

		Panel wise BOQ of FDA System														Annexure -[A2] of PY 56217																		
		Devices BOQ for MFAP - 1																																
		Project: 4X270 MW FPS system - Manuguru Bhadradi																																
S.N	Description	:	TG Building Unit 1&2																															
o			AC plant(44X17.5X) EL: 0M	Passage(Area: Later)EL: 0M	Cable Gallery(42X33X3.5)EL: 0M	Switchgear room (42X39X1.5) EL:3.5M	Cable Vault(42X18X4) EL:5.0	SWAS room(10X8X3.5) EL: 9.0 M	Boiler MCC(43X25X3.5) EL 9.0 M	Charger room-1(8X8X3.5) EL:9.0M	24V Battery room (24X8X3.5) EL:9.0 M	Charger room-2(7.7X8X3.5)EL:9.0 M	Passage(Area: Later) EL: 9.0 M	220V Battery room-1 (11X14X4) EL: 11.5M	220V Battery room-2 (11X14X4)EL:11.5 M	Electrical Bay (Area : Later) EL: 11.5M	Cable Vault (42X35X3) EL:12.5 M	UPS room(20X6.5X5.5) EL:15.5	C&I lab(10X5X5.5)EL:15.5	Conference room(6X5X5.5) EL:15.5	Shift incharge room (4X5X5.5)EL:15.5	CCR(Area : LaterXX5.5)EL:15.5	CCR(area : Later5.5)EL:15.5	Express Lab(6X10X5.5)EL:15.5	Central lab (12X10X5.5)EL:15.5	Environment & Metrological lab(10X10X5.5)EL:15.5	Passage(Area : Later)EL:15.5	Soot Blower MCC-1 (11X13X5.2)EL 21.0 M	Soot Blower MCC-2 (11X13X5.2) EL 21M	AHU(32X8.5X6)EL 21 M	Passage(Area :Later)EL 21 M	Total devices	Units	
1	False Ceiling	:	NA	NA	NA	NA	NA	NA	YES	NA	NA	NA	NA	NA	NA	YES	NA	NA	NA	NA	YES	NA	NA	NA	NA	NA	YES	NA	NA	NA	NA	NA	-	-
2	MSD below False Ceil	:	18	0	30	42	18	2	28	0	0	0	0	0	0	0	30	3	2	1	1	0	0	2	4	4	0	4	4	10		203	No's	
3	MSD after False Ceil	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
4	Air Sampling Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	1	0	0	0	0	0	0	0	0	0	6	No's
5	Response Indicator	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
6	Beam Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
7	IR Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
8	Probe Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
9	Manual Call Points(Indoor)	:	1	4	3	4	3	1	3	1	1	1	4	1	1	2	3	1	0	1	0	1	2	0	1	0	3	1	1	1	2	47	No's	
10	Manual Call Points(Outdoor)	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
11	Hooter cum Strobe	:	1	4	2	2	2	1	2	1	1	1	4	1	1	2	2	1	0	1	0	2	2	0	1	0	3	1	1	1	2	42	No's	
12	Control Module for Hooters	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
13	Exit	:	1	4	3	4	3	1	3	1	1	1	4	1	1	2	3	1	0	1	0	1	2	0	0	0	3	1	1	1	2	46	No's	
14	Control Module for Exit signs	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
15	LHS	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
16	Flame Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
17	Heat detector below False Ceil	:	0	0	0	0	0	0	0	4	10	4		6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	No's
18	Heat detector above False Ceil	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
19	Manual Call Points (Flame Proof)	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
20	1 Input 1 Output Module	:	0	0	5	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	No's
21	Input Module for Optical LHS	:	0	0	5	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	No's



