

परियोजना
इंजीनियरिंग
प्रबंधन

Project Engineering
Management

भारत हेवी इलेक्ट्रिकल्स लिमिटेड
(भारत सरकार का उपक्रम)
Bharat Heavy Electricals Limited
(A Govt. of India Undertaking)



Ref: PE/PG/GTG/E-4067/13/Corrigenda/05

Date: 20/Sep/2013

DUE DATE
27-Sep-2013
BY 2.00 PM (IST)

Subject: Revised Price Format of CONTROL VALVES of 2X800MW Gadarwara Stg I project

Our Ref: TENDER ENQUIRY NO: **PE/PG/GTG/E-4067/13 Dt: 23-07-2013** FOR CONTROL VALVES for 2X800 MW GADARWARA STPP, STAGE I project

Bidders to note that there has been change in scope of Mandatory Spares required as per above referred Tender.

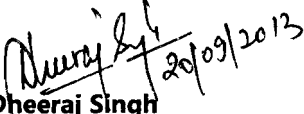
- 1. Revised Price Format & Revised scope w.r.t. Mandatory Spares in Technical Specification (PE-TS-394-145-I104)** is attached.

Kindly submit your offer/Revised Offer (if submitted) considering the above points.

Please ensure submission of offer before due date.


Thanking You

With regards
For & on behalf of BHEL


Dheeraj Singh
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कृपया प्रेषित करे :	Please reply to :	फोन Phone No:
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पीपीइआई भवन	PPEI Building,	
प्लॉट नं २५, सेक्टर १६ ए	Plot No.25, Sector 16A,	
नोएडा - २०१ ३०१ उ प्र	Noida-201301 (U.P.)	
भारत	INDIA	

पंजीकृत कार्यालय	Registered Office :
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	Technical specification for Control Valves with Pneumatic Actuator and accessories GADARWARA STPP STAGE-I (2x800 MW) TG PACKAGE	SPECIFICATION NO. PE-TS-394-145-1104	
		VOLUME II-B	
		SECTION D	
		REV. NO. 00	DATE: 13/06/2013
		SHEET 110	OF 122

LIST OF COMMISSIONING SPARES

S.No.	ITEM DESCRIPTION	QUANTITY
1.	Gaskets	One (1) set with each control valve Tag
2.	Gland Packings	One (1) set with each control valve Tag

LIST OF MANDATORY SPARES

S.No.	ITEM DESCRIPTION	QUANTITY (Lot price for applicable items)
1.	Valve Trim (including cage, plug, stem, seat rings, guide bushings etc.)	1 set for each type of Control Valve.
2.	Diaphragms, 'O' rings, seals etc.	1 set for each actuator.
3.	Pressure Gauges of all types, make, rating etc. (if applicable)	10% or 2 Nos. of each type whichever is more.
4.	Solenoid Valves (if applicable)	10% or 2 Nos. of each type whichever is more.
5.	Control Valve positioners and its accessories	10% or 2 Nos. of each type, model and rating whichever is more.
6.	Pneumatic Actuator Assembly	10% or 2 Nos. of each type, model and rating whichever is more.

NOTES:

Wherever % is indicated, the quantity shall be calculated for % of supply for total quantity of 2 unit of 2X800 MW, unless otherwise specified. The quantity to be reckoned for % indicated shall be rounded off to the next higher whole number. For example if the % of total quantity arrived is 0.2, the quantity to be supplied shall be 1 and if the % of total quantity is 5.1, the quantity to be supplied shall be 6.

