

CORRIGENDUM NO. 3

1. Organization Chain	Bharat Heavy Electricals Limited EPD - Bangalore
2. Tender ID	2022_BHEL_11870_1
3. Tender Reference Number	12302644
4. Tender Title	SUPPLY OF LV Switchgear for FGD - RAMAGUNDAM SUPER THERMAL POWER STATION STAGE-I & II (3x200 MW + 3X500MW)
5. Corrigendum Type	Technical Corrigendum-1
6. Corrigendum Title	Corrigendum-3
7. Description	Technical Corrigendum-1 as per Annexure [Board wise BOM Rev 01 (Annexure-B1,B2,B3,B4,B5,B6,B9,B10)]

TECHNICAL CORRIGENDUM-1

SL NO	VOULME/ SECTION	PAGE NO.	CLAUSE NO.	TECHNICAL SPECIFICATION/ TENDER DOCUMENT	BIDDER DEVIATION	BHEL REPLY
TECHNICAL DEVIATIONS (SBD-TS-CPBG-FGD-RAM, REV 00)						
1		3 of 150	1 (i)	No. of Verticals considered for each switchboard considering the no. of feeders mentioned in the load data and break-up of no. of verticals considered shall be provided i.e no. of breaker verticals and no. of MCC verticals. Bidder shall also furnish dimensions & weight of each switchboard.	Will be provide upon placement of order.	Bidder shall mandatorily declare number of verticals per board as a part of technical offer. Pont Closed
2		3 of 150	1 (i)	No Of Vertical	We have considered Number of Vertical (i.e MCC & PCC) based on our standrd Size, further we have not considered MCC/PCC Vertical quantity, which you have mentioned in Board Wise BOM. <i>This is for your information.</i>	Noted. In case of change same will be settled based on Addition deletion price during detailed engg . Point Closed
3		4 of 150	2 (1)	This specification covers the design, manufacture, relay parameterization and site support, supply of networking hardware, site modification(if any), inspection and testing at manufacturer's works, proper packing and delivery to site of LV switchgear.	Our scope is restricted design, manufacturing and supply up to site only.	Along with Design , Manufacturing and suply of LT switchgear , Relay parameterisation support (Setting)at site is in Bidder's scope . Point Closed.
4		1 of 57	1.01.00 (b)	The Finally selected Busbar ratings for Switchboards, MCCs, ACDBs and Busducts shall include a 10% margin over the calculated values.	Busbar Ratings shall be considered as per the incomer rating which is mentioned in the price format Annexure. No margin over the same is considered	Noted. Point Closed.
5		1 of 57	1.01.00 (C)	Lighting load of 50 kVA (Minimum) shall be considered on each section of main switchgears with incomer from transformer as indicated in the tender SLD.	Number, type and rating of the feeders are considered as per your feeder list only. No other feeder/spares/space provision is considered.	Number, type and rating of the feeders to be considered as per feeder list only
6		1 of 57	1.01.00 (d)	Busbar Ratings of Valve / Damper ACDBs shall be derived by addition of 5% of the total kVA load connected and the rating of the largest Valve / Damper connected.	Busbar Ratings shall be considered as per the incomer rating which is mentioned in the price format Annexure. No margin over the same is considered.	busbar rating has to be considered as per Boardwise BOM . Point Closed.
7		1 of 57	1.01.00 (e)	Welding sockets shall be connected from Welding DBs, which shall be fed through 1X100% Welding transformers.	Not in our scope	This clause of specification is not applicable for bidder.Point Closed .
8		1 of 57	1.01.00 (f)	ESP consumption for 100% BMCR operation shall be considered and further this load shall be uniformly divided among ESP Switchgears.	Not applicable for us.	This clause of specification is not applicable for bidder.Point Closed
9		4 of 57	3.01.02 (1)	DC SYSTEM	Since DCDB's asked 220VDC in feeder list hence we considered DCDB's suitable for 220VDC only.	Noted. Point Closed.
10		4 of 57	3.01.03 (1&2)	CONTROL SUPPLY VOLTAGE	Control voltage shall be 220V DC or 110V DC	Control voltage shall be of 220VDC. Point Closed
11		8 of 57	3.12.00 (5)	LIGHTING TRANSFORMER / WELDING TRANSFORMER	Not applicable for us.	Noted. Point Closed.
12		10 of 57	4.09.00	Switchboards shall be easily extendable on both sides by the addition of vertical sections after removing the end covers.	We have consider the Top duct entry and with this arrangement Extension on both side is possible.	Add/Del price shall be declared by bidder for conversion from Top entry to side Entry and vice versa so that in during detailed engg if required same can be settled through Add-Del price.
13		10 of 57	4.10.00	Switchboards shall be supplied with base frames made of structural steel sections, along with all necessary mounting hardware required for welding down the base frame to the foundation / steel insert plates. The base frame height shall be such that floor finishing (50 mm thick) to be done by Contractor after erection of the switchboards does not obstruct the movement of doors, covers, withdrawable modules etc.	Switchboards shall be supplied along with 50mm height integral base frame which is suitable for direct tag welding hence we do not envisaged separate Foundation bolts, mounting hardware is considered.	Switchboards shall be supplied along with minimum 50mm height integral base frame which is suitable for direct tag welding hence separate Foundation bolts, mounting hardware are not required.Point Closed .
14		11 of 57	4.15.00	All panel doors shall open by 90 deg or more.In case of double-front MCCs, if this cannot be achieved for panels adjacent to a breaker panel, suitable dummy panel shall be provided by the Contractor wherever necessary.	Dummy required to attain door opening angle as per spec to be provided without any price implication. Wherever dummy panel required as per layout constraints same shall be supplied at additional cost as per Add/del.	Dummy required to attain door opening angle as per spec to be provided without any price implication. Wherever dummy panel required as per layout constraints same shall be supplied at additional cost as per Add/del. Point Closed.
15		11 of 57	4.22.00	Employer reserves the right to alter the cable entries, if required during detailed engineering, without any additional commercial implication.	The boards are being offered with bottom cable entry. If top cable entry is applicabel for any of the boards please indicate in the tender stage itself. As this point is a major price implication and cannot be kept ambiguous.	Cable entry shall be bottom only. Point Closed.
16		12 of 57	4.24.00	Adopter panels and dummy panels shall be provided wherever required.	Presently no dummy/Adopter panel is considered. If any dummy /adopter panel is required during detailed engineering same will arrived from Unit rates.	presently BHEL has anticipated some dummy/Adopter panel as per boardwise BOM. If any dummy /adopter panel is required over and above during detailed engineering same will arrived from Unit rates.. Point Closed.
17		12 of 57	5.00.00	PROTOTYPE PANELS	Since we are regular supplier to NTPC, we are fully aware of the NTPC specification requirements and hence prototype panel is not required for this project	Prototype Panel is required . However Prototype will be part of any of the switchboards which is in vendor's scope of supply. Point Closed.
18		13 of 57	7.03.00	All busbars and jumper connections shall be of high conductivity Aluminium alloy / Copper of adequate size.	All busbars and jumper shall be aluminium only.	All busbars and jumper shall be aluminium only.Point Closed.
19		14 of 57	7.07.00	All busbars shall be colour coded as per IS: 375.	All busbars shall be black colored sleeve with color bands at regular intervals.	Noted . Point Closed.
20		14 of 57	8.04.00	Control Transformer Ratings	CTF rating shall be followed as per your feeder list.	Noted . Point Closed.
21		17 of 57	11.00.00	TELESCOPIC TROLLEY	We have considered quantity (i.e.2Nos) of Trolley as per your List of Tools & Tackles List.	Noted . Point Closed.
22		18 of 57	13.02.00 & 13.04.00	MCCB shall be provided with Microprocessor based inbuilt front adjustable releases (Overload & Short-circuit) and shall have adjustable Earth Fault protection unit also. The protection settings shall have suitable range to achieve the required time & current settings. LED indications shall also be provided for faults, MCCB status (on/off etc.).	We shall provide indication lamps for MCCB ON,OFF & TRIP status.Kindly specified the Board name to enable us to provide the status.	Noted. Boards name,if anything comes during Detailed Engg , same will be settled through ADD-DEL. Point Closed

TECHNICAL CORRIGENDUM-1

SL NO	VOULME/ SECTION	PAGE NO.	CLAUSE NO.	TECHNICAL SPECIFICATION/ TENDER DOCUMENT	BIDDER DEVIATION	BHEL REPLY
TECHNICAL DEVIATIONS (SBD-TS-CPBG-FGD-RAM, REV 00)						
23		19 of 57	15.03.00	For CHP conveyor motors, minimum rating of power contactors shall be 240% of full load current of the motors. For other CHP drives, minimum rating of power contactors shall be 160% of full load current of motor.	Kindly identify boardwise CHP conveyor Motors & CHP drives Feeders.	Wherever such requirement arises at later stage differential cost of contactors and higher size rated module for providing higher rating will be settled through Add/Del. Point Closed.
24		20 of 57	18.02.00		The Opening and closing of Breaker can be done through Local HMI. Through Laptop it should force True in settings from front communication port.	Noted . Point Closed.
25		21 of 57	18.04.00		The communication to SCADA/DDCMIS is through SOFT signals, but not through Binary outputs. We are offering Two no of RJ-45 on rear on IEC-61850 in relay to achieve above function. We are not offering any hardware for communication between SCADA and IED.	Kindly follow technical spec.
26		24 of 57	20.05.00	All motor feeders of rating ≥ 30 kW and < 110 kW shall be provided with Multifunction Digital Energy Meter with communication facility to display the current, voltage, power factor, power energy related data locally as well as communicate these for remote metering/audit/analysis purposes.	As per this clause we have considered Multifunction meter instead of Energy meter.	Kindly follow technical spec.
27		28 of 57	27.00.00	LOCAL PUSH BUTTON STATIONS	Not in our scope.	Noted . Point Closed.
28		29 of 57	28.00.00	LOCAL MOTOR STARTERS	Not in our scope.	Noted . Point Closed.
29		29 of 57	30.00.00	METAL ENCLOSED NON SEGREGATED PHASE BUSDUCT(AIR INSULATED)	Not in our scope.	Noted . Point Closed.
30		31 of 57	31.00.00	Lighting / Welding Transformer	Not in our scope.	Noted . Point Closed.
31		32 of 57	37.00.00	Test & Test Reports	Please note that Panels to be offered by us have already been type tested for short time current and degree of protection test at CPRI, Bhopal and for temperature rise test at our works for several times, therefore, it is not required to carryout these tests. However, we shall furnish type test certificate received from the testing laboratories for your reference. In case you still desire to carry out these tests again, the same shall be conducted at extra cost. The unit prices are indicated in our enclosed Price Schedule.	In case the Bidder is not able to submit report of the type test(s) conducted not earlier than ten years prior to the date of bid opening, or in case the type test report(s) are not found to be meeting the specification requirements, the bidder shall conduct all such tests under this contract at no additional cost either at third party lab or in presence of client/Employer for approval.Point Closed.
32		35 of 57	38.00.00	ERECTION / INSTALLATION OF SWITCHBOARDS AND OTHER EQUIPMENTS	Not in our scope.	Noted . Point Closed.
33		35 of 57	39.00.00	COMMISSIONING CHECKS / TESTS	Not in our scope.	Noted . Point Closed.
34		38 of 57	40.01.00(b)	Three (3) Current transformers for Protection and metering.	Only 3 Nos. of protection CT's is considered.	Noted . Point Closed.
35		45 of 57	43.00.00	COMMISSIONING OF LT SWITCHGEARS	Not in our scope.	Supervision of Commisioning for LT switchgear is in bidder scope as per UnPriced schedule -ANNEXURE-I.Point Closed.
36		45 of 57	44.00.00	INSULATING MAT	Not in our scope.	Noted . Point Closed.
BOARD WISE BOM						
37				30KW DOL Feeder	Please note that you have given many boards as DK2 type with 30KW, However as per spec/Module wise BOM called DK2 should be upto 29.9KW. Kindly Check and confirm.	Please consider DK2 30 KW as DK21 30KW in feeder list in Annexure-B1,B2,B3,B4,B5,B6,B9,B10.
MODULE WISE BOM						
38				CT's Burden	We have considered CT's (Metering & Protection) 5VA inline with your Spec Clause no.3.05.00 (5) as against called for 10VA in your Module Wise BOM	Bidder to quote for 10VA .
39		14, 15 of 19	DK21/PK21/A K21	CURRENT TRANSDUCER (AC),4-20mA, DUAL O/P,AUX.- 110V AC	We confirm to considered Digital Energy meter with Analog output of Current (4-20 mA) (for motors of rating 30kW & < 110 kW). inline with your Spec Clause No.40.12.00 (e). However we have not considered any separate Current transducer, since the sam has been shown in your Module wise BOM. <u>This is for your kind information.</u>	Noted . Point Closed.
40				I/O device	We have not considered any marshalling panel for the scope of the project as same is not mentioned in the specificatio. Also we are not considering conversion of the MCCB hardwired feedbacks to 61850 protocol using a I/O devices as this is also not specifically called anywhere in the specification. These are sometimes asked for NTPC in certain projects and hence it is highlighted for your reviewto check whether the same is applicabel for this project or not.	Additional Numerical relay & IO cards shall be provided by bidder for the boards listed below 1. 415V FGD SERVICE PMCC(0DA, 0DB). 2. 415V AC VENT & WS PMCC(0DC). 3. 415V GYPSUM PMCC (0DD) 4.415V LHP/GHP PMCC (0DE) Other than these boards if anything comes during Detailed Engg , same will be settled through ADD-DEL. Point Closed
MANDATORY SPARES						
41		49 of 63		Spring Charge Motors	We have offered two type of Sparing charge Motor as listed below 1) Common for all ratings upto 1600A 2) Common for all ratings above 1600A-4000A	Noted . Point Closed.
42		49 of 63		Aux.Contact	We have offered two type of Aux.Contact as listed below 1) Common for all ratings upto 1600A 2) Common for all ratings above 1600A-4000A	Noted . Point Closed.

TECHNICAL CORRIGENDUM-1

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TECHNICAL DEVIATIONS (SBD-TS-CPBG-FGD-RAM, REV 00)						
43		49 of 63	Limit Switches		We have offered two type of Limit Switches as listed below 1) Common for all ratings upto 1600A 2) Common for all ratings above 1600A-4000A	Noted . Point Closed.
44		49 of 63	Arc Chutes		We have offered 1 Nos of Arc Chutes (i.e. 1Nos=1Pole)	1Nos=3Pole
45		49 of 63	Fixed Contact		We have offered 3 Nos Sets of Fixed Contact for Sr No.5 of Mantatory Spares (i.e. 1set=1Nos=1Pole)	1set=3Pole
46		49 of 63	Moving Contact		We have offered 3 Nos Sets of Moving Contact for Sr No.6 of Mantatory Spares (i.e. 1set=1Nos=1Pole)	1set=3Pole
47		49 of 63	Arcing Contact		We have offered 3 Nos Sets of Arcing Contact for Sr No.7 of Mantatory Spares (i.e. 1set=1Nos=1Pole)	1set=3Pole
48		50 of 63	Bus Duct Flexible Connectors		Please note that Bus Duct Flexible Connector not in our scope of supply, hence not envisaged in Mandatory Spares.	Noted . Point Closed.
49		50 of 63	Primary & Secondary Disconnect	Sr No.24 (a) & 25 (b)	Please note that all Drawout Module shall be Closed Door Operation, Hence separate Primary and secondary Disconnect not applicable, hence we have not quoted.	Noted. bidder should ensure primary and secondary disconnect as per Bidder standard to meet the customer mandatory spare requirement for primary and secondary disconnet. Point Closed.
COMMISSIONING SPARES						
50			Sr.No.1.2, 1.3 & 1.4	Primary & Secondary Isloating Contact	Please note that all Drawout Module shall be Closed Door Operation, Hence separate Primary and secondary Isolating contact not applicable, hence we have not quoted.	Noted. bidder should ensure primary and secondary disconnect as per Bidder standard to meet the customer mandatory spare requirement for primary and secondary disconnet. Point Closed.
MAKE OF COMPONENTS						
51				Make of components	Components and their makes to be provided by us shall be as per our enclosed <u>Bill of Materials</u> .	Make of component shall be as per list enclosed along with technical purchase specification & shall be subject to customer approval
52				Numerical Relay Model	We have Offered SIEMENS 7SJ66 model for all Numerical relay for this project as per our earlier supplied NTPC Projects like Patratu, Panki, etc., <i>Kindly provide your confirmation.</i>	Noted.However same shall be subject to customer approval.
GENERAL						
53				Glands & lugs	Please note that Gland and lugs are not considered in our scope of supply.	Power and Control cable glands & cable lugs are in Bidder's scope.
54				ACB Outgoing Tier Arrangment	We confirm having considered Incomer, Bus coupler and Outgoing feeder arrangement as under, • I/C & B/C ACB's Shall be Single Tier Outgoing:- • ACB upto 1600A shall be Two Tier • SFU/MCCB/DOL/RDOL shall be Multi tier This is for your information. <i>Kindly confirm.</i>	Noted . Point Closed.
55				Limitation of scope	We have not considered the following items in our scope of supply: 1. Data concentrator / HMI / MMI/ Laptop / PLC. 2. Cable Glands 3. DC Battery & Charger 4. Integral actuator 5.Lugs	Noted for 1,3,4. Power and Control cable glands & cable lugs are in Bidder's scope. Point Closed.
56	SBD-TS-CPBG-FGD-RAM	78 of 150	3.12.00	LIGHTING TRANSFORMER / WELDING TRANSFOR	Enclosure with Lighting trafo are supplied in a standalone panel design. cabling between MLDB and Trafo shall be done by you.	Noted. Point Closed.
57	SBD-TS-CPBG-F	87 of 150	12.00.00	AIR BREAK SWITCHES	since all the DCDB's are with 220VDC voltage we have considered switches for DC application suitable for 220VDC only.	Noted . Point Closed.
58	SBD-TS-CPBG-F	92 of 150	19.04.00	The numerical relay shall be able to provide supervisory functions such as trip circuit monitoring, circuit breaker state monitoring, VT and CT supervisions and recording facilities with post fault analysis	Please mentioned what are signals required for	Scheme shall be prepared in line with already executed NTPC projects by Bidder. Accordingly Relays shall be selected. Point closed.
59	SBD-TS-CPBG-F	93 of 150	19.11.01	TRAINING	Training charges shall be quoted as per the a	Noted . Point Closed.
60	SBD-TS-CPBG-F	116 of 150		ETHERNET SWITCH	Our scope is limited upto the Ethernet switch and considered only local relay parameterization software for relays.	Bidder scope is upto the Ethernet switch ,Patchcord and LIU and shall consider local relay parameterization software for relays. Point Closed.
61	SBD-TS-CPBG-F	116 of 150		LAN CABLE & CONNECTOR	No FO ports is considered. Only RJ45 ports is	Bidder to comply to specification. Point Closed

