

## ADDENDUM-6

DATE: 12-01-2016

Stacker Machine and Reclaimer Machine Package for 5X800 MW Yadadri TPS

Tender Ref : 77/15/6212/RCD

1. Following changes have been made in the Technical Specification :

Sl.No	Technical Specification Clause Reference	Existing clause no:	Revised clause no:
1	Clause no: C in technical enquiry spec: <b>TSG/YTPS/S/R</b> under “ <b>DESIGN PARAMETERS FOR STACKER MACHINES</b> ” page 10 of 40 under the sub topic “ <b>TECHNICAL PARAMETERS</b> ” Type: of Stacker Machine	Unidirectional type boom Stacker Machine with by-pass	Unidirectional type boom Stacker Machine

2. The following documents have been uploaded on [www.bhelisg.com](http://www.bhelisg.com) website:

- a) Revised Consortium Agreement
- b) Pre-bid Queries & clarifications have been uploaded on the web.

3. Any further addendum such issued carry part of the bidding documents and this will be available at the website [www.bhelisg.com](http://www.bhelisg.com). Hence bidders are requested to visit the website [www.bhelisg.com](http://www.bhelisg.com) on regular basis.

**For Further Queries if any, Contact:**

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**PRE- QUALIFICATION REQUIREMENT  
FOR 5 X 800MW YADADRI CHP – STACKER MACHINE AND RECLAIMER  
MACHINE**

**Annexure- A**

**CONSORTIUM AGREEMENT**

(To be executed on Rs. 50/- Non - Judicial Stamp Paper)

THIS AGREEMENT is made and executed on \_\_\_\_ day of \_\_\_\_\_ by and between (1) M/s. \_\_\_\_\_, represented by Shri \_\_\_\_\_, designated as \_\_\_\_\_, having its registered office at \_\_\_\_\_, ( The First Party, i.e, the Bidder) Company incorporated under the Company's Act 1956 having its registered office at \_\_\_\_\_ (hereinafter referred to as the "Bidder" which expression shall include its successors, administrators, executors and permitted assigns) and (2) M/s. \_\_\_\_\_, (The Second Party, i.e, the associates), a company incorporated under \_\_\_\_\_( Company act), having its registered office at \_\_\_\_\_ (hereinafter called the "Associates", which expression shall include its successors, administrators, executors and permitted assigns).

WHEREAS, the Industrial Systems Group, one of the Units of M/s. Bharat Heavy Electricals, having its office at Prof. CNR Rao Circle, Opp. Indian Institute of Science, Malleswaram, Bangalore-560 012, A Government of India Undertaking (hereinafter called the "Employer", " which expression shall include its successors, administrators, executors and permitted assigns), proposes to issue / issued a Notice Inviting Tender ( hereinafter referred to as NIT), inviting bids from the individual bidders for undertaking the work of " \_\_\_\_\_(Package name) for \_\_\_\_\_( Project name) at \_\_\_\_\_(site location) (hereinafter referred to as the "Project") being set up by M/s. \_\_\_\_\_ (hereinafter referred to as the " Owner").

AND WHEREAS, the said NIT enables submission of a bid by a Party subject to fulfilment of the stipulations pre-qualification criteria specified in the said NIT.

AND WHEREAS, the Bidder desirous of submitting bid in response to the said NIT for the said Project, and by itself is not meeting all the qualifying the Pre-qualification Criteria specified in the said NIT and in order to fully meet the qualifying requirements of NIT, the Bidder entered into this Consortium Agreement with the Associates.

AND WHEREAS the Bidder and the Associates are contractors engaged in the business of carrying out various items of works. WHEREAS, the two parties have agreed to and constitute themselves into a consortium for the purpose of carrying out the said works relating to this Project, and that the consortium will be continued till the completion of the works in all respects including the performance guarantee period as may be specified in the NIT or PurchaseOrder/Work Order.

AND WHEREAS, with this consortium Agreement, the Bidder and Associates together meets all the pre-qualification criteria as mentioned in the NIT.

WHEREAS, the parties have agreed to certain terms and conditions which forms a part of this consortium agreement, as mentioned hereinbelow :

NOW therefore, this agreement witnesseth as follows :

1. The Bidder and Associates hereby constitute themselves into a Consortium for the purpose of submitting a Bid and undertaking the said works pursuant to the said NIT as hereinafter stated.
2. The Bidder will be the leader (Lead Partner) and will be responsible for the execution of the entire scope of works and its complete functioning as stated in the NIT.
3. The Bidder shall undertake the entire scope of work as detailed in the NIT jointly with the Associates.
4. The Associates shall undertake their part of work as detailed in the NIT jointly with the Bidder.
5. The Bidder and the Associates hereby declare and confirm that each of them jointly and severally will fulfil the required minimum qualifying requirements as prescribed in the said NIT for the works agreed to be undertaken by them as stated herein above.