Panel wise BOQ of FDA System

Annexure -[A2] of PY 56217

Devices BOQ for MFAP - 1

REV 00

Project: 4X270 MW FPS system - Manuguru Bhadradri

Sl. No.	Description	:						DG House- Unit-#1 & 2 (13.35X22.5X7.5) EL: Later	Condensate Storage Tanks and Condensor Make up & Boiler Fill Pumps(6X22X5) EL: Later	Fuel Oil Tanks		Fuel Oil Forwarding Pump House (47.5X14X) EL: Later	Inert Gas Control System	Ash Slurry Pump House-Unit # 1 & 2		AHP Vacuum cum Compressor House-1				
			Boiler 1&2		ESP Control Room Unit 1 & 2					HFO tanks(Area : Later) EL: Later	LDO tanks Area : Later) EL: Later			Pumps Area (31.5X13X8)	Tool room (4X2.5X3)	Compressor Area (46X13X8.5)	Tool room (3.5X2.5X3)	Total devices	Units	
			Boiler - Unit-#1(XX)	Boiler - Unit-#2(XX)	Cable Gallery (61X13.5X3.5) EL. 0.0 M	MCC room (51.5X13.5X5.5) EL. 3.5M	Panel room (9.5X13.5X5.5) EL. 3.5M													
1	False Ceiling	:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-	-	
2	MSD below False Ceil	:	0	0	16	24	4	15	0	0	0	0	0	0	0	0	0	1	60	No's
3	MSD after False Ceil	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
4	Air Sampling Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
5	Response Indicator	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
6	Beam Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
7	IR Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
8	Probe Detector	:	0	0	0	0	0	0	0	8	6	0	0	0	0	0	0	0	14	No's
9	Manual Call Points(Indoor)	:	0	0	2	2	1	1	2	0	0	0	0	2	1	2	0	13	No's	
10	Manual Call Points(Outdoor)	:	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	32	No's	
11	Hooter cum Strobe	:	0	0	2	2	1	1	1	0		2	0	1	1	2	0	13	No's	
12	Control Module for Hooters	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
13	Exit	:	0	0	2	2	1	1	2	0	0	3	0	2	1	2	0	16	No's	
14	Control Module for Exit signs	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
15	LHS	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
16	Flame Detector	:	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	8	No's	
17	Heat detector below False Ceil	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
18	Heat detector above False Ceil	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
19	Manual Call Points (Flame Proof)	:	0	0	0	0	0	0	0	2	2	3	0	0	0	0	0	7	No's	
20	1 Input 1 Output Module	:	0	0	1	0	0	0	0	2	2	1	0	0	0	0	0	6	No's	
21	Input Module for Optical LHS	:	0	0	1	0	0	0	0	2	2	1	0	0	0	0	0	6	No's	



Panel wise BOQ of FDA System

Devices BOQ for MFAP - 1

Annexure -[A2] of PY 56217

REV 00

Project: 4X270 MW FPS system - Manuguru Bhadradi

Sl.N o.	Description	:	SERVICE BUILDING EI. 0														SERVICE BUILDING EI. 4.25														Total device s	Units						
			Library(6.05X7.69X4.25)	Conference Room(6.05X8.5X4.25)	Chamber(3.46X2.87X4.25)	Chamber-2(3.46X2.8X4.25)	Package AC room(4.32X5.77X4.25)	Office-1(6.62X4.3X4.25)	Digital Display room(4.67X3.3X4.25)	VIP lounge(3.77X6.23X4.25)	Reception/Waiting lounge/Lobby(20.27X6.5X4.25)	Lift Lobby(3.64X2.73X4.25)	Pantry(2.66X2.53X4.25)	Package AC room-2(6.27X5.77X4.25)	EPBAX room(8.98X6.05X4.25)	MCC room(16.55X8.77X4.25)	Passage-1(6X1.5X4.25)	Passage-2(6.72X2X4.25)	Passage-3(10.4X2X4.25)	Office(16.55X17.9X4.25)	GM room(3.68X3.11X4.25)	PA room(2.63X3.11X4.25)	Chamber-1(3.46X2.87X4.25)	Chamber-2(3.46X2.8X4.25)	Passage-1(6X1.5X4.25)	Package AC room(4.32X5.77X4.25)	Passage-2(6.72X2X4.25)	Lift Lobby(3.64X2.73X4.25)	Rec/Waiting lounge(9.9X5.9X4.25)	Lobby(6.5X5.9X4.25)			Pantry(2.66X2.53X4.25)	Package AC room(6.27X5.77X4.25)	Record/Store room(8.98X6.05X4.25)	Conference room(12.55X5.77X4.25)	Lab(3.77X8.84X4.25)	
1	False Ceiling	:	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	-	-	
2	MSD below False Ceil	:	1	2	1	1	1	1	1	1	3	1	0	1	2	6	1	1	2	9	1	1	1	1	1	1	1	1	2	1		1	2	2	2	53	No's	
3	MSD after False Ceil	:	1	2	1	1	0	1	1	1	3	1	0	1	2		1	1	2	9	1	1	1	1	1	0	1	1	2	1		0	0	2	2	42	No's	
4	Air Sampling Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
5	Response Indicator	:	1	2	1	1	0	1	1	1	3	1	1	1	2	0	1	1	2	9	1	1	1	1	1	0	1	1	2	1	1	0	0	2	2	44	No's	
6	Beam Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
7	IR Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
8	Probe Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
9	Manual Call Points(Indoor)	:	0	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	6	No's
10	Manual Call Points(Outdoor)	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
11	Hooter cum Strobe	:	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	5	No's
12	Control Module for Hooters	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
13	Exit	:	0	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	6	No's
14	Control Module for Exit signs	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
15	LHS	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
16	Flame Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
17	Heat detector below False Ceil	:	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	No's
18	Heat detector above False Ceil	:	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	No's
19	Manual Call Points (Flame Proof)	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
20	1 Input 1 Output Module	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
21	Input Module for Optical LHS	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's



