

**PRE BID REPLIES (LOT 5)- Fire Fighting System  
M/s TALCHER FERTILIZERS LIMITED**



**PROJECT : FIRE FIGHTING SYSTEM FOR OSBL FACILITIES ON PACKAGE BASIS**  
**TENDER ID : 2022\_PDIL\_674308\_1**  
**TENDER REF NO. : PNMM/PC-183/E- 4012/NCB**  
**OWNER : M/s TALCHER FERTILIZERS LIMITED**



SL. NO	DOCUMENT NO	PAGE NO.	Cl. No	ITB REQUIREMENT	BIDDERS QUERIES	PMC REPLIES on 05.05.2022
1	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	517 of 1261	7.3.5	Voltage Rating for the Motors of different ratings shall be as follow: Upto 150 KW, 415V, 3-Phase, 50Hz AC Above 150KW - 1000 KW, 3.3 KV, 3-Phase 50Hz AC Above 1000 KW, 11KV, 3-Phase 50Hz AC	As per Technical specification Jockey pump Motors feeders are LT 415V ±10%, 50Hz ±5% and rating upto 150 KW Motor should be LT Motors. but as per OEM / manufacturers Motors rating are coming 160 KW which are falling under HT rating as per technical specification. Kindly Confirm the same and provide the 2 Nos 3.3 KV HT Feeders for Jockey Pumps instead of LT feeders.	Motor Feeders of required voltage Levels shall be made available to the Bidder.
2	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	503 of 1261	1.4	2 Nos. of 415V ±10%, 50Hz ±5%, Breaker Motor feeders for LSTK Contractor's Jockey Fire water Pump Motors		
3	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	519 of 1261	7.5.5	Both 3 Phase switch sockets and 1 Phase switch sockets shall be provided at Min. 20 M interval. Maximum 2 Nos. 63A switch sockets and 2 Nos. 16A switch sockets shall be connected in one circuit.	As per technical specification we have understand that to provide the switch & socket in Pump House at every 20 M interval. Therefore we have consider the three set of Switch & sockets since pump house total length is 65 M. Kindly Confirm the same.	Noted.
4	General			Cable routing from Fire Water Pump House to Offsite Utility Sub-Station and fields.	Pipe Rack details drawing are not available in technical Specification. Kindly provide the same also so that we can avail to finalize the cable routing accordingly.	Please refer Plot Plan. Same shall be finalised during detail engineering.
5	General			Soil Resistivity require for finalizing the nos. of Earth Pits.	Soil Resistivity are not provided in technical Specification. Please provide the soil resistivity to finalised the qty of Earth Pits.	Soil investigation shall be in the scope of bidder. Accordingly, the quantity of earth Pits shall be finalised.
6	General			DC 110 V Supply for Interposing Relay Panel at OUSS.	We Understand that require DC 110 V Supply for interposing relay Panel at OUSS for HT Breaker Feeder shall be provide by Client. Please Confirm.	Noted.
7	PC183-TFL-4012-603-SEC VI-4.0 DESIGN PHILOSOPHY-PIPING	371 of 1261	4.2.4		In NIT document, it is mentioned that Sprinkler system with deluge valves (dry type), shall be installed at <b>All Buildings as per NBC 2016 (and/or latest edition)</b> also similarly, in the scope description of Sprinkler system (wet type with QBD) it is mentioned that Wet type deluge system shall be installed at <b>All Buildings as per NBC 2016 (and/or latest edition)</b> .  <b>From above statement it is not clear which buildings as per NBC 2016 require wet and dry type deluge system.</b> Please give bifurcations of the building names(under NBC 2016) which need be considered under Dry and wet type of deluge system.	Please refer Attachment 5. Further details shall be finalize during detail engineering.
8	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	530 of 1261	13.1		As per our understanding, we presume that FACP system for individual location is already installed by another contractor and we only need to intergrate the main FACP panel with our centralised fire alarm system located at Fire Brigade building and control station. Please confirm.	Please refer Amendments.
9	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL				Power supply for individual location FACP panel is not in our scope. Please confirm.	Power supply for FACP's (in Bidder's scope) shall be provided by nearest Substation, as available. However, all cabling work shall be in Bidder's scope.
