such <i>registered facility</i> continues to meet the requirements for registration to provide the applicable <i>ancillary services</i>. Such requirements:</p> <p>4.11.1.1 shall not be inconsistent with any applicable <i>reliability standards</i>; and</p> <p>4.11.1.2 shall be included in the <i>system operation manual</i>.</p>	<p>To remove the phrase “Prior to the <i>market commencement date</i>” now that the market has started.</p>
<p>8.3.1 The <i>EMC</i> shall, subject to section 8.3.3, include in each <i>ancillary service contract</i> terms and conditions that address, at a minimum, the following:</p> <p>8.3.1.1 the duration of the <i>ancillary service contract</i>, which shall not exceed 1 year;</p>	<p>8.3.1 The <i>EMC</i> shall, subject to section <del>8.3.3</del><u>5</u>, include in each <i>ancillary service contract</i> terms and conditions that address, at a minimum, the following:</p> <p>8.3.1.1 the duration of the <i>ancillary service contract</i>, which shall not exceed 1 year;</p>	<p>To correct a cross-reference to section 8.3.3, which is re-numbered to 8.3.5.</p>

Existing Rules (Release: 1 April 2008)	Proposed Rules Changes (Deletions represented by strikethrough text and additions represented by double underlined text)	Remarks
<p>8.3.1.2 the situations in which the <i>contracted ancillary service resource</i> may be called;</p> <p>8.3.1.3 the nature and timing of any advance notice required for the <i>PSO</i> to call upon the <i>contracted ancillary service resources</i>;</p> <p>8.3.1.4 payment terms for the provision of the <i>contracted ancillary service</i> above the levels required to be provided by any <i>electricity licence</i> or any registration or <i>connection</i> requirements referred to in these <i>market rules</i>, the <i>transmission code</i> or any applicable <i>connection agreement</i>, including the amount and timing of any availability payment;</p> <p>8.3.1.5 the situations under which some or all of the terms of the <i>ancillary service contract</i> may be suspended;</p> <p>8.3.1.6 the process for modifying the terms of the <i>ancillary service contract</i>;</p> <p>8.3.1.7 the terms of assignment or transfer of the <i>ancillary service contract</i> in the event of the assignment or transfer of the <i>contracted ancillary service resource</i> to another person; and</p> <p>8.3.1.8 in the case of an <i>ancillary service contract for reliability must-run service</i>, agreed <i>offer variation</i> data that the <i>PSO</i> may</p>	<p>8.3.1.2 the situations in which the <i>contracted ancillary service resource</i><u>(s)</u> may be called;</p> <p>8.3.1.3 the nature and timing of any advance notice required for the <i>PSO</i> to call upon the <i>contracted ancillary service resource</i><u>(s)</u>;</p> <p>8.3.1.4 payment terms for the provision of the <i>contracted ancillary service</i> above the levels required to be provided by any <i>electricity licence</i> or any registration or <i>connection</i> requirements referred to in these <i>market rules</i>, the <i>transmission code</i> or any applicable <i>connection agreement</i>, including the amount and timing of any availability payment;</p> <p>8.3.1.5 the situations under which some or all of the terms of the <i>ancillary service contract</i> may be suspended;</p> <p>8.3.1.6 the process for modifying the terms of the <i>ancillary service contract</i>;</p> <p>8.3.1.7 the terms of assignment or transfer of the <i>ancillary service contract</i> in the event of the assignment or transfer of the <i>contracted ancillary service resource</i><u>(s)</u> to another person; and</p> <p>8.3.1.8 in the case of an <i>ancillary service contract</i></p>	<p>To include the notation “(s)” for all references to <i>contracted ancillary service resource</i>, so as to encompass situations where the contract could cover either the singular resource or multiple resources.</p>