Panel wise BOQ of FDA System

Annexure -[A2] of PY 56217

Devices BOQ for MFAP -1

REV 00

Project: 4X270 MW FPS system - Manuguru Bhadradi

S.No	Description	:	SERVICE BUILDING EI. 8.5																SERVICE BUILDING EI. 12.75																Total / devices	Units		
			Office (16.55X17.9X4.25)	GM room (3.68X3.11X4.25)	PA room (2.63X3.11X4.25)	Chamber-1 (3.46X2.87X4.25)	Chamber-2 (3.46X2.8X4.25)	Passage-1 (6X1.5X4.25)	Package AC room (4.32X5.77X4.25)	Passage-2 (6.72X2X4.25)	Lift Lobby (3.26X3.07X4.25)	Lounge (9.9X5.9X4.25)	Lobby (6.5X5.9X4.25)	Pantry (2.66X2.53X4.25)	Package AC room (6.27X5.77X4.25)	Record/Store room (8.98X6.05X4.25)	Conference room-1 (12.55X5.77X4.25)	Conference room-2 (10X5.77X4.25)	Store (4X3.07X4.25)	Office (16.55X17.9X4.25)	GM room (3.68X3.11X4.25)	PA room (2.63X3.11X4.25)	Chamber-1 (3.46X2.87X4.25)	Chamber-2 (3.46X2.8X4.25)	Passage-1 (6X1.5X4.25)	Package AC room (4.32X5.77X4.25)	Passage-2 (6.72X2X4.25)	Lift Lobby (3.26X3.07X4.25)	Lounge (9.9X5.9X4.25)	Lobby (6.5X5.9X4.25)	Pantry (2.66X2.53X4.25)	Package AC room (6.27X5.77X4.25)	Record/Store room (8.98X6.05X4.25)	Training room (12.55X5.77X4.25)			Conference room (10X5.77X4.25)	Store (4X3.07X4.25)
1	False Ceiling	:	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	-	-				
2	MSD below False Ceil	:	9	1	1	1	1	1	1	1	2	1	0	1	2	2	2	1	9	1	1	1	1	1	1	1	1	2	1	0	1	2	2	2	1	56	No's	
3	MSD after False Ceil	:	9	1	1	1	1	1	0	1	1	2	1	0	0	0	2	2	0	9	1	1	1	1	1	0	1	1	2	1	0	0	0	2	2	0	46	No's
4	Air Sampling Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
5	Response Indicator	:	9	1	1	1	1	1	0	1	1	2	1	1	0	0	2	2	0	9	1	1	1	1	1	0	1	1	2	1	1	0	0	2	2	0	48	No's
6	Beam Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
7	IR Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
8	Probe Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
9	Manual Call Points(Indoor)	:	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	4	No's
10	Manual Call Points(Outdoor)	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
11	Hooter cum Strobe	:	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	No's
12	Control Module for Hooters	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
13	Exit	:	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	4	No's
14	Control Module for Exit signs	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
15	LHS	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
16	Flame Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
17	Heat detector below False Ceil	:	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	No's	
18	Heat detector above False Ceil	:	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	No's		
19	Manual Call Points (Flame Proof)	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
20	1 Input 1 Output Module	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
21	Input Module for Optical LHS	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's

BHEL		Panel wise BOQ of FDA System																					Annexure -[A2] of PY 56217											
		Devices BOQ for MFAP -1																														REV 00		
		Project: 4X270 MW FPS system - Manuguru Bhadradri																																
Sl. No.	Description	:	..	SERVICE BUILDING El. 17.0																	Booster Pump House(8.5X6X4.5) EL.: Later	AHP Control cum HT Switchgear room(15X55X)	AHP MCC-1(50X18X)	Lube Oil room(16X11X)	CHP MCC-3							Total devices	Units	
				Office(16.55X17.9X4.25)	GM room(3.68X3.11X4.25)	PA room(2.63X3.11X4.25)	Chamber-1(3.36X2.87X4.25)	Chamber-2(3.36X2.8X4.25)	Passage-1(6X2.5X4.25)	Package AC room(6.27X5.77X4.25)	Passage-2(12.87X3.11X4.25)	Lift Lobby(3.26X3.07X4.25)	Lounge(9.9X5.9X4.25)	Lobby(6.5X5.9X4.25)	Pantry(4.44X2.98X4.25)	Package AC room(6.27X5.77X4.25)	Record/Store room(6.05X5.77X4.25)	Computer room(12.55X5.77X4.25)	Conference room(10X5.77X4.25)	Store(4X3.07X4.25)					Foam Pump House(10X8.3X) EL.: Later	Cable Vault(37X10X3.5) EL: 0M	DCS room(10X5.67X5) EL: 3.5M	UPS battery room(5X5.67X5) EL: 3.5M	Switchgear room(37X10X5) EL: 3.5M	Ventilation room(6X6X5) EL: 3.5M	Foam Pump House(10X8.3X)			Booster Pump House(8.5X6X4.5)
1	False Ceiling	:	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	NA	NA	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-	-		
2	MSD below False Ceil	:	9	1	1	1	1	1	0	2	1	2	1	1	0	0	2	2	1	4	2	0	42	4	12	2	1	12	1	4	2	112	No's	
3	MSD after False Ceil	:	9	1	1	1	1	1	0	2	1	2	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	24	No's		
4	Air Sampling Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's		
5	Response Indicator	:	9	1	1	1	1	1	0	2	1	2	1	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	25	No's		
6	Beam Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's		
7	IR Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's		
8	Probe Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's		
9	Manual Call Points(Indoor)	:	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	2	2	0	3		2	0	0	2		2	2	18	No's		
10	Manual Call Points(Outdoor)	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	No's		
11	Hooter cum Strobe	:	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	2	0	3	2	2	0	0	2	0	2	2	19	No's		
12	Control Module for Hooters	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's		
13	Exit	:	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	2	0	0	3	2	2	0	0	2	0	2	2	18	No's		
14	Control Module for Exit signs	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's		
15	LHS	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's		
16	Flame Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's		
17	Heat detector below False Ceil	:	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	No's		
18	Heat detector above False Ceil	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	No's		
19	Manual Call Points (Flame Proof)	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	No's		
20	1 Input 1 Output Module	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	No's		
21	Input Module for Optical LHS	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	No's		

