

Projectwise Bill of Material																			
Framework for Fire Detection & Alarm System																			
S. No.	Item Description	Total Quantity	Unit	2 x 500 MW NTPL Tuticorin	2 x 500 MW NTPC Sipat	3 x 660 MW NTPC North Karanpura	3 x 660 MW NTPC Nabinagar	3 x 660 MW NTPC Barh-I	2 x 660 MW NTPC Barh-II	4 x 250 MW BRBCL Nabinagar	4 x 270 MW Bhadadri	2 x 250 MW Bhilai	1 x 800 MW Kothagudem	1 x 800 MW North Chennai	3 x 200 MW + 3 x 500 MW + 1 x 500 MW NTPC Korba	3 x 200 MW + 3 x 500 MW NTPC Ramagundam	4 x 210 MW + 3 x 500 MW NTPC Kahalgaon	1 x 70MW Kodayar	3 x 27.5MW Kuttiyadi
1	Fire Alarm Panel (Each panel shall have 12 Loops) Floor Mounted	2	No.'s												1	1			
2	Fire Alarm Panel (Each panel shall have 8 Loops) Floor Mounted	6	No.'s			1	1	1		1	1						1		
3	Fire Alarm Panel (Each panel shall have 6 Loops) Floor Mounted	4	No.'s	1					1				1	1					
4	Fire Alarm Panel (Each panel shall have 4 Loops) Floor Mounted	2	No.'s		1														1
5	Fire Alarm Panel (Each panel shall have 2 Loops) Floor Mounted	2	No.'s									1						1	
6	Loop Card	4	No.'s		1				1				1	1					
7	Repeater Panel	12	No.'s	1	1		1	1	1	1		1		1	1	1	2		
8	Multisensor Detectors with detector base and mounting back box (Analogue addressable) along with PVC cable glands	6600	No.'s	450	500	420	300	500	450	680	250	230	250	250	670	745	780	50	75
9	Heat Detectors with detector base and mounting back box (Analogue addressable) along with PVC cable glands	132	No.'s	10	10	10	11	12	11	10	6	6	6	6	10	10	10	2	2
10	Probe Detectors (ROR type) with Flameproof Junction box for Fuel tanks (Min. 50 ft x 50 ft coverage for each detector along with counter flange and gasket) (Addressable)	15	No.'s	1	1	1	1	1	1	1	1	1	1	1	2	1	1		
11	Beam Detectors (Addressable) along with PVC cable glands	132	No.'s	5	5	5	12	12	10	15	6	6	6	5	15	10	10	5	5
12	Air Sampling Type Smoke Detection System for Control Rooms and Control Equipment Rooms of TG Building (including modules for interfacing with fire detection & alarm system)	6	Sets								3		3						
13	Infrared Ember Detector with Air Purge Unit along with Accessories	15	No.'s	1	1	1	1	1	1	1	1	1	1	1	2	1	1		
14	Module for interface with IR Ember Detector (1 Input + 1 Output) with IP-65 enclosure along with PVC cable glands	15	No.'s	1	1	1	1	1	1	1	1	1	1	1	2	1	1		
15	Dual Wavelength Infrared Flame Detector with Accessories	6	No.'s								3		3						
16	Module for interface with Dual Wavelength IR Flame Detector (1 Input + 1 Output) with IP-65 enclosure along with PVC cable glands	6	No.'s								3		3						
17	Indoor Manual Call Points with mounting back box (Addressable type) along with PVC cable glands	473	No.'s	60	39	19	28	33	30	22	32	44	13	36	24	30	44	5	14
18	Outdoor Manual call points with mounting back box (IP-65 min.) (Addressable type) along with PVC cable glands	546	No.'s	11	31	40	39	40	35	48	28	7	38	24	58	65	82		
19	Flameproof Manual call points with mounting back box (Addressable type) along with PVC cable glands	2	No.'s								1		1						
20	Indoor Hooter cum Strobe with mounting back boxAddressable type & Loop powered) along with PVC cable glands	700	No.'s	60	30	20	60	50	50	65	60	45	20	60	80	35	50	5	10
21	Response Indicators	605	No.'s	65	84	30	24	25	25	72	18	34	32	16	72	50	46	8	4
22	Siren (10 km) with Siren Control panel	1	No.'s												1				
23	Siren (3 km) with Siren Control panel	1	No.'s													1			
24	Siren (1 km) with Siren Control panel	6	No.'s									1	1	1			1	1	1
25	Interface module for Siren Operation with IP-65 enclosure	8	No.'s									1	1	1	1	1	1	1	1
26	Digital LHS Cable (Thermoplastic Type) for Cable Galleries	82500	Mtr.		8440	6930	6000	12000	12000	12000		3020			12000	5010	5100		
27	Digital LHS Cable (Steel Braided Type) for Conveyors	28600	Mtr.		3130	6130	3000	2500	2200	2500		2040			3000	1850	2250		
28	End of Line Resistance with IP-65 enclosure	350	No.'s	17	14	9	36	60	60	60	7	5	5	5	58	8	6		
29	LHS Cable Jointing Box (IP-65 rated)	200	No.'s	10	20	19	24	25	24	24	5	5	5	5	24	5	5		
30	Digital LHS Controller (2 kms range)	30	No.'s	2	2	2	2	2	2	2	2	2	2	2	3	3	2		
31	Module for LHS Cable (1 Input) with IP-65 enclosure along with PVC cable glands	350	No.'s	25	22	28	28	38	37	38	13	15	10	27	38	12	15	2	2
32	Module for Deluge Valve (2 Input + 1 Output) with IP-65 enclosure along with PVC cable glands	350	No.'s	40	39	25	10	15	9	25	17	25	6	35	24	12	60	4	4
