

**BEFORE THE
HON'BLE BIHAR ELECTRICITY REGULATORY COMMISSION
VIDYUT BHAWAN -II, PATNA**

Petition

For

True - up for FY 2022-23,

Annual Performance Review (APR) for FY 2023-24,

Determination of Annual Revenue Requirement (ARR) for the FY 2024-25,

Determination of Transmission Tariff for the FY 2024-25

For

Bihar Grid Company Limited

(BGCL)

Patna



Bihar Grid

2nd Floor, Alankar Place,
Boring Road,
Patna - 800 001

November __, 2023

BEFORE, THE BIHAR ELECTRICITY REGULATORY COMMISSION,

IN THE MATTER OF

Filing of the Petition for True-up of FY 2022-23, Annual Performance Review (APR) for FY 2023-24, and Determination of Annual Revenue Requirement (ARR) for the FY 2024-25 along with Determination of Transmission Tariff for the FY 2024-25 under Bihar Electricity Regulatory Commission (Multi Year Transmission Tariff and SLDC Charges) Regulations, 2021 along with the other guidelines and directions issued by the Bihar Electricity Regulatory Commission from time to time and under Section 61, 62, 64 and 86 of the Electricity Act, 2003 read with the relevant guidelines.

AND

IN THE MATTER OF

BIHAR GRID COMPANY LIMITED (hereinafter referred to as "BGCL" or "Petitioner" which shall mean for the purpose of this Petition, the Licensee), having its registered office at 2nd Floor, Alankar Place, Boring Road, Patna - 800001.

The Petitioner respectfully submits as under:

1. BGCL is Filing of the Petition for True-up of FY 2022-23, Annual Performance Review (APR) for FY 2023-24, and Determination of Annual Revenue Requirement (ARR) for the FY 2024-25 along with Determination of Transmission Tariff for the FY 2024-25 under Bihar Electricity Regulatory Commission (Multi Year Transmission Tariff and SLDC Charges) Regulations, 2021 along with procedures outlined in the respective governing Regulations thereof.
2. This Petition has been prepared in accordance with the Section 61, 62 and 64 of the Electricity Act, 2003 along with provisions contained in Bihar Electricity



Regulatory Commission (Multi Year Transmission Tariff and SLDC Charges) Regulations, 2021, and Bihar Electricity Regulatory Commission (Conduct of Business) Regulations 2005.

3. BGCL along with this Petition is submitting the Tariff Formats (Annexure A of the Petition) with relevant data and information to the extent applicable and would make available any further information/additional data required by the Bihar Electricity Regulatory Commission during the course of the proceedings.

Date: November , 2023



(Name)
(Designation)

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1 Background

1.1 Development of Intra State Transmission Network

Considering the rapid load growth and the upcoming generating stations in the State of Bihar, a comprehensive study was carried out by POWERGRID in 2011-12 in association with the then Bihar State Electricity Board (BSEB) and Central Electricity Authority (CEA). As per the study, transmission and system strengthening schemes were planned and categorised in following three parts:

Table 1 - Development of Intra State Transmission Network

Part	Scheme Details
1	Bihar Sub-Transmission Phase-II extension scheme
2a	Strengthening scheme: Phase-1: Schemes identified for year 2012-13, 2013-14 and 2014-15 under Phase-III
2b	Strengthening Scheme: Phase-2: Schemes identified for year 2015-16 & additional strengthening for year 2016-17 under Phase-IV
3	Generation Linked Scheme: Transmission System for evacuation of power from Lakhisarai, Pirpainti and Buxar generation projects (identified for year 2016-17) under Phase-V

1.2 Formation of BGCL

In order to develop the aforesaid Intra-State Transmission System in the State of Bihar, Bihar State Power Holding Company Limited (BSP(H)CL) and Power Grid Corporation of India Limited (POWERGRID) formed a 50:50 Joint Venture Company in the name of Bihar Grid Company Limited (BGCL) on January 4, 2013 under the provisions of the Companies Act, 1956.

1.3 Transmission License for BGCL

The Transmission Licence was issued to BGCL on June 21, 2013 vide Letter No. BERC/Case No.7/2013-792-01-Tr.L. The Hon'ble Commission while granting the approval of transmission license in Case No. 7 of 2013 directed as follows:

"Therefore, the application of the Bihar Grid Company Limited for grant of licence to the applicant BGCL for transmission of electricity as a transmission licensee in the State of Bihar is approved. After compliance of conditions laid down in the Regulations 13, 14 and 15 of BERC (Licencing for Transmission of Electricity) Regulations, 2007 by the Bihar Grid Company Limited, the Commission would issue the Licence. The BGCL shall pay the initial and annual licence fee to the Bihar Electricity Regulatory Commission in accordance with BERC (Fees, Fines and Charges) Regulations, 2006.

The licence shall be issued for 25 (twenty five) years with effect from the date of issue of the licence. Bihar Grid Company Limited shall submit requisite documents as specified in Regulations 13, 15 and 16 of the BERC (Licencing for Transmission of Electricity) Regulations, 2007. Bihar Grid Company Limited shall abide by all terms and conditions of the licence and any other terms and conditions which Commission considers necessary to remove the difficulty in giving effect to any of the provision of the BERC (Licencing for Transmission of Electricity) Regulations, 2007."

1.4 Current Projects entrusted with BGCL

While it was initially envisaged that BGCL should undertake the development of transmission and system strengthening schemes as identified above, however, works under Part-1 and Part-2 (a) were undertaken by BSPTCL on priority basis. Therefore, BGCL is implementing works under Part-2 (b) of the above-mentioned schemes and Detailed Project Report (DPR) for the same has been approved by the Hon'ble Commission vide Order dated January 4, 2014 and July 22, 2015 in Case No. 20 of 2013 and Case No. 14 of 2015, respectively.

1.5 Main Functions and Duties of BGCL

The main functions and duties of BGCL are as follows:

-
- a) To undertake planning and coordination activities in regard to Intra-State Transmission, works connected with the inter-State Transmission System in the State of Bihar, to introduce open access in transmission on payment of transmission charges. To ensure development of an efficient, coordinated and economical system of Intra-State Transmission lines for smooth flow of electricity from a generating station to load centres and to provide non-discriminatory open access as per requirement. Other functions as may be assigned to the company by law or otherwise by Government or Government Authority concerning the operation of the Power System.
 - b) To plan, acquire, develop, establish, built, take over, erect, lay, operate, run, manage, renovate, modernize, electrical transmission lines and/or networks through various voltage lines and associated sub-stations, including cables, wires, meters, computers and materials connected with transmission, ancillary services, telecommunication and tele-metering equipment etc.
 - c) To make available the entire transmission capacity of the Project to BSP(H)CL on a commercial basis subject to the conditions laid down in the Inter-State Transmission Services Agreement (ITSA).
 - d) To derive its revenue by recovery of transmission charges from transmission system users. The Company shall be primarily in the business of transmission of electricity and it shall be vested with the transmission assets, interest in property, rights and liabilities. The Company shall act as a Transmission Licensee under the Provisions of Section 14 of the Electricity Act, 2003.
 - e) To define its own 'Safety policy ' keeping in view the motto of ' ZERO ACCIDENT GOAL'.

2 Regulatory Background

- Based on the study carried out jointly by CEA, Power Grid, and the then BSEB, business plan for suitable transmission network to meet load growth as estimated in 18th EPS, had been prepared under phase-IV part-2 scheme comprising of Part 1 of 2 and Part 2 of 2.
- Accordingly, BGCL had filed its Business plan of Rs. 1699.36 Crore under phase IV (part 1 of 2) of the projects under 12th five year plan under domestic funding. Vide Order dated 04.01.2014, the Hon'ble Commission in Case No. 20/ 2013 has accorded approval to the Business Plan filed by the Petitioner for Part 1 of 2. The approved project cost was Rs. 1699.36 Crore with debt: equity ratio of 70:30.
- Further, BGCL sought approval of the Revised Cost Estimate (RCE - 1) pertaining to Part 1 of 2 by way of ARR Petition for the FY 2017-18. Hon'ble Commission vide Order dated 09.03.2017 in Case No. 49 of 2016 approved the RCE -1 to the extent of Rs. 1833.23 Crore (from Rs. 1699.36 Crore).
- Further, BGCL sought approval of cost estimate pertaining to Part 2 of 2 by way of Petition for Approval in Business plan of BGCL for control period from FY 2015-16 to FY 2017-18. Hon'ble Commission vide Order dated 28.07.2017 in Case No. 05 of 2016 approved the cost estimate to the extent of Rs.1688.36 Crore.
- Further, BGCL sought approval of the Revised Cost Estimate (RCE - 2) pertaining to Part 1 of 2 by way of Petition for Approval of REC-2 of Capital Investment Plan of Phase-IV Part-1 Scheme of BGCL. Hon'ble Commission vide Order dated 28.01.2020 gave in-principal approval to the RCE -2 of Part 1 of 2 to the tune of Rs. 2091.89 Crore, subject to furnishing the following information during the true up:

- The actual cost incurred, actual date of start of work, actual COD and scheduled completion period
 - Detailed justification along-with supporting documents for change in cost with comparison to original project cost Rs. 1699.36 crore showing deviation amount attributable to each factor contributing into deviation i.e Government Taxes & duties, change in scope of work etc.
 - Calculation sheet of IDC from the date of infusion of debt fund upto Scheduled Date / Actual Date of Commercial operation showing amount of loan & amount of capex actually attributed/allocated to each substations & transmission lines
 - Details of IEDC from the zero date to Scheduled Date / Actual Date of Commercial operation.
- Further, BGCL had filed petition for determination of Tariff for FY 2021-22 however, during the course of proceedings, due to want of certain documents, Hon'ble Commission had not approved the Capex for part 1 of 2 and the same was restricted to Rs. 1459.97Cr. (hard cost) based on the LOA awarded hard cost at that time. BGCL aggrieved by the said order of Hon'ble Commission preferred a Review of the said Order however, BGCL's plea was not accepted before the Hon'ble Commission. Thereafter, left with no choice, BGCL had to prefer an Appeal before the Hon'ble APTEL against the Hon'ble Commission's Order dated 12.03.2021, which is pending adjudication before the Hon'ble APTEL.
 - Further, BGCL filed a review Petition for review of Hon'ble Commission's Order dated 25.03.2022 in regard to disallowance of Capex and Capitalization of Part 1 of 2 in the truing up of 2019-20 and FY 2020-21. BGCL provided all the information sought by the Hon'ble Commission vide Order dated 28.01.2020. Hon'ble Commission vide Order dated 11.11.2022 in Case No. 15 of 2022

directed that the requisite information as above be submitted by the Petitioner during the time of Tariff proceedings for the FY 2023-24.

- By virtue of said observation, the Petitioner was of the firm view that the deviation in Capital Cost pertaining to Part 1 of 2 would be admitted at the time of Tariff determination during the FY 2023-24. Under such apprehension, the Petitioner by way of Additional Submissions placed on record the requisite documents/ justification during the course of Tariff proceedings for the FY 2023-24. However, the Hon'ble Commission has not admitted the variation in Capital Cost owing to the matter being sub-judice before APTEL (against Tariff Order dated 12.03.2021 for FY 2021-22 bearing Appeal ref. DFR No. 145 of 2022, IA No. 1755 of 2022 and IA No. 603 of 2022).
- Owing to the financial injury on the Licensee due to the disallowance in Capital Cost and aggrieved by the observations made by the Hon'ble Commission in the Tariff Order dated 25.3.2023 for FY 2023-24, the Petitioner has filed an Appeal before APTEL (appeal DFR No. 145 of 2022 & IA No.1755 of 2022 and IA No.603 of 2022).

In view of the above pending matters, BGCL respectfully prays before the Hon'ble Commission that the earlier disallowed Capital Cost towards Part 1 of 2 (ref Tariff Order dated 12.03.2021 and Tariff Order dated 25.03.2022) be considered for the consideration of opening Capital Cost for the FY 2022-23. To facilitate the prudence check by the Hon'ble Commission, the Petitioner is placing the documents/ justification in support of Capital Cost for Part 1 of 2 before the Hon'ble Commission. A copy of the same is provided as **Annexure B**.

The Hon'ble Commission is sincerely requested to consider the Capital Cost as claimed by the Petitioner pertaining to Part 1 of 2 based on the information/ documents provided under Annexure B while determining the True up of FY 2022-23, APR for FY 2023-24 and ARR for FY 2024-25.

