## **Black Start**

Black Start	
8.3.3.1	the desired quantity (if any) of that ancillary service;
	88.848 MW
8.3.3.2	the desired duration of that ancillary service contract;
	Reference to Article 5.1 and Schedule A of contract  Agreement Term: This Agreement shall come into force on the Commencement Date identified in Schedule A and remain in force until the Completion Date identified in Schedule A, unless terminated at an earlier date in accordance with the terms of this Agreement. In any event the Agreement Term shall not exceed one year, in accordance with Chapter 5 of the Market Rules.
8.3.3.3	the desired situations in which that ancillary service may be called upon to be provided;
	Reference to Schedule B of contract Situations in which the Contracted Ancillary Service Resource may be called: Immediately upon full or partial blackout condition.
8.3.3.4	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> ;
	Reference to Schedule B of contract  Nature and timing of any advance notice required:  None.
8.3.3.5	the desired timing of payment for the provision of that ancillary service;
	Reference to Article 14.2 of contract  Monthly Invoicing: The Ancillary Service Provider will invoice the EMC for payments due for provision of Contracted Ancillary Services under this Agreement on a monthly basis following the end of each calendar month in respect of the Contracted Ancillary Services provided in that period. The invoice will show details of:
	(a) inclusive dates for which payment for Ancillary Service provision is claimed;
	(b) dates, times, and amounts of Contracted Ancillary Services provided by each Contracted Ancillary Service Resource, in accordance with the payment amounts set out in Schedule C, supported by an availability report substantially in the form of Schedule D and any other relevant information as may be required by EMC, to enable the EMC to validate the invoice with minimal administration.
8.3.3.6	the desired service standards and performance levels applicable to that <i>ancillary service</i> ;
	Reference to Article 11 of contract  General Service Standards:
	General Jervice Standards.

The Ancillary Service Provider will:

- comply with all relevant laws in force from time to time in Singapore, and all relevant Codes of Practice, and Electricity Licences, and the Market Rules, in relation to any act, matter or thing to be done pursuant to this Agreement;
- (b) provide the Contracted Ancillary Services in a manner consistent with all applicable professional and industry standards relevant to the provision of the Contracted Ancillary Services, and, subject to the service and quality standards specified in this Agreement or as may be determined by the PSO with the consent of the Ancillary Service Provider, which consent shall not be unreasonably withheld, in accordance with all guidelines and directions provided by the PSO and/or the EMC to the Ancillary Service Provider from time to time;
- (c) obtain all statutory and other approvals, licences, permits, consents, assurances, authorisations and similar requirements necessary to perform its obligations under this Agreement and keep them in full force and effect during the Term;
- (d) comply with all relevant laws and codes of good practice relating to occupational health and safety, and take all reasonable precautions for the safety of the general public and personnel engaged in performing the Contracted Ancillary Services;
- (e) not engage in any activity which would in any way adversely affect or impair the Ancillary Service Provider's ability to provide the Contracted Ancillary Services in an independent and reliable manner;
- (f) immediately act on and bring to the attention of the PSO and the EMC any matter relating to the Contracted Ancillary Services which may threaten the security of the Power System;
- (g) deliver the Contracted Ancillary Services in accordance with the provisions of this Agreement, and promptly attend to and rectify all problems which arise relating to the delivery of the Contracted Ancillary Services;
- (h) comply with all reasonable instructions given by the EMC and/or the PSO in relation to the manner in which the Contracted Ancillary Services are to be performed (in so far as they conform to the service and quality standards specified in this Agreement or as may be determined by the PSO with the consent of the Ancillary Service Provider, which consent shall not be unreasonably withheld), and the level of resources comprising the Contracted Ancillary Service Resources to be devoted to the Contracted Ancillary Services;
- (i) ensure that all personnel involved in providing the Contracted Ancillary Services (including persons designated as Dispatch Coordinators) hold all necessary qualifications and permits and are adequately trained and are competent to carry out their duties in relation to provision of the

Contracted Ancillary Services; and

(j) act promptly to follow all Dispatch instructions for provision of the Contracted Ancillary Services and ensure that each Dispatch Coordinator for a Contracted Ancillary Service Resource shall operate its equipment in a manner consistent with the Dispatch instructions issued to it.

### **Specific Performance Levels:**

The Ancillary Service Provider will ensure (where applicable) that:

- (a) each Contracted Ancillary Service Resource providing Reactive Support and Voltage Control Services shall meet the performance standards referred to in section 4.7 of Chapter 5 of the Market Rules and the operational parameters and standard of availability specified in Schedule B1 as well as the standards set out in the System Operation Manual;
- (b) each Contracted Ancillary Service Resource providing Black Start Capability Services shall meet the performance standards referred to in section 4.8 of Chapter 5 of the Market Rules and the operational parameters and standard of availability specified in Schedule B2 as well as the standards set out in the System Operation Manual;
- (c) each Contracted Ancillary Service Resource providing Fast Start Services shall meet the performance standards referred to in section 4.9 of Chapter 5 of the Market Rules and the operational parameters and standard of availability specified in Schedule B3 as well as the standards set out in the System Operation Manual; and
- (d) each Contracted Ancillary Service Resource providing Reliability Must-run Services shall meet the performance standards referred to in section 4.10 of Chapter 5 of the Market Rules and the operational parameters and standard of availability specified in Schedule B4 as well as the standards set out in the System Operation Manual.

