ORDER
OF THE
WEST BENGAL ELECTRICITY REGULATORY COMMISSION
IN CASE NO. OA-281/18-19

IN REGARD TO THE APPLICATION SUBMITTED BY WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED (WBSEDCL) FOR “IN-PRINCIPLE” CLEARANCE IN RESPECT OF INVESTMENT PROPOSAL FOR INSTALLATION AND COMMISSIONING OF 10 MW SOLAR PV POWER PLANT AT PATNI (KHEMASULI) OF PASCHIM MEDINIPUR DISTRICT, WEST BENGAL IN TERMS OF REGULATIONS 2.8.1.4 OF THE WEST BENGAL ELECTRICITY REGULATORY COMMISSION (TERMS AND CONDITIONS OF TARIFF) REGULATIONS, 2011, AS AMENDED.

PRESENT:
SRI SUTIRTHA BHATTACHARYA, CHAIRPERSON
SRI DURGADAS GOSWAMI, MEMBER
SRI PULAK KUMAR TEWARI, MEMBER

DATE: 23.10.2019
"In-principle" clearance in respect of investment proposal for Installation and Commissioning of 10 MW Solar PV Power Plant at Patni (Khemasuli) of Paschim Medinipur District, West Bengal by West Bengal State Electricity Distribution Company Limited (WBSEDCL) in terms of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 as amended.

Facts in brief:

1.0 The West Bengal State Electricity Distribution Company Limited (WBSEDCL) submitted an application dated 28.06.2018 for "in-principle" clearance i.r.o investment approval for Installation and Commissioning of 10 MW Solar PV Power Plant at Patni (Khemasuli) of Paschim Medinipur District, West Bengal in terms of Regulation 2.8.1.4 of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011, as amended (in short 'Tariff Regulations'). WBSEDCL subsequently submitted a supplementary petition dated 16.04.2019 with revised project cost and redetermined levelised tariff. The petition dated 28.06.2018 and the supplementary petition dated 16.04.2019 together are termed as 'the petition' and has been admitted by the Commission in Case No. OA-281/18-19.

2.0 WBSEDCL along with their application dated 28.06.2018 submitted a DPR for the scheme. Brief description of the submission made by WBSEDCL in the application is as follows:

2.1 Department of Power & NES, Government of West Bengal (GoWB) has taken up initiatives to promote and facilitate the growth of solar power generation in the state. Furthermore, exploring solar PV generation in the State is also essential for solar Renewable Purchase Obligation (RPO) fulfilment in forthcoming years. Department of Power & NES, GoWB has entrusted WBSEDCL to take necessary measure for setting up of large as well as small scale grid connected solar PV plants at different districts of the State.

2.2 Accordingly, WBSEDCL submitted the project proposal to the Dept. of Power & NES, GoWB for installation and commissioning of 10 MW capacity grid connected solar PV power plant at Patni (Khemasuli), Paschim Medinipur.

2.3 Dept. of Power & NES, GoWB has accorded administrative approval vide their letter no. 104-PO/P/C-II/1B-27/2016 dated 21.09.2016 to provide fund of Rs. 60.18 Crore to be arranged from NABARD under RIDF Tranche XXII. Board of Directors, WBSEDCL also
“In-principle” clearance in respect of investment proposal for Installation and Commissioning of 10 MW Solar PV Power Plant at Patni (Khemasuli) of Paschim Medinipur District, West Bengal by West Bengal State Electricity Distribution Company Limited (WBSEDCL) in terms of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 as amended.

accorded approval of the project on 13.05.2017 at a cost of Rs. 60.18 Crores (inclusive of taxes). Dept. of Power & NES, GoWB accordingly issues sanction cum allotment order vide their letter 88 (Sanc)-PO/P/C-II/1B-27/2016 dated 23.03.2018 to provide fund of Rs. 60.18 Crores.

WBSEDCL subsequently initiated the tender process and the total awarded value of the project to the lowest bidders comes to Rs. 46.59 Crore including Tax Liabilities. WBSEDCL also stated that the total awarded value is within the administrative approval of Rs. 60.18 Crore accorded by Dept. of Power & NES, GoWB. WBSEDCL also submitted a breakup of total project cost as below:

<table>
<thead>
<tr>
<th>SI No.</th>
<th>Description</th>
<th>Cost (in Rs. Lakh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Solar Modules</td>
<td></td>
</tr>
<tr>
<td>(i)</td>
<td>Supply of Material</td>
<td>3563.55</td>
</tr>
<tr>
<td>(ii)</td>
<td>Installation &amp; Commissioning</td>
<td>672.30</td>
</tr>
<tr>
<td>(iii)</td>
<td>Operation and Maintenance (5 years)</td>
<td>316.25</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-Total</strong></td>
<td><strong>4552.10</strong></td>
</tr>
<tr>
<td>B.</td>
<td>Evacuation Cost</td>
<td></td>
</tr>
<tr>
<td>(i)</td>
<td>Cost of Material including Sundries for Drawal of 33 kV HT OH Line</td>
<td>86.88</td>
</tr>
<tr>
<td>(ii)</td>
<td>Erection Charges, etc</td>
<td>18.72</td>
</tr>
<tr>
<td>(iii)</td>
<td>Cess</td>
<td>1.03</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-Total</strong></td>
<td><strong>106.63</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Total Cost of Project</strong></td>
<td><strong>4658.73</strong></td>
</tr>
</tbody>
</table>