TRUE-UP of ARR for the FY 2022-

23



3 True - Up for 2022-23

3.1 Background

The Hon'ble Commission in the Order dated 25.03.2022 has approved ARR for FY 2022-23 to the tune of Rs. 433.32 Crore. Further, in the Order dated 21.03.2023, the Hon'ble Commission has approved Rs. 380.93 Crore while conducting the Review of Annual Performance for the FY 2022-23. The Petitioner herein, submits the claim towards each and every item of the ARR before this Hon'ble Commission for conducting the True-up for the period FY 2022-23 in accordance with the Regulatory provisions and the principles. The following considerations have been made by the Petitioner for the True up for FY 2022-23:

- a. Opening Value of GFA for FY 2022-23 are considered as respective closing values for FY 2021-22 (as claimed by the Petitioner in the Tariff Petition for FY 2023-24)
- b. As far as the Additions to GFA is concerned, it is submitted that the claim of Capitalization during the FY 2022-23 is more than the Capitalization as per the Books of Accounts. This is owing to the fact that certain assets having attained capitalization could not be capitalized in the Books of Accounts.
- c. Expense items of ARR are calculated based on the normative parameters in line with the principles of Tariff Regulations, 2021.
- d. Amount of Rs. 16.91 Crore, pertaining to Land of Jakkanpur is being claimed under Part 2 capitalisation which was previously disallowed by the Hon'ble Commission during the True-up of FY 2018-19.

Details of the claims under various elements of the Annual Revenue Requirement (ARR) for the True-up for FY 2022-23 is explained in the subsequent sections.

3.2 Performance of Transmission System - Transmission Availability Factor (TAF) and Transmission Loss

The Tariff Regulations 2021 stipulate the Normative Transmission System Availability Factor (NATAF) of 98% for the control period FY 2022-23 to FY 2024-25. The Petitioner submits that the Annual Transmission Availability of the BGCL system for the FY 2022-23 is 99.90%.

The Hon'ble Commission as per the Order dated 25.03.2022 has approved Transmission Loss trajectory to be 1.80% for the control period of FY 2022-23 to FY 2024-25. The Petitioner submits that the actual Annual Transmission Losses in the BGCL network for the FY 2022-23 is 0.89%.

The Month-wise Transmission Availability and Transmission Loss along with the incentives allowable in accordance with the Tariff Regulations 2021 is detailed out in the upcoming sections.

3.3 Capital Expenditure and Capitalisation

As explained in the preceding sections, the Hon'ble Commission vide Order dated 28.01.2020 had accorded in-principle approval of the Capital Investment Plan of Rs. 2091.88 Crore (in accordance with the Revised Cost Estimate - II proposed by the Petitioner) for Phase IV Part 1 of 2.

Furthermore, the Hon'ble Commission vide Order dated 28.07.2017 and further vide Order dated 20.03.2020 had approved Capital Investment Plan of Rs. 1688.36 Crore for Phase IV Part 2 of 2. In addition, the Hon'ble Commission vide Order dated 15.02.2019 also gave in-principle approval of the Supplementary works proposed along with Phase IV Part 2 of 2 amounting to Rs. 111.14 Crore.

The Capital Investment Plan as approved by the Hon'ble Commission w.r.t. BGCL Network is summarized below:

Table 2 - Scheme wise Capital Expenditure and Capitalisation

Particulars	Approved Cost	Remarks
Phase IV Part 1 of 2	2,091.88	Order dated 28.01.2020
Phase IV Part 2 of 2	1,688.36	Order dated 28.07.2017

Particulars	Approved Cost	Remarks
Phase IV Supplementary works	111.14	Order dated 15.02.2019
Total	3,891.39	

It is submitted that the Capital expenditure along with the details of capitalisation for FY 2022-23 as per books of accounts is summarised in the CWIP statement that shall follow in subsequent paras.

Further, Petitioner submits that in addition to the Capitalization booked in the Audited Accounts, three more transmission elements have attained DOCO which are listed as under:

- LILO of 132 kV S/C Jakkanpur/Mithapur-Fatuha line at Jakkanpur New
- LILO of both ckt of 132kV Ara-Jagdishpur D/C - T/L at Dumraon (New)
- 132kV D/C Dumraon (new) - Dumroan (BSPTCL)

The aggregate Capitalization pertaining to above assets is Rs. 67.82 Crore, were is over and above the Capitalization reflected in the books of accounts. It is imperative to point out that such assets as indicated above have been put under Commercial operation and are therefore "Put to Use", therefore, the claim made by the Petitioner is in line with the philosophy of the Tariff Regulations 2021 which provide that the Expense items of ARR are recoverable after the start of commercial operation and after put to use. The relevant abstract from the Tariff Regulations 2021 are reproduced below:

"22. Return on Equity

- (a) *The return on the equity invested shall be allowed from the date of start of commercial operation and after put to use:*

23. Depreciation

- (iii) *Depreciation shall be calculated annually on the basis of assets capitalised and put to use based on the straight line method over the useful life of the asset and at the rate not exceeding the rate specified by the Central Electricity Regulatory Commission from time to time.*

24. Interest and finance charges on loan capital

- (j) Addition to loan during the year for interest purpose will be restricted to the quantum of assets capitalized and put to use."

The breakup of the Hard cost and soft cost towards such assets is shown in the table below:

Table 3: List of Assets made operation during the FY 2022-23 but not capitalized in the Books of accounts of FY 2022-23

(in Rs Crore)

Assets	CWIP	IDC	IEDC	Total
LILO of 132 KV S/C Jakkanpur/Mithapur-Fatuha line at Jakkanpur new (with HTLS conductor)	26.96	4.88	2.41	34.25
LILO of both ckt of 132kV Ara-Jagdishpur D/C T/L at Dumraon (new)	18.56	3.36	1.66	23.58
132kV D/C Dumraon (new) - Dumroan (BSPTCL) transmission line	7.86	1.42	0.70	9.99
Total	53.38	9.67	4.77	67.82

Auditor Certificate for the above mentioned assets is annexed as **Annexure-C**

Notwithstanding, it is also mentioned that the assets as above are part of the Capex Scheme Part 2 of 2 which has already been accorded approval by this Hon'ble Commission.

In light of the aforesaid, the Petitioner humbly requests the Hon'ble Commission to allow Capitalization and recovery of Transmission Charges towards the assets as mentioned in the Table no. 3. The Petitioner emphasizes that these assets were duly capitalized during FY 2022-23 and have been put to use.

Further, breakup of the Hard and the Soft cost of the assets commissioned during the FY 2022-23 is annexed as **Annexure - D**. The Petitioner submits that the Hon'ble

Commission while approving Capitalization during the True up for FY 2019-20 observed as follows:

“4.4.25 However, considering that BGCL has already undertaken the capital cost of Rs.2,091.89 Crore, the Commission is inclined to provide BGCL a final opportunity to provide justification of each factor of cost escalation of the works undertaken in Phase IV Part I. Hence, the Commission directs BGCL to submit detailed information and justification along with supporting documents to substantiate the amount actually incurred on each factor of deviation as elaborated in earlier section of this Order in next Truing up in which Project get completed.”

Furthermore, in view of the Capital Cost under consideration before the Hon'ble Commission, the Petitioner has claimed the opening Capital Cost for the FY 2022-23 based on the closing Capital Cost claimed by the Petitioner for the True up of FY 2021-22.

It is also submitted that the Land of Jakkanpur has been Capitalised in the Books of Accounts of Petitioner in earlier financial year but same was not approved during the True-up of FY 2018-19 as the asset pertaining to that land had not attained DOCO. The relevant abstract of the Order is reproduced below:

“It is observed from Para(g) of the petitioner reply vide Letter No-JV/BG/PT/Comml./BERC/04 dated 02.01.2020 that out of total direct capitalization of Rs.46.05 Crore, Rs.41.78 Crore relating to Phase IV Part 2 of 2 works which has been directly charged to GFA. The project relating to Phase IV Part 2 of 2 is proposed to be capitalised and put into use in FY 2019-20 and FY 2020-21 by the petitioner. The capex made amounting to Rs.41.78 Crore is for erection of substations and shall be capitalised along with the cost of equipment on commissioning of substation. As such capex of Rs.41.78 Crore is treated as CWIP and withdrawn from the value of GFA in truing up for FY 2018-19”

It is submitted that the asset at Jakkanpur has attained Capitalisation in the FY 2022-23, accordingly capitalization of Land amounting to Rs. 16.91 Cr has also been considered in capitalisation in this petition along with the audited capitalised cost and the cost pertaining to the assets shown in the Table no.3. Summary of the CWIP statement for the FY 2022-23 is provided in the table below:

Table 4 - CWIP statement for the FY 2022-23

(in Rs Crore)

S.No.	Particulars	Approved by the Hon'ble Commission in the Order dated 25.03.2022	BGCL claim
1	Opening CWIP without IEDC and IDC		647.75
2	Opening IDC		109.06
3	Opening IEDC		49.56
4	Opening CWIP (1+2+3)	244.26	806.37
5	Capital investment during the year (without IDC and IEDC)	35.29	175.69
6	IDC addition	11.11	47.58
7	IEDC addition	11.24	7.73
8	Total (5+6+7)	57.64	231.00
9	Asset capitalisation without IDC & IEDC	214.74	512.24
10	IDC capitalised	56.15	54.30
11	IEDC capitalised	31.01	44.20
12	Total Capitalisation (9+10+11)	301.90	610.74
13	Closing CWIP without IDC and IEDC (1+5-9)	-	311.20
14	Closing IDC (2+6-10)	-	102.34
15	Closing IEDC (3+7-11)	-	13.09
16	Closing CWIP (13+14+15)	-	426.62

The Audited Accounts of BGCL for the FY 2022-23 is annexed as Annexure E.

Following table shows the Head-wise capitalization sought by the Petitioner:

Table 5 - Head-wise Capitalization claim

(in Rs Crore)

SN	Heads	Amount
1	Land at Jakkanpur	16.91
2	Audited Capitalization	
A	Buildings	84.74

SN	Heads	Amount
B	Plant and Machinery	438.08
C	Furniture and Fixtures	0.75
D	Office Equipment	2.46
3	Assets put under commercial operations but not Capitalized in the Books of Accounts	67.82
	Total Capitalization	610.74

The Petitioner thereby submits before the Hon'ble Commission to approve the CWIP and Capitalization for the FY 2022-23 as per the tables above.

3.4 Schedule of Capitalization

The Petitioner submits that the Assets capitalized during FY 2022-23 in accordance with the Audited Accounts for the FY 2022-23 and assets shown in the Table no. 3 have been listed along with the Date of Commercial Operation in the table below:

Table 6 - Details of Assets Capitalized during the FY 2022-23 (Part 1 of 2)

S. No.	Transmission Element (Part 1 of 2)	Date of Commercial Operation
	Nil	

Table 7 - Details of Assets Capitalized during the FY 2022-23 (Part 2 of 2)

S. No.	Transmission Element (Part 2 of 2)	Date of Commercial Operation
Transmission Lines		
	Transmission Line	
1.	LILO of 400kV D/C (Quad) Nabinagar-II - Patna (PG) Transmission Line at Jakkanpur(new)	21-04-2022
2.	220 KV D/C Naubatpur(New)-Bihta(BSPTCL) Transmission line	28-06-2022
3.	LILO of 220 KVD/C Ara (PG) - Khagaul(BSPTCL) line at Naubatpur (New)	28-04-2022
4.	220 KV D/C Naubatpur (New)-Bhusaula (New) Transmission line	02-06-2022

S. No.	Transmission Element (Part 2 of 2)	Date of Commercial Operation
5.	220 KV S/C Jakkanpur (New)-Khagaul- Sipara Transmission line DOCO 03-12-2022	03-12-2022
6.	LILO of 132 KV S/C Jakkanpur/Mithapur-Fatuha line at Jakkanpur new (with HTLS conductor)	23-07-2022
7.	LILO of both ckt of 132kV Ara-Jagdishpur D/C T/L at Dumraon (new)	14-07-2022
8.	132kV D/C Dumraon (new) - Dumroan (BSPTCL) transmission line	14-07-2022
Sub Station		
9.	400/220/132 kv GIS Jakkanpur	21-04-2022
10.	100 MVA ICT 1 at Bhusaula	03-06-2022
11.	220kv GIS Bihta	27-06-2022
12.	500 MVA ICT 1 at Jakkanpur	20-04-2022
13.	160 MVA ICT 1 at Jakkanpur	11-05-2022
14.	80 MVA ICT 1 at Jakkanpur	26-05-2022
15.	80 MVA ICT 1 at Jakkanpur	30-09-2022
16.	500 MVA ICT 1 at Jakkanpur	05-11-2022
17.	Naubatpur 500 MVA transformer	22-02-2023
18.	Bhusaula 100 MVA transformer	03-03-2023
19.	Jakkanpur 02 no od 80 MVA transformer	28-03-2023

The Petitioner submits that few assets planned to be capitalized during the FY 2022-22 as per the submissions made for the Annual Performance Review of FY 2022-23 could not attain Capitalization in actual on account of reasons beyond the control of the Petitioner. The key reasons attributable to such delay include the time required for land acquisition, local law & order issues, contractual & technical issues, unprecedented rainfall/floods in certain areas, delay due to shutdown requirement and the intermittent lockdowns due to COVID pandemic. In view of the same, the Petitioner requests the Hon'ble Commission to approve the capitalisation of the projects.

