

	TITLE	SPECIFICATION NO. PE-TS-STD -166-A001
	STANDARD TECHNICAL SPECIFICATION FOR FO SYSTEM	VOLUME III
		SECTION
		REV 00

PRE-BID CLARIFICATION SCHEDULE

S.No.	Section/Clause/ Page No.	Statement of the referred clause	Clarification required	BHEL REPLY
1	VOLUME II-B,(Clause No.1.3.1), Page 273 of 348	One no. pressure reducing station consisting of self-regulating type control valves with safety relief valve and bypass arrangement shall be provided for reducing auxiliary steam available at 11 kg/cm ² (a) to 4.0 kg/cm ² (a). As per P&ID No.PE-DG-411-166-A103,Pressure reducing valve for 16 Kg/cm ² to 4 Kg/cm ² is required	Technical Specification of PRS in P &ID and Datasheet are contradictory. Kindly confirm.	Aux. Steam Pressure at 11 kg/cm ² (a) @ 210 °C will be available.
2	VOLUME II-B, Section-C (Clause No.1.1.2), Page 272 of 348	The railway wagons shall have steam heating coil arrangement dully installed for heating HFO up to min. 50C	Kindly confirm the initial Temperature of oil in unloading wagons and the heating time for unloading wagons.	Wagon initial temperature may be considered as ambient temperature. Railways allows maximum unloading time as 9 hrs (consisting of coupling, heating & pumping), beyond which demurrage charges are imposed.
3	VOLUME II-B, Section-C(Clause No.1.3.2), Page 273 of 348	A condensate flash tank of capacity 6.0 m ³ will also be provided in the unloading area for collecting condensate from	Kindly Confirm the location of Flash Tank. In case it is located in Unloading area Condensate shall be disposed nearby location and	Bidder query noted. Bidder to provide two (2) nos flash tank, One (1) no of 6 m ³ near HFO unloading area and one (1) of 2

		railway wagons heating before discharging the same to oil water separator near tank farm area.	vice versa as Tank Farm area is far.	m3 near tank farm area.
	VOLUME II-B, Section-C(Clause No.1.1.0), Point E, Page 11 of 348	One (1) no of Condensate Flash Tank near tank farm area of capacity 6.0m3 duly insulated and claded near tank farm area.		6m3 & 2m3 flash tank shall receive condensate from HFO unloading area and Tank farm area respectively.
4	VOLUME II-B,(Clause No.6.0.0), layout requirements, Point J, Page 16 of 348	However, inside the pump house no pedestals / insert plate shall be provided for fixing. Bidder shall support the pipes using pipe supports and anchor fasteners inside the pump house.	Kindly provide the P&IDs for Pump house to estimate the pipe support requirement for fixing arrangement.	No P&ID is available for pump house. Bidder to do the needful at their end itself.
5	General	Preparation of drawings/ document / P&IDs in 3D modeling software & providing soft copy of same to BHEL	In general practice, we use AutoCAD software to develop piping layouts & PIDs. Kindly confirm	Bidder to follow the specification.
6	Clause 6.0.0 layout requirements, Point L, Page 16 of 348	Oily water collected in storage tank area, oil unloading area will normally be collected in OWS pit by gravity either through trench (limited to a depth of 0.5 m) or through buried pipe (limited to a depth of 1.0 m) . However, in case depth of pipe between the pit and OWS pit exceeds 1 m or gravity flow is not possible due to layout constraints (which can be reviewed during detail engineering), the oily water waste shall be collected	Please specify the capacity of pump incase it is required in dyke area. Also provide the FGL at Tank farm area, oil unloading area & pump house area to determine the requirement of the pump. Also specify the capacity of these pumps (if required).	Capacity of pumps shall be decided during detail engineering. It shall normally be in the range 10-30 m3/hr.