**PRE- QUALIFICATION REQUIREMENT  
FOR 5 X 800MW YADADRI CHP – STACKER MACHINE AND RECLAIMER  
MACHINE**

6. The Bidder and the Associates also hereby agree that both of them shall be jointly and severally responsible for the completion of the said works as per the schedule. Further, if the Employer and or the Owner sustains any loss or damage on account of non-performance or any breach of contract, both the Bidder and Associates, as a consortium partners, individually and severally undertake to compensate and pay such losses / damages so caused to the Employer and or the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever, in line with and subject to the terms and conditions of the contract with the Employer.
7. AND WHEREAS, the Bidder and the Associates, do hereby undertakes to indemnify both the Employer and the Owner to make good any losses/damages sustained by them due to the negligence or any acts of Bidder and or the Associates which results in loss / damages to the Employer / Owner, in line with and subject to the terms and conditions of the contract with the Employer.
8. AND WHEREAS Bidder and the Associates hereby agree that in case of any dispute arising in and out of this consortium agreement shall be dealt in accordance with the provisions of Indian Arbitration and Conciliation Act, 1996 and the place of Arbitration will be at India and the language of Arbitration will be English.
9. AND WHEREAS both the Bidder and the Associates hereby agree and undertake that they shall provide adequate finances, suitable Tools, Plants, equipments, tractors, trailers, other transportation equipment, other Tools and Plants, Measuring and Monitoring Equipments (MMEs), Men and Machinery etc., for the proper and effective execution of the works to be undertaken by them as specified herein above.
10. AND WHEREAS, it was agreed to interse, between the parties hereto that all the consequential liabilities ec., arising out of any default in the due execution of the said works shall be borne by the consortium leader and or party in default, that is by party in whose area of works default has occurred, provided however, so far as the Employer is concerned, both The bidder and the Associates shall be jointly and severally liable irrespective of their scope of work.

IN WITNESS WHEREOF, the parties above named have signed this agreement on the day month and year first above written at \_\_\_\_\_ (place).

For and on Behalf of The Bidder

AUTHORISED SIGNATORY ::

OFFICIAL ADDRESS :

COMPANY SEAL

WITNESSES :

1.

2.

For and on Behalf of the Associates

AUTHORISED SIGNATORY ::

OFFICIAL ADDRESS :

COMPANY SEAL

WITNESSES :

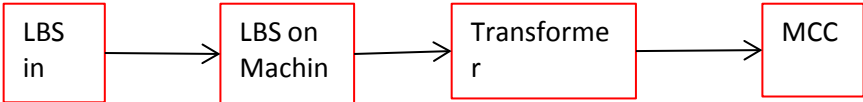
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**Enquiry No. : 77/15/6212/RCD**

**Stacker Machine and Reclaimer Machine Package for 5X800 MW Yadadri TPS**

Sl. No.	Document No. /Clause No/Page No.	Bidder's Query	BHEL Reply
1	TSG/YTPS/S/R - S.No. I - Page No. 40 of 40	<p>TSGENCO Specification of KOTHAGUDEM TPS does not matching the requirement of Yadadri TPS. Even yard machine and stockpile information of the KTPS is not same as the YTPS. It is stated in the enquiry specification all the document of KTPS (i.e., Volume-II - 555 pages, Volume - III - 902 pages, Volume IV - 225 pages, Volume - VI - 622 pages, Voulme - VII - 926, Voulme VIII-12 +Dwgs., Volume - X -30 Pages - Total 4000 + Pages) is to be signed and stamped.</p> <p>We request you to specify what are all the documents pertating to this package which is to be followed from the KTPS Specification. We will sign those documents and submit along with the offer.</p>	<p>Bidder to note that capacities mentioned in the technical enquiry specification are different from those indicated in TSGENCO NIT. But capacities in the technical enquiry specification are final and bidder shall follow the same. All the other technical specification shall be as per TSGENCO NIT only.</p>
2	TSG/YTPS/S/R - S.No. I - Page No. 5 of 40	<p>We request you furnish us the purpose and location of cover storage shed.</p>	<p>Open storage and Closed storage shed is in the scope of bidder for storage of bidder supplied equipments.</p>
3	Rail and Rail fixture Scope	<p>Stockpile length of 442m as per the calculation furnished along with the enquiry specification is considered accordingly the rail length is arrived if any increase in pile length will have a cost implication</p>	<p>Rail length shall be considered for the entire travel length of the stacker &amp; reclaimer machine including storm achoring for the machines at the either extermes for each machines. Both Stacker &amp; reclaimer machines shall be designed so as to cover the entire length of the stock pile.</p>
4	<p>Drawings of all the equipment shall be furnished in editable AutoCAD format (page no. 22 of 40 TSG/YTPS/S/R)</p>	<p>Only GA Drawing of Equipment (i.e., stacker and reclaimer GA),Stockyard layout and civil loading information shall be furnished during detail engineering.</p> <p>We request you to provide the drawing list which is required in the editable fromat other than the above specified drawings</p>	<p>All necessary system/equipment drawings shall be furnished by the bidder for approval/reference/ information related to Stacker &amp; Reclaimer machine in editable format.</p>

