



CONSULTATION PAPER

PROPOSED MODIFICATIONS TO TRANSMISSION CODE

Closing date for submissions of comments and feedback:
9 Nov 2009

7 OCT 2009

ENERGY MARKET AUTHORITY
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The information in this Consultation Paper is not to be treated by any person as any kind of advice. The Energy Market Authority shall not be liable for any damage or loss suffered as a result of the use of or reliance on the information given in this Consultation Paper.

1 Introduction

- 1.1 The Transmission Code sets the minimum conditions that the Transmission Licensee must meet in carrying out its obligation to provide transmission services and to provide non-discriminatory access to the Transmission Licensee's transmission system. The Transmission Code also describes the rights and obligations of the Transmission Licensee in respect of the provision of transmission services, together with the rights and obligations of the users of transmission services.
- 1.2 The Transmission Code also sets out the technical requirements to be met by those connected or to be connected to the Transmission Licensee's transmission system.

2 Proposed Modifications

- 2.1 Pursuant to Section 1.6 of the Transmission Code, EMA had circulated a consultation paper in Jun 2009 and feedback was gathered from Licensees.
- 2.2 Based on the feedback received, EMA have amended the proposed modification to the Transmission Code. The proposed modification is to give clarity to the requirement for generation licensees to demonstrate the availability of all their centrally dispatchable generating units connected to the Singapore transmission system. The amended proposed modification to the Transmission Code is attached in Appendix 1.
- 2.3 EMA's assessment on the feedback received for the Jun 2009 consultation paper is attached in the appendix 2.

3 Request for comments and feedback

- 3.1 EMA invites comments and feedback on the proposed modifications to the Transmission Code as set out in the Appendix 1. The template for Industry comments is attached in the appendix 3.

3.2 Please send your submission by e-mail to:

yeo_kheng_san@ema.gov.sg and yeo_eng_houw@ema.gov.sg

Alternatively, you may send your submission by post/fax to the following address:

Director, Electricity Industry Regulation Department

Regulation Division

Energy Market Authority

991G Alexandra Road

#02-29

Singapore 119975.

Fax: (65) 6 835 8020

3.3 Anonymous submission will not be considered.

3.4 All comments and feedback must reach EMA by 9 Nov 2009.

3.5 EMA will acknowledge receipt of all submissions electronically. Please contact Mr Yeo Kheng San at 63767613 and Mr Yeo Eng Houw at 63767572 if you have not received an acknowledgement of your submission within two business days.

3.6 EMA reserves the right to make public all or parts of any written submissions made in response to this Consultation Paper and to disclose the identity of the source. Any part of the submission, which is considered by respondents to be confidential, should be clearly marked and placed as an annex. EMA will take this into account regarding disclosure of the information submitted.

~ End ~

APPENDIX

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Appendix 1

Proposed Modifications to the Transmission Code

<u>Modification Ref. No.</u>	<u>Section</u> ¹	<u>Original Text</u>	<u>Modification</u>	<u>Reasons</u>
TC/2009/2	6.2.3	New	The Generation Licensee shall demonstrate to the Power System Operator quarterly the availability of all its centrally dispatchable generating units connected to the Singapore transmission system. A centrally dispatchable generating unit that is not on forced/planned outage shall deem to be available if it has been synchronised and operating for a duration not less than its minimum on-time (or 2 hours, whichever is higher) in every quarter of a year.	<p>The amendment is to ensure the availability and operational readiness of all centrally dispatchable generating units.</p> <p>This is to minimise the risks that such generation facilities are not available when scheduled by the Energy Market Company to provide Energy and Reserves, or called upon by the Power System Operator to maintain the secure operation of the power system.</p>

¹ Reference to the section of the code where change is to be made in the version dated on January 2008 as published on the web.

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Appendix 2

EMA's Assessment on the Feedback on Proposed Modifications to the Transmission Code

<u>Modification Ref. No.</u>	<u>Section¹</u>	<u>Industry's Feedback</u>	<u>EMA's Assessment</u>
TC/2009/1	6.2.3	Common Issues highlighted:	
TC/2009/1	6.2.3	<p><u>1. Clarity on the Proposed New Modification</u> Senoko Power and PowerSeraya commented that there should be more clarity on the "requirement" and "intervals" required by Power System Operator (PSO).</p>	Noted. A new consultation paper will be put up for feedback that will include clarity on the requirement to demonstrate the availability of all centrally dispatchable generating units.
		<p><u>2. Compensation for Demonstrating Availability of Infrequently-Run Generating Units</u> PowerSeraya and Tuas Power enquired on how would they be paid for their dispatch when demonstrating their respective plant's availability. PowerSeraya also voiced its concern on the compensation should the prevailing electricity market price is not sufficient to cover its generation costs?</p>	<p>All generating units that have been dispatched by the market would be paid the Market Clearing price.</p> <p>Generating Licensees can choose to declare their generating units as unavailable should they deem that the market clearing price would not be sufficient to cover their generation costs.</p>

