REPLIES TO PRE BID QUERIES LOT-7 DATED -26.5.23

NIT NO : PNMM/PC-183/E-4018/NCB

SUB : COAL/PETCOKE/LIMESTONE HANDLING FROM RAILWAYSLIDING TO STORAGE YARD ON LSTK BASIS

Sr. No.	Document	Clause no./Page no	NIT Clause	Bidders Query	PMC replies 27.04.2023	Bidders Response 02.05.2023	PMC response 03.05.2023	Bidder response 11.05.2023	PMC response 24.05.2023	Bidder response 25.05.2023	PMC response 26.05.2023
1	PC0183/4018/Sec VI/3.1.1	10.5, Sheet 21 of 33	OTHER RELATED SYSTEMS Contractor/Bidder to consider & provide following other systems related to raw material handling. i) Piping of all required services Following utility piping lines shall be made available to the contractor/bidder at one point of battery limit of Coal Handling plant, further distribution to the required location considering attached piping specification shall be under scope of contractor/bidder. a) Drinking Water b) Service Water c) Cooling water if required **d) Instrument Air** e) Service air as mentioned above (complete piping scope from compressor to required location)	Client to furnish the water & compressed air terminal points. Client to furnish the co-ordinate points and available pressure at tie-in-points.	Refer Conceptual fire water layout drg. in NIT, for tentative tie-in points, which may be further finalized during detail engg by bidder. Pressure available at tie-in point is 7kg/cm2(g) minimum. Tentative Coordinate of tie-in points E=1020m and N=500m	Noted. All pipes shall be run through the on-ground pedestals from the client's terminal point to the proposed plant /upto proposed pump house near TP-2 (Pedestals are placed Parallel to the road). Client to furnish available pressure at tie in point of instrument air. Bidder has not envisaged any compressor, drier for the proposed plant. Booster pumps / Booster pump house considered at client's terminal point, since pressure available at the terminal point is not sufficient to deliver water upto proposed pump house. Client to provide sufficient /clear space for locating the pump house at client's terminal point.		Reply awaited.	Noted and same shall be finalized during detail engineering The available instrument air pressure at battery limit is 5.5 - 6 kg/cm2 (g) Mechanical design pressure - 10 kg/cm2 (g) Bidder to consider compressor and drier If required.	i) Noted ii) Noted iii) Mechanical deisgn pressure -10 kg/cm2 - Not clear, Kindly ellobrate furnished pressure is for air or fire water pressure. iv) As per Technical specification DFDS air, Instrument & service air shall be provided by client, Hence tkll has not envisaged compressor and drier.	i) ok ii) ok iii) -Plant Air pressure at B.L. -**7.0 kg/cm2g**, -Fire water pressure at WAGON UNLOADING PLATFORM-NORTH SIDE B.L. - 9.0 **kg/cm2g (Minimum)** -Instrument Air at B.L.- **5.5 - 6 kg/cm2g** iv) As per TS, Plant air, Instrument air, Fire water, Service water and drinking water shall be provided at B.L.(as mentioned prebid query reply). The available pressure is provided in point no. (iii). Booster pumps / Booster pump house will be in the scope of bidder, If, Fire water pressure at the farthest point of package shall not be a minimum of 7 kg/cm2 after installation of headers and sub headers.
2	PC183/4018/SecVI/3.1.2	3.9, Sheet 14 of 18	All civil buildings / facility, Control room, substation, labs etc. to be equipped with Centralize HVAC system (preferably water cooled) with 100 % redundancy	a) Bidder has considered water cooled PAC units with redundancy for control room, panel rooms, RIO rooms. b) Bidder has considered dry type pressurized ventilation system for substation. c) Client to clearly spelt out the civil buildings/facility room in case of air conditioning system has to considered, since bidder is not aware of other civil buildings/ facility rooms. Client to clarify & confirm the above mentioned points.		Client to reply to our query raised on 28.03.2023		Reply awaited.	The substation Switchgear room, UPS & Battery charger room, ECMS room, Control room, Maintenance Room, Engineer Room, and shift office shall be fully air conditioned through centralised HVAC system (as per Design Philosophy -HVAC system) with proper ducting arrangement for uniform cooling. Type of HVAC system to be determine during detail engineering stage based on Heat load calculations.	Noted & considered centrailsed HVAC (Water cooled PAC units) system.	Bidder to note that type of HVAC system to be determine during detail engineering stage based on Heat load calculations only.
