



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

TCN – 02

Ref: PSER:SCT:SDG-T2142:TCN-02

Date: 09-03-2022.

Sub	Tender Change Notice (TCN) - 02	
Job	Erection, Testing and Commissioning of Steam Turbine & its Auxiliaries, Generator & its Auxiliaries, Condenser & its Auxiliaries, Pumps, Dosing Systems (LP, Oxygen, NAOH etc.), Central Oil Purification System, Condenser on Line Tube Cleaning System, Plate Heat Exchangers, TG Integral Piping, DG Sets and Misc equipment etc., including Erection & Commissioning of Fire Protection System with associated piping job for 1x660 MW, Unit#5 Sagardighi Project, Murshidabad, West Bengal.	
Ref	1.0	Tender no. PSER:SCT:SDG-T2142:22
	2.0	BHEL's NIT, vide reference no. PSER:SCT:SDG-T2142:8999, Date: 23-02-2022.
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:SDG-T2142:TCN-01, dated 04-03-2022.
	4.0	All other pertinent issues till date.

With reference to above, following points/ documents, relevant to tender, may please be noted and complied with while submitting offer.

- 1.0 Introduction of new clauses (Cl. No. 19.1.10, 19.1.11 & 19.1.12) under clause no. 19.1 of TECHNICAL CONDITIONS OF CONTRACT, VOLUME-IF-CML, R-00 as below:

Cl. No.	Description
19.1.10	EQUIPMENTS INSTALLATION – COMMON REQUIREMENTS
19.1.10.1	<u>Machining of shims, packers, Coupling Bolts and other items</u> The contractor within his quoted price has to either own or have tie up for a work shop for machining/cutting/grinding/polishing of key ways, packer plates, hanger/support items, machining of Nuts, bolts, studs, tie-rods, Coupling Bolts, bushes of all equipment, dowel pins, jack bolts etc. and other machining works. The machining scope is elaborated in brief :
19.1.10.2	During the erection, commissioning, handing over of the sets, the contractor within his quoted price has to carry out necessary machining jobs on Main equipment and Auxiliaries like enlargement of holes by drilling (including flanged faces/surfaces /pieces), gas cutting/grinding/other machining methods and finishing to achieve proper matching/parallelism/ proper erection/ leak proof joints etc., machining /rectification of key ways, machining of coupling bolts, fabrication/ machining of dowel pins, taking out damaged/ seized bolts etc. and reconditioning, threading, making additional holes as per requirement, dressing up of holes/cut out etc. and other machining activities as required to carry out the total execution. In case of relocation of holes/cut outs, the vendor has to carry out blocking of extra holes/cut outs as per requirement of BHEL. The total machining jobs required during erection, testing, commissioning, handing over of Unit to customer is included in the contractor's quoted price. The contractor within his quoted price has to enlarge, relocate, make additional holes in flanges, parts of equipment for mating flanges treating it as part of his scope, in case of any discrepancy found in flanges. The holes are to be finished with precision as decided by BHEL and necessary threading inside holes and dressing up also is to be done. Closing of existing holes by suitable method as suggested by BHEL is also to be carried out by the contractor, in case the holes are not required in earlier locations."
19.1.10.3	Machining of un-machined packer plates sent by BHEL/Units are included in contractor's scope

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POWER SECTOR EASTERN REGION, DJ-9/1, SECTOR-II, SALT LAKE CITY, KOLKATA - 700 091

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	including scrapping, matching, machining etc. Additional packer plates if required, will have to be arranged and prepared by the contractor out of steel plates (for thickness lesser than 5.0 mm), steel sheets to meet site requirements and is included within normal scope of work of the contractor. Necessary steel plates for this purpose (for plate thickness of above 5.0 mm) will be provided by BHEL free of cost. SS shims/other shims (for thickness of less than 5.0 mm.) which are required in addition to the supplied quantity of BHEL/Manufacturing Units are included in vendor's scope at no extra cost to BHEL. For misc equipments/misc pumps/misc tanks etc for which shims are not supplied normally by manufacturing units. In such cases, packer plates & SS shim (thk lesser than 5.0 mm) shall be arranged by vendor.
19.1.10.4	Enlargement /relocation of holes/pockets, making dowel pin holes, arranging threading arrangements in machined holes in the equipment/system/piping are included in the scope. Material build up and dressing up in case of patch up on holes /cut outs by material build ups are also included in the vendor's scope at no extra to BHEL.
19.1.11	ELECTRICAL AND INSTRUMENTATION
19.1.11.1	Contractor shall mount all flow indicators, centrifugal/speed switches of motors, accumulators, pressure regulators, etc which are received loose and which are to be erected/mounted at site on air lines, water lines, oil lines, steam lines, auxiliaries and firemen floor and other operating floors on boiler/power house and other equipment. These are to be mounted during erection for finalizing routing/position etc. They are to be dismantled after completion of erection work and handed over to BHEL for calibration. After calibration, these instruments shall be remounted by the contractor in their respective positions just before commissioning.
19.1.11.2	Certain instrumentation like, pressure gauges, power cylinders, flow meters, valve actuators, flow indicators, etc are received in assembled condition as integral part of equipment. Contractor shall dismantle such equipment at an appropriate stage under the instruction of BHEL and hand them over to BHEL for calibration and storage. Contractor shall re-erect them in position just before commissioning of the equipment. Commissioning of the actuator is excluded from the scope of work.
19.1.11.3	Seal welding of Thermowells, plugs before Hydrotest of equipment and piping systems is also within the scope of this work/specification. Contractor shall also remove the seal welded plugs by process of grinding and fix and seal weld Thermowells after Hydrotest/steam blowing of lines.
19.1.11.4	Welding of all Thermowells, draft, pressure and temperature instrumentation points, and all other instrumentation points on piping, and auxiliaries is within the scope of this work.
19.1.12	PG TEST (PERFORMANCE GUARANTEE TEST)
19.1.12.1	Providing services for preparation for performance guarantee test of equipment /systems is in the scope of this contract.
19.1.12.2	Providing assistance during conductance of performance guarantee test.
19.1.12.3	The scope in general shall include: - Installation and welding of all tapping points for fixing of sensors / pr-temp. gauges / thermo-couples / RTDs etc. including laying of connecting wires, impulse pipes, valves fittings etc. - Providing assistance in calibration test of equipment's as may be required. - Replacement of regular flow nozzles/orifices with PG test flow nozzles/orifices and restoring back regular ones after PG test. - Normalization after PG test (removal of impulse pipings, instruments, thermowell, data-logger, temporary fixtures etc.). - Receipt of all test equipment, appliances etc. its safe handling & storage transportation

