

PROJECT: 3X16.65MW STG Project		ANNEXURE-8 TO PY-55199 REV00	
CUSTOMER: M/s RSPL, Gujarat			
CONSULTANT: M/s JACOBS, Mumbai		BHEL ENQUIRY NO.:	
PRICE SCHEDULE FOR LT SWITCHGEAR PACKAGE: COMMON NOTES			
BIDDER:		PRICE OFFER NO. & DATE:	
SL. NO.	COMMON NOTES:		
1	This document details the price schedule for the enquiry. Bidder shall fill up in this format only. No other format will be entertained. No cognizance will be taken of any changes made by bidder with respect to this format.		
2a	Duly signed & stamped unpriced price schedule shall be submitted by bidders as a token of their concurrence that the price schedule is submitted in this format. If not submitted in this format or any field is left blank, the offer will be liable for rejection.		
2b	All the blank fields shall be filled irrespective of applicability of any item for this Project. If any item is not in bidder's manufacturing range or not available in market (for bought-outs) then "Not Applicable/NA" shall be mentioned in the field. If the bidder mentions "Not Applicable/NA" against any item and if need arises during order execution for such item, then the same shall be supplied free of cost. If any item is left unfilled, it shall be deemed that the price is included in any of the other quoted items / package and hence, price will be considered as zero for evaluation/additions. Also, for such items, unit rates for deletions will be at the discretion of BHEL.		
3	Vendor shall fill up prices of various items and submit to BHEL in separate sealed cover as commercial offer. All prices shall be submitted as ex-works. Applicable taxes, duties, freight and insurance etc. shall also be indicated separately in a separate document as per commercial terms and conditions.		
4	The format contains TWO sections apart from this page:		
4a	Section-1: Price Schedule for Main Equipments for the LT Switchgear Package. (i) In Section - 1 at SI.No. B.1 & 2 Lumpsum price for Modification / Additional Job on LT Switchgear package at site by the OEM will be ordered by PE&SD_Hyderabad (ii) In Section - 1 at SI No. C.1&2 (Lumpsum price for Supervision of Installation, Service, Testing & Commissioning of Intelligent Controllers as well as LT Switchgear by the respective OEMs at site) listed in Section-1, C.1 & 2 will be ordered by BHEL-PSWR.		
4b	Section-2: Unit rates for the Switchgear items / Services for components' addition / deletion		
5	Tender evaluation priority / criteria shall be as per the Landed cost to BHEL as per cumulative of "Price Schedule for Main Equipment for the LT Switchgear". However, in case of any mis-match in values quoted by the bidder, final decision will be at the discretion of BHEL.		
6	Unit rates of components / services would be used for affecting required additions / deletions in main equipment. The Unit rates shall include all associated items for functional integration with the main equipment. Also, unit rates of Wall mounted DBs in section-2 of Price Schedule shall be used for addition / deletion of Wall mounted DBs.		
7	Unit rates would be used for affecting required corresponding changes in the percentage for spares (due to additions / deletions in main equipment).		
8	Components / Items / Spares shall be identical to the main equipment for modification jobs, mandatory and commissioning spares.		
9	Billing & Payments will be as per approved BOM.		
10	All rates shall be valid up to the execution of BHEL's contract with end user.		
11	BHEL reserves the right to order part quantity or short close if any item / main equipment is not needed during execution.		

