

Pre Bid Clarification No.04 on technical queries to NIB No.370 dated 31.08.2020

Sr. No.	Part / Clause	Heading	Pre-Bid Queries / Modification Required	NEEPCO's Clarification (dtd. 08.10.2020)	Bidder Queries	Replies of D&E, NEEPCO
20	Section-IV / Vol-2 / Part-II - 01 / Cl. 1.3	Hydraulic system	Please provided the complete hydraulic water conductor system drawing from HWL to TWL with detailed drawing of surge tank.	Drawing shall be shared during site visit of the bidders.	Noted.	Noted.
21	Section-IV / Vol-2 / Part-II - 01 / Cl. 1.5.3 & 1.6.4	Noise	Since the supply of turbine's components are very limited, so existing noise level would be measured before dismantling of existing turbine, and after that existing level of noise will be respected in maximum limit of condition. Kindly confirm.	Bid specification shall prevail.	Please note, noise level of 90-95dB is being kept for all new green-field projects. Since, Kopili plant is in shut condition and noise level of the unit can not be measured before handing over the unit to the Contractor, therefore the latest measured value of noise level (at all condition from part load to rated load) while putting unit in shutdown and same value may be taken as a reference. Kindly provide the above mentioned measured value.	90dB from 1 meter distance of the equipment.
22	Section-IV / Vol-2 / Part-II - 01 / Cl. 1.1.6 & 1.7.8	Guide vane servomotor	Please provide the existing drawing of servomotor. Please provide also the curve for guide vane servomotor stroke vs guide vane angle.	Available drawings, curve shall be shared during site visit of the bidders.	As discussed in pre-bid meeting kindly provide the drawings & data available at site to avoid any delay in bid preparation.	May be collected during site visit whatever drawing is available.
23	Section-IV / Vol-2 / Part-II - 01 / Cl. 1.11 and Section-IV / Vol-3 / Part-I / ANNEXURE – 1 (TB)	Spare parts	Kindly confirm that listed recommended spare parts is to be considered as mandatory spare parts.	Confirmed.	Noted.	Noted.
24	Section-IV / Vol-2 / Part-II - 01 / Cl. 1.11 (3)&(4) and Section-IV / Vol-3 / Part-I / ANNEXURE – 1 (TB)	Labyrinth seals upper & lower – fixed and moving	The turbine specification does not specify about any kind of labyrinth in main scope of supply. Kindly review & clarify.	Dimensions may be shared during site visit. However, for supply of Turbine shaft bidder has to come to site for take measurements etc. The same can be done at that time also.	As per scope of the tender, we understand that, the labyrinth seals upper & lower (fixed & moving) are not in bidders scope. Kindly confirm.	Confirmed

Pre Bid Clarification No.04 on technical queries to NIB No.370 dated 31.08.2020

Sr. No.	Part / Clause	Heading	Pre-Bid Queries / Modification Required	NEEPCO's Clarification (dtd. 08.10.2020)	Bidder Queries	Replies of D&E, NEEPCO
25	Section-IV / Vol-2 / Part-II - 01 / Cl. 1.1.6 & 1.7.8 and Amendment in technical specification/ Annexure-A / TURBINE (Section IV, Vol-2, Part-II - 01) / point no.-1	Linking arrangement	Kindly confirm whether the linking arrangement (link and lever) subjected to regulating ring with guide vane is to be considered as a supply part or not.	No.	Noted.	Noted.
26	Section-IV / Vol-2 / Part-II - 01 / Cl. 1.1.9, 1.7.10, 1.11.(9) and Amendment in technical specification/ Annexure-A / TURBINE (Section IV, Vol-2, Part-II - 01) / point no.-1	Centralized grease lubrication system	As per the amendment, "Linking arrangement for the servomotors with the regulating ring without changing servomotor stroke and torque shall be designed and supplied along with servomotors." And as per cl. no. 1.1.9, The system shall be designed to supply measured quantities of operating grease to all the bearing surfaces of levers, links, operating ring, rods, wicket gate stem (if applicable), inlet valve. <ul style="list-style-type: none"> • Please confirm whether the grease lubrication system is used for existing wicket gate stem & MIV or not. • Since the amendment call for linking arrangement, in that case self-lubricated bearing may be provided without connecting with centralized grease lubrication system. Kindly confirm. 	NEEPCO has planned to convert all the GV bushes to self lubricating bushes (bearing) and for MIV also. Hence CGL system will be removed.	Noted.	Noted.
27	Section-IV / Vol-2 / Part-II - 01 / Cl. 1.7.7	Top cover dewatering system	Kindly explain about the Ejector.	In BIDDER Turbines installed at Kopili Power Station, for removal of	With clause 1.7.7, we understand that, here ejector (ejector type	Pump shall be used in addition to ejector system

