

TENDER SPECIFICATION

S N	Tender Specification Number	Unit Number & Project
1	BHE/PW/PUR/ DHJOI-PIPG / PKG I/1077	PIPING FOR UB1, HRSG 2 & 4 + STG1, GT/GTG 2 & 4 (PKG-I)
2	BHE/PW/PUR/ DHJOI-PIPG / PKG II/1078	PIPING FOR UB2, HRSG 1 & 3 + STG2, GT/GTG 1 & 3 (PKG-II)

FOR

RECEIPT/COLLECTION/LOADING/UNLOADING/TRANSPORTATION OF MATERIALS FROM BHEL/CLIENT'S STORES/STORAGE YARD TO SITE OF WORK, ERECTION, TESTING, COMMISSIONING, SUPPLY OF PAINTS/PRIMER AND APPLICATION OF PAINTS FOR FINAL PAINTING, APPLICATION OF THERMAL INSULATION & SHEETING/CLADDING WORK AND HANDING OVER OF COMPLETE POWER CYCLE PIPING / EXTERNAL PIPING /FIELD PIPING TOGETHER WITH VALVES, HANGERS AND SUPPORTS, FITTINGS BOTH IBR PIPING (CARBON STEEL AND ALLOY STEEL) AND NON-IBR PIPING (CARBON & SS STEEL), COMPLETE WITH ASSOCIATED PIPES, FITTINGS AND ASSOCIATED, ACCESSORIES SPECIALITIES AND OTHER ACCESSORIES & EQUIPMENTS INCLUDING BOUGHT OUT ITEMS ETC FOR OPAL (ONGC PETRO ADDITIONS LIMITED) STEAM AND POWER GENERATION SYSTEM PACKAGE FOR DAHEJ PETROCHEMICAL COMPLEX, PACKAGE – I FOR PIPING FOR UB1, HRSG 2&4, STG1 AND GT/GTG 2&4 AND PACKAGE – II FOR UB 2, HRSG 1&3, STG2 AND GT/GTG 1&3.

AT

2X220 TPH UB + 2X30MW STG + 4XFr6 B GT + 4X110 TPH HRSG
AT ONGC PETRO ADDITIONS LIMITED, SEZ, DAHEJ GUJARAT

PART II – PRICE BID – REV-01
(Revision-01 DT:21/12/2012)

BOOK NO.



BHARAT HEAVY ELECTRICALS LIMITED
(A GOVERNMENT OF INDIA UNDERTAKING)
POWER SECTOR - WESTERN REGION
345, KINGS WAY - NAGPUR 440 001

BHARAT HEAVY ELECTRICALS LIMITED
(A GOVERNMENT OF INDIA UNDERTAKING)
POWER SECTOR - WESTERN REGION
SHREEMOHINI COMPLEX
345, KINGS WAY - NAGPUR 440 001

TENDER SPECIFICATION NO.

S N	Tender Specification Number	Unit Number & Project
1	BHE/PW/PUR/ DHJOI-PIPG / PKG I/1077	PIPING FOR UB1, HRSG 2 & 4 + STG1, GT/GTG 2 & 4 (PKG-I)
2	BHE/PW/PUR/ DHJOI-PIPG / PKG II/1078	PIPING FOR UB2, HRSG 1 & 3 + STG2, GT/GTG 1 & 3 (PKG-II)

RECEIPT/COLLECTION/LOADING/UNLOADING/TRANSPORTATION OF MATERIALS FROM BHEL/CLIENT'S STORES/STORAGE YARD TO SITE OF WORK, ERECTION, TESTING, COMMISSIONING, SUPPLY OF PAINTS/PRIMER AND APPLICATION OF PAINTS FOR FINAL PAINTING, APPLICATION OF THERMAL INSULATION & SHEETING/CLADDING WORK AND HANDING OVER OF COMPLETE POWER CYCLE PIPING / EXTERNAL PIPING /FIELD PIPING TOGETHER WITH VALVES, HANGERS AND SUPPORTS, FITTINGS BOTH IBR PIPING (CARBON STEEL AND ALLOY STEEL) AND NON-IBR PIPING (CARBON & SS STEEL), COMPLETE WITH ASSOCIATED PIPES, FITTINGS AND ASSOCIATED, ACCESSORIES SPECIALITIES AND OTHER ACCESSORIES & EQUIPMENTS INCLUDING BOUGHT OUT ITEMS ETC FOR OPAL (ONGC PETRO ADDITIONS LIMITED) STEAM AND POWER GENERATION SYSTEM PACKAGE FOR DAHEJ PETROCHEMICAL COMPLEX, PACKAGE – I FOR PIPING FOR UB1, HRSG 2&4, STG1 AND GT/GTG 2&4 AND PACKAGE – II FOR UB 2, HRSG 1&3, STG2 AND GT/GTG 1&3.

PRICE BID, ARE ISSUED TO:

M/s.

