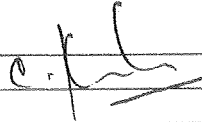


Sl. No.	Description & Specification	Unit	Qty.	DELIVERY SHEDULE		
				Qty.	Date	Remarks
1	125-CLCV-01	NO	6	6	30.04.2010	TWO PART BID
2	125-CLCV-02	NO	20	20	30.04.2010	
3	250-CLCV-01	NO	12	12	30.04.2010	
4	250-CLCV-04	NO	10	10	30.04.2010	
5	500-CLCV-01	NO	6	6	30.04.2010	
6	500-CLCV-02	NO	10	10	30.04.2010	
7	500-CLCV-04	NO	24	24	30.04.2010	

Technical specification for CBD Level Control Valve

1. Scope of supply shall be as per the selection/data sheet.
2. Model no. for the valve to be selected and drawing to be submitted with drg no.
3. Accessories type/make to be indicated in the offer as per the Annexure list.
4. Calculation shall be furnished for the valve sizing conditions if given. Computer program shall be submitted in CD for calculating the Cv, lift, velocity and noise by BHEL.
5. Testing/Inspection requirements shall be as per approved Q.P.
6. 15 sets of dimensional drawing, O&M data sheets, test certificate shall be submitted along with the supply of equipment.
7. Commissioning spares requirement to be specified separately.
8. 2/3 years maintenance spares to be quoted separately.

Prepared:	C. Karunakaran	
Date:	10.04.08	

SELECTION/DATA SHEET FOR 250 MW - CBD LEVEL CONTROL VALVE

	Supplier	Valve Sizing Data			
		Conditions	1	2	3
Model No.		Medium	Water (Saturated)	Water (Saturated)	Water (Saturated)
Rated Cv	50±10	Flow rate T/hr			
Characteristic	EQ%	Operating inlet Pr. Kg/cm2(a)			
Body	WC6	Operating inlet temp. °C			
Ends	SW	Outlet Pressure Kg/cm2(a)			
Valve size	2"	Cv required			
Body Rating	300# ANSI	% opening			
Leakage	Class IV	Calculated Velocity			
IBR	Yes	Calculated Noise			

Options		Item code
1	Control valve with basic accessories	250-CLCV-01
2	Control valve with basic accessories with SMART positioner option	250-CLCV-02
3	Control valve with basic accessories with NTPC-Option socket connection.	250-CLCV-03
4	Control valve with basic accessories with NTPC-option socket connection with SMART positioner.	250-CLCV-04

For list of Accessories refer Annexure.

Accessories to be supplied for each 250 MW CBD level control valve

- 1) Pneumatic Actuator
- 2) Pneumatic Positioner with Air filter regulator
- 3) Solenoid valve rated for 24V DC and Air lock valve to effect stayput
- 4) 2 nos. of Limit switches rated for 24V, 5A AC
- 5) I/P Converter, 2 wire 4-20mA fail-freeze type
- 6) Position transmitter rated for 24V DC, 2 wire 4-20mA output
- 7) Junction box.

Note:

- 1) As an alternative instead of pneumatic positioner with I/P converter, SMART positioner suitable for 4-20mA 2 wire suitable for HART protocol can be offered. In either case all other accessories listed in above para shall also be given.
- 2) For NTPC projects 2 nos. of 9 pin plug and socket connection and 1 no. 5 pin plug and socket connection to be provided.

SELECTION/DATA SHEET FOR 500 MW - CBD LEVEL CONTROL VALVE

	Supplier	Valve Sizing Data			
		Conditions	1	2	3
Model No.		Medium	Water (Saturated)	Water (Saturated)	Water (Saturated)
Rated Cv	120±10	Flow rate T/hr			
Characteristic	EQ%	Operating inlet Pr. Kg/cm2(a)			
Body	WC6	Operating inlet temp. °C			
Ends	BW	Outlet Pressure Kg/cm2(a)			
Valve size	3"	Cv required			
Body Rating	300# ANSI	% opening			
Leakage	Class IV	Calculated Velocity			
IBR	Yes	Calculated Noise			

Options		Item code
1	Control valve with basic accessories	500-CLCV-01
2	Control valve with basic accessories with SMART positioner option	500CLCV-02
3	Control valve with basic accessories with NTPC-Option socket connection.	500-CLCV-03
4	Control valve with basic accessories with NTPC-option socket connection with SMART positioner.	500-CLCV-04

For list of Accessories refer Annexure.

Accessories to be supplied for each 500 MW CBD control valve

- 1) Pneumatic Actuator
- 2) Pneumatic Positioner with Air filter regulator
- 3) Solenoid valve rated for 24V DC and Air lock valve to effect stayput
- 4) 2 nos. of Limit switches rated for 24V, 5A AC
- 5) I/P Converter, 2 wire 4-20mA fail-freeze type
- 6) Position transmitter rated for 24V DC, 2 wire 4-20mA output
- 7) Junction box.

Note:

1) As an alternative instead of pneumatic positioner with I/P converter, SMART positioner suitable for 4-20mA 2 wire suitable for HART protocol can be offered. In either case all other accessories listed in above para shall also be given.

2) For NTPC projects 2 nos. of 9 pin plug and socket connection and 1 no. 5 pin plug and socket connection to be provided.

SELECTION / DATA SHEET FOR CBD LEVEL CONTROL VALVE FOR 125/120 MW

	Supplier	Valve Sizing Data			
		Conditions	1	2	3
Model No.		Medium	Water (Saturated)	Water (Saturated)	Water (Saturated)
Rated Cv	40±10	Flow rate T/hr			
Characteristic	EQ%	Operating inlet Pr. Kg/cm2(a)			
Body	WC6	Operating inlet temp. °C			
Ends	SW	Outlet Pressure Kg/cm2(a)			
Valve size	2"	Cv required			
Body Rating	300# ANSI	% opening			
Leakage	Class IV	Calculated Velocity			
IBR	Yes	Calculated Noise			

Options		Item code
1	Control valve with basic accessories	125-CLCV-01
2	Control valve with basic accessories with SMART positioner option	125-CLCV-02

For list of accessories refer Annexure.

Accessories to be supplied for each 125/120 MW CBD Level control valve

- 1) Pneumatic Actuator
- 2) Pneumatic Positioner with Air filter regulator
- 3) Solenoid valve rated for 24V DC and Air lock valve to effect stayput
- 4) 2 nos. of Limit switches rated for 240V, 5A AC
- 5) I/P Converter, 2 wire 4-20mA fail-freeze type
- 6) Position transmitter rated for 24V DC, 2 wire 4-20mA output
- 7) Junction box.

Note:

As an alternative instead of pneumatic positioner with I/P converter, SMART positioner suitable for 4-20mA 2 wire suitable for HART protocol can be offered. In either case all other accessories listed in above para shall also be given.