3.5 Gross Fixed Assets

The Petitioner has considered the Opening GFA as per the Closing GFA submitted by the Petitioner in the True up Petition for FY 2021-22. As illustrated in preceding sections, the additions to GFA is summarized under the following heads:

1. Deferred item pertaining to Jakkanpur Land which was previously disallowed by Hon'ble Commission
2. Additions to the GFA based on the Audited Accounts
3. Assets put under commercial operation and put to use but not booked in the Audited Accounts.

Accordingly, the Petitioner requests the Hon'ble Commission to approve the GFA for FY 2022-23 as depicted in the table below:

Table 8 - Gross Fixed Assets for the FY 2022-23

(in Rs Crores)

S.No	Particulars	FY 2022-23	
		Approved by Hon'ble BERC in the Order dated 25.03.2022	BGCL claim
1	Opening GFA	2455.21	2339.44
2	Net Additions	301.90	610.74
A	Capex Addition		512.24
B	IDC Addition		54.30
C	IEDC addition		44.20
5	Closing GFA	2757.11	2950.18

3.6 Depreciation

Regulation 23 of Tariff Regulations, 2021 stipulates the following:

"

- i. Depreciation shall be calculated for each year of the control period on the original cost of the fixed assets of the corresponding year. No advance shall be granted against depreciation.
- ii. Depreciation shall not be allowed on assets funded by capital subsidies, beneficiary contributions or grants.
- iii. Depreciation shall be calculated annually on the basis of assets capitalised and put to use based on the straight line method over the useful life of the asset and at the rate not exceeding the rate specified by the Central Electricity Regulatory Commission from time to time as provided in Appendix-III of these Regulations.
The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset. The Transmission Licensee or

SLDC, as the case may be, shall submit separate detail of fully depreciated asset along with year of commissioning and year of attaining ninety percent depreciation with the tariff petition.

Provided that freehold land shall not be treated as a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset.

Provided further that the cost of lease hold land shall be amortised evenly within the leased period.

- iv. The original capital cost of the asset shall include Additional Capitalisation on account of Foreign Exchange Rate Variation as allowed by the Government / Bihar Electricity Regulatory Commission.
- v. Depreciation shall be chargeable from the first year of operation of the asset. For part of the year, depreciation shall be charged on pro rata basis.
- vi. A provision of replacement of assets shall be made in the capital investment plan."
- vii. The licensee(s) shall submit certified copy of the Asset Register with the list of fully depreciated Transmission lines, substation, transformers, etc. along with the details of disposed off assets and amount received therefore with the tariff petition.

In consonance with the above and methodology adopted by the Hon'ble Commission in previous years, the Petitioner has computed the weighted average rate of depreciation in 2 parts:

1. for the assets capitalized on/ before 31.03.2022 - Rate of depreciation is 4.66%
2. for the assets commissioned during the FY 2022-23 - Rate of depreciation is computed on a pro rata basis (i.e. based upon the actual DOCO of the capitalized asset) which comes out to be 3.41 %.

Accordingly, the computation of the Weighted Average Rate of depreciation is illustrated in the table below:

Table 9 - Computation of Weighted average Rate of Depreciation
(in Rs. Crores)

S.No	Particulars	Value
1	Opening GFA as per Audited Accounts	2356.34
2	Opening land	58.10
3	Net opening depreciable assets (1-2)	2298.24
4	Depreciation of opening depreciable assets	107.01
5	Weighted average rate of depreciation on opening assets (4/3)	4.66%
6	Addition to Depreciable GFA (excluding land) as per Audited Accounts	593.84
7	Depreciation on asset additions during the year	20.26

S.No	Particulars	Value
8	Weighted average prorata depreciation on asset additions during the year (7/6)	3.41%

In accordance with the Rate of Depreciation computed as above, the Depreciation claimed by the Petitioner is Rs. 127.29 Crore as shown in the table below:

Table 10 - BGCL claim of Depreciation for the FY 2022-23
(in Rs. Crore)

S.No.	Particulars	Approved by Hon'ble BERC in the Order dated 25.03.2022	BGCL claim
1	Net Opening GFA (without land)	2438.44	2298.69
2	Additions during the year	301.90	610.74
3	Less: land during the year	-	16.91
4	Net Additions (2-3)	301.90	593.84
5	Closing GFA (1+4)	2740.34	2,892.53
6	Average GFA (1+5)/2	2589.39	2,595.61
7	Weighted average Rate of depreciation on opening assets	5.18%	4.66%
8	Weighted average Rate of depreciation on asset additions during the year	2.06%	3.41%
9	Depreciation (1*7+4*8)	132.53	127.29

3.7 Interest on Loan Capital and Finance Charges

Regulation 24 of Tariff Regulations 2021 stipulates the provisions in the matter of Interest and Finance charges on Loan Capital.

The Petitioner has considered Gross Opening Loan as the Normative Closing loan as claimed by the Petitioner in the True up Petition for the FY 2021-22. Further, the debt: equity ratio for the Capital Expenditure for the projects under Part 1 of 2, Part 2 of 2 shall be 80:20 in accordance with the Business Plan approved by the Hon'ble Commission vide respective Orders. As such, the normative loan addition shall be 80% of the Capitalization claimed for the FY 2022-23.

The overall weighted average rate of Interest on Actual Loans for assets capitalized through REC and PFC loans for the FY 2022-23 comes out to be 9.73%. The detailed working of the same is annexed as Annexure F.

In view of the above submissions, the Interest on Loan Capital claimed for the FY 2022-23 is Rs. 163.08 Crore, the working of which is explained below:

Table 11 - BGCL claim of Interest on Loan for the FY 2022-23
(in Rs. Crore)

S.No	Particulars	Approved by Hon'ble BERG in the Order dated 25.03.2022	BGCL claim
1	Opening Loan (Normative)	1596.34	1495.65
2	Additions (@80% of GFA additions)	241.52	488.59
3	Repayment	132.53	127.29
4	Net Closing Loan (Normative) (1+2-3)	1705.33	1856.95
5	Average Loan (1+4)/2	1650.84	1676.30
6	Weighted average rate of Interest (%)	10.18%	9.73%
7	Interest on Loan (5x6)	168.06	163.08

3.8 Operations and Maintenance Expenses

Regulation 21 of Tariff Regulations 2021 provides for the mechanism by which Operations and Maintenance Expenses shall be allowed to the Transmission Licensee. The Regulations allow O&M Expenses based on the norms which are to be determined at the beginning of the Control period. However, the said activity could not be done/proposed by the Petitioner during the MYT filing for the FY 2021-24 period owing to the reason that a significant chunk of Capital works was still under progress and O&M Expenses had not attained certainty. The variation in items of O&M Expenses viz-à-viz GFA during the period FY 2018-23 is shown as under:

Table 12 - O&M and GFA from FY 2018-23

(in Rs. Crore)

Particular	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
Employee Expense	8.66	4.31	11.29	14.94	19.98
R&M Expense	6.07	8.52	20.46	20.69	25.56
A&G Expense	3.71	3.04	6.95	6.26	8.84
Total O&M Expense	18.33	15.87	38.70	41.90	54.38
Gross GFA (as per accounts)	1510.41	1781.99	2078.02	2356.34	2882.35

As could be observed, the variation in O&M Expenses does not follow any contiguous trend so as to align the same within the normative framework. Furthermore, the Petitioner in support of its contention also mentions that the Hon'ble Commission has also recognized such an issue w.r.t Operation and Maintenance Expenses claimed by BGCL during the True up of FY 2018-19. The relevant extracts from the Order dated 20.03.2020 in the matter of Truing Up for FY 2018-19, APR for FY 2019-20, ARR and Transmission Charges for FY 2020-21 observed as follows:

"The Commission in Tariff Order dated 20.03.2020 (Para 7.8) had opined to determine the O&M norms for the next control period (i.e. from FY 2022-23 onwards) as the parameters required for determination of O&M norms i.e. No. of substations, No. of bays, length of lines in Ckt KM, etc. and full operational O&M expenses were not available and the same could be arrived after the capitalisation and commissioning of the assets (Phase IV Part 1 of 2, Phase IV Part 2 of 2 and supplemental works) which are spread over the Control period of FY 2019-20 to FY 2021-22."

Likewise, as above, the Hon'ble Commission vide Order dated 12.03.2021 approved the O&M at actuals recognizing the fact that many of the Transmission projects were under way and subsequently full network details were not available. Therefore, the norms for the computation of O&M Expenses were not determined and actual O&M Expenses were allowed. In light of the same, the Petitioner has claimed O&M expenses on actuals based on the methodology adopted by the Hon'ble Commission towards the O&M Expenses.

However, the Hon'ble Commission vide Order dated 25.03.2022 opined that O&M expenses being controllable factor should be allowed based on the norms and the Hon'ble Commission in the absence of norms has approved O&M expenses considering O&M Expenses approved pertaining to respective year's tariff order.

The Petitioner sincerely submits that since the asset development pertaining to Part 1 and Part 2 of 2 are still under development, the norms could not be determined, therefore, the Petitioner herein submits that the O&M Expenses viz. Employee Expenses, Repairs & Maintenance (R&M) Expenses and Administration & General (A&G) Expenses be allowed at actuals in accordance with the Books of Accounts for the FY 2022-23.

Furthermore, it is essential to highlight that the O&M expenses approved by the Hon'ble Commission during the ARR for FY 2022-23 were based on the actual O&M expenses of FY 2020-21, with further escalations in accordance with regulatory provisions. It's crucial to note that in FY 2020-21, the closing GFA, as per the petitioner's claim, amounted to Rs. 2039.42 Crore, and accordingly, the O&M expenses for FY 2020-21 were commensurate with assets totalling Rs. 2039.42 Crore. However, in FY 2022-23, the closing GFA stands at Rs. 2950.18 Crore.

Moreover, the regulatory methodology for escalation of O&M expenses is primarily designed to account for inflation and is intended for application when the project is capitalized to the maximum extent possible, with O&M expenses determined based on established norms. This escalation is not intended to address an increase in capitalized assets. Therefore, it is not justifiable to compare the approved O&M expenses for FY 2022-23 during the ARR with the actual O&M expenses, as there has been a substantial increase in assets amounting to Rs. 910.76 Crore.

However, Hon'ble Commission vide its Order dated 21.03.2023 has considered sharing of gains/(Losses) on account of O&M expenses. The relevant abstract of the Order is reproduced below:

“The Commission following the principle of prudence and consistency has considered sharing of gains/(Losses) on account of variation in O&M expenses for FY 2021-22”

In light of the above, the Petitioner respectfully requests the Hon'ble Commission to approve O&M expenses as per the audited accounts for FY 2022-23. Additionally, it is kindly requested that the Hon'ble Commission does not apply the sharing of Losses/(Gains) in this case as there would be no case of Gain/ Loss, since the expenses are being allowed at actuals. Furthermore, the increase in O&M expenses is a result of the growth in total assets.

3.8.1 Employee Expenses

The employee expenses primarily include costs towards salaries, dearness allowances, bonus, staff welfare and medical benefits, leave travel and earned leave encashment, and the terminal benefits in the form of pension, gratuity etc.

