



Ref No.: PE/PG/NB2/E-6828/2021 /CORRIGENDA/02

Date: 30.12.2021

**CORRIGENDA - 02**

**PROJECT: 3X660 MW NPGCPL NABINAGAR STAGE-II -FGD SYSTEM**

**PACKAGE: AGITATOR OF FGD SLURRY TANKS**

**TENDER ENQUIRY NO: PE/PG/NB2/E-6828/2021 dated 07.12.2021**

**TENDER DUE DATE: 04.01.2022 (2.00M)**

Bidders to note following amendments w.r.t subject tender:

- 1) Pls refer enclosed Amendment-01 for Technical Pre-Bid Clarification pertaining to subject tender.

**Bidders to ensure the submission of bid within the tender due date and time.**

With Regards,  
For & on behalf of BHEL

Isha Rawat  
Dy Mgr/PG-III/BHEL-PEM

**NATIONAL THERMAL POWER CORPORATION LTD.**

**NABINAGAR SUPER THERMAL POWER PROJECT  
STAGE – II (3X660 MW)**

AMENDMENT-01

**TECHNICAL SPECIFICATION  
FOR  
AGITATORS OF FGD SLURRY TANKS**

**SPECIFICATION NO.: PE- TS- 457- 571- 18000-A003**



**BHARAT HEAVY ELECTRICALS LTD  
POWER SECTOR  
PROJECT ENGINEERING MANAGEMENT  
NOIDA**



**TITLE:**  
**NABINAGAR SUPER THERMAL POWER  
PROJECT (3x660MW)**  
TECHNICAL SPECIFICATION  
FOR AGITATORS OF FGD SLURRY TANKS

**SPECIFICATION No: PE-TS-457-571-18000-A003**

**SECTION-I Sub Section-D**

**REV.**

**DATE:**

**SHEET : 1 OF 1**

REVISED MANDATORY SPARE LIST OF ANNEXURE-II, SUB-SECTION-D, OF SECTION-I OF TECHNICAL SPECIFICATION ARE ATTACHED AS ANNEXURE- A TO THIS AMENDMENT AND SHALL BE BINDING ON BIDDERS AND SAME SHALL BE SUPERCEDED THE CORRESPONDING CLAUSE OF TECHNICAL SPECIFICATION /AMENDMENT.

NABINAGAR SUPER THERMAL POWER PROJECT (3x660MW) TECHNICAL SPECIFICATION FOR AGITATORS OF FGD SLURRY TANKS		ANNEXURE-A
MANDATORY SPARE LIST		ANNEXURE-II
Sl. No.	PARTICULARS	Unit /Quantity (Nos./SET/%)
<b>1.06.00</b>	<b>AGITATORS</b>	
<b>A</b>	<b>AUXILIARY ABSORBENT TANK AGITATOR</b>	
1	Impeller Assembly	1 no. of each type and size
2	Bearing Assembly	1 no. of each type and size
3	Motor	1 no. of each type
4	Belt and Pulley (If applicable)	1 no. of each type and size
5	Gear Box Assembly (If Applicable)	1 no. of each type and size
6	Agitators shaft assembly	1 no. of each type and size
7	Shaft seal	1 no. of each type and size
8	Complete Agitator Assembly	1 no. of each type and size
<b>B1</b>	<b>LIMESTONE SLURRY STORAGE TANK AGITATORS</b>	
1	Impeller Assembly	1 no. of each type
2	Bearing Assembly	1 no. of each type
3	Motor	1 no. of each type
4	Belt and Pulley (If applicable)	1 no. of each type
5	Gear Box Assembly (If Applicable)	1 no. of each type
6	Agitators shaft assembly	1 no. of each type and size
7	Complete Agitator Assembly	1 no. of each type and size
<b>B2</b>	<b>PRIMARY HYDRO-CYCLONE FEED TANK AGITATOR</b>	
1	Impeller Assembly	1 no. of each type
2	Bearing Assembly	1 no. of each type
3	Motor	1 no. of each type
4	Belt and Pulley (If applicable)	1 no. of each type
5	Gear Box Assembly (If Applicable)	1 no. of each type
6	Agitators shaft assembly	1 no. of each type and size
7	Complete Agitator Assembly	1 no. of each type and size
<b>B3</b>	<b>SECONDARY HYDROCYCLONE FEED TANK AGITATOR</b>	
1	Impeller Assembly	1 no. of each type
2	Bearing Assembly	1 no. of each type
3	Motor	1 no. of each type
4	Belt and Pulley (If applicable)	1 no. of each type
5	Gear Box Assembly (If Applicable)	1 no. of each type
6	Agitators shaft assembly	1 no. of each type and size
7	Complete Agitator Assembly	1 no. of each type and size
<b>B4</b>	<b>FILTRATE WATER TANK AGITATOR</b>	
1	Impeller Assembly	1 no. of each type
2	Bearing Assembly	1 no. of each type
3	Motor	1 no. of each type
4	Belt and Pulley (If applicable)	1 no. of each type
5	Gear Box Assembly (If Applicable)	1 no. of each type
6	Agitators shaft assembly	1 no. of each type and size
7	Complete Agitator Assembly	1 no. of each type and size
<b>B5</b>	<b>WASTE WATER TANK AGITATOR</b>	
1	Impeller Assembly	1 no. of each type
2	Bearing Assembly	1 no. of each type
3	Motor	1 no. of each type
4	Belt and Pulley (If applicable)	1 no. of each type
5	Gear Box Assembly (If Applicable)	1 no. of each type
6	Agitators shaft assembly	1 no. of each type and size
7	Complete Agitator Assembly	1 no. of each type and size

