



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

TCN – 01

Ref: PSER:SCT:NKP-M1627:TCN-01

Date: 03-12-2014

Sub	Tender Change Notice (TCN-01).	
Job	Design, engineering, manufacturing, supply/delivery, storage, erection, commissioning, trial run, handing over to customer, etc of Fuel oil unloading and storage system for, 3 X 660 MW North Karanpura, Super Thermal Power Project, Jharkhand.	
Ref	01	Tender No. PSER:SCT:NKP-M1627:14.
	02	BHEL's NIT, vide reference no PSER:SCT:NKP-M1627: 4057, dated 15-11-2014.
	03	Other references (if any).

With reference to above, following points, relevant to tender, may please be noted and complied with while submitting offer.

- 1.0 Clarification to bidder's query as per **Annexure-I** to TCN-01 attached herewith.
- 2.0 Due date of offer submission is extended from 06-12-2014 to **15-12-2014** (15=00 Hrs). Bidders are requested to submit their offer by extended due date positively.
- 3.0 Revised Fuel oil unloading and storage system layout has been attached herewith.
- 4.0 Revised 'No deviation certificate' is attached. Bidder to submit 'No deviation certificate' as per attached format only.
- 5.0 All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD

SR. ENGINEER (SCT)

Encl

- 1.0 Revised 'No deviation certificate' format.
- 2.0 Clarifications to bidder's queries- ANNEXURE-I.
- 3.0 Revised Fuel oil unloading and storage system layout.

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

POWER SECTOR EASTERN REGION, DJ-9/1, SALT LAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 23211960

फोन/Phone : बोर्ड/EPABX : 23211798/ 1691

FORMAT FOR NO DEVIATION CERTIFICATE
(To be submitted in the bidder's letter head)

BHARAT HEAVY ELECTRICALS LIMITED,
Power Sector - Eastern Region,
Plot no 9/1, DJ Block, Sector – II, Salt Lake City,
Kolkata – 700 091

Sub	No Deviation Certificate.	
Job	Design, engineering, manufacturing, supply/delivery, storage, erection, commissioning, trial run, handing over to customer, etc of Fuel oil unloading and storage system for, 3 X 660 MW North Karanpura, Super Thermal Power Project, Jharkhand.	
Ref	1.0	Tender No. PSER:SCT:NKP-M1627:14.
	2.0	BHEL's NIT, vide reference no PSER:SCT:NKP-M1627: 4057, dated 15-11-2014.
	3.0	BHEL's TCN-01, vide reference no: Ref: PSER:SCT: NKP-M1627: TCN-01, dated 03-12-2014.
	4.0	Other references (if any).

Dear Sirs,

With reference to above, this is to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc. We also confirm that we have not changed/ modified the tender documents as appeared in the website/ issued by you and in case of such observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to technical specification, integrity pact (if applicable) and acceptance to reverse auctioning process.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted offer in accordance with tender instructions and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorised
representative of the contractor)

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

POWER SECTOR EASTERN REGION, DJ-9/1, SALT LAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 23211960

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ANNEXURE-I TO TCN-01

CLARIFICATIONS TO BIDDER'S QUERIES

Tender No. PSER:SCT:NKP-M1627:14.