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CUSTOMER: M/s RSPL, Gujarat					
CONSULTANT: M/s JACOBS, Mumbai			BHEL ENQUIRY NO.:		
SECTION-1					
PRICE SCHEDULE FOR MAIN EQUIPMENT FOR LT SWITCHGEAR PACKAGE					
BIDDER:			PRICE OFFER NO. & DATE:		
SL. NO.	ITEM	QTY.	UNIT PRICE Ex Works (Rs) <u>Refer Note-4</u>	TOTAL PRICE Ex Works (Rs)	REMARKS
A	SWITCHBOARDS				
1	415V STG IMCC-1, 2 & 3	3 no.s			
2	110V DCDB	1 no.			
3	240V UPSDB	1 no.			
4	Commissioning Spares	1 lot			
5	Tools & Tackles	1 lot			
<u>SERVICES - To be ordered by BHEL-PE&SD Hyderabad (Refer note-4 (a) of common Notes of Price Format)</u>					
B	Lumpsum price for Modification / Additional Job on LT Switchgear package at site by the OEM				Refer Note-3, & 4 below
1	Lumpsum price for travel by LT Switchgear package OEM to and fro site. (1 Set = 2 Visits).	1 set	NA		Quote Total Price only
2	Lumpsum price including Lodging, Boarding etc. for LT Switchgear Package OEM at site. (1 Set = 2 visits =12 mandays total). Each visit will be of 6 mandays.	1 set	NA		Quote Total Price only
<u>SERVICES - To be ordered by BHEL-PSWR (Refer note-4 (a) of common notes of Price Format)</u>					
C	Lumpsum price for Supervision of Installation, Service, Testing & Commissioning of Intelligent Controllers , Numerical Relay and LT Switchgear by the respective OEMs at site.				Refer Note-3, & 4 below
1	Lumpsum price for travel by OEM of Intelligent Controller, Numerical Relay & LT Switchgear to and fro site. (1 Set = 2 Visits).	1 set	NA		Quote Total Price only
2	Lumpsum price including Lodging, Boarding etc. for OEMs of Intelligent Controller, Numerical Relays & LT Switchgear at site. (1 Set = 2 Visits = 12 mandays total). Each Visit shall be of 6 mandays.	1 set	NA		Quote Total Price only
GRAND TOTAL (A+B+C)			--		
Notes :	<p>1. Bidder to Quote for each and every item as per this schedule. If bidder has not quoted for any item as per the above list then the offer is liable to be rejected.</p> <p>2. Quantity of feeders shall be as per SLDs (Annexure-2) and Bhel Specification. This includes the price of O&M Manual, As-manufactured Drawings, Lugs and Glands for the entire LT Switchgear Package</p> <p>3. Actual visits/mandays needed at site will depend on site fronts availability and amount of work involved. For quoting purpose the sets/visits/mandays are specified. However, payment shall be made for actual services provided. The charges/ rates quoted above at item nos. (B & C) shall be used for deriving per visit/manday charges. These will be used for making payment for services offered for actual no. of visits/mandays. Also, actual services provided need to be certified by BHEL's site office.</p> <p>4. At above Sl No. B & C, bidder to quote the total price that is for "1 set". The meaning of "Set" is defined against each Item description.</p>				

SECTION-2

UNIT RATES FOR THE SWITCHGEAR ITEMS / SERVICES FOR COMPONENTS' ADDITION / DELETION

BIDDER:		PRICE OFFER NO. & DATE:		
SL. NO.	DESCRIPTION	RATING	PRICE Ex Works (Rs)	
II. FOR FEEDER MODULES:				
BOM: ALL FITMENTS EXCEPT NUMERICAL RELAY				
		RATING	DRAWOUT	FIXED
1	AC BOARD INCOMERS & BUS COUPLERS (SFU)	Upto 250A		
		400A		
		630A	NA	
2	AC BOARDS INCOMERS & BUS COUPLERS (MCCB)	Upto 250A		
		400A		
		630A	NA	
3	DC BOARDS INCOMERS & BUS COUPLERS (MCCB)	Upto 250A		
		400A		
		630A		
4	AC BOARDS INCOMERS & BUS COUPLERS (ACB) WITH COMMUNICABLE MFM	upto 630A	NA	NA
		800A		
		1000/1250A		
		1600/2500A		
		3200A		
5	ACB CONTROLLED STARTER FEEDER	90kW to 160kW		
6	AC BOARDS OUTGOING ACB FEEDER	800A		
		1000A		
		1250A		
		1600A		
7	DOL/RDOL OUTGOING FEEDER	Upto 5.5kW		
		5.6-12kW		
		12.1-22kW		
		22.1-35kW		
		35.1-54.9kW		
		55-74.9kW		
		75-99.9kW		
		100-150kW		
		RDOL Upto 5.5kW		
		RDOL 5.6 to 12kW		
		RDOL 22.1-35kW	NA	NA
RDOL 35.1-55kW	NA	NA		
8	AC BOARDS OUTGOING MCCB FEEDERS	Upto 32A		
		63A		
		100A		
		125A		
		160A		
		200A		
		400A		
9	AC BOARDS OUTGOING MPCB FEEDERS	Upto 32A		
		63A		
		100A		
		125A		
		160A		
		200A		
		400A		
10	AC BOARDS OUTGOING MCB FEEDERS	Upto 6A		
		6A-32A		
		63A		
		100A		
		125A		
		160A	NA	NA
		250A	NA	NA
400A	NA	NA		
11	AC BOARDS OUTGOING SFC FEEDERS	Upto 32A		
		63A		
		100A		
		125A		
		160A		
		250A		
		400A	NA	NA
630A	NA	NA		

