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ODISHA POWER TRANSMISSION CORPORATION LIMITED

(A Government of Odisha Undertaking)

OFFICE OF THE SR. GENERAL MANAGER [ELECT.], CONSTRUCTION ZONE-I, TECHNICAL BUILDING (1st floor), BHOI NAGAR, BHUBANESWAR- 751 022

Tel- 0674-2546353: Fax- 0674-2547261, E Mail: sgm.con1.bbs@optcl.co.in

No. TRP/WKL/761/2017-18

2438(16)

Date:

04/10/2018

To

M/s Shree Cements Ltd., Chandrabalishyampur, Athagarh, Cuttack,

Sub.: Connectivity permission for drawal of 15 MVA power by M/s Shree Cements Ltd. at Chandrabalishyampur, Athagarh, Cuttack through a dedicated 132 KV feeder from proposed 132/33 KV Grid sub-station, Khuntuni (Mathurapur).

Ref.: (1) Lr. No. CESU/Tech-753 (Vol-I)/12381 dated 30.05.17 of CGM (Tech) CESU, Bhubaneswar.

- (2) Lr No. WK/CESU/CTC/471 dated 05.06.2017 of G.M, EHT (O&M) Circle, Cuttack.
- (3) Feasibility report no-859 dated 17.07.2017 of DGM EHT(C) Division, Cuttack.
- (4) System Study Report No. 4573 dated 09.08.2017 and 4436 dated 23.08.2018.
- (5) Lr. No. 1014 dated 23.09.2017 and 3718 dated 07.07.2018 of CGM (PP).
- (6) Letter No. TB-SO-PSI-15/2017/1703 dated 11.09.2017 of CGM (O & M)

Dear Sirs,

In inviting a reference to above cited correspondence the in-principle connectivity for drawal of 15MVA Power at 132kV is permitted through one no. 132kV feeder bay at 132/33 KV GIS substation, Khuntuni and associated 132 KV line, subject to your acceptance of the following terms and conditions.

1. Connectivity condition:

- a) You will construct one no. 132 KV GIS feeder bay at 132/33 KV GIS sub-station at Khuntuni along with 132 KV transmission line up to your plant premises under the supervision OPTCL. Both bay and line works to be constructed by you at your own cost
- b) You will also construct anything extra required for bay construction such as extension of existing fence, modification in control room and GIS room, construction of cable trench for the bay & its connection to main cable trench, shifting of the drain etc. as may be required as per the site condition.
- c) The point of inter-connection of your system with OPTCL transmission system shall be the outgoing feeder gantry.
- d) The OPTCL transmission network will be adequate to transmit 15MVA power at 132 KV through the above connection condition and power supply will be extended subject to real time available of power.
- e) The maximum power to be availed by you is 15 MVA. Your drawl of power shall not exceed 15MVA under any circumstance. In case there is any change in the above

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quantum of power or any other condition which has been considered for the system study, you have to conduct a fresh system study.

- f) No CPP injection/ connection shall be permitted.
- g) Contract demand of 15 MVA with DISCOM shall not be reduced.

2. Agreement:

- (a) <u>Connection agreement</u>: A connection agreement shall be executed between you and OPTCL as per the provisions of clause no. 4.5 of Odisha Grid Code (OGC) Regulations 2006, and shall include the following:
- i. A condition requiring both parties to comply with the OGC.
- ii. Details of connection, technical requirements with specific reference to reactive power compensation/operation of Generating Units and Power Station, if any and commercial arrangements, (In accordance with relevant provision of Indian Electricity Grid Code, wherever applicable)
- iii. Details of any capital related payments arising from necessary reinforcement or extension of the system, data communication, RTU etc. and demarcation of the same between parties.
- iv. A Site Responsibility Schedule as referred at section 4.13 (1) of OGC.
- v. General Philosophy, guidelines etc. on protection and telemetry.

3. Document/Information:

You have to furnish the required data to OPTCL for data registration as per the provisions of Odisha Grid Code (OGC) Regulations 2006 read with Indian Electricity Grid Code, wherever applicable, at the time specified therein. The above codes are available in the official websites of the Odisha Electricity Regulatory Commission (OERC) and Central Electricity Regulatory Commission (CERC).