2.4 The salient technical and financial features of the project as stated by WBSEDCL are as below:

Technical features: Capacity of the power plant: 10 MW (AC); Grid Interfacing Voltage: 33 kV; Capacity Utilization Factor (CUF): 18.20%; Performance ratio: 77.10%; Annual Energy Exported to Grid: 15.242 MU; Project commissioning period: 1 year;

Financial features: Total project cost is Rs. 46.59 Crore with 100% grant fund of State Government arranged from NABARD under Tranche XXII.
"In-principle" clearance in respect of investment proposal for Installation and Commissioning of 10 MW Solar PV Power Plant at Patni (Khemasuli) of Paschim Medinipur District, West Bengal by West Bengal State Electricity Distribution Company Limited (WBSEDCL) in terms of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 as amended.

2.5 WBSEDCL further submitted that such investment will finally lead to following advantages:

a) Utilization of vested Land of 50 acres (Conventionally 5 acres/MW).

b) Saving of Fossil Fuel and reduction of Green House Gas (GHG) emissions.

c) Reduction in transmission & distribution loss as generation is closer to consumption points.

d) Periodic rise in coal price and consequential hike electricity tariff can be contained by developing such solar PV plants as a cheaper alternative of conventional counterparts.

3.0 The Commission directed WBSEDCL to publish the gist of their application as approved by the Commission in the newspapers. WBSEDCL accordingly published the gist of the petition in (i) the Telegraph (ii) the Economic Times and (iii) The Anandabazar Patrika on 27.05.2019 inviting suggestions and objections on their petition within 14 days (including the date of publication) of publication of the notice in Newspaper. No suggestion and objection was received by the Commission within the stipulated time-period.

4.0 WBSEDCL vide their supplementary petition dated 19.08.2019 further requested the Commission to accord 'in-principle' clearance against their application i.r.o the investment approval for Installation and Commissioning of 10 MW (AC) Solar PV Power Plant at Patni (Khemasuli) of Paschim Medinipur District, West Bengal in terms of regulation 2.11.1 of Tariff Regulations, 2011 instead of Regulation 2.8.1.4 of Tariff Regulations, 2011 as Regulation 2.8.1.4 as mentioned in application dated 28.06.2018 and 16.04.2019 covers different stages of investment approval related to mainly Thermal Generating Stations and its components, and its not applicable for investment approval of solar power plant.

5.0 WBSEDCL vide letter dated 21.10.2019 further submitted that the project is entirely financed by State Government including O&M cost of 5 years operation after commissioning and handing over the project to WBSEDCL. The project cost will
"In-principle" clearance in respect of investment proposal for Installation and Commissioning of 10 MW Solar PV Power Plant at Patni (Khemasuli) of Paschim Medinipur District, West Bengal by West Bengal State Electricity Distribution Company Limited (WBSEDCL) in terms of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 as amended.

Accordingly be capitalized considering the state grant. Only O&M cost for such solar project will be applicable after 5 years if operation from commissioning and handing over the project to WBSEDCL.

**Observations of the Commission:**

6.0 The Commission observes from the application that Dept. of Power & NES, Government of West Bengal (GoWB) had entrusted WBSEDCL to take necessary measures for setting up of large as well as small scale grid connected solar PV plant at different district of West Bengal. Accordingly, WBSEDCL has submitted a project proposal for setting up 10 MW solar PV power plant at Patni (Khemasuli), Paschim Medinipur with an estimation of Rs. 59.63 Crore (excluding tax) to the Dept. of Power & NES, GoWB. Subsequently, Dept. of Power & NES, Government of West Bengal vide their letter 104-PO/P/C-11/18-27/2016 dated 21.09.2016 accorded administrative approval of Rs 60.18 Crore (including tax) in favour of WBSEDCL for setting up such 10 MW solar PV power plant at Patni (Khemasuli), Paschim Medinipur.

7.0 WBSEDCL in its supplementary petition dated 16.04.2019 submitted that, through tender process they have received the contract price of installation of 10 MW solar module including comprehensive O&M for 5 years of Rs. 45.52 Crore (including taxes) and through a separate tender process for evacuation of generated power received a contract price of Rs. 1.07 Crore (including taxes) against estimated cost of Rs.1.37 Crore. WBSEDCL also submitted that the overall project cost comprising solar PV power plant and evacuation system comes to Rs. 46.59 Crore, which is well within the administratively approved amount of Rs.60.18 Crore.