* (Revised scope of Mandatory Spares
To be Considered as part of Technical
Specification PE-TS-394-145-1104)

Sherry



**2 X 800 MW GADARWARA STPP-STAGE I (TG PACKAGE)
PACKAGE - CONTROL VALVES
PRICE SCHEDULE - Applicable for Indian Bidders (Prices in INR)**

SL.No.	DESCRIPTION		UNIT OF MEASURE MENT	TOTAL QUANTITY (for 2 Units)	Unit Ex-Works Price (Rs.)	Total Ex-Works Price (Rs.)	ED including Cess	(CST/VAT @.....% (Rs.))	Freight Including Service Tax in terms of percentage (%) of Ex-Work Price	Service Tax @.....% (as applicable) (Rs.)	TOTAL F.O.R. Site Price (Rs.)
	TAG NO.	SERVICE									
	1	2	3	4	5=3*4	6	7	8	9	10	
[A]	CONTROL VALVES (COMPLETE ASSLY WITH SMART POSITIONER) - FOR 2 UNITS										
1	ASV-8	DEAERATOR PEGGING FROM AUX.STEAM HEADER	Nos.	2							
2	CRHV-6	DEAERATOR PEGGING FROM CRH LINE	Nos.	2							
3	CDV-10	CEP A MINIMUM RECIRCULATION	Nos.	2							
4	CDV-12	CEP B MINIMUM RECIRCULATION	Nos.	2							
5	CDV-14	CEP C MINIMUM RECIRCULATION	Nos.	2							
6	CDV-22	MAIN CONDENSATE CONTROL	Nos.	2							
7	CDV-25	MAIN CONDENSATE CONTROL	Nos.	2							
8	CDV-40	GSC MINIMUM FLOW RE-CIRCULATION	Nos.	2							
9	CDV-46	EXCESS DUMP CONTROL	Nos.	2							
10	CDV-67	CONDENSATE FOR FLASH TANK-B	Nos.	2							
11	CDV-72	CONDENSATE FOR VALVE GLAND SEALING	Nos.	2							
12	DRV-14	HPH-7A DRAIN TO HPH-6A	Nos.	2							
13	DRV-20	HPH-7B DRAIN TO HPH-6B	Nos.	2							
14	DRV-17	HPH-7A DRAIN TO F/T-A	Nos.	2							
15	DRV-23	HPH-7B DRAIN TO F/T-A	Nos.	2							
16	DRV-27	HPH-6A DRAIN TO DEAERATOR	Nos.	2							
17	DRV-34	HPH-6B DRAIN TO DEAERATOR	Nos.	2							
18	DRV-30	HPH-6A DRAIN TO F/T-A	Nos.	2							
19	DRV-37	HPH-6B DRAIN TO F/T-A	Nos.	2							
20	DRV-58	LPH-3 DRAIN TO F/T-B	Nos.	2							
21	DRV-73	DEAERATOR OVERFLOW	Nos.	2							
