ORDER
OF THE
WEST BENGAL ELECTRICITY REGULATORY COMMISSION

IN CASE NO. OA-316/19-20

IN REGARD TO THE APPLICATION SUBMITTED BY THE WEST BENGAL STATE ELECTRICITY TRANSMISSION COMPANY LIMITED (WBSETCL) FOR APPROVAL OF INCURRING CAPITAL EXPENDITURE FOR IMPLEMENTATION OF NEW TRANSMISSION SCHEMES IN TERMS OF REGULATION 2.8.2.3 AND PARAGRAPH 4.1 (VI) OF SCHEDULE-2 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: 08.07.2020

Certified true Copy
Approval of incurring capital expenditure by West Bengal State Electricity Transmission Company Limited for implementation of new transmission schemes in terms of regulation 2.8.2.3 and paragraph 4.1 (vi) of Schedule - 2 of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011, as amended.

**Facts in brief:**

1.0 West Bengal State Electricity Transmission Company Limited (in short 'WBSETCL') submitted a petition vide letter dated 25.10.2019 for approval of incurring capital expenditure of an estimated cost of Rs. 50780.64 Lakh for implementation of 5 nos. new transmission schemes namely 132 kV GIS at Nilganj, Panpur, Gaighata, Chandiberia and Gardwani in terms of regulation 2.8.2.3 and paragraph 4.1 (vi) of Schedule – 2 of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011, as amended (in short 'Tariff Regulations'). WBSETCL further submitted a modification request through a supplementary petition on 13.03.2020 and withdrawn the project at Gardwani from the instant petition and thereby revised the overall project cost to Rs.43326.49 Lakh. The petition has been marked in Case No. OA-316/19-20.

2.0 In their petition WBSETCL submitted DPR for each of the schemes. Brief descriptions of the schemes are as follows:

A) Establishment of 132/33 kV Gas Insulated Substation (GIS) at Nilganj and associated transmission system (ATS):

WBSETCL proposed for establishment of new 132/33 kV GIS at Nilganj under P.S. Barasat in the District 24 Parganas (North) with 2x50 MVA 132/33 kV Transformer bays, 132 kV GIS Module with 8 numbers of 132 kV Feeder Bays, 12 numbers of 33 kV Feeder Bays (Indoor VCB Switchgear), construction of 132 kV Multi Circuit (M/c) Transmission Line for D/c LILO of Jeerat – Mohishpota 132kV Double circuit (D/c) Line at proposed Nilganj 132 kV GIS and construction of 132 kV Multi circuit (M/c) Transmission Line with HTLS conductor for D/c LILO of Dharampur – Titagarh 132 kV D/c line at proposed Nilganj 132 kV GIS alongwith diversion of existing overhead 33 kV, 11 kV & LT line and conversion of the same to Underground (UG) cable at the premises of M/s Keventer for construction of Nilganj 132 kV GIS. 132 lines are a hybrid combination of D/c, M/c & UG cables.
Approval of incurring capital expenditure by West Bengal State Electricity Transmission Company Limited for implementation of new transmission schemes in terms of regulation 2.8.2.3 and paragraph 4.1 (vi) of Schedule - 2 of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011, as amended.

Nilganj 132/33 kV GIS was contemplated to offload the 33 kV load of Barasat 220 kV & Titagarh 132 kV Substation and to meet the up-coming load in and around Barasat. It is submitted that, WBSEDCL has placed requirement of a large no new 33 kV bays from Barasat 220 kV to overcome 33 kV source constraint for existing as well as upcoming Substations. But, there is space constraint within Barasat 220 kV to construct new 33 kV Feeder Bay. Establishment of Nilganj 132/33 kV sub-station will help to strengthen the distribution network of WBSEDCL which in turn improve the quality of power supply in the vicinity and make the system capable to cope future load growth. It will also help to reduce line loss to a good extent.

WBSETCL also submitted that 132 kV GIS at Nilganj will be constructed at the available space at Nilganj 33/11 kV substation of WBSEDCL. Competent authority of WBSEDCL has already instructed the Regional Manager of North 24 Paraganas to handover the permissive possession of said land to WBSETCL.