3	PC0183/4018/Sec VI/3.1.5	3.5, Sheet 3 of 17	Tapings with the fire water mains provided at plant battery limit (adjacent to the proposed location) shall be provided as per requirement. The same (tie-in location/s) shall be decided during the detail engineering.	Client to furnish the fire water tie in points location and available pressure at each tie-in point.	Refer Conceptual fire water layout drg. in NIT, for tentative tie-in points, which may be further finalized during detail engg by bidder. Pressure available at tie-in point is 7kg/cm2(g) minimum. Tentative Coordinate of tie-in points E=1020m and N=500m	Noted. All pipes shall be run through the on-ground pedestals from the client's terminal point to the proposed plant /upto proposed pump house near TP-2 (Pedestals are placed Parallel to the road). Client to furnish available pressure at tie in point of instrument air. Bidder has not envisaged any compressor, drier for the proposed plant. Booster pumps / Booster pump house considered at client's terminal point, since pressure available at the terminal point is not sufficient to deliver water upto proposed pump house. Client to provide sufficient /clear space for locating the pump house at client's terminal point.		Reply awaited.	Noted and same shall be finalized during detail engineering The available instrument air pressure at battery limit is 5.5 - 6 kg/cm2 (g) Mechanical design pressure - 10 kg/cm2 (g) Bidder to consider compressor and drier If required. Bidder to consider fire water tie in points as per NIT.	i) Noted ii) Noted iii) Mechanical design pressure -10 kg/cm2 - Not clear, Kindly elaborate furnished pressure is for air or fire water pressure. iv) As per Technical specification DFDS air, Instrument & service air shall be provided by client, Hence tkll has not envisaged compressor and drier.	i) ok ii) ok iii) -Plant Air pressure at B.L. -**7.0 kg/cm2g**, -Fire water pressure at WAGON UNLOADING PLATFORM-NORTH SIDE B.L. - 9.0 **kg/cm2g (Minimum)** -Instrument Air at B.L.- **5.5 - 6 kg/cm2g** iv) As per TS, Plant air, Instrument air, Fire water, Service water and drinking water shall be provided at B.L.(as mentioned prebid query reply). The available pressure is provided in point no. (iii). Booster pumps / Booster pump house will be in the scope of bidder, If, Fire water pressure at the farthest point of package shall not be a minimum of 7 kg/cm2 after installation of headers and sub headers.
4	PC0183/4018/SEC VI/3.2	3.4.7, Sheet 9 of 66	Fire Alarm system & Fire and Gas detection system(if applicable) shall be interfaced with the Central fire control room, all the necessary communication up to the central fire system PLC shall be in bidder's scope. Including supply of OFC and network switches etc. Any alarm generated in ROM COAL/PETCOKE/LIMESTONE HANDLING units shall be displayed at Fire Control Room. Repeater panel at central fire control station shall be in bidder scope.	Client to furnish the location of central fire control room in the plant layout.	Refer Conceptual fire water layout drg. in NIT.	Noted, However we have observed that fire water tap points are available at the track hopper & other proposed TP's. In this scenario, bidder can utilize these fire tap points for the proposed plant. Kindly check & reconfirm.		Reply awaited.	Confirmed. Bidder to consider fire water tap points as per NIT	As per NIT drawing (Drg.No.-PC183-4012-921-001), Fire water tap points are available near Track hopper, TP05C. Hence we have taken tap point from as per furnished drawing. Booster fire water pump has not envisaged.	Fire water pressure at WAGON UNLOADING PLATFORM-NORTH SIDE B.L. - 9.0 **kg/cm2g (Minimum)** Booster pumps / Booster pump house will be in the scope of bidder, If, Fire water pressure at the farthest point of package shall not be a minimum of 7 kg/cm2 after installation of headers and sub headers.