22	DRV-2	HPH-8A DRAIN TO HPH-7A	Nos.	2							
23	DRV-8	HPH-8B DRAIN TO HPH-7B	Nos.	2							
24	DRV-5	HPH-8A DRAIN TO F/T-A	Nos.	2							
25	DRV-11	HPH-8B DRAIN TO F/T-A	Nos.	2							
26	DRV-40	LPH-4 DRAIN TO LPH-3	Nos.	2							
27	DRV-43	LPH-4 DRAIN TO F/T-B	Nos.	2							
28	DMV-21	DM NORMAL MAKE-UP TO HOTWELL	Nos.	2							
29	DMV-48	EMERGENCY MAKE-UP TO HOTWELL	Nos.	2							
30	DRV-52	DRIP PUMP DISCHARGE CONTROL	Nos.	2							
31	DRV-78	LPH-2A&2B NORMAL DRAIN TO DC-1	Nos.	2							
32	DRV-81	LPH-2A&2B ALT DRAIN TO F/T-B	Nos.	2							
33	DMCW-17	TG DMCW SYSTEM	Nos.	2							
	TOTAL COST OF 66 CONTROL VALVES (S. No. 1.0 to 33.0)		-	-	-	-					
[B]	900 METRES 1/4 " COPPER TUBING(PVC COATED) - FOR 2 UNITS (to be supplied loose)		Metres	900							
[C]	BRASS FITTINGS- FOR 2 UNITS (to be supplied loose)		-	-	-	-					
1	BRASS FITTINGS for connection to Air Filter Regulator		Lots	2							
2	BRASS FITTINGS for connection to Air Lock Relay		Lots	2							
3	BRASS FITTINGS for connection to IA Header Isolation Valve		Lots	2							
4	BRASS EQUAL TEE		Lots	2							
	TOTAL COST OF BRASS FITTINGS (S.No. 1.0 TO 4.0)		-	-	-	-					
[D]	CV TEST CHARGES (REFER ANNEXURE - D)		-	-	-	-					
[E]	COST OF COMMISSIONING SPARES (Total Price of 1 Set of Gasket and 1 Set of Gland Packing with each Control Valve Tag) (REFER ANNEXURE - E)		-	-	-	-					
[F]	VALVE DIAGNOSTIC AND CONFIGURATION SOFTWARE (FOR ALL TAGS)		Sets	2							
[G]	UNIVERSAL HAND HELD CALIBRATOR		Nos.	2							
	TOTAL FOR MAIN SUPPLY- CONTROL VALVES WITH COMMISSIONING SPARES, CV TEST CHARGES, TUBING, FITTINGS, SOFTWARE & CALIBRATOR ([A]+[B]+[C]+[D]+[E]+[F]+[G])		-	-	-	-					
[H]	MANDATORY SPARES (REFER ANNEXURE - H)		-	-	-	-					
[I]	GRAND TOTAL ([A]+[B]+[C]+[D]+[E]+[F]+[G]+[H])		-	-	-	-					