B) Establishment of 132/33 kV Gas Insulated Substation (GIS) at Panpur and associated transmission system (ATS):

WBSETCL proposed for establishment of new 132/33 kV at Panpur under P.S. Naihati in the District 24 Parganas (North) with 2x80 MVA 132/33 kV Transformers, 132 kV GIS Module with 4 numbers of 132 kV Feeder Bays, 12 numbers of 33 kV Feeder Bays (Indoor VCB Switchgear), 2x10 MVAR Capacitor Bank and construction of D/c LILO of Dharampur - Titagarh 132kV D/c Line with HTLS conductor at proposed Panpur 132 kV GIS. The 132 line is a hybrid combination of D/c, M/c & UG cables.

Establishment of Panpur 132 kV GIS was contemplated to supply adequate, reliable and quality power supply in western part of North 24 Parganas District in and around Naihati, Halsahar, Kakinar, Jagaddal, Shyamnagar. After establishment of the proposed Panpur 132 kV GIS, the referred 33 kV substations could be fed with shorter line length, which will in turn improve the total power scenario in the vicinity and reduce
line loss in a good extent. It will also help in betterment of voltage and to cope up with future load growth in the vicinity.

WBSETCL submitted that 132 kV GIS at Panpur will be constructed at the available space at Panpur 33/11 kV substation of WBSEDCL. WBSETCL initiated the process for obtaining the permissive possession of the said land from WBSEDCL.

C) Establishment of 132/33 kV Gas Insulated Substation (GIS) at Gaighata and associated transmission system (ATS):

WBSETCL proposed for establishment of new 132/33 kV at Gaighata under P.S. Gaighata in the District 24 Parganas (North) with 2x50 MVA 132/33 kV Transformers, 132 kV GIS Module with 4 numbers of 132 kV Feeder Bays, 12 numbers of 33 kV Feeder Bays (Indoor VCB Switchgear) and construction of D/c LILO of Jeerat – Ashokenagar 132 kV D/c line at proposed Gaighata 132 kV GIS. This lines is a combination of D/c and M/c lines.

Establishment of Gaighata 132 kV GIS was contemplated to supply adequate, reliable and quality power supply in the command area of following existing 33/11 kV substations of WBSEDCL namely Gaighata, Gobardanga, Chandpara and Nagarukhra and also to cope up with future load growth in the vicinity. It will also provide supply to upcoming Thakurnagar 33kV substation and will provide alternative source to 33kV Banbania and Banipur sub-stations of WBSEDCL. After establishment of the proposed Gaighata 132 kV GIS, the referred 33 kV substations could be fed with shorter line length, which will in turn improve the total power scenario in the vicinity and reduce line loss in a good extent.

WBSETCL submitted that 132 kV GIS at Gaighata will be constructed at the available space at Gaighata 33/11 kV substation of WBSEDCL. Regional Manager, WBSEDCL of North 24 Parganas has handed over the permissive possession of 1.96 Acre land to WBSETCL on 04/06/2019 for establishment of EHV Substation.
D) Establishment of 132/33 kV Gas Insulated Substation (GIS) at Chandiberia and associated transmission system (ATS):

WBSETCL proposed for establishment of new 132/33 kV at Chandiberia under P.S. Baguihati in District 24 Parganas (North) with 3x50 MVA 132/33 kV Transformers, 132 kV GIS Module with 2 numbers of 132 kV Feeder Bays, 12 numbers of 33 kV Feeder Bays (Indoor VCB Switchgear), construction of 132 kV D/c UG Cable Line from New Town IIC 220 kV GIS at proposed Chandiberia 132 kV GIS along with construction of 2 numbers of 132 kV GIS Bays at New Town IIC 220 kV substation.

Establishment of Chandiberia 132 kV GIS was contemplated to enhance reliability of power supply in and around Chandiberia, Bagiola, Baguihati and Ghuni of 24 Paraganas (North) District. After construction of Chandiberia 132 kV GIS, the 33 kV substations namely Chandiberia, Bagiola, Bantala and Ghuni will be fed with shorter line length and thus line loss will be reduced in a great extent. Also, the power scenario in the vicinity will be improved substantially.

WBSETCL inter-alia submitted that loading of 132/33 kV transformers of EHV substations around Salt Lake are heavily loaded and creation of 132/33 kV Chandiberia sub-station is urgently required to offload KLC & Salt Lake substations.