		MFAP-1 - Total Devices BOQ					Annexure -[A2] of PY 56217		
							REV 00		
		Project: 4X270 MW FPS system - Manuguru Bhadradri							
S.No	Description	:	MFAP-1-1	MFAP-1-2	MFAP-1-3	MFAP-1-4	MFAP-1-5	Total devices	Units
1	False Ceiling	:	-	-	-	-	-	0	No's
2	MSD below False Ceil	:	203	60	53	56	112	484	No's
3	MSD after False Ceil	:	0	0	42	46	24	112	No's
4	Air Sampling Detector	:	6	0	0	0	0	6	No's
5	Response Indicator	:	0	0	44	48	25	117	No's
6	Beam Detector	:	0	0	0	0	0	0	No's
7	IR Detector	:	0	0	0	0	0	0	No's
8	Probe Detector	:	0	14	0	0	0	14	No's
9	Manual Call Points(Indoor)		47	13	6	4	18	88	No's
10	Manual Call Points(Outdoor)	:	0	32	0	0	0	32	No's
11	Hooter cum Strobe	:	42	13	5	4	19	83	No's
12	Control Module for Hooters	:	0	0	0	0	0	0	No's
13	Exit	:	46	16	6	4	18	90	No's
14	Control Module for Exit signs	:	0	0	0	0	0	0	No's
15	LHS	:	0	0	0	0	0	0	No's
16	Flame Detector	:	0	8	0	0	0	8	No's
17	Heat detector below False Ceil	:	30	0	2	2	1	35	No's
18	Heat detector above False Ceil	:	0	0	2	2	2	6	No's
19	Manual Call Points (Flame Proof)	:	0	7	0	0	2	9	No's
20	1 Input 1 Output Module	:	8	6	0	0	0	14	No's
21	Input Module for Optical LHS	:	8	6	0	0	0	14	No's

[illegible]