Sl.No.	Reference clause or tender document	Existing Provision	Bidder's query	BHEL's clarification
1	Salient Feature of NIT SL no.11.0 Main NIT, Clause No. 12.0, Page No 4 of 16	Integrity Pact : NA	Kindly Clarify.	Integrity Pact : NOT APPLICABLE.
	TCC -Section -111 (B) Exclusion	Bidder shall submit the Integrity Pact (Duly Signed..... along with the techno commercial bid....		
2	Clause 2.01.02 One Index, Sub Section IIA-11, Scope of supply and services, Page 21 of 334	Referring NTPC amendments at the end of specification.	Amendment is Not found. Kindly provide the same.	Detail already covered in specification. Bidder to follow specification.
3	Sub Section IIA-11 Fuel oil Handling System Clause 2.01.03 (e) Page 22 of 334	LDO tanks shall be provided with fixed fire protection system using foam and medium velocity water spray system. All necessary nozzle openings required for above fixed fire protection system on the storage tanks shall be provided.	As per the statement, we understand that, only nozzle shall be provided by bidder. Kindly Confirm.	Fire Protection system is not in bidder scope.
	Sub Section A-19 Exclusion 2.0.0 Page 39 of 334	Fire Protection system for storage tank.		
4	Clause 2.01.04 (B) Scope of supply & services, Page 22 of 334	Detailed Design of OWS pit required for the system.	Please note that, generally OWS pit is made of RCC concrete, which comes under civil portion. And civil portion is excluded from bidder scope of work as per the clause 2.0.0 Exclusion Page 39 of 334.	Bidder to do Mechanical capacity sizing and mechanical items sizing as specified in the specification. Civil design as per mechanical input will be done by BHEL.
	Clause 4.03.04, Technical Requirement, Page 25 of 334	Oil Water Separator shall be provided near unloading area....		
	Clause 1.1.0, (f), Scope of supply page 36 of 334	One (1) no. single chamber gravity type OWS pit along with the accessories.		
5	Sub Section IIA-11 Clause No. 2.01.02, Scope of supply & services Page 21 of 334	Mentioned Pump Capacity 50m3/hr	Please Clarify the LDO pump capacity to be considered.	3 nos. 50 cum/hr. capacity LDO unloading pump as per Sub Section IIA-11 Clause No. 2.01.02, Scope of supply & services Page 21 of 334 and P&ID PE-DG-405-166-A001 to be considered
	Technical Specification, Clause 4.00.00 Pumps Details Sr. no. 7, Page 34 of 331	Mentioned Pump Capacity 100m3/hr		
	Refer LDO P&ID Drawing PE-DG-405-166-A001	Mentioned Pump Capacity 50m3/hr for LDO unloading system.		
6	Clause 3.03.00, Page 35 of 334	Control interlocks for safe operationProvided in DDCMIS provided by the Bidder.	We understand that, as per the refer clauses; DDCMIS shall be supplied by others. Kindly clarify.	DDCMIS will be supplied by BHEL
	2.03.02 CONTROL SYSTEM, Page 23 of 334	The FUEL OIL UNLOADING AND STORAGE SYSTEM shall be controlled through microprocessor based Distributed Digital Control Monitoring and Information System (DDCMIS) being provided for 2X660MW units.		
	SCOPE OF C&I FOR FUEL OIL UNLOADING & STORAGE SYSTEM, Point No.21, Page 65 of 334	Bidder's presence is required for 3 Man days.....		
7	Sub Section A-19, Clause 1.02.00, Drain Oil Tank, Page 28 of 334	DOT is not in bidder scope.	We understand that as the DOT has to be provide by BHEL Trichy, therefore bidder shall not provide any type of accessories i.e instruments, valves, piping to tank, cabling, local push button, which may be part of DOT; the same shall be provide by BHEL.	DOT and instrument mounted on DOT is not in bidder scope. Bidder to connect drain from various equipment to the drain oil tank.

ANNEXURE-I TO TCN-01

CLARIFICATIONS TO BIDDER'S QUERIES

Tender No. PSER:SCT:NKP-M1627:14.

