

**RESPONSE TO QUERIES AND FEEDBACK FOR THE
REQUEST FOR COMMENTS, EXPRESSION OF INTEREST AND REQUEST FOR PROPOSAL
TO PROVIDE FAST START ANCILLARY SERVICE**

S/No.	Query	EMA's Response
Timeline Extension and Performance Bond		
1	Whether there can be an extension of timeline for the RFP submission and delivering the Base Capacity Fast Start (“ FS ”) generating unit(s).	<p>EMA requires the FS capacity in 2024. As such, EMA will first evaluate proposals with Commercial Operation Date (“COD”) in 2024. If there are no acceptable proposals for 2024 COD. EMA will consider proposals which will COD from 2025 onwards.</p> <p>There will be no change to the RFP submission date, but EMA will aim to conclude the evaluation by mid-April 2024 instead of end-April 2024 to cater more time for project implementation.</p>
2	Whether the deadline for furnishing the Performance Bond (stated as three (3) business days) can be extended.	EMA will extend the time for furnishing the Performance Bond to <u>seven (7) business days</u> .
3	Whether the Performance Bond will be released upon the unit(s) reaching Commercial Operations Date (“ COD ”), and whether it will be stated in the Request for Proposal (“ RFP ”).	The Performance Bond will be released to the Ancillary Services Provider (“ ASP ”) upon COD of the generating unit(s).

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Cost Recovery and Financial Proposal		
4	How will the FS AS cost be recovered from the market?	The FS AS cost will be recovered from the market through the Monthly Energy Uplift Charge as stipulated in Chapter 7, Section 4.1 of the Market Rules.
5	How will the FS AS cost be recovered from importers after the capacity is repurposed as imports backup?	EMA will engage the ASP on the cost recovery methodology from importers prior any changes taking effect. However, while the method of cost recovery may change when the FS AS is repurposed, the contracted quantum that the ASP recovers will remain as per the formula set out in the ASC.
6	How does the Efficiency Factor ("EF") work?	The EF allows for the participants to provide their anticipated change in costs annually vis-à-vis MAS Core Inflation Index e.g. an EF (between 0% and 100%) of 1% implies that Fixed OPEX would grow at a rate of MAS Core Inflation minus 1%-point.
7	<p>How will EMA evaluate the Participant's Financial Proposal if the capacity provided by the proposed FS generating unit(s) is larger than 100MW, and will the CAPEX be pro-rated to 100MW or can the ASP recoup the CAPEX incurred for the unit(s)?</p> <p>Whether EMA would evaluate the price competitiveness on a levelised basis to account for different capacities proposed?</p>	<p>The ASP will be allowed to recover its full CAPEX even if the capacity of the proposed generating unit(s) is larger than 100MW, up to 200MW.</p> <p>EMA will not evaluate price competitiveness on a levelised basis to avoid over-procuring capacity.</p>

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8	Whether exogenous costs arising from regulatory impositions, that may be incurred over the duration of providing FS AS, can be recovered.	The ASP will be allowed to recover exogenous costs arising from changes in government directives or policies, such as a change in taxation, that cannot be reasonably accounted for adequately by the MAS Core Inflation, provided such costs were unavoidable and prudently incurred by the ASP.
9	Whether there will be any margins allowed on Variable OPEX.	The ASP will be allowed to recover the Variable OPEX with <u>no</u> margin.
10	What are the components that are allowed under Variable OPEX and CAPEX? Will carbon tax be allowed under Variable OPEX?	<p>Allowed cost components will take reference from components considered in EMA's Review of Long Run Marginal Cost Parameters to Set the Vesting Price, where carbon tax is allowed for recovery under Variable OPEX, with no margin.</p> <p>Under the Vesting Procedures, fuel reserve cost is a component of Fixed OPEX. Due to the uncertainty of the frequency to run up the Fast Start units, Participants should minimally take into account the fuel consumption due to monthly testing of the Fast Start units and price the cost of associated fuel reserves in their Fixed OPEX bids. Incremental fuel reserve costs solely and wholly attributable to any change in reserve fuel stockpile when the ASP is activated by PSO due to system needs can be passed through as Variable OPEX, subject to the ASP providing clear documentation for EMA's approval.</p>