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TECHNICAL DEVIATIONS (SBD-TS-CPBG-FGD-RAM, REV 00)						
62				Cable Sizes	Specification does not indicate the cable sizes for the feeders(ACB/MCCB/starter feeders). Presently we have considered module sizes based on standard cable sizes that are normally used for various ratings. For any reason during detail engineering if the cable sizes are required high it will result in increase in the module size of the particular feeder and in turn may increase the number of verticals.such increase revised price for the board shall be suitably derived using the addition/deletion rates.	Noted . Point Closed.
63				General	For wallmounted DB's we have considered only submission of IP55 DOP certificate as part of the Type test submission.We have not envisaged any other type test certificates or plan to do any test for these items.	Only IP55 certifcate is applicable for Wall Mounted DBs.Point Closed.
64				General	All the Busbars/droppers/ I/C and O/G links shall be Aluminium only.	Please follow the tender spec. Point Closed.
65				General	Our scope is limited upto Ethernet switch to FO ports shall be provided for upstream communication. No LIU is considered., Beyond Ethernet switch no hardware/software in the scope of supply. In each relay cable of adequate length will be rolled and kept which need to be terminated to the Ethernet switch by you at site.	LIU to be part of bidder scope.Necessary FO cable and pigtails for connection of ethernet switch FO ports to LIU shall also to be considered in scope of bidder. Further bidder has to follow technical spec.Point Closed.
66				General	No Hardware/ software is considered for upstream communication.	2 sets of Licenssed Relay parameterisation software shall be provided by bidder . Point Closed.
67				General	Neutral shall be 50% of the main busbar size.	Neutral busbar siize shall be min 50% and also meet the cl no 7.04.00 (pg no 13 of 57) . Point Closed
68				General	VM - Kindly clarify the requirement of the rectifier mentioned in the module wise BOM.	Kindly consider tranducer with universal aux supply. Rectifier not required.

ANNEXURE-B1, REV 01

Name of the Board: 415V FGD SERVICE PMCC # 0DA, 2500A

TYPE OF CONNECTION: TOP/SIDE BUSDUCT ENTRY

DOUBLE FRONT D/O TYPE

FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Price	Total price
DAE OG	630A	2		
DK2	15KW	9		
DK21	30KW	11		
DK2	5.5KW	2		
DK21	37KW	3		
DK21	45KW	3		
DK21	75KW	3		
DM	160KW	2		
E1	100A	2		
E1	16A	14		
E1	32A	7		
E3	16A	37		
E3	200A	7		
E3	32A	6		
E3	63A	10		
E3	150A	3		
E3	50A	3		
BUS PT - G1	50VA	2		
CS	2KVA	2		
DAET IC	2500A	2		
DAET BC	2500A	1		
ACB I/C PANELS	2500A	2		
ACB B/C PANEL	2500A	1		
ACB O/G PANELS	2500/630A	2		
MCC (DFDO)	2500A	AS REQ.		
DUMMY PANELS	2500A	1		
ETHERNET SWITCH		1		

ANNEXURE-B2, REV 01

Name of the Board: 415V FGD SERVICE PMCC # ODB, 4000A

TYPE OF CONNECTION: TOP/SIDE BUSDUCT ENTRY

DOUBLE FRONT D/O TYPE

FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Price	Total price
DAE OG	1000A	2		
DK2	15KW	29		
DK2	3.7KW	8		
DK21	30KW	29		
DK2	5.5KW	4		
DK21	37KW	4		
DK21	45KW	15		
DM	110KW	4		
E1	100A	4		
E1	16A	44		
E1	32A	5		
E3	150A	7		
E3	16A	136		
E3	200A	3		
E3	32A	8		
E3	50A	3		
E3	63A	22		
BUS PT - G1	50VA	2		
CS	2KVA	2		
DAET IC	4000A	2		
DAET BC	4000A	1		
ACB I/C PANELS	4000A	2		
ACB B/C PANEL	4000A	1		
ACB O/G PANELS	4000/1000A	1		
ACB O/G PANELS	4000/630A	2		
MCC (DFDO)	4000A	AS REQ.		
DUMMY PANELS	4000A	1		
ETHERNET SWITCH		1		

ANNEXURE-B3 , REV 01

Name of the Board: 415V AC VENT & WS PMCC # 0DC, 3200A

TYPE OF CONNECTION: TOP/SIDE BUSDUCT ENTRY

DOUBLE FRONT D/O TYPE

FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Price	Total price
DK2	0.75KW	3		
DK2	1.1KW	2		
DK2	11KW	14		
DK2	18.5KW	8		
DK2	2.2KW	2		
DK2	22kw	5		
DK21	30KW	4		
DK21	37KW	10		
DK21	45KW	10		
DK21	55KW	3		
E1	16A	60		
E3	16A	82		
E3	200A	9		
E3	32A	8		
E3	63A	3		
BUS PT - G1	50VA	2		
CS	2KVA	2		
DAET IC	3200A	2		
DAET BC	3200A	1		
ACB I/C PANELS	3200A	2		
ACB B/C PANEL	3200A	1		
MCC (DFDO)	3200A	AS REQ.		
DUMMY PANELS	3200A	1		
ETHERNET SWITCH		1		

ANNEXURE-B4, REV 01

Name of the Board: 415V GYPSUM PMCC # ODD, 3200A

TYPE OF CONNECTION: TOP/SIDE BUSDUCT ENTRY

DOUBLE FRONT D/O TYPE

FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Price	Total price
DK2	0.55kW	3		
DK2	0.75kW	3		
DK2	11KW	6		
DK2	15KW	15		
DK21	30KW	8		
DK2	5.5KW	9		
DK2	7.5KW	3		
DK21	45KW	6		
DK21	70KW	3		
DK21	90KW	3		
DM	125KW	3		
DM	160KW	3		
DM	200KW	3		
E1	16A	6		
E3	100A	2		
E3	16A	185		
E3	200A	3		
E3	32A	5		
E3	63A	5		
BUS PT - G1	50VA	2		
CS	2KVA	2		
DAET IC	3200A	2		
DAET BC	3200A	1		
ACB I/C PANELS	3200A	2		
ACB B/C PANEL	3200A	1		
ACB O/G PANELS	3200/630A	5		
MCC (DFDO)	3200A	AS REQ.		
DUMMY PANELS	3200A	1		
ETHERNET SWITCH		1		

ANNEXURE-B5, REV 01

Name of the Board: 415V LHP/GHP PMCC # 0DE , 4000A

TYPE OF CONNECTION: TOP/SIDE BUSDUCT ENTRY

DOUBLE FRONT D/O TYPE

FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Price	Total price
DAE OG	800A	2		
DK2	0.186kW	2		
DK2	0.75kW	11		
DK2	1.1kW	3		
DK2	1.67kW	10		
DK2	15kW	4		
DK2	18.5kW	8		
DK2	2.2kW	8		
DK2	22kW	8		
DK21	30kW	5		
DK2	4kW	5		
DK21	37kW	5		
DK21	45kW	5		
DK21	90kW	3		
DN1	22kW	3		
E1	16A	6		
E3	100A	3		
E3	160A	3		
E3	16A	6		
E3	200A	3		
E3	250A	3		
E3	32A	47		
E3	63A	30		
BUS PT - G1	50VA	2		
CS	2KVA	2		
DAET IC	4000A	2		
DAET BC	4000A	1		
ACB I/C PANELS	4000A	2		
ACB B/C PANEL	4000A	1		
ACB O/G PANELS	4000/800A	1		
MCC (DFDO)	4000A	AS REQ.		
DUMMY PANELS	4000A	1		
ETHERNET SWITCH		1		

ANNEXURE-B6, REV 01

Name of the Board: 415V BALL MILL MCC # 0DF, 800A

TYPE OF CONNECTION: CABLE ENTRY BOTTOM

DOUBLE FRONT D/O TYPE

FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Price	Total price
DK2	0.75KW	3		
DK2	1.1KW	20		
DK2	11KW	3		
DK2	15KW	14		
DK2	18.5KW	3		
DK2	2.2KW	4		
DK2	22KW	3		
DK2	2KW	2		
DK21	30KW	10		
DK2	5.5KW	3		
DK2	7.5KW	5		
DK21	45KW	3		
DK21	55KW	3		
E1	16A	6		
E1	32A	6		
E3	100A	2		
E3	16A	106		
E3	32A	4		
E3	63A	3		
BUS PT - G1	50VA	2		
CS	2KVA	2		
DAE IC	800A	2		
DAE BC	800A	1		
ACB I/C PANELS	800A	2		
ACB B/C PANEL	800A	1		
MCC (DFDO)	800A	AS REQ.		
DUMMY PANELS	800A	1		
ETHERNET SWITCH		1		

ANNEXURE-B9, REV 01

Name of the Board: 415V EMERGENCY MCC # 0MA,800A

TYPE OF CONNECTION: CABLE ENTRY BOTTOM

DOUBLE FRONT D/O TYPE

FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Price	Total price
DK2	9.3KW	5		
DK21	30KW	12		
DK2	3KW	3		
DK2	5.5KW	6		
DK21	45KW	6		
E3	100A	3		
E3	16A	4		
E3	200A	2		
E3	32A	3		
E3	50A	4		
E3	63A	5		
BUS PT - G1	50VA	2		
CS	2KVA	2		
DAE IC	800A	2		
DAE BC	800A	1		
ACB I/C PANELS	800A	2		
ACB B/C PANEL	800A	1		
MCC (DFDO)	800A	AS REQ.		
DUMMY PANELS	800A	1		
ETHERNET SWITCH		1		

ANNEXURE-B10, REV 01

Name of the Board: 415V EMERGENCY MCC # 0MB,1000A

TYPE OF CONNECTION:CABLE ENTRY BOTTOM

DOUBLE FRONT D/O TYPE

FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Price	Total price
DK2	9.3KW	15		
DK21	30KW	15		
DK2	3KW	8		
DK2	5.5KW	18		
DK21	45KW	11		
E3	100A	2		
E3	16A	4		
E3	200A	4		
E3	250A	3		
E3	32A	4		
E3	50A	4		
E3	63A	5		
BUS PT - G1	50VA	2		
CS	2KVA	2		
DAE IC	1000A	2		
DAE BC	1000A	1		
ACB I/C PANELS	1000A	2		
ACB B/C PANEL	1000A	1		
MCC (DFDO)	1000A	AS REQ.		
DUMMY PANELS	1000A	1		
ETHERNET SWITCH		1		

UNPRICED SCHEDULE -SUMMARY SHEET
PROJECT: 3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I & II- FGD

Sl. No.	MATERIAL CODE	Boards	Rating	UNIT	Qty	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination	Applicable Annexure
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	ELGDRAMCPI092001	415V FGD SERVICE PMCC # ODA	2500A	EA	1									Annexure B-1
2	ELGDRAMCPI092002	415V FGD SERVICE PMCC # ODB	4000A	EA	1									Annexure B-2
3	ELGDRAMCPI092003	415V AC VENT & WS PMCC# ODC	3200A	EA	1									Annexure B-3
4	ELGDRAMCPI092004	415V GYPSUM PMCC# ODD	3200A	EA	1									Annexure B-4
5	ELGDRAMCPI092005	415V LHP/GHP PMCC # ODE	4000A	EA	1									Annexure B-5
6	ELGDRAMCPI092006	415V BALL MILL MCC # ODF	800A	EA	1									Annexure B-6
7	ELGDRAMCPI092007	220V DCDB # OFA	63A	EA	1									Annexure B-7
8	ELGDRAMCPI092008	220V DCDB # OFB	63A	EA	1									Annexure B-8
9	ELGDRAMCPI092009	415V EMERGENCY MCC # OMA	800A	EA	1									Annexure B-9
10	ELGDRAMCPI092010	415V EMERGENCY MCC # OMB	1000A	EA	1									Annexure B-10
11	ELGDRAMCPI092011	415V EMERGENCY MCC # OMC	250A	EA	1									Annexure B-11
12	ELGDRAMCPI092012	DC FUSE DB	63A	EA	4									
13	ELGDRAMCPI092013	AC FUSE DB	63A	EA	4									
14	ELGDRAMCPI092014	Mandatory spares for LT switchgear (ANNEXURE-D)		LOT	1									ANNEXURE-D
15	ELGDRAMCPI092015	COMMISSIONING SPARES-ANNEXURE-E		LOT	1									ANNEXURE-E
16	ELGDRAMCPI092016	TOOLS & TACKLES -ANNEXURE-F		LOT	1									ANNEXURE-F
17	ELGDRAMCPI092017	TRAINING CHARGES FOR TRAINING WORKSHOP AT SITE FOR SWITCHGEAR & NUMERICAL RELAY-ANNEXURE-G		LOT	1									ANNEXURE-G
18	ELGDRAMCPI092018	COMMISSIONING CHARGE FOR NUMERICAL RELAY-ANNEXURE-H		LOT	1									ANNEXURE-H
19	ELGDRAMCPI092019	CHARGES FOR SUPERVISION OF COMMISSIONING FOR LT SWITCHGEAR-ANNEXURE-I		LOT	1									ANNEXURE-I
20	ELGDRAMCPI092020	SITE MODIFICATION CHARGES (As per Annexure-J)		LOT	1									ANNEXURE-J
21	ELGDRAMCPI092021	SITE MODIFICATION MATERIAL @1 % OF TOTAL EXWORKS FOR SL NO 1 TO 13		LOT	1									
TOTAL 1 TO 21 , AMOUNT IN FIGURE														
TOTAL 1 TO 21 , AMOUNT IN WORDS														

NOTES:

- SUMMATION OF ALL UNIT RATES OF MODULES SHALL BE EQUIVALENT TO TOTAL BOARD COST QUOTED, VARIANCE OF +/- 5% IS ACCEPTABLE. BEYOND 5% OFFER WILL NOT BE CONSIDER AS VALID OFFER. IN UNIT ADDITION-DELETION PRICES, PRICES QUOTED FOR COMPONENTS SHALL BE AS PER LIST PRICE OF CONCERNED MANUFACTURES. IF ANY ABNORMAL PRICES ON HIGHER SIDE OBSERVED OFFER MAY BE REJECTED.
- ALL LT PCC/ MCC/ DBs SHALL BE SUPPLIED ALONGWITH THE INTEGRAL BASE FRAMES, FOUNDATION BOLTS, CABLE GLANDS & LUGS AND TOOLS & TACKLES AS MENTIONED IN DIFFERENT SECTIONS. ALL FIXING NUTS & BOLTS TOGETHER WITH FOUNDATION BOLTS SHALL ALSO BE SUPPLIED.
- ITEM WISE PRICES WITH DESCRIPTION AND RATING OF EACH ITEM COMPLYING TO LIST FURNISHED IN THE SCHEDULE OF UNIT PRICES SHALL BE FURNISHED IN SCHEDULE OF UNIT PRICE.
- FOR DETAILED BOARD WISE BOM, REFER ANNEXURE-B1 TO B11.
- FOR DETAILED MODULE WISE BOM, REFER ANNEXURE-C.
- ADDITION/DELETION OF QUANTITIES SHALL BE APPLICABLE AT THE QUOTED PRICE.THE UNIT RATE OF SUPPLY OF ALL EQUIPMENTS & SERVICES QUOTED BY THE BIDDER SHALL BE FIRM FOR A VARIATION OF QUANTITIES , WHICH MAY BE TO THE EXTENT OF ±30% OF THE TOTAL CONTRACT VALUE DERIVED ON THE BASIS OF ORDERED QUANTITY. SUM OF INDIVIDUAL MODULE SHALL EQUAL TO BOARD PRICE.
 - COMPLETE DIMENSIONS OF ALL THE BOARDS INCLUDING NO OF ACB, MCC. GA DRAWING SHALL BE DULY SUBMITTED FOR ALL BOARDS.
 - DIMENSIONS OF EACH TYPE OF PANEL.
 - MODULE SIZE OF EACH TYPE OF FEEDER.
 - MINIMUM CLEARANCES REQUIRED ON ALL SIDES FOR EACH TYPE OF PANEL.
 - NO. of VERTICAL, (including PCC, MCC etc.) OF EACH PANLES TO BE GIVEN, ELSE YOUR OFFER WILL BE REJECTED.
- DOUBLE COMPRESSION, NICKLE PLATED BRASS CABLE GLANDS & HEAVY DUTY LUGS OF NTPC APPROVED MAKE FOR EXTERNAL POWER, CONTROL & EARTHING CONNECTIONS AT SUPPLIED EQUIPMENT END AND FOUNDATION BOLT ARE IN THE SCOPE OF BIDDER. BIDDER TO QUOTE ALL EQUIPMENT WITH CABLE GLANDS, LUGS AND FOUNDATION BOLTS.
- EACH CABLE ALLEY SHALL BE PROVIDED WITH SPACE HEATER & ILLUMINATION CIRCUIT ALONG WITH PLUG, SOCKET & DOOR SWITCH.