NABINAGAR SUPER THERMAL POWER PROJECT (3x660MW) TECHNICAL SPECIFICATION FOR AGITATORS OF FGD SLURRY TANKS		ANNEXURE-A
MANDATORY SPARE LIST		ANNEXURE-II
Sl. No.	PARTICULARS	Unit /Quantity (Nos./SET/%)
B6	AGITATOR FOR DRAIN PIT ( FOR ABSROBER AREA, GYPSEM AREA AND LIMESTONE AREA)	
1	Impeller Assembly	1 no. of each type
2	Bearing Assembly	1 no. of each type
3	Motor	1 no. of each type
4	Belt and Pulley (If applicable)	1 no. of each type
5	Gear Box Assembly (If Applicable)	1 no. of each type
6	Agitators shaft assembly	1 no. of each type and size
7	Complete Agitator Assembly	1 no. of each type and size
<b>Note:</b>		
1) One set means 100% complete replacement of the particular component/equipment, as mentioned i.e., Set for the particular equipment, would include all components required to replace the item. For example, a set of bearing shall include all hardware normally required while replacing the bearings. It is further, intended that the assembly / sub-assembly which have different orientation (like left hand or right hand, top or bottom), different direction of rotation or mirror image positioning or any other reasons which result in maintaining two different sets of the spares to be used for the subject assembly / sub-assembly, these shall be considered as different types of assembly/sub-assembly.		
2) Wherever the quantities have been indicated for each type, size, thickness, material, radius, range etc. these shall cover all the items supplied and installed.		
3) In case spares indicated in the list are not applicable to the particular design offered by the bidder, the bidder should offer spares applicable to offered design with quantities generally in line with the approach followed in the above list.		
4) Any item which is quoted as "not applicable" in the above list and is found to be "applicable" at a later date shall be supplied by the bidder without any commercial implications. The Bidder shall note that if there in any change/ variation in equipment/ system during detail engineering which causes any change/ variation in the essential spares quantity, the same shall be supplied without any commercial implications. The price indicated for the mandatory spares shall be considered for the purpose of evaluation.		
5) Mandatory spares shall not be dispatched before dispatch of corresponding main equipment. Pls. refer NIT for delivery schedule. The spares shall be treated and packed for a long storage under the climatic condition prevailing at site.		
6) All spares supplied under this contract shall be strictly interchangeable with parts for which they are intended for replacements. These spares should include all mounted accessories like components, boards, add or items, fitting, connectors etc. and be complete in all respects so that the replacement of the main items by these spares does not require any additional item. The vendors must conform the pair to pair compatibility of each electrical spares modules with the modules supplied in the original package. All electronic modules should be pre-set and/or pre-programmed for ready use at site. Alternatively, suitable instruction sheet indicating the details of required PCB jumper position, BCD which is setting, EPROM/PROM listing etc should be packed along with each module. Also a caution mark sign should be put on all such module which needs pre-setting/pre-programming before putting them in to service. The spare shall be treated and properly packed for long term storage.		
7) Each spare shall be clearly marked and labelled on the outside of the packing with its description. When more than one spare part is packed in single case, a general description of the contents shall be shown on the outside of such case and a detailed list enclosed. All cases, containers and other packages must be suitably marked and numbered for the purpose of identification.		
8) Set for the particular equipment, would include all components required to replace the item, for example a set of bearing shall include all hardware normally required while replacing the bearings. It is further intended that the assembly / sub-assembly which have different orientation (like left hand or right hand, top or bottom), different direction of rotation or mirror image positioning or any other reasons which result in maintaining two different sets of the spares to be used for the subject assembly / sub-assembly, these shall be considered as different types of assembly/sub-assembly.		
9) All the spares shall be manufactured along with the main equipment components as a continuous operation as per same specification and quality plan.		
10) The Contractor shall warrant that all spares supplied will be new and in accordance with the Contract Documents and will be free from defects in design, material and workmanship.		
11) Any cell left blank in the unpriced schedule shall be teated as "Quoted"		
12) Bidder to provide mandatory spares as asked above for each type of tank separately ,even in case type & size of tank of agitator is similar.		