In continuation to the arguments placed in the preceding sections and approved by Hon'ble Commission, the Petitioner claim towards Employee Expenses for the FY 2022-23 as per the Books of Accounts is depicted below for the kind consideration of the Hon'ble Commission:

Table 13 - BGCL claim of Employee Expenses for the FY 2022-23
(in Rs. Crore)

Particulars	Approved by Hon'ble BERC in the Order dated 25.03.2022	BGCL claim
Base Employee Expenses	10.64	
Indexation %	6.00%	
Inflationary increase	0.64	
Employee expenses	11.28	19.98

In line with the arguments under Para 3.8, it is kindly requested that the Hon'ble Commission does not apply the sharing of Losses/(Gains) in this case, as the increase in Employee expenses is a result of the growth in total assets.

3.8.2 Repairs & Maintenance (R&M) Expenses

The Repair and Maintenance Activities are primarily directed towards the upkeep of the transmission system and related office works.

In continuation to the arguments placed in the preceding sections, the Petitioner claim towards Repair and Maintenance Expenses for the FY 2022-23 as per the Books of Accounts is depicted below for the kind consideration of the Hon'ble Commission:

Table 14 - BGCL claim of Repairs & Maintenance (R&M) Expenses for FY 2022-23
(in Rs. Crore)

Particulars	Approved by Hon'ble BERC in the Order dated 25.03.2022	BGCL claim
R&M expenses	18.53	25.56
Average GFA (Net of Land)	2438.44	2561.25
Average % of R&M expenses to average GFA	0.76%	1.00%

In line with the arguments under Para 3.8, it is kindly requested that the Hon'ble Commission does not apply the sharing of Losses/(Gains) in this case, as the increase in R&M expenses is a result of the growth in total assets.

3.8.3 Administration and General (A&G) Expenses

Administration and General expenses mainly comprise costs towards rent charges, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other debits.

In continuation to the arguments placed in the preceding sections, the Petitioner claim towards Administration and General Expenses for the FY 2022-23 as per the Books of Accounts is depicted below for the kind consideration of the Hon'ble Commission:

Table 15 - BGCL claim of Administration and General (A&G) Expenses for the FY 2022-23

(in Rs. Crore)

Particulars	Approved by Hon'ble BERC in the Order dated 25.03.2022	BGCL claim
Base A & G Expenses	5.06	
WPI Inflationary index %	3.85%	
Add: Inflationary increase	0.19	
A&G expenses	5.25	8.84

In line with the arguments under Para 3.8, it is kindly requested that the Hon'ble Commission does not apply the sharing of Losses/(Gains) in this case, as the increase in A&G expenses is a result of the growth in total assets.

3.9 Return on Equity

As per Regulation 22 of Tariff Regulations 2021, Return on Equity is to be computed as follows:

"

- a) Return on equity shall be computed on 30% of the capital cost or actual equity, whichever is lower:

Provided that assets funded by beneficiary contribution, capital subsidies/ grants and corresponding depreciation shall not form part of the capital cost. Actual equity invested in the Transmission Licensee or SLDC, as the case may be, as per book value shall be considered as perpetual and shall be used for computation in this Regulation:

Provided further that the premium if any raised by the Licensee while issuing share capital and investment of internal resources created out of its free reserves, for the funding of the Scheme, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the distribution system, and are within the ceiling of 30% of capital cost approved by the Commission.

- b) The return on the equity invested shall be allowed from the date of start of commercial operation and after put to use;
- c) Return on equity shall be computed at the rate of 15.5% for the project which is commissioned w.e.f. 01.04.2015 and further incentive equivalent to 0.5% will be allowed in the form of RoE, if the project is completed within schedule as per the Annexure A or original schedule period as the case may be. However, Return on Equity for the project commissioned prior to 01.04.2015 shall be allowed at the rate of 14%."

Accordingly, for the computation of RoE, the Petitioner has considered Normative Opening Equity as the Normative Closing Equity for the True up Petition for the FY 2021-22. Accordingly, the Return on Equity claimed by the Petitioner for the FY 2022-23 is shown in the table below:

Table 16 - BGCL claim of Return on Equity for the FY 2022-23
(in Rs. Crore)

S.No.	Particulars	Approved by Hon'ble BERC in the Order dated 25.03.2022	BGCL claim
1	Opening Equity	490.21	467.05
2	Additions during the year	60.38	122.15
3	Closing Equity (1+2)	550.59	589.20
4	Average Equity (1+3)/2	520.40	528.12
5	Base Rate of Return on Equity%	15.50%	15.50%
6	Effective Rate of RoE	25.168%	15.50%
7	Pre-tax Rate of RoE	20.71%	15.50%
8	Return on Equity (4*5)	135.78	81.86

3.10 Interest on Working Capital

Regulation 26 of Tariff Regulations 2021, stipulates the following methodology for computing the Interest on Working Capital:

“

- a. The Transmission Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:
- Receivables equivalent to two (2) month of transmission charges calculated on target availability level.
 - O&M Expenses of one (01) month.
 - Maintenance spares @ 15% of O&M expenses for one month.

Less:

- Return on equity and contribution to contingency reserves equivalent to two months.

- v. Amount of security deposits from Transmission System users, if any, held during the year except the security deposits held in the form of Bank Guarantee from Transmission System Users.
- b. Interest on working capital shall be on normative basis and rate of interest shall be equal to the State Bank one-year Marginal Cost of Funds-based Lending Rate ('MCLR') as of the date on which petition for determination of tariff is filed plus 150 basis points. The rate of interest for the purpose of Truing-up shall be the weighted average MCLR of the concern Financial Year plus 150 basis points.
- c. Interest shall be allowed on the amount held as security deposit from Transmission System Users at the Bank Rate as at the date on which the application for determination of tariff is filed. The interest allowed shall be subject to true up at weighted average Bank Rate of the concern Financial Year.
- d. If the State Government is providing resource gap grant and/or subsidy, the working capital shall be reduced by two months equivalent of that amount. "

In line with the provisions of the Tariff Regulations 2021, for the True-up of FY 2022-23, the Rate of Interest claimed is the weighted average MCLR plus 150 basis points. The computation of the Rate of Interest is demonstrated below:

Table 17 – Computation of Rate of Interest on Working Capital for the FY 2022-23

S.N o.	Date applicable from	Date applicable to	Applicable no of days	SBI MCLR Rates*
1	01-04-2022	14-04-2022	14	7.00%
2	15-04-2022	14-05-2022	30	7.10%
3	15-05-2022	14-06-2022	31	7.20%
4	15-06-2022	14-07-2022	30	7.40%
5	15-07-2022	14-08-2022	31	7.50%
6	15-08-2022	14-09-2022	31	7.70%
7	15-09-2022	14-10-2022	30	7.70%
8	15-10-2022	14-11-2022	31	7.95%
9	15-11-2022	14-12-2022	30	8.05%
10	15-12-2022	14-01-2023	31	8.30%
11	15-01-2023	14-02-2023	31	8.40%
12	15-02-2023	14-03-2023	28	8.50%
13	15-03-2023	31-03-2023	17	8.50%
13	Weighted Average MCLR			8.18%
14	Rate of interest on Working Capital			9.68%

*Source: <https://sbi.co.in/web/interest-rates/interest-rates/mclr-historical-data>

Based upon the Working capital requirements as envisaged in the provisions of the Tariff Regulations 2021 and the Rate of Interest as above, the Petitioner's claim towards Interest on Working Capital is worked out as depicted in the table below:

Table 18 - BGCL claim of Interest on Working Capital for the FY 2022-23
(in Rs. Crore)

S.No.	Particulars	Approved by Hon'ble BERC in the Order dated 25.03.2022	BGCL claim
1	O&M expenses (1 month)	2.92	4.53
2	Maintenance spares @15% of 1 month of O&M Exp	0.62	0.85
3	Receivables - 2 months	72.22	66.70
4	Less: Dep, RoE and contribution to contingency reserve (for 2 months)	18.37	13.64
5	Total working capital (1+2+3-4)	57.39	58.44
6	Rate of interest	8.50%	9.68%
7	Interest on working capital (6x5)	4.88	5.66

The Petitioner requests the Hon'ble Commission to approve the Interest on Working Capital amounting to Rs. 5.66 Crore as above.

3.11 Gain/ Loss Sharing

Regulation 10 of the Tariff Regulations 2018 establish a mechanism for pass through of Gains/ Losses on account of controllable factor as follows:

"10. Mechanism for sharing of gains or losses on account of controllable factors

10.1 The approved aggregate gain or loss to the Licensee or SLDC, as the case may be, on account of controllable factors shall be dealt with separately for aggregate gain and aggregate loss in the following manner:

(a) Aggregate gain:

(i) Two-third of the amount of such gain shall be a pass through as an adjustment in the tariff of the Licensee or SLDC, as the case may be,, as specified in these Regulations and as may be determined in the Order of the Commission passed under these Regulations;

(ii) The balance one-third of the amount of such gain shall be on account of Licensee or SLDC, as the case may be, and such amount shall be utilized at the discretion of Licensee or SLDC, as the case may be.

(b) Aggregate Loss:

(i) One-third of the amount of such loss shall normally be a pass through as an adjustment in the tariff of the Licensee or SLDC, as the case may be, as specified in these Regulations and as may be determined in the Order of the Commission passed under these Regulations, provided the Commission is satisfied that such

loss is not on account of deliberate action of the Licensee or SLDC, as the case may be;

(ii) The balance two-third of the amount of such loss shall be on account of Licensee or SLDC and shall be absorbed by the Licensee or SLDC, as the case may be."

The Petitioner submits that it has considered Working Capital as a controllable factor. Therefore, as per the above Regulations, the Petitioner computes the Gain to be shared as shown in the table below:

Table 19 - Gain/ Loss Sharing for the FY 2021-22

(in Rs. Crore)

Particulars	Formula	Value
Normative Interest on Working Capital	A	5.66
Actual Interest on Working Capital	B	-
Interest on Working Capital gains/ (losses)	C=A-B	5.66
50% of Gains to be passed through as an adjustment in Tariff	D=1/2*C	2.83

3.12 Non- Tariff Income

The Petitioner submits that the actual Non-Tariff Income accounted in books of accounts stands at Rs 77.68 Crores for FY 2022-23 which includes Delayed Payment Surcharge of Rs 67.31 Crore.

The Petitioner further submits that while computing the actual Non-Tariff Income of BGCL for FY 2022-23, the financing cost for corresponding receivables has to be reduced as accrued DPS is considered as NTI. The Petitioner has already incurred Expenses on such outstanding receivables and DPS is levied as financing cost of such receivables, however, the Petitioner is allowed only 2 months of receivables in allowance of Working Capital. For the receivables beyond the period, DPS is applicable and as DPS is considered to be additional income for the Petitioner financing cost of such receivables are allowed in line with the Judgment of Hon'ble APTEL dated July 12, 2011 in case No. 142 & 147 of 2009.

The Petitioner submitted that the Hon'ble Commission vide its previous Order, has also considered the above approach which is in line with the Judgment dated 12.07.2011 of the Hon'ble APTEL in Appeal no. 142 & 147 of 2009. The Non-Tariff Income submitted by the Petitioner is summarised below:

Table 20 - BGCL submission of Non- Tariff Income for the FY 2022-23
(in Rs. Crore)

S.No.	Particulars	Approved by Hon'ble BERC in the Order dated 25.03.2022	BGCL claim
1	Surcharge on transmission charges		67.31
2	Interest from Bank		7.27
3	Interest from Others		0.07
4	Interest on Income Tax Refund		3.03
5	Liquidated Damages Recovered		0.002
6	Total Non-Tariff Income (1+2+3+4+5)		77.68
7	Principal amount on which DPS is charged (1/15%)		448.71
8	Rate of Interest for funding Principal of DPS		9.68%
9	Less: Interest on funding of Principal DPS (8x9)		43.43
10	Net Non-Tariff Income (6-9)	17.42	34.24

3.13 Transmission Availability and Transmission Loss Incentive

According to Regulation 16.1 of Tariff Regulations 2021, the Normative Annual Transmission System Availability Factor is 98%. The Petitioner submits that the System has achieved 99.92% Annual Transmission Availability. Month-wise Transmission Availability of the BGCL system is depicted in the table below:

Table 21 - Transmission Availability for the FY 2022-23

Month	No. of days	Transmission Availability (in %)
Apr'21	30	99.74
May'21	31	99.95
June'21	30	99.99
July'21	31	99.98

Month	No. of days	Transmission Availability (in %)
Aug'21	31	99.99
Sep'21	30	99.98
Oct'21	31	99.95
Nov'21	30	99.85
Dec'21	31	99.76
Jan'22	31	99.98
Feb'22	28	99.85
Mar'22	31	99.73
Annual Transmission Availability		99.90

The Regulation 16.3 defines the incentive allowable to the Petitioner. The extract of the same is reproduced below:

"16.3 The Transmission Licensee shall be entitled to incentive on achieving annual availability beyond the target availability, in accordance with the following formula: -

$$\text{Incentive} = \text{Annual Transmission Charges} \times (\text{Annual availability achieved} - \text{Target Availability}) / \text{Target Availability};$$

Where,

Annual transmission Charges shall correspond to Aggregate Revenue Requirement for each year of the Control Period for the particular Transmission Licensee within the State:

Provided that no incentive shall be payable above the availability of 99.75 % for AC system and 98.5 % for HVDC system."