10	OSBL Substation				Kindly confirm the location for OSBL substation in plant layout.	Refer Plot Plan.
11	location of PLC room				Refer pre bid replies lot-2, query no 103, reply given by owner states that PLC control room is located inside the fire fighting pump house wheare as per building drawings PLC need to be placed in Fire control room located in Fire brigade building and control station.  Please confirm the exact location where PLC panel need to be placed.	Kindly ignore Pre bid reply of lot-2 ,query no 103.  PLC shall be located in fire control room.
12	Furniture requirement				Kindly confirm if furniture/ chair/ Almirah shown in Fire Brigade Building drawing is in scope of Bidder.	Furniture ,chair ,table etc. as mentioned in electrical & Instrumentation technical specification shall be in the scope of bidders as per NIT.
13	Fire water mounting pump house				Please confirm if Fire Water mounting pump house is in scope of bidder.	Fire Water pump house is in scope of bidder.
14	Power for FW pump motor				Please confirm , from which location we need to take power required for the fire water pumps.	From OUSS.
15	General				As per tender description, 2 Nos. of 415V Breaker Motor Feeders for LSTK Contractor's Jockey Fire Water Pump Motors will be provided by Owner, however, we have received offer from approved pump vendors for Jockey pumps where pump vendor is offering electrical motor which has KW rating more than 150 KW.  As per tender specifications, KW rating between 150 to 1000 KW need to be considered as HT as 3.3 KV. hence, we request owner to supply HT feeder panel for the jockey pumps insted of 450 V i.e. LT.	Motor Feeders of required voltage Levels shall be made available to the Bidder.
16	PC183-TFL-4012-603-SEC-VI-2.0 CONTRACTOR'S SCOPE OF WORK	338 of 1261	2.0 Point No: VIII	Piping along with valves and fittings for connecting from diesel oil day tanks (at fire water pump house) to bulk diesel oil storage tank area at battery limit.	Route way need to be carried out for fill pipes from bulk diesel oil storage tank to day diesel tank of engine driven pumps. <b>Mark the same in the plot plan.</b>	Diesel oil piping/routing shall be as per engineering by bidder. Piping along with valves and fittings, control etc. for connecting from diesel oil day tanks (at fire water pump house) to bulk diesel oil storage tank area at battery limit area is in Fire fighting bidders scope.
17	PC183-TFL-4012-603-SEC-VI-2.0 CONTRACTOR'S SCOPE OF WORK	338 of 1261	2.0 Point No: VIII	Piping along with valves and fittings for connecting from diesel oil day tanks (at fire water pump house) to bulk diesel oil storage tank area at battery limit.	Filling pumps of bulk diesel oil storage tank to day diesel tank of engine driven pumps in FFS vendor scope or not already there is a existing pumping system available.	Filling pumps of bulk diesel oil storage tank shall be in the scope of Bulk diesel storage vendor. Transfer line from battery limit up to diesel day tank shall be in the scope of bidder.
18	PC183-TFL-4012-603-SEC-VI-2.0 CONTRACTOR'S SCOPE OF WORK	338 of 1261	2.0 Point No: VIII	Piping along with valves and fittings for connecting from diesel oil day tanks (at fire water pump house) to bulk diesel oil storage tank area at battery limit.	Power supply, control panel & shed for diesel filling pumps in FFS vendor scope or not.	Power supply, control panel & shed for bulk storage tank shall be in the scope of BULK DIESEL STORAGE VENDOR But Power supply, control panel & shed for day storage tank for diesel fire pump system shall be under this tender.
19	General				The space availability in the existing cable trays whether same can be used for our system cables or we have to propose new cable tray.	Bidder to consider new cable trays in their scope.
20	General				Structures for existing cables trays can be used or we have to propose new structures for our proposed cable trays.	Cables shall be laid on Overhead Cable Trays in entire plant. Space in Owner's Pipe rack may be used for laying of cable trays . In case, Owner's Piperack is not available in Cable Route, structure and cable trays support for cable Trays shall also be in Bidder's scope.
21	General				The space availability in the existing pipe racks whether same can be used for our systems (Diesel Fill pipes, Instrumentation air pipes & drinking water pipes) or we have to propose new Pipe rack for proposed (Diesel Fill pipes, Instrumentation air pipes & drinking water pipes).	Bidder shall provide the structures/supports for their scope of piping systems.