WBSETCL submitted that 132 kV GIS at Chandiberia will be constructed at the available space at Chandiberia 33/11 kV substation of WBSEDCL. Permissive possession of 0.883 Acre land within Chandiberia 33/11 kV Substation has already been received from WBSEDCL for establishment of EHV Substation.

3.0 Subsequently, WBSETCL vide letter no. CE/CPD/WBERC/92 dated 13.03.2020 submitted a modification request through a supplementary petition along with some additional clarifications and relevant documents. WBSETCL, inter alia, submitted the following:

3.1 Cost involvement for direct purchase of private land to construct 132 kV GIS at Gardwani in the district of South 24 Parganas was not finalized due to delay in obtaining concurrence of
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the Standing Committee. Accordingly, the said project is proposed to be dropped from the petition submitted by WBSETCL and the revised cost involvement of the instant petition is Rs. 43326.49 Lakh.

3.2 WBSETCL submitted that the Nilganj 132 kV GIS, Panpur 132 kV GIS, Gaighata 132 kV GIS and Chandiberia 132 kV GIS are being constructed within the vacant space available within 33/11 kV substations of WBSEDCL and execution of these project was initiated after obtaining the permissive possession from WBSEDCL due to urgent requirement of the beneficiary (WBSEDCL). WBSETCL also submitted that the process has already been taken to finalize the modality of formal transfer of lands from WBSEDCL to WBSETCL confirming the Regulation 5.11.3 of West Bengal Electricity Regulatory Commission (Licensing and Conditions of License) Regulations, 2013.

3.3 WBSEDCL clarified that, completion period of substation work is scheduled generally as 18 to 20 months and line work from 12 months to 24 months from the date of placement of order depending on involvement of the work. As per standard practice, during financial calculation 24 month is considered as completion time. Now, during IDC calculation phasing of the expenditure is considered in three financial year with an assumption that the loan may be drawn at the mid of the financial year and the interest component is calculated for half of the year effectively two years effect on IDC amount.

3.4 WBSETCL submitted that, moratorium period is counted from the start date of the loan, ideally that is considered as start date of the project. The moratorium period is also clubbed with the life span of the asset i.e. 25 years for the substation asset and 35 years for the line asset in the IRR calculation sheet. The calculation has been made in idealistic approach considering that the project will be completed and commissioned in all respect and the asset will be converted at a time on completion in the subsequent year after the drawal of last installment of the loan.
Further in case of Panpur project, WBSETCL resubmitted the IRR calculation sheet where year mismatch was observed. WBSETCL stated that the changes have no effect in the project cost.

3.5 WBSETCL also submitted detailed estimate and single-line diagram (SLD) of Nilganj, Panpur, Gaighata and Chandiberia projects.

4.0 It is stated by WBSETCL that the approval of the above schemes has been accorded in different meetings of Board of Directors (BoD) of WBSETCL, the details of which are as follows:

i) Nilganj 132/33 kV GIS & ATS in 69th meeting of BoD held on 12.07.2019.
ii) Panpur 132/33 kV GIS & ATS in 69th meeting of BoD held on 12.07.2019.
iii) Gaighata 132/33 kV GIS & ATS in 69th meeting of BoD held on 12.07.2019.
iv) Chandiberia 132/33 kV GIS & ATS in 70th meeting of BoD held on 24.09.2019.

5.0 The project cost, as submitted by WBSETCL for each of the schemes, covered under paragraph 2.0 above are tabulated as under:

<table>
<thead>
<tr>
<th>SL No</th>
<th>Description</th>
<th>Project Cost</th>
<th>Supervision Charge</th>
<th>IDC</th>
<th>Total Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Establishment of 132/33 kV Gas Insulated Substation at Nilganj and associated transmission system</td>
<td>10382.15</td>
<td>1557.32</td>
<td>1165.57</td>
<td>13105.04</td>
</tr>
<tr>
<td>2</td>
<td>Establishment of 132/33 kV Gas Insulated Substation at Panpur and associated transmission system</td>
<td>4953.67</td>
<td>743.05</td>
<td>520.64</td>
<td>6217.36</td>
</tr>
<tr>
<td>3</td>
<td>Establishment of 132/33 kV Gas Insulated Substation at Gaighata and associated transmission system</td>
<td>7625.54</td>
<td>1143.83</td>
<td>920.92</td>
<td>9690.29</td>
</tr>
<tr>
<td>4</td>
<td>Establishment of 132/33 kV Gas Insulated Substation at Chandiberia and associated transmission system</td>
<td>11310.73</td>
<td>1696.61</td>
<td>1306.46</td>
<td>14313.80</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
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</tr>
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</table>

It was also submitted that the projects are proposed to be funded through WBSETCL's Internal Resources and through domestic borrowings. The equity component (30%) is proposed to be met through Internal Resources and the loan component (70%) through
domestic borrowings from any Financial Institute and the equity component being released simultaneously with the loan component. The target beneficiary of the projects is WBSEDCL.

