

ORDER OF THE WEST BENGAL ELECTRICITY REGULATORY COMMISSION IN CASE NO. OA-318/19-20

IN REGARD TO THE APPLICATION SUBMITTED BY THE WEST BENGAL STATE ELECTRICITY TRANSMISSION COMPANY LIMITED (WBSETCL) FOR APPROVAL OF INCURRING CAPITAL EXPENDITURE OF AN ESTIMATED AMOUNT OF RS. 36413.40 LAKH 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 REGULATIONS, 2011, AS AMENDED.

PRESENT:

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

DATE: 07.07.2020







Facts in brief:

- 1.0 West Bengal State Electricity Transmission Company Limited (in short 'WBSETCL') submitted a petition vide letter dated 28.11.2019 for approval of incurring capital expenditure of an estimated cost of Rs. 36413.40 Lakh for implementation of new transmission schemes covered under paragraph 2.0 below 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'). The petition has been marked in Case No. OA-318/19-20.
- 2.0 In their petition WBSETCL submitted DPR for each of the schemes. Brief descriptions of the schemes are as follows:
 - A) Establishment of Bakidanga 132/33 kV Gas Insulated Substation (GIS) and associated transmission system (ATS):

WBSETCL proposed for establishment of new 132/33 kV at Bakidanga under P.S. Asansole in the Burdwan (West) district of West Bengal with 2x50 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 Assembly) and construction of Asansole – Bakidanga 132 kV D/c UG Cable line (route length 7.59 kM).

Establishment of 132 kV GIS at Bakidanga was contemplated mainly to off-load Asansole 220 kV substation and to supply adequate, reliable & quality power in and around Asansol, Bakidanga and Kanyapur, Murgasole and Bogra areas and to meet up the growing load demand in those areas.

WBSETCL submitted that 132 kV GIS at Bakidanga will be constructed at the available space at Bakidanga (Kanyapur II) 33/11 kV substation of WBSEDCL. WBSETCL also submitted that after detailed route survey no overhead corridor was found from Asansol to Bakidanga, accordingly they proposed construction of 132 kV UG cable line from Asansol 220 kV GIS to Bakidanga 132 kV proposed GIS. Existing 132 kV bays at Asansol will be used for this connectivity.







B) Establishment of 220 kV D/c Connectivity between Satgachia 220 kV Substation and Rishra 220 kV Substation:

WBSETCL proposed for 220 kV D/c connectivity between Satgachia 220 kV Substation and Rishra 220 kV Substation by construction of 220 kV D/c overhead Transmission Line to tie up Jeerat – Satgachia 220 kV D/c defunct Line (at Satgachia side) and Rishra – Dharampur 220 kV D/c line (at Rishra side).

Establishment of Satgachia – Rishra 220 kV D/C connectivity was contemplated to combat 220 kV source constraint of Rishra 220 kV Substation mainly during evening peak hours.

By establishment of Satgachia – Rishra 220 kV D/C link the existing asset of WBSETCL will be utilized efficiently and the reliability of transmission system of Rishra 220 kV Substation and the downstream 132 kV & 33 kV Substations will be enhanced. Power scenario of entire Hooghly district, which greatly depends on Rishra 220 kV will be benefitted through this scheme.

C) Establishment of 220 kV D/c Connectivity between Jeerat 400 kV Substation and Krishnagar 220 kV Substation:

WBSETCL proposed for 220 kV D/c connectivity between Jeerat 400 kV Substation and Krishnagar 220 kV Substation by extension of Jeerat – Satgachia 220 kV D/c defunct line from Chakda to Krishnanagar 220 kV Substation along with extension of 2 numbers of 220 kV feeder bays at Krishnanagar 220 kV Substation.

Establishment of Jeerat – Krishnanagar 220 kV D/C connectivity was contemplated to provide strong alternative 220 kV source for Krishnanagar 220 kV Substation to strengthen the transmission system.

By establishment of Jeerat – Krishnanagar 220 kV D/C link the existing asset of WBSETCL will be utilized efficiently and the reliability of transmission system of Krishnanagar 220 kV Substation and the downstream 132 kV & 33 kV Substations will be enhanced.



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D) Establishment of 220 kV D/c Connectivity between Rajarhat 400 kV GIS of PGCIL and Barasat 220 kV GIS:

WBSETCL proposed for 220 kV D/c connectivity between Rajarhat 400 kV GIS of PGCIL and Barasat 220 kV GIS by converting a part of existing Barasat – N. Town III 132 kV D/c line (RL = 8 km) to 220 kV D/c line and utilizing portion of Jeerat – Rajarhat 220 kV D/c line along with extension of 2 numbers of 220 kV GIS bays at Barasat 220 kV GIS.

