# PRE QUALIFICATION REQUIREMENT (PQR) Flange-Lead in Plate, Pressure cap & Protection Cover

Dt: 10-06-2024

A. Application: Lead-in-plate is required for inter connecting fibre Optic End Winding Sensors from inside of generator to the external signalling devices. The generator shall be pressurized with H2 gas up to 6 kg/cm2.

### PQR points: -

## (1) Flange (Lead-in-plate) Code W96415210041

- (a) The vendor must have experience of supplying at least 6 nos Flange (Lead in plates) of Diameter ≥250mm (thickness 15mm min) in last 5 years from date of enquiry. Material of LIP shall be mild steel. Vendor to produce PO's and corresponding drawing in support of the same.
- (b) Vendor should have facility for precision machining for achieving specified tolerances. Vendor to confirm and give supporting document for the same.
- (c) Wherever not mentioned, acceptable tolerance of 0.5mm is allowed. Vendor to confirm tools for achieving specified tolerance and measuring facility for the same.
- (d) Hard chrome plating of 10 microns is required to be done. Vendor to confirm to comply the same.
- (e) Vendor shall have facility for performing gas tightness Test of Flange. Test facility shall be equipped to perform testing of Flange with Nitrogen at 16 bar OR Helium gas at 10 bar.
- (f) Vendor shall be asked to produce chemical test certificate of material at the time of inspection. Vendor to confirm for the same.

## (2) Pressure cap Code W96415209701

- (a) Vendor shall have Mild steel or Aluminium casting facility.
- (b) Vendor to qualify PQR of Flange (Lead-in-plate).

## (3) Protection Cover Code W96415209710

- (a) Vendor shall have Mild steel or Aluminium casting facility
- (b) Vendor to qualify PQR of Flange (Lead-in-plate).
- (4) Common Point for all 3 items- Vendor to confirm that it can supply all 3 items.

#### Notes:-

- (1) Flange shall be mounted on Turbo Generator of Power plant (rating 250MW to 800MW)
- (2) Material of LEAD-IN-PLATE shall be as Structural steel (weldable-quality)
- (3) If required, vendor to arrange any fixture for testing on their own.
- (4) It is informed that Generator shall be filled with pressurized Hydrogen of 6kg/cm2.
- (5) Bidder to furnish reference list of important customers/ projects for our information. List must contain Project name, Customer name, M/c rating, Year of commissioning etc.
- (6) Bidder to confirm specific compliance wherever asked. BHEL reserves the right to verify information submitted by Bidder. In case the information is found false/incorrect/incomplete, the offer shall be rejected.

MANUFACTURER'S NAME AND ADDRESS		QUALITY PLAN					TO BE FILLED BY BHEL TO BE FILLED BY BHEL		BY BHEL			
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		LEGEND: ! RECORDS IDENTIFIED WITH 'TICK' SHALL BE ESSENTIALLY INCLUDED BY CONTRACTOR IN QA DOCUMENTATION. M: MANUFACTURER / SUBCONTRACTOR B: BHEL / NOM. INSPECTION AGENCY N: CUSTOMER INDICATE 'P' PERFORM 'W' WITNESS AND 'V' VERIFICATION	FOR CUSTOMER USE	
MANUFACTURER/SUBCO NTRACTOR				APPROVED BY
		ALL 'W' INDICATED IN COLUMN 'N' SHALL BE 'CHP' OF CUSTOMER		