

Revisions :	Prepared by:	Checked by:	Approved By:	Date
	-SD-	-SD-	-SD-	
00	Anupam	Amit	PCS	26.08.20

TD-106-2 Rev.No. 5 Form No.		PROJECT ENGINEERING & SYSTEM DIVISION BHEL, HYDERABAD –32.	PY51670												
			Rev No. 00												
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COPYRIGHT AND CONFIDENTIAL The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED. It must not be used directly or indirectly in any way detrimental to the interest of the company.	1. SCOPE/INTENT: 1.1. This specification covers the scope of work, inspection and documentation for TAC Approval. 1.2. Scope of work shall include drawing review, inspection and report submission by Agencies. 1.3. The supplier shall strictly comply with this standard in all respects. No deviation shall be allowed. However, bidder can raise technical queries on the specification during pre-bid stage and clarifications may be sought from BHEL before the bid submission. 2. VARIANT TABLE: <table border="1"> <thead> <tr> <th>Var. No.</th> <th>Description</th> <th>Material Code</th> </tr> </thead> <tbody> <tr> <td>01</td> <td>TAC Approval for FPS (Fire Protection System) Installations</td> <td></td> </tr> </tbody> </table> 3. DETAILED SCOPE OF WORK: <table border="1"> <tbody> <tr> <td>1.0</td> <td>Scrutinizing and approval / stamping of drawings & documents of all the FPS systems as per TAC.</td> </tr> <tr> <td>2.0</td> <td>Conduct Final inspection at site for approval / certification of all the FPS systems as per TAC.</td> </tr> <tr> <td>3.0</td> <td>Issue of Final Inspection Report (FIR) / Certificate of all the FPS System for sanction of FEA discounts as per TAC.</td> </tr> </tbody> </table> Note : Please refer Annexure-1 for detailed breakup of Fire Detection and Protection systems designed, supplied and installed in the Project. Scrutinizing and approval / stamping of drawings & documents shall be available in soft copy and stamping shall be given on soft copy (if required hard copy shall be forwarded for stamping) 4. DOCUMENTATION: 4.1. Along with the offer: Signed and stamped copy of this specification as token of acceptance of the specification for execution in the event of Order. 4.2. After PO Placement: Final documentation shall be submitted within stipulated time & in requisite sets (to be decided post order) of hard/soft copies. Schedule for document submissions:			Var. No.	Description	Material Code	01	TAC Approval for FPS (Fire Protection System) Installations		1.0	Scrutinizing and approval / stamping of drawings & documents of all the FPS systems as per TAC.	2.0	Conduct Final inspection at site for approval / certification of all the FPS systems as per TAC.	3.0	Issue of Final Inspection Report (FIR) / Certificate of all the FPS System for sanction of FEA discounts as per TAC.
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COPYRIGHT AND CONFIDENTIAL The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED. It must not be used directly or indirectly in any way detrimental to the interest of the company. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">S.no</th> <th style="width: 60%;">Description of Work by Bidder</th> <th style="width: 30%;">Schedule</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Approved and Stamped copies of all the drawings and documents of all the FPS Systems (Systems defined as per Annexure-1)</td> <td>30 days from the receipt of all the drawings/documents by bidder</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Issue of Final Inspection Report (FIR) / Certificate of all the FPS Systems (Systems defined as per Annexure-1)</td> <td>15 days from the date of Inspection by bidder</td> </tr> </tbody> </table> * The Final Inspection Report (FIR) submitted by vendor shall be strictly in compliance to all applicable standards and specification as per TAC. Inspection will be carried out in multiple phase depending on site progress, one-week prior notice will be given for bidder to reach site. After each site visit, bidder has to generate intermediate Inspection report within the seven days of the visit. 5. ATTACHMENT: 5.1. Annexure-1 : Detailed break up FPS systems designed, supplied and Installed in the project and Tentative list of major equipment details 5.2. Annexure-2 : Price Format 5.3. Annexure-3 : Drawings and documents applicable for all the FPS Systems i.e. DBR, P&ID of FPWH, P&ID of Booster Pumping system, Scheme of Hydrant, Scheme of Spray system, Scheme of FDA, P&ID of Foam system, Composite layout of hydrant & spray system, P&ID of Inert Gas Extinguishing system, Schedule of fire extinguishers etc. attached for reference along with master document list applicable.				S.no	Description of Work by Bidder	Schedule	1	Approved and Stamped copies of all the drawings and documents of all the FPS Systems (Systems defined as per Annexure-1)	30 days from the receipt of all the drawings/documents by bidder	2	Issue of Final Inspection Report (FIR) / Certificate of all the FPS Systems (Systems defined as per Annexure-1)	15 days from the date of Inspection by bidder
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		Rev. No.	Date	Revision Details	Revised By	Checked By	Approved By
		00	26.08.20	First Issue	-SD-	-SD-	-SD-
		Ref. Doc.					