ANNEXURE-B1

Name of the Board: 415V FGD SERVICE PMCC # 0DA, 2500A

TYPE OF CONNECTION: TOP/SIDE BUSDUCT ENTRY

DOUBLE FRONT D/O TYPE

FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
DAE OG	630A	2								
DK2	15KW	9								
DK21	30KW	11								
DK2	5.5KW	2								
DK21	37KW	3								
DK21	45KW	3								
DK21	75KW	3								
DM	160KW	2								
E1	100A	2								
E1	16A	14								
E1	32A	7								
E3	16A	37								
E3	200A	7								
E3	32A	6								
E3	63A	10								
E3	150A	3								
E3	50A	3								
BUS PT - G1	50VA	2								
CS	2KVA	2								
DAET IC	2500A	2								
DAET BC	2500A	1								
ACB I/C PANELS	2500A	2								
ACB B/C PANEL	2500A	1								
ACB O/G PANELS	2500/630A	2								
MCC (DFDO)	2500A	AS REQ.								
DUMMY PANELS	2500A	1								
ETHERNET SWITCH		1								
TOTAL										

Name of the Board: 415V FGD SERVICE PMCC # ODB, 4000A

TYPE OF CONNECTION: TOP/SIDE BUSDUCT ENTRY

DOUBLE FRONT D/O TYPE

FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
DAE OG	1000A	2								
DK2	15KW	29								
DK2	3.7KW	8								
DK21	30KW	29								
DK2	5.5KW	4								
DK21	37KW	4								
DK21	45KW	15								
DM	110KW	4								
E1	100A	4								
E1	16A	44								
E1	32A	5								
E3	150A	7								
E3	16A	136								
E3	200A	3								
E3	32A	8								
E3	50A	3								
E3	63A	22								
BUS PT - G1	50VA	2								
CS	2KVA	2								
DAET IC	4000A	2								
DAET BC	4000A	1								
ACB I/C PANELS	4000A	2								
ACB B/C PANEL	4000A	1								
ACB O/G PANELS	4000/1000A	1								
ACB O/G PANELS	4000/630A	2								
MCC (DFDO)	4000A	AS REQ.								
DUMMY PANELS	4000A	1								
ETHERNET SWITCH		1								
TOTAL										

Name of the Board: 415V AC VENT & WS PMCC # 0DC, 3200A

TYPE OF CONNECTION: TOP/SIDE BUSDUCT ENTRY

DOUBLE FRONT D/O TYPE

FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
DK2	0.75KW	3								
DK2	1.1KW	2								
DK2	11KW	14								
DK2	18.5KW	8								
DK2	2.2KW	2								
DK2	22kw	5								
DK21	30KW	4								
DK21	37KW	10								
DK21	45KW	10								
DK21	55KW	3								
E1	16A	60								
E3	16A	82								
E3	200A	9								
E3	32A	8								
E3	63A	3								
BUS PT - G1	50VA	2								
CS	2KVA	2								
DAET IC	3200A	2								
DAET BC	3200A	1								
ACB I/C PANELS	3200A	2								
ACB B/C PANEL	3200A	1								
MCC (DFDO)	3200A	AS REQ.								
DUMMY PANELS	3200A	1								
ETHERNET SWITCH		1								
TOTAL										

Name of the Board: 415V GYPSUM PMCC # 0DD, 3200A

TYPE OF CONNECTION: TOP/SIDE BUSDUCT ENTRY

DOUBLE FRONT D/O TYPE

FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
DK2	0.55kW	3								
DK2	0.75kW	3								
DK2	11KW	6								
DK2	15KW	15								
DK21	30KW	8								
DK2	5.5KW	9								
DK2	7.5KW	3								
DK21	45KW	6								
DK21	70KW	3								
DK21	90KW	3								
DM	125KW	3								
DM	160KW	3								
DM	200KW	3								
E1	16A	6								
E3	100A	2								
E3	16A	185								
E3	200A	3								
E3	32A	5								
E3	63A	5								
BUS PT - G1	50VA	2								
CS	2KVA	2								
DAET IC	3200A	2								
DAET BC	3200A	1								
ACB I/C PANELS	3200A	2								
ACB B/C PANEL	3200A	1								
ACB O/G PANELS	3200/630A	5								
MCC (DFDO)	3200A	AS REQ.								
DUMMY PANELS	3200A	1								
ETHERNET SWITCH		1								
TOTAL										

Name of the Board: 415V LHP/GHP PMCC # ODE , 4000A

TYPE OF CONNECTION: TOP/SIDE BUSDUCT ENTRY

DOUBLE FRONT D/O TYPE

FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
DAE OG	800A	2								
DK2	0.186kW	2								
DK2	0.75kW	11								
DK2	1.1kW	3								
DK2	1.67kW	10								
DK2	15kW	4								
DK2	18.5kW	8								
DK2	2.2kW	8								
DK2	22kW	8								
DK21	30kW	5								
DK2	4kW	5								
DK21	37kW	5								
DK21	45kW	5								
DK21	90kW	3								
DN1	22kW	3								
E1	16A	6								
E3	100A	3								
E3	160A	3								
E3	16A	6								
E3	200A	3								
E3	250A	3								
E3	32A	47								
E3	63A	30								
BUS PT - G1	50VA	2								
CS	2KVA	2								
DAET IC	4000A	2								
DAET BC	4000A	1								
ACB I/C PANELS	4000A	2								
ACB B/C PANEL	4000A	1								
ACB O/G PANELS	4000/800A	1								
MCC (DFDO)	4000A	AS REQ.								
DUMMY PANELS	4000A	1								
ETHERNET SWITCH		1								
TOTAL										

Name of the Board: 415V BALL MILL MCC # ODF, 800A

TYPE OF CONNECTION: CABLE ENTRY BOTTOM
 DOUBLE FRONT D/O TYPE
 FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
DK2	0.75KW	3								
DK2	1.1KW	20								
DK2	11KW	3								
DK2	15KW	14								
DK2	18.5KW	3								
DK2	2.2KW	4								
DK2	22KW	3								
DK2	2KW	2								
DK21	30KW	10								
DK2	5.5KW	3								
DK2	7.5KW	5								
DK21	45KW	3								
DK21	55KW	3								
E1	16A	6								
E1	32A	6								
E3	100A	2								
E3	16A	106								
E3	32A	4								
E3	63A	3								
BUS PT - G1	50VA	2								
CS	2KVA	2								
DAE IC	800A	2								
DAE BC	800A	1								
ACB I/C PANELS	800A	2								
ACB B/C PANEL	800A	1								
MCC (DFDO)	800A	AS REQ.								
DUMMY PANELS	800A	1								
ETHERNET SWITCH		1								
TOTAL										

Name of the Board:220V DCDB # 0FA,63A
 TYPE OF CONNECTION: CABLE ENTRY BOTTOM
 DOUBLE FRONT FIXED TYPE
 FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
X	16A	34								
X	32A	8								
INCOMER - DB	63A	2								
INCOMER - CH	63A	2								
BUSCOUPLER - DC	63A	3								
DC BUS METERING - S	220V DC	2								
MCC (DFFT)	63A	AS REQ.								
DUMMY PANELS	63A	1								
TOTAL										

Name of the Board:220V DCDB # 0FB,63A
 TYPE OF CONNECTION: CABLE ENTRY BOTTOM
 DOUBLE FRONT FIXED TYPE
 FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
X	16A	15								
X	32A	6								
INCOMER - DB	63A	2								
INCOMER - CH	63A	2								
BUSCOUPLER - DC	63A	3								
DC BUS METERING - S	220V DC	2								
MCC (DFFT)	63A	AS REQ.								
DUMMY PANELS	63A	1								
TOTAL										

Name of the Board: 415V EMERGENCY MCC # 0MA,800A

TYPE OF CONNECTION: CABLE ENTRY BOTTOM

DOUBLE FRONT D/O TYPE

FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
DK2	9.3KW	5								
DK21	30KW	12								
DK2	3KW	3								
DK2	5.5KW	6								
DK21	45KW	6								
E3	100A	3								
E3	16A	4								
E3	200A	2								
E3	32A	3								
E3	50A	4								
E3	63A	5								
BUS PT - G1	50VA	2								
CS	2KVA	2								
DAE IC	800A	2								
DAE BC	800A	1								
ACB I/C PANELS	800A	2								
ACB B/C PANEL	800A	1								
MCC (DFDO)	800A	AS REQ.								
DUMMY PANELS	800A	1								
ETHERNET SWITCH		1								
TOTAL										

Name of the Board: 415V EMERGENCY MCC # 0MB,1000A

TYPE OF CONNECTION:CABLE ENTRY BOTTOM

DOUBLE FRONT D/O TYPE

FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
DK2	9.3KW	15								
DK21	30KW	15								
DK2	3KW	8								
DK2	5.5KW	18								
DK21	45KW	11								
E3	100A	2								
E3	16A	4								
E3	200A	4								
E3	250A	3								
E3	32A	4								
E3	50A	4								
E3	63A	5								
BUS PT - G1	50VA	2								
CS	2KVA	2								
DAE IC	1000A	2								
DAE BC	1000A	1								
ACB I/C PANELS	1000A	2								
ACB B/C PANEL	1000A	1								
MCC (DFDO)	1000A	AS REQ.								
DUMMY PANELS	1000A	1								
ETHERNET SWITCH		1								
TOTAL										

Name of the Board: 415V EMERGENCY MCC # OMC,250A , 250A

TYPE OF CONNECTION: CABLE ENTRY BOTTOM

DOUBLE FRONT D/O TYPE

FLOOR MOUNTED

Feeder type	Rating	Total feeders	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
DK2	7.5KW	5								
DK2	9.3KW	5								
DK21	45KW	3								
E3	16A	4								
E3	50A	4								
E3	63A	4								
BUS PT - VM		2								
CS	2KVA	2								
EM3 IC	250A	2								
EM3 BC	250A	1								
MCC (DFDO)	250A	AS REQ.								
TOTAL										

MODULE WISE BOM

ANNEXURE-C

SL NO	MODULE TYPE	ITEM DESCRIPTION	QTY.	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
1	DAET (I/C)	PMCC INCOMER OF 1600A, 2500A, 3000A, 3200A, 4000A SHALL COMPRISE OF:									
		ACB TP, ELECTRICALLY OPERATED D/O TYPE, WITHOUT RELEASES, CONTROL SUPPLY VOLTAGE 220V DC,4NO + 4NC CONTACTS OF POSITION/ CELL SWITCH. SPRING CHARGE LIMIT SWITCH WITH minimum 2NO + 2NC contacts.	1								
		CONTROL FUSE 6A	15								
		CONTROL FUSE 16A	4								
		FUSE BASE 32A	19								
		Indicating Lamp	5								
		CURRENT TRANSFORMER (PROTECTION) 10VA,CL-5P20	3								
		CURRENT TRANSFORMER (PROTECTION) with VDR 10VA,CL-PS	3								
		POTENTIAL TRANSFORMER -CAST RESIN, OVER VOLTAGE FACTOR 1.2 CONT./1.5 FOR 30 SEC . 415/110,50 VA CL-0.5 INSL CL-E	1								
		NEUTRAL LINK 32A	1								
		CONTROL TERMINALS(FIXED)	As required								
		CT SHORTING TERMINAL-STUD TYPE	As required								
		POWER TERMINAL	As required								
		DOUBLE POLE ON/OFF SWITCH-16 A,220 V DC	2								
		2POLE 2POSI SELECTOR SWITCH KEY LOCKABLE-10A, 220VDC	1								
		NUMERICAL RELAY WITH COMMUNICATION FACILITY AS PER IEC-61850 FOR FOLLOWING FUNCTIONS: • SHORT CIRCUIT PROTECTION (51) • EARTH FAULT PROTECTION (51N) • OVER LOAD PROTECTION • RESTRICTED EARTH FAULT PROTECTION • RESIDUAL EARTH FAULT PROTECTION • TRIP CIRCUIT SUPERVISION (95) • CIRCUIT BREAKER MONITORING • PT FUSE FAILURE • ENERGY METERING • CURRENT, VOLTAGE & FREQUENCY MEASUREMENT • SYNCHRONIZING FEATURE • No of DI/DO SHALL BE AS PER SCHEME REQUIREMNET • ALL THE BINARY INPUTS SHALL BE CAPABLE OF TAKING THE 220V DC ,HOWEVER THE THRESHOLD VALUE FOR BINARY INPUT SHALL BE 18V DC (+/- 5%)	1								
		INTERPOSING RELAY REM302/EQVT. WITH BUILT IN LED, TEST KNOB & FREEWHEELING DIODE	2								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
2	DAE (I/C)	MCC INCOMER OF 400A, 630A, 800A, 1000A, 1250A, 1600A SHALL COMPRISE OF:									
		ACB TP, ELECTRICALLY OPERATED D/O TYPE, WITHOUT RELEASES, CONTROL SUPPLY VOLTAGE 220V DC,4NO + 4NC CONTACTS OF POSITION/ CELL SWITCH. SPRING CHARGE LIMIT SWITCH WITH minimum 2NO + 2NC contacts.	1								
		CONTROL FUSE 6A	15								
		CONTROL FUSE 16A	4								
		FUSE BASE 32A	19								
		Indicating Lamp	5								
		CURRENT TRANSFORMER (PROTECTION) 10VA,CL-5P20	3								
		POTENTIAL TRANSFORMER -CAST RESIN, OVER VOLTAGE FACTOR 1.2 CONT./1.5 FOR 30 SEC . 415/110,50 VA CL-0.5 INSL CL-E	1								
		NEUTRAL LINK 32A	1								
		CONTROL TERMINALS(FIXED)	As required								
		CT SHORTING TERMINAL-STUD TYPE	As required								
		POWER TERMINAL	As required								
		DOUBLE POLE ON/OFF SWITCH-16 A,220 V DC	2								
		2POLE 2POSI SELECTOR SWITCH KEY LOCKABLE-10A, 220VDC	1								
		NUMERICAL RELAY WITH COMMUNICATION FACILITY AS PER IEC-61850 FOR FOLLOWING FUNCTIONS: • SHORT CIRCUIT PROTECTION (51) • EARTH FAULT PROTECTION (51N) • OVER LOAD PROTECTION • RESIDUAL EARTH FAULT PROTECTION • TRIP CIRCUIT SUPERVISION (95) • CIRCUIT BREAKER MONITORING • PT FUSE FAILURE • ENERGY METERING • CURRENT, VOLTAGE & FREQUENCY MEASUREMENT • SYNCHRONIZING FEATURE • No of DI/DO SHALL BE AS PER SCHEME REQUIREMNET • ALL THE BINARY INPUTS SHALL BE CAPABLE OF TAKING THE 220V DC ,HOWEVER THE THRESHOLD VALUE FOR BINARY INPUT SHALL BE 18V DC (+/- 5%)	1								
		INTERPOSING RELAY REM302/EQVT. WITH BUILT IN LED, TEST KNOB & FREEWHEELING DIODE	2								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
3	DAET/DAE (B/C)	PMCC/MCC BUSCOUPLER OF 400A, 630A, 800A, 1000A, 1250A, 1600A, 2500A, 3000A, 3200A,4000A SHALL COMPRISE OF:									

