



**ORDER  
OF  
WEST BENGAL ELECTRICITY REGULATORY COMMISSION  
IN**

**CASE NO: OA- 446 / 22-23**

**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 COST RS. 17623.61 LAKH FOR IMPLEMENTATION OF DIFFERENT TRANSMISSION SCHEME 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 CONDITION OF TARIFF) REGULATIONS, 2011, AS AMENDED.**

**PRESENT:**

**SRI MALLELA VENKATESWARA RAO, CHAIRPERSON**

**SRI PULAK KUMAR TEWARI, MEMBER**

**DATE: 17.08.2023**





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 cost Rs. 17623.61 Lakh for implementation of different transmission scheme 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 Condition of Tariff) Regulations, 2011, as amended.



### FACTS IN BRIEF

- 1.0 The instant petition has been filed by West Bengal State Electricity Transmission Company Limited (in short 'WBSETCL') on 09.02.2023 for the approval of incurring Capital Expenditure for an estimated cost of Rs.17623.61 Lakh for implementation of different transmission scheme along with the Detailed Project Reports (DPR) 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 Condition of Tariff) Regulations, 2011, as amended from time to time (in short 'WBERC Tariff Regulations'). The Commission has admitted the application and registered in Case No. OA – 446/22–23.
- 2.0 In the application, WBSETCL has submitted the brief description of the following scheme:
  - 2.1 **Construction of Abdalpur 132/33/11 kV Gas Insulated Substation (GIS) and Associated Transmission System:**
    - 2.1.1 WBSETCL has proposed for construction of new 132/33/11 kV GIS at Abdalpur in the District of 24 Parganas (North) with 2x50 MVA 132/33 KV Transformers, 2 numbers of 132 KV feeder bays, 16 numbers of 33 KV feeder bays, 16 numbers of 11 KV feeder bays, 4x10 MVA 33/11 KV transformers and laying of 132 KV Double Circuit (D/C) Under Ground (UG) Cable line from Barasat 220 KV Substation to proposed Abdalpur 132 KV GIS along with 2 numbers of 132 kV bays at Barasat end.
    - 2.1.2 The present source of the existing 33 KV Substations in the adjacent areas (Abdalpur, Sisirkunj, and Kishalay) is the Barasat 220 KV Substation (presently running on 93.5% of the installed capacity), whereas Ganganagar 33 KV substation is fed from Mahispota 132 KV Substation (presently running on 88.7% of the installed capacity). It is worth to note that there is no further space at Barasat 220 kV Sub-Station to take up any augmentation there and also, there are severe ROW problem at Mahispota end. It is expected that the aggregated demands of the abovementioned 33 kV Sub-stations will reach up to 49 MVA during commissioning of Abdalpur 132/33 KV GIS.
    - 2.1.3 After establishment of proposed Abdalpur 132/33 KV GIS, adjacent 33 kV Substations will be fed from Abdalpur 132/33 KV GIS. The 33 KV Bus of the proposed Abdalpur 132 KV GIS will be operated in N-1 contingency.
    - 2.1.4 WBSETCL has submitted that the project will revive the distribution system in the area, improve overall redundancy in the system and that any contingency can be tackled.





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As submitted by WBSETCL, construction of new 132/33 KV GIS at Abdalpur at District 24 Parganas (North) will add the following benefits:

- Improvement in voltage profile, system stability as well as reduction in technical loss in the area.
- Additional sale of energy by WBSEDCL in the project command area.
- Enhancement of system reliability, reduction in customer interruption frequency index and customer interruption duration index.

2.1.5 The proposed Abdalpur 132/33 KV GIS is to be set up on the spare land available within 33/11 KV substation of WBSEDCL. The project is scheduled to be commissioned in next two years within 2024-25.

2.1.6 The Abdalpur project is contemplated in Rolling Plan up to 2027-28 (target year 2024-25) which was approved by the BoD, WBSETCL in its 85<sup>th</sup> meeting held on 16.11.2022 to cater growing demand in and around Barasat area in 24 Parganas (North) district.

3.0 The project cost, as submitted by WBSETCL in the DPR, covered under paragraph 2.0 above is tabulated as under:

Sl. No	Description	Amount (Rs lakh)
1	Construction of Abdalpur 132/33/11 kV GIS with 02 Nos. 132 kV Feeder bays, 2x50 MVA, 132/33/ kV Transformers, 16 nos. 33 kV feeder bays, 4x10 MVA, 33/11 KV Transformers, 16 nos. 11 KV outgoing feeders, 2x100 KVA, 33/0.415 KV Station Station Service Transformers and 02 nos. 33 KV Earthing Transformers.	4531.62
2	Construction of 2 nos. 132 KV Line Bays at Barasat 220 KV Substation for proposed Abdalpur 132/33/11 KV GIS.	192.00
3	Construction of 132 KV D/C UG Cable line from Barasat 220 KV Substation to proposed Abdalpur 132 KV GIS (RL= 6.95 KM).	9937.79
	Total Cost	14661.41
3	Supervision Charge	1466.14
	Total Project Cost	16127.55
4	IDC	1496.06
	<b>Project Cost Including IDC</b>	<b>17623.61</b>