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(THESE TENDER DOCUMENTS ARE NOT TRANSFERABLE)

FOR BHARAT HEAVY ELECTRICALS LIMITED

DGM (PURCHASE)

PLACE: NAGPUR

DATE:

IMPORTANT INFORMATION

1. This is a combined tender for Piping works for UB1, HRSG 2 & 4 + STG1, GT/GTG 2 & 4 (PACKAGE- I) & Piping work for UB2, HRSG 1 & 3 + STG2, GT/GTG 1 & 3 (PKG-II) of Opal Dahej Project

- i Tender specification (Volume I) is common for both Packages (**Package I & Package-II**).
- ii **Package I & Package-II** shall be awarded to separate agencies.
- iii **Bidder has to submit price for One Package of Piping Works as indicated in the Price Bid.**
- iv L-1 Bidder shall be considered for award of Package-I
- v For award of Package-II, next bidder in the order of their price competitiveness (i.e L-2, then L-3 and hence forth) shall be given an option to match their price/rate, with the Awarded/Finalised price/rate of Package-II. In case none of the bidders agree to match the Awarded Lump sum price of Package-I, then BHEL may consider awarding the Package-II to L-1 bidder or opt any other suitable method to finalize Package-II.
- vi Each package (I & II) shall have two different option of Price Bid (as given in the rate schedule document)
- vii Bidders are to offer their most competitive rates under two options i.e. Option 1 and Option 2.
- viii Option 2 categorically specifies use of Orbital welding machine for 50% of total tonnage of pipes under each package.
- ix Evaluations of offers shall be only on the basis of price offer for option 1. Lowest bidder of option 1 will be awarded the work.
- x The lowest bidder of option 1 will be offered the lowest quoted price of each items amongst the all bidders of option 2 and if bidder agrees, then BHEL as per the discretion may opt for award of work on the basis of option 2.

BHEL-PSWR-NAGPUR

**PART-II PRICE BID (RATE SCHEDULE)
NO: BHE/PW/PUR/ DHJOI-PIPG / PKG I/1077 &
BHE/PW/PUR/ DHJOI-PIPG / PKG II/1078 (Rev-01 DT: 21/12/2012)**

OPTION 1 : PRICE SCHEDULE FOR EACH PACKAGE									
SL.NO	Contract (Piping Package) - UBs, HRSGs	Rate schedule Identifier	QTY	UNIT	RATE PER UNIT IN RS (In Figure)	Rate in Rs (In Words)	TOTAL AMOUNT	PGMAs covered	Remarks
1	PIPING (UBs, HRSGs, STG. GT/GTGS))	IBR Piping with fittings- Carbon Steel	240	MT				80, 81, xx	IBR pipes are supplied in single commercial lengths with edge prepared and fully formed like bends, curvature, coupler for pipes, branches etc.
2	PIPING (UBs, HRSGs, STG. GT/GTGS))	IBR Piping with fittings- Alloy Steel.	266.78	MT				80, xx	IBR pipes are supplied in single commercial lengths with edge prepared and fully formed like bends, curvature, coupler for pipes, branches etc.
3	PIPING (UBs, HRSGs, STG. GT/GTGS))	NON-IBR Piping with fittings- Carbon Steel	554	MT					Non-IBR Pipes are supplied in Single commercial lengths, with edge prepared
4	PIPING (UBs, HRSGs, STG. GT/GTGS))	NON-IBR Piping with fittings-Stainless Steel	19	MT					--do--

DATE

SIGNATURE OF BIDDER

BHEL-PSWR-NAGPUR

**PART-II PRICE BID (RATE SCHEDULE)
NO: BHE/PW/PUR/ DHJOI-PIPG / PKG I/1077 &
BHE/PW/PUR/ DHJOI-PIPG / PKG II/1078 (Rev-01 DT: 21/12/2012)**

5	PIPING (UBs, HRSGs, STG. GT/GTGS)	Pipe Hanger Assemblies, Structural Steel for Pipe Supports	11.67	MT					
6	INSULATION (UBs, HRSGs, STG. GT/GTGS)	Insulation/Wool Mattress	122	MT					
7	INSULATION (UBs, HRSGs, STG. GT/GTGS)	Iron parts/Anciliary materials	15	MT					
8	INSULATION (UBs, HRSGs, STG. GT/GTGS)	Aluminium Cladding Sheets	20	MT					
Grand Total Amount (Figures)									
Grand Total Amount (In Words)				RUPEES.					

NOTE: Bidder should note the followings before quoting the rates:

1. IBR pipes are supplied in single commercial lengths with edge prepared and fully formed like bends, curvature, coupler for pipes, branches etc.
2. Non-IBR Pipes are supplied in Single commercial lengths, with edge preparation by EMRP.
3. Cutting into required spool lengths, edge preparation of spools, welding of Stubs & support attachments are to be done at Site by Erection Agency.
4. IBR pipes are supplied in single commercial lengths with edge prepared and fully formed like bends, curvature, coupler for pipes, branches etc.