MODULE WISE BOM

ANNEXURE-C

SL NO	MODULE TYPE	ITEM DESCRIPTION	QTY.	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
		ACB TP, ELECTRICALLY OPERATED D/O TYPE, WITHOUT RELEASES, CONTROL SUPPLY VOLTAGE 220V DC	1								
		CONTROL FUSE 6A	9								
		CONTROL FUSE 16A	6								
		FUSE BASE 32A	15								
		AUXILIARY CONTACTOR 2NO+2NC 220VDC	1								
		BREAKER CONTACT MULTIPLICATION RELAY TYPE VAJC 11 OR EQVT	1								
		Indicating Lamp	2								
		CURRENT TRANSFORMER (PROTECTION) 10VA,CL-5P20	3								
		NEUTRAL LINK 32A	1								
		CONTROL TERMINALS(FIXED)	As required								
		CT SHORTING TERMINAL-STUD TYPE	As required								
		POWER TERMINAL	As required								
		DOUBLE POLE ON/OFF SWITCH-16 A, 220 V DC	5								
		2POLE 2POSI SELECTOR SWITCH KEY LOCKABLE-10A, 220VDC	1								
		NUMERICAL RELAY WITH COMMUNICATION FACILITY AS PER IEC-61850 FOR FOLLOWING FUNCTIONS: <ul style="list-style-type: none"> • SHORT CIRCUIT PROTECTION (51) • EARTH FAULT PROTECTION (51N) • OVER LOAD PROTECTION • RESTRICTED EARTH FAULT PROTECTION • RESIDUAL EARTH FAULT PROTECTION • TRIP CIRCUIT SUPERVISION (95) • CIRCUIT BREAKER MONITORING • PT FUSE FAILURE • ENERGY METERING • CURRENT, VOLTAGE & FREQUENCY MEASUREMENT • SYNCHRONIZING FEATURE • No of DI/DO SHALL BE AS PER SCHEME REQUIREMNET • ALL THE BINARY INPUTS SHALL BE CAPABLE OF TAKING THE 220V DC, HOWEVER THE THRESHOLD VALUE FOR BINARY INPUT SHALL BE 18V DC (+/- 5%) 	1								
		INTERPOSING RELAY REM302/EQVT. WITH BUILT IN LED, TEST KNOB & FREEWHEELING DIODE	2								
		DC SOURCE SELECTION SWITCH	2								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
4	DAEG(-1/C)	EMERGENCY MCC INCOMER OF 800A, 1000A, 1250A, 1600A, 2000A, 2500A SHALL COMPRISE OF:									
		ACB TP, ELECTRICALLY OPERATED D/O TYPE, WITHOUT RELEASES, CONTROL SUPPLY VOLTAGE 220V DC,4NO + 4NC CONTACTS OF POSITION/ CELL SWITCH. SPRING CHARGE LIMIT SWITCH WITH minimum 2NO + 2NC contacts.	1								
		CONTROL FUSE 6A	15								
		CONTROL FUSE 16A	4								
		FUSE BASE 32A	19								
		Indicating Lamp	5								
		CURRENT TRANSFORMER (PROTECTION) 10VA,CL-5P20	3								
		CURRENT TRANSFORMER (PROTECTION) with VDR 10VA,CL-PS	3								
		POTENTIAL TRANSFORMER -CAST RESIN, OVER VOLTAGE FACTOR 1.2 CONT./1.5 FOR 30 SEC . 415/110,50 VA CL-0.5 INSL CL-E	1								
		NEUTRAL LINK 32A	1								
		CONTROL TERMINALS(FIXED)	As required								
		CT SHORTING TERMINAL-STUD TYPE	As required								
		POWER TERMINAL	As required								
		DOUBLE POLE ON/OFF SWITCH-16 A, 220 V DC	2								
		2POLE 2POSI SELECTOR SWITCH KEY LOCKABLE-10A, 220VDC	1								
		NUMERICAL RELAY WITH COMMUNICATION FACILITY AS PER IEC-61850 FOR FOLLOWING FUNCTIONS: <ul style="list-style-type: none"> • SHORT CIRCUIT PROTECTION (51) • EARTH FAULT PROTECTION (51N) • OVER LOAD PROTECTION • RESTRICTED EARTH FAULT PROTECTION • RESIDUAL EARTH FAULT PROTECTION • TRIP CIRCUIT SUPERVISION (95) • CIRCUIT BREAKER MONITORING • PT FUSE FAILURE • ENERGY METERING • CURRENT, VOLTAGE & FREQUENCY MEASUREMENT • SYNCHRONIZING FEATUR • No of DI/DO SHALL BE AS PER SCHEME REQUIREMNET • ALL THE BINARY INPUTS SHALL BE CAPABLE OF TAKING THE 220V DC, HOWEVER THE THRESHOLD VALUE FOR BINARY INPUT SHALL BE 18V DC (+/- 5%) • DIFFERENTIAL PROTECTION (HIGH IMPEDANCE) • REVERSE POWER PROTECTION • DG NEUTRAL DISPLACEMENT • DG MONITORING 	1								
		INTERPOSING RELAY REM302/EQVT. WITH BUILT IN LED, TEST KNOB & FREEWHEELING DIODE	2								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									

MODULE WISE BOM

ANNEXURE-C

SL NO	MODULE TYPE	ITEM DESCRIPTION	QTY.	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
5	DAE/DAE-TIE (O/G)	OUTGOING BREAKER FEEDER OF 630A, 800A, 1000A, 1250A, 1600A, 2500A SHALL COMPRISE OF:									
		ACB TP, ELECTRICALLY OPERATED D/O TYPE, WITHOUT RELEASES, CONTROL SUPPLY VOLTAGE 220V DC, 4NO + 4NC CONTACTS OF POSITION/ CELL SWITCH, SPRING CHARGE LIMIT SWITCH WITH minimum 2NO + 2NC contacts.	1								
		CONTROL FUSE 6A	8								
		CONTROL FUSE 16A	2								
		FUSE BASE 32A	10								
		Indicating Lamp	2								
		CURRENT TRANSFORMER (PROTECTION) 10VA, CL-5P20	3								
		NEUTRAL LINK 32A	1								
		CONTROL TERMINALS(FIXED)	As required								
		CT SHORTING TERMINAL-STUD TYPE	As required								
		POWER TERMINAL	As required								
		DOUBLE POLE ON/OFF SWITCH-16 A, 220 V DC	1								
		2POLE 2POSI SELECTOR SWITCH KEY LOCKABLE-10A, 220VDC	1								
		NUMERICAL RELAY WITH COMMUNICATION FACILITY AS PER IEC-61850 FOR FOLLOWING FUNCTIONS: • SHORT CIRCUIT PROTECTION (51) • EARTH FAULT PROTECTION (51N) • OVER LOAD PROTECTION • RESIDUAL EARTH FAULT PROTECTION • TRIP CIRCUIT SUPERVISION (95) • CIRCUIT BREAKER MONITORING • PT FUSE FAILURE • ENERGY METERING • CURRENT, VOLTAGE & FREQUENCY MEASUREMENT • SYNCHRONIZING FEATURE • No of DI/DO SHALL BE AS PER SCHEME REQUIREMNET • ALL THE BINARY INPUTS SHALL BE CAPABLE OF TAKING THE 220V DC ,HOWEVER THE THERSHOLD VALUE FOR BINARY INPUT SHALL BE 18V DC (+/- 5%)	1								
		INTERPOSING RELAY REM302/EQVT. WITH BUILT IN LED, TEST KNOB & FREEWHEELING DIODE	2								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
6	DM /PM	BREAKER CONTROLLED MOTOR ABOVE 110KW & ABOVE SHALL COMPRISE OF:									
		ACB TP, ELECTRICALLY OPERATED D/O TYPE, WITHOUT RELEASES, CONTROL SUPPLY VOLTAGE 220V DC, 4NO + 4NC CONTACTS OF POSITION/ CELL SWITCH, SPRING CHARGE LIMIT SWITCH WITH minimum 2NO + 2NC contacts.	1								
		CONTROL FUSE 6A	9								
		CONTROL FUSE 16A	2								
		FUSE BASE 32A	11								
		Indicating Lamp	2								
		CURRENT TRANSFORMER (METERING) 10VA, CL-1	1								
		CURRENT TRANSFORMER (PROTECTION) 10VA, CL-5P20	3								
		CURRENT TRANSDUCER (DC),4-20mA, DUAL O/P,AUX.-220V DC	1								
		NEUTRAL LINK 32A	1								
		CONTROL TERMINALS(FIXED)	As required								
		CT SHORTING TERMINAL-STUD TYPE	As required								
		POWER TERMINAL	As required								
		SP ON/OFF SWITCH FOR MOTOR SPACE HTR. OF BREAKER MOTOR FDR-12A, 240VAC	1								
		DOUBLE POLE ON/OFF SWITCH-16 A, 220 V DC	1								
		2POLE 2POSI SELECTOR SWITCH KEY LOCKABLE-10A, 220VDC	1								
		NUMERICAL RELAY WITH COMMUNICATION FACILITY AS PER IEC-61850 FOR FOLLOWING FUNCTIONS: • SHORT CIRCUIT PROTECTION (51) • EARTH FAULT PROTECTION (51N) • OVER LOAD PROTECTION UNDER VOLTAGE • EARTH FAULT PROTECTION • TRIP CIRCUIT SUPERVISION (95) • CIRCUIT BREAKER MONITORING • PT FUSE FAILURE • ENERGY METERING • CURRENT, VOLTAGE & FREQUENCY MEASUREMENT • LOCKED ROTOR PROTECTION CURRENT UNBALANCE PROTECTION • No of DI/DO SHALL BE AS PER SCHEME REQUIREMNET • ALL THE BINARY INPUTS SHALL BE CAPABLE OF TAKING THE 220V DC ,HOWEVER THE THERSHOLD VALUE FOR BINARY INPUT SHALL BE 18V DC (+/- 5%) •NEGATIVE SEQUENCE PROTECTION •RESTART INHIBIT PROTECTION	1								
		INTERPOSING RELAY REM302/EQVT. WITH BUILT IN LED, TEST KNOB & FREEWHEELING DIODE	2								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
7	G1	BUS PT MODULE FOR PCC / PMCC SHALL COMPRISE OF:									
		CONTROL FUSE-6A	7								
		FUSE BASE-32A	7								

MODULE WISE BOM

ANNEXURE-C

SL NO	MODULE TYPE	ITEM DESCRIPTION	QTY.	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
		POTENTIAL TRANSFORMER -415/ROOT3 /110/ROOT3, 50 VA CL-0.5 INSL CL-E	3								
		NEUTRAL LINK-32A	1								
		CONTROL TERMINALS(FIXED)	As required								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
8	G2	BUS PT MODULE FOR DG PCC SHALL COMPRISE OF:									
		CONTROL FUSE-6A	7								
		FUSE BASE-32A	7								
		POTENTIAL TRANSFORMER -415/ROOT3 /110/ROOT3, 50 VA CL-0.5 INSL CL-E	3								
		NEUTRAL LINK-32A	1								
		CONTROL TERMINALS(FIXED)	As required								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
9	VM	BUS PT MODULE FOR MCC/ACDB SHALL COMPRISE OF:									
		CONTROL FUSE-6A	3								
		FUSE BASE-32A	3								
		AUX. CONTACTOR 2NO+2NC CV. 415 V AC	1								
		VOLTMETER (AC),96 X 96 mm2, SCALE-90, CL-1.5,0-500V DIRECT	1								
		VOLTAGE TRANSDUCER (AC),4-20 m A DUAL O/P AUX. 220 V DC,0-500/4-20mA, 415V DIRECT	1								
		VOLTMETER SELECTOR SWITCH-12 A,415 V AC	1								
		RECTIFIER (AC TO DC),/P-240V AC, O/P-220VDC	1								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
10	CS	EACH CONTROL SUPPLY OUTGOING SHALL COMPRISE OF:									
		CONTROL FUSE-6A	4								
		CONTROL FUSE-25A	4								
		FUSE BASE-32A	8								
		AUX. CONTACTOR , 2NO+2NC,CV. 110 V AC	4								
		NEUTRAL LINK-32A	6								
		CONTROL TERMINALS(FIXED)	As required								
		POWER TERMINALS	As required								
		CONTROL TRANSFORMER,DRY TYPE, CAST RESIN,415/110 V, 2KVA	2								
		4POLE,2POS, SELECTOR SWITCH FOR CONTROL TRF.-25A, 110V AC	2								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
11	DB	220V DC INCOMER FROM BATTERY SHALL COMPRISE OF:									
		DC AMMETER WITH SHUNT AND CENTER ZERO	1								
12	DC	220V DC BUS COUPLER SHALL COMPRISE OF:									
		DOUBLE POLE 250V DC SWITCH/CIRCUIT BREAKER WITH 2NO+2NC AUXILIARY CONTACTS	1								
13	CH	220V DC INCOMER OF DCDB FROM CHARGER SHALL COMPRISE OF:									
		Double pole, 250 V DC fuse -switch unit	1								
		INDICATING LAMP	2								
		VOLTMETER	1								
		DC AMMETER WITH SHUNT	1								
		CURRENT TRANSDUCER	1								
14	HD	220V DC ISOLATING SWITCH/CIRCUIT BREAK MODULE SHALL COMPRISE OF:									
		DOUBLE POLE 250V DC SWITCH ISOLATOR/CIRCUIT BREAKER WITH REQUIRED AUXILIARY CONTACTS	1								
15	S	220V DCDB BUS MODULE FOR METERING & PROTECTION SHALL COMPRISE OF:									
		UNDERVOLTAGE (INSTANNANEDUS WITH SETTING OF 95% OF 240VDC. THE RESETTING OF RELAY SHOULD NOT BE MORE THAN 1.0S)	1								
		OVERVOLTAGE(INSTANEDUS WHICH SHALL OPERATE AT 110% OF 240V DC. THE RESETTINGRATION SHOULD NOT BE LESS THAN .9S)	1								
		EARTHFAULT (CAEM21 OR EQV.)	1								
		INDICATING LAMP	2								
		CONTROL FUSE-6A	3								
		FUSE BASE-32A	3								
		NEUTRAL LINK	1								
		DC VOLTAGE METER (0-300V)	1								
		VOLTMETER SELECTOR SWITCH	1								
		AUXILIARY CONTACTOR,2NO+2NC,CV 220AC	1								
		PUSH BUTTON- SPRING RETURN WITH 1NO+1NC AUX, CONTACT	2								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
16	X	220V DC OUTGOING FEEDER SHALL COMPRISE OF:									
		DOUBLE POLE 250V DC FUSE SWITCH UNIT	1								
		HRC FUSES	2								
		Materials Cost									
		Integration Cost	1								

SL NO	MODULE TYPE	ITEM DESCRIPTION	QTY.	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
		Breaker Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
17	CC	ISOLATOR INCOMER WITH CONTACTOR UPTO 630A SHALL COMPRISE OF									
		TRI POLE LOAD BREAK ISOLATING SWITCH	2								
		Power Fuse	3								
		Auxiliary Switch	1								
		INDICATING LAMP	2								
		CONTROL FUSE-6A	5								
		FUSE BASE-32A	5								
		SERVICE POSITION LIMIT SWITCH	2								
		TRIPLE POLE POWER CONTACTOR WITH COIL SUITABLE FOR 415V AC WITH 2NO+2NC AUX	2								
		AUXILIARY CONTACTOR 2NO+2NC ,CV 415V AC	2								
		TERMINAL BLOCKS	30								
		Materials Cost									
		Integration Cost	1								
		Breaker Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
18(a)	EM3 (I/C)	INCOMER MCCB FOR MCC / ACDB FOR RATING from 100A UPTO 630A									
		CONTROL FUSE-6A	1								
		FUSE BASE-32A	1								
		MCCB TP MICROPROCESSOR BASED ADJ. O/L/S/C & E/F RELEASE	1								
		AUX. SWITCH FOR MCCB-2C/O	2								
		ALARM SWITCH FOR MCCB-1C/O	1								
		SHUNT TRIP COIL 220VAC	1								
		EXTENDED ROTORY HANDLE	1								
		INDICATION LAMP	3								
		NEUTRAL LINK 32A	1								
		NEUTRAL LINK AS PER MCCB RATING	1								
		CONTROL TERMINALS (DRAWOUT)	AS REQUIRED								
		CT SHORTING TERMINAL-STUD TYPE	AS REQUIRED								
		Materials Cost									
		Integration Cost	1								
		Breaker Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
18(b)	EM3 (I/C)	INCOMER SFU FOR MCC / ACDB FOR RATING below 100A									
		CONTROL FUSE-6A	1								
		FUSE BASE-32A	1								
		SFU (3 POLE WITH AUX. CONTACT 1NO+1NC)	1								
		INDICATION LAMP	3								
		NEUTRAL LINK 32A	1								
		NEUTRAL LINK AS PER MCCB RATING	1								
		CONTROL TERMINALS (DRAWOUT)	AS REQUIRED								
		CT SHORTING TERMINAL-STUD TYPE	AS REQUIRED								
		Materials Cost									
		Integration Cost	1								
		Breaker Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
19(A)	EM3 (B/C)	BUSCOUPLER MCCB FOR MCC / ACDB FOR RATING UPTO 630A									
		MCCB TP MICROPROCESSOR BASED ADJ. O/L/S/C & E/F RELEASE	1								
		EXTENDED ROTORY HANDLE	1								
		AUXILIARY CONTACTOR	2								
		CONTROL FUSES-6A	2								
		FUSE BASE-32A	2								
		NEUTRAL LINK	2								
		INDICATING LAMP	2								
		Materials Cost									
		Integration Cost	1								
		Breaker Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
19(B)	EM3 (B/C)	BUSCOUPLER SFU FOR MCC / ACDB FOR RATING below 100A									
		SFU (3 POLE WITH AUX. CONTACT 1NO+1NC)	1								
		AUXILIARY CONTACTOR	2								
		CONTROL FUSES-6A	2								
		FUSE BASE-32A	2								
		NEUTRAL LINK	2								
		INDICATING LAMP	2								
		Materials Cost									
		Integration Cost	1								
		Breaker Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
20(A)	E/E3	TPN AC OUTGOING MCCB OPERATED FEEDER FOR RATING 100A AND ABOVE									
		MCCB TP MICROPROCESSOR BASED ADJ. O/L/S/C & E/F RELEASE	1								
		EXTENDED ROTORY HANDLE	1								
		NETURAL LINK EQUIVALENT TO POWER FUSE RATING	1								
		Materials Cost									
		Integration Cost	1								
		Breaker Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
20(B)	E/E3	TPN AC OUTGOING SFU OPERATED FEEDER FOR RATING below 100A									
		3 POLES SFU	1								
		POWER FUSE	3								
		NETURAL LINK EQUIVALENT TO POWER FUSE RATING	1								
		Materials Cost									
		Integration Cost	1								