8.0 The Commission observes that the project is entirely financed by the State Government including it's O&M for 5 years operation after commissioning and handing over the project to WBSEDCL and the project will be capitalized considering the state grant. Therefore, there is no capital investment by the licensee in the project. Further, O&M cost for five
"In-principle" clearance in respect of investment proposal for Installation and Commissioning of 10 MW Solar PV Power Plant at Patni (Khemasuli) of Paschim Medinipur District, West Bengal by West Bengal State Electricity Distribution Company Limited (WBSEDCL) in terms of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 as amended.

years is also included within the project cost which is given as a grant by the Government. In fact the licensee is capitalizing the asset against the grant from the government following due procedures. Further the plant being connected at 33kV system near consumption point the T&D loss will also be less. Thus, it will be ultimately beneficial to the consumers of WBSEDCL.

9.0 Now it is required to examine the requirement of installation and commissioning of 10MW solar power by WBSEDCL in terms of clause (i) of regulation 3.4 of RE Regulations.

10.0 In terms of regulation 3.1 read with regulation 3.2 of RE Regulations the RPO target for the year 2019-2020 WBSEDCL comes to 8.00 % including solar target of 0.50%.

11.0 From the APR petition for the year 2017-18 it is evident that WBSEDCL has met 4.05% of total RPO out of the target 6.00% of which 0.38% was solar against target solar of 0.30%. Thus, during 2017-18 WBSEDCL has fulfilled their solar RPO target but is not able to achieve their total RPO target.

12.0 WBSEDCL in this petition has proposed for installation of 10 MW solar PV plant at Patni (Khemasuli), District Paschim Medinipur, West Bengal to fulfil their RPO requirement. Commission further observed that, WBSEDCL has also submitted 8 more applications seeking ‘in-principle’ clearance for installation and commissioning of solar PV power plant in different districts of West Bengal. The total annual generation from all the nine (9) projects proposed is 131.48 MU.

13.0 Commission observes that, in terms of regulation 3.3 of the RE Regulations, licensee can purchase additional solar power to fulfil its overall RPO provided such purchase of solar energy beyond the target of any year shall not exceed 0.25% of total consumption in that area of supply of distribution licensee for that year or target of solar RPO for that year whichever is higher. Considering the last five years’ sales to consumers by WBSEDCL and their procurement of power from the existing solar sources, the proposed 131.48 MU of annual generation from all the 9 projects stated in paragraph 12.0 above, including the 10
"In-principle" clearance in respect of investment proposal for Installation and Commissioning of 10 MW Solar PV Power Plant at Patni (Khomasuli) of Paschim Medinipur District, West Bengal by West Bengal State Electricity Distribution Company Limited (WBSEDCL) in terms of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 as amended.

MW plant at Patni (Khomasuli) appears to be within the limit specified in regulation 3.3 of the RE Regulations.

14.0 However, considering fulfilment of total RPO, the Commission is of the view that WBSEDCL is required to have a proper analysis of future power procurement from the solar and other renewable and co-generation sources and submit a report within three months.

Order:

15.0 The Commission hereby accords approval to the proposal contained in the letter of WBSEDCL dated 21.10.2019 read with petitions dated 28.06.2018, 16.04.2019 and 19.08.2019 and noted that the State Government sanctioned Rs. 60.18 Crores i.e. 100% of the project cost for setting up the 10 MW Solar PV Power Plant at Patni (Khomasuli) of Paschim Medinipur district, West Bengal in the following manner:

<table>
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<tr>
<td>A.</td>
<td>Solar Modules(inclusive of Tax and 5 years O&amp;M)</td>
<td>45.52</td>
</tr>
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<td>B.</td>
<td>Evacuation Cost (inclusive of Tax)</td>
<td>1.07</td>
</tr>
<tr>
<td></td>
<td>Total Cost of Project</td>
<td>46.59</td>
</tr>
</tbody>
</table>

16.0 The Commission also gives the following directions:

16.1 WBSEDCL, within 3 months from the date of this order, shall submit their power requirement plan from Solar and other than solar Sources for future years to fulfil its RPO compliance in terms of Regulation 3.1, 3.2 and 3.3 of the RE Regulations;

16.2 On completion of the project, WBSEDCL shall submit the COD before the Commission.
"In-principle" clearance in respect of investment proposal for Installation and Commissioning of 10 MW Solar PV Power Plant at Patni (Khamasuli) of Paschim Medinipur District, West Bengal by West Bengal State Electricity Distribution Company Limited (WBSEDCL) in terms of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 as amended.

16.3 The cost related to maintenance of the Solar PV Power Plant for initial five year from the date of commissioning of the power plant shall not be claimed in tariff for the said period as the project cost includes 5 years' maintenance costs of the total solar PV power plant. The Licensee shall include the requisite O&M cost at appropriate time in the ARR.

16.4 In future, WBSEDCL shall not make any progress towards implementation of a project before obtaining prior approval of the Commission as per provisions of Tariff Regulations.

17.0 The petition is thus disposed off. Let a copy of the order be served upon WBSEDCL.

Sd/-
(PULAK KUMAR TEWARI)
MEMBER

Sd/-
(DURGADAS GOSWAMI)
MEMBER

Sd/-
(SUTIRTHA BHATTACHARYA)
CHAIRPERSON

Dated: 23.10.2019

(T. K. MUKHERJEE)
SECRETARY