4. Metering, Protection & Communication:

You shall abide by the provisions of Odisha Grid Code (OGC) Regulation 2006/Indian Electricity Grid Code (IEGC) and CEA Grid Connectivity regulations 2004, for protection, safety and communication requirements, CEA Regulation on Installation & Operation of Meters shall be the basis for implements of metering provision.

You shall abide by State Electricity Grid Code (SEGC)/Indian Electricity Grid Code (IEGC) and CEA Grid Connectivity regulations for protection, safety and communication requirements. CEA Regulation on Installation & Operation of Meters shall be the basis for implements of metering provision. Metering Code of SEGC shall also be the basis for implementation of metering provision.

The target clearance time for any fault is 160msec. (refer clause 4.8(3)(a) of OGC)

You will also provide the voice communication facilities (Land line/WLL/Cell phone) at Khuntuni Grid for communication between the grid substation and your own substation, at your own cost and responsibility. The monthly bill of the above Communication system (Land line/WLL/Cell phone) shall be borne by you.



5. construction:

- a. You will construct the line, one no. 132 KV GIS feeder bay extension (including AIS bays as per existing system at 132/33kV S/s Khuntuni for termination of transmission line into GIS via cable termination arrangement) and all other additional works as required including the bus system extension etc. at 132/33kV GIS substation Khuntuni at your own cost under supervision of OPTCL engineers after deposit of the required 6% supervision charges with GST and other charges whatsoever to OPTCL.
- b. You will also bear the proportionate cost of the available infrastructure already existing in the above grid sub-station. The proportionate cost of available infrastructure and supervision charges as applicable will be intimated after approval of layout drawing, single line diagram, protection system, approval of your survey report, profiles and sanction of the estimate and compliance of other requirements. The quality of equipment/material to be used and construction standard shall confirm to the OPTCL requirements and standards.
- c. The 132KV GIS bay shall be constructed identical to the existing adjacent feeders. Maximum efforts shall be made to use the equipment and materials with identical ratings, make and standards.
- d. The control and relay system of the feeder bay extension shall have IEC 61850 compliant Substation Automation System (SAS) with PRP, integrated with the existing system at 132/33kV Substation, Khuntuni with panels, BCUs and all other accessories equivalent to the existing bays.
- e. Care shall be taken that the shutdown period is minimum for execution of the work.
- f. 0.2s class accuracy micro-processor based energy metering system shall be installed for main and check metering system. The metering system shall be provided, installed and commissioned by OPTCL. You have to deposit the cost of the metering system and annual maintenance charge as applicable under OPTCL norms.
- g. You have to engage licensed electrical contractor of Electrical Licensing Board, Government of Odisha for electrical construction activities, who shall obtain the project license before starting the work. It will also be your responsibility to get the electrical installations inspected by the Electrical Inspectorate, Odisha and obtain the clearance.

6. Approval of drawing, profiles, estimates etc.:

a. The bay layout drawing, section elevation drawing, the single line diagram, shall be submitted to the DGM, EHT Construction Division, Cuttack who, in turn, will submit the documents to this office through proper channel. This office will approve the drawings with necessary instructions for resubmission of revised drawings with corrections and modification (if any). The final approved drawings will be forwarded to you with necessary endorsements. You will circulate copies of the approved drawings to all concerned.



- b. The route alignment drawing and SLD of the line duly recommended by the field officials will be approved by this office. The profile, land schedule & tower schedule of the line will be furnished to the DGM, EHT Construction Division, cuttack for his scrutiny & approval. The special crossing profile of the alignment duly recommended by the field officials will also be approved by this office.
- c. The estimate shall be prepared by the DGM, EHT Construction Division, Cuttack and shall be sanctioned by this office. The amount of supervision and other charges with GST as applicable, payable by you for the execution of the construction work, shall be intimated.