SECTION-2

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BIDDER:		PRICE OFFER NO. & DATE:				
SL. NO.	DESCRIPTION	RATING	PRICE Ex Works (Rs)			
12	DC BOARDS OUTGOING MCB FEEDERS	Upto 6A				
		16A				
		32A				
		63A				
		100A				
		125A				
		150A				
		200A				
		250A	NA	NA		
		300A	NA	NA		
13	DC BOARDS OUTGOING MCCB FEEDERS	Upto 6A				
		16A				
		32A				
		63A				
		100A				
		125A				
		150A				
		200A				
		250A				
		300A				
14	UPSDB BOARDS OUTGOING MCB FEEDERS	Upto 6A				
		16A				
		32A				
		63A				
		100A				
		125A				
		150A	NA	NA		
		200A	NA	NA		
		15	UPSDB BOARDS OUTGOING MCCB FEEDERS	Upto 6A		
				16A		
32A						
63A						
100A						
125A						
150A	NA			NA		
200A	NA			NA		
16	CONTROL / SUB DIST TRANSFORMER MCB FEEDERS (MCB IN DRAWOUT AND TRAF0 IN FIXED)			Upto 2.5kVA 415/110V 1ph		
				2.5-5kVA 415/110V 1ph	NA	
		10kVA 415/110V 1ph	NA			
		15kVA 415/110V 1ph	NA			
		Upto 2.5 KVA 415/240V 1ph				
		2.5-5 KVA 415/240V 1ph	NA			
		10kVA 415/240V 1ph	NA			
		15kVA 415/240V 1ph	NA			
		17	MCB MODULE (9kA MCBs)	30 Nos.	NA	
				20 Nos.	NA	
10 Nos.	NA					
18	LINE / BUS VT MODULES		DRAWOUT	FIXED		
a)	PT MODULE IN D/O EXE. COMPRISING OF 3 Nos. of PTs (415V/√3)/(110V/√3)/(110V/√3), 200VA CL1/3P	200VA				
b)	PT MODULE IN D/O EXE. COMPRISING OF 3 Nos. of PTs (415V/√3)/(110V/√3)/(110V/√3), 100VA CL1/3P	100VA				
c)	PT MODULE IN D/O EXE. COMPRISING OF 3 Nos. of PTs (415V/√3)/(110V/√3)/(110V/√3), 50VA CL1/3P	50VA				
19	VACANT MODULE / COMPT.	Upto 200 mm	NA			
		201 TO 500 mm	NA			
		501 TO 800 mm	NA			
20	MARSHALLING COMPT. WITH WIRING (MTB)	Upto 300 mm	NA			
		Above 300 mm	NA			
21	FEEDER MANAGEMENT SYSTEM	Upto 32A				
		63A				
		100A				
		125A				
		160A				
		250A				
		400A				
		630A				
		800A				

Signature & Seal of bidder

Date:

SECTION-2

UNIT RATES FOR THE SWITCHGEAR ITEMS / SERVICES FOR COMPONENTS' ADDITION / DELETION

BIDDER:		PRICE OFFER NO. & DATE:	
SL. NO.	DESCRIPTION	RATING	PRICE Ex Works (Rs)
22	INTELLIGENT / MOTOR CONTROLLERS FOR OUTGOING FEEDER	Upto 5.5kW	
		5.6-12kW	
		12.1-22kW	
		22.1-35kW	
		35.1-54.9kW	
		55-74.9kW	
		75-99.9kW	
		100-150kW	
III. COMMON ITEMS:			
1	RELAYS		
a)	80 (DC supply supervision relay)		
b)	86 (VAJH 23 or equivalent)		
c)	95 (Trip circuit supervision relay)		
d)	27 (Undervoltage relay - Numerical type)		
e)	27-N (No-volt relay)		
f)	2 (Timer)		
g)	DC Earth fault relay (CAEM 21 or equivalent)		
h)	CBCT + CAG12 Relay + VTT 11		
i)	25 (Check synch relay)		
j)	94 (Antipumping relay)		
k)	97 (PT FUSE MONITORING RELAY)		
l)	VAJC or equivalent		
m)	VAA63 or equivalent		
n)	Comprehensive electronic motor protection relay without communication facility		
o)	Comprehensive electronic motor protection relay with communication facility		
p)	Interposing relay		
2	NUMERICAL RELAYS		
a)	Numerical relay for I/C & B/C feeder of MCC		
b)	Numerical relay for ACB O/G feeder		
c)	Numerical relay for ACB controlled motor feeder		
3	STAYPUT SELECTOR SWITCH 5-WAY, 4-POLE IN EACH WAY		
4	SELECTOR SWITCH, 2-POLE, 4-WAY		
5	TNC SWITCH		
6	PB (2 NO + 2 NC)		
7	MCB, DP	6A	
		16A	
		32A	
		63A	
8	MCB, 4-POLE	16A	
		32A	
9	MPCB	16A	
		32A	
		63A	
		100A	
		250A	
10	MCCB	16A	
		32A	
		63A	
		100A	
		250A	
11	NIL		
12	INDICATING LAMP ASSEMBLY (LED)		
13	SLIDE IN CONTACT (SIC) FOR D/O MODULES (Male & Female)		
14	DUAL VOLTMETER		
15	DUAL FREQUENCY METER		
16	SYNCHROSCOPE		
17	ELCB		
18	CTs		
a)	METERING CTs	Upto 25A/1A	
		50A/1A	
		100A/1A	
		150A/1A	
		200A/1A	
		250A/1A	
		400A/1A	
		600A/1A	
		800A/1A	
		1250A/1A	