Nil against PAC

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2 X 800 MW GADARWARA STPP-STAGE I (TG PACKAGE)

PACKAGE - CONTROL VALVES

PRICE SCHEDULE - Applicable for Foreign Bidders (Bidder to indicate their Currency)

SL.No.	DESCRIPTION		UNIT OF MEASUREMENT	TOTAL QUANTITY (for 2 Units)	UNIT FOB PRICE	TOTAL FOB PRICE
	TAG NO.	SERVICE				
	1		2	3	4	5=3*4
[A]	CONTROL VALVES (COMPLETE ASSLY WITH SMART POSITIONER) - FOR 2 UNITS					
1	ASV-8	DEAERATOR PEGGING FROM AUX.STEAM HEADER	Nos.	2		
2	CRHV-6	DEAERATOR PEGGING FROM CRH LINE	Nos.	2		
3	CDV-10	CEP A MINIMUM RECIRCULATION	Nos.	2		
4	CDV-12	CEP B MINIMUM RECIRCULATION	Nos.	2		
5	CDV-14	CEP C MINIMUM RECIRCULATION	Nos.	2		
6	CDV-22	MAIN CONDENSATE CONTROL	Nos.	2		
7	CDV-25	MAIN CONDENSATE CONTROL	Nos.	2		
8	CDV-40	GSC MINIMUM FLOW RE-CIRCULATION	Nos.	2		
9	CDV-46	EXCESS DUMP CONTROL	Nos.	2		
10	CDV-67	CONDENSATE FOR FLASH TANK-B	Nos.	2		
11	CDV-72	CONDENSATE FOR VALVE GLAND SEALING	Nos.	2		
12	DRV-14	HPH-7A DRAIN TO HPH-6A	Nos.	2		
13	DRV-20	HPH-7B DRAIN TO HPH-6B	Nos.	2		
14	DRV-17	HPH-7A DRAIN TO F/T-A	Nos.	2		
15	DRV-23	HPH-7B DRAIN TO F/T-A	Nos.	2		
16	DRV-27	HPH-6A DRAIN TO DEAERATOR	Nos.	2		
17	DRV-34	HPH-6B DRAIN TO DEAERATOR	Nos.	2		
18	DRV-30	HPH-6A DRAIN TO F/T-A	Nos.	2		
19	DRV-37	HPH-6B DRAIN TO F/T-A	Nos.	2		
20	DRV-58	LPH-3 DRAIN TO F/T-B	Nos.	2		
21	DRV-73	DEAERATOR OVERFLOW	Nos.	2		
22	DRV-2	HPH-8A DRAIN TO HPH-7A	Nos.	2		
23	DRV-8	HPH-8B DRAIN TO HPH-7B	Nos.	2		
24	DRV-5	HPH-8A DRAIN TO F/T-A	Nos.	2		
25	DRV-11	HPH-8B DRAIN TO F/T-A	Nos.	2		
26	DRV-40	LPH-4 DRAIN TO LPH-3	Nos.	2		
27	DRV-43	LPH-4 DRAIN TO F/T-B	Nos.	2		
28	DMV-21	DM NORMAL MAKE-UP TO HOTWELL	Nos.	2		
29	DMV-48	EMERGENCY MAKE-UP TO HOTWELL	Nos.	2		
30	DRV-52	DRIP PUMP DISCHARGE CONTROL	Nos.	2		
31	DRV-78	LPH-2A&2B NORMAL DRAIN TO DC-1	Nos.	2		
32	DRV-81	LPH-2A&2B ALT DRAIN TO F/T-B	Nos.	2		
33	DMCW-17	TG DMCW SYSTEM	Nos.	2		
	TOTAL COST OF 66 CONTROL VALVES (S. No. 1.0 to 33.0)			-	-	-
[B]	900 METRES 1/4 " COPPER TUBING(PVC COATED) - FOR 2 UNITS (to be supplied loose)		Metres	900		
[C]	BRASS FITTINGS- FOR 2 UNITS (to be supplied loose)		-	-	-	-
	1	BRASS FITTINGS for connection to Air Filter Regulator	Lots	2		
	2	BRASS FITTINGS for connection to Air Lock Relay	Lots	2		
	3	BRASS FITTINGS for connection to IA Header Isolation Valve	Lots	2		
	4	BRASS EQUAL TEE	Lots	2		
	TOTAL COST OF BRASS FITTINGS (S.No. 1.0 TO 4.0)			-	-	-
[D]	CV TEST CHARGES (REFER ANNEXURE - D)		-	-	-	-
[E]	COST OF COMMISSIONING SPARES (Total Price of 1 Set of Gasket and 1 Set of Gland Packing with each Control Valve Tag) (REFER ANNEXURE - E)		-	-	-	-
[F]	VALVE DIAGNOSTIC AND CONFIGURATION SOFTWARE (for All Tags)		Sets.	2		
[G]	UNIVERSAL HAND HELD CALIBRATOR		Nos.	2		
	TOTAL FOR MAIN SUPPLY - CONTROL VALVES WITH COMMISSIONING SPARES, CV TEST CHARGES, TUBING, FITTINGS, SOFTWARE & CALIBRATOR ((A)+[B]+[C]+[D]+[E]+[F]+[G])			-	-	-
[H]	MANDATORY SPARES (REFER ANNEXURE - H)		-	-	-	-
[I]	GRAND TOTAL ((A)+[B]+[C]+[D]+[E]+[F]+[G]+[H])			-	-	-