7. Vendor approval:

- i) You have to procure materials/equipment from the approved vendors of OPTCL.
- ii) Maximum effort should be made to procure materials & equipment identical to the existing ones, for operational and maintenance convenience.
- iii) Approved Vendors of OPTCL possess the required technical specification/GTP & drawings of equipment/materials. However for any specific requirement of the drawings etc., this office may be contacted.
- iv) The vendors for small items like cable tray, earth mat, flat, Tower accessories etc. are not approved. These items are to be bought from reputed manufactures preferably having ISI mark for such product, after ascertaining the quality and subject to confirmation of applicable IS/IEC specifications, The quality of these materials shall be assessed by the OPTCL engineers at the manufacturer's works and/or at site.

8. Approval of equipment drawings, guaranteed technical particulars (GTP), technical specification etc.

- a. You shall furnish the detailed foundation drawings, structural drawings, technical specifications and GTP, type test reports etc. to the concerned GM, EHT Construction Circle through the concerned EHT Construction Division who will approve the said documents after verification.
- b. The equipment drawings, control, protection and metering scheme drawings, cable schedules shall be submitted to this office through proper channel including the technical literatures, brochures, manuals etc. These drawings will be approved by this office, in consultation with O&M Branch of OPTCL.
- c. The equipment drawings with GTP shall be submitted to this office through proper channel for approval.
- **d.** The drawing of the PLCC/SCADA scheme shall be approved by CGM (Telecom).
- e. Orders for procurement of materials and equipment will be placed by you on approved vendors only after compliance of above requirements.



9. Pre-despatch inspection and issue of despatch instruction:

- a. You, on your own interest, may intimate this office regarding the progress of the manufacturing of the materials and equipment by the respective manufacturers. However once the materials are ready for inspection, the materials will be offered for inspection to this office. The offer of the inspection should contain the following documents and information;
- 1. List of materials/equipment
- 2. Quantity to be inspected
- 3. Routine test certificates of the equipment/materials
- 4. Name of the Vendors
- 5. Place of inspection with detail address
- 6. Name of contact persons with telephone numbers
- 7. Bill of Materials in case of Tower materials and sub-station structures
- **b**. The inspection of materials/equipment shall be carried out at your cost.
- c. The deputation of the inspecting officers of OPTCL for witnessing the acceptance test will be decided & communicated to all concerned after receipt of these documents & scrutiny thereof.
- d. The inspection will be witnessed by the OPTCL inspecting officer as per OPTCL practice in the presence of the representative of the manufacturer and yours. The inspection report, test result, minutes of discussion, calibration certificates of the measuring and testing instruments etc. will be submitted to this office by the inspecting officer.
- **e.** If the test results are acceptable and the observations made by the inspecting officer are complied with, a dispatch instruction will be issued from this office.
- **f.** Materials/equipment procured and received by you, contrary to the procedure enumerated above, shall not be allowed to be used in construction activities involving OPTCL transmission network.

11. Supervision of all erection works by OPTCL officials:

All the survey, levelling, foundation, erection, stringing, installation, commissioning, civil and other works of EHT lines, bay extension and other associated works shall be inspected by OPTCL officials as and when required, in order to ensure the quality of the works. Prior intimation of works shall be given to the concerned SDO/DGM, EHT Construction Sub-division/Division for visiting the site. Notwithstanding above, all efforts should be made by the beneficiary/contractors engaged by the beneficiary to adhere to OPTCL standards and quality while executing different works.

12. Survey of route alignment etc. :

You will undertake the detailed survey of the 132 kV line in consultation with DGM, EHT(C) Division, Cuttack. The survey documents including the land records, topographic sheets, route alignment map, profile, tower schedules etc. shall be submitted to DGM, EHT(C) Division, Cuttack. A sum of Rs. 2.00 Lakhs shall be deposited in shape of demand draft drawn in favour of Director (Finance), OPTCL payable at Bhubaneswar towards supervision charges for the supervision of Survey works by OPTCL officials.

13. Operation and Maintenance:

After completion and commissioning of the transmission line and the feeder bay, you will hand over the same to OPTCL for operation and maintenance. You will pay the annual operation and maintenance charges to OPTCL, as applicable under OPTCL norms.