MODULE WISE BOM

ANNEXURE-C

SL NO	MODULE TYPE	ITEM DESCRIPTION	QTY.	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
21(A)	E2	DP AC OUTGOING MCCB OPERATED FEEDER FOR RATING 100A AND ABOVE									
		MCCB TP MICROPROCESSOR BASED ADJ. O/L/S/C	1								
		EXTENDED ROTORY HANDLE	1								
		NETURAL LINK EQUIVALENT TO POWER FUSE RATING	1								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
21(B)	E2	DP AC OUTGOING SFU OPERATED FEEDER FOR RATING below 100A									
		(DP)SWITCH FUSE UNIT	1								
		HRC FUSE (POWER)	2								
		NETURAL LINK EQUIVALENT TO POWER FUSE RATING	1								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
22(A)	E1	SP AC OUTGOING MCCB OPERATED FEEDER FOR RATING 100A AND ABOVE									
		MCCB TP MICROPROCESSOR BASED ADJ. O/L/S/C	1								
		EXTENDED ROTORY HANDLE	1								
		NETURAL LINK EQUIVALENT TO POWER FUSE RATING	1								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
22(B)	E1	SP AC OUTGOING SFU OPERATED FEEDER FOR RATING below 100A									
		(TP)SWITCH FUSE UNIT	1								
		HRC FUSE (POWER)	1								
		NETURAL LINK EQUIVALENT TO POWER FUSE RATING	1								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
23	DK2/PK2/ AK2	UNIDIRECTIONAL MOTOR FEEDER BELOW 30KW (AU/BU/CU CONTROLLED FROM ATRS/DDCMIS/PLC SHALL COMPRISE OF:									
		(TP)SWITCH FUSE UNIT	1								
		AUX. CONTACT FOR SFU (1NO+1NC)	1								
		HRC FUSE (POWER)	3								
		CONTROL FUSE-6A	1								
		FUSE BASE-32A	1								
		POWER CONTACTOR(AC) WITH 1NO AUX CONTACT COIL VOLTAGE 110V AC	1								
		AUX. CONTACTOR,2NO+2NC, CV. 110 V AC	2								
		ADD ON AUX. CONTACTOR BLOCK 2NO+2NC	1								
		OVERLOAD RELAY,BUILT IN SPPR FEATURE 1NO+1NC AUX. & INDEPENDENT MOUNTING TYPE	1								
		MOUNTING KIT FOR O/L RELAY	1								
		RESET CORD ACTUATOR	1								
		Indication lamp	3								
		NEUTRAL LINK-32A	1								
		CONTROL TERMINALS (DRAWOUT)	30								
		COUPLING RELAY WITH BUILT IN DIODE	2								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
24	EA1	1-PHASE SFU CONTACTOR CONTROLLED FEEDER SHALL COMPRISE OF:									
		(TP)SWITCH FUSE UNIT	1								
		AUX. CONTACT FOR SFU (1NO+1NC)	1								
		HRC FUSE (POWER)	2								
		CONTROL FUSE-6A	1								
		FUSE BASE-32A	1								
		2P POWER CONTACTOR(AC) WITH 1NO AUX CONTACT COIL VOLTAGE 110V AC	1								
		AUX. CONTACTOR,2NO+2NC, CV. 110 V AC	2								
		ADD ON AUX. CONTACTOR BLOCK 2NO+2NC	1								
		Indication lamp	3								
		NEUTRAL LINK-32A	1								
		CONTROL TERMINALS (DRAWOUT)	30								
		COUPLING RELAY WITH BUILT IN DIODE	2								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
25	EA3	3-PHASE SFU CONTACTOR CONTROLLED FEEDER SHALL COMPRISE OF:									
		(TP)SWITCH FUSE UNIT	1								
		AUX. CONTACT FOR SFU (1NO+1NC)	1								
		HRC FUSE (POWER)	3								
		CONTROL FUSE-6A	1								
		FUSE BASE-32A	1								
		3P POWER CONTACTOR(AC) WITH 1NO AUX CONTACT COIL VOLTAGE 110V AC	1								
		AUX. CONTACTOR,2NO+2NC, CV. 110 V AC	2								
		ADD ON AUX. CONTACTOR BLOCK 2NO+2NC	1								
		Indication lamp	3								
		NEUTRAL LINK-32A	1								
		CONTROL TERMINALS (DRAWOUT)	As required								

MODULE WISE BOM

ANNEXURE-C

SL NO	MODULE TYPE	ITEM DESCRIPTION	QTY.	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
		COUPLING RELAY WITH BUILT IN DIODE	2								
		Materials Cost									
		Integration Cost	1								
		Breaker Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
26	DK21/PK21/ AK21	UNIDIRECTIONAL MOTOR FEEDER 30KW & ABOVE UPTO 110KW CONTROLLED FROM DDCMIS/PLC/ATRS SHALL COMPRISE OF:									
		(TP)SWITCH FUSE UNIT	1								
		AUX. CONTACT FOR SFU (1NO+1NC)	1								
		HRC FUSE (POWER)	3								
		CONTROL FUSE-6A	2								
		FUSE BASE-32A	2								
		POWER CONTACTOR(AC) WITH 1NO AUX CONTACT COIL VOLTAGE 110V AC	1								
		AUX. CONTACTOR.2NO+2NC CV. 110 V AC	2								
		ADD ON AUX. CONTACTOR BLOCK 2NO+2NC	1								
		OVERLOAD RELAY,BUILT IN SPPR FEATURE 1NO+1NC AUX. & INDEPENDENT MOUNTING TYPE	1								
		RESET CORD ACTUATOR	1								
		Indication lamp	3								
		CURRENT TRANSFORMER (METERING) 10VA, CL-1	1								
		AMMETER CTSEC 1A (AC),96 X 96 mm2, SCALE-90, CL-1.5	1								
		CURRENT TRANSDUCER (AC),4-20mA, DUAL O/P,AUX.-110V AC	1								
		NEUTRAL LINK	1								
		CONTROL TERMINALS (DRAWOUT)	50								
		CT SHORTING TERMINAL-STUD TYPE	18								
		SP ON/OFF SWITCH FOR MOTOR SPACE HTR. OF MOTOR FDR, 10A, 240VAC	1								
		COUPLING RELAY WITH BUILT IN DIODE,24V DC 2C/O	2								
		One (1) Digital Energy Meter with Analog output of Current (4-20 mA)	1								
		Materials Cost									
		Integration Cost	1								
		Breaker Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
27	DKE2**	UNIDIRECTIONAL MOTOR FEEDER (ESSENTIAL) BELOW 30KW CONTROLLED FROM DDCMIS/PLC/ ATRS SHALL COMPRISE OF:									
		TRIPLE POLE SWITCH FUSE UNIT	1								
		AUX. CONTACT FOR SFU (1NO+1NC)	1								
		HRC FUSE (POWER)	3								
		TRIPLE POLE POWER CONTACTOR	1								
		THERMAL O/L RELAY OF SUITABLE RANGE	1								
		Mounting Kit	1								
		THERMAL O/L RELAY RESET PUSH BUTTON	1								
		INDICATING LAMP	3								
		CONTROL FUSE	4								
		Contori Fuse base	4								
		NEUTRAL LINK	2								
		AUXILIARY CONTACTOR	2								
		CT FOR METERING	1								
		AMMETER	1								
		CURRENT TRANSDUCER (DUAL OUTPUT)	1								
		INTERPOSING RELAY RE302 OR EQVT	2								
		TIMER	1								
		Materials Cost									
		Integration Cost	1								
		Breaker Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
28	DKE21**	UNIDIRECTIONAL MOTOR FEEDER (ESSENTIAL) 30KW & ABOVE UPTO 110KW CONTROLLED FROM ATRS/DDCMIS/PLC SHALL COMPRISE OF:									
		3P SFU	1								
		AUX. CONTACT FOR SFU (1NO+1NC)	1								
		HRC FUSE (POWER)	3								
		TRIPLE POLE POWER CONTACTOR	1								
		THERMAL O/L RELAY OF SUITABLE RANGE	1								
		THERMAL O/L RELAY RESET PUSH BUTTON	1								
		INDICATING LAMP	3								
		CONTROL FUSE	8								
		Contori Fuse base	8								
		NEUTRAL LINK	2								
		AUXILIARY CONTACTOR	2								
		CT FOR METERING	1								
		AMMETER SELECTOR SWITCH	1								
		AMMETER	1								
		CURRENT TRANSDUCER (DUAL OUTPUT)	1								
		INTERPOSING RELAY RE302 OR EQVT	2								
		TIMER	1								
		Materials Cost									
		Integration Cost	1								
		Breaker Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
29	K3	UNIDIRECTIONAL MOTOR FEEDER BELOW 30KW CONTROLLED FROM LPBS SHALL COMPRISE OF:									
		3P SFU	1								
		AUX. CONTACT FOR SFU (1NO+1NC)	1								
		HRC FUSE (POWER)	3								
		TRIPLE POLE POWER CONTACTOR	1								
		THERMAL O/L RELAY OF SUITABLE RANGE	1								
		Mounting Kit	1								
		THERMAL O/L RELAY RESET PUSH BUTTON	1								
		INDICATING LAMP	3								
		AUXILIARY CONTACTOR	1								
		INTERPOSING RELAY RE302 OR EQVT	2								
		CONTROL FUSE	1								
		Control fuse base	1								

SL NO	MODULE TYPE	ITEM DESCRIPTION	QTY.	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
		NEUTRAL LINK	1								
		NO. OF TERMINALS	25								
		Materials Cost									
		Integration Cost	1								
		Breaker Module Cost (Breaker Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
30	K31	UNIDIRECTIONAL MOTOR FEEDER 30KW & ABOVE UPTO 110KW CONTROLLED FROM LPBS SHALL COMPRISE OF:									
		3P SFU	1								
		AUX. CONTACT FOR SFU (1NO+1NC)	1								
		HRC FUSE (POWER)	3								
		TRIPLE POLE POWER CONTACTOR	1								
		THERMAL O/L RELAY OF SUITABLE RANGE	1								
		THERMAL O/L RELAY RESET PUSH BUTTON	1								
		INDICATING LAMP	3								
		AUXILIARY CONTACTOR	1								
		AMMETER	1								
		INTERPOSING RELAY RE302 OR EQVT	2								
		CT FOR METERING	1								
		CONTROL FUSE	1								
		Control Fuse base	1								
		NEUTRAL LINK	1								
		Materials Cost									
		Integration Cost	1								
		Breaker Module Cost (Breaker Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
31	DK2**	HEATER FEEDER BELOW 30KW (AU/BU/CU CONTROLLED FROM ATRS/DDCMIS/PLC SHALL COMPRISE OF:									
		(TP)SWITCH FUSE UNIT	1								
		AUX. CONTACT FOR SFU (1NO+1NC)	1								
		HRC FUSE (POWER)	3								
		CONTROL FUSE-6A	1								
		FUSE BASE-32A	1								
		POWER CONTACTOR(AC) WITH 1NO AUX CONTACT COIL VOLTAGE 110V AC	1								
		AUX. CONTACTOR,2NO+2NC, CV. 110 V AC	2								
		ADD ON AUX. CONTACTOR BLOCK 2NO+2NC	3								
		Indication lamp	3								
		NEUTRAL LINK-32A	1								
		CONTROL TERMINALS (DRAWOUT)	30								
		COUPLING RELAY WITH BUILT IN DIODE	2								
		Materials Cost									
		Integration Cost	1								
		Breaker Module Cost (Breaker Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
32	DK21**	HEATER FEEDER 30KW & ABOVE UPTO 110KW CONTROLLED FROM DDCMIS/PLC/ATRS SHALL COMPRISE OF:									
		(TP)SWITCH FUSE UNIT	1								
		AUX. CONTACT FOR SFU (1NO+1NC)	1								
		HRC FUSE (POWER)	3								
		CONTROL FUSE-6A	2								
		FUSE BASE-32A	2								
		POWER CONTACTOR(AC) WITH 1NO AUX CONTACT COIL VOLTAGE 110V AC	1								
		AUX. CONTACTOR,2NO+2NC CV. 110 V AC	2								
		ADD ON AUX. CONTACTOR BLOCK 2NO+2NC	1								
		Indication lamp	3								
		CURRENT TRANSFORMER (METERING) 10VA, CL-1	1								
		AMMETER CTSEC 1A (AC),96 X 96 mm2, SCALE-90, CL-1.5	1								
		CURRENT TRANSDUCER (AC),4-20mA, DUAL O/P,AUX.-110V AC	1								
		NEUTRAL LINK	1								
		CONTROL TERMINALS (DRAWOUT)	60								
		CT SHORTING TERMINAL-STUD TYPE	60								
		SP ON/OFF SWITCH FOR MOTOR SPACE HTR. OF MOTOR FDR.,10A, 240VAC	1								
		COUPLING RELAY WITH BUILT IN DIODE,24V DC 2C/O	2								
		Materials Cost									
		Integration Cost	1								
		Breaker Module Cost (Breaker Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
33	DW	220V DC SOLENOID VALVE FEEDER SHALL COMPRISE OF:									
		DOUBLE POLE 250V DC ISOLATING SWITCH FUSE UNIT	1								
		HRC FUSE	2								
		220V DC POWER CONTACTOR	1								
		AUXILIARY CONTACTOR	1								
		NEUTRAL LINK	1								
		DIODE WITH PEAK INVERSE VOLTAGE OF 440V	1								
		COUPLING RELAY	1								
		Control fuse	2								
		Control fuse base	2								
		Materials Cost									
		Integration Cost	1								
		Breaker Module Cost (Breaker Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
34	DN1	BIDIRECTIONAL MOTOR FEEDER									
		(TP)SWITCH FUSE UNIT	1								
		AUX. CONTACT FOR SFU (1NO+1NC)	1								
		HRC FUSE (POWER)	3								
		TRIPLE POLE POWER CONTACTOR	2								
		THERMAL O/L RELAY OF SUITABLE RANGE	1								
		MOUNTING KIT	1								
		THERMAL O/L RELAY RESET PUSH BUTTON	1								
		INDICATING LAMP	3								
		CONTROL FUSE	4								
		Control fuse base	4								
		NEUTRAL LINK	1								
		AUXILIARY CONTACTOR	2								
		NO. OF TERMINALS (240V AC/24V DC)	60								