Annexure-1 of PY51670 Rev-00

Project Details:

Project: 1 x 800 MW Kothagudem TPS Stage -VII, Unit #12

Nearest Railway Station: Bhadrachhalam Road

Nearest Airport: Hyderabad

(1) FPS Systems designed, supplied and installed in the Project:-

- a) Fire water Tanks – 2 Nos, each of capacity 2500 m³
- b) Fire Water Pump House

3 Nos of Hydrant Pumps (2 Nos working Motor driven + 1 No Standby Diesel engine driven), 3 Nos of Spray Pumps (2 Nos working Motor driven + 1 No Standby Diesel engine driven), 2 Nos of Jockey Pumps (1W + 1S), 2 Nos of Air Compressors (1W + 1S) and 1 Hydro-pneumatic tank
- c) Booster Pump House

2 Nos of Hydrant Booster Pumps (1 No working Motor driven + 1 No Standby Diesel engine driven)

2 Nos of Spray Booster Pumps (1 No working Motor driven + 1 No Standby Diesel engine driven)
- d) Hydrant System
- e) High Velocity Water Spray System (HVWS)
- f) Medium Velocity Water Spray System (MVWS)
- g) Foam Protection system
- h) Fire Detection Alarm & Control System
- i) Inert Gas Extinguishing system (Main Control Room of TG Bldg, Central Equipment Room (CER), Computer Room etc.)
- j) Portable Fire Extinguishers

(2) List of Major equipment details from the scope of Work for Various System:

Water based Fire Protection System		
1.	Equivalent nos. of hydrants	
a)	Single/double hydrants on grounds=	116
b)	Single/double hydrants on upper floors (FEH) =	99
c)	Water monitor with sizes (38 mm) =	24
d)	Long range monitors (GPM) =	Not applicable

2.	Water Spray systems	
a)	Nos. of Deluge Valve	127
Fixed Foam Protection System		
a)	Nos. of Tanks (with diameter and height) =	
	Nos. of HFO Tank-1 (14M x 15M)	1
	Nos. of HFO Tank-2 (9M x 9.5M)	1
	Nos. of LDO Tank (9M x 9.5M)	1
Fire Detection & Alarm system		
a)	Nos. of Detectors =	1350
b)	Nos. of Manual call points=	272
Inert Gas Extinguishing Systems		
a)	Main Control Room, Central Equipment Room (CER), Computer Room of TG Building	
Portable Fire Extinguishers		
a)	Nos. of Extinguishers =	419

Above BOQ is only indicative, Bidder to refer actual drawings.

		Price Bid format			Annexure -[2] of PY51670	
		TAC Approval of Fire Detection & Protection system			Rev 00	
		Project: 1 x 800 MW Kothagudem TPS Stage -VII, Unit #12				
S. No	Material Code	Item Description	Quantity [I]	UNITs	Price Weightage in % age	REMARKS
1		TAC Approval of Fire Detection & Protection system				
1.a		Approval and Stamped copies of all the drawings and documents	1	Set	28	
1.b		Issue of 1st Stage Inspection Report (FIR) / Certificate	1	Set	23.1	
1.c		Issue of Final Inspection Report (FIR) / Certificate	1	Set	25	
2		To and fro Travel expenses	2	Visits	14.08	
3		Per Diem rate for the serves offered	6	Man days	9.8	
A. Total prices for overall L1 evaluation (1+2+3) (Rs.) :: = _____					100%	
NOTES						
1	Bidder to quote for grand total price (A) . Price for the individual items shall be calculated based on the %age of weightage written against each items. Incomplete/partial offer shall make bidder's offer liable for rejection.					
2	Offer will be evaluated based on GRAND TOTAL PRICE (total price for Sl. No. 1+2+3 of price format) w.r.t the finalized technical scope and commercial conditions including the applicable tax components.					
3	Bidder to quote the base rates only. Applicable taxes and duties to be indicated separately.					
4	The above items shall be quoted as per tender specification. Responsibility of ensuring correctness & completeness of scope of supply as per spec. requirement solely lies with bidder.					
5	Bidder is required to furnish confirmation to this priced bid format in their technical offer by indicated ' Quoted ' against sl no "A" listed above, failing which their offer may be liable for rejection.					
6	Bidder to note that the number of man-days and visits considered under Sl. No. 2 & 3 is only for the purpose of tender evaluation. For the purpose of tender total number of 6 man days to be covered in 2 visits have been considered. However, Total number of man days and number of visits may change (either increase or decrease) as per site requirement. Bidders services shall be compensated as per per diem rate & rate per visit basis only.					