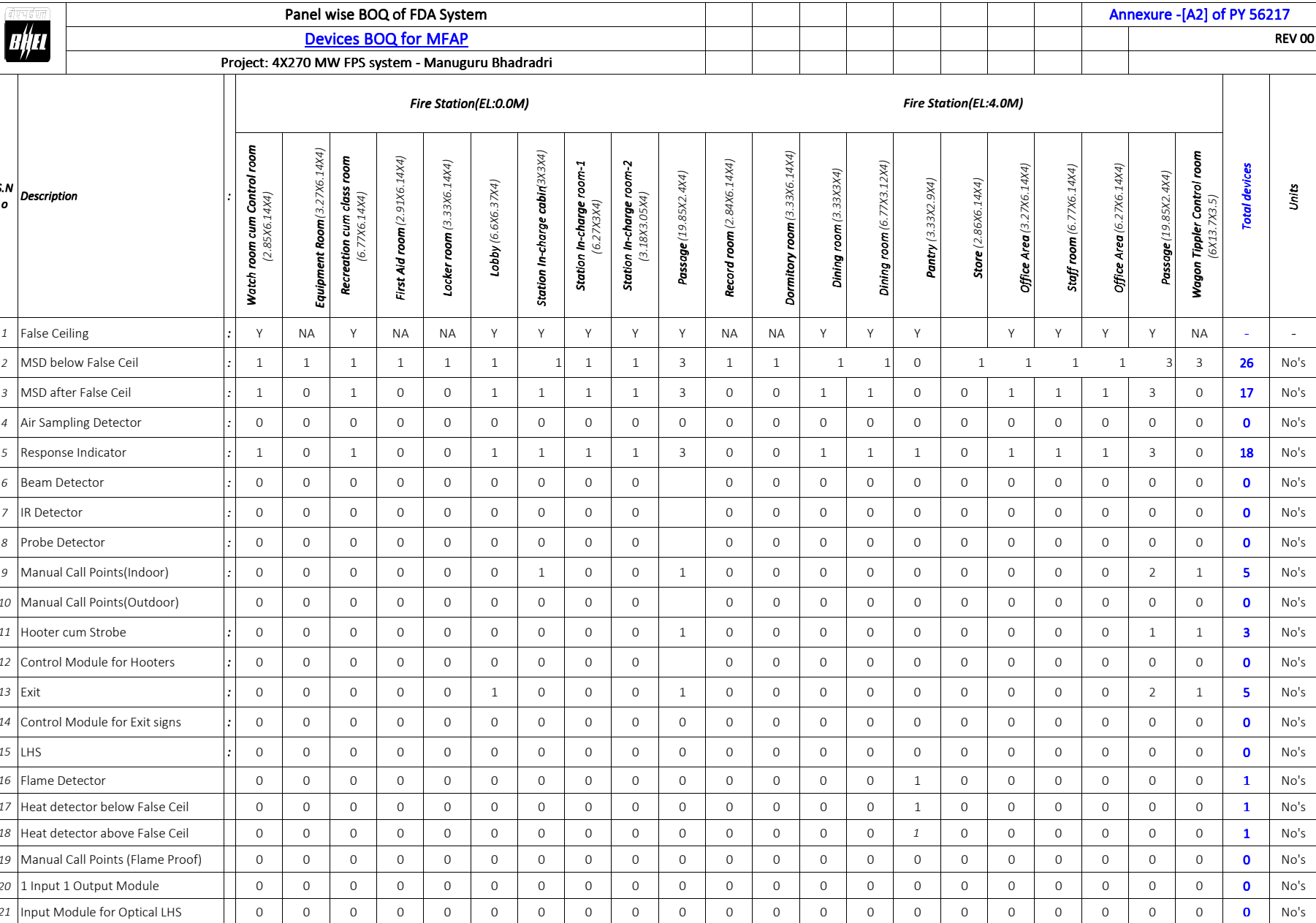
बीएचईएल		Panel wise BOQ of FDA System																Annexure -[A2] of PY 56217																REV 00										
		Devices BOQ for MFAP - 2																																										
		Project: 4X270 MW FPS system - Manuguru Bhadradri																																										
Sl.No	Description	:			Ash Slurry Pump House-Unit # 3&4		AHP Vacuum cum Compressor House-1		Storage Shed Unit 3 &4(EL:Later)																Total devices	Units																		
			DG House- Unit-#3 & 4 (13.35X22.5X7.5) EL: Later	CW Pump House- Unit-#3 & 4 (11.5X55.1X17.3)EL: Later	Pumps Area(31.5X13X8)EL: Later	Tool room(4X2.5X3)EL: Later	Compressor Area46X13X8.5)EL: Later	Tool room(3.5X2.5X3)EL: Later	Stores Office(Area :Later)	AC Store(3.77X5.05X3.5)	Pantry(1.62X3.15X3.5)	Office-1(11.54X19.88X3.5)	Office-2(8.17X9.54X3.5)	Reception(4.85X4.85X3.5)	PA room(2.74X2X3.5)	Super. Office(3.85X2.74X3.5)	Passage(12.17X1.5X3.5)	Store-1(29.7X14.77X8.3)	Store-2(30.17X14.77X8.3)	Store-3(30.17X14.77X8.3)	Store-4(30.17X14.77X8.3)	Store-5(30.17X14.77X8.3)	Store-6(30.17X14.77X8.3)	Store-7(30.17X14.77X8.3)			Guard room-1(2.77X3.86X3.5)	Store-8(29.7X14.77X8.3)	Store-9(30.17X14.77X8.3)	Store-10(30.17X14.77X8.3)	Store-11(30.17X14.77X8.3)	Store-12(30.17X14.77X8.3)	Store-13(30.17X14.77X8.3)	Store-14(30.17X14.77X8.3)	Store-15 (Part-1)(7X7.27X6.3)	Store-15 (Par-2)11.15X14.77X6.3)	Package AC room(6.82X7.27X6.3)	Hot Storage room(5.77X14.77X6.3)	MCC room(5.74X14.77X6.3)	Guard room-2(2.77X3.77X3.5)	MCC room(18X52X)			
1	False Ceiling	:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-	-			
2	MSD below False Ceil	:	15	0	0	1	0	1	0	1	0	6	2	1	1	1	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	4	6	2	3	6	1	42	96	No's		
3	MSD after False Ceil	:		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's	
4	Air Sampling Detector	:		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's	
5	Response Indicator	:		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
6	Beam Detector	:		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	No's
7	IR Detector	:		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
8	Probe Detector	:		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
9	Manual Call Points(Indoor)	:	1	4	2	1	2	0	0	0	0	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	35	No's
10	Manual Call Points(Outdoor)			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
11	Hooter cum Strobe	:	1	2	1	1	2	0	0	0	0	0	0	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	32	No's
12	Control Module for Hooters	:		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
13	Exit	:	1	4	2	1	2	0	0	0	0	0	0	1	0		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	35	No's
14	Control Module for Exit signs	:		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
15	LHS	:		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
16	Flame Detector			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
17	Heat detector below False Ceil			0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	No's
18	Heat detector above False Ceil			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
19	Manual Call Points (Flame Proof)			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
20	1 Input 1 Output Module			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's
21	Input Module for Optical LHS			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's