Sl.No.	Reference clause or tender document	Existing Provision	Bidder's query	BHEL's clarification
8	SCC Services, Clause No. 10.4 Cleanliness	The vendor shall responsible.....scrap material shall be stacked or disposed in a place identified by the BHEL...	We understand the location of the disposed material. Within the plant boundary, outside from the boundary plant shall be extra. Kindly clarify.	"Scrap" to be stacked inside the plant premises at the location identified by BHEL/Customer but for "Debris" location for disposing may be either inside or outside of the plant premises. No extra cost is payable irrespective of the location for stack/disposal of scrap/debris as generated by the agency.
9	Clause 1.1.0 (H) SCOPE OF SUPPLY, Page 36 of 334	Drain and vent connection in lines along with isolation valve at every low and high point as per layout requirement of FOHS.	Please clarify - Isolation valve would be ball valve.	Drain and vent connection will be to suit the requirement and will be decided during detail engineering.
10	Clause 1.1.0 (Y) SCOPE OF SUPPLY, Page 37 of 334	All valves, counter flange with nuts, bolts and gaskets at all the terminal points.	Valves quantity shall be as per tender P&IDs. Blind flange would be provided at header ends only. Kindly confirm.	Valves indicated in the tender P&ID is minimum. Any valve required to complete the system will be in bidder's scope. Blind flange to be provided by bidder as per layout requirement
11	Clause 1.1.0 (aa) SCOPE OF SUPPLY, Page 37 of 334	Flowable non-shrink grout of one grade higher than concrete used for civil work grouting below base plate for all structure & grouting of foundation/anchor bolts	As per the Exclusion, all Civil related work is in BHEL Scope. Please Clarify	Major Civil work is excluded from bidder scope. However, minor civil work i.e. grouting / chipping etc. as mentioned will be in Bidder scope.
12	Clause 8.03.04, DRAWINGS, Page 249 of 334, Preparation of drawings/document /P&IDs in 3D modeling software & providing soft copy of same to BHEL	All the plant layouts shall be made in computerized 3D modeling system.....	In general practice, we use AutoCAD software to develop piping layouts & PIDs. Kindly confirm	Not acceptable. Bidder to follow specification.
13	Clause 4.0.0 TERMINAL POINT, Page 40 of 334	Up to 1000 mm outside pressurizing pump house wall for suction & return lines. Piping from this TP is being done by Trichy. Bidder to plan the layout and size the pipe between storage tank and P&H unit in a manner so as to ensure availability of above TP pressure 1.0Kg/cm2 (a) limiting the tank foundation height for storage tanks to 1 m and the P&H unit FFL approx. 500 mm above ground level	Acc. to P&IDs, terminal shall be at 2 meter away from Pump house. Please clarify.	TP shall be 1.0m outside P&H unit.

ANNEXURE-I TO TCN-01

CLARIFICATIONS TO BIDDER'S QUERIES

Tender No. PSER:SCT:NKP-M1627:14.

Sl.No.	Reference clause or tender document	Existing Provision	Bidder's query	BHEL's clarification
14	Clause No. 5.0.0 (h) ADDITIONAL LAYOUT REQUIREMENTS, Page 41 of 334	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 by pumping to OWS pit. Necessary pumps, valves, pipe supports, and instruments etc. for the same shall be included by bidder in their scope.	Please specify the capacity of pump in case it is required in dyke area	Pump capacity, if required, may please be considered as 10.0 cum/hr minimum.
15	General	Please clarify the Valve end connection type and type of NRV's to be considered		Type of NRV is specified under page no. 32 of 334 clause no. 2.06.00. Valve End connection shall primarily be as per clause no. 2.00.00, page no. 32 of 334. For valves where details are missing, please consider the following: i. For sizes up to 40 NB/ 50 NB (As per manufacturer's standard): Ends-shall be socket welded. ii. For sizes above 50 NB: Ends shall be flanged to ANSI Class 150/300 lb. rating with raised face.
ELECTRICAL, C&I PORTION				
16	As per Sub section- IIA-11, Section VI, part-A, clause 2.02.02, Page 22 of 334, Scope of supply and services.	The local emergency stop push buttons shall be installed near to the drives.	We understand that the LPBS for motors is in BHEL scope of supply and erection. Please confirm.	Local Push button station will be supplied by BHEL.
	Sr. no. 2, Electrical Scope between BHEL and Vendor, Page 61 of 334	LPBS for motors is in BHEL scope of supply and erection.		
17	As per page 64 of 334, S.No.-4.	All instruments shall be terminated on JB/ LCP in field and instrument and JB/ LCP are in bidder scope.	We understand that, the Instrument cable connecting field instruments and JB is in bidder scope of supply including JB however; the Instrument cable connecting JB and DDCMIS (By BHEL) is in client scope of supply. Hence; there is no need of any local control panel or remote I/O. Please confirm.	Flame proof junction box, if required for both power / instrument will be in Bidder scope. All cables including power / control and instrument cable will be in BHEL scope as per electrical scope matrix. Page 61 of 334. Equipment internal cable will be in bidder scope. Control panel / remote IO is not in bidder scope.
	5.0.0 Additional Layout Requirements Point (L), Page 42 of 334	Signals from all field instruments shall be first terminated in junction boxes before transmitting this signal either to control panel or to I/O rack or to DCS. Junction box is included in bidder's		