MODULE WISE BOM

ANNEXURE-C

SL NO	MODULE TYPE	ITEM DESCRIPTION	QTY.	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
		INTREPOSING RELAY	3								
		TEST PUSH BUTTTON	1								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
35	K1	UNIDIRECTIONAL MOTOR FEEDER BELOW 30KW CONTROLLED FROM MCC SHALL COMPRISE OF:									
		(TP)SWITCH FUSE UNIT	1								
		AUX. CONTACT FOR SFU (1NO+1NC)	1								
		HRC FUSE (POWER)	3								
		TRIPLE POLE POWER CONTACTOR	1								
		THERMAL O/L RELAY OF SUITABLE RANGE	1								
		MOUNTING Kit									
		THERMAL O/L RELAY RESET PUSH BUTTON	1								
		INDICATING LAMP	3								
		CONTROL FUSE	1								
		CONTROL FUSE BASE	1								
		NEUTRAL LINK	1								
		NO. OF TERMINALS	30								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									
36	K11	UNIDIRECTIONAL MOTOR FEEDER RATED FROM 30KW to 110KW CONTROLLED FROM MCC SHALL COMPRISE OF:									
		(TP)SWITCH FUSE UNIT	1								
		AUX. CONTACT FOR SFU (1NO+1NC)	1								
		HRC FUSE (POWER)	3								
		TRIPLE POLE POWER CONTACTOR	1								
		THERMAL O/L RELAY OF SUITABLE RANGE	1								
		THERMAL O/L RELAY RESET PUSH BUTTON	1								
		INDICATING LAMP	3								
		CURRENT TRANSFORMER (METERING) 10VA, CL-1	1								
		AMMETER	1								
		CURRENT TRANSDUCER (AC),4-20mA, DUAL O/P,AUX.-110V AC									
		CONTROL FUSE	1								
		CONTROL FUSE base									
		NEUTRAL LINK	1								
		NO. OF TERMINALS	50								
		Single Phase switch for motor Space Heater	1								
		Materials Cost									
		Integration Cost	1								
		Breakar Module Cost (Beakar Plat, Support, Paint & Class-C items wire, lugs, Cable gland etc.)	1								
		TOTAL									

COMISSIONING SPARE

SL NO	DESCRIPTION	UNIT	QUANTITY	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
1	Factory built assemblies (PCC/MCC/DB)										
1.1	Busbar supports (Horizontal)	1 set of 3 ph	1								
1.2	Primary isolating contacts (Bus side) of each rating	1 set of 3 ph									
a)	100A		1								
b)	250A		1								
c)	400A		1								
1.3	Primary isolating contacts (Load side) of each rating	1 set of 3 ph									
a)	100A		1								
b)	250A		1								
c)	400A		1								
1.4	Secondary isolating contacts of each rating	1 set of 3 ph									
a)	100A		1								
b)	250A		1								
c)	400A		1								
1.5	Gaskets (each size)	Meter	10								
1.6	Fixed terminal (one way)	Nos	20								
1.7	Shrouds (for outgoing modules)										
	300mm	Nos	1								
	500mm	Nos	1								
	700mm	Nos	1								
	1000mm	Nos	1								
	2000mm	Nos	1								
1.8	Wire (for secondary wiring)										
	2.5mm ²	Meter	100								
	1.5mm ²	Meter	100								
1.9	Lugs (for secondary wiring)	Nos	100								
2	Air circuit breaker (for each rating)										
2.1	Shunt trip coil	Nos	5								
2.2	Spring charging motor (1 no for each rating)	Nos	1								
2.3	Closing coil	Nos	5								
2.4	Auxiliary switch	Nos	1								
3	Isolating switch										
3.1	Main contact kiot for each rating	1 set of 3 poles	1								
4	Power Contactors										
4.1	contactor coil of each rating	Nos	1								
4.2	contactor kit (main) for each rating	1 set of 3 poles	1								
5	Auxiliary conatctors										
5.1	Complete unit with 2NO+2NC contacts (1 no of each rating/ type)	Nos	1								
5.2	contactor coils										
a.	AC for each rating	set	1								
b.	DC for each rating	set	1								
6	HRC fuse										
6.1	Fuse base (each rating)	Nos	1								
6.2	Fuse link										
a.	Upto 40A (assorted ratings)	Nos	10								
b.	63A to 200A (assorted ratings)	Nos	10								
c.	250A to 400A (assorted ratings)	Nos	5								
7	Push Buttons										
7.1	Actuator contacts	Nos	5								
7.2	Element	Nos	5								
8	Indicating Lamps										
8.1	Complete unit	Nos	10								
8.2	Lens (assorted)	Nos	10								
9	Others										
9.1	Selector & control switch (each type)	Nos	1								
9.2	AC Voltmeter (0-500V)	Nos	1								
9.3	DC Voltmeter (0-300V)	Nos	1								
TOTAL											

LIST OF TOOLS & TACKLES

S.No.	ITEM / COMPONENT	UNIT	QUANTITY	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
1	ACB RACKING HANDLE	Nos	5								
2	MODULE RACKING HANDLE	Nos	5								
3	FUSE PULLERS	Nos	5								
4	TROLLEY FOR ACB HANDLING	Nos	2								
TOTAL											

TRAINING CHARGES FOR TRAINING WORKSHOP AT SITE FOR SWITCHGEAR & NUMERICAL REALY

SL.NO.	DETAILS	QUANTITY	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
1	LUMP SUM ALL INCLUSIVE CHARGES PER VISIT FOR TRAINING ENGINEER (EXCEPT DAILY CHARGES)	1 VISITS								
2	LUMP SUM ALL INCLUSIVE DAILY CHARGES FOR TRAINING ENGINEER FOR ONE NUMBER OF LT SWITCHGEAR WORKSHOP AND TRAINING FOR A BATCH OF 20 ENGINEERS AT SITE	2 DAYS								
3	LUMP SUM ALL INCLUSIVE DAILY CHARGES FOR TRAINING ENGINEER FOR ONE NUMBER OF LT SWITCHGEAR WORKSHOP AND TRAINING FOR A BATCH OF 20 SUPERVISORS / TECHNICIANS AT SITE	2 DAYS								
4	LUMP SUM ALL INCLUSIVE DAILY CHARGES FOR TRAINING ENGINEER FOR ONE NUMBER OF NUMERICAL RELAY WORKSHOP AND TRAINING FOR A BATCH OF 20 ENGINEERS AT SITE	2 DAYS								
TOTAL										

NOTES:

COMMISSIONING CHARGES FOR NUMERICAL RELAYS AT SITE

SL.NO.	DETAILS	QUANTITY	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
1	LUMP SUM ALL INCLUSIVE CHARGES PER VISIT FOR SERVICE ENGINEER (EXCEPT DAILY CHARGES)	1 VISITS								
2	LUMP SUM ALL INCLUSIVE PER NUMERICAL RELAY COMMISSIONING CHARGES	50 NOS								
TOTAL										

NOTES:

1) AMOUNT PAYABLE FOR SERVICE ENGINEER PER VISIT TO SITE = VISIT CHARGES AS PER SL. NO. 1 ABOVE + (PER NUMERICAL RELAY COMMISSIONING CHARGES AS PER SL. NO. 2 ABOVE X NO. OF RELAYS) (TO BE CERTIFIED BY BHEL SITE)

CHARGES FOR SUPERVISION OF COMMISSIONING OF LT SWITCHGEAR

SL.NO.	DETAILS	QUANTITY	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
1	LUMP SUM ALL INCLUSIVE CHARGES PER VISIT FOR SERVICE ENGINEER (EXCEPT DAILY CHARGES)	1 VISITS								
2	LUMP SUM ALL INCLUSIVE DAILY CHARGES FOR SERVICE ENGINEER	10 DAYS								
TOTAL										

NOTES:

1) AMOUNT PAYABLE FOR SERVICE ENGINEER PER VISIT TO SITE = VISIT CHARGES AS PER SL. NO. 1 ABOVE + (DAILY CHARGES AS PER SL. NO. 2 ABOVE X NO. OF DAYS AT SITE) (TO BE CERTIFIED BY BHEL SITE)

SITE MODIFICATION CHARGES

SL.NO.	DETAILS	QUANTITY	Unit Ex-Works Price including P&F Charges	Total Ex-Works Price including P&F Charges	Freight % (in terms of Total Ex-Works Price including P&F Charges)	Freight Amount	Total Ex-Works Price including P&F Charges + Freight Amount	GST %	GST Amount	FOR Destination
1	LUMP SUM ALL INCLUSIVE CHARGES PER VISIT FOR SKILLED TECHNICIAN (EXCEPT DAILY CHARGES)	1 VISITS								
2	LUMP SUM ALL INCLUSIVE DAILY CHARGES FOR SKILLED TECHNICIAN	4 DAYS								
3	LUMP SUM ALL INCLUSIVE CHARGES PER VISIT FOR SERVICE ENGINEER (EXCEPT DAILY CHARGES)	1 VISITS								
4	LUMP SUM ALL INCLUSIVE DAILY CHARGES FOR SERVICE ENGINEER	4 DAYS								
TOTAL										

NOTES:

1) AMOUNT PAYABLE FOR SKILLED TECHNICIAN PER VISIT TO SITE = VISIT CHARGES AS PER SL. NO. 1 ABOVE + (DAILY CHARGES AS PER SL. NO. 2 ABOVE X NO. OF DAYS AT SITE) (TO BE CERTIFIED BY BHEL SITE)

2) AMOUNT PAYABLE FOR SERVICE ENGINEER PER VISIT TO SITE = VISIT CHARGES AS PER SL. NO. 3 ABOVE + (DAILY CHARGES AS PER SL. NO. 4 ABOVE X NO. OF DAYS AT SITE) (TO BE CERTIFIED BY BHEL SITE)

**3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I II- FGD (LOT-III)
UnPrice Schedule For Addition/Deletion**

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
1	INCOMING FEEDER UNIT		
a)	ACB Incomer to PCC/PMCC from Trafo. - Module Type DAET (I/C)		
	630A		
	1000A		
	1600A		
	2000A		
	2500A		
	3000A		
	3500A		
	4000A		
b)	ACB Incomer to MCC - Module Type DAE/ DAEN/ AE (I/C)		
	630A		
	800A		
	1000A		
	1600A		
	2500A		
	3200A		
c)	MCCB Incomer for MCC / ACDB – Module Type EM3 (I/C)		
	200A – Fixed Type		
	125A – Fixed Type		
	200A – Fixed Type		
	250A – Fixed Type		
	400A – Fixed Type		
	630A – Fixed Type		
	125A – Drawout Type		
	200A – Drawout Type		
	200A – Drawout Type		
	250A – Drawout Type		
	400A – Drawout Type		
	630A – Drawout Type		
d)	SFU Incomer for MCC / ACDB – Module Type E3 (I/C)		
	Upto 63A – Fixed Type		
	Upto 63A – Drawout Type		
e)	220V DCDB Incomer from charger - Module type CH (I/C)		
	150A – CH Fixed Type		
	200A – CH Fixed Type		
	400A – CH Fixed Type		
	630A – CH Fixed Type		
	800A – CH Fixed Type		
	1250A – CH Fixed Type		
	150A – CH Drawout Type		
	200A – CH Drawout Type		
	400A – CH Drawout Type		
	630A – CH Drawout Type		
	800A – CH Drawout Type		
	1250A – CH Drawout Type		
f)	220V DCDB Incomer from battery - Module type DB (I/C)		
	150A – DB Fixed Type		
	200A – DB Fixed Type		
	400A – DB Fixed Type		
	630A – DB Fixed Type		
	800A – DB Fixed Type		
	1250A – DB Fixed Type		
	150A – DB Drawout Type		
	200A – DB Drawout Type		
	400A – DB Drawout Type		
	630A – DB Drawout Type		
	800A – DB Drawout Type		
	1250A – DB Drawout Type		
g)	220V DC Fuse DB Incomer from DCDB - Module type H2		
	32A		
	50A		
	63A		
h)	AC MCCB DB Incomer– Module Type H3		

3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I II- FGD (LOT-III)
UnPrice Schedule For Addition/Deletion

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
	32A		
	63A		
	125A		
	i) ACB Incomer to Emergency Board - Module Type DAEG/ DAEGN (I/C)		
	1600A		
	2 BUSCOUPLER UNIT		
	a) ACB Buscoupler to PCC/PMCC/MCC from Trafo. - Module Type DAET/ DAE (B/C)		
	630A		
	800A		
	1000A		
	1600A		
	2000A		
	2500A		
	3000A		
	4000A		
	b) MCCB Buscoupler for MCC / ACDB – Module Type EM3 (B/C)		
	Upto 63A – Fixed Type		
	125A – Fixed Type		
	200A – Fixed Type		
	200A – Fixed Type		
	250A – Fixed Type		
	400A – Fixed Type		
	630A – Fixed Type		
	Upto 63A – Drawout Type		
	125A – Drawout Type		
	200A – Drawout Type		
	200A – Drawout Type		
	250A – Drawout Type		
	400A – Drawout Type		
	630A – Drawout Type		
	c) 220V DCDB buscoupler - Module Type - DC		
	150A – DC Fixed Type		
	200A – DC Fixed Type		
	400A – DC Fixed Type		
	630A – DC Fixed Type		
	800A – DC Fixed Type		
	1250A – DC Fixed Type		
	150A – DC Drawout Type		
	200A – DC Drawout Type		
	400A – DC Drawout Type		
	630A – DC Drawout Type		
	800A – DC Drawout Type		
	1250A – DC Drawout Type		
	d) 220V DCDB TIE - Module Type - HD		
	150A – HD Fixed Type		
	200A – HD Fixed Type		
	400A – HD Fixed Type		
	630A – HD Fixed Type		
	800A – HD Fixed Type		
	1250A – HD Fixed Type		
	150A – HD Drawout Type		
	200A – HD Drawout Type		
	400A – HD Drawout Type		
	630A – HD Drawout Type		
	800A – HD Drawout Type		
	1250A – HD Drawout Type		
	e) ACB BUSCOUPLER to Emergency Board - Module Type DAEG (B/C)		
	1600A		
	3 Outgoing ACB supply feeder - Module Type DAE/DAE-TIE (O/G)		
	630A		
	800A		
	1000A		
	1600A		
	3000A		

**3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I II- FGD (LOT-III)
UnPrice Schedule For Addition/Deletion**

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
4	Outgoing ACB motor feeder - Module Type DM/PM (controlled from DDCMIS/PLC)		
	90.1- 200KW		
5.1	DOL Motor Starter - Unidirectional Drive(SFU CONTROLLED) - Drawout Type		
a)	Module Type K2 (Controlled from LPBS)		
	Upto 5.5KW		
	5.6 - 7.0KW		
	7.1 - 13KW		
	13.1 - 24KW		
	24.1 - 29.9KW		
b)	Module Type K21 (Controlled from LPBS)		
	30.0 - 37.0KW		
	37.1 - 40KW		
	40.1 - 50.0KW		
	50.1 - 75KW		
	75.1 - 90KW		
	90.1 - 110KW		
c)	Module Type K3 (Controlled from LCP)		
	Upto 5.5KW		
	5.6 - 7.0KW		
	7.1 - 13KW		
	13.1 - 24KW		
	24.1 - 29.9KW		
d)	Module Type K31 (Controlled from LCP)		
	30.0 - 37.0KW		
	37.1 - 40KW		
	40.1 - 50.0KW		
	50.1 - 75KW		
	75.1 - 90KW		
	90.1 - 110KW		
e)	Module Type DK2/PK2/AK2 (Controlled from DDCMIS/PLC/ATRS)		
	Upto 5.5KW		
	5.6 - 7.0KW		
	7.1 - 13KW		
	13.1 - 24KW		
	24.1 - 29.9KW		
f)	Module Type DK21/PK21/AK21 (Controlled from DDCMIS/PLC/ATRS)		
	30.0 - 37.0KW		
	37.1 - 40KW		
	40.1 - 50.0KW		
	50.1 - 75KW		
	75.1 - 90KW		
	90.1 - 110KW		
g)	Module Type DK2E/PK2E/AK2E (Controlled from DDCMIS/PLC/ATRS)		
	Upto 5.5KW		
	5.6 - 7.0KW		
	7.1 - 13KW		
	13.1 - 24KW		
	24.1 - 29.9KW		
h)	Module Type DK21E/PK21E/AK21E (Controlled from DDCMIS/PLC/ATRS)		
	30.0 - 37.0KW		
	37.1 - 40KW		
	40.1 - 49.9KW		
	50 - 75KW		
	75.1 - 90KW		
	90.1 - 110KW		