Pre Bid Clarification No.04 on technical queries to NIB No.370 dated 31.08.2020

Sr. No.	Part / Clause	Heading	Pre-Bid Queries / Modification Required	NEEPCO's Clarification (dtd. 08.10.2020)	Bidder Queries	Replies of D&E, NEEPCO
	And Cl. 1.14 (d)	Inspection and testing at site / Ejector		<p>top cover water, 1(one) high pressure line of 80NB (approx.) tapped from upstream of MIV and 1(one) solenoid valve is connected to this pipe then there one more pipe is connected to top of top cover. The solenoid valve is operated with the help of a float switch and depending on the level of water say if the level in the top cover is in higher side, the solenoid switch gives a contact which operates the solenoid valve and due to high pressure flow through this pipe whose delivery is at tail pool, a suction takes place in the top cover pipe connected to this pipe. This way top cover accumulated water is removed, Once, water level recedes to lower level in the top cover, float switch releases its contact, and the solenoid valve in the high pressure line is closed.</p>	<p>Pump) is to be used for "Top Cover Dewatering System". Kindly share the existing details/scheme of Top Cover Dewatering System with ejector type pump etc.</p>	
28	Section-IV / Vol-2 / Part-II - 01 / Cl. 1.14 (1)	Field efficiency / acceptance test	<p>Since this tender does not call for any new part of turbine subjected to efficiency and power (hydraulically), so before handing over the turbine to contractor the existing shape of efficiency curve and power output shall be measured in presence of both owner and contractor. And it will be a benchmark for field acceptance test after commissioning of new part</p>	<p>May be agreed. However, D&E Wing may comment. Turbine efficiency after the R&M of the plant will be required to be evaluated for reference purpose. Methodology for evaluation of the same will be discussed jointly in Pre Bid Meeting.</p>	<p>As it has already been replied & confirmed under Sl. No. 1 & 2 of your reply "Clarification on Pre-Bid Technical Queries dtd.08.10.2020" that, Field Acceptance Test (FAT) is envisaged neither as Guarantee or demonstration test. The methodology could not be concluded in the pre-bid meeting.</p>	<p><i>Shall be confirmed later.</i></p>

Pre Bid Clarification No.04 on technical queries to NIB No.370 dated 31.08.2020

Sr. No.	Part / Clause	Heading	Pre-Bid Queries / Modification Required	NEEPCO's Clarification (dtd. 08.10.2020)	Bidder Queries	Replies of D&E, NEEPCO
			as per tender specification for verification purpose only.		The space/ provision is required to know at site for feasibility of conducting the FAT with suitable methodology at site. The selected methodology for FAT should be same for all bidders. Hence, we request you to discuss again this topic in next pre-bid meeting to be scheduled.	
29	Section-IV / Vol-2 / Part-II - 01 / Cl. 1.14 (1)	Field efficiency / acceptance test	<ul style="list-style-type: none"> • Kindly provide also the existing field acceptance test method. • Kindly confirm also that measuring connection port shall be provided in workable condition to the contractor. • Kindly provide the drawing for existing connecting port for measuring also. 	Methodology for evaluation of the turbine efficiency and available connection ports will be discussed jointly in Pre Bid Meeting.	The methodology could not be concluded in the pre-bid meeting. The space/ provision is required to know at site for feasibility of conducting the FAT with suitable methodology at site. The selected methodology for FAT should be same for all bidders. Hence, we request you to discuss again this topic in next pre-bid meeting to be scheduled.	Shall be confirmed later.
30	Section-IV / Vol-3 / Part-II - 01 / Cl. 11.1.1 (1),(2),(3) And 11.4.2.(1), (2)	Guaranteed characteristics / performance data	Since this tender does not call for any new part of turbine subjected to efficiency and power (hydraulically), so may please be deleted the asked the performance data, axial load, factor safety, transient calculation for pressure rise and speed rise. kindly review and confirm.	Refer Point No. 9. But as far as performance data, axial load, factor of safety, transient calculation for pressure rise and speed rise shall be in the scope for the safe operation of the machines.	As it has already been replied & confirmed under Sl. No. 1 & 2 of your reply "Clarification on Pre-Bid Technical Queries dtd. 08.10.2020" that, the Field Acceptance Test (FAT) is envisaged neither as Guarantee or demonstration test, so may please be deleted the asked the performance data, axial load, factor safety, transient calculation for pressure rise and speed rise. Kindly confirm.	The performance data, axial load, factor safety, transient calculation for pressure rise and speed rise shall be part of scope of the contract.
31	Section-IV / Vol-2 /	Pressure rise	Since there is limited scope of	Bid conditions shall prevail.	As it has already been replied	Bid conditions shall

Pre Bid Clarification No.04 on technical queries to NIB No.370 dated 31.08.2020

Sr. No.	Part / Clause	Heading	Pre-Bid Queries / Modification Required	NEEPCO's Clarification (dtd. 08.10.2020)	Bidder Queries	Replies of D&E, NEEPCO
	Part-II - 01 / Cl. 1.3.2, 1.9.3, 1.14 And Section-IV / Vol-3 / Part-II - 01 / Cl. 11.4.2. (1), (2)	& speed rise	supply, transient analysis may not be performed. Kindly review and confirm.		& confirmed under Sl. No. 1 & 2 of your reply "Clarification on Pre Bid Technical Queries dtd. 08.10.2020" that, the Field Acceptance Test (FAT) is envisaged neither as Guarantee or demonstration test, so transient analysis may not be performed. Kindly confirm.	prevail.
Additional	Section-IV / Vol-2 / Part-II - 02 / Governor PTS / Cl. 2.7.1	2.7 Oil Pressure System 2.7.1 General	Additional Query on OPU		To design the OPU for MIV, Guide Vanes & PRV, kindly provide the following details of MIV Servomotor along with its bypass Servomotor, as MIV is not included in scope of supply. - Quantity - Maximum / Minimum Operating Pressure - Minimum required Pressure - Piston/Rod Diameter - Piston Stroke - Opening/Closing time - Open/Close operating medium (i.e. OIL/Counter Weight) We understand that the MIV Servomotor will be operated on high pressure system. Please confirm.	<i>Shall be provided during detail engineering.</i>