## System Operation Manual section 8.4.6 to 8.4.9:

https://www.emcsg.com/f419,155849/SOM Rev16 24 March 2022.zip

Market Rules Chapter 5 section 4.7 to 4.10:

https://www.emcsg.com/f283,7842/Chapter 5 System Operation 1Apr22.pdf

8.3.3.7 the desired situations under which some or all of the terms of the *ancillary service* contract may be suspended;

#### Reference to Article 6 of contract

**Suspension of Services**: The EMC shall, in consultation with the PSO and with the PSO's written consent, have the right to order a temporary suspension of part or all of the Contracted Ancillary Services under this Agreement, if the Ancillary Service Provider fails to remedy within a reasonable time of receiving notice (which shall not be less than 14

days) all matters that may give rise to suspension. The circumstances that may give rise to suspension are:

- (a) when, in the reasonable opinion of the EMC and the PSO, provision of such Contracted Ancillary Services:
  - fails to meet the specified service or quality standard referred to in this Agreement or as advised by the PSO with the consent of the Ancillary Service Provider, which consent shall not be unreasonably withheld, from time to time; or
  - (ii) is conducted in a manner which materially contravenes the Market Rules, a relevant Electricity Licence, or other relevant authority, or other terms of this Agreement;
- (b) when, in the reasonable opinion of the EMC and the PSO, a Contracted Ancillary Service Resource:
  - (i) fails a test performed pursuant to section 4.11 of Chapter 5 of the Market Rules; or
  - (ii) repeatedly fails to respond in accordance with the operational parameters specified in Schedule B for that Contracted Ancillary Service Resource, or to meet the standard of availability specified in Schedule B for that class of Ancillary Service; or
- (c) if, after due consideration and examination as may be provided by any applicable provision of the Market Rules, Codes or Electricity Licences, in the reasonable opinion of the PSO, any of the Ancillary Service Provider's Contracted Ancillary Service Resources do not or will not meet the performance and availability standards prescribed in Article 11.2.

**Resumption of Services:** The EMC will authorise resumption of the suspended Contracted Ancillary Services once the cause giving rise to the suspension has been remedied to the satisfaction of the EMC and the PSO, including (as applicable) satisfaction of the requirements of section 4.12 of Chapter 5 of the Market Rules.

8.3.3.8 the desired process for modifying the terms of the *ancillary service contract*; and

# Reference to Article 8 of contract

**No Modification Without Written Agreement**: Subject to Section 8.2 and as otherwise provided under this Agreement no modification of this Agreement shall be effective unless made in writing, signed by the Parties and approved by the Authority.

**Acknowledgement of Modifications:** Each of the Ancillary Service Provider and the EMC acknowledges and confirms that:

- (a) the Market Rules may be Modified from time to time in accordance with the Market Rules and the Act;
- (b) a Market Manual may be Modified by the Board of Directors of the EMC or by a committee of the Board of Directors of the EMC, with the approval of the Authority where required, from time to time in accordance with the Market Rules:
- (c) the System Operation Manual may be modified by the PSO from time to time in accordance with the Market Rules;
- (d) the Transmission Code and any other Code of Practice may be Modified by the Authority in accordance with the Act and any applicable provisions contained in the Transmission Code or other Code of Practice.
- the desired terms of assignment or transfer of the *ancillary service contract* to another person.

#### Reference to Article 9.2 to 9.4 of contract

Assignment by EMC: The EMC may not assign or transfer, whether absolutely, by way of security or otherwise, all or any part of its rights or obligations under this Agreement without the prior written consent of the Ancillary Service Provider, which shall not be unreasonably withheld. Notwithstanding the foregoing, and for greater certainty, all or a part, as the case may be, of the rights or obligations of the EMC under this Agreement, may, without the consent of the Ancillary Service Provider, be assigned or transferred by the EMC to a person that replaces EMC, in whole or in part, as the person licensed or authorised by the Authority under the Electricity Act (Cap 89A) to operate any wholesale electricity market or enter into any Ancillary Service Contract.

Assignment by Ancillary Service Provider: The Ancillary Service Provider may not assign or transfer, whether absolutely, by way of security or otherwise, all or any part of its rights or obligations under this Agreement, and may not assign or transfer any of the Contracted Ancillary Service Resources to another person, without the prior written consent of the EMC which shall not be unreasonably withheld.

Successors and Assigns: This Agreement shall ensure to the benefit of, and be binding on, the Parties and their respective heirs, administrators, executors, successors, substitutes (including persons taking by novation) and permitted assigns. Subject to Article 9.3 if the Ancillary Services Provider assigns or transfers any or all of the Contracted Ancillary Service Resources to another person, that person will be bound by this Agreement in respect of the Contracted Ancillary Service Resources that have been assigned or transferred.