ANNEXURE-I TO TCN-01

CLARIFICATIONS TO BIDDER'S QUERIES

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Sl.No.	Reference clause or tender document	Existing Provision	Bidder's query	BHEL's clarification
18	Sr. No. 5, Electrical Scope between BHEL and Vendor, Page 61 of 334	Cable trays, accessories & supporting system is in BHEL scope.	We understand that, the Instrument cable shall be in bidder scope and their accessories i.e cable trays, accessories & supporting system (for instrument cable) shall be in client scope. Please confirm.	BHEL Specification is clear and further clarification is not envisaged.
19	SUB SECTION A 19 SECTION-VI, PART B CL 3.03.00, Control Philosophy, Page 35 of 334	Control interlocks for safe operation of various pumps shall be provided in DDCMIS provided by the Bidder.	We understand that, only the requirement for Control and interlocking for Fuel oil system is to be provided by bidder for incorporation in DDCMIS, however, DDCMIS is being supplied by Client. Please confirm.	DDCMIS is in BHEL scope. Documentation / logic and support for implementation of logic in DDCMIS will be provided by Bidder.
20	Vol. II , Sub-sec-IIA-11/ Clause 2.01.03 a) / Page 22 of 334	(a) LDO pipe lines, LDO drain pipe lines, all instrument air lines, complete with all supports, hangers, strainers, bends, flanges, counter flanges, gaskets, valves, fittings, etc. All piping required to complete the system shall be furnished by contractor as specified.	The referred clauses are contradicting about scope of Pipes. Please clarify the same.	Pipe shall be issued to Bidder free of charges. E&C of pipes will be in Bidder scope.
	Vol. II , Sub-sec-A-19/ Clause 2.0.0 a) / Page 39 of 334	EXCLUSION a) Supply of pipes. However, E&C of the same including supporting arrangement shall be in bidder's scope of supply:		
21	Vol. II , Sub-sec-A-19/ Clause 4.0.0 / Page 34 of 334	PUMPS LDO Unloading Pumps 6. No. of pumps - 6 nos. 7. Rated capacity in design viscosity range - 100 cu.m./hr	The referred clauses are contradicting about number of pumps and capacity of pump. Please clarify the same.	No. of LDO pumps shall be as per Vol. II , Sub-sec-A-19/ Clause 1.1.0 a)/ Page 37 of 334
	Vol. II , Sub-sec-A-19/ Clause 1.1.0 a)/ Page 37 of 334	SCOPE OF SUPPLY a) Three (3) (2W+1S) nos. LDO/HSD twin screw unloading pump motor set each of capacity 50 cum/hr. with twin simplex type strainers of matching capacity at the suction of each pump.		
22	Vol. II , Sub-sec-A-19/ Clause 1.1.0 b)/ Page 36 of 334	SCOPE OF SUPPLY b) Ten (10) Nos. 75 NB LDO/HSD unloading hoses with hose stand for road tanker unloading. Total no. of unloading points will be five (5).	The referred clauses are contradicting each other about the number of unloading hoses. Please clarify.	Bidder to consider no. of unloading points and unloading hoses as 10 nos.
	Vol. III/P&ID, Drg no: PE-DG-405-166-A001/ Page 332 of 334	P&ID Shows 10 nos. unloading points with hoses.		
	Vol. II , Sub-sec-IIA-11/ Clause 2.01.03 a) / Page 22 of 334	(b) Ten (10) numbers neoprene rubber flexible hoses for unloading LDO from Road Tankers each of 75 NB size each of 8000 mm length with coupling & fitting for connecting to road tankers.		
	Other points:			
1	GENERAL: FOHS layout changed			Location of FOHS and orientation changed. Revised layout is enclosed for tendering purpose offer preparation.