4.0 WBSETCL has further submitted the following:





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- 4.1 The projects are proposed to be funded through WBSETCL's Internal Resources (IR) and through domestic borrowings. The equity component (30%) is proposed to be met through Internal Resources (IR) and the loan component (70%) through domestic borrowings from any Financial Institute. The interest during construction (IDC) is worked out with interest rate for the loan @ 9.50% for the domestic funding with a payback period of 9 years 6 months.
- 4.2 The unit rates for all equipment for transmission lines & substations have been considered from latest cost data as on 23.11.2021 obtained from Procurement Department of WBSETCL and inclusive of all Taxes & Duties. For Cash flow study & IRR calculation, 15 years repayment period including moratorium period of initial 3 years is considered. Life span of the asset is considered 25 years for the Substation asset and 35 years for the line asset. Power Map of West Bengal as on 31.08.2022 and planned up to 2026-27, schematic diagram, financial calculations, detailed estimate for Sub-station, detailed estimate for Line, Power flow study snaps-shots, approval of the projects, Technical & Administrative Approval Order are enclosed for reference.
- 4.3 The target beneficiary of the projects is WBSEDCL. The projects are in pre-tender engineering stage.
- 5.0 The Commission, after careful analyzing, admitted the application on 24.04.2023 and directed WBSETCL to publish the gist of their application as approved by the Commission in the newspapers and also in the website of WBSETCL as per requirement of regulation 2.8.2.3 of the WBERC Tariff Regulations. WBSETCL accordingly published the gist of the application in (i) The Telegraph (ii) The Times of India (iii) the 'Aajkaal' and (iv) the 'Bartaman' and in their website on 09.05.2023 inviting suggestions and objections on their application within 21 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**

- 6.0 The Commission observes that, in terms of Regulation 2.8.2.3 of the WBERC Tariff Regulations, approval of the Commission for investment in new transmission project is mandatory. 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.





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- 7.0 The Commission noted that the project has been considered in the Rolling Plan 2023-24 to 2027-28 submitted by WBSETCL along with their Multi Year Tariff Application for the 8th Control Period for the years 2023 – 24, 2024 – 25 and 2025 – 26, admitted by the Commission in Case No. TP - 99/22 – 23.
- 8.0 Commission observes that the proposed Abdalpur 132/33/11 kV GIS is to be set up on vacant land within the 33/11 kV Sub-station of WBSEDCL. In terms of regulation 5.11 of the West Bengal Electricity Regulatory Commission (Licensing and Condition of License) Regulation, 2013 WBSETCL is required to take prior approval from the Commission before taking over or acquiring by purchase of the land.
- 9.0 The Commission further observes the following:  
The proposed 132/33/11 kV GIS at Abdalpur will cater growing load demand in and around Barasat area in the district North 24 Pargana and supply adequate, reliable & quality power supply in the vicinity.

### ORDER

- 10.0 The Commission after consideration all the facts and the project reports submitted by WBSETCL, accords approval of the investment proposal in terms of regulation 2.8.2.3 of the WBERC Tariff Regulations with the details as given below subject to approval of project cost in terms of regulation 2.8.5 of the WBERC Tariff Regulations:

Sl. No	Description	Amount (Rs lakh)
1	Construction of Abdalpur 132/33/11 kV GIS with 02 Nos. 132 kV Feeder bays, 2x50 MVA, 132/33/ kV Transformers, 16 nos. 33 kV feeder bays, 4x10 MVA, 33/11 KV Transformers, 16 nos. 11 KV outgoing feeders, 2x100 KVA, 33/0.415 KV Station Station Service Transformers and 02 nos. 33 KV Earthing Transformers.	4531.62
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3	Construction of 132 KV D/C UG Cable line from Barasat 220 KV Substation to proposed Abdalpur 132 KV GIS (RL= 6.95 KM).	9937.79
	Total Cost	14661.41
3	Supervision Charge	1466.14
	Total Project Cost	16127.55





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 cost Rs. 17623.61 Lakh for implementation of different transmission scheme 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 Condition of Tariff) Regulations, 2011, as amended.



4	IDC	1496.06
	<b>Project Cost Including IDC</b>	<b>17623.61</b>

11.0 The Commission also gives the following directions:

- (i) For the purpose of capitalization WBSETCL will have to seek approval of the Commission for the project cost 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 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) On completion of each project WBSETCL shall submit the COD and a benefit analysis of the project separately before the Commission.
- (iv) Original project cost is required to be approved in terms of Regulation 2.8.5 of the WBERC Tariff Regulations. Commission shall disallow any excess of project cost on capitalization over approved cost if it finds the justifications furnished are not adequate.
- (v) In case of escalation in project cost in any scheme, WBSETCL shall take due approval from the Commission before capitalization of assets.
- (vi) WBSETCL shall take prior approval from the Commission before taking over or acquiring by purchase of the land at Abdalpur 33 kV Sub-station of WBSEDCL in terms of regulation 5.11 of the West Bengal Electricity Regulatory Commission (Licensing and Condition of License) Regulation, 2013.

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





सत्यमेव जयते

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13.0 A copy of the order shall be posted in the website of the Commission.

**Sd/-**  
**(PULAK KUMAR TEWARI)**  
**MEMBER**

**Sd/-**  
**(MALLELA VENKATESWARA RAO)**  
**CHAIRPERSON**

**Dated: 17.08.2023**

**Sd/-**  
**SECRETARY**