5			General comment	Technical specification is silent about LHS cable for conveyors. Bidder has considered 3 runs of LHS cable each stream of conveyor (Carrying & return conveyors). Please check & confirm.		Client to reply to our query raised on 28.03.2023		Reply awaited.	LHS cable, as required shall be LSTK contractor's scope. Run LHS cables shall be finalized during detail engineering.	Noted & confirmed. Bidder has considered 3 runs of LHS cable each stream of conveyor (Carrying & return conveyors).	Noted
6			General comment	Bidder has not envisaged booster pumps for fire fighting system.	Fire water pressure at the farthest point shall be a minimum of 7 kg/cm2 after installation of headers and sub headers. If booster pump is required for the system to fulfill the TAC/NFPA/IS norms, same to be provided by vendor.	Noted & considered Booster pump (one diesel/ one electrical pump capacity of 137 cum/hr. @ 110Mwc) at tie in point.		Reply awaited.	Rating of pump/motor shall be finalized during detail engineering.	As per NIT drawing (Drg.No.-PC183-4012-921-001), Fire water tap points are available near Track hopper, TP05C. Hence we have taken tap point from as per furnished drawing. Booster fire water pump has not envisaged.	Fire water pressure at WAGON UNLOADING PLATFORM-NORTH SIDE B.L. - 9.0 **kg/cm2g (Minimum)** Booster pumps / Booster pump house will be in the scope of bidder, If, Fire water pressure at the farthest point of package shall not be a minimum of 7 kg/cm2 after installation of headers and sub headers.
7	SECTION VI - 3.0-DESIGN SPECIFICATIONS	SHEET 19 OF 33 (32 OF 750)	10.1.15 Other Design Factor - Wagon unloading Operation at track hopper building: Unloading is done automatically from the bottom through Pneumatic Door Operating Mechanism activated by rail Side Devices mounted on the track . Wagon type:-BOBRN, BOBR (Bottom discharge) and BOBSN(Side discharge)	Please confirm the scope of Pneumatic Door Opening Mechanism and how many wagons opened at a time.			Pneumatic door opening system shall be in scope of the supply of Bidder. At a time one third part of full rake shall be opened.	As per client reply, The Capex & Opex implication will be huge. Following implications are mentioned below for your review & confirmation. 1. As per the reply bidder understand all 21 Nos. of BOBR wagons (Track hopper area) will open at a time.	Noted. For track hopper maximum six (6) no. of wagon of bottom opening doors shall operate at a time. Bidder to consider DFDS system in wagon tippler and track hopper as per NIT DFDS system shall be installed at whole length of track hopper on both sides.	i) Noted ii) Noted iii) Noted iv) Noted, However DFDS nozzles will operate for six (6) wagons at a time.	Noted.

								Spacing of each nozzle – 500 mm No. Of Wagon discharge Simultaneously = 21 Nos (250/12=21Nos) Total nozzles – (250m X 2 sides X1000/500)=1000 nos. Total air requirement of track hopper – 1000 X 6 = 6000 cfm **ii) Compressor air requirement of BOBR wagon (Bottom opening of the wagon)** Compressed Air Required For Door Opening of One No. BOBR Wagon = 0.5 cum / Min No. Of Wagon Door To Be Opened Simultaneously = 21 Nos. Total air requirement = 21 X 0.5 X 35.31 (Conversion factor for cfm)= 371 cfm **iii) Wagon tippler & Other tp's DFDS system** WT hopper – 130 Nos of nozzles X 6 cfm = 780 cfm Other TP's (WT conveyor, TP-1, TP-2,TP-3,TP-4,TP-5 & Existing TP-2) = 132 Nos X 5 cfm 660cfm **Hence total air required for the proposed plant = 6000 +371+780+660 = 7811 cfm** **Client to supply compressed air for the proposed plant = 7811 cfm X 5% (Margin) = 8200 cfm @ 6 bar pressure at tie-in point.** **As per Sl.No.2, Currently, bidder has not envisaged any compressor & compressor house in our scope of supply.** 2. **In case the client is not able to supply compressed air as per the above requirement, then Minimum 9 nos of working compressors with standby units need to be considered for the proposed plant.** **Approx. compressor room size shall be 40m X 12m (W) X 6M (H) - Impact in Civil & Structural** **Each compressor power rating will be 160KW (minimum) - Impact in E&I** **Gallery should take care of pipe load (Compressor pipe size Max 300 NB)- Impact in Civil & Structural** **Which leads to an increase in the commercial aspect.** **Client to check & confirm.**			
								Continuation to the above statement As per NTPC standards & our Past experience - For track hopper Maximum six (6) nos. of Bottom opening doors shall operate at a time. For the Track hopper - Plain water DS system envisaged, hence there won't be any compressor requirement. At a time maximum of six (6) nos. of wagon DS nozzle shall operate on both sides. Hence compressor requirement will be less & service air can be easily supplied at client's terminal point. Client to check both options & confirm the requirement			