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<p>direct the <i>contracted ancillary service resource</i> to submit when it is called by the <i>PSO</i> to operate in various modes under the <i>ancillary service contract</i> for <i>reliability must-run service</i>, and provisions for the revision of such <i>offer variation</i> data, when necessary.</p> <p>...</p>	<p>for <i>reliability must-run service</i>, agreed <i>offer variation</i> data that the <i>PSO</i> may direct the <i>contracted ancillary service resource</i><u>(s)</u> to submit when it is called by the <i>PSO</i> to operate in various modes under the <i>ancillary service contract</i> for <i>reliability must-run service</i>, and provisions for the revision of such <i>offer variation</i> data, when necessary.</p> <p>...</p>	
<p>8.3.2A At the time of commencement of the process(es) described in section 8.3.2 for the procuring of an <i>ancillary service</i> under an <i>ancillary service contract</i>, the <i>EMC</i> shall <i>publish</i> the following particulars in respect of that <i>ancillary service</i>:</p> <p>8.3.2A.1 the desired quantity (if any) of that <i>ancillary service</i>;</p> <p>8.3.2A.2 the desired duration of that <i>ancillary service contract</i>;</p> <p>8.3.2A.3 the desired situations in which that <i>ancillary service</i> may be called upon to be provided;</p> <p>8.3.2A.4 the desired nature and timing of any advance notice required for the <i>PSO</i> to call upon the provision of that <i>ancillary service</i>;</p>	<p>8.3.<del>2A</del><u>3</u> At the time of commencement of the process(es) described in section 8.3.2 for the procuring of an <i>ancillary service</i> under an <i>ancillary service contract</i>, the <i>EMC</i> shall <i>publish</i> the following particulars in respect of that <i>ancillary service</i>:</p> <p>8.3.<del>2A</del><u>3</u>.1 the desired quantity (if any) of that <i>ancillary service</i>;</p> <p>8.3.<del>2A</del><u>3</u>.2 the desired duration of that <i>ancillary service contract</i>;</p> <p>8.3.<del>2A</del><u>3</u>.3 the desired situations in which that <i>ancillary service</i> may be called upon to be provided;</p> <p>8.3.<del>2A</del><u>3</u>.4 the desired nature and timing of any advance notice required for the <i>PSO</i> to call upon the provision of that <i>ancillary service</i>;</p>	Re-numbered.

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<p>8.3.2A.5 the desired timing of payment for the provision of that <i>ancillary service</i>;</p> <p>8.3.2A.6 the desired service standards and performance levels applicable to that <i>ancillary service</i>;</p> <p>8.3.2A.7 the desired situations under which some or all of the terms of the <i>ancillary service contract</i> may be suspended;</p> <p>8.3.2A.8 the desired process for modifying the terms of the <i>ancillary service contract</i>; and</p> <p>8.3.2A.9 the desired terms of assignment or transfer of the <i>ancillary service contract</i> to another person.</p>	<p><del>8.3.2A</del><u>3</u>.5 the desired timing of payment for the provision of that <i>ancillary service</i>;</p> <p><del>8.3.2A</del><u>3</u>.6 the desired service standards and performance levels applicable to that <i>ancillary service</i>;</p> <p><del>8.3.2A</del><u>3</u>.7 the desired situations under which some or all of the terms of the <i>ancillary service contract</i> may be suspended;</p> <p><del>8.3.2A</del><u>3</u>.8 the desired process for modifying the terms of the <i>ancillary service contract</i>; and</p> <p><del>8.3.2A</del><u>3</u>.9 the desired terms of assignment or transfer of the <i>ancillary service contract</i> to another person.</p>	
[New section]	<p><u>8.3.4</u> <u>The EMC may, of its own accord or at the request of the PSO, engage an independent consultant to conduct an audit in respect of the proposals from prospective ancillary service providers pursuant to section 8.3.2, upon the following terms:</u></p>	Rule Change: To introduce the provision of an audit of the proposals by prospective <i>ancillary service providers</i> .
[New section]	<p><u>8.3.4.1</u> <u>the EMC shall engage a consultant with inputs from the PSO and the prospective ancillary service provider. The consultant selected should be an independent professional consultant of good repute and having relevant skill and expertise, and</u></p>	Rule Change: To set the selection criteria of the consultant.