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<u>Modification Ref. No.</u>	<u>Section¹</u>	<u>Industry's Feedback</u>	<u>EMA's Assessment</u>
		<p><u>3. Addressing Generating Units That Trip During Loading Up</u></p> <p>PowerSeraya enquired on how PSO would treat generating units that trip during loading up?</p>	<p>A generating unit that tripped while loading up would be deemed as failing to prove its availability. A re-test should be conducted as soon as possible after rectifying the fault.</p>
		<p><u>4. Generation Licensee Fails to Meet the Requirements As Stipulated by PSO</u></p> <p>Senoko Power enquired on the consequences if generation licensee fails to meet the requirement stipulated by PSO.</p>	<p>Please note that failure to comply with the requirements stipulated by PSO is a breach of the Transmission Code.</p>
		<p><u>5. A Self-Commitment Market</u></p> <p>Senoko Power commented that Generation Licensee would be incentivised (and conversely, be penalized) for its availability (or non-availability). Hence, it is to their interest that the generating units will be available when called for.</p>	<p>The purpose of this proposed code modification is to ensure that generating units that are declared as available are able to start up when required. This is from a system security consideration. However, Generation Licensees can choose to declare their plant as unavailable should they deem that the market clearing price would not be sufficient to cover their generation costs.</p>

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<u>Modification Ref. No.</u>	<u>Section¹</u>	<u>Industry's Feedback</u>	<u>EMA's Assessment</u>
		<p><u>6. Procure From Market to Test Infrequently Run Generating Units</u></p> <p>Tuas Power commented that should PSO wanted such infrequently run generating units to demonstrate its availability, PSO should procure for such services through the market similar to the market for ancillary services (reserve and black start). Tuas Power does not support the proposed modification, which attempts to circumvent the market-based mechanism.</p>	<p>This is unlike fast-start or black-start contracted ancillary services where additional equipment or resources are required to be maintained by the service provider. This is a matter of system security whereby generating units that are declared as available are to run up when called upon to do so.</p>

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<u>Modification Ref. No.</u>	<u>Section¹</u>	<u>Industry's Feedback</u>	<u>EMA's Assessment</u>
		<p><u>7. Market Rules In Place to Address EMA's Concern With Regards to System Security Risk</u></p> <p>Tuas Power commented that the existing market rules (Chapter 5 – System Operation) clearly spelt out that the general principle is that “to the fullest extent possible consistent with maintaining the reliability of the PSO controlled system, the PSO shall apply the market rules relating to reliability so as to minimise the PSO’s intervention into the operation of the wholesale electricity markets”. In this regards the market rules already allow for the PSO to specify the reserve requirements for the various classes of reserves and the procurement of ancillary services to support system reliability such as black start, fast start and must-run ancillary services to address any concerns the PSO may have with respect to real-time system security.</p>	<p>As the NEMS is a self-commitment market, Generation Licensees can, every quarter of a year, offer each of its generating units into the market and ensure that it is scheduled to operate at the required output level for the required duration. PSO will not be issuing explicit instruction to run-up any particular generating unit for the test. That is, there is no intervention by PSO in the operation of the NEMS during normal operating condition.</p>

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<u>Modification Ref. No.</u>	<u>Section¹</u>	<u>Industry's Feedback</u>	<u>EMA's Assessment</u>
		<p><u>8. High Risk Operating State</u></p> <p>Tuas Power commented that the market rules specify that even under a “High-Risk Operating State”, while the PSO can take steps to relax some security limits, it is the intent of the rules to allow the market itself to take steps to return the system to a normal operating state rather than have the PSO interferes with the normal operation of the market. Only when the market fails to achieve this result, with the system subsequently entering into an Emergency Operating State, then can the PSO take more direct action.</p>	<p>This is unlike fast-start or black-start contracted ancillary services where additional equipment and resources are required to be maintained by the service provider.</p> <p>This is a matter of system security whereby generating units that are declared as available are to run up when called upon to do so.</p>

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Appendix 3

Industry Comments on the Proposed Modification to the Transmission Code

Name: _____

Designation: _____

Company: _____

Email: _____

Role (Generation Licensee/ Retailer/ Consumer):

Submission Date: _____ (dd/mm/yy)

Modification Ref. No.	Section*	Industry Comments

* Reference to the section of the Code where change is to be made in the version dated on January 2008 as published on the web.