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11	Whether Fixed OPEX costs will be based on actual cost incurred with markup or recovered on a yearly cost-plus basis due to the difficulty in estimating CAPEX / OPEX for a 25-year period.	The compensation to the ASP would be based solely on its Financial Proposal. Only the compensation for Variable OPEX would be based on actual costs prudently incurred by the ASP.
Performance Standards and Testing		
12	<p>What does hot switch between diesel and natural gas mean?</p> <p>Whether a load reduction arising from this switch has been contemplated.</p>	<p>Hot switching means switching the fuel used by the plant, from gas to diesel and vice versa, without shutting down the plant.</p> <p>Participants' will have to clarify in their proposals if the FS generating unit(s) will experience a deration of capacity on alternate fuel from the switch and/or if deloading is required during the switch.</p>
13	Whether tests can be conducted on a less frequent basis from 20 days to four times a year, to align the testing schedule with existing generating units.	Due to uncertain and infrequent run-up of FS generating unit(s), they will be tested on a monthly basis.
14	Whether there are any testing requirements for the FS generating unit(s) that have received a waiver to operate on a commercial basis.	If the FS generating unit(s) is/are able to run-up successfully within a month, PSO may consider this to have met the testing requirements for the given month.
15	Whether there will be allowances given for major inspections as a result of frequent activations (therefore diminishing EOH), resulting in the unit not able to attain the Availability Factor.	The Licensee will have to submit its long-term (yearly) plans for outages for the following year during the AGOP. Any request for more outage hours will be considered on a case-by-case basis, and subject to PSO's approval.

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16	Whether EMA will reduce the overall Availability Factor or adjust the numerator (i.e. add back long Planned Outage Hours) if there are adjustments due to approvals for additional planned maintenance in the AGOP.	The default 95% Availability Factor will be adjusted if the prolong planned maintenance request with justification is approved in the AGOP.
Technologies and Emission Standards		
17	Whether proposals for alternative technologies that can meet a subset of the FS AS technical requirements will be considered.	The proposed technologies must meet all of the technical requirements.
18	Whether the proposed FS generating unit(s) need to be hydrogen compatible.	FS generating unit(s) that are hydrogen-ready or compatible will be considered more favourably, ceteris paribus.
19	Whether the FS generating unit(s) will be subject to the emission standards imposed by EMA.	<p>The proposed FS generating unit(s) will be exempted from meeting emissions allowance limit under Tier 2 emission standards during activation by PSO to meet system needs. More information can be found at: EMA's Emission Standards Framework for Power Generation Units.</p> <p>However, if the generating unit is allowed to and participates commercially in the SWEM, emissions arising from relevant periods will be subject to prevailing Tier 2 emission standards in full.</p>
Others		
20	<p>During commissioning period, whether ASP can</p> <p>1. Recover Variable OPEX; or</p>	As the commissioning schedule and requirements are known to the ASP, the provision and costs associated with any fuel needed should be catered for by the ASP – i.e. to avoid use of SLF and to bear costs within the CAPEX and/or

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	<p>2. Draw down gas from SLNG.</p>	<p>Fixed OPEX provisions. Variable OPEX should only be costs associated with the activation by PSO.</p>
21	<p>Whether the ASP needs to procure the fuel gas for the FS generating unit(s) from the Gasco under EMA's Centralised Gas Procurement Framework, or can it draw down on the Singapore LNG Facility ("SLF")?</p> <p>As the FS generating unit(s) are expected to run infrequently and required to respond within a short notice, whether the Gasco would be able to provide the ASP with the necessary supply flexibility for FS AS testing and activation?</p>	<p>By default, the ASP will be allowed to use the SLF to run up under PSO's directions.</p> <p>Additionally, the ASP will not be required to contract for firm gas or book firm pipeline capacity. The cost of gas and for the use of the pipelines can be recovered as Variable OPEX.</p>
22	<p>Whether the ASP is exempted from gas nomination in cases where the primary fuel is gas, as FS is required to run up within 10 minutes but the gate closure for nomination is 3 hours prior to each balancing period.</p>	<p>EMA is reviewing operational procedures in respect of gas nomination and offtake for the purposes of FS and will update the industry when ready.</p>
23	<p>Whether EMA can provide more visibility on generation capacity requirements going forward, to allow Gencos to better formulate plans for their own planting strategies.</p>	<p>EMA understands that each Genco has their long-term business plans and will aim to conduct the industry consultation earlier for future RFPs.</p>
24	<p>Whether EMA can exempt the generating capacity for the proposed FS generating unit(s) from the generating capacity cap as these unit(s) are usually offline, and triggered upon PSO's instructions only.</p>	<p>To the extent the FS capacity under ASC is not used for commercial trading in the SWEM, such capacity will not be counted towards the relevant generation licensee's licensed capacity cap</p>

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25	Whether EMA can help to support in the land lease extension if the ASC end-date exceeds the expiry of the land lease.	EMA can facilitate Gencos' land lease discussions with planning agencies, where necessary.
26	Whether EMA can provide a waiver to Black Start ("BS") requirements under the Transmission Code.	EMA will consider requests for any waiver of BS capability requirements with justifications provided by the ASP. If the Fast Start unit is proposed to be on sites where BS capability is already present or waived, as the case may be, EMA would preliminarily take the same stance and not amend BS system requirements due to the addition of this Fast Start capacity.
27	Whether EMA requires the FS generating unit to be equipped with Automatic Generator Control ("AGC").	Yes. As the FS generating units may be required to run for prolonged periods during disruption (especially if FS unit is repurposed to provide backup contingency reserves for imports), it will be vital for the generating unit to be equipped with AGC.