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	<u>should not have any real or potential conflict of interests, whether commercial or otherwise, in connection with the conduct of such audit;</u>	
[New section]	8.3.4.2 <u>prior to commencing the conduct of such audit, the consultant has executed a confidentiality agreement upon such terms and in such form as the EMC may prescribe;</u>	Rule Change: To provide that the consultant must have executed a confidentiality agreement (prescribed by the EMC) before commencing the audit.
[New section]	8.3.4.3 <u>the scope of the audit shall be determined jointly by the PSO and EMC, with inputs from the prospective ancillary service provider.</u>	Rule Change: To make clear how the EMC and the PSO will work together to determine the scope of the audit, together with inputs from the prospective ancillary service provider.
[New section]	8.3.4.4 <u>all fees incurred by the EMC relating to the engagement of the consultant shall be recovered by the EMC under section 4.1 of Chapter 7;</u>	Rule Change: To allow EMC to recover the audit cost from the MEUC.
[New section]	8.3.4.5 <u>the market participant, who is the</u>	Rule Change: To

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	<u>prospective ancillary service provider, shall fully cooperate with, and provide all information and/or access to facilities, where relevant to the audit, to the consultant; and</u>	ensure full cooperation by the <i>market participant</i> (who is the prospective <i>ancillary service provider</i> ) with the consultant.
[New section]	<u>8.3.4.6 the findings of the consultant's audit shall serve as only a reference for further negotiations between the EMC and the prospective ancillary service provider. The prospective ancillary service provider is not obliged to sign the proposed ancillary service contract based on specific prices and terms arising from the findings of the audit.</u>	Rule Change: To state that the findings of the audit shall be for reference only, and not to be binding on the prospective <i>ancillary service provider</i> .
8.3.3 The provisions of sections 8.3.1 and 8.6.1 shall be subject to any contrary provisions contained in: 8.3.3.1 any <i>electricity licence</i> ; or 8.3.3.2 the terms of any <i>ancillary service contract</i> the terms of which are required by an <i>electricity licence</i> to be, and have been, approved by the <i>Authority</i> .	8.3.3 <del>5</del> The provisions of sections 8.3.1 and 8.6.1 shall be subject to any contrary provisions contained in: 8.3.3 <del>5</del> .1 any <i>electricity licence</i> ; or 8.3.3 <del>5</del> .2 the terms of any <i>ancillary service contract</i> the terms of which are required by an <i>electricity licence</i> to be, and have been, approved by the <i>Authority</i> .	Re-numbered.
8.3.4 Each person that: 8.3.4.1 has entered into an <i>ancillary service contract</i> with the <i>EMC</i> ; and 8.3.4.2 is not, at any time during the term of such	8.3.4 <del>6</del> Each person that: 8.3.4 <del>6</del> .1 has entered into an <i>ancillary service contract</i> with the <i>EMC</i> ; and 8.3.4 <del>6</del> .2 is not, at any time during the term of such	Re-numbered.

