

BHEL Hyderabad	FIP for RFCL, Ramagundam	Dt: 20.07.17
PE&SD	NIT no in www.bhel.com :NIT_33293 Tender id in mjunction (eps) : T7I1Q06750	Rev 00 Page 1 of 1

Corrigendum 2

Name of the Work: **Field Instrumentation Package for RFCL 1x32.5 MW Co-gen Project, Ramagundam**

Tender No.: **T7I1Q06750**/NIT_33293 published on 20.06.2017
With reference to above tender, following corrigendum –2 is released.

Sl. N o.	File No.	Document No./Title/ Reference	As Published	Should be read as
1.	File 1	tech spec PY56217	Price format : BOM Annexure -[I] of PY 56217 Rev 00	Revised Price format : Revised BOM Annexure -[I] of PY 56217 Rev 01 .

Bidders are requested to submit a copy of this corrigendum(as part of technical bid) duly signed by the authorized signatory & stamped with official seal as a token of Bidder's unqualified acceptance to this corrigendum.

Sd/-
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Amendment-1 (No. PY 56217/T-1, Rev.00)

to

Tech. Spec PY56217 Rev 00

Enquiry No: T7I1Q06750, [FIELD INSTRUMENT PKG \[BOP + UB + HRSG\]](#), RFCL Ramagundam Project

S.No	Reference	Subject	Addition/Deletion/Modification
1	Annexure -[I] of PY 56217 Rev 00	FIP BOM	<u>Modification:</u> Field instruments BOM is revised and it is reflected in R01 of <i>Annexure-[I] of PY56217 which is attached here.</i>

Note: All other requirements of enquiry specifications remain unchanged.

BILL OF MATERIAL & PRICE FORMAT [for Main Supply + Mandatory Spares]**FIELD INSTRUMENT PACKAGE [BOP + UB + HRSG]****STEAM AND POWER GENERATION PACKAGE, RFCL**

ESP-001-2A Rev.00		PRODUCT STANDARD PROJECT ENGINEERING & SYSTEMS DIVISION HYDERABAD	Std. / Doc. Number	
			Annexure -[I] of PY 56217	
			Rev. No.	01

TABLE -1 : BOM for Material Code - PY9756217006 [MAIN SUPPLY]

S. No	Type of instrument	Main Supply Quantity (No's) [I]	Unit Rate [II]	TOTAL PRICE [I*II]	REMARKS
1	Pressure Transmitter with integral manifold [upto 100 kg/cm2(g)]	85			Note-5
2	Pressure Transmitter with integral manifold [Above 100 kg/cm2(g)]	42			Note-5
3	Pressure Transmitter with Remote seal [upto 100 kg/cm2(g)]	5			Note-5
4	Differential Pressure Transmitter with integral manifold	69			Note-5
5	Differential Pressure Transmitter Remote seal Type (Remote seal required for HP & LP)	11			Note-5
6	Temperature Transmitter	175			Note-5
7	Level Gauge [Reflex type] - Side mounted Process connection : 1" 300RF (0-350 mm)	6			
8	Level Gauge [Reflex type] - Side mounted Process connection : 1" 300RF (0-800 mm)	2			
9	Level Gauge [Reflex type] - Side mounted Process connection : 1" 300RF (0-1500 mm)	9			
10	Level Gauge [Reflex type] - Side mounted Process connection : 1" 300RF (0-1000 mm)	3			
11a	Pressure Gauge (Bourdon Tube) [upto 60 kg/cm2(g)] [Dial Size : 150 mm]	126			
11b	Pressure Gauge (Bourdon Tube) [Range: 0 -250 kg/cm2(g)] [Dial Size : 250 mm]	3			
12	Pressure Gauge (Bourdon Tube) [Above 60 kg/cm2(g)]	25			
13	Pressure Gauge (Diaphragm seal) [upto 60 kg/cm2(g)]	9			
14	Diff. Pressure Gauge (Bourdon Tube)	10			
15	Diff. Pressure Gauge (Remote Seal)	5			
16	TG (Bimetallic) With Thermowell [TG range upto 600 Deg C; Thermowell & flange: SS316, 1.5" 300 RF, U≤400mm]	42			
17	TG (Bimetallic) With Thermowell [TG range upto 600 Deg C; Thermowell & flange: SS316, 1.5" 600 RF, U≤400mm]	5			
18a	TG (Bimetallic) With Thermowell [TG range upto 600 Deg C; Thermowell & flange: SS316, 2" 1500 RJ, U≤400mm]	3			
18b	TG (Bimetallic) With Thermowell [TG range upto 600 Deg C; Thermowell & flange: SS316, 2" 1500 RJ, U>500mm]	5			

