

AMENDMENT NO. 4 ... TO TECHNICAL SPECIFICATION (SECTION VI)

S. No.	SPECIFICATION REFERENCE				Existing	Read as
	SEC/PART	Sub-Section	Clause No.	PAGE NO.		
1.	VI/A	Volume II	Annexure - IA	4 of 10	Note: Typical composition has been given only as a reference condition for Performance Guarantee. (refer clause 3.01.00, Volume – IV). Actual composition of the gas generally may be anything within the range indicated. However, the engine shall also be designed to run on gas fuel with methane no. corresponding to at least (-)10% of the methane number calculated on the minimum composition mentioned here above.	Note: Typical composition has been given only as a reference condition for Performance Guarantee (refer clause 3.01.00, Volume – IV). Actual composition of the gas generally may be anything within the range indicated. However, the engine shall also be designed to run on gas fuel with methane no. lowest upto 65.
2.	VI/A	Volume IV	15.01.00	20 of 28	Deleted	The offered Gas engine should have logged a minimum of 4000 fired hours since commissioning and should have been in successful operation for a period of at least one (01) year prior to the date of techno-commercial bid opening. The Bidder shall furnish experience list of Gas engine offered to substantiate their provenness along with the techno commercial bid.
3.	VII		Attachment 3K	398 of 609	A. Dual Fuel Engine (Not applicable).....	A. Gas Engine..... (Refer attached format at Annexure-I to this amendment)
4.	VI/A	Volume VI	40.00.00	40 of 71	NIL	40.00.00 Make In India requirements a) The bidder shall follow Indian laws, regulations and standards. b) The technologies/ products offered shall be environmentally friendly, consuming less energy, and safe, energy efficient, durable and long lasting under the prescribed operational conditions. c) The bidder/its sub vendor/supplier shall ensure supply of spares, materials and technological support for the entire life of the project. d) The bidder shall list out the products and components producing Toxic E-waste and other waste as specified. It shall have an Extended Producers Responsibility (EPR) so

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						that after the completion of the lifecycle, the materials are safely recycled/ disposed of by the contractor and for this, the bidder has to establish recycling/ disposal unit as specified. e) The equipment/ material sourced from foreign companies will be tested in accredited labs in India before acceptance wherever such facilities are available. The testing shall be carried out in accordance with MOP extant order/guidelines f) The bidder shall have to furnish a certificate regarding cyber security/safety of the equipment/process to be supplied/services to be rendered as safe to connect. g) All applicable safety requirements shall be met. Regular safety audit shall be carried out by the manufacturer/ supplier. h) Wherever required, the foreign supplier shall establish fully functional service centers in India and shall keep spares/material locally for future needs of Employer. i) To protect the security, integrity and reliability of equipment in this package, it is essential to remove vulnerabilities arising out of the possibility of cyber attack through malware/ Trojans etc. embedded in imported equipments. This requirement shall apply to any item imported for end use or to be used as a component, or as a part in manufacturing, assembling of any equipment or to be used in this package. Contractor shall comply all the requirements of Order No 25-11/6/2018-PG, dated 02/07/2020 (attached as Annexure-II), issued by Ministry of Power, Government of India and its subsequent amendments/revisions. Contractor shall furnish declaration of compliance of MOP order dated 02/07/2020 requirements with dispatch of equipment/ item. Further, Contractor shall furnish back up testing certificates, whenever Employer asks the same.	
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A. Gas Engine:

Details of Provenness for the offered gas engine as per Clause No. 15.01.00, Volume IV, Part- A, Section-VI of Bidding Documents.

Item Description	Plant Name	Model No.	Fired hours Since commissioning	Date of Commencement of successful operation
Gas Engine				

We declare that the offered Gas engine has logged a minimum of 4000 fired hours since commissioning and has been in successful operation for a period of at least one (01) year prior to the date of techno-commercial bid opening as per the details furnished below:

Sl. No.	Reference Engine	Offered Engine
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1. Name of the reference plant & location:
2. Client name and his address:
3. No. of units and capacity in MW of unit:
4. Whether equipment operating in power plant (Yes/No)
5. Name of equipment manufacturer & address:
6. Date of commission of the Gas Engine
7. Model no. of the equipment:
8. Brief Technical particulars of the engine:

Sl. No.	Reference Engine	Offered Engine
a. Engine Speed	 rpm	 rpm
b. Power Output (Electrical generated power)	 kWe	 kWe
c. Frequency	 Hz	 Hz
d. No. of Cylinders	 Nos.	 Nos.
e. Bore size	 mm	 mm
f. Swept Volume per cylinder	 dm ³	 dm ³
g. No. of Stroke	 nos.	 nos.
h. Stroke Length	 mm	 mm
9. Certificate regarding successful operation in at least one(01) plant for a period not less than one year and a minimum of 4000 fired hours logged since commissioning prior to the date techno-commercial bid opening is attached at Annexure..... to Attachment - 3K		
10. Scope of Work:		

No.25-11/6/2018-PG
Government of India
Ministry of Power
Shram Shakti Bhawan, Rafi Marg, New Delhi – 110001
Tele Fax: 011-23730264

Dated 02/07/2020

ORDER

Power Supply System is a sensitive and critical infrastructure that supports not only our **national defence, vital emergency services** including health, disaster response, **critical national infrastructure** including classified data & communication services, defence installations and manufacturing establishments, logistics services but also the **entire economy** and the **day-to-day life** of the citizens of the country. Any danger or threat to Power Supply System can have catastrophic effects and has the potential to cripple the entire country. Therefore, the Power Sector is a **strategic and critical sector**.

The vulnerabilities in the Power Supply System & Network mainly arise out of the possibilities of cyber attacks through malware / Trojans etc. embedded in imported equipment. Hence, **to protect the security, integrity and reliability of the strategically important and critical Power Supply System & Network** in the country, the following directions are hereby issued :-

(1) All equipment, components, and parts imported for use in the Power Supply System and Network shall be tested in the country to check for any kind of embedded malware/trojans/cyber threat and for adherence to Indian Standards.

(2) All such testings shall be done in certified laboratories that will be designated by the Ministry of Power (MoP).

(3) Any import of equipment/components/parts from "prior reference" countries as specified or by persons owned by, controlled by, or subject to the jurisdiction or the directions of these "prior reference" countries will require prior permission of the Government of India

(4) Where the equipment/components/parts are imported from "prior reference" countries, with special permission, the protocol for testing in certified and designated laboratories shall be approved by the Ministry of Power (MoP).

This order shall apply to any item imported for end use or to be used as a component, or as a part in manufacturing, assembling of any equipment or to be used in power supply system or any activity directly or indirectly related to power supply system.

This issues with the approval of Hon'ble Minister of State for Power and New & Renewable Energy (Independent Charge).



(Goutam Ghosh)

Director

Tel: 011-23716674

To:

1. All Ministries/Departments of Government of India (As per list)
2. Secretary (Coordination), Cabinet Secretariat
3. Vice Chairman, NITI Aayog
4. Comptroller and Auditor General of India
5. Chairperson, CEA
6. CMDs of CPSEs/Chairman of DVC & BBMB/MD, EESL/DG, NPTI/DG, CPRI/DG, BEE/
7. All ASs/JSs/EA, MoP

Copy:

1. PS to Hon'ble PM, Prime Minister's Office
2. PS to Hon'ble MOS(IC) for Power and NRE
3. Sr. PPS to Secretary(Power)