		<u>MFAP-2 System - Total Devices BOQ</u>			Annexure -[A2] of PY 56217	
		Project: 4X270 MW FPS system - Manuguru Bhadradi			REV 00	
S.No	Description	:	MFAP-2-1	MFAP-2-2	Total devices	Units
1	False Ceiling	:	-	-	0	No's
2	MSD below False Ceil	:	259	96	355	No's
3	MSD after False Ceil	:	0	0	0	No's
4	Air Sampling Detector	:	6	0	6	No's
5	Response Indicator	:	0	0	0	No's
6	Beam Detector	:	0	14	14	No's
7	IR Detector	:	0	0	0	No's
8	Probe Detector	:	0	0	0	No's
9	Manual Call Points(Indoor)		47	35	82	
10	Manual Call Points(Outdoor)	:	0	0	0	No's
11	Hooter cum Strobe	:	42	32	74	No's
12	Control Module for Hooters	:	0	0	0	No's
13	Exit	:	46	35	81	No's
14	Control Module for Exit signs	:	0	0	0	No's
15	LHS		0	0	0	No's
16	Flame Detector		0	0	0	No's
17	Heat detector below False Ceil		30	1	31	No's
18	Heat detector above False Ceil		0	0	0	No's
19	Manual Call Points (Flame Proof)		0	0	0	No's
20	1 Input 1 Output Module		8	0	8	No's
21	Input Module for Optical LHS		8	0	8	No's

		Panel wise BOQ of FDA System																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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		Panel wise BOQ of FDA System																								Annexure -[A2] of PY 56217										REV 00	
		Devices BOQ for MFAP-4																																			
		Project: 4X270 MW FPS system - Manuguru Bhadradi																																			
S.No	Description	:	CW Chlorination plant- Unit-#3 & 4			Silo Utility Building		Admin Building																				Total devices	Units								
			Chlorinator room(5X10X5)JEL:Later	Control room(5X5X5)JEL:Later	CW Treatment plant- Unit-#3 & 4 (Area:Later)JEL:Later	Silo utility room (17X7.5X6.5)JEL:Later	Tool room(3X3X3)JEL:Later	MD room-1(5.27X8X4.5)JEL:OM	DE room-1(4.1X4.87X4.5)JEL:OM	PA room (2.95X2.15X4.5)JEL:OM	DE room-2(4.07X4.01X4.5)JEL:OM	SE room (3.7X3.85X4.5)JEL:OM	MD room-2(5.27X7.34X4.5)JEL:OM	Office-1 (8.5X17.5X4.5)JEL:OM	Package AC room (8.04X4.24X4.5)JEL:OM	Pantry (4.75X3.87X4.5)JEL:OM	Record Room (4.04X3X4.5)JEL:OM	VIP lounge (4.16X10X4.5)JEL:OM	Reception lounge (19.5X11.3X4.5)JEL:OM	Lift Lobby (4.52X7.9X4.5)JEL:OM	Conference room (10.2X8.37X4.5)JEL:OM	Package AC room (7.77X4.24X4.5)JEL:OM	Telecommunication room (5.52X5.77X4.5)JEL:OM	Passage-1 (6.2X2.29X4.5)JEL:OM	Passage-2 (7.9X1.9X4.5)JEL:OM	Stationary room (3.46X3.6X4.5)JEL:OM	Xerox machine room (2.7X3.6X4.5)JEL:OM			Security room (8X4.06X4.5)JEL:OM	Store (1.9X3.77X4.5)JEL:OM	MCC room (10.24X17.87X4.5)JEL:OM					
1	False Ceiling	:	NA	NA	NA	NA	NA	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	-	-					
2	MSD below False Ceil	:	2	1	0	3	1	1	1	1	1	1	1	6	1	0	1	2	6	1	4	1	1	1	1	1	1	1	1	6	48	No's					
3	MSD after False Ceil	:	0	0	0	0	0	1	1	1	1	1	1	6	0	0	0	2	6	1	4	0	1	1	1	1	1	1	0	0	31	No's					
4	Air Sampling Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's					
5	Response Indicator	:	0	0	0	0	0	1	1	1	1	1	1	6	0	1	0	2	6	1	4	0	1	1	1	1	1	1	0	0	32	No's					
6	Beam Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's					
7	IR Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	NA	0	NA	0	0	0	0	NA	0	0	0	0	0	0	0	0	0	No's					
8	Probe Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's					
9	Manual Call Points(Indoor)	:	1	1	0	2	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	8	No's					
10	Manual Call Points(Outdoor)	:	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	No's					
11	Hooter cum Strobe	:	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	6	No's					
12	Control Module for Hooters	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's					
13	Exit	:	1	1	0	2	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	8	No's					
14	Control Module for Exit signs	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's					
15	LHS	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's					
16	Flame Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's					
17	Heat detector below False Ceil	:	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	No's					
18	Heat detector above False Ceil	:	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	No's					
19	Manual Call Points (Flame Proof)	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's					
20	1 Input 1 Output Module	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's					
21	Input Module for Optical LHS	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's					