BILL OF MATERIAL & PRICE FORMAT [for Main Supply + Mandatory Spares]**FIELD INSTRUMENT PACKAGE [BOP + UB + HRSG]****STEAM AND POWER GENERATION PACKAGE, RFCL**

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				Rev. No.	01

TABLE -1 : BOM for Material Code - PY9756217006 [MAIN SUPPLY]

S. No	Type of instrument	Main Supply Quantity (No's) [I]	Unit Rate [II]	TOTAL PRICE [I*II]	REMARKS
19	TG (Gas filled) With Thermowell [TG range upto 600 Deg C; Thermowell & flange: A 335 P91, 2" 2500 RJ, U≤400mm]	4			
20	Thermocouple With Thermowell [TC range upto 600 Deg C; Thermowell & flange: SS316, 1.5" 300 RF; U≤400mm]	44			
21	Thermocouple With Thermowell [TC range upto 600 Deg C; Thermowell & flange: SS316, 1.5" 600 RF; U≤400mm]	7			
22a	Thermocouple With Thermowell [TC range upto 600 Deg C; Thermowell & flange: SS316, 2" 1500 RJ; U≤400mm]	5			
22b	Thermocouple With Thermowell [TC range upto 600 Deg C; Thermowell & flange: SS316, 2" 1500 RJ; U>500mm]	5			
23	Thermocouple With Thermowell [TC range upto 600 Deg C; Thermowell & flange: A335 P11, 2" 1500 RJ; U≤400mm]	2			
24	Thermocouple With Thermowell [TC range upto 600 Deg C; Thermowell & flange: P22, 2" 2500 RJ; U≤400mm]	2			
25	Thermocouple With Thermowell [TC range upto 600 Deg C; Thermowell & flange: P91, 2" 2500 RJ; U≤400mm]	8			
26	Thermowell [Thermowell & flange: SS316, U-280, 2" 1500 RJ]	0			
27	Thermowell [Thermowell & flange: P91, U-320, 2" 2500 RJ]	0			
28	FRP Canopies for Transmitters	200			
29	FRP Canopies for JB's	145			
30	FRP Canopies for Positioners	43			
31	Magnetic Flow Meter	2			
32	Universal Hand held calibrator with charger & common for all SMART instruments	4			
MAIN SUPPLY Total prices (Rs.) ::					

BILL OF MATERIAL & PRICE FORMAT [for Main Supply + Mandatory Spares]**FIELD INSTRUMENT PACKAGE [BOP + UB + HRSG]****STEAM AND POWER GENERATION PACKAGE, RFCL**

ESP-001-2A Rev.00		PRODUCT STANDARD PROJECT ENGINEERING & SYSTEMS DIVISION HYDERABAD	Std. / Doc. Number	
			Annexure -[I] of PY 56217	
			Rev. No.	01

TABLE -2 : BOM for Material Code - PY9756217032 [Mandatory Spares]