**3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I II- FGD (LOT-III)
UnPrice Schedule For Addition/Deletion**

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
6.1	RDOL Motor Starter – Bidirectional Drive(SFU CONTROLLED) Drawout Type		
a)	Module Type DN1/ PN1/ AN1 (Controlled from DDCMIS/PLC/ATRS)		
	Upto 5.5KW		
	5.6 - 7.0KW		
	7.1 - 13KW		
	13.1 - 24KW		
	24.1 – 29.9KW		
a)	Module Type DN21/ PN21/ AN21 (Controlled from DDCMIS/PLC/ATRS)		
	30.0 - 37.0KW		
	37.1 - 40KW		
	40.1 - 49.9KW		
	50 - 75KW		
	75.1 - 90KW		
7	Outgoing MCCB/ SFU controlled feeders		
a)	Outgoing SFU controlled supply feeder - Module Type E3 (O/G)		
	upto 10A - Fixed type		
	16A - Fixed type		
	25A - Fixed type		
	32A - Fixed type		
	63A - Fixed type		
	125A - Fixed type		
	160A - Fixed type		
	200A - Fixed type		
	250A - Fixed type		
	400A - Fixed type		
	600A - Fixed type		
	upto 10A - Drawout type		
	16A - Drawout type		
	25A - Drawout type		
	32A - Drawout type		
	63A - Drawout type		
	125A - Drawout type		
	160A - Drawout type		
	200A - Drawout type		
	250A - Drawout type		
	400A - Drawout type		
	600A - Drawout type		
b)	Outgoing MCCB controlled supply feeder - Module Type E3 (O/G)		
	16A - Fixed type		
	32A - Fixed type		
	63A - Fixed type		
	125A - Fixed type		
	160A - Fixed type		
	200A - Fixed type		
	250A - Fixed type		
	400A - Fixed type		
	600A - Fixed type		
	16A - Drawout type		
	32A - Drawout type		
	63A - Drawout type		
	125A - Drawout type		
	160A - Drawout type		
	200A - Drawout type		
	250A - Drawout type		
	400A - Drawout type		
	600A - Drawout type		
c)	Double pole SFU controlled 1-ph feeder - E1 (O/G)		
	10A - Fixed type		
	16A - Fixed type		
	25A - Fixed type		
	32A - Fixed type		
	63A - Fixed type		
	10A - Drawout type		
	16A - Drawout type		
	25A - Drawout type		
	32A - Drawout type		
	63A - Drawout type		
d)	Double pole MCCB controlled 1-ph feeder - E1 (O/G)		
	16A - Fixed type		
	32A - Fixed type		
	63A - Fixed type		
	125A - Fixed type		
	16A - Drawout type		
	32A - Drawout type		

**3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I II- FGD (LOT-III)
UnPrice Schedule For Addition/Deletion**

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
	63A - Drawout type		
	125A - Drawout type		
e)	1-Ph SFU controlled outgoing contactor feeder (EA1)		
	10A - Fixed type		
	16A - Fixed type		
	25A - Fixed type		
	32A - Fixed type		
	63A - Fixed type		
	10A - Drawout type		
	16A - Drawout type		
	25A - Drawout type		
	32A - Drawout type		
	63A - Drawout type		
f)	1-Ph MCCB controlled outgoing contactor feeder (EA1)		
	16A - Fixed type		
	32A - Fixed type		
	63A - Fixed type		
	16A - Drawout type		
	32A - Drawout type		
	63A - Drawout type		
g)	3-Ph SFU controlled outgoing contactor feeder (EA3)		
	10A - Fixed type		
	16A - Fixed type		
	25A - Fixed type		
	32A - Fixed type		
	63A - Fixed type		
	125A - Fixed type		
	200A - Fixed type		
	250A - Fixed type		
	400A - Fixed type		
	600A - Fixed type		
	10A - Drawout type		
	16A - Drawout type		
	25A - Drawout type		
	32A - Drawout type		
	63A - Drawout type		
	125A - Drawout type		
	200A - Drawout type		
	250A - Drawout type		
	400A - Drawout type		
	600A - Drawout type		
h)	3-Ph MCCB controlled outgoing contactor feeder (EA3)		
	16A - Fixed type		
	32A - Fixed type		
	63A - Fixed type		
	125A - Fixed type		
	200A - Fixed type		
	250A - Fixed type		
	400A - Fixed type		
	600A - Fixed type		
	16A - Drawout type		
	32A - Drawout type		
	63A - Drawout type		
	125A - Drawout type		
	200A - Drawout type		
	250A - Drawout type		
	400A - Drawout type		
	600A - Drawout type		
i)	3-Ph SFU controlled Contactor Changeover Between Two In Coming Supplies Module Type CC		
	16A - Fixed type		
	32A - Fixed type		
	63A - Fixed type		
	125A - Fixed type		
	200A - Fixed type		

3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I II- FGD (LOT-III)
UnPrice Schedule For Addition/Deletion

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
	250A - Fixed type		
	400A - Fixed type		
	600A - Fixed type		
	16A - Drawout type		
	32A - Drawout type		
	63A - Drawout type		
	125A - Drawout type		
	200A - Drawout type		
	250A - Drawout type		
	400A - Drawout type		
	600A - Drawout type		
	8 1-Ph MCB controlled outgoing feeder (H1) from AC MCCB DB		
	10A		
	16A		
	9 Outgoing Switch-fuse feeders		
a)	220V DC Outgoing SFU feeder (X)		
	2A - Fixed type		
	4A - Fixed type		
	6A - Fixed type		
	10A - Fixed type		
	16A - Fixed type		
	25A - Fixed type		
	32A - Fixed type		
	50A - Fixed type		
	63A - Fixed type		
	100A - Fixed type		
	125A - Fixed type		
	200A - Fixed type		
	250A - Fixed type		
	400A - Fixed type		
	500A - Fixed type		
	630A - Fixed type		
	2A - Drawout type		
	4A - Drawout type		
	6A - Drawout type		
	10A - Drawout type		
	16A - Drawout type		
	25A - Drawout type		
	32A - Drawout type		
	50A - Drawout type		
	63A - Drawout type		
	100A - Drawout type		
	125A - Drawout type		
	200A - Drawout type		
	250A - Drawout type		
	400A - Drawout type		
	500A - Drawout type		
	630A - Drawout type		
	10 Common Auxiliary Module		
a)	PT module		
	i Bus PT module for PCC/PMCC-G1 Type		
	ii Bus PT module for Emergency MCC-G2 Type		
	iii Bus PT DCDB-S Type		
	iv Bus PT module for MCC/ACDB-VM Type		
b)	Space heater and Power Socket - TT		
c.1)	110V AC control supply module – Type CS (consisting of 415/110V control Trafo.)		
	1KVA		
	2KVA		
	2.5KVA		
	3KVA		
	5KVA		
	7.5KVA		
	10KVA		

3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I II- FGD (LOT-III)
UnPrice Schedule For Addition/Deletion

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
c.2)	240 V AC control supply module – type CS (consisting of 415/240V control Trafo.)		
	1KVA		
	2KVA		
	2.5KVA		
	3KVA		
	5KVA		
	7.5KVA		
	10KVA		
d.1)	110V AC control supply module – Type CS-A (consisting of 415/110V control Trafo.)		
	1KVA		
	2KVA		
	2.5KVA		
	3KVA		
	5KVA		
	7.5KVA		
	10KVA		
d.2)	240 V AC control supply module – type CS-A (consisting of 415/240V control Trafo.)		
	1KVA		
	2KVA		
	2.5KVA		
	3KVA		
	5KVA		
	7.5KVA		
	10KVA		
e)	240V AC motor space heater module		
f)	220V DC supply module (for receiving 220V DC supply)		
g)	24 V winding heating module		
h)	Alarm module		
i)	Test supply module		
J.1)	240 V AC Panel Space hetaing supply module – type SH (consisting of 415/240V control Trafo.)		
	1KVA		
	2KVA		
	2.5KVA		
	3KVA		
	5KVA		
	7.5KVA		
	10KVA		
J.2)	240 V AC Panel Space hetaing supply module – type SH-A (consisting of 415/240V control Trafo.)		
	1KVA		
	2KVA		
	2.5KVA		
	3KVA		
	5KVA		
	7.5KVA		
	10KVA		
11	Empty Panel with Horizontal & Vertical Busbar, Support & Auxiliary Busbar		
a)	MCC Panel (Double Front Drawout Type)		
	250 / 250A		
	400 / 400A		
	630 / 630A		
	800 / 630A		
	1000 / 630A		
	1600 / 630A		
	2000 / 630A		
	2500 / 630A		
	3000 / 630A		
	4000 / 630A		
b)	MCC Panel (Double Front Fixed Type)		
	250 / 250A		
	400 / 400A		
	630 / 630A		
	800 / 630A		

3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I II- FGD (LOT-III)
UnPrice Schedule For Addition/Deletion

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
	1000 / 630A		
	1600 / 630A		
	2000 / 630A		
	2500 / 630A		
	3000 / 630A		
	4000 / 630A		
c)	220V DCDB Panel (Double Front Fixed type)		
	UPTO 630A (with 630A VBB)		
	1000A (with 630A VBB)		
	1600A (with 630A VBB)		
d)	220V DCDB Panel (Double Front Drawout type)		
	UPTO 630A (with 630A VBB)		
	1000A (with 630A VBB)		
	1600A (with 630A VBB)		
12	Empty Panel With Horizontal & Vertical Busbar, Support & Auxiliary Busbar		
a)	PCC Panel (Single Front Drawout Type)		
	1600 / 1600A		
	2000 / 2000A		
	2500 / 2500A		
	3000 / 3000A		
	4000 / 4000A		
b)	MCC Panel (Single Front Drawout Type)		
	250 / 250A		
	400 / 400A		
	630 / 630A		
	800 / 630A		
	1000 / 630A		
	1600 / 630A		
	2000 / 630A		
	2500 / 630A		
	3000 / 630A		
	4000 / 630A		
c)	MCC Panel (Single Front Fixed Type)		
	250 / 250A		
	400 / 400A		
	630 / 630A		
	800 / 630A		
	1000 / 630A		
	1600 / 630A		
	2000 / 630A		
	2500 / 630A		
	3000 / 630A		
	4000 / 630A		
d)	220V DCDB Panel (Single Front Fixed Type)		
	UPTO 630A (with 630A VBB)		
	1000A (with 630A VBB)		
	1600A (with 630A VBB)		
e)	220V DCDB Panel (Single Front Fixed Type)		
	UPTO 630A (with 630A VBB)		
	1000A (with 630A VBB)		
	1600A (with 630A VBB)		
13	ACB Panel with Horizontal & Vertical Busbar, Support & Auxiliary Busbar		
	630 / 630A		
	800 / 630A		
	800 / 800A		
	1000 / 630A		
	1000 / 800A		
	1000 / 1000A		
	1600 / 630A		
	1600 / 800A		
	1600 / 1000A		
	1600 / 1600A		
	2000 / 630A		
	2000 / 800A		

3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I II- FGD (LOT-III)
UnPrice Schedule For Addition/Deletion

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
	2000 / 1000A		
	2000 / 1600A		
	2000 / 2000A		
	2500 / 630A		
	2500 / 800A		
	2500 / 1000A		
	2500 / 1600A		
	2500 / 2000A		
	2500 / 2500A		
	3000 / 630A		
	3000 / 800A		
	3000 / 1000A		
	3000 / 1600A		
	3000 / 2000A		
	3000 / 2500A		
	3000 / 3000A		
	4000 / 630A		
	4000 / 800A		
	4000 / 1000A		
	4000 / 1600A		
	4000 / 2000A		
	4000 / 2500A		
	4000 / 3000A		
	4000 / 4000A		
	14 Dummy Panel		
	UPTO 630A		
	800A		
	1000A		
	1600A		
	2000A		
	2500A		
	3000A		
	4000A		
	15 Unit Prices For Circuit Components		
	a) Air Circuit Breaker without releases		
	630A MDO		
	800A MDO		
	1000A MDO		
	630A ACB, 3P, EDO, AC		
	800A ACB, 3P, EDO, AC		
	1000A ACB, 3P, EDO, AC		
	4000A ACB, 3P, EDO, AC		
	3200A ACB, 3P, EDO, AC		
	2500A ACB, 3P, EDO, AC		
	2000A ACB, 3P, EDO, AC		
	1600A ACB, 3P, EDO, AC		
	1250A ACB, 3P, EDO, AC		
	1250A ACB, 2P, MDO, DC		
	b) MCCB, 2NO+2NC AUX, FSC		
	16A		
	25A		
	32A		
	63A		
	80A		
	115A		
	150A		
	185A		
	265A		
	315A		
	400A		
	630A		
	c) MCCB, 2NO+2NC AUX, ASC		
	16A		
	25A		

**3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I II- FGD (LOT-III)
UnPrice Schedule For Addition/Deletion**

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
	32A		
	63A		
	80A		
	115A		
	150A		
	185A		
	265A		
	315A		
	400A		
	630A		
d)	MCCB with LSIG release		
	200A		
	250A		
	300A		
	350A		
	400A		
	630A		
e)	MCCB - Motorized with LSIG release		
	200A		
	250A		
	300A		
	350A		
	400A		
	630A		
f)	POWER FUSE LINK FOR SFU (AC) - TPN		
	Upto 16A		
	25A		
	32A		
	63A		
	125A		
	250A		
	400A		
	630A		
g)	POWER FUSE LINK FOR SFU (DC) - DP		
	Upto 16A		
	25A		
	40A		
	50A		
	60A		
	80A		
	100A		
	200A		
	300A		
	400A		
	630A		
h)	SFU WITHOUT POWER FUSE LINK (AC) - TPN		
	Upto 16A		
	25A		
	32A		
	63A		
	125A		
	250A		
	400A		
	630A		
i)	SFU WITHOUT POWER FUSE LINK (DC) - DP		
	Upto 16A		
	25A		
	40A		
	50A		
	60A		
	80A		
	100A		
	200A		
	300A		

3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I II- FGD (LOT-III)
UnPrice Schedule For Addition/Deletion

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
	400A		
	630A		
j)	HRC Fuse Links (Offset tag Type)		
	Upto 10A		
	16A		
	25A		
	32A		
	50A		
	63A		
k)	HRC Fuse DIN Type (Blade Contact)		
	Upto 10A		
	16A		
	20A		
	32A		
	36A		
	50A		
	63A		
	80A		
	100A		
	125A		
	160A		
	200A		
	250A		
	315A		
	400A		
	Control Fuse Link		
l)	Power contactor (AC)		
	16A		
	25A		
	32A		
	63A		
	80A		
	115A		
	150A		
	185A		
	265A		
	315A		
	400A		
m)	Power contactor (DC)		
	16A		
	25A		
	32A		
	63A		
	80A		
	115A		
	150A		
	185A		
	265A		
	400A		
n)	Fuse Base		
	UPTO 20A		
	32A		
	50/63A		
	100A		
	250A		
	400A		
	630A		
o)	Auxiliary contactor AC/DC		
i)	AC Aux. contactor		
	2NO + 2NC		
	3NO + 3NC		
	4NO + 4NC		
	6NO + 6NC		
ii)	DC Aux. contactor		

**3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I II- FGD (LOT-III)
UnPrice Schedule For Addition/Deletion**

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
	2NO + 2NC		
	3NO + 3NC		
	4NO + 4NC		
	6NO + 6NC		
p)	Protection Relay		
	VAGM 23		
	CTU 12		
	CTU 32		
	VTT 11		
	VAG 11		
	VAA 11		
	VAJHM 13		
	VAJHM 23		
	CDGM-12		
	CAG 12		
	CAG 34		
	CCUM 21		
	CDG 11		
	CDG 31		
	CDG 61		
	VDG 14		
	CDV 62		
	CAG 14		
	VAX 31		
	CAG 37		
	CAEM-21		
	VAG-21		
	VAJC-11		
	CTMM-501		
	MOTPRO		
	VAA21		
	VTT12		
	VTIG		
	VTU21		
	NUMERICAL RELAY FOR PROTECTION, T/C SUPERVISION, LOGIC, METERING FUNCTION & WITH CHECK SYNCHRONIZATION, REF PROTECTION, FUSE FAILURE, ENERGY METERING, OVER LOAD PROTECTION, 50, 50N, 51, 51N, 27, 98, 86, 25, 95, 30A, 30B, 64R		
	SEF NUMERICAL RELAY		
	NUMERICAL RELAY FOR PROTECTION, T/C SUPERVISION, LOGIC, METERING FUNCTION & WITH CHECK SYNCHRONIZATION, FUSE FAILURE, ENERGY METERING, OVER LOAD PROTECTION 50, 50N,51, 51N, 27, 98, 86, 25, 95, 30A, 30B		
	NUMERICAL RELAY FOR PROTECTION, T/C SUPERVISION, LOGIC, METERING FUNCTION & WITH CHECK SYNCHRONIZATION, FUSE FAILURE, 50, 50N,51, 51N, 27, 98, 86, 25, 95, 30A, 30B		
	NUMERICAL RELAY FOR PROTECTION, T/C SUPERVISION, LOGIC, METERING FUNCTION & WITH CHECK SYNCHRONIZATION, FUSE FAILURE, ENERGY METERING, OVER LOAD PROTECTION 50, 50N,51, 51N, 27, 98, 86, 25, 95, 30A, 30B, DG PROTECTION (Like Neutral Under-voltage-27N, Power Direction / Reverse Power (Islanding)-32, Negative Phase Sequence Over-current (Phase unbalance, reverse phase sequence) -46, , Negative Sequence Voltage -47, Ground Over-voltage trip or ground over-current trip-51G, Instantaneous Over-voltage trip (ferro-resonance)-59, Over-voltage trip-59T, Neutral over-voltage-59N, Over/Under Frequency trip-81O/ 81U etc.)		
	NUMERICAL RELAY FOR PROTECTION, T/C SUPERVISION, LOGIC, METERING FUNCTION & FUSE FAILURE, OVER LOAD PROTECTION 50, 50N,51, 51N, 27, 98, 86, 95, 30A, 30B		
	NUMERICAL RELAY FOR PROTECTION, T/C SUPERVISION-95, LOGIC, METERING FUNCTION & FUSE FAILURE-98, OVER LOAD PROTECTION, LOCKED ROTOR PROTECTION-14, RESTART INHIBIT PROTECTION-49, NEGATIVE SEQUENCE PROTECTION-46, 50, 50N, 51, 51N, 27, 86, 30A, 30B		
	Communicable type Numerical relay for O/C, E/F, TC Supervision on IEC-61850 protocol		
	Communicable type Numerical relay for O/C, E/F, Check Synchronization, TC Supervision on IEC-61850 protocol		
	Communicable type Numerical relay for Voltage control O/C, 3Phase O/C, Reverse power, Differential, Neutral Displacement, E/F, U/V, O/V protection, Check Synchronization, TC Supervision on IEC-61850 protocol		
	Communicable type Numerical relay for Under voltage, Over voltage etc. on IEC-61850 protocol		