In accordance with the above provisions, since the Petitioner has achieved Availability greater than 99.90%, the incentive claimed is capped up to the level of 99.75% for the FY 2022-23 as shown in the table below:

Table 22 - BGCL claim of Transmission Availability Incentive for the FY 2022-23
(in Rs. Crore)

Particulars	FY 2022-23
Normative Transmission Availability for incentive (%)	98.50%
Actual Transmission Availability (%)	99.90%
ceiling limit for Incentive Consideration	99.75%
Annual Transmission charges (in Rs. Cr)	400.19
Incentive (in Rs. Cr.)	5.00

Further, the Petitioner respectfully submits that Section 62 of the Electricity Act 2003 allows for Regulated tariff which is based on the Cost plus principles. The "Cost plus" approach involves companies and licensees being allowed to recover their operating and capital costs while also earning a specified Return on Equity (RoE) set by regulatory authorities. RoE serves as an incentive for companies to invest in infrastructure and provide reliable services. Furthermore, performance incentives, both positive and negative are there to encourage efficiency and cost control, aligning the interests of the company with consumers and the public. This regulatory mechanism aims to strike a balance between ensuring a reasonable return on investment for energy companies and safeguarding consumers from unfair pricing, with variations based on jurisdiction and market conditions, typically applied in monopolistic or natural monopoly situations to maintain oversight and quality control.

In view of the above, gain/(loss) sharing of the Incentive on Transmission Availability is not in the spirit of Cost plus principles. The Availability incentive are given to the licensee to encourage efficiency; application of sharing over the incentive would essentially nullify the purpose of incentive.

Therefore, the Petitioner humbly requests the Hon'ble Commission to not apply the sharing of Losses/(Gains) on Transmission Availability Incentive.

3.14 Annual Transmission Charges/ ARR for True up of 2022-23

The Petitioner submits that the Annual Transmission Charges have been arrived by aggregating all the expenses as illustrated in the previous sections *i.e.* Depreciation, Interest on Loan, O&M expenses, Return on Equity, Incentive on attaining Normative Transmission Availability and Interest on Working Capital. The Total Expenses Less Non-Tariff Income comprise Annual Transmission Charges or Annual Revenue Requirement. The Petitioner herein has claimed ARR for the True-up of FY 2022-23 as detailed in the table below. For the sake of comparative analysis, the ARR approved by the Hon'ble Commission in Order dated 25.03.2022 is also illustrated in the table below.

Table 23 - BGCL claim of ARR for True up of FY 2022-23
(in Rs. Crore)

S.No	Particulars	Approved by Hon'ble BERC in the Order dated 25.03.2022	BGCL claim
1	O&M expenses (a+b+c)	35.07	54.38
a.	Employee Expenses	11.28	19.98
b.	R&M expenses	18.53	25.56
c.	A&G Expenses	5.25	8.84
2	Depreciation	132.53	127.29
3	Interest and finance charges	168.06	163.08
4	Interest on working capital	4.88	5.66
5	Return on equity	107.77	81.86
6	Incentive for TAF	-	5.00
7	Contribution to Contingency Reserve	2.44	-
9	Gain/ (Loss) Sharing	-	(2.83)
12	Gross Annual Revenue Requirement	450.74	434.44
13	Less: Non-Tariff Income	17.42	34.24
14	Net Annual Revenue Requirement	433.32	400.19
15	Revenue billed during the year		433.32
16	Gap/ (Surplus) (14-15)		(33.13)
17	Gap/ (Surplus) Adjustment of FY 2020-21 (ref Order dated 25.03.2022)		(258.70)
18	Net Gap/ (Surplus) (16-17)		(291.83)

The Petitioner respectfully submits before the Hon'ble Commission to approve Rs. 400.19 Crore towards ARR for the True-up of FY 2022-23.

ANNUAL PERFORMANCE
REVIEW (APR) for the FY 2023-24



4 Annual Performance Review for FY 2023-24

4.1 Introduction

The Hon'ble Commission approved the Annual Revenue Requirement of Rs. 517.16 Crore for the FY 2023-24 in the Tariff Order dated 21.03.2022. In the instant petition, the Petitioner submits the revised estimates of the expenses for the Annual Performance Review for the FY 2023-24 as per the Tariff Regulations 2021 for the kind consideration of the Hon'ble Commission.

4.2 Performance of Transmission System

4.2.1 Transmission System Availability

Regulation 16 of Tariff Regulations 2021 stipulates the following:

"Normative Annual Transmission System Availability Factor (NATAF):

16.1 The Normative Annual Transmission System Availability Factor for recovery of full transmission charges shall be as under:

<i>(a) For full recovery of Annual Transmission Charges</i>		
1.	<i>AC System</i>	<i>98%</i>
2.	<i>HVDC System</i>	<i>95%</i>
<i>(b) For Incentive Consideration</i>		
3.	<i>AC System</i>	<i>98.5%</i>
4.	<i>HVDC System</i>	<i>97.5%</i>

Accordingly, the Petitioner submits that Transmission System Availability is considered at 98% as per the Tariff Regulations 2021 for FY 2023-24.

4.2.2 Transmission Losses

The Hon'ble Commission has approved Transmission Loss trajectory at 1.80% for the FY 2023-24 vide Order dated 21.03.2023. The relevant extracts of the said Order is reproduced below:

"Transmission Loss Trajectory:

The Commission, in Tariff order dated 25.03.2022 has approved transmission loss trajectory at 1.80% for each year of the control period of FY 2022-23 to FY 2024-25. Accordingly, the transmission loss is approved at 1.80% for FY 2023-24."

Accordingly, the Petitioner submits that Transmission Loss target is considered at 1.80% for the FY 2023-24.

4.2.3 Transformer Failure Rate

The Petitioner submits that it would be able to maintain its operational efficiency through proactive measures. Therefore, the transformer failure rate is assumed to be NIL.

4.3 Schedule of Capitalization

The Petitioner submits that it had earlier envisaged to capitalize the entire portfolio of projects (Part 1 of 2 and Part 2 of 2) by FY 2022-23, however, due to reasons beyond the control of the Petitioner particularly contractual & technical issues, rainfall/flood, Covid induced lockdowns during the FY 2020-21 and FY 2021-22, certain items of the Capital works planned to be capitalized during the FY 2022-23 could not attain Capitalization which has led to a no. of works being spilled into the FY 2023-24. The Hon'ble Commission is requested to take cognizance of this fact and approve the projected Capitalization as depicted below for the FY 2023-24:

Table 24 - BGCL estimate of Asset Capitalization for the FY 2023-24 Phase IV (Part 1 of 2)

S. No.	Transmission Element	Date of Commissioning/ Likely Commissioning
Transmission Lines		
1	LILO 132 kV S/C Line _ Khagaul (BSPTCL) -Bihta (BSPTCL) Circuit 1	10-04-2023
2	LILO 132 kV S/C Line _ Digha (BSPTCL) - Bihta (BSPTCL) Circuit 1	10-04-2023
New 220/132/33 kV GIS substations		
3	132/33 kV 50 MVA Transformer 3 of GIS, Khirjisarai (Gaya Manpur)	2023-24
4	220/132 kV 160 MVA Transformer 2 of GIS, Goradih (Sabour)	2023-24
5	132/33 kV Transformer-1 50 MVA of GIS, Mokama (Hatidah)	2023-24
6	220/132 kV 160 MVA Transformer 1 of GIS, Mokama (Hatidah)	2023-24
Bay Extension Works		
7	Bihita Bay Extension (2x132 kV GIS)	10-04-2023



Table 25 - BGCL estimate of Asset Capitalization for the FY 2023-24 Phase IV (Part 2 of 2)

S. No.	Transmission Element	Date of Commissioning/ Likely Commissioning
Transmission Lines		
1.	LILO of 132 kV D/C Jakkanpur - Sipara TL at Jakkanpur new (being re-conducted with HTLS by BSPTCL)	2023-24
2.	LILO of one Ckt of 132kV D/C Purnea-Naugachia/ Khagaria line at Katihar (BSPTCL)	2023-24
3.	LILO of 220 kV D/C Sipara (BSPTCL) - Bihta (BSPTCL) TL at Jakkanpur (new).	2023-24
4.	132kV D/C Naubatpur (New) - Palliganj (BSPTCL)	2023-24
New 220/132/33 kV GIS substations		
5.	1X80MVA ICT at 400/220/132/33 kV New GIS station at Naubatpur	2023-24
6.	2X160MVA at 400/220/132/33kV GIS station at Jakkanpur	2023-24
7.	1X80MVA at 400/220/132/33kV GIS station at Jakkanpur	2023-24
8.	1X160MVA Transformer at Naubatpur	2023-24
9.	1X160MVA Transformer at Dumraon	2023-24
Bay Extension Works		
10.	220kV Bihta GIS (BSPTCL)	2023-24
11.	1X160MVA ICT at 400/220/132/33 kV New GIS station at Naubatpur	2023-24
12.	132kV Katihar (BSPTCL)	2023-24

Table 26 - BGCL estimate of Asset Capitalization for the FY 2023-24 Phase IV (Supplementary)

S. No.	Transmission Element	Date of Commissioning/ Likely Commissioning
New 220/132/33 kV GIS substations		
1.	Installation of 220/132kV, 160MVA 3rd ICT at 220/132/33kV GIS Amnour S/s along with associated bays	2023-24
2.	Installation of 420kV, 2x125MVA r bus reactor at 400/220/132/33kV GIS Jakkanpur S/s along with associated bays	2023-24

S. No.	Transmission Element	Date of Commissioning/ Likely Commissioning
3.	Installation of 420kV, 2x125MVA bus reactor at 400/220/132/33kV GIS Naubatpur S/s along with associated bays	2023-24

In addition to above Capital works, during the FY 2023-24, the Petitioner shall also undertake implementation of ABT meters pertaining to Part 1 and Part 2 of 2 projects. Accordingly, ABT meters are to be commissioned with an overall outlay of Rs. 12.06 Crore for the FY 2023-24. The Petitioner requests the Hon'ble Commission to approve the same.

4.4 Capitalization

The Petitioner submits that the capitalization for FY 2023-24 as per the following table:

Table 27 - BGCL claim of CWIP Statement for the FY 2023-24
(in Rs. Crore)

S.No.	Particulars	Approved by Hon'ble BERG in the Order dated 21.03.2023	BGCL claim
1	Opening CWIP		311.20
2	Opening IDC		102.34
3	Opening IEDC		13.09
4	Sub Total (Opening)	226.91	426.62
5	Capital investment during the year		433.55
6	IDC addition during the year		56.67
7	IEDC addition during the year		47.53
8	Sub Total (Additions)	95.09	537.75
9	Asset capitalisation without IDC & IEDC		744.75
10	IDC capitalised		159.01
11	IEDC capitalised		60.62
12	Total Capitalisation (7+8+9)	232.73	964.38
13	Closing CWIP (1+4-7)		-
14	Closing IDC (2+5-8)		-

S.No.	Particulars	Approved by Hon'ble BERC in the Order dated 21.03.2023	BGCL claim
15	Closing IEDC (3+6-9)		-
16	Sub Total (Closing)	89.27	-

4.5 Funding of Capitalization

The Petitioner submits that the Capital Expenditure is being funded with a Debt – Equity ratio of 80:20. While Phase IV (part 1 of 2) has loan agreement with REC, Phase IV (Part 2 of 2) has loan agreement with PFC.

