



PROJECT: 1X500 MW NTPC UNCHAHAR TPP STAGE-IV

TECHNICAL PREQUALIFYING REQUIREMENTS
FOR VENDOR FOR
VIS FOR TG FOUNDATION

SPECIFICATION NO:PE-TS-401-613-C002

REV.NO. 0

DATE 07/05/2014

SHEET 1 OF 3

**TECHNICAL PREQUALIFYING REQUIREMENTS OF VENDOR
FOR
VIBRATION ISOLATION SYSTEM (VIS)
FOR
TG FOUNDATION**

SPECIFICATION NO: PE-TS-401-613-C002



BHARAT HEAVY ELECTRICALS LIMITED
PROJECT ENGINEERING MANAGEMENT
PPEI BUILDING, HRD & ESI COMPLEX
Plot No. 25, Sector 16A
NOIDA, U.P. – 201301



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SHEET 2 OF 3

PROJECT TITLE: 1X 500 MW NTPC UNCHAHAR TPP STAGE-IV

JOB NO. 401 DOCUMENT NO. PE-TS-401-613-C002

BUILDING/SYSTEM: VIBRATION ISOLATION SYSTEM

SUBJECT: TECHNICAL PREQUALIFYING REQUIREMENTS OF VENDOR FOR
VIBRATION ISOLATION SYSTEM FOR TG FOUNDATION.

| REV. NO. | PARTICULARS | PREPD. BY | CHECKED BY | APPROVED BY | REMARKS |
|-------------|-------------|----------------------------------|---------------|----------------------|---------|
| 00. | NAME | PK | SKM | TKM | |
| | SIGN | <i>Pradeep Kumar</i> 07/05/14 | <i>SKM</i> | <i>TKM</i> 7/5/14 | |
| | DATE | 07-05-14 | 07-05-14 | 07-05-14 | |



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TECHNICAL PREQUALIFYING REQUIREMENTS OF VENDOR
FOR VIBRATION ISOLATION SYSTEM (VIS)
FOR TG FOUNDATION

- a. Vendor should have **supplied and commissioned VIS (consisting of steel helical springs and viscous dampers)** for TG (Turbo-Generator) foundation or similar machine foundation in power plants or equivalent large sized industrial plants and furnish experience list of at least ten recently executed contracts where such systems have been successfully installed for such applications. The vibration isolation system shall be of proven make and should be in successful operation for TG Foundation or similar machines for at least two years.
- b. The vendor should have at least two years **design experience** in design of VIS module, selection and finalisation of Layout of VIS as well as design of machine foundations and be able to furnish static and dynamic analysis of the RCC deck slab resting on VIS and supporting the machine. Calculation should establish that no dynamic loads are transferred to the structure supporting the VIS and that the foundation system meets the amplitude and frequency requirement as required by the machine manufacturer. The isolation system and R.C.C. deck slab shall be able to withstand seismic loading in addition to other loadings i.e. dead, live, wind, dynamic etc. Seismic design shall conform to IS: 1893 (Criteria for Earthquake Resistant Design of Structures).
- c. **Performance certificate** (along with copy of relevant purchase order) from the end user/customer for at least two (different Customers) successfully executed contracts which are in successful operation for at least two years for the applying package shall be furnished.