S. No	Type of instrument	Mandatory Spares Quantity (No's) [I]	Unit Rate [II]	TOTAL PRICE [I*II]	REMARKS
1	Pressure Transmitter with integral manifold [upto 100 kg/cm2(g)]	8			Note-5
2	Pressure Transmitter with integral manifold [Above 100 kg/cm2(g)]	4			Note-5
3	Pressure Transmitter with Remote seal [upto 100 kg/cm2(g)]	1			Note-5
4	Differential Pressure Transmitter with integral manifold	7			Note-5
5	Differential Pressure Transmitter Remote seal Type (Remote seal required for HP & LP)	1			Note-5
6	Temperature Transmitter	17			Note-5
7	Level Gauge [Reflex type] - Side mounted Process connection : 1" 300RF (0-350 mm)	1			
8	Level Gauge [Reflex type] - Side mounted Process connection : 1" 300RF (0-800 mm)	1			
9	Level Gauge [Reflex type] - Side mounted Process connection : 1" 300RF (0-1500 mm)	1			
10	Level Gauge [Reflex type] - Side mounted Process connection : 1" 300RF (0-1000 mm)	1			
11a	Pressure Gauge (Bourdon Tube) [upto 60 kg/cm2(g)] [Dial Size : 150 mm]	12			
11b	Pressure Gauge (Bourdon Tube) [Range: 0 -250 kg/cm2(g)] [Dial Size : 250 mm]	1			
12	Pressure Gauge (Bourdon Tube) [Above 60 kg/cm2(g)]	3			
13	Pressure Gauge (Diaphragm seal) [upto 60 kg/cm2(g)]	1			
14	Diff. Pressure Gauge (Bourdon Tube)	1			
15	Diff. Pressure Gauge (Remote Seal)	1			
16	TG (Bimetallic) With Thermowell [TG range upto 600 Deg C; Thermowell & flange: SS316, 1.5" 300 RF, U≤400mm]	5			
17	TG (Bimetallic) With Thermowell [TG range upto 600 Deg C; Thermowell & flange: SS316, 1.5" 600 RF, U≤400mm]	1			
18a	TG (Bimetallic) With Thermowell [TG range upto 600 Deg C; Thermowell & flange: SS316, 2" 1500 RJ, U≤400mm]	1			
18b	TG (Bimetallic) With Thermowell [TG range upto 600 Deg C; Thermowell & flange: SS316, 2" 1500 RJ, U>500mm]	1			

BILL OF MATERIAL & PRICE FORMAT [for Main Supply + Mandatory Spares]**FIELD INSTRUMENT PACKAGE [BOP + UB + HRSG]****STEAM AND POWER GENERATION PACKAGE, RFCL**

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TABLE -2 : BOM for Material Code - PY9756217032 [Mandatory Spares]					
S. No	Type of instrument	Mandatory Spares Quantity (No's) [I]	Unit Rate [II]	TOTAL PRICE [I*II]	REMARKS
19	TG (Gas filled) With Thermowell [TG range upto 600 Deg C; Thermowell & flange: A 335 P91, 2" 2500 RJ, U≤400mm]	1			
20	Thermocouple With Thermowell [TC range upto 600 Deg C; Thermowell & flange: SS316, 1.5" 300 RF; U≤400mm]	4			
21	Thermocouple With Thermowell [TC range upto 600 Deg C; Thermowell & flange: SS316, 1.5" 600 RF; U≤400mm]	1			
22a	Thermocouple With Thermowell [TC range upto 600 Deg C; Thermowell & flange: SS316, 2" 1500 RJ; U≤400mm]	1			
22b	Thermocouple With Thermowell [TC range upto 600 Deg C; Thermowell & flange: SS316, 2" 1500 RJ; U>500mm]	1			
23	Thermocouple With Thermowell [TC range upto 600 Deg C; Thermowell & flange: A335 P11, 2" 1500 RJ; U≤400mm]	1			
24	Thermocouple With Thermowell [TC range upto 600 Deg C; Thermowell & flange: P22, 2" 2500 RJ; U≤400mm]	1			
25	Thermocouple With Thermowell [TC range upto 600 Deg C; Thermowell & flange: P91, 2" 2500 RJ; U≤400mm]	1			
26	Thermowell [Thermowell & flange: SS316, U-280, 2" 1500 RJ]	0			
27	Thermowell [Thermowell & flange: P91, U-320, 2" 2500 RJ]	0			
MANDATORY SPARES Total prices (Rs.) ::					

NOTES ::

- This document details the price schedule format for the enquiry. No other format will be entertained. Applicable taxes and duties shall be indicated separately in commercial offer.
- Duly signed & stamped un-priced price schedule format shall be submitted by vendor in the technical offer as a token of concurrence that price schedule would be submitted in this format. Any tampering / modification / additions, etc. are NOT allowed and not considered binding and is liable for rejection of the offer.
- Bidders shall be evaluated on overall L1 basis.
- For addition/reduction of quantity, unit rate quoted in the present offer shall be considered during ordering and shall be valid up to execution of the contract to the extent of +10% and -30% of order Value. These would include the cost up to engineering, installation of the item, wiring up in the panel and seamless integration with main system at works/site without any cost implications. All accessories required for this purpose shall be included in the price quoted.
- 20% of total transmitters shall be provided with SIL-2 certification.