4.6 Gross Fixed Assets

The Petitioner submits the estimated Gross Fixed Assets for the FY 2023-24 follows:

Table 28 – BGCL claim of Gross Fixed Assets for the FY 2023-24

(in Rs. Crore)

S.No.	Particulars	Approved by Hon'ble BERC in the Order dated 21.03.2023	BGCL claim
1	Opening GFA	3236.33	2950.18
2	Additions to GFA	232.73	964.38
3	Closing GFA (1+2)	3469.06	3914.56

4.7 Depreciation

Regulation 23 of Tariff Regulations, 2021 stipulates the following:

- “
- viii. Depreciation shall be calculated for each year of the control period on the original cost of the fixed assets of the corresponding year. No advance shall be granted against depreciation.
- ix. Depreciation shall not be allowed on assets funded by capital subsidies, beneficiary contributions or grants.
- x. Depreciation shall be calculated annually on the basis of assets capitalised and put to use based on the straight line method over the useful life of the asset and at the rate not exceeding the rate specified by the Central Electricity Regulatory Commission from time to time as provided in Appendix-III of these Regulations.
The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset. The Transmission Licensee or SLDC, as the case may be, shall submit separate detail of fully depreciated asset along

with year of commissioning and year of attaining ninety percent depreciation with the tariff petition.

Provided that freehold land shall not be treated as a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset.

Provided further that the cost of lease hold land shall be amortised evenly within the leased period.

- xi. The original capital cost of the asset shall include Additional Capitalisation on account of Foreign Exchange Rate Variation as allowed by the Government / Bihar Electricity Regulatory Commission.
- xii. Depreciation shall be chargeable from the first year of operation of the asset. For part of the year, depreciation shall be charged on pro rata basis.
- xiii. A provision of replacement of assets shall be made in the capital investment plan."
- xiv. The licensee(s) shall submit certified copy of the Asset Register with the list of fully depreciated Transmission lines, substation, transformers, etc. along with the details of disposed off assets and amount received therefore with the tariff petition.

The Petitioner submits that depreciation is based on the capitalisation schedule of the assets. The Weighted average rate of depreciation for the opening GFA and for the Additions is considered to be 4.66% and 3.41% respectively which is considered for the True up for the FY 2022-23. Accordingly, the overall depreciation worked out for FY 2023-24 is summarised in the table below:

Table 29 - BGCL claim of Depreciation for the FY 2023-24

(in Rs. Crore)

Sl. No.	Particulars	Approved by Hon'ble BERC in the Order dated 21.03.2023	BGCL claim
1	Opening GFA (without land)	3180.99	2,892.53
2	Additions during the year	237.73	964.38
3	Less: land during the year	-	-
4	Closing GFA (1+2-3)	3413.56	3,856.91
5	Average GFA (1+4)/2	3297.28	3,374.72
6	Weighted average Rate of depreciation on opening assets	5.17%	4.66%
7	Weighted average Rate of depreciation on asset additions during the year	0.27%	3.41%
8	Depreciation (1*6+(2-3)*7)	170.95	167.58



4.8 Interest on Loan Capital and Finance Charges

According to Regulation 24 of Tariff Regulations 2021, Interest and Finance Charges is to be computed as follows:

“

- a) *The Transmission Licensee or SLDC, as the case may be, shall provide detailed loan-wise, project wise and utilization-wise details of all the loans.*
- b) *If the equity actually deployed is more than 30 % of the capital cost, equity in excess of 30 % shall be treated as normative loan:
Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loan:*
- c) *Actual loan or normative loan, if any, shall be referred as gross normative loan in this Regulation.*
- d) *The normative loan outstanding as of 1st April of control period shall be computed by deducting the cumulative repayment as approved by the Commission (basis as mentioned below) up to 31st March of current period (a year before control period) from the gross normative loan.*
- e) *The repayment for the control period shall be deemed to be equal to the depreciation allowed for the year.*
- f) *Notwithstanding any moratorium period availed by the Transmission Licensee or SLDC, as the case may be, the repayment of the loan shall be considered from the first year of the control period as per annual depreciation allowed.*
- g) *The rate of interest shall be the weighted average rate of interest calculated on the basis of actual loan portfolio at the beginning of each year of the control period, in accordance with terms and conditions of relevant loan agreements, or bonds or nonconvertible debentures:
Provided that if no actual loan is outstanding but normative loan is still outstanding, the last available weighted average rate of interest shall be applicable.
Provided further that if no actual loan is outstanding but normative loan is still outstanding and the last available weighted average rate of interest is also not available, rate of interest equal to the State Bank one-year Marginal Cost of Funds-based Lending Rate ('MCLR') shall be applicable.
Provided further that the interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest:
Provided also that exception shall be made for the existing loans which may have different terms as per the agreements already executed if the Commission is satisfied that the loan has been contracted for and applied to identifiable and approved projects:*
- h) *The Transmission Licensee or SLDC, as the case may be, shall make every effort to refinance the loan as long as it results in net benefit to the beneficiaries.
Provided that the cost associated with such refinancing shall be eligible to be passed through in tariffs and the benefit on account of refinancing of loan and interest on loan shall be shared in the ratio of 50:50 between the Transmission Licensee or SLDC and the beneficiaries.
Provided further that the Transmission Licensee shall submit the calculation of such benefit to the Commission for its approval.*

- i) The Transmission Licensee shall enable tracking of the loans converted into grants under schemes like BRGF, PSDF, APDRP, RAPDRP, RGGVY, DDUGVY, RSVP, etc or any other loan from the Central or State Government by providing information and data regularly to the Commission, for enabling the Commission to recover from Transmission Licensee or SLDC, as the case may be, the amount of interest on loans which have been passed on to the beneficiaries in the earlier years and have been converted into grant subsequently so that the recovered amount is passed on to the beneficiaries.
- j) Addition to loan during the year for interest purpose will be restricted to the quantum of assets capitalized and put to use.
- k) The excess interest during construction on account of time and/or cost overrun as compared to the approved completion schedule and capital cost or on account of excess drawal of the debt funds disproportionate to the actual requirement based on Scheme completion status, shall be allowed or disallowed partly or fully on a case to case basis, after prudence check by the Commission. The transmission licensee shall endeavour to adhere the time schedule for various transmission system in accordance with Annexure-A appended for these regulations.
Provided that where the excess interest during construction is on account of delay attributable to an agency or contractor or supplier engaged by the Transmission Licensee, any liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost:
Provided further that the extent of liquidated damages to be considered shall depend on the amount of excess interest during construction that has been allowed by the Commission.
- l) The above interest computation shall exclude interest on loan amount, normative or otherwise, to the extent of capital cost funded by Consumer Contribution, Deposit Works, Grants or Capital Subsidy."

The Petitioner submits rate of Interest has been considered as per the actual long term Loan portfolio as on 31.03.2023. As such, the Rate of Interest considered for True-up of FY 2022-23 i.e. 9.73% has been considered for the Review for FY 2023-24. Accordingly, The Petitioner has claimed Interest and Finance charges for the FY 2023-24 as summarised in the table below:

Table 30 - BGCL claim of Interest on Loan for the FY 2024-24
(in Rs. Crore)

S.No.	Particulars	Approved by Hon'ble BERC in the Order dated 21.03.2023	BGCL claim
1	Opening Loan	2123.10	1,856.95
2	Additions (@80% of GFA additions)	186.18	771.50
3	Repayment	170.95	167.58

S.No.	Particulars	Approved by Hon'ble BERC in the Order dated 21.03.2023	BGCL claim
4	Net Closing Loan (1+2-3)	2138.34	2,460.87
5	Average Loan (1+4)/2	2130.72	2,158.91
6	Weighted average rate of Interest (%)	9.90%	9.73%
7	Interest on Loan (5x6)	210.94	210.03

4.9 Operations and Maintenance Expenses

As per Regulation 21 of Tariff Regulations 2021,

" (a) The Commission shall stipulate a separate trajectory of norms for each of the components of O&M expenses viz., Employee cost, Repair and Maintenance (R&M) expense and Administrative and General (A&G) expense. Provided that such norms may be specified for a specific Transmission Licensee or a class of Transmission Licensees.

(b) Norms shall be defined in terms of number of personnel per ckt/km (for different categories of transmission lines for e.g. 400 KV, 220 KV, 132 KV etc. Lines) and number of personal per bay (for different categories of bay for e.g. 400 KV, 220 KV, 132 KV etc. Bays) along with annual expenses per personnel for Employee expenses; combination of A&G expense per personnel and A&G expense per substation for A&G expenses and R&M expense as percentage of gross fixed assets for estimation of R&M expenses.

(c) One-time expenses such as expense due to change in accounting policy and arrears paid due to pay commission recommendation shall be excluded from the norms in the trajectory.

(d) The unforeseen expenses beyond the control of the Transmission Licensee such as pay revision, shall be excluded from the norms in the trajectory.

(e) The One-time expenses and the expenses beyond the control of the Transmission Licensee shall be allowed by the Commission over and above normative Operation & Maintenance Expenses after prudence check.

(f) The norms in the trajectory shall be specified over the control period with due consideration to productivity improvements.

(g) The norms shall be determined at constant prices of base year and escalation on account of inflation shall be over and above the baseline. Provided that for the purpose of escalation based on Wholesale Price Index(WPI_n) and Consumer Price Index(CPI_n), WPI_n is to be computed based on the average yearly inflation derived based on the monthly Wholesale Price Index of the respective past three financial years (including

the year of Truing-up) as per the Office of Economic Advisor Ministry of Commerce & Industry Government of India and CPI is to be computed based on the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) of the respective past three financial years (including the year of Truing-up) as per the Labour Bureau Government of India, at the time of filing of Petition. Provided that in case the average yearly inflation derived based on the monthly CPI and WPI indices is negative for a particular year, the same will be excluded from the computation of yearly inflation

(h) The Transmission Licensee specific trajectory of norms shall be identified by the Commission on the basis of absolute and relative analysis.

(i) In absolute analysis, Transmission Licensee's audited accounts of operations for last three years, expenses claimed for control period, historically approved cost, and prudence check shall be used by the Commission to estimate values of norms.

(j) In relative analysis, performance parameters of other Transmission Licensees within the same state or in other states, shall be considered by the Commission to estimate norms.

Provided that other Transmission Licensees so chosen shall have similar profile as that of the Transmission Licensee under consideration in terms of consumer mix, type of license area (city, state, etc.) type of substation, transmission networks, etc.

(k) Suitable average of outcomes of absolute and relative analysis shall be taken by the Commission to fix the norms over the control period for the Transmission Licensee. "

The Petitioner submits that since a number of Transmission projects are under way and subsequently full network details are not available at present, therefore the norms for the computation of O&M Expenses must not be determined. In light of the same, the Petitioner herein has followed the methodology adopted by the Hon'ble Commission in the previous orders for computation of O&M Expenses pertaining to the ensuing year.

4.9.1 Employee Expenses

The employee expenses primarily include costs towards salaries, dearness allowances, bonus, staff welfare and medical benefits, leave travel and earned leave encashment, and the terminal benefits in the form of pension, gratuity etc.

Regulation 21.1 stipulates the following:

“Employee cost shall be computed as per the approved norm escalated by consumer price index (CPI), adjusted by provisions for expenses beyond the control of the Transmission Licensee and one time expected expenses, such as recovery/adjustment of terminal benefits, implications of pay commission, arrears and Interim Relief, governed by the following formula:

$$EMP_n = (EMP_b * CPI \text{ inflation}) + Provision$$

Where:

EMP_n : Employee expense for the year n

EMP_b : Employee expense as per the norm

CPI inflation : is the average increase in the Consumer Price Index (CPI) for immediately preceding three years”

Provision: Provision for expenses beyond control of the Transmission Licensee and expected one-time expenses as specified above. Till the norms are specified by the Commission the employee cost shall be determined on the basis of actual historical cost.”

As per the aforesaid regulations, the CPI index for the preceding three years has been shown in the table below:

CPI index

Table 31 - Computation of Average CPI (past 3 years)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
Annual Average CPI Index	322.50	338.69	356.06	377.62
CPI Inflation (YOY)		5.02%	5.13%	6.05%
Average			5.40%	

The Petitioner submits the revised employee expenses for the FY 2023-24 based upon the Average CPI Inflation Index (preceding 3 years) and the Employee Expenses claimed for the true-up of FY 2022-23 (considered as *EMP_b*) as shown in the table below:

Table 32 - BGCL claim of Employee Expenses for the FY 2023-24
(in Rs Crore)

Particulars	Approved by Hon'ble BERC in the Order dated 21.03.2023	BGCL claim
Base Employee expenses	8.65	19.98

Particulars	Approved by Hon'ble BERC in the Order dated 21.03.2023	BGCL claim
Indexation %	5.89%	5.40%
Inflationary increase	1.39	1.08
Employee expenses	9.16	21.06

4.9.2 Repair and Maintenance Expenses

The Repair and Maintenance Activities are primarily directed towards the upkeep of the transmission system and related office works.