Establishment of Rajarhat – Barasat 220 kV D/C connectivity was contemplated to enhance transmission system reliability & operational flexibility by creating second 220 kV D/C source for Barasat 220 kV GIS from Rajarhat 400 kV GIS of PGCIL utilizing the existing infrastructure of WBSETCL efficiently.

After implementation of the proposed scheme, reliability of power supply at Barasat 220 kV GIS will be enhanced and system operation will be more flexible.

E) Establishment of LILO of STPS – J. K. Nagar 220 kV S/c line at Asansole 220 kV Substation:

WBSETCL proposed for drawal of 220 kV overhead transmission line from Asansole 220 kV Substation for making LILO of STPS – J. K. Nagar 220 kV S/c line at Asansole 220 kV Substation. Two nos. spare 220 kV feeder bays available at Asansol will be utilized to terminate the line at Asansol sub-station.

Establishment of LILO of STPS – J. K. Nagar 220 kV S/c line connectivity was contemplated to mitigate 220 kV source constraint of Asansole 220 kV Substation, strengthening of the existing transmission system and to enhance reliability of power supply at Asansole 220 kV Substation, upcoming Bakidanga 132 kV GIS and in the command area of downstream 33 kV substations in the district of Burdwan West.

F) Establishment of 132 kV D/c connectivity between Vidyasagar Park 220 kV GIS and Kharagpur WBIDC 132 kV Substation:

WBSETCL proposed for construction of 132 kV Transmission Line from Junction Point of Midnapur – Vidyasagar Park and Midnapur – Kharagpur WBIDC line to Kharagpur WBIDC 132 kV Substation to establish connectivity between Vidyasagar Park 220 kV

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GIS and Kharagpur WBIDC 132 kV substation along with construction of 2 numbers of 132 kV AIS bays at Kharagpur WBIDC 132/33 kV Substation.

Establishment of connectivity between Vidyasagar Park 220 kV GIS and Kharagpur WBIDC 132 kV Substation was contemplated to enhance quality & reliability of power supply at Kharagpur WBIDC 132 kV Substation and in the command area of downstream 33 kV substations in the district of West Midnapur and strengthening of the existing transmission system.

The proposed Vidyasagar Park - Kharagpur WBIDC 132 kV D/C Connectivity will improve reliability of power supply at Kharagpur WBIDC 132 kV Substation, as Kharagpur WBIDC 132 kV SS is radially connected and have no alternative source to meet the contingency. On the other hand, this line will ensure evacuation of power from Vidyasagar Park 220 kV GIS and offload Midnapur 220 kV Substation. At the same time, the existing multi-circuit line from Vidyasagar Park up to Midnapur – Kharagpur WBIDC line will be utilized effectively. Further, 2 numbers of 132 kV Bays at Vidyasagar Park 220 kV GIS is available for Kharagpur WBIDC.

- 3.0 It is stated by WBSETCL that the administrative 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) Bakidanga 132/33 kV GIS & ATS in 66th meeting of BoD held on 14.11.2018.
 - ii) Construction of 220 kV D/c line between Rishra Satgachia in 70th meeting of BoD held on 24.09.2019.
 - iii) Construction of 220 kV D/c line between Jeerat Krishnanagar along with 2 numbers of bays at Krishnanagar in 70th meeting of BoD held on 24.09.2019 and 42nd meeting of BoD held on 14.11.2019.
 - iv) Construction of 220 kV D/c line between Rajarhat Barasat in 67th meeting of BoD held on 20.02.2019.
 - v) Construction of LILO of STPS J. K. Nagar 220 kV S/c Line at Asansole in 71st meeting of BoD on 18.11.2019.
 - vi) Construction of 132 kV D/c line between Vidyasagar Park Kharagpur WBIDC in 59th meeting held on 15.09.2017.



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

(Rs. In Lakh)

SL No	Description	Project Cost	Supervis ion Charge	IDC	Total Project Cost
1	Establishment of 132 kV Gas Insulated Substation at Bakidanga and Associated Transmission System	8009.34	1201.40	1163.02	10373.76
2	Establishment of 220 kV D/c Connectivity between Satgachia 220 kV substation and Rishra 220 kV Substation	1156.46	173.47	139.67	1469.60
3	Establishment of 220 kV D/c Connectivity between Jeerat 400 kV substation and Krishnanagar 220 kV Substation along with construction of 2 numbers of bays at Krishnanagar 220 kV substation	9575.23	1436.28	989.56	12001.07
4	Establishment of 220 kV D/c Connectivity between Rajarhat 400 kV GIS and Barasat 220 kV GIS along with construction of 2 numbers of bays at Barasat 220/132/33 kV Substation	2485.36	372.81	218.66	3076.83
5	Establishment of LILO of STPS – J. K. Nagar 220 kV S/c line at Asansole 220 kV substation	6530.61	979.59	682.32	8192.52
6	Establishment of 132 kV D/c Connectivity between Vidyasagar Park 220 kV GIS and Kharagpur WBIDC 132 kV Substation along with construction of 2 numbers of 132 kV line bays at Kharagpur WBIDC 132 kV Substation	1057.26	158.59	83.77	1299.62
TOTAL					36413.40

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.