	Panel wise BOQ of FDA System																																														Annexure -[A2] of PY 56217							
	Devices BOQ for MFAP-4																																																		REV 00			
	Project: 4X270 MW FPS system - Manuguru Bhadradri																																																					
Sl. No	Description	..	Admin Building(EL:4.5M)																	Canteen(EL:0M)													Total devices	Units																				
			JAO room(5.27X4.1X4)	DM room(5.27X3.9X4)	DGM room(5.27X3.84X4)	Pantry(5.27X3.4X4)	Office(12.7X23.77X4)	Package AC room(8.1X4.24X4)	Record room(4.75X3.87X4)	Office-2(19.77X4.65X4)	Lift Lobby(4.7X8X4)	Passage-1(19.7X1.8X4)	Passage-2(7.7X1.8X4)	Passage-3(19.7X1.8X4)	Passage-4(7.7X1.8X4)	Conference room(10X8.37X4)	Package AC room(7.77X4.22X4)	Office-3(12.83X15.6X4)	Pantry(3.4X3.4X4)	AO room-1(5.1X3.9X4)	AO room-2(5.1X3.9X4)	AAO room(5.1X4X4)	SDO room(4.87X4.05X4)	Dy. CCA room(7.37X4.07X4)	Passage-5(6.2X1.4X4)	Executive Dining Hall(6.95X11.79X4)	Wet Raw Material Store(2.83X3.48X4)	Dry Raw Material Store-1(4X2.33X4)	Dry Raw Material Store-2(2X2.58X4)	Manager Room(2.79X2.47X4)	Corridor(2X3.79X4)	Kitchen Area(7.5X13.55X4)				Non-Executive Dining Hall-1(13.84X13.88X4)	Non-Executive Dining Hall-2(7.2X6.66X4)	Dining Hall for Women-1(6.95X3.4X4)	Dining Hall for Women-2(4.3X3.6X4)	Billing Counter(2.5X3.5X4)														
1	False Ceiling	:	Y	Y	Y	Y	Y	NA	NA	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-																	
2	MSD below False Ceil	:	1	1	1	0	6	1	1	3	1	3	1	4	1	4	0	1	1	1	1	1	1	1	2	1	1	1	1	1	0	4	1	1	1	1	53	No's																
3	MSD after False Ceil	:	1	1	1	0	6	0	0	3	1	3	1	4	0	4	0	1	1	1	1	1	1	1	2	1	1	1	1	1	0	4	1	1	1	1	50	No's																
4	Air Sampling Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's															
5	Response Indicator	:	1	1	1	1	6	0	0	3	1	3	1	4	0	4	1	1	1	1	1	1	1	1	2	1	1	1	1	1	6	4	1	1	1	1	58	No's																
6	Beam Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's															
7	IR Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's															
8	Probe Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's															
9	Manual Call Points(Indoor)	:	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	5	No's															
10	Manual Call Points(Outdoor)	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's															
11	Hooter cum Strobe	:	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	5	No's																
12	Control Module for Hooters	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's															
13	Exit	:	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	5	No's																
14	Control Module for Exit signs	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's															
15	LHS	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's															
16	Flame Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's															
17	Heat detector below False Ceil	:	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	8	No's																
18	Heat detector above False Ceil	:	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	8	No's																	
19	Manual Call Points (Flame Proof)	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's																
20	1 Input 1 Output Module	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's																
21	Input Module for Optical LHS	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's																



		FDA System - Total Devices BOQ MFAP-4				Annexure -[A2] of PY 56217	
						REV 00	
		Project: 4X270 MW FPS system - Manuguru Bhadradri					
S.N o	Description	:	MFAP-4-1	MFAP-4-2	MFAP-4-3	Total devices	Units
1	False Ceiling	:	-	-	-	0	No's
2	MSD below False Ceil	:	48	53	26	127	No's
3	MSD after False Ceil	:	31	50	17	98	No's
4	Air Sampling Detector	:	0	0	0	0	No's
5	Response Indicator	:	32	58	18	108	No's
6	Beam Detector	:	0	0	0	0	No's
7	IR Detector	:	0	0	0	0	No's
8	Probe Detector	:	0	0	0	0	No's
9	Manual Call Points(Indoor)		8	5	5	18	No's
10	Manual Call Points(Outdoor)	:	4	0	0	4	No's
11	Hooter cum Strobe	:	6	5	3	14	No's
12	Control Module for Hooters	:	0	0	0	0	No's
13	Exit	:	8	5	5	18	No's
14	Control Module for Exit signs	:	0	0	0	0	No's
15	LHS	:	0	0	0	0	No's
16	Flame Detector	:	0	0	1	1	No's
17	Heat detector below False Ceil	:	1	8	1	10	No's
18	Heat detector above False Ceil	:	1	8	1	10	No's
19	Manual Call Points (Flame Proof)	:	0	0	0	0	No's
20	1 Input 1 Output Module	:	0	0	0	0	No's
21	Input Module for Optical LHS	:	0	0	0	0	No's