As per Regulation 21.2 of the Tariff Regulations 2021, R&M will be calculated as follows

“Repairs and Maintenance expense shall be calculated as percentage (as per the norm determined) of Opening Gross Fixed Assets excluding land cost for the year governed by following formula:

$$R\&M_n = K_b * GFAn$$

Where:

R&M_n : Repairs & Maintenance expense for nth year

GFAn : Opening Gross Fixed Assets for nth year

K_b : Percentage point as per the norm”

In the absence of *K_b* on normative basis, the Petitioner in line with approach adopted by the Hon'ble Commission (vide Order dated 25.03.2022) while determining ARR for the FY 2022-23, claims the R&M Expenses based upon the factor derived by considering the actual R&M expenses against the actual GFA. Accordingly, the Petitioner herein considers the factor as per the True-up values of the previous years as shown in the table below:

Table 33 - Computation of Average % factor (R&M expenses to GFA)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23
Average GFA (Net of Land)	1872.41	2159.58	2561.25
R&M expenses	20.46	22.54	25.56
% of R&M expenses to GFA (2/1)*100	1.09%	1.04%	1.00%
Average % of R&M expenses to average GFA	1.04%		

The Petitioner submits the claim towards R&M expenses on the basis of the factor derived above as shown in the following table:

Table 34 - BGCL claim of Repair and Maintenance Expenses for the FY 2023-24
(in Rs Crore)

S.No.	Particulars	Approved by Hon'ble BERC in the Order dated 21.03.2023	BGCL claim
1	Average GFA (excluding land)	3297.20	2892.53
2	% Factor on GFA	0.76%	1.04%
3	R&M Expenses (1x2)	25.06	30.22

4.9.3 Administrative and General Expenses

Administration and General expenses mainly comprise costs towards rent charges, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other debits.

As per Regulation 21.3 of the Tariff Regulations 2021, A&G Expenses shall be computed as follows:

"A&G expense shall be computed as per the norm escalated by wholesale price index (WPI) and Consumer Price Index (CPI) in the ratio 60:40 and adjusted by provisions for confirmed initiatives (IT etc. initiatives as proposed by the Transmission Licensee and validated by the Commission) or other expected one-time expenses, and shall be governed by following formula:

$$A\&G_n = (A\&G_b * WPI \text{ inflation}) + \text{Provision}$$

Where:

A&G_n: A&G expense for the year n

A&G_b: A&G expense as per the norm

WPI inflation: is the average increase in the Wholesale Price Index (WPI) for immediately preceding three years

Provision: Cost for initiatives or other one-time expenses as proposed by the Transmission Licensee and validated by the Commission. Till the norms of A&G expenses is specified by the Commission, the actual historical cost will be considered for determination of A&G expenses."

As per the aforesaid regulations, the Average WPI and CPI index in the ratio of 60:40 for the preceding three years has been shown in the table below:

Table 35 - Computation of Average WPI and CPI in 60:40 ratio (past 3 years)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
April	235.64	245.08	260.333	281.5856

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
May	237.04	245	261.557	284.912
June	238.2	246.92	263.778	285.4176
July	239.92	250	266.198	286.0672
August	240.6	251.6	267.024	286.2656
September	241.72	253.237	268.022	287.6464
October	243.8	255.936	272.107	290.12
November	245.72	257.227	274.69	289.96
December	247.2	255.446	274.011	288.8144
January	247.36	254.85	273.693	289.7584
February	245.68	256.872	274.12	289.6656
March	243.76	258.629	277.288	290.7424
Annual Average	242.22	252.57	269.40	287.58
CPI Inflation (YOY)		4.27%	6.67%	6.75%
Past 3 Year Average			5.89%	

Accordingly, based upon the derived Inflation Index in accordance with the Tariff Regulations 2021 and the A&G expenses for the FY 2022-23 (A&Gb, considered as norm), the Petitioner projects the A&G Expenses as follows:

Table 36 - BGCL claim of Administrative and General Expenses for the FY 2023-24
(in Rs Crore)

Sl. No.	Particulars	Approved by Hon'ble BERC in the Order dated 21.03.2023	BGCL claim
1	Base A & G Expenses	4.47	8.84
2	Inflationary index %	5.55%	5.89%
3	Add: Inflationary increase	0.25	0.52
4	A&G expenses	5.72	9.36

4.10 Return on Equity

As per Regulation 22 of Tariff Regulations 2021, Return on Equity is to be computed as follows:

“

d) Return on equity shall be computed on 30% of the capital cost or actual equity, whichever is lower:

Provided that assets funded by beneficiary contribution, capital subsidies/ grants and corresponding depreciation shall not form part of the capital cost. Actual equity invested in the Transmission Licensee or SLDC, as the case may be, as per book value shall be considered as perpetual and shall be used for computation in this Regulation:

Provided further that the premium if any raised by the Licensee while issuing share capital and investment of internal resources created out of its free reserves, for the funding of the Scheme, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the distribution system, and are within the ceiling of 30% of capital cost approved by the Commission.

- e) The return on the equity invested shall be allowed from the date of start of commercial operation and after put to use:
- f) Return on equity shall be computed at the rate of 15.5% for the project which is commissioned w.e.f. 01.04.2015 and further incentive equivalent to 0.5% will be allowed in the form of RoE, if the project is completed within schedule as per the Annexure A or original schedule period as the case may be. However, Return on Equity for the project commissioned prior to 01.04.2015 shall be allowed at the rate of 14%."

The Petitioner also submits that the Rate of Return on Equity has been considered at 18.78% assuming 17.47% as the effective MAT rate inclusive of surcharge and cess.

Accordingly, the Return on Equity has been tabulated below:

Table 37 - BGCL claim of Return on Equity for the FY 2023-24
(in Rs Crores)

Sl. No.	Particulars	Approved by Hon'ble BERC in the Order dated 21.03.2023	BGCL claim
1	Opening Equity	646.43	589.20
2	Add: Equity During the year	46.55	192.88
3	Closing equity balance (1+2)	692.98	782.07
4	Average equity $\{(1+3)/2\}$	669.71	685.64
5	Base Rate of Return on equity %	15.50%	15.50%
6	Tax Rate	14.99%	17.47%
7	Pretax Rate of Return on equity % $\{(5)/(1-(6))\}$	18.23%	18.78%
8	Return on Equity (4*7)	122.11	128.77

The working of Tax rate is shown in the table below:

Table 38 - Effective Tax rate

Particulars	Ref	Rate
MAT	A	15%
Add: Surcharge	B	12%
Add: Cess	C	4%
Tax rate	$A*(100\%+B)*(100\%+C)$	17.47%

4.11 Interest on Working Capital

Regulation 26 of Tariff Regulations 2021, stipulates the following methodology for computing the Interest on Working Capital:

“

- e. The Transmission Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:
- vi. Receivables equivalent to two (2) month of transmission charges calculated on target availability level.
 - vii. O&M Expenses of one (01) month.
 - viii. Maintenance spares @ 15% of O&M expenses for one month.
- Less:
- ix. Return on equity and contribution to contingency reserves equivalent to two months.
 - x. Amount of security deposits from Transmission System users, if any, held during the year except the security deposits held in the form of Bank Guarantee from Transmission System Users.
- f. Interest on working capital shall be on normative basis and rate of interest shall be equal to the State Bank one-year Marginal Cost of Funds-based Lending Rate ('MCLR') as of the date on which petition for determination of tariff is filed plus 150 basis points. The rate of interest for the purpose of True-up shall be the weighted average MCLR of the concern Financial Year plus 150 basis points.
- g. Interest shall be allowed on the amount held as security deposit from Transmission System Users at the Bank Rate as at the date on which the application for determination of tariff is filed. The interest allowed shall be subject to true up at weighted average Bank Rate of the concern Financial Year.
- h. If the State Government is providing resource gap grant and/or subsidy, the working capital shall be reduced by two months equivalent of that amount. “

The Petitioner submits that one year SBI MCLR as on 15th September 2023 was 8.55% as per Annexure G. Accordingly, the Interest on Working Capital has been considered as 10.05% (SBI MCLR: 8.55% +150 basis points)

Table 39 - BGCL claim of Interest on Working Capital for the FY 2023-24
(in Rs Crores)

S. No.	Particulars	Approved by Hon'ble BEREC in the Order dated 21.03.2023	BGCL claim
1	O&M expenses (1 month)	3.24	5.05
2	Maintenance spares @15% of 1 month O&M expenses (1x15%)	0.84	1.01
3	Receivables - 2 months	86.19	90.05

S. No.	Particulars	Approved by Hon'ble BERC in the Order dated 21.03.2023	BGCL claim
4	Less: RoE and contribution to contingency reserve for 2 months	20.35	21.46
5	Less: Amount of sec deposit held from consumers during the year	-	-
6	Working capital requirement (1+2+3-4-5)	84.70	74.65
7	Rate of interest	9.45%	10.05%
8	Interest on working capital (6x7)	8.00	7.50

4.12 Non- Tariff Income

The Petitioner submits that for the FY 2023-24, it has considered the Non-Tariff Income as per the Non-Tariff Income claimed in the True up for FY 2022-23 as per the methodology adopted by the Hon'ble Commission in previous orders.

4.13 Annual Revenue Requirement for the FY 2023-24

Accordingly, the Petitioner submits the Annual Fixed Charges for the FY 2023-24 as follows:

Table 40 - BGCL claim of ARR for the APR of FY 2023-24

(in Rs. Crores)

S. No.	Particulars	Approved by Hon'ble BERC in the Order dated 21.03.2023	BGCL claim
1	O&M expenses (a+b+c)	38.94	60.64
a.	Employee cost	9.16	21.06
b.	R&M expenses	25.06	30.22
c.	A&G Expenses	4.72	9.36
2	Depreciation	170.95	167.58
3	Interest and finance charges	210.94	210.03
4	Interest on working capital	6.68	7.50
5	Return on Equity	122.11	128.77
6	Gross Annual Revenue Requirement	549.62	574.52
7	Less: Non-Tariff income	32.46	34.24

S. No.	Particulars	Approved by Hon'ble BERC in the Order dated 21.03.2023	BGCL claim
8	Net ARR (1+2+3+4+5+6-8)	517.16	540.28

The Petitioner requests the Hon'ble Commission to kindly approve the ARR of Rs. 540.28 Crore for the Review of FY 2023-24.

ANNUAL REVENUE
REQUIREMENT (ARR) for the
FY 2024-25
and
TRANSMISSION CHARGES
FOR THE
FY 2024-25



5 Annual Revenue Requirement for the FY 2024-25

5.1 Introduction

BGCL has submitted the petition on 9th December, 2021 for approval of Multiyear Annual Revenue Requirement (ARR) for the period FY 2022-23, FY 2023-24 and FY 2024-25. The ARR approved by the Hon'ble Commission for the FY 2024-25 is Rs. 437.27 Cr.

In accordance with BERC Tariff Regulations, 2021, the Petitioner submits the revised estimated for determination of ARR along with Transmission Tariff for the FY 2024-25.

5.2 Performance of Transmission System

Regulation 17.1 (b) stipulates the following:

"The Commission shall monitor the following Quality of Supply parameters during the Control Period:

- a) *Transmission System Availability*
- b) *Transformer Failure"*

5.2.1 Availability of Transmission System

Regulation 16 of Tariff Regulations 2021 stipulates the following:

"Normative Annual Transmission System Availability Factor (NATAF):

16.1 The Normative Annual Transmission System Availability Factor for recovery of full transmission charges shall be as under:

<i>(a) for full recovery of transmission charges</i>		
1.	<i>AC System</i>	<i>98%</i>
2	<i>HVDC System</i>	<i>95%</i>
<i>(b) For Incentive Consideration</i>		
3	<i>AC System</i>	<i>98.5%</i>
4	<i>HVDC System</i>	<i>97.5%</i>

As per the Business Plan, the Petitioner submits the Transmission System Availability to be 98% for FY 2024-25.

5.2.2 Transformer Failure Rate

The Petitioner submits that it would be able to maintain its operational efficiency through proactive measures. Therefore, the transformer failure rate is estimated to be NIL for FY 2025-26.