<b>Existing Rules (Release: 1 April 2008)</b>	<b>Proposed Rules Changes</b> (Deletions represented by strikethrough text and additions represented by double underlined text)	<b>Remarks</b>
<p><i>ancillary service contract</i>, the <i>dispatch coordinator</i> for the facility from which the <i>contracted ancillary service</i> will be provided,</p> <p>shall ensure that the <i>dispatch coordinator</i> for that facility complies with the provisions of the <i>ancillary service contract</i>.</p>	<p><i>ancillary service contract</i>, the <i>dispatch coordinator</i> for the facility from which the <i>contracted ancillary service</i> will be provided,</p> <p>shall ensure that the <i>dispatch coordinator</i> for that facility complies with the provisions of the <i>ancillary service contract</i>.</p>	
<p>8.6.1 Subject to section 8.3.3, the price payable under an <i>ancillary service contract</i> entered into by the <i>EMC</i> may cover any of the following:</p> <p>8.6.1.1 the cost of being available to provide a <i>contracted ancillary service</i> if directed by the <i>PSO</i> to do so;</p> <p>8.6.1.2 the direct costs and the opportunity costs of actually providing the <i>contracted ancillary service</i> when directed by the <i>PSO</i> to do so; and</p> <p>8.6.1.3 such other compensation as the <i>EMC</i> determines to be fair and reasonable under the circumstances.</p>	<p>8.6.1 Subject to section 8.3.<del>3</del><u>5</u>, the price payable under an <i>ancillary service contract</i> entered into by the <i>EMC</i> may cover any of the following:</p> <p>8.6.1.1 the cost of being available to provide a <i>contracted ancillary service</i> if directed by the <i>PSO</i> to do so;</p> <p>8.6.1.2 the direct costs and the opportunity costs of actually providing the <i>contracted ancillary service</i> when directed by the <i>PSO</i> to do so; and</p> <p>8.6.1.3 such other compensation as the <i>EMC</i> determines to be fair and reasonable under the circumstances.</p>	<p>To correct a cross-reference to section 8.3.3, which has been re-numbered to 8.3.5..</p>
<b><u>CHAPTER 7</u></b>	<b><u>CHAPTER 7</u></b>	
<p><b>4.1 THE MONTHLY ENERGY UPLIFT CHARGE</b></p> <p>4.1.1 Prior to the beginning of each calendar month, the <i>EMC</i> shall calculate for that calendar month the</p>	<p><b>4.1 THE MONTHLY ENERGY UPLIFT CHARGE</b></p> <p>4.1.1 Prior to the beginning of each calendar month, the <i>EMC</i> shall calculate for that calendar month the</p>	<p>Rule Change: To allow <i>EMC</i> to recover the audit cost from the</p>

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<p>monthly amount for compensation and other payments (MACP), which shall be the sum of:</p> <p>4.1.1.1 an estimate of the amounts that has or may be invoiced by the <i>ancillary service providers</i> under <i>contracted ancillary service</i> contracts;</p> <p>4.1.1.2 an estimate of the costs that may be incurred by the <i>PSO</i> in testing related to the procurement of <i>ancillary services</i>;</p> <p>4.1.1.3 the amounts of compensation claims to be paid by the <i>EMC</i> or the <i>PSO</i> under section 3.11 of Chapter 3; and</p> <p>4.1.1.4 the amount of compensation and/or costs that have been awarded against the <i>EMC</i> and/or the <i>PSO</i> under the <i>market rules</i> or otherwise payable by the <i>EMC</i> and/or the <i>PSO</i> as a result of the resolution of any disputes under these <i>market rules</i>;</p> <p>Less the aggregate of: ...</p>	<p>monthly amount for compensation and other payments (MACP), which shall be the sum of:</p> <p>4.1.1.1 an estimate of the amounts that has or may be invoiced by the <i>ancillary service providers</i> under <i>contracted ancillary service</i> contracts;</p> <p>4.1.1.2 an estimate of the costs that may be incurred by the <i>PSO</i> in testing related to the procurement of <i>ancillary services</i>;</p> <p>4.1.1.2A <u>an estimate of the costs that may be incurred by the <i>EMC</i> in engaging a consultant to conduct any audit related to the procurement of <i>ancillary services</i> under section 8.3.4 of Chapter 5;</u></p> <p>4.1.1.3 the amounts of compensation claims to be paid by the <i>EMC</i> or the <i>PSO</i> under section 3.11 of Chapter 3; and</p> <p>4.1.1.4 the amount of compensation and/or costs that have been awarded against the <i>EMC</i> and/or the <i>PSO</i> under the <i>market rules</i> or otherwise payable by the <i>EMC</i> and/or the <i>PSO</i> as a result of the resolution of any disputes under these <i>market rules</i>;</p> <p>Less the aggregate of: ...</p>	<p><i>MEUC.</i></p>