Southern Power Distribution Company of Telangana Limited



#6-1-50, Corporate Office, Mint Compound, Hyderabad 500 063 Phone No.(040) 2343 1312 Fax Nos.(040) 2343 1395/1452 website <u>www.tssouthernpower.com</u>

| From | To |
|---|---------------------------------------|
| The Chief General Manager (IPC & RAC), | -M/s Bharat Dynamics Limited (Govt.Of |
| TSSPDCL, Corporate Office, | India Enterprise), Kanchanbagh, |
| 6-1-50, 5th Floor, Mint Compound, | Hyderabad, Telangana– 500 058, |
| Hyderabad - 500 063. | Ph. No: 040-24587104. |
| Lr No.CGM(IPC&RAC)/SE(IPC)/F. BDL IBMP/D. No. Sディノ17, dated: 14.09.17 | |
| Sir, | |
| Sub. TSSDDOL DE Projecto Proposed acting up of 5 MW conceity color | |

Sub:- TSSPDCL - RE Projects - Proposed setting up of 5 MW capacity solar power project by M/s Bharat Dynamics Limited at Ibrahimpatnam, Shamshabad(Dist) in Telangana State - Confirmation of technical feasibility for grid connectivity at 33 kV level - Regarding.

Ref:- 1. Your application received dated 06-06-2017

2. Memo No.CGM(RAC)/SE(IPC)/F.BDL IBMP/D.No.495, dt: 22.06.17

3. Lr.No.SE/OP/SRNR/DE(T)/AE(Comml&Tech)/D.No.6/17, Dt:01.08.17

With reference to the above, TSSPDCL hereby informs that based on the technical feasibility report received from the SE/Op/Saroornagar in respect of the Solar Power Project being proposed by M/s Bharat Dynamics Limited at Ibrahimpatnam, Shamshabad(Dist) in Telangana State for Captive Use under REC scheme is technically feasible for grid connectivity.

The above proposed Solar Power Plant can be connected at 33 kV voltage level through a 33 kV line from the proposed Solar Power Plant as per the interconnection point given below.

Interconnection point: 33/11 kV Mangalapally Substation at 33 kV level existing on 33 kV Mangalapally feeder emanating from 132/33 kV Thurkayamjal Substation for a capacity of 5 MW.

Further it is to inform that,

- i. This technical feasibility approval is issued by TSSPDCL subject to condition that you have to furnish Bank guarantee to the undersigned (format is available in <u>www.tssouthernpower.com</u>/Renewable Energy / Telangana State Solar Power Policy / "<u>Bank Guarantee Format</u>) with validity period of Two years and two months with one month additional claim period from any nationalized bank for Rs. 10,00,000/- (i.e., Rs.2,00,000/- per MW) of proposed capacity within 45 days from the date of receipt of this letter or before processing of estimate, whichever is earlier, ensuing the commissioning of the said project within two years period.
- M/s Bharat Dynamics Limited, shall execute the line works up to interconnection point, extension of 33 kV Bay at 33/11 kV Mangalapally Substation, associated switchgear and metering equipment.
- iii. Directional over current & earth fault protection scheme may be provided for better selectivity and to avoid mal-operations at Substation end & Generator end.
- iv. The required Energy Meters (Main, Check & Standby 0.2s class accuracy) are to be provided at Interconnection Point (TRANSCO/Discom SS), Plant Gross Energy Generation, Auxiliary Consumption and Captive consumption (wherever applicable) should be obtained from TSSPDCL on cost basis.

- v. Testing of CTs (0.2s class accuracy with secondary burden of 5VA) & PTs (0.2 class accuracy with secondary burden of 10VA) should be done in the presence of TSSPDCL & TSTRANSCO officials at NABL certified laboratories only, and whose accreditation remains valid at the time of meter testing (as per the NABL website).
- vi. The capacity of Solar panels erected shall not be greater than 5 MW
- vii. As per the Regulations and Standards the following equipment should be installed at generator premises.
 - a. Installation of equipment capable of supplying dynamically varying reactive power support to maintain power factor within the limits of 0.95 lag to 0.95 lead, facility to control active power injection etc., as per part (II)(B)(B2) of Central Electricity Authority (Technical Standards for connectivity to the Grid) Amendment Regulations-13.
 - b. Installation of equipment to limit the harmonic current injections, DC current injection and flicker below the specified limits of standards (IEEE 519, IEC 61000).
 - c. Installation of metering equipment for recording of harmonic content injections in the Load Survey data and under instantaneous parameters, etc., as per the approved Technical Specifications of ABT Meters approved by TSTRANSCO
- viii. The generator should provide communication system i.e., SCADA/DAS to transfer the Real Time Data to the SLDC, TSTRANSCO. And the details of equipment erected for transferring the real time plant data to SLDC, Vidyutsoudha, Hyderabad through leased line over MPLS on IEC 60870-5-101/104 protocol in secured VPN tunnel and the Data Acquisition System (DAS) established at the plant end will be KEMA certified for IEC 60870-5-101 and 104 protocol.
- ix. For startup power and auxiliary consumption billing, a service connection under HT Cat-II to be taken with a CMD of 70KVA before synchronization.
- x. For getting the captive use status the developer shall have to use the 51% of generated energy from the plant to developer's company only and the balance 49% can be sold to 3rd party after getting prior open access approval, if failed to use 51% of generated energy for then owned company then it will be treated as 3rd party sale only and billing procedure will be carried out accordingly.

Receipt of this letter may please be acknowledged.

Yours faithfully,

Chief General Manager (1940 & RAC)

Copy to

The Chief Engineer/Commercial/TSTRANSCO/Vidyuth Soudha /Hyderabad. The Superintending Engineer/Commercial/Corporate Office/TSSPDCL/Hyderabad. The Superintending Engineer/Operation/TSSPDCL/Sangareddy.