ANNEXURE-I TO TCN-01

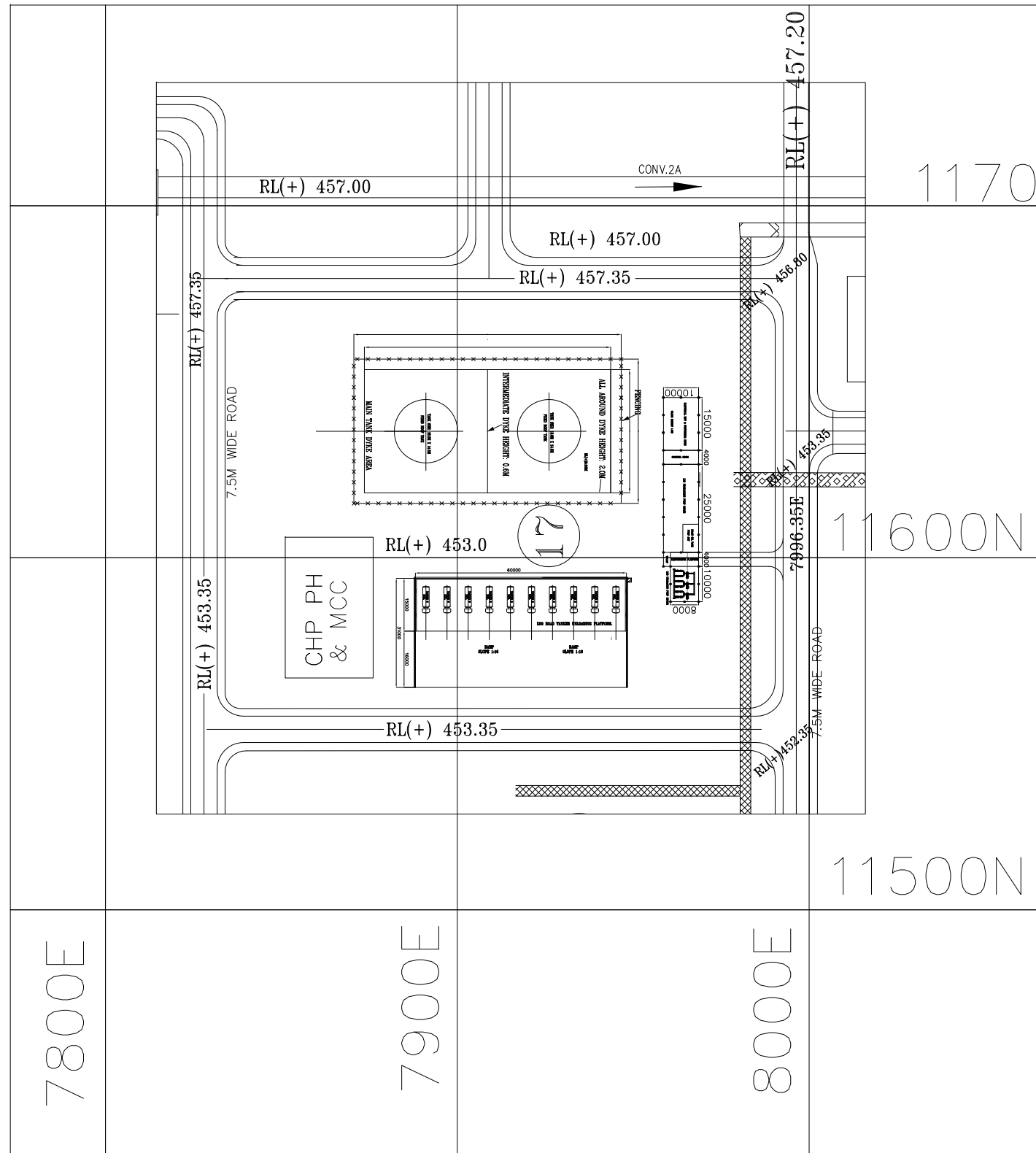
CLARIFICATIONS TO BIDDER'S QUERIES

Tender No. PSER:SCT:NKP-M1627:14.

Sl.No.	Reference clause or tender document	Existing Provision	Bidder's query	BHEL's clarification
2	GENERAL			Nozzle at tank outlet and wherever blind flange should provide be fitted with spectacle blind.
3	TAXES & DUTIES		I understand from tender that PAC will be given to us for excise exemption for material manufactured in our factory and billed from our factory.	YES
4	TAXES & DUTIES		We can bill all material in loose condition under our declared excise heading { " PART OF FUEL OIL HANDLING SKID"- 8413.30.90 }. Will PAC be given to us on the same excise heading or there is any predefined excise heading list for same.	PAC will be issued along with other documents like Payment Certificate (after receipt of payment from BHEL) , Mega Power Certificate to enable you to take Excise Duty remission for the goods supplied to instant project only .