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ANNEXURE - D				
2 x 800 MW GADARWARA STPP STAGE-I (TG PACKAGE)				
[D] CONTROL VALVES - CV TEST CHARGES				
SL.No.	Tag No.	Service	Applicable for Indian Bidders (Prices in INR)	Applicable for Foreign Bidders (Bidder to indicate their Currency)
			Total Ex-Works Price	Total FOB Price
		1	2	3
1	ASV-8	DEAERATOR PEGGING FROM AUX.STEAM HEADER		
2	CRHV-6	DEAERATOR PEGGING FROM CRH LINE		
3	CDV-10; CDV-12; CDV-14	CEP A/B/C MINIMUM RECIRCULATION		
4	CDV-22; CDV-25	MAIN CONDENSATE CONTROL		
5	CDV-40	GSC MINIMUM FLOW RE-CIRCULATION		
6	CDV-46	EXCESS DUMP CONTROL		
7	CDV-67	CONDENSATE FOR FLASH TANK-B		
8	CDV-72	CONDENSATE FOR VALVE GLAND SEALING		
9	DRV-14; DRV-20	HPH-7A/7B DRAIN TO HPH-6A/6B		
10	DRV-17; DRV-23	HPH-7A/7B DRAIN TO F/T-A		
11	DRV-27; DRV-34	HPH-6A/6B DRAIN TO DEAERATOR		
12	DRV-30; DRV-37	HPH-6A/6B DRAIN TO F/T-A		
13	DRV-58	LPH-3 DRAIN TO F/T-B		
14	DRV-73	DEAERATOR OVERFLOW		
15	DRV-2; DRV-8	HPH-8A/8B DRAIN TO HPH-7A/7B		
16	DRV-5; DRV-11	HPH-8A/8B DRAIN TO F/T-A		
17	DRV-40	LPH-4 DRAIN TO LPH-3		
18	DRV-43	LPH-4 DRAIN TO F/T-B		
19	DMV-21	DM NORMAL MAKE-UP TO HOTWELL		
20	DMV-48	EMERGENCY MAKE-UP TO HOTWELL		
21	DRV-52	DRIP PUMP DISCHARGE CONTROL		
22	DRV-78	LPH-2A&2B NORMAL DRAIN TO DC-1		
23	DRV-81	LPH-2A&2B ALT DRAIN TO F/T-B		
24	DMCW-17	TG DMCW SYSTEM		
		TOTAL		

NOTES:

- Charges to be indicated against each tag no.
- CV test to be conducted for one per type per size , cv value , tag nos. to be grouped accordingly and indicated
- CV Test needs to be conducted for all types of valves. However, if the bidder has CV Type Test Certificate for a similar model/Size/CV and the certificate is not more than three years old from the date of part-1 opening (receipt of technical unpriced offer), the certificate shall be acceptable .
In case the submitted CV Test certificates are found non-acceptable to BHEL/Customer, bidder shall conduct the CV type Test without any price implication to BHEL.
-

PARTICULARS OF BIDDER/ AUTHORISED REPRESENTATIVE
(Name, Designation, Signature, Date, Company name along with Seal)

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ANNEXURE - E

2 x 800 MW GADARWARA STPP STAGE-I (TG PACKAGE)