		by pumping to OWS pit. Necessary pumps, valves, pipe supports, and instruments etc. for the same shall be included by bidder in their scope.		
7	Plant Layout PE-DG-K27-100-M001	As per the plant layout, we have noticed that, the area in between the pump house & oil tank farm area has been accumulated by some building / road crossing etc.	Kindly provide the section layout in between the Pump house & oil tank farm area; because if the pipe shall be routed on pedestal or pipe trestle then the parameter of the pumps shall varies and it shall impact on commercial part.	Copy of legible plot plan is attached. No section layout in between the P/H & tank farm area is available. Bidder to quote accordingly.
8	Instrumentation data SHEET -2.00.00, Page 199 of 348,	Hand held calibrators (5 nos. for each type) shall be provided for adjustment/ calibration/ maintenance of the HART compatible transmitters. The hand held calibrator shall be suitable for all types of transmitters supplied in the package. If one type of hand held type calibrator is not suitable for communicating with all types of transmitters Then separate hand held calibrator will be provided.	Kindly clarify the requirement of Hand Held Calibrator for transmitter.	Hand Held Calibrator is not in bidder scope of supply. However, please note that the smart positioner (for control valves, if supplied) shall be compatible with Universal Hand Held Calibrator.
9	LCP & Junction Boxes Specification, Section 2.01.05, Page 231 of 348	For Control desk/ panel mounted instruments/ devices etc. which are to be powered from UPS, all required conversion of interface equipments/ accessories to make such devices compatible with UPS supply shall be provided. All necessary hardware like input	We understand that 240V AC UPS supply for LCP and 24 VDC supply for field instruments shall be provided by BHEL. Kindly Confirm.	Please refer point no. 6.0 of Specific Technical requirement (C&I). Same is reproduced as below: "BHEL shall provide 230 VAC UPS supply feeder at a single point. Further distribution to various instruments shall be in Bidder's

		switches/ fuse unit for each feeder as well as switch fuse unit for each instrument/ device on the power supply line shall be provided. From UPS redundant feeders shall be provided with suitably rated MCB and provision of fast auto changeover of UPS feeders.		scope. Bidder to include necessary power distribution board in his scope. Any power supply other than the above, if required by any instrument/device, has to be derived by the Bidder and all necessary hardware/software for the same shall be in bidder's scope. Bidder to furnish UPS power requirement along with the bid."
10	LCP & JUNCTION BOXES Specification, Section 2.04.01, Page 233 of 348 and clause no. 2.02, Page 273 of 348	All DDCMIS system modules, power supply components and other Local Control panels (PLC/Relay based) shall be housed in cabinets. Local Control panel will act as an interface between DCS and the field devices for command & feedbacks. LCP shall have provision of command (Start/Stop), annunciation & feedback interface with the plant DCS.	We understand that the Relay based Local Control Panel shall be used and will act as interface between the DCS and the field devices for commands & feedbacks, DCS panel will be connected with LCP through hardwired. Further, necessary command shall be required from DCS to LCP for feedback of MCC (i.e. pump running). Kindly confirm.	Confirmed.
11	General	Level Transmitter	We have considered the Ultrasonic level transmitter for Fuel oil Tanks as it's not specified. Kindly confirm.	LTs shall be radar type, top mounted.
12	Main NIT, Point No 12,	Delivery for Supply 6 month from	6 Month delivery from the date	Bidder to refer NIT

	Delivery schedule	Date of LOI and 4 Months for Erection from site clearance . Site clearance is "Date for which site....."	of LOI is feasibly not achievable; kindly provide some relaxation via following: 1. 6 months from date of approved layout (P&ID etc). 2. 9 months from the date of detailed Purchased Order. 3. For Erection, 4 months from the date of front handing over to bidder such as Fuel oil pump house, FO Tank Dyke area, whichever comes later.	
13	SSC (Rev 00), Point No 14	Provision of facilities at site. Construction Power: it will be provided at one point of plant boundary free of cost.	We understand that, the Construction power shall be provided by BHEL @415V, 3 Phase to the contractor free of cost.	Confirmed.
14	SSC (Rev 00), Point No 15	Inspection Agency (Domestic Suppliers) : Later	We understand that, the TPI charges shall be client / BHEL scope.	Confirmed.
15	HEALTH, SAFETY AND ENVIRONMENT PLAN Clause 8.4.5.1	MEDICAL CENTRE (As per Schedule V, X and XI of BOCW central Rules, 1998) • A medical centre shall be ensured / identified at site with basic facilities for handling medical emergencies. The medical center can be jointly developed on proportionate	The medical centre has been established by client / owner, and charges shall have been debited, if the facilities shall be used by bidder during any type of emergency / medical treatment. Kindly confirm.	"As on date Medical facility (Clause no 8.4.5.1 MEDICAL CENTRE) is not available, if facility get developed vendor may avail the same on chargeable basis".

		<p>sharing basis with permission from BHEL.</p> <ul style="list-style-type: none">• A qualified medical professional, not less than MBBS, shall be deployed at the medical centre• The medical centre shall be equipped with one ambulance, with trained driver and oxygen cylinder.• Medical waste shall be disposed as per prevailing legislation (Bio-Medical Waste – Management and Handling Rules, 1998)		
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