Signature & Seal of bidder

Date:

SECTION-2

UNIT RATES FOR THE SWITCHGEAR ITEMS / SERVICES FOR COMPONENTS' ADDITION / DELETION

BIDDER:		PRICE OFFER NO. & DATE:	
SL. NO.	DESCRIPTION	RATING	PRICE Ex Works (Rs)
		2500A/1A	
		3200A/1A	
		4000A/1A	
b)	CLASS PS CTs	630/1A	
		800/1 A	
		Upto 25A/1A	
		50A/1A	
		100A/1A	
		150A/1A	
		200A/1A	
		250A/1A	
c)	PROTECTION CTs	400A/1A	
		600A/1A	
		800A/1A	
		1250A/1A	
		2500A/1A	
		3200A/1A	
		4000A/1A	
d)	CBCT	100 mA	
19	Meters & their Selector Switches		
a)	AC ammeter		
b)	AC voltmeter		
c)	Voltmeter selector switch		
d)	Ammeter selector switch		
e)	kWh meter with Maximum Demand Indicator (MDI)		
f)	DC Voltmeter		
g)	DC Ammeter		
h)	Double voltmeter		
i)	Double frequency meter		
j)	Synchroscope		
k)	DC Shunt (75 mV)		
l)	kW meter		
m)	PF meter		
n)	kVA meter		
o)	Multifunction Meter (Communicable Type)		
20	Transducers		
a)	Current		
b)	Voltage		
c)	kW		
d)	kVAR		
21	Unit rate for 1 no. auxiliary contactor with 2 NO + 2 NC contacts	AC	
		DC	
		15A	
		30A	
		63A	
		100A	
22	Power contactors (AC with 2 NO + 2 NC)	150A	
		300A	
		400A	
		500A	
		630A	
		63A	
		100A	
		150A	
23	Power contactors (DC with 2 NO + 2 NC)	200A / 250A	
		400A	
		630A	
24	Auxiliary relay for contact multiplication	--	
25	Local starters (MK1 or equivalent)	< 5.5kW	
		22kW-D3	
26	DC starter modules	15kW-D3	
		11kW-D3	

SECTION-2

UNIT RATES FOR THE SWITCHGEAR ITEMS / SERVICES FOR COMPONENTS' ADDITION / DELETION

BIDDER:		PRICE OFFER NO. & DATE:	
SL. NO.	DESCRIPTION	RATING	PRICE Ex Works (Rs)
28(a)	ACB Closing Coil	1000A	
28(b)	ACB Closing Coil	800A	
28(c)	ACB Closing Coil	630A	
29(a)	ACB Shunt Trip Coil	1000A	
29(b)	ACB Shunt Trip Coil	800A	
29(c)	ACB Shunt Trip Coil	630A	
30(a)	Air Circuit Breaker	1000A	
30(b)	Air Circuit Breaker	800A	
30(c)	Air Circuit Breaker	630A	
31(a)	Limit Switch of ACB	1000A	
31(b)	Limit Switch of ACB	800A	
31(c)	Limit Switch of ACB	630A	
32(a)	Spring Charging Motor of ACB	1000A	
32(b)	Spring Charging Motor of ACB	800A	
32(c)	Spring Charging Motor of ACB	630A	
33	Type Test charges	For 65kA Switchboard	
a	Short Time withstand test		
b	Temperature rise test		
c	Type II Coordination test		
d	Duty cycle test for breaker		
e	Degree of protection test		
f	Mechanical endurance test for breakers		
g	Electrical endurance test for breakers		
34	Communication		
a	Ethernet Switch		
35	Miscellaneous		
a	Breaker Handling Truck		
b	Breaker Operating Handle		
c	Fuse Pullers		
d	Breaker Racking Handle		
e	Glass for front facia meters		
f	Shrouds		
g	Gaskets		
36	Lumpsum price including Service, Lodging, Boarding etc.for Supervision of Erection & Commissioning at site	One Man day	
37	Wall Mounted DB (with 1 No.MCCB Incomers of 150A and 6 no. outgoing feeders of 32A MCCB) - 3Ph.	--	