- 5.0 WBSETCL further submitted that all the projects included in the petition are in pre-tender engineering stage or tendering stage. Letter of Award (LOA) for implementation of the schemes will be placed after obtaining approval from the Commission.
- 6.0 Subsequently, WBSETCL vide letter no. CE/CPD/WBERC/93 dated 13.03.2020 and submitted some additional information/ clarifications and relevant documents. WBSETCL, inter alia, submitted the following:
- 6.1 WBSETCL submitted that the Bakidanga 132 kV GIS is being constructed within the vacant space of Bakidanga/ Kanyapur II 33/11 kV substation of WBSEDCL and execution of the

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project will be initiated after obtaining the permissive possession of land 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.

- 6.2 In case of Bakidanga project, WBSETCL resubmitted the IRR calculation sheet where year mismatch was observed. WBSETCL stated that the changes have no effect in the project cost.
- 6.3 WBSETCL also submitted detailed SLD of the substation.
- 7.0 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 Telegraph 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.

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 Bakidanga substation is being constructed within the vacant space available at the substation of WBSEDCL after obtaining permissive possession from WBSEDCL.
- 10.0 The Commission also observes that salvage value of dismantled materials i.r.o LILO of STPS – J.K. Nagar 220 KV S/C line at Asansol, 220 kV D/c connectivity between Rajarhat



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400 kV GIS and Barasat 220 kV GIS and 220kV D/C connectivity between Jeerat 400 kV – Krishnanagar 220 kV sub-stations needs to be adjusted with the total project cost.

Order:

11.0 The Commission after considering all the facts and the project report submitted by WBSETCL in the petition vide letter dated 28.11.2019 and additional submission dated 13.03.2020, approves the investment proposal in terms of regulation 2.8.2.3 of the Tariff Regulations after adjusting the salvage value of Rs. 52.66 Lakh for the dismantled material from the total estimated project cost of Rs. 36413.40 Lakh submitted in the petition. The details of approved schemes are given below:

(Rs. In Lakh)

SL No	Description	Project Cost	Supervis ion Charge	IDC	Adjustme nt of salvage value	Total Project Cost
1	Establishment of 132 kV Gas Insulated Substation at Bakidanga and Associated Transmission System	8009.34	1201.40	1163.02	-	10373.76
2	Establishment of 220 kV D/c Connectivity between Satgachia 220 kV substation and Rishra 220 kV Substation	1156.46	173.47	139.67		1469.60
3	Establishment of 220 kV D/c Connectivity between Jeerat 400 kV substation and Krishnanagar 220 kV Substation along with construction of 2 numbers of bays at Krishnanagar 220 kV substation	9575.23	1436.28	989.56	(-) 8.75	11992.32
4	Establishment of 220 kV D/c Connectivity between Rajarhat 400 kV GIS and Barasat 220 kV GIS along with construction of 2 numbers of bays at Barasat 220/132/33 kV Substation	2485.36	372.81	218.66	(-) 30.25	3046.58
5	Establishment of LILO of STPS – J. K. Nagar 220 kV S/c line at Asansole 220 kV substation	6530.61	979.59	682.32	(-) 13.66	8178.86
6	Establishment of 132 kV D/c Connectivity between Vidyasagar Park 220 kV GIS and Kharagpur WBIDC 132 kV Substation along with construction of 2 numbers of 132 kV line bays at Kharagpur WBIDC 132 kV Substation	1057.26	158.59	83.77	-	1299.62
TOTAL						36360.74



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12.0 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.







- (vii) WBSETCL in future shall seek prompt approval by making timely submissions to the Commission after receiving approval of the Board of Directors for the projects.
- (viii) WBSETCL shall take timely clearances from all the authorities or agencies to obviate any delay and consequent financial implications and inform the Commission on the clearances received for each of the projects.

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

Sd/-(PULAK KUMAR TEWARI) MEMBER Sd/-(DURGADAS GOSWAMI) MEMBER Sd/-(SUTIRTHA BHATTACHARYA) CHAIRPERSON

Dated: 07.07.2020

(T. K. MUKHERJEE) SECRETARY