14. Statutory compliance:

All statutory requirements like compliance of the applicable provisions of Standards on Grid Connectivity and Grid standards specified by CEA, IEGC and SEGC in force, PTCC approval, Inspection by the Electrical Inspectorate, Odisha, Notification under section 164 of the Electricity Act 2003, environmental and pollution clearance, OERC guidelines and norms and all other requirements, as applicable under the law of the land, shall be complied by you. OPTCL may assist you for such compliance, as and when required.

15. Check list for energization of lines, bays and switching stations to extend power supply to prospective Industries:

- 1. If permission letter has been issued by OPTCL.
- 2. If availability of power and phasing of the power supply has been confirmed by GRIDCO.
- 3. If System study has been conducted.
- 4. If project license has been obtained from Electrical Inspectorate for executing the electrical construction works of lines, bays, substations etc.

5. Approvals

If layout, section elevation and single line diagram of the bay are approved.

- a. If vendor list approved.
- b. If estimates have been sanctioned.
- c. If control & protection scheme approved.
- d. If route alignment, profile, tower schedule approved.
- e. If earth mat design approved.
- f. If cable schedule approved.
- g. If equipment drawings, foundation & structural drawings, GA drawings, technical specifications, GTP etc. approved.
- h. If PLCC/SCADA scheme, equipment approved.
- i. If drawings have been approved by Electrical Inspectorate.

6. Supervision of Works

- a. If the construction works of the bay has been supervised by OPTCL officials.
- b. If the construction works of the line has been supervised by OPTCL officials.

7. Agreements

- a. If agreement executed with DISTCO.
- b. If connection agreements has been executed with OPTCL.
- c. If PPA executed with GRIDCO.

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8. Clearances

- a. If forest & railway clearance obtained for EHT lines.
- b. If inspection has been done by Electrical Inspectorate and the observations complied
- c. If pre-commissioning and scheme testing has been done by E&MR.
- d. If clearance for PLCC/SCADA scheme obtained by Telecom, OPTCL.
- e. If completion/check list has been prepared by concerned EHT Construction Division.
- f. If metering arrangement has been completed.
- g. If PTCC approval obtained.
- h. If public notification about the project and public notification about the probable energization has been made.

9. Payment of charges:

- a. If all the supervision charges deposited with OPTCL.
- b. If security deposits have been deposited with DISTCO.
- c. If all the applicable taxes & duties have been deposited & TDS certificates furnished.
- d. If cost of energy metering arrangement has been deposited with OPTCL.
- e. If compensation of forest charges, railway blockade charges etc. are paid.
- f. If electrical Inspection fees are deposited with Electrical Inspectorate.

16. Other requirements:

Any other requirements, as and when required due to changed circumstances, change in the existing laws and acts, shall be communicated to you for compliance.

17. Validity:

The validity of this permission is for 60 (sixty) days from the date of its issue.

You are requested to communicate your acceptance to the above terms and conditions of OPTCL through affidavit.

The above letter has been issued with the approval of the CMD, OPTCL.

Yours faithfully,

Senior General Manager (Const.) Zone-I

C. C. to:-

- 1. DGM, EHT Construction Division, Cuttack/GM, EHT Construction Circle, Bhubaneswar for information and necessary action.
- 2. DGM, EHT (O&M) Division Choudwar /GM EHT (O&M) Circle Cuttack for information and necessary action.
- 3. SGM (PS) SLDC/ SGM (CP) for information.
- 4. Sr. G.M (O & M)-II, Meramundali for information.
- 5. CGM (Construction)/CGM (O&M) for kind information.
- 6. CGM (PP), Gridco /Director (Commercial) Gridco, Bhubaneswar for kind information.
- 7. Director (Projects)/Director(Operation), OPTCL, Bhubaneswar for kind information.
- 8. Sr. P.S. to C.M.D., OPTCL for kind information of C.M.D.
- 9. CGM (Tech) CESU, Bhubaneswar for information & necessary action.