	to site & storage at site. - Manpower assistance for laying of PG Test cables after receiving. - Dismantling of various PG test instruments/appliances/devices etc. re-placing in their original cases after re-calibration & handling over to BHEL. - Re-packing of instruments. - Removal/restoration of insulation/sheeting for PG test - Complete restoration of all PG test locations after the test - Attending to passing valves and Cleaning of passing valves. NOTE : The above tests and guidelines mentioned are only to give a brief idea of the type of work involved at site and does not constitute the total scope of work.
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- 2.0 The clarifications to bidder's queries are attached as **Annexure-A** to this TCN-02.
- 3.0 SI No 5 of Preamble of Volume-III-Price Schedule-Rev-00 stands deleted.
- 4.0 Due date of submission of offer is extended from 09-03-2022 to **16-03-2022 (13-00 hrs. IST)**.
- 5.0 Revised 'No deviation certificate' as per enclosed Annexure-2. Bidder shall submit no deviation certificate as per enclosed format only.
- 6.0 All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD

DY. MGR (SCT)

Encl : As above.

Erection, Testing and Commissioning of Steam Turbine & its Auxiliaries, Generator & its Auxiliaries, Condenser & its Auxiliaries, Pumps, Dosing Systems (LP, Oxygen, NAOH etc.), Central Oil Purification System, Condenser on Line Tube Cleaning System, Plate Heat Exchangers, TG Integral Piping, DG Sets and Misc equipment etc., including Erection & Commissioning of Fire Protection System with associated piping job for 1x660 MW, Unit#5 Sagardighi Project, Murshidabad, West Bengal.

Tender no. PSER:SCT:SDG-T2142:22					TCN-02 (ANNEXURE-A)
SL NO	Reference clause of tender document	Clause No.	Existing provision	Bidder's query	BHEL's Reply/ clarification
1	TECHNICAL CONDITIONS OF CONTRACT, VOL-IF, R-0	18.11.7.1	Handling, lifting from special trailer/resting place in front of A row and placement on TG foundation with the help of Strand-Jack is included in the scope of contractor. The contractor shall tie up with specialized agency sufficiently experienced in handling of 500-660 MW Generator stator by strand jack method and take approval of BHEL regarding the agency and the method."	<i>We are requesting you to remove the Strand Jack scope from the contract and requesting you to arrange the same by BHEL.</i>	Shall be as per tender.

FORMAT FOR NO DEVIATION CERTIFICATE
(To be submitted in the bidder's letter head)

BHARAT HEAVY ELECTRICALS LIMITED,
 Power Sector - Eastern Region,
 Plot no 9/1, DJ Block, Sector – II, Salt Lake City,
 Kolkata – 700 091

Sub	No Deviation Certificate.	
Job	Erection, Testing and Commissioning of Steam Turbine & its Auxiliaries, Generator & its Auxiliaries, Condenser & its Auxiliaries, Pumps, Dosing Systems (LP, Oxygen, NAOH etc.), Central Oil Purification System, Condenser on Line Tube Cleaning System, Plate Heat Exchangers, TG Integral Piping, DG Sets and Misc equipment etc., including Erection & Commissioning of Fire Protection System with associated piping job for 1x660 MW, Unit#5 Sagardighi Project, Murshidabad, West Bengal.	
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	5.0	All other pertinent issues till date.

Dear Sirs,

With reference to above, this is to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc. We also confirm that we have not changed/ modified the tender documents as appeared in the website/ issued by you and in case of such observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to technical specification, integrity pact (if applicable) and acceptance to reverse auctioning process.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted/uploaded offer/documents in accordance with tender instructions with acceptance of the terms & conditions of the tender by us and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized
representative of the bidder)

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

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