

**TECHNICAL QUERY for BHEL Tender Ref: B7D1R1242**

**TMR ELECTRONIC GOVERNOR AND ELECTRONIC OVERSPEED PROTECTION SYSTEM**

Clause Ref	Clause Details	Query	BHEL Reply
2.1.2	Vendor to supply program loader (laptop, if specified) along with necessary maintenance software's (licensed software's) for application program uploading/ unloading in the Governor during system recovery.	Clarify whether Laptop is required since both MCR HMI PC & RR Panel Mount HMI PC can be used for Application program as well. As per RFQ TC9765263074 is not applicable for supply purpose.	TC9765263074 (Laptop) is not applicable.
2.2.7	Program loader laptop / HMI PC shall be loaded with software for program loading / unloading and settings configuration.	Clarify whether Separate Laptop is required for configuration of Overspeed protection system. As per RFQ TC9765263074 is not applicable for supply purpose.	TC9765263074 (Laptop) is not applicable.
2.4.4	The latest certificates for use in hazardous areas shall be furnished for speed sensors by the vendor as specified below: *Certificates from statutory authorities like BASEFA, FM, PTB, UL and LCIE etc. for items of foreign origin and from CMRI etc. for items of Indian origin. *Approval certificates from CCE (Chief Controller of Explosives)/ PESO for items to be installed in India, irrespective of country of origin and the same is mandatory. In case CCE certificate is not available for any item at the time of offer, vendor shall confirm that the certificate shall be furnished during detailed engineering and before dispatch. *Approval certificate from BIS (Bureau of Indian Standards) for all flameproof instruments of Indian origin.	Speed probes are imported and statutory authorities certificate like BASEFA, FM etc, whichever applicable, can be provided. However, further certification from CCE in India is not practical as they are imported with certification. Please confirm acceptance	CCOE / PESO certificate is required. It is available with Ai-Tek, Honeywell etc.
2.5.4	All the Digital Inputs and Outputs shall be provided with interposing relays for isolation purpose.	Contradicts to Clause 2.3.3. Please clarify no of Barriers & Isolators (AI/AO/DI/DO) as well as no of Relays (DI/DO) quantity	Please consider 50% IOs from Haz Area, remaining from safe area, other than speed sensors inputs.
2.5.5	All the analog inputs, analog Outputs & Actuator outputs shall be provide with Isolators for isolation purpose.	Contradicts to Clause 2.3.3. Please clarify no of Barriers & Isolators (AI/AO/DI/DO) as well as no of Relays (DI/DO) quantity. Kindly confirm if SIL-3 Relays are required for DI & DO	Please consider 50% IOs from Haz Area, remaining from safe area, other than speed sensors inputs.
3.2	The HMI with 21" LCD TFT screen shall be located in Main Control room, away from TMR Electronic Governor system panel. The communication with HMI shall be through fiber optic channel (if specified) else shall be on ethernet. Vendor shall provide all the required communication hardware & software including fiber optic converters & power supply for fiber optic converters along with armored fiber optic cables along with HDPE conduit and other networking accessories like LIU, patch cords etc at both ends. The fiber optic cable shall have min 2 nos spare cores. The fiber optic cable (orange colour) and converters shall be of single mode type. Orange fibre optic cables shall be routed in HDPE pipe. Fittings shall be used for joining the HDPE pipe. HDPE pipe shall be as per IS-4984 or equivalent IEC standard. Colour shall be	AS per RFQ Material Code No TC9765263031, TC9765263040, TC9765263058, TC9765263066, TC9765263074 is not applicable for supply . Please confirm	FO communication is applicable. All items to be considered, except FO cable / Conduit. FO Cable / Conduit are in Purchaser scope.

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	orange with black fittings.		
5.2	The TMR Electronic Governor system shall be supplied as a fully wired & assembled system in a standalone cabinet of RITTAL make, IP55 as a minimum.	IP55 not applicable for Rack room with Air conditioning. Please Confirm if IP 42 is ok	IP55 panel is available from Rittal.
5.4.2	The overall dimensions of each cabinet shall be in general 800 / 1600 mm width X 2100mm (or 2200mm) height (including base channel of 100 mm height) X 800mm depth. The number of panels required shall be decided by vendor meeting the specification requirement.	Two 800x800 cabinets, bayed together will be considered. Please confirm	Noted.
8.1	Vendor shall be responsible for all the items supplied in this package ie, vendor shall provide a guarantee certificate for trouble free performance of all the items for 18 months from date of supply. Vendor shall have tie-ups with sub-vendors for providing guarantee & only OEM authorized agency shall handle the warranty period services.	Addendum says 36 months from the date of supply whereas this clause says 18 months from the date of supply. Please clarify. Also Warranty for buyouts from sub-vendors like Barriers, Relays, PC, Ethernet switches etc are generally 18 months from the date of supply. Extended warranty provided for Main system and Overspeed Protection system. Please confirm.	18 months period from clause 8.1 is already striked off from the BHEL specification TC65263-R03. Please follow Warranty / Guarantee as per Technical Addendum.
11.1	The training shall include configuration, operation and maintenance of the TMR Electronic Governor and Electronic Overspeed protection system package. The training shall be conducted at site. All requisite training material for the said training shall be provided by the vendor during the training.	We recommend Training to be conducted at our Chennai premises. If site training is must, it will be presentation based training. Please confirm.	Offer for Site training (on actual supplied system) is required.
19	POST WARRANTY COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT (PWAMC, if specified in RFQ):	As per Price schedule template in the addendum, PWAMC is not specified. Please clarify if PWAMC is part of scope.	PWAMC is not applicable.

20) Technical Addendum Clause 3: BHEL free issue (CCC Series 3++) Antisurge Controller mounting in Governor panel is NOT applicable.