



BHARAT HEAVY ELECTRICALS LIMITED  
PROJECT ENGINEERING MANAGEMENT, NOIDA

Date-29-May-26

CORRIGENDUM-02

PROJECT	:	2 X 800 MW NTPC SINGRAULI TPP Stage-III
PACKAGE	:	LT Switchgear
ENQUIRY NO.	:	77/26/6027/SHA, Dated 02.05.2026
SUBJECT	:	Due date extension & reply of pre bid queries
BHEL Gepnic Tender ID	:	2026_BHEL_60787_1

Type of Corrigendum			
Technical Corrigendum -	<input checked="" type="checkbox"/>	Commercial Corrigendum -	<input checked="" type="checkbox"/>

With reference to the above-mentioned tender enquiry for **LT Switchgear**, following may please be noted:-

1. Due date for bid submission has been extended from **02.06.26, 02.00 P.M to 15.06.26, 02.00 P.M.** Bid opening shall be done on **15.06.26, 04.00 P.M.**
2. W.r.t to Pre-bid meeting held on 22.05.26, please find the enclosed Technical corrigendum.

Digitally signed by SHAMIK GUPTA  
DN: c=IN, o=Bharat Heavy Electricals Limited, ou=Department of Heavy Industry, postalCode=201301, l=Gautam Buddha Nagar, st=Uttar Pradesh, street=BHARAT HEAVY ELECTRICALS LIMITED, PLOT NO - 25, HRDI BUILDING, CDT, 2ND FLOOR HALL SEC - 16A, NOIDA, 25.4.20=7e7b5fda1db2650271bed1d1354b5fa07107b4ecbf79360a33ad4f4c99a5480d, serialNumber=01296bc789cc50361a0238c26dd668e088e53c2151a250cd7b7636eda0bb6dae, email=shamikgupta@bhel.in, cn=SHAMIK GUPTA

Yours faithfully,

For and on behalf of BHEL

**2X800MW SINGRAULI STPP  
LV SWITCHGEAR (AMENDMENT-I)**

**ALL THE BIDDERS TO NOTE FOLLOWING POINTS:**

S. NO.	Volume	Section/ Description	Clause no.	Sheet No.	Existing clause/ Details	Modified clause/ Details
1.0	Technical	Unpriced Schedule- BOQ-CUM-PRICE SCHEDULE FOR LT SWITCHGEAR-ANNEXURE-H	S.No. 30	160 of 184 of Technical Specification	Connection from PMCC/MCC panel to PMCC/MCC panel	Per Meter Connection from PMCC/MCC panel to PMCC/MCC panel
2.0	Technical	TECHNICAL DATA PART-A-ANNEXURE-A.2 -MODULE WISE BOM	S.No. 6 DM/PM/AM -DETAILS OF NUMERICAL RELAY	47-48 of 184 of Technical Specification	<p><b><u>BREAKER CONTROLLED MOTOR FEEDER RATED 90KW &amp; ABOVE (CONTROLLED FROM DDCMIS/PLC/ATRS)</u></b></p> <p>NUMERICAL RELAY WITH COMMUNICATION FACILITY (ONE LOCAL FRONT PORT FOR COMMUNICATION WITH LAPTOP &amp; TWO RJ REAR PORT AS PER IEC-61850 FOR COMMUNICATION WITH DDCMIS) FOR FOLLOWING FUNCTIONS:</p> <ul style="list-style-type: none"> <li>• PHASE OVER CURRENT PROTECTION (50/51)</li> <li>• EARTH FAULT PROTECTION (50N/51N)</li> <li>• STALLING/ LOCKED ROTOR PROTECTION (50L/R)</li> <li>• THERMAL OVERLAOD PROTECTION (49)</li> <li>• NEGATIVE PHASE SEQUENCE PROTECTION (46)</li> <li>• BUS NO VOLT</li> <li>• REPETATIVE START PROTECTION (66)</li> <li>• FAULT LOCKOUT FUNCTION (86)</li> <li>• UNDER VOLTAGE WITH TIMER (27M)</li> <li>• MOTOR DIFFERENTIAL PROTECTION (87M)</li> <li>• CIRCUIT BREAKER FAILURE (50BF)</li> </ul>	<p><b><u>BREAKER CONTROLLED MOTOR FEEDER RATED 90KW &amp; ABOVE (CONTROLLED FROM DDCMIS/PLC/ATRS)</u></b></p> <p>NUMERICAL RELAY WITH COMMUNICATION FACILITY (ONE LOCAL FRONT PORT FOR COMMUNICATION WITH LAPTOP &amp; TWO RJ REAR PORT AS PER IEC-61850 FOR COMMUNICATION WITH DDCMIS) FOR FOLLOWING FUNCTIONS:</p> <ul style="list-style-type: none"> <li>• PHASE OVER CURRENT PROTECTION (50/51)</li> <li>• EARTH FAULT PROTECTION (50N/51N)</li> <li>• STALLING/ LOCKED ROTOR PROTECTION (50L/R)</li> <li>• THERMAL OVERLAOD PROTECTION (49)</li> <li>• NEGATIVE PHASE SEQUENCE PROTECTION (46)</li> <li>• BUS NO VOLT</li> <li>• REPETATIVE START PROTECTION (66)</li> <li>• FAULT LOCKOUT FUNCTION (86)</li> <li>• UNDER VOLTAGE WITH TIMER (27M)</li> <li>• -----</li> <li>• CIRCUIT BREAKER FAILURE (50BF)</li> </ul>