22	General				Structures for existing pipe racks can be used or we have to propose new structures for pipe racks of (Diesel fill pipes, Instrumentation air pipes & drinking water pipes) that we are proposing.	Bidder shall provide the structures/supports for the piping systems of their scope.
23	PC183-TFL-4012-603-SEC-VI-2.0 CONTRACTOR'S SCOPE OF WORK	339 of 1261	2.0 Point No: XXXV	Overhead storage tanks (potable water storage), septic tank, plumbing piping, fittings, taps (valves) for drinking water and sanitary purposes, respectively, at each building constructed by bidder	Drinking water fill pumps along with control panel & cabling in FFS vendor scope or not.	Drinking water fill pumps not in bidder scope.

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24	PC183-TFL-4012-603-SEC-VI-2.0 CONTRACTOR'S SCOPE OF WORK	339 of 1261	2.0 Point No: XXXV	Overhead storage tanks (potable water storage), septic tank, plumbing piping, fittings, taps (valves) for drinking water and sanitary purposes, respectively, at each building constructed by bidder	Water softening plant in each buildings that we are building in FFS vendor scope or not.	Water softening plant not in bidder scope.																														
25	General				Following Substation Building Drawings are required, <table border="1"> <thead> <tr> <th>SL.NO</th> <th>BLOCK DESCRIPTION</th> </tr> </thead> <tbody> <tr><td>1.</td><td>SUB-STATION (DR WATER PLANT)</td></tr> <tr><td>2.</td><td>SUB-STATION (WATER TREATMENT PLANT)</td></tr> <tr><td>3.</td><td>SUB-STATION (ETP)</td></tr> <tr><td>4.</td><td>SUB-STATION (BAGGING PLANT)</td></tr> <tr><td>5.</td><td>SUB-STATION (CDAL HANDLING)</td></tr> <tr><td>6.</td><td>SUB-STATION (STEAM GENERATION)</td></tr> <tr><td>7.</td><td>SUB-STATION (ASH DYKE)</td></tr> <tr><td>8.</td><td>SUB-STATION (EDG BUILDING + PANEL ROOM)</td></tr> <tr><td>9.</td><td>SUB-STATION (COOLING TOWER-MCC ROOM)</td></tr> <tr><td>10.</td><td>SUB-STATION (33KV SWITCH YARD)</td></tr> <tr><td>11.</td><td>SUB-STATION (MSS-EDS)</td></tr> <tr><td>12.</td><td>SUB-STATION (ASH HANDLING)</td></tr> <tr><td>13.</td><td>SUB-STATION (GUSS)</td></tr> <tr><td>14.</td><td>SUB-STATION (SILD-MCC ROOM)</td></tr> </tbody> </table>	SL.NO	BLOCK DESCRIPTION	1.	SUB-STATION (DR WATER PLANT)	2.	SUB-STATION (WATER TREATMENT PLANT)	3.	SUB-STATION (ETP)	4.	SUB-STATION (BAGGING PLANT)	5.	SUB-STATION (CDAL HANDLING)	6.	SUB-STATION (STEAM GENERATION)	7.	SUB-STATION (ASH DYKE)	8.	SUB-STATION (EDG BUILDING + PANEL ROOM)	9.	SUB-STATION (COOLING TOWER-MCC ROOM)	10.	SUB-STATION (33KV SWITCH YARD)	11.	SUB-STATION (MSS-EDS)	12.	SUB-STATION (ASH HANDLING)	13.	SUB-STATION (GUSS)	14.	SUB-STATION (SILD-MCC ROOM)	Tentative Dimension of Substation already provided. Detailed drawings shall be provided during detailed engineering.
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26	PC183-TFL-4012-603-SEC-VI-2.0 CONTRACTOR'S SCOPE OF WORK	339 of 1261	2.0 Point No: XXVII,XXVIII,XXIX	Interconnection of fire & gas detection system of OSBL areas with Fire & Gas detection system provided by ISBL contractor and separate package vendors/agencies.	Existing fire alarm system details (ISBL) like Brands & Model No.	shall be provided during detail engineering.																														