5	TAXES & DUTIES		In case of we despatching material directly to your site from our sub vendors works, Will our sub vendor get PAC will and will be exempted from charging Excise duty.	Name of your Sub-Vendor can not be incorporated in PAC . In other words PAC can not be issued in favour of your Sub-Vendor . However , you can get the benefit from DGFT Authority and you need to take an advice from a reputed consultant in this field ,

LEGEND:

S. No.	DESCRIPTION
17	FUEL OIL HANDLING AREA



DIMENSIONS OF VARIOUS FACILITIES ARE AS UNDER.

- 1) LDO / HSD TANK : 2 NOS., 18.0M DIA, 14.0 M Ht
- 2) DYKE AREA 69M X 33M, Ht: 2.0M
- 3) ROAD TANKER UNLOADING AREA (APPROX.) : 1NO., 51M X 31M. HEIGHT OF THE PLATFORM: 1.0M FROM GROUND LEVEL
- 4) DISTANCE BETWEEN SHELL TO SHELL OF ADJACENT TANKS = 18 M
- 5) COMBINED UNLOADING AND FORWARDING PUMP HOUSE=AS SHOWN
- 6) OIL WATER SEPARATOR=12M X 2M (APPROX.)

NOTE :

- 1) ALL CIVIL WORKS ARE IN BHEL'S SCOPE EXCEPT MINOR CIVIL WORK.



BHARAT HEAVY ELECTRICALS LTD.
POWER SECTOR
PROJECT ENGINEERING MANAGEMENT
NOIDA-201301

DRN.	VN	01/12/14	PACKAGE : FUEL OIL HANDLING SYSTEM
CHKD.	HK	01/12/14	3X660 MW KARANPURA TPS
APPD.	SKB	01/12/14	
DEPT.	NAME	DATE	TITLE
M	SCALE :		FUEL OIL HANDLING SYSTEM LAYOUT
File Name :			BHEL DRG. NO. : PE-DG-405-166-A002
			SHEET NOS. REV. 1 OF 1 1