33	Module for Tripping (1 Output) along with PVC cable glands	150	No.'s	6	23	19	12	12	12	12	4	9	5	12	12	6	6		
34	Module for Monitoring Pumps Status (1 Input) with IP-65 enclosure along with PVC cable glands	5	No.'s										1	1	1	1	1		
35	Module for interface with DCS (1 Output) with IP-65 enclosure along with PVC cable glands	100	No.'s	3	3	3	10	15	12	12	3	3	3	9	12	3	6	3	
36	Module for interface with IGES (1 Input + 1 Output) with IP-65 enclosure along with PVC cable glands	5	No.'s										1	1	1	1	1		

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37	230V AC Back-Lit Exit Sign Board with Battery Back Up	100	No.'s	33							22		15	30						
38	24V DC Back-Lit Exit Sign Board	100	No.'s	33							22		15	30						
39	Self Illuminating Exit Sign Board	350	No.'s		6	13	36	40	35	33		47			38	35	48	5	14	
40	24 V DC Power Supply Modules with Battery Back Up with (IP - 20 enclosure)	20	No.'s	2	1	1	1	1			2	2	2	2	2	2	2			
41	24 V DC Power Supply Modules with Battery Back Up with (IP - 66 enclosure)	30	No.'s	3	3	3	2	2	2	2	2	1	2	2	2	2	2			
42	Operator Workstation & Color Laser Jet Printer along with Commissioning software with Licence / Dongle + Graphic software with License /Dongle	16	Sets	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
43	Operator Workstation along with OPC Server & Client Software + License + Accessories	2	Sets								1		1							
44	UPS for Operator Work Station + Printer	16	Sets	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
45	Laptop along with Fire Alarm Panel Commissioning Software with License /Dongle	1	No.'s										1							
46	Furniture for Operator Workstation & Printer	16	Sets	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
47	6F Fiber Optic Cable for Networking Fire Alarm Panels & Repeater Panels along with 2" rodent proof HDPE Conduit	49500	Mtr.	5000	7450	2750	2400	2500	2400	2400		2200		5000	2400	5000	10000			
48	Cable Tags for 1P x 1.5 Sqmm Cable	100	No.'s	10	10	20	12	12	12	12					12					
49	Cable Tags for 2C x 2.5 Sqmm Cable	100	No.'s	10	10	20	12	12	12	12					12					
50	Cable Saddle + Saddle Bars along with fixing screws and rawl plugs for 1P x 1.5 sqmm Cable	75000	Sets	4000	3000	5000	5000	5000	5000	5000	5000	2000	5000	5000	8000	8000	8000	1000	1000	
51	Cable Saddle + Saddle Bars along with fixing screws and rawl plugs for 2C x 2.5 sqmm Cable	40000	Sets	2000	2000	3000	3000	3000	3000	3000	3000	1000	3000	3000	3000	3000	3000	1000	1000	
52	50 mm Cable Tray	7500	Meter	500	500	500	500	500	500	500	500	500	500	500	500	500	500	250	250	
53	Networking Components for Fire Alarm Panel, Repeater Panels & OWS	15	Sets	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
54	Fuses (100% of population)	15	No.'s	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
55	Indicating Lamps (100% of population)	15	Sets	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
56	Push Buttons (10 Nos of each type and rating)	15	Sets	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
57	Power supply Modules (10% or 1 Nos of each type and rating whichever is more)	15	Sets	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
58	LCD display of each type unit of panel (1 No / project)	15	Sets	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
59	LED's of each type (100% of population / project)	15	Sets	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
60	Power Supervision Relay (4 Nos of each type)	15	Sets	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
61	Alarm buzzer (1 Nos of each type)	15	Sets	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
62	Cartridge for Printers (2 Nos of each type)	15	Sets	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
63	CPU Card (2 Nos. of each type)	2	Sets												1	1				
64	Network Card (2 Nos. of each type)	2	Sets												1	1				
65	Zone Card (2 Nos. of each type)	2	Sets												1	1				
66	Audio Control Module (2 Nos. of each type)	2	Sets												1	1				
67	Batteries (2 Nos. of each type)	2	Sets												1	1				
68	All mounting Accessories & Erection Hardware Software required for installing above components and establishing the networking between all fire alarm panels, repeater panels, DCS, PCs, Printers etc shall be considered.	1	Lot												1	1				