27	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	531 of 1261	13.1	Minimum 6 Nos. FACP suitably located in above mentioned Buildings/Substations/Control Rooms/Plant and corresponding minimum 2 Nos. Repeater Panel covering all FACP's in Fire Station Building including all interface and integration shall be in LSTK Contractor's scope.	There are 6 Nos of fire alarm panel we require locations of the each of each proposed fire alarm panel.	Location of Minimum 6 Nos. FACP's (in Bidder's scope) to be decided by Bidder.																														
28	PC183-TFL-4012-603-SEC VI-4.0 DESIGN PHILOSOPHY-PIPING	371 of 1261	4.2.2	To be provided for the followings locations, but not limited to. - Transformers irrespective of oil content & location	Transformers details like (Dimensions) (Length X Width X Height) of transformers need to be protected with HVWS.	Transformers tentative details are already provided in amendment.																														
29	PC183-TFL-4012-603-SEC VI-4.0 DESIGN PHILOSOPHY-PIPING	371 of 1261	4.2.1 Point No: 4	To be provided for the followings locations, but not limited to. - Compressor seals - Lube oil consoles - Knock out drums (with hydrocarbon bearing service) - Cable cellars - Diesel/Petrol/Kerosene oil or any hydrocarbon liquid / oil tank - Coal/ Pet coke/ solid hydrocarbon material handling plant area - Pumps under racks. - Empty bag storage area	1.Cable tray details like (No. of rows & tiers , length , width) in the substation buildings that need to be protected. 2. Equipment dimensions & details 3.Structures Dimensions & details 4.Conveyor details like (No. of conveyors list , height details, length , width)	Shall be provided during detail engineering stage.																														
30	PC183-TFL-4012-603-SEC VI-4.0 DESIGN PHILOSOPHY-PIPING	371 of 1261	4.2	Instrument air service Piping/ Tubing shall be SS304.	Pumps arrangement along with panels to transfer instrument air from owner's tie-in points to our service line	Owner shall provide instrument air/service water/plant air/ drinking water at battery limit of fire water pump house , fire control room etc. , facilities,and bidder has to take tapping from available point.																														
31	PC183-TFL-4012-603-SEC VI-4.0 DESIGN PHILOSOPHY-PIPING	370 of 1261	4.1.2	Suitable draining scheme for trenches shall be provided.	Distance between existing draining pits & proposed fire water pipe trench to carry out our drain trench routing. Mark the same in the plot plan.	As per bidder engineering																														
32	PC183-TFL-4012-603-SEC VI-6.0 DESIGN PHILOSOPHY – CIVIL & STRUCTURAL WORKS	404 of 1261	1.9	Sewage Disposal	Distance between existing sewage line from each buildings that we are building in order to connect our sewage connections with it. Mark the same in the plot plan.	Bidder sewage connections shall be as per bidder engineering to the plant sewage system near the battery limit.																														
33	PC183-TFL-4012-603-SEC VI-4.0 DESIGN PHILOSOPHY-PIPING	370 of 1261	4.1	Field adjustable variables flow type remote operated monitors shall be provided for the protection of inaccessible equipment.	Remote operated water monitor locations & power supply availability near to the water monitors	Manually operated monitors are envisaged in this tender.																														
34	General				Areas where we have to propose gas detection system & type of gas detection system.	Flange joints of piping system for Toxic/flammable service in piping/equipment system in OSBL area. (Ex. OSBL pipe rack etc.). Further details shall be provided during detail engineering.																														
35	PC183-TFL-4012-603-SEC VI-4.0 DESIGN PHILOSOPHY-PIPING	372 of 1261	4.4	Clean Agent Flooding System	Areas other than fire station building that need to be protected by gas suppression system required system.	Gas flooding system shall be as per NIT. However any other minor facilities required to complete the fire fighting system shall be done by bidder, and same shall be finalized during detail engineering																														
36	General				Fire Pipes in railway track routed above ground in structures or underground in NP4 hume pipes	Rail crossings shall be by underground piping.																														