**3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I II- FGD (LOT-III)
UnPrice Schedule For Addition/Deletion**

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
	Communicable type Numerical relay for E/F protection for DCDB on IEC-61850 protocol		
	Communicable type Numerical relay for composite motor protection including TC Supervision on IEC-61850 protocol		
	Communicable type Numerical relay for Neutral Displacement on IEC-61850 protocol		
	Communicable type Numerical relay for O/C, E/F, TC Supervision on Modbus protocol		
	Communicable type Numerical relay for O/C, E/F, Check Synchronization, TC Supervision on Modbus protocol		
	Communicable type Numerical relay for Voltage control O/C, 3Phase O/C, Reverse power, Differential, Neutral Displacement, E/F, U/V, O/V protection, Check Synchronization, TC Supervision on Modbus protocol		
	Communicable type Numerical relay for Under voltage, Over voltage etc. on Modbus protocol		
	Communicable type Numerical relay for E/F protection for DCDB on Modbus protocol		
	Communicable type Numerical relay for composite motor protection including TC Supervision on Modbus protocol		
	Communicable type Numerical relay for Neutral Displacement on Modbus protocol		
	Numerical Check synchronising Relay		
	Check synchronising Relay Type-SKE11 or better		
	Guard Relay		
	NUMERICAL RELAY Over current and Earth fault		
	BATTERY EARTH FAULT RELAY, 1-7mA, NOMINAL VOLTAGE-220V DC, 1DV, 2NO S/R, FLUSH		
	OVERLOAD RELAY, NOMINAL VOLTAGE-220V DC, O/V VLTAGE SETTING-110%, 1/4NV, 1NO+1NC S/R		
	UNDER VOLTAGE RELAY, NOMINAL VOLTAGE-220V DC, U/V SETTING-80%, AUX.- 240V AC, 1/2NH, 1NO+2NC S/R		
	JAMING RELAY - CAG17		
q)	Bimetal Thermal O/L Relays		
i)	Thermal O/L relay with SPP - OLR		
	Upto 5.5KW		
	5.6 to 11KW		
	11.1 to 22KW		
	22.1 to 45KW		
	45.1 to 75KW		
	75 to 110KW		
ii)	Heavy Duty Thermal O/L relay with SPP - OLR		
	Upto 5.5KW		
	5.6 to 11KW		
	11.1 to 22KW		
	22.1 to 45KW		
	45.1 to 75KW		
	75 to 110KW		
r)	Timer (DC)		
	ON DELAY TIMER, 0.5-5SEC., 220V DC, 2NO+2NC		
	ON DELAY TIMER, 1.0-10SEC. 220V DC, 2NO+2NC		
	240VAC MTR RESTART CONTROL TIMER (.2-60SECS)		
	240VAC ON DELAY TIMER(1-10SECNS)WITH 1NO		
	220VDC ON DELAY TIMER(.5-5SECS) WITH 1NO		
	220VDC ON DELAY TIMER(0.5-5SECS)WITH 3NO		
	220VDC ON DELAY TIMER(1-10SECS) WITH 3NO		
s)	Meter		
	AC ammeter (Digital)		
	AC ammeter (Analog) linear scale		
	AC ammeter (Analog) compressed scale		
	DC ammeter (Digital)		
	DC ammeter (Analog)		
	AC voltmeter (Digital)		
	DC voltmeter (Analog)		
	Wattmeter (3 Phase)		
	Wattmeter (1 Phase)		
	TVM meter		
	DIGITAL ENERGY METER		
	Frequency meter		
	Synchroscope		
	Differential Voltmeter		
	Differential Frequency meter		

**3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I II- FGD (LOT-III)
UnPrice Schedule For Addition/Deletion**

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
	Multifunction digital Energy meter with RS485 Port (0.2 Acc. Class)		
	Multifunction digital Energy meter with RS485 Port (0.5 Acc. Class)		
	Multifunction digital Energy meter with RS485 Port (1.0 Acc. Class)		
t)	Single Phase Preventor Relay		
u)	MCB		
	6A, 4P 415V AC		
	6A DP, 240V AC		
	10A DP, 240V AC		
	16A DP, 240V AC		
	32A DP, 240V AC		
	6A DP, 110V AC		
	10A DP, 110V AC		
	16A DP, 110V AC		
	32A DP, 110V AC		
	16A DP, 220V DC		
	6A DP, 220V DC		
	6A DP, 240V AC		
	10A SP, 240V AC		
	16A SP, 240V AC		
	32A SP, 240V AC		
	6A SP, 110V AC		
	10A SP, 110V AC		
	16A SP, 110V AC		
	32A SP, 110V AC		
	16A SP, 220V DC		
	6A SP, 220V DC		
v)	SWITCH & PUSH BUTTON		
	BREAKER CONTROL SWITCH, 16A,220V DC, 2CLOSE+2TRIP		
	DC ISOLATING SWITCH 16A,220V DC, DP, BASE MTG.		
	16A,240V AC SELECTOR SWITCH 3WAY, 4POLE, FLUSH MTG		
	25A,240V AC SELECTOR SWITCH 3WAY, 4POLE, FLUSH MTG		
	16A,240V AC SELECTOR SWITCH 2WAY, 2POLE, FLUSH MTG		
	NORMAL/ TRIAL SEL. SWITCH, 2POLE , 2WAY, 10A 240V AC, FLUSH MTG,		
	MCC/ NORMAL/ TRIAL SEL. SWITCH, 2POLE ,3WAY, 10A 240V AC, FLUSH MTG		
	SWGR/ REMOTE SEL. SWITCH 3POLE 2WAY,16A 220V DC, FLUSH MTG		
	SWGR/ NORMAL/ TRIAL SEL. SWITCH, 3POLE, 3WAY, 16A 220V DC, FLUSH MTG.		
	NORMAL/ TRIAL SEL. SWITCH, 2POLE , 2WAY, 10A 240V AC, FLUSH MTG, LOCKABEL TYPE		
	MCC/ NORMAL/ TRIAL SEL. SWITCH, 2POLE ,3WAY, 10A 240V AC, FLUSH MTG, LOCKABEL TYPE		
	SWGR/ REMOTE SEL. SWITCH 3POLE 2WAY,16A 220V DC, FLUSH MTG.LOCKABLE TYPE		
	SWGR/ NORMAL/ TRIAL SEL. SWITCH, 3POLE, 3WAY, 16A 220V DC, FLUSH MTG., LOCKABLE TYPE		
	AMMETER SELECTOR SWITCH		
	VOLTMETER SELECTOR SWITCH		
	TOGGLE SWITCH 5A, 240V AC		
	AC SWITCH SPST-5A,240V AC		
	10A, 220V DC SWITCH		
	Door Limit switch		
	Ammeter selector switch		
	Voltmeter selector switch		
	Synchronisation selector switch		
	Trip selector switch		
	Push Button		
	2NO + 2NC Shrouded		
	1NO + 1NC Shrouded		
	2NO + 2NC Mushroom head stayput		
	2NO + 2NC Lockable type		
w)	Indicating Lamp Assembly (LED Type)		
	240V AC-GREEN		
	240V AC-RED		
	240V AC- AMBER		
	110V AC-GREEN		

3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I II- FGD (LOT-III)
UnPrice Schedule For Addition/Deletion

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
	110V AC-RED		
	110V AC- AMBER		
	220V DC-WHITE		
	220V DC-RED		
	220V DC-GREEN		
	220V DC-BLUE		
	220V DC- AMBER		
	63.5V AC-RED		
	63.5V AC-YELLOW		
	63.5V AC-BLUE		
x)	CT		
i)	Metering CT		
	Upto 75/1A		
	100/1A		
	125/1A		
	150/1A		
	200/1A		
	250/1A		
	300/1A		
	400/1A		
	500/1A		
	630/1A		
	800/1A		
	1000/1A		
	1250/1A		
	1600/1A		
	2000/1A		
	2500/1A		
	3000/1A		
	4000/1A		
ii)	Protection CT (5P20)		
	Upto 75/1A		
	100/1A		
	125/1A		
	150/1A		
	200/1A		
	250/1A		
	300/1A		
	400/1A		
	500/1A		
	630/1A		
	800/1A		
	1000/1A		
	1250/1A		
	1600/1A		
	2000/1A		
	2500/1A		
	3000/1A		
	4000/1A		
	630/5A		
	800/5A		
	1000/5A		
	1250/5A		
	1600/5A		
	2000/5A		
	2500/5A		
	3000/5A		
	4000/5A		
iii)	PS Class CT		
	1600/1A		
	2500/1A		
	3000/1A		
	4000/1A		
	1600/5A		

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UnPrice Schedule For Addition/Deletion

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
	2500/5A		
	3000/5A		
	4000/5A		
y)	Voltage Transformer		
i)	415/√3 : 110/√3V, 1ph, 50VA		
ii)	415/√3 : 110/√3V, 1ph, 100VA		
iii)	415/√3 : 240/√3V, 1ph, 50VA		
iv)	415/√3 : 240/√3V, 1ph, 100VA		
z)	Toggle switch (16A)		
aa)	Secondary Isolating Contact Block		
ab)	Control Terminal (Fixed)		
ac)	Thermostat		
ad)	CONTROL TRANSFORMER		
	415/240V,CL-E, 1 KVA		
	415/240V,CL-E, 2KVA		
	415/240V,CL-E, 2.5KVA		
	415/240V,CL-E, 3KVA		
	415/240V,CL-E, 5KVA		
	415/240V,CL-E, 10KVA		
	415/110V,CL-E, 1 KVA		
	415/110V,CL-E, 2KVA		
	415/110V,CL-E, 2.5KVA		
	415/110V,CL-E, 3KVA		
	415/110V,CL-E, 5KVA		
	415/110V,CL-E, 10KVA		
ac)	4-20mA Dual o/p, Aux sup 220V DC, 1A, Current Transducer		
	4-20mA Dual o/p, Aux sup 240V AC, 1A, Current Transducer		
	4-20mA Dual o/p, Aux sup 110V AC, 1A, Current Transducer		
	4-20mA Dual o/p, Aux sup 220V DC, VoltageTransducer, PTR 415/110V		
	4-20mA Dual o/p, Aux sup 240V AC, VoltageTransducer, PTR 415/110V		
	4-20mA Dual o/p, Aux sup 110V AC, VoltageTransducer, PTR 415/110V		
	4-20mA Dual o/p, Aux sup 220V DC, FrequencyTransducer, PTR 415/110V		
	4-20mA Dual o/p, Aux sup 220V DC, Input 0-75mV DC, Current Transducer-DC		
	4-20mA Dual o/p, Aux sup 240V AC, Input Voltage 0-220V DC, Voltage Transducer-DC		
ad)	4-20mA Dual Output kW transducer		
ae)	4-20mA Dual Output kVA transducer		
af)	4-20mA Dual Output PF transducer		
ag)	4-20mA Dual Output Frequency transducer		
ah)	Interposing relay RE 302 or Eqvt with freewheeling diode & LED		
ai)	Laptop PC alongwith software & hardware		
aj)	3 PIN SOCKET - 5A, 110V AC, 3PIN		
ak)	THERMOSTATE, DIAL TYPE		
am)	SPACE HEATER		
an)	CFL WITH HOLDER		
ao)	NEUTRAL LINK		
	20A FOR CONTROL CKT. & POWER CKT. UPTO 25A MCCB RATING		
	32A FOR 50A MCCB RATING		
	63A FOR 100A & 125A MCCB RATING		
	125A FOR 250A MCCB RATING		
	250A FOR 400A & 500A MCCB RATING		
ap)	CASTLE KEY INTERLOCK FOR MCCB - 3LOCK+2KEY		
aq)	MECHANICAL INTERLOCK FOR POWER CONTACTOR		
	16A		
	25A		
	32A		
	63A		
	80A		
	115A		
	150A		
	185A		
	265A		
	315A		
	400A		

3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I II- FGD (LOT-III)
UnPrice Schedule For Addition/Deletion

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
ar)	AUX. CONTACTOR		
	2NO+2NC, CV-220V DC		
	4NO, CV-220V DC		
	2NO+2NC, CV-240V AC		
	3NO+1NC, CV-240V AC		
	2NO+2NC, CV-110V AC		
	3NO+1NC, CV-110V AC		
	1NO + 1NC 240V AC		
	1NO + 1NC 110V AC		
	1NO + 1NC 220V DC		
	1NO 240V AC		
	1NO 110V AC		
	1NO 220V DC		
as)	ISOLATING TRANSFORMER-15kVA		
	ISOLATING TRANSFORMER-20kVA		
	ISOLATING TRANSFORMER-25kVA		
	ISOLATING TRANSFORMER-30kVA		
16	Foundation Frame		
a)	MCC panel		
	upto 1600A (SF)		
	2500A (SF)		
	3000A (SF)		
	4000A (SF)		
	upto 1600A (DF)		
	2500A (DF)		
	3000A (DF)		
	4000A (DF)		
b)	220V DCDB panel		
	SF		
	DF		
c)	PCC / PMCC panel		
	upto 1600A		
	2500A		
	3000A		
	4000A		
17	Connection from PMCC/MCC panel to PMCC/MCC panel		
	250A		
	400A		
	630A		
	800A		
	1000A		
	1600A		
	2500A		
	3000A		
	4000A		
18	Cable Glands & Lugs:		
a)	Single Compression Cable Glands for cable sizes:		
	2C X 2.5 Sq. mm.		
	3C X 2.5 Sq. mm.		
	5C X 2.5 Sq. mm.		
	7C X 2.5 Sq. mm.		
	12C X 2.5 Sq. mm.		
	16C X 2.5 Sq. mm.		
	2C X 10 Sq. mm.		
	2C X 16 Sq. mm.		
	2C X 25 Sq. mm.		
	2C X 35 Sq. mm.		
	2C X 50 Sq. mm.		
	2C X 70 Sq. mm.		
	2C X 95 Sq. mm.		
	3C X 2.5 Sq. mm.		
	3C X 10 Sq. mm.		
	3C X 16 Sq. mm.		
	3C X 25 Sq. mm.		

3 X 200 + 3 X 500 MW NTPC RAMAGUNDAM TPP STAGE I II- FGD (LOT-III)
UnPrice Schedule For Addition/Deletion

ANNEXURE-K

SL.NO.	ITEM DESCRIPTION	MODEL NO./ ITEM DESCRIPTION	UNIT PRICE (Rs.)
	3C X 35 Sq. mm.		
	3C X 50 Sq. mm.		
	3C X 70 Sq. mm.		
	3C X 95 Sq. mm.		
	3C X 150 Sq. mm.		
	3C X 185 Sq. mm.		
	3C X 240 Sq. mm.		
	3.5C X 25 Sq. mm.		
	3.5C X 50 Sq. mm.		
	3.5C X 70 Sq. mm.		
	3.5C X 300 Sq. mm.		
	3.5C X 240 Sq. mm.		
	3.5C X 185 Sq. mm.		
	3.5C X 95 Sq. mm.		
	4C X 16 Sq. mm.		
	4C X 35 Sq. mm.		
	1C X 400 Sq. mm.		
	1C X 630 Sq. mm.		
	b) Double Compression Cable Glands for cable sizes:		
	2C X 2.5 Sq. mm.		
	3C X 2.5 Sq. mm.		
	5C X 2.5 Sq. mm.		
	7C X 2.5 Sq. mm.		
	12C X 2.5 Sq. mm.		
	16C X 2.5 Sq. mm.		
	2C X 10 Sq. mm.		
	2C X 16 Sq. mm.		
	2C X 25 Sq. mm.		
	2C X 35 Sq. mm.		
	2C X 50 Sq. mm.		
	2C X 70 Sq. mm.		
	2C X 95 Sq. mm.		
	3C X 2.5 Sq. mm.		
	3C X 10 Sq. mm.		
	3C X 16 Sq. mm.		
	3C X 25 Sq. mm.		
	3C X 35 Sq. mm.		
	3C X 50 Sq. mm.		
	3C X 70 Sq. mm.		
	3C X 95 Sq. mm.		
	3C X 150 Sq. mm.		
	3C X 185 Sq. mm.		
	3C X 240 Sq. mm.		
	3.5C X 25 Sq. mm.		
	3.5C X 50 Sq. mm.		