[E] CONTROL VALVES - COMMISSIONING SPARES

SL.No.	Tag No.	Total Quantity (For 2 units)	Applicable for Indian Bidders (Prices in INR)			Applicable for Foreign Bidders (Bidder to indicate their Currency)		
			Unit (Per Set) Ex-Works Price for Gland Packing (Rs)	Unit (Per Set) Ex-Works Price for Gasket (Rs)	Total Ex-Works Price of Commissioning Spares for each Control Valve Tag (Rs)	Unit (Per Set) FOB Price for Gland Packing	Unit (Per Set) FOB Price for Gasket	Total FOB Price of Commissioning Spares for each Control Valve Tag
		1	2	3	4=2+3	5	6	7=5+6
1	ASV-8	One Set with each Control Valve Tag (1Set = 2 Nos.)						
2	CRHV-6	One Set with each Control Valve Tag (1Set = 2 Nos.)						
3	CDV-10	One Set with each Control Valve Tag (1Set = 2 Nos.)						
4	CDV-12	One Set with each Control Valve Tag (1Set = 2 Nos.)						
5	CDV-14	One Set with each Control Valve Tag (1Set = 2 Nos.)						
6	CDV-22	One Set with each Control Valve Tag (1Set = 2 Nos.)						
7	CDV-25	One Set with each Control Valve Tag (1Set = 2 Nos.)						
8	CDV-40	One Set with each Control Valve Tag (1Set = 2 Nos.)						
9	CDV-46	One Set with each Control Valve Tag (1Set = 2 Nos.)						
10	CDV-67	One Set with each Control Valve Tag (1Set = 2 Nos.)						
11	CDV-72	One Set with each Control Valve Tag (1Set = 2 Nos.)						
12	DRV-14	One Set with each Control Valve Tag (1Set = 2 Nos.)						
13	DRV-20	One Set with each Control Valve Tag (1Set = 2 Nos.)						
14	DRV-17	One Set with each Control Valve Tag (1Set = 2 Nos.)						
15	DRV-23	One Set with each Control Valve Tag (1Set = 2 Nos.)						
16	DRV-27	One Set with each Control Valve Tag (1Set = 2 Nos.)						
17	DRV-34	One Set with each Control Valve Tag (1Set = 2 Nos.)						
18	DRV-30	One Set with each Control Valve Tag (1Set = 2 Nos.)						
19	DRV-37	One Set with each Control Valve Tag (1Set = 2 Nos.)						
20	DRV-58	One Set with each Control Valve Tag (1Set = 2 Nos.)						
21	DRV-73	One Set with each Control Valve Tag (1Set = 2 Nos.)						
22	DRV-2	One Set with each Control Valve Tag (1Set = 2 Nos.)						
23	DRV-8	One Set with each Control Valve Tag (1Set = 2 Nos.)						
24	DRV-5	One Set with each Control Valve Tag (1Set = 2 Nos.)						
25	DRV-11	One Set with each Control Valve Tag (1Set = 2 Nos.)						
26	DRV-40	One Set with each Control Valve Tag (1Set = 2 Nos.)						
27	DRV-43	One Set with each Control Valve Tag (1Set = 2 Nos.)						
28	DMV-21	One Set with each Control Valve Tag (1Set = 2 Nos.)						
29	DMV-48	One Set with each Control Valve Tag (1Set = 2 Nos.)						
30	DRV-52	One Set with each Control Valve Tag (1Set = 2 Nos.)						
31	DRV-78	One Set with each Control Valve Tag (1Set = 2 Nos.)						
32	DRV-81	One Set with each Control Valve Tag (1Set = 2 Nos.)						
33	DMCW-17	One Set with each Control Valve Tag (1Set = 2 Nos.)						
		TOTAL						

PARTICULARS OF BIDDER/ AUTHORISED REPRESENTATIVE
(Name, Designation, Signature, Date, Company name along with Seal)

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ANNEXURE - H
2 X 800 MW GADARWARA STPP-STAGE I (TG PACKAGE)
[H] CONTROL VALVES - MANDATORY SPARES

			Applicable for Indian Bidders (Prices in INR)				Applicable for Foreign Bidders (Bidder to indicate their Currency)	
S.NO.	ITEM DESCRIPTION	QUANTITY	Total Ex-Works Price (Rs.)	ED including Cess	(CST/VAT @.....% (Rs.)	Freight Including Service Tax in terms of percentage (%) of Ex-Work Price	TOTAL F.O.R. Site Price (Rs.)	TOTAL FOB PRICE
1		2	3	4	5	6	8	9
1	Valve Trim (including cage, plug, stem, seat rings, guide bushings etc.)	1 set for each type of Control Valve.		Nil against PAC				
2	Diaphragms, 'O' rings, seals etc.	1 set for each actuator.						
3	Pressure Gauges of all types, make, rating etc. (if applicable)	10% or 2 Nos. of each type whichever is more.						
4	Solenoid Valves (if applicable)	10% or 2 Nos. of each type whichever is more.						
5	Control Valve positioners and its accessories	10% or 2 Nos. of each type, model and rating whichever is more.						
6	Pneumatic Actuator Assembly	10% Or 2 Nos of each type, model and rating whichever is more.						
TOTAL								

Note Wherever % is indicated, the quantity shall be calculated for % of supply for total quantity of 2 unit of 2X800 MW, unless otherwise specified. The quantity to be reckoned for % indicated shall be rounded off to the next higher whole number. For example if the % of total quantity arrived is 0.2, the quantity to be supplied shall be 1 and if the % of total quantity is 5.1, the quantity to be supplied shall be 6.

PARTICULARS OF BIDDER/ AUTHORISED REPRESENTATIVE
(Name, Designation, Signature, Date, Company name along with Seal)

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Shrey