5	TSG/YTPS/S/R - S.No. 14 - Page No. 8 of 40 & TSG/YTPS/S/R - S.No. E-9 - Page No. 18 of 40	In S.No. 14 of Pg.No. 8 of 40 it is stated that the "Fixing of rails and grouting of rails shall be in the scope of BHEL civil contractor". whereas in the S.No. E-9 - Page No. 18 of 40 it is stated that "Supply of grouting cement and grouting of all mechanical equipment / items and its drive base shall be in the bidder's scope". We have not considered the Grouting of rail and its fixture. Kindly confirm	Supply of grouting cement and grouting of all mechanical equipment / items and its drive base shall be in the bidder's scope if applicable.
6		By-Pass Arrangement in Stacker - We have considered collapsible type tripper with separate intermediate conveyor. Kindly confirm the arrangement which is acceptable to BHEL	By pass arrangement is not applicable. The respective clause is revised in the corrigendum issued along with this clarification.
7	TSG/YTPS/S/R Page-25 of 40, Sr.no:4	<p>The requirement listed is contradicting within teh point and also with Sr.no-1. If LBS is provided on Land then HT fuse junction box is not required. The incoming 3.3kV cbale will be terminated to LBS in land and further through trailing cable it will get terminated to LBS mounted machine.</p>  <pre> graph LR     A[LBS in] --&gt; B[LBS on Machin]     B --&gt; C[Transforme r]     C --&gt; D[MCC]   </pre> <p>Customer shall kindly clariy the exact requirement.</p>	Bidder to refer clause 1.01.00, V.V-A/S-VIII : 19 of Volume 5 of tender specification, where by both land mounted LBS and HT JB are required and the same shall be in Bidder's scope as per enquiry specification.
8	TSG/YTPS/S/R Page-26 of 40, Sr.no:11	<ol style="list-style-type: none"> <li>Lightning protection shall not be required for machines. Sotckyard lighting pole which was being supplied by others shall have the lightning arestor with it. We presume that the pole will cover the complete stock pile area.</li> <li>Tenovo scope of earthing shall be for machine pheriphery only. Rail earthing shall be by others.</li> <li>Seperate earth pit shall not be possible for mobile machine applications. All the earthing will be commonly connected to Earth current collector only.</li> </ol>	<ol style="list-style-type: none"> <li>Bidder to note that the stock yard is very large and lighting poles donot cover the complete stockyard. Hence, Lightning protection if required/ insisted by customer/consultant shall be provided by successful bidder without any price implication to BHEL.</li> <li>Not acceptable. Shall be as per clause 11, section F of BHEL enquiry spec. BHEL shall only provide earth mat along the grade slab of the yard conveyor with risers at regular interval.</li> <li>Electronic earthing pit shall be in Bidder's scope as per enquiry specification (clause 11, section F of BHEL enquiry spec).</li> </ol>
9	TSG/YTPS/S/R Page-29 of 40, Sr.no:20	The requirmetn of two (2) nos. desk type handset station per machine is not clear. Kindly clarify the exact requirement.	Two no.s desk type phones shall be provided at suitable locations on the machine to facilitate communication.

