



*Smart Energy, Sustainable Future*

**FINANCING FRAMEWORK FOR  
PROCUREMENT OF ANCILLARY SERVICES**

***INFORMATION PAPER***

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# FINANCING FRAMEWORK FOR PROCUREMENT OF ANCILLARY SERVICES

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### INTRODUCTION

1. The Market Rules provides for Energy Market Company (“EMC”) to procure, on behalf and at the request of the Power System Operator (“PSO”), ancillary services to ensure security and reliability of electricity supply under Ancillary Service Contracts (“ASCs”). These services are namely Black Start, Fast Start, Reliability Must-Run, and Reactive Support and Voltage Control. EMC will pay the Ancillary Service Provider (“ASP”) for the provision of ancillary service in accordance with the ASC. EMC will then recover the cost incurred through the Singapore Wholesale Electricity Market (“SWEM”) by collecting Monthly Energy Uplift Charge (“MEUC”) from load serving entities (i.e. retailers and SP Services) who will pass through the costs to consumers.
2. ASPs would typically finance the required works using their own equity and/or debt financing to enable the services to be provided under the ASC with EMC. Under the current ASCs, the ASPs are entitled to a 10% rate of return for capital expenditure (“CAPEX”) and 10% margin for operational expenditure (“OPEX”).
3. EMA have reviewed the current arrangement to procure the ancillary services and decided to finance any new CAPEX<sup>1</sup> required to enable the provision of the ancillary services where this could lead to cost saving at the system level.

### Financing Framework

4. EMA will finance all new CAPEX that is required to enable the provision of ancillary services under the following framework (“Financing Framework”):
  - a) The ancillary service is deemed essential to ensure the security or reliability of the power system;
  - b) It is not feasible to procure the ancillary service via competitive tenders;
  - c) The cost of procuring the ancillary service is fully recovered from the market/consumers; and

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<sup>1</sup> Such CAPEX includes cost incurred for the following: (i) to replace/repair/refurbish existing ancillary service resources or to build a new ancillary service resource, and (ii) land cost (e.g. extension of land lease) that is required for the required ancillary service to be provided.

d) The ASP cannot obtain the same or lower financing cost of EMA, regardless of the ASP's financial situation.

5. With EMA financing the new CAPEX, the ASP will only be entitled to collect revenues under the ASC to cover the following costs:

- a) OPEX required for provision of the ancillary service with a margin to compensate the ASP for providing working capital; and
- b) Depreciation of sunk fixed assets (including land, existing generating unit(s) facility) funded by the ASP previously and are required for providing the ancillary service, and a rate of return to compensate the ASP for the opportunity cost of capital; and
- c) Allowable margin and rate of return will be cap at 10% based on current benchmarked Return on Equity for vesting contracts.

6. EMC shall recover the new CAPEX and other associated financing costs through MEUC collection.

### **Implementation**

7. The above financing framework shall henceforth apply to all ancillary service contracts to be entered into by EMC on behalf of PSO.

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