

	TITLE:- DOCUMENTS/DRAWINGS SUBMISSION SCHEDULE FOR 2 X 500KVA DG SET	DOC. NO. OR 12701 ANNEXURE-1	REV 01
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Projects:- 2X500 KVA SILENT DG SET FOR VYASI HYDRO (2 X 60 MW), UJVNL, INDIA

Sl. No.		Documents	No. of Copies/ Sets	Submission Schedule/ Remarks
1.0		Before Award of Contract (i.e. At the time of submitting technical offer) along with offer for technical scrutiny	1 Sets/ Copies each	At the time of technical bid submission.
	1.1	Check List as per Annexure-11 for submission of document Duly filled by vendor.		
	1.2	Technical Deviations if any from specification, together with the justification as per format (Annexure-7 , Schedule of Technical Deviations).		
	1.3	Confirmation of Scope of supply as per Annexure-3 .		
	1.4	Unpriced Schedule as per Annexure-4 (without price indication and clearly indication as Quoted/Not quoted).		
	1.5	Schedule of Guaranteed & Technical Particulars as per Annexure-2 .		
	1.6	Copy of Complete Type tests reports as per Clause no. 6.0 of Specification OR 12701 .		
	1.7	Reference List of Projects executed for similar ratings of DG sets		
	1.8	Confirmation for suitability of equipment (under scope of supply) for trouble free operation and satisfactory working under climatic conditions indicated in doc. no. OR12702 (General Technical Specification).		
	1.9	Works test schedule (Includes list of Routine Tests, acceptance tests, type tests and site & performance tests etc.)		
	1.10	Acceptance of clause no. 6.0 , Tests & Inspection (Yes/No)		
	1.11	Detailed Catalogues of major components (e.g. Diesel Engine, Alternator/Generator, AVR, Engine Controller, ACB, MCCB, Contactors, Thermal O/L Relays, Aux.		

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		Contactor relay, Protective Relays, CT & PT, Meters, Aux. Transformers, MCBs, PCBs, Transducers, Instruments, Gauges/Meters, Sensors etc.)		
	1.12	Confirmation for supply of Mandatory Spares as per Annexure-5 and Tools & Instruments as per Annexure-6 .		
	1.13	Functional write up & Design Philosophy for DG System, Governor & Control		
	1.14	Technical literature and data pertaining to Engines, Alternators & Control		
	1.15	Comprehensive List of drawings/documents to be submitted after award.		
	1.16	DG Room Layout Drawing showing Outline dimensional & General Arrangement drawings of DG Set and associated equipment e.g. panels, Instruments, Intake & Exhaust System, piping, tanks, trenches, cut-outs, chimneys etc. and other windows, doors, opening etc.		
	1.17	Foundation drawings for DG Set & Main fuel oil tank		
	1.18	Design Calculation for selecting the engine capacity based on the site of installation and also after deration factors deleting the auxiliary power consumption e.g. radiator fan, cooling fan, battery charger, etc.		
	1.19	Design Calculation for capacity of the Main Fuel Oil tank & Daily Fuel Tank as per requirement.		
	1.20	Automatic mode starting/stopping logics of AMF		

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2.0		After Award of Contract	12 Sets of each	Within two weeks from the date of award of contract.
	2.1	<u>For Approval</u>		
	2.1.1	Final Schedule of Technical Particulars as per Annexure-2 duly filled in all respects and agreed during tender stage.		
	2.1.2	QA Plans (Separately for Diesel Engine, Alternator/Generator, Diesel Engine Set, Control Panel, Storage Tank, Fuel Handling System etc.) for shop and site separately (Duly filled covering all the tests as specified in clause no. 6.0 of Technical Specification OR 12701).		
	2.1.3	DG Room Layout Drawing, Outline dimensions and assembly drawing (of Diesel Engine, Alternator/Generator, Diesel Engine Set, Control Panel, Bulk Storage Fuel Tank, Fuel Handling System, Piping Arrangement etc. with Complete Bill of material.		
	2.1.4	Foundation arrangement drawing indicating complete civil guidelines information		
	2.1.5	Control Schematics & Wiring diagram with Termination Schedule for AMF Control & Synchronizing Panels and other control panel.		
	2.1.6	Detailed Specification and drawings of Controller and Governing System		
	2.1.7	Instrumentation diagram, Sequence chart of control functions and List of settings		
	2.1.8	Detailed views/ sections of DG Set, Fuel handling, Intake & Exhaust System		
	2.1.9	Detailed specification & drawings (GA, Assembly etc.) of Acoustic Enclosures		
	2.1.10	Package/Consignment Data as per Annexure-8 .		

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	2.2	<u>For Reference</u>	12 Sets of each	Within two weeks from the date of award of contract
	2.2.1	Type tests reports		
	2.2.2	Technical specifications, GA, Instruction Manual & Wiring Diagram of all the type equipments/instruments used in the Boards/Cubicles/System (Diesel Engine/Alternator/Engine Controller/AVR/ Instruments/Relays/Circuit Breakers/MCCBs/Timers/Thyristors/ Control switches/CTs/PTs/Meters/PCBs, Contactors, level & pressure switches etc. Drawings of major accessories/components		
	2.3	Resubmission, if required	12 Sets of each	Within 10 days from date of comments excluding both ways postal time
	2.4	Approved documents as listed at 2.1	12 Sets of each	Within 10 days from date of comments excluding both ways postal time
3.0		Test & Inspection Reports Final Inspection & Test Certificates/Reports (Including Type Tests, Routine Tests & Witness Tests), copy of calibration certificates of instruments used during testing and Packing Lists shall also be supplied before dispatch of equipment for getting dispatch clearance from customer.	12 Sets of each	Immediately After Inspection of equipment
4.0		Manuals in Bound Volumes	15 Sets of each	Before despatch of Equipment
	4.1	Erection/Installation, Termination & Testing Manuals		
	4.2	Instruction Manuals & Wiring Diagram of all the type equipment used in the System/Boards/Cubicles (Diesel Engine, Alternator/Generator, AVR, Engine		

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		Controller, Instruments/Relays/ Circuit Breakers/MCCBs/Timers/ Thyristors/Control switches/CTs/PTs/ Meters/PCBs, Contactors etc.)		
	4.3	Instructions, Operation, Troubleshooting & Maintenance Manuals		
	4.4	Manuals for Handling & Preservation and Storage		
5.0		Guarantee Certificates	15 Sets of each	Before despatch of Equipment
6.0		Soft copy of "As Built Drawings" and all types of Manuals, test reports etc. (In DVD or CD).	02 Sets of each	Before despatch of Equipment

Notes:-

1. The vendor to strictly submit the documents as listed at Sl. no.-1 (documents required for technical evaluation during tender stage).
2. Vendor to submit the detailed documents/drawings after placement of order at least as per Sl. No. 2.0. However vendor can be asked to submit the various drawings/documents as indicated in General Technical Specification for Customer's approval/reference if required by end customer during detailed design. Vendor to accept the same.
3. The supplier may note that all re-submissions must incorporate all comments given in the prior submission by the Purchaser. Adequate justification for not incorporating the same must be submitted, failing which the submitted documents may be returned.
4. All the drawings shall be worked out on computer using latest version of AUTOCAD on maximum A2 size, to scale. All electrical drawings shall be made on A3 size. All documents shall be made in MS office. Offer/ all drawings and documentation shall be in English and units of measurement shall be Metric/SI. If required by BHEL for submission of soft copies of drawings/documents in editable format in between the review stage then the vendor shall be adhere to submit the same without any fail.