DATE

SIGNATURE OF BIDDER

BHEL-PSWR-NAGPUR

PART-II PRICE BID (RATE SCHEDULE)

**NO: BHE/PW/PUR/ DHJOI-PIPG / PKG I/1077 &
BHE/PW/PUR/ DHJOI-PIPG / PKG II/1078 (Rev-01 DT: 21/12/2012)**

- 5. Bidder shall deploy any additional construction equipment (not categorically mentioned in T&P deployment plan) if required to meet the contractual schedule without any extra time & cost implication.**
- 6. Bidders to provide proper arrangement for monsoon combat including suitable coverage for of pipe rack for uninterrupted construction activities during monsoon period.**
- 7. No uncalled entries shall be made in the rate schedule, which otherwise may lead to the rejection of offer.**
- 8. Overwriting, corrections, if any, shall be authenticated by the signature of the bidder.**

DATE

SIGNATURE OF BIDDER

BHEL-PSWR-NAGPUR

**PART-II PRICE BID (RATE SCHEDULE)
NO: BHE/PW/PUR/ DHJOI-PIPG / PKG I/1077 &
BHE/PW/PUR/ DHJOI-PIPG / PKG II/1078 (Rev-01 DT: 21/12/2012)**

OPTION 2 : PRICE SCHEDULE FOR EACH PACKAGE (CONSIDERING 50% WORK THROUGH ORBITAL WELDING M/C)									
SL.NO	Contract (Piping Package) - UBs, HRSGs	Rate schedule Identifier	QTY	UNIT	RATE PER UNIT IN RS (In Figure)	Rate in Rs (In Words)	TOTAL AMOUNT	PGMAs covered	Remarks
1	PIPING (UBs, HRSGs, STG. GT/GTGS))	IBR Piping with fittings- Carbon Steel	240	MT				80, 81, xx	IBR pipes are supplied in single commercial lengths with edge prepared and fully formed like bends, curvature, coupler for pipes, branches etc.
2	PIPING (UBs, HRSGs, STG. GT/GTGS))	IBR Piping with fittings- Alloy Steel.	266.78	MT				80, xx	IBR pipes are supplied in single commercial lengths with edge prepared and fully formed like bends, curvature, coupler for pipes, branches etc.
3	PIPING (UBs, HRSGs, STG. GT/GTGS))	NON-IBR Piping with fittings- Carbon Steel	554	MT					Non-IBR Pipes are supplied in Single commercial lengths, with edge prepared
4	PIPING (UBs, HRSGs, STG. GT/GTGS))	NON-IBR Piping with fittings-Stainless Steel	19	MT					--do--

DATE

SIGNATURE OF BIDDER

BHEL-PSWR-NAGPUR

**PART-II PRICE BID (RATE SCHEDULE)
NO: BHE/PW/PUR/ DHJOI-PIPG / PKG I/1077 &
BHE/PW/PUR/ DHJOI-PIPG / PKG II/1078 (Rev-01 DT: 21/12/2012)**

5	PIPING (UBs, HRSGs, STG. GT/GTGS)	Pipe Hanger Assemblies, Structural Steel for Pipe Supports	11.67	MT					
6	INSULATION (UBs, HRSGs, STG. GT/GTGS)	Insulation/Wool Mattress	122	MT					
7	INSULATION (UBs, HRSGs, STG. GT/GTGS)	Iron parts/Anciliary materials	15	MT					
8	INSULATION (UBs, HRSGs, STG. GT/GTGS)	Aluminium Cladding Sheets	20	MT					
Grand Total Amount (Figures)									
Grand Total Amount (In Words)				RUPEES.					

NOTE: Bidder should note the followings before quoting the rates for Option 2:

1. IBR pipes are supplied in single commercial lengths with edge prepared and fully formed like bends, curvature, coupler for pipes, branches etc.
2. Non-IBR Pipes are supplied in Single commercial lengths, with edge preparation by EMRP.
3. Cutting into required spool lengths, edge preparation of spools, welding of Stubs & support attachments are to be done at Site by Erection Agency.
4. IBR pipes are supplied in single commercial lengths with edge prepared and fully formed like bends, curvature, coupler for pipes, branches etc.

DATE

SIGNATURE OF BIDDER

BHEL-PSWR-NAGPUR

PART-II PRICE BID (RATE SCHEDULE)

**NO: BHE/PW/PUR/DHJOI-PIPG / PKG I/1077 &
BHE/PW/PUR/DHJOI-PIPG / PKG II/1078 (Rev-01 DT: 21/12/2012)**

5. Bidder shall deploy any additional construction equipment (not categorically mentioned in T&P deployment plan) if required to meet the contractual schedule without any extra time & cost implication.
6. Bidders to provide proper arrangement for monsoon combat including suitable coverage for of pipe rack for uninterrupted construction activities during monsoon period.
7. No uncalled entries shall be made in the rate schedule, which otherwise may lead to the rejection of offer.
8. Overwriting, corrections, if any, shall be authenticated by the signature of the bidder.
9. Welding of the pipes shall be done using Orbital welding M/c as well as conventional welding M/c both. Quantity of Orbital welding shall be approx. 50% of total Tonnage of the pipes. Type and suitability of the orbital welding M/c shall be decided mutually in consultation with BHEL/Customer during execution at site.

DATE

SIGNATURE OF BIDDER