BHEL बीएचएल		Panel wise BOQ of FDA System																																								Annexure -[A2] of PY 56217				Rev 00	
		Devices BOQ for MFAP-5																																													
		Project: 4X270 MW FPS system - Manuguru Bhadradi																																													
S.No	Description	:	IA & SA Compressor House (44X13X10)EL:Later	CW Pump House- Unit-#1 & 2 (11.5X55.1X17.3)EL:Later	Chlorinator room (5X10X5) EL:Later	Control room (5X5X5) EL:Later	CW Treatment plant- Unit-#1 & 2(Area:Later)EL:Later	Stores Office(Area :Later)	AC Store(3.77X5.05X3.5)	Pantry(1.62X3.15X3.5)	Office-1(11.54X19.88X3.5)	Office-2(8.17X9.54X3.5)	Reception (4.85X4.85X3.5)	PA room(2.74X2X3.5)	Super. Office(3.85X2.74X3.5)E	Passage(1.2.17X1.5X3.5)	Store-1(29.7X14.77X8.3)	Store-2(30.17X14.77X8.3)	Store-3(30.17X14.77X8.3)	Store-4(30.17X14.77X8.3)	Store-5(30.17X14.77X8.3)	Store-6(30.17X14.77X8.3)	Store-7(30.17X14.77X8.3)	Guard room-1(2.77X3.86X3.5)	Store-8(29.7X14.77X8.3)	Store-9(30.17X14.77X8.3)	Store-10(30.17X14.77X8.3)	Store-11(30.17X14.77X8.3)	Store-12(30.17X14.77X8.3)	Store-13(30.17X14.77X8.3)	Store-14(30.17X14.77X8.3)	Store-15 (Part-1)(7X7.27X6.3)	Store-15 (Part-2)(11.15X14.77X6.3)	Package AC room(6.82X7.27X6.3)	Hot Storage room(5.77X14.77X6.3)	MCC room(5.74X14.77X6.3)	Guard room-	Total devices	Units								
1	False Ceiling	:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-	-						
2	MSD below False Ceil	:	12	0	2	1	0	0	1	0	6	2	1	1	1	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	4	6	2	3	6	1	52	No's						
3	MSD after False Ceil	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's				
4	Air Sampling Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's				
5	Response Indicator	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's				
6	Beam Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	14	No's				
7	IR Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's				
8	Probe Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's				
9	Manual Call Points(Indoor)	:	2	4	1	1	0	0	0	0	0	0	1			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	30	No's				
10	Manual Call Points(Outdoor)	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's				
11	Hooter cum Strobe	:	2	2	1	1	0	0	0	0	0	0	1	0	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	28	No's					
12	Control Module for Hooters	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's				
13	Exit	:	2	4	1	1	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	30	No's					
14	Control Module for Exit signs	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's				
15	LHS	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's				
16	Flame Detector	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's				
17	Heat detector below False Ceil	:	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	No's				
18	Heat detector above False Ceil	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's				
19	Manual Call Points (Flame Proof)	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's				
20	1 Input 1 Output Module	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's				
21	Input Module for Optical LHS	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	No's				

		<u>FDA System - Total Devices BOQ</u>					Annexure -[A2] of PY 56217		
							Rev 00		
		Project: 4X270 MW FPS system - Manuguru Bhadradi							
S.No	Description	:	MFAP1	MFAP2	MFAP-3	MFAP4	MFAP5	Total devices	Units
1	False Ceiling	:	-	-	-	-	-	-	No's
2	MSD below False Ceil	:	484	355	193	127	52	1211	No's
3	MSD after False Ceil	:	112	0	16	98	0	226	No's
4	Air Sampling Detector	:	6	6	0	0	0	12	No's
5	Response Indicator	:	117	0	0	108	0	225	No's
6	Beam Detector	:	0	14	0	0	14	28	No's
7	IR Detector	:	0	0	51	0	0	51	No's
8	Probe Detector	:	14	0	0	0	0	14	No's
9	Manual Call Points(Indoor)	:	88	82	38	18	30	256	No's
10	Manual Call Points(Outdoor)	:	32	0	33	4	0	69	No's
11	Hooter cum Strobe	:	83	74	39	14	28	238	No's
12	Control Module for Hooters	:	0	0	0	0	0	0	No's
13	Exit	:	90	81	41	18	30	260	No's
14	Control Module for Exit signs	:	0	0	0	0	0	0	No's
15	LHS	:	0	0	0	0	0	0	No's
16	Flame Detector	:	8	0	0	1	0	9	No's
17	Heat detector below False Ceil	:	35	31	0	10	1	77	No's
18	Heat detector above False Ceil	:	6	0	3	10	0	19	No's
19	Manual Call Points (Flame Proof)	:	9	0	3	0	0	12	No's
20	1 Input 1 Output Module	:	14	8	64	0	0	86	No's
21	Input Module for Optical LHS	:	14	8	64	0	0	86	No's