37	General			BUILDING REQUIREMENTS Water supply, finishing works, plumbing works, sanitary fixtures, LAN system, EPABX system, electrical wiring system/fixtures, approach roads, drainage system, sewage system, fire fighting system, safety requirements etc. shall be mandatory requirement for all buildings / sheds under bidder's scope.	Telecom connection & LAN connection for Fire Station Building shall be provided by the owner upto the building.	LAN & TELECOM is not in bidder scope.However conducting of LAN & TELECOM wire for each system inside fire control station, fire water pump hose, fire brigade vehicle parking shall be in the scope of bidder.																														
38	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	500 of 1261	Clause No. 1.3.2		As per referred clause we understand that panels for the Lighting & UPS system are only in the scope of the supply.	Supply, erection, testing & commissioning of all panels as per NIT are in Bidder's scope.																														
39	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	503 of 1261	Clause No. 1.16		As per referred clause power factor improvement device have to be provided in the construction panel. But in general practice the same have not been provided in the construction panel.	Bidder shall ensure that the minimum power factor of 0.9 is maintained at their end.																														
40	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	503 of 1261	Clause No. 1.16		Again also note as per the referred clause the DG set also have to be considered for construction power. In general practice the same has been included in the client.	During non availability of construction power, Bidder shall have to arrange power supply, if required, through DG set at their own cost.																														
41	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	503 of 1261	Clause No. 1.16		The distance for the tapping point of the construction power upto the work front is required.	Please refer Substation near 132 kV Switchyard in Plot Plan for tapping Construction Power.																														
42	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	503 of 1261	Clause No. 1.21		As per referred clause electrical work for the Fire water pump house, Fire Station building, Fire bridge parking building are in the scope.	Electrical work complete in all respect shall be in Bidder's scope.																														
43	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	503 of 1261	Clause No. 1.22		As per referred clause points are not clear	In this clause interface & integration with Owner's other Plant/Systems (to be done by Bidder) are elaborated.																														
44	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	501 of 1261	Clause No. 1.4		The distance for the tapping point of the HT Outgoing panel terminal upto the fire water pump house and the tapping point of the LT Outgoing panel terminal upto the fire water pump house are required.	Power shall be tapped from OUSS by Bidder. Please refer OUSS in Plot Plan																														
45	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	501 of 1261	Clause No. 4.2.1		As per referred clause 33% of total light will be provided from DG power. Scope of DG set for the same not clear.	Emergency Power shall be tapped from OUSS by Bidder.																														
46	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	513 of 1261	Clause No. 7.2.1		As per referred clause distribution board have drawout module but as per SLD all MPDB, Lighting sub distribution board etc are fixed type.	MPDB Incomers drawout type, Outgoings Fixed Type. LSDB fixed type.																														
47	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	516 of 1261	Clause No. 7.2.3.4		As per referred clause the lighting sub DB will be fabricated from cold rolled sheet steel. Instead of the same CRCA sheet can be considered.	The lighting sub distribution boards shall be fabricated out of 2.5 mm thick cold rolled sheet steel.																														
48	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	518 of 1261	Clause No. 7.4.12		As per referred make two nos LCS will be provided for the motor. But in general practice one No. LCS near motor has been provided. All motor for this project will be installed in ground only. Hence can we consider one no. LCS for each motor.	This clause is applicable for the motors, which are installed at elevated platforms.																														
49	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	521 of 1261	Clause No. 8.1.3		HV cable will be screen cable or not.	Screen cable.																														
50	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	524 of 1261	Clause No. 8.2.3		As per referred clause GI strip through out cable racks will be 75X12mm. But in general the same has been considered 50X6mm.	NIT condition to be complied.																														

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51	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	530 of 1261	Clause No. 10.2	Please confirm which have been considered for Lightning protection either air terminal or shielding mats	Air Terminal. (refer clause 10.2.4)
52	ATTACHMENT- 09	1234 of 1261		Kindly provide us the Sectional Drawings indicating the Height & architecture of Workshop	Shall be provided during detail engineering stage.
53	ATTACHMENT- 09	1234 of 1261		Kindly provide the GA & Section Drawings of the Existing Fire Station & First Aid Centre along with False Ceiling details	Shall be provided during detail engineering stage.
54	ATTACHMENT- 09	1234 of 1261		Kindly provide the sectional drawing of Training Centre	Shall be provided during detail engineering stage.