6.0 The Commission admitted the petition on 03.06.2020 and directed WBSETCL to publish the gist of their petition as approved by the Commission in the newspapers as per requirement of regulation 2.8.2.3 of the Tariff Regulations. WBSETCL accordingly published the gist of the petition in (i) the Bartaman (ii) the Aajkal and (iii) the Millennium Post on 06.06.2020 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 were received by the Commission within the stipulated time-period.

7.0 WBSETCL vide letter no CE/CPD/WBERC/140 dated 18.06.2020 also submitted the status of land for construction of sub-stations as below:

- Nilganj 132/33 kV GIS: permissive possession from WBSEDCL taken on 06.11.2019;
- Panpur 132/33 kV GIS: permissive possession from WBSEDCL taken on 16.06.2020;
- Gaighata 132/33 kV GIS: permissive possession from WBSEDCL taken on 04.06.2019;
- Chandiberia 132/33 kV GIS: permissive possession from WBSEDCL taken on 13.06.2019;

Observations of the Commission:

8.0 The Commission observes that, in terms of Regulation 2.8.2.3 of Tariff Regulations, approval of the Commission for investment in new transmission project is mandatory after 31.12.2007. The Commission also observes that the regulation inter-alia specifies approval of the project shall be taken before investment is made in order to minimize the investment risk. The Commission also noted that the projects submitted in the petition have been considered in the perspective plan submitted by WBSETCL along with their Multi Year Tariff Application for the 6th Control Period for the years 2018 – 19 and 2019 – 20.

9.0 The Commission also observes that the substations are being constructed within the vacant space available at the substations of WBSEDCL for which permissive possession from WBSEDCL has already been taken.

West Bengal Electricity Regulatory Commission
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**Order:**

10.0 The Commission after considering all the facts and the project report submitted by WBSETCL in the petition vide letter dated 25.10.2019 along with supplementary petition and additional submission dated 13.03.2020 and duly noting the submission under letter dated 18.06.2020 approves the investment proposal in terms of regulation 2.8.2.3 of the Tariff Regulations with the details as given below:

<table>
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<td>1306.46</td>
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**TOTAL** | 43326.49

11.0 The Commission also gives the following directions:

(i) For the purpose of capitalization, actual project cost is to be got approved by the Commission along with actual interest during construction and all actual expenditure incurred or apportioned to the project cost on account of spares, transportation, insurance, tax, establishment charges, tools and plants, audit and accounts, maintenance and losses during construction and consultancy charges and also any actual expenditure met out of contingency. WBSETCL is to provide the cost break-up of each scheme showing the actual vis-à-vis estimation included in the total project cost as above.

(ii) WBSETCL shall ensure proper metering arrangement in line with the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 as
amended from time to time and arrangement for real time data display at SLDC control room before energization of the sub-station and associated Transmission Systems.

(iii) WBSETCL shall take necessary approval from the Commission in line with Regulation 5.11 of West Bengal Electricity Regulatory Commission (Licensing and Condition of License) Regulations, 2013 regarding transfer of land from WBSEDCL.

(iv) On completion of each project WBSETCL shall submit the date of commercial operation (COD) and a cost benefit analysis of the project separately before the Commission.

(v) Original project cost is required to be approved in terms of Regulation 2.8.5 of the Tariff Regulations. Commission may disallow any excess project cost on capitalization over approved cost if it finds the justifications furnished are not adequate.

(vi) In case of escalation in project cost in any scheme, WBSETCL shall take due approval from the Commission before capitalization of assets.

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

Sd/-
(PULAK KUMAR TEWARI)
MEMBER

Sd/-
(DURGADAS GOSWAMI)
MEMBER

Sd/-
(SUTIRTHA BHATTACHARYA)
CHAIRPERSON

Dated: 08.07.2020

(T. K. MUKHERJEE)
SECRETARY