10	TSG/YTPS/S/R Page-29 of 40, Sr.no:21	<p>Required Communication protocol shall be clarified.</p> <p>Tenova shall supply Radio modem / FO interfacing unit in Main DCS / CHP DCS, however the installation, power requirement for the unit , connectivity cable shall be in DCS / CHP DCS vendor scope.</p>	<p>Wireless interfacing or connectivity shall be considered between machine mounted PLCs and CHP DCS. However, Radio modem or RTU type shall be decided during detailed engg only as per specification. Customer/consultant decision shall be final and binding on bidder without any commercial implication to BHEL. Also, connectivity of cables upto the BHEL provided Ethernet switch in control room shall be in Bidder's scope as per specification. Any software required for the above in BHEL supplied system shall also be in Bidder's scope.</p> <p>Only power supply for equipment in CHP control room shall be by BHEL for which successful Bidder shall provide the requirement (no.of feeders, type and rating of feeders) in advance to BHEL.</p>
11	TSG/YTPS/S/R Page-30 of 40, Sr.no:24	<p>This clause call for Redundant PLC for Stacker / reclaimers and communication module for IO shall be redundant. However in technical specification DOCUMENT NO. e-PCT/TS/K/02/2014-15, page 79, clause 3.01.01 it specifies as stand alone PLC for machines. BHEL shall clarify the exact requirement.</p> <p>However in general specification calls for communication redundancy , hence Tenova shall consider Redundant PLC, redundant power supply module, redundant communication module and IO module will be non-redundant.</p>	<p>PLC system shall be standalone with reference to the Main CHP DCS system. However, PLC system shall be in hot standby configuration as indicated in the section F/sl no 24/pg 30 of 40 in Tech Enquiry Spec. All redundancy (including IO) shall be as indicated in volume 6 of tender specifications</p>
12	TSG/YTPS/S/R Page-33 of 40, Sr.no:30 & 31	<p>Tenova requesting to exclude the scope of PA &amp; telephone system to avoid the interfacing difficulties with the system being supplied by others. We shall consider the required number of control cables for the same.</p>	<p>Not acceptable. PA and telephone system for machine shall be in Bidder's scope as per specification. Also, required cables upto land mounted JB for interfacing these system with main plant shall be considered by Bidder.</p>

13	TSG/YTPS/S/R Page-34 of 40, Sr.no:4	<p>Redundancy of field devices shall not be possible in machine applications.</p> <p>However in machine as standard we will prove two type of switches like operation limit switch &amp; Emergency limit switch.</p> <p>For example, In travel there are two limits as below,</p> <ol style="list-style-type: none"> <li>1) Operational limit non contact type (Proximity switch) - Whenever the switch is activated it will stop only the respective feeder.</li> <li>2) Emergency limit - lever type switch - If system fails to stop in operational limit, then the emergency limit switch gets activated and it will give trip command to main Incomer. Hence ensured that further electrical operation of machine is stopped.</li> </ol>	<p>redundancy shall be as per specification only. However, any special requiremnt/conditions for machines shall be discussed with customer/consultant during detailed engg and customer's decision shall be binding on Bidder without any commercial implication to BHEL.</p>
14		<p>Belwo listed mode of interface are requested in contract,</p> <ol style="list-style-type: none"> <li>1. Control cable for interfacing with Main CHP DCS.</li> <li>2. Wireless communcation RTU type</li> <li>3. FO (Fibre optic cable)</li> </ol> <p>When FO (Fibre optic cable) is used it will cater the system requirement, hence we can avoid wireless communication. Requesting BHEL to check &amp; confirm the final requirement.</p>	<p>Bidder to note that following are mandatory to establish communication between machine PLC/ CHP DCS:</p> <ol style="list-style-type: none"> <li>1) Hardwired (through Control cable)</li> <li>2) Soft link (through wireless system only) Since stacker/reclaimer are moving machines, wireless system is preferred over FO connectivity. Hence same shall be considered by Bidder. Type of wireless shall be decided during detailed engg.</li> </ol>

15		<p>Since the specification is common for complete plant it is not possible to confirm the complete E&amp;I specification for Stacker Reclaimer application. We hereby list the key deviation from the specification.</p> <p>1) MCC shall be of non-drawout, front access only. No rear access.</p> <p>2) Spare feeder shall be as follows, One number higher rating motor feeder and one number power feeder. To avoid the increase in E-house dimension we restrict the spare feeder provisions in machine application.</p> <p>3) DCDB / Battery charger shall not be provided. However if DC power is required for ACB incomer it shall be derived with Battery powerbank with minimum backup time shall be as per manufacturer standard.</p> <p>4) Tenova shall consider Redundant PLC, redundant power supply module &amp; redundant communication module. IO module will be non-redundant. Also we shall consider HMI on control desk and one laptop for Engineering activities of PLC / HMI.</p>	<p>Bidder to note that for items/equipment applicable in main plant area and for this package, the specification and type of equipment shall be same as that of main plant. Also, any deviations from specification shall be taken up with Customer/consultant during detailed engg and decision of Customer shall be binding on successful bidder without any price implications to BHEL.</p> <p>1) MCC shall be drawout as per specification for stacker/reclaimer also. However, this shall be taken-up during detailed engg with the customer/consultant.</p> <p>2) Spare feeders shall be as per spec.</p> <p>3) Noted.</p> <p>4) All redundancy shall be as per specification only. Also, operator work stations shall be provided separately in operator's cabins as per specification. Other work stations shall be as per specification.</p>
16		Where to upload Break Up of Mandatory Spares	Break Up of mandatory spares (as per annexure A1, A2 & A3) to be necessarily submitted in the Price part of the tender
17		where to upload Power consumption of equipment as it is linked with loading	Power consumption of equipment to be submitted with Techno-Commercial part of tender (SCC).