					<ul style="list-style-type: none"> <li>• PHASE REVERSAL PROTECTION (46R)</li> <li>• MOTOR START MONITORING &amp; RESTART INHIBIT FEATURE</li> <li>• VT FUSE-FAIL PROTECTION (60)</li> <li>• CURRENT UNBALANCE PROTECTION</li> <li>• RELAY SELF SUPERVISION</li> <li>• CIRCUIT BREAKER CONDITION MONITORING</li> <li>• TRIP CIRCUIT SUPERVISION (95)</li> <li>• CURRENT TRANSFORMER SUPERVISION</li> <li>• VOLTAGE TRANSFORMER SUPERVISION</li> <li>• BREAKER CONTROL FUNCTION</li> <li>• DISTURBANCE RECORDING</li> <li>• FAULT RECORDING</li> <li>• EVENT RECORDING</li> <li>• MEASUREMENT FUNCTIONS (3I, Io, 3U, Uo, Hz, P, Q, E, PF, H, 27U)</li> <li>• NO. OF DI/DO SHALL BE AS PER SCHEME REQUIREMENT</li> <li>• ALL THE BINARY INPUTS SHALL BE CAPABLE OF TAKING THE 220V DC, HOWEVER THE THRESHOLD VALUE FOR BINARY INPUTS SHALL BE MORE THAN 70% OF RATED CONTROL SUPPLY VOLTAGE</li> <li>• CT INPUT 5 NOs. (3-Ph, 1 for REF and 1 SPARE) WITH CT SECONDARY CURRENT OF 1A</li> <li>• PT INPUT 4 NOs. (3 NOS FOR BUS VOLTAGE &amp; 1 NO FOR LINE VOLTAGE)</li> </ul>	<ul style="list-style-type: none"> <li>• PHASE REVERSAL PROTECTION (46R)</li> <li>• MOTOR START MONITORING &amp; RESTART INHIBIT FEATURE</li> <li>• VT FUSE-FAIL PROTECTION (60)</li> <li>• CURRENT UNBALANCE PROTECTION</li> <li>• RELAY SELF SUPERVISION</li> <li>• CIRCUIT BREAKER CONDITION MONITORING</li> <li>• TRIP CIRCUIT SUPERVISION (95)</li> <li>• CURRENT TRANSFORMER SUPERVISION</li> <li>• VOLTAGE TRANSFORMER SUPERVISION</li> <li>• BREAKER CONTROL FUNCTION</li> <li>• DISTURBANCE RECORDING</li> <li>• FAULT RECORDING</li> <li>• EVENT RECORDING</li> <li>• MEASUREMENT FUNCTIONS (3I, Io, 3U, Uo, Hz, P, Q, E, PF, H, 27U)</li> <li>• NO. OF DI/DO SHALL BE AS PER SCHEME REQUIREMENT</li> <li>• ALL THE BINARY INPUTS SHALL BE CAPABLE OF TAKING THE 220V DC, HOWEVER THE THRESHOLD VALUE FOR BINARY INPUTS SHALL BE MORE THAN 70% OF RATED CONTROL SUPPLY VOLTAGE</li> <li>• CT INPUT 5 NOs. (3-Ph, 1 for REF and 1 SPARE) WITH CT SECONDARY CURRENT OF 1A</li> <li>• PT INPUT 4 NOs. (3 NOS FOR BUS VOLTAGE &amp; 1 NO FOR LINE VOLTAGE)</li> </ul>
3.0	Technical	TECHNICAL DATA PART-A	CLAUSE NO 4.1 c)	19 of 184 of Technical Specification	INTERNAL ARC TEST FOR PERSONNEL AND ASSEMBLY PROTECTION AS PER IEC/TR 61641. TEST SHALL BE CONDUCTED FOR BREAKER COMPARTMENT, BUSBAR CHAMBER, INCOMING SIDE OF SMALLEST SIZED MODULE, OUTGOING TERMINALS OF MODULE IN CABLE ALLEY.	INTERNAL ARC TEST SHALL BE AS PER ANNEXURE-I ATTACHED.

Singrauli TPS- LV SWITCHGEAR  
Annexure-I  
Internal Arc (IAC) Testing

S. No.	Test Location	Clarification
a)	Outgoing side of Incomer breaker	As these switchgear locations are not protected with current-limiting devices, IAC testing with 50 kA for 0.5sec will be required to be conducted. The breaker must remain in the ON position during the period.
b)	Main Busbar/Horizontal busbar	
c)	Cable alley	As per IEC TR 61641: 1.0 If the connected module of the cable alley is protected with a current limiting device, arc can be initiated by keeping current limiting device in circuit. 2.0 Accordingly, the testing shall be carried out as specified in clause no. 8.5 and 8.6 of the IEC TR 61641.  Since MCCB is used in the modules, test shall be conducted at the outgoing of 400 Amp module with MCCB in service.
d)	Incoming side of smallest module	As per IEC TR 61641, if a part of the circuit meets the requirement of arc ignition protected zone, arc need not to be initiated there. Dielectric and IP tests, as mentioned in IEC TR 61641, will required to be conducted at that part.  If the bidder confirms that all of their modules comply with the requirements of IEC TR 61641 of the arc ignition protected zone, the incoming side of the modules can be declared as an arc ignition protected zone. In this case, to fully meet the specification for the incoming side of the smallest module, IAC test shall be conducted at the topmost portion of the vertical bus bar which is completely uninsulated and does not meet with the arc ignition protected zone requirement.  Else, IAC test shall be conducted at the incoming side of the smallest module.