5.3 Schedule of Capitalization

The Petitioner submits that as per current projections, all assets pertaining to Part 1 of 2, Part 2 of 2, and Supplementary Work are expected to attain capitalization in FY 2023-24. Therefore, no further assets are to be capitalized under the current scheme.

5.4 Capitalization

In view of the above, as all the assets are projected to be capitalized in FY 2023-24, the Petitioner submits that opening CWIP for FY 2024-25 is zero and there is no further Capital expenditure to be incurred in the current scheme.

5.5 Gross Fixed Assets

The Petitioner submits that the Revised Estimates of Gross Fixed Assets as follows:

Table 41 – BGCL estimate of Gross Fixed Assets for the period FY 2024-25
(in Rs Crores)

S.No.	Particulars	Approved by Hon'ble BEREC in the Order dated 25.03.2022	BGCL claim
1	Opening GFA	3,909.46	3914.56
2	Additions to GFA	-	-
3	Closing GFA (1+2)	3,909.46	3914.56

5.6 Funding of Capitalization

The Petitioner submits that the Phase IV Capital Expenditure is being funded with a Debt - Equity ratio of 80:20.

Therefore, all assets due to attain capitalization by the FY 2024-25 shall be funded with Debt - Equity ratio of 80:20.

5.7 Depreciation

The Petitioner has worked out the Depreciation as per Regulation 23 of Tariff Regulations 2021. The Petitioner submits that depreciation is based on the capitalisation schedule of the assets. The Weighted average rate of depreciation for the opening GFA (as on 01st April of the year) and for the Additions (during the year) is

considered to be 4.66% and 3.41% respectively which is considered for the True up for the FY 2022-23. Accordingly, the overall depreciation has been worked out for FY 2024-25 as summarised in the table below:

Table 42 – BGCL estimate of Depreciation for the period FY 2024-25
(in Rs. Crores)

S. No.	Particulars	Approved by Hon'ble BEREC in the Order dated 25.03.2022	BGCL claim
1	Opening GFA (without land)	2740.34	3856.91
2	Additions during the year	-	-
3	Less: land during the year	-	-
4	Closing GFA (1+2-3)	2740.34	3856.91
5	Average GFA (1+4)/2	2740.34	3856.91
6	Weighted average Rate of depreciation on opening assets	5.18%	4.66%
7	Weighted average Rate of depreciation on asset additions during the year	2.06%	3.41%
8	Depreciation (1*6+(2-3)*7)	141.95	179.59

5.8 Interest on Loan Capital and Finance Charges

According to Regulation 24 of Tariff Regulations 2021, Interest and Finance Charges is to be computed as follows:

" 24. Interest and finance charges on loan capital

- The Transmission Licensee or SLDC, as the case may be, shall provide detailed loan-wise, project wise and utilization-wise details of all the loans.
- If the equity actually deployed is more than 30 % of the capital cost, equity in excess of 30 % shall be treated as normative loan:
Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loan:
- Actual loan or normative loan, if any, shall be referred as gross normative loan in this Regulation.
- The normative loan outstanding as of 1st April of control period shall be computed by deducting the cumulative repayment as approved by the Commission (basis as mentioned below) up to 31st March of current period (a year before control period) from the gross normative loan.
- The repayment for the control period shall be deemed to be equal to the depreciation allowed for the year.



- f) Notwithstanding any moratorium period availed by the Transmission Licensee or SLDC, as the case may be, the repayment of the loan shall be considered from the first year of the control period as per annual depreciation allowed.
- g) The rate of interest shall be the weighted average rate of interest calculated on the basis of actual loan portfolio at the beginning of each year of the control period, in accordance with terms and conditions of relevant loan agreements, or bonds or nonconvertible debentures:
 Provided that if no actual loan is outstanding but normative loan is still outstanding, the last available weighted average rate of interest shall be applicable.
 Provided further that if no actual loan is outstanding but normative loan is still outstanding and the last available weighted average rate of interest is also not available, rate of interest equal to the State Bank one-year Marginal Cost of Funds-based Lending Rate ('MCLR') shall be applicable.
 Provided further that the interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest:
 Provided also that exception shall be made for the existing loans which may have different terms as per the agreements already executed if the Commission is satisfied that the loan has been contracted for and applied to identifiable and approved projects:
- h) The Transmission Licensee or SLDC, as the case may be, shall make every effort to refinance the loan as long as it results in net benefit to the beneficiaries.
 Provided that the cost associated with such refinancing shall be eligible to be passed through in tariffs and the benefit on account of refinancing of loan and interest on loan shall be shared in the ratio of 50:50 between the Transmission Licensee or SLDC and the beneficiaries.
 Provided further that the Transmission Licensee shall submit the calculation of such benefit to the Commission for its approval.
- i) The Transmission Licensee shall enable tracking of the loans converted into grants under schemes like BRGF, PSDF, APDRP, RAPDRP, RGGVY, DDUGVY, RSVP, etc or any other loan from the Central or State Government by providing information and data regularly to the Commission, for enabling the Commission to recover from Transmission Licensee or SLDC, as the case may be, the amount of interest on loans which have been passed on to the beneficiaries in the earlier years and have been converted into grant subsequently so that the recovered amount is passed on to the beneficiaries.
- j) Addition to loan during the year for interest purpose will be restricted to the quantum of assets capitalized and put to use.
- k) The excess interest during construction on account of time and/or cost overrun as compared to the approved completion schedule and capital cost or on account of excess drawal of the debt funds disproportionate to the actual requirement based on Scheme completion status, shall be allowed or disallowed partly or fully on a case to case basis, after prudence check by the Commission. The transmission licensee shall endeavour to adhere the time schedule for various transmission system in accordance with Annexure-A appended for these regulations.
 Provided that where the excess interest during construction is on account of delay attributable to an agency or contractor or supplier engaged by the Transmission

Licensee, any liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost:
Provided further that the extent of liquidated damages to be considered shall depend on the amount of excess interest during construction that has been allowed by the Commission.

- l) The above interest computation shall exclude interest on loan amount, normative or otherwise, to the extent of capital cost funded by Consumer Contribution, Deposit Works, Grants or Capital Subsidy."

Accordingly, the Petitioner has computed the Interest and Financing Charges for FY 2024-25 as depicted in the table below:

Table 43 - BGCL estimate of Interest on Loan for the period FY 2024-25
(in Rs Crores)

S. No.	Particulars	Approved by Hon'ble BEREC in the Order dated 25.03.2022	BGCL claim
1	Opening loan	1563.38	2460.87
2	Additions during the year	-	-
3	Repayment	141.95	179.59
4	Closing Loan (1+2-3)	1421.43	2281.28
5	Average Loan (1+4)/2	1492.41	2371.07
6	Rate of Interest	10.18%	9.73%
7	Interest Charges (5* 6)	151.93	230.67

5.9 Operations and Maintenance Expenses

As per Regulation 21 of Tariff Regulations 2021:

"21. Operation and Maintenance Expenses

(a) The Commission shall stipulate a separate trajectory of norms for each of the components of O&M expenses viz., Employee cost, Repair and Maintenance (R&M) expense and Administrative and General (A&G) expense.

Provided that such norms may be specified for a specific Transmission Licensee or a class of Transmission Licensees.

(b) Norms shall be defined in terms of number of personnel per ckt/km (for different categories of transmission lines for e.g. 400 KV, 220 KV, 132 KV etc. Lines) and number of personal per bay (for different categories of bay for e.g. 400 KV, 220 KV, 132 KV etc. Bays) along with annual expenses per personnel for Employee expenses; combination of A&G expense per personnel and A&G expense per substation for A&G expenses and R&M expense as percentage of gross fixed assets for estimation of R&M expenses.



(c) One-time expenses such as expense due to change in accounting policy and arrears paid due to pay commission recommendation shall be excluded from the norms in the trajectory.

(d) The unforeseen expenses beyond the control of the Transmission Licensee such as pay revision, shall be excluded from the norms in the trajectory.

(e) The One-time expenses and the expenses beyond the control of the Transmission Licensee shall be allowed by the Commission over and above normative Operation & Maintenance Expenses after prudence check.

(f) The norms in the trajectory shall be specified over the control period with due consideration to productivity improvements.

(g) The norms shall be determined at constant prices of base year and escalation on account of inflation shall be over and above the baseline.

Provided that for the purpose of escalation based on Wholesale Price Index(WPI_n) and Consumer Price Index(CPI_n), WPI_n is to be computed based on the average yearly inflation derived based on the monthly Wholesale Price Index of the respective past three financial years (including the year of Truing-up) as per the Office of Economic Advisor Ministry of Commerce & Industry Government of India and CPI_n is to be computed based on the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) of the respective past three financial years (including the year of Truing-up) as per the Labour Bureau Government of India, at the time of filing of Petition.

Provided that in case the average yearly inflation derived based on the monthly CPI and WPI indices is negative for a particular year, the same will be excluded from the computation of yearly inflation

(h) The Transmission Licensee specific trajectory of norms shall be identified by the Commission on the basis of absolute and relative analysis.

(i) In absolute analysis, Transmission Licensee's audited accounts of operations for last three years, expenses claimed for control period, historically approved cost, and prudence check shall be used by the Commission to estimate values of norms.

(j) In relative analysis, performance parameters of other Transmission Licensees within the same state or in other states, shall be considered by the Commission to estimate norms."

The Petitioner submits that since a number of Transmission projects are under way and subsequently full network details are not available at present, therefore the norms for the computation of O&M Expenses could not be determined. In view of the same, the Petitioner herein shall follow the methodology adopted by the Hon'ble Commission in its previous Orders for computation of O&M Expenses pertaining to the ensuing year.

5.9.1 Employee Expenses

The employee expenses primarily include costs towards salaries, dearness allowances, bonus, staff welfare and medical benefits, leave travel and earned leave encashment, and the terminal benefits in the form of pension, gratuity etc.

Regulation 21.1 stipulates the following:

“21.1 Employee Cost

Employee cost shall be computed as per the approved norm escalated by consumer price index (CPI), adjusted by provisions for expenses beyond the control of the Transmission Licensee and one time expected expenses, such as recovery/adjustment of terminal benefits, implications of pay commission, arrears and Interim Relief, governed by the following formula:

$$EMP_n = (EMP_b * CPI \text{ inflation}) + Provision$$

Where:

EMP_n : Employee expense for the year n

EMP_b : Employee expense as per the norm

CPI inflation : is the average increase in the Consumer Price Index (CPI) for immediately preceding three years”

Provision: Provision for expenses beyond control of the Transmission Licensee and expected one-time expenses as specified above.

Till the norms are specified by the Commission the employee cost shall be determined on the basis of actual historical cost.

As per the aforesaid Regulations, the CPI index for the preceding three years has been shown in the table below:

CPI index

Table 44 – Computation of Average CPI (past 3 years)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
Annual Average CPI Index	322.50	338.69	356.06	377.62
CPI Inflation (YOY)		5.02%	5.13%	6.05%
Average		5.40%		

The Petitioner submits the revised employee expenses for FY 2024-25 based upon the Average CPI Inflation Index and the Employee Expenses for the previous year as shown in the table below:

Table 45 - BGCL estimate of Employee Expenses for the period FY 2024-25
(in Rs Crore)

Particulars	Approved by Hon'ble BEREC in the Order dated 25.03.2022	BGCL claim
Base Employee expenses	11.96	21.06
Indexation %	6.00%	5.40%
Inflationary increase	0.72	1.14
Employee expenses	12.68	22.20

The Petitioner expects that the Capital works would be completed by the end of FY 2023-24 and FY 2024-25, thereafter, the Petitioner would propose norms for the recovery of O&M Expenses.

5.9.2 Repair and Maintenance Expenses

The Repair and Maintenance Activities are primarily directed towards the upkeep of the transmission system and related office works

As per Regulations 21.2 of the Tariff Regulations 2021, R&M will be calculated as follows:

"21.2 Repairs and Maintenance (R&M) Expense

Repairs and Maintenance expense shall be calculated as percentage (as per the norm determined) of Opening Gross Fixed Assets excluding land cost for the year governed by following formula:

$$R\&M_n = K_b * GFAn$$

Where:

R&M_n : Repairs & Maintenance expense for nth year

GFAn : Opening Gross Fixed Assets for nth year

K_b : Percentage point as per the norm"

The Petitioner submits that the Hon'ble Commission vide its previous orders while approving the ARR for the ensuing year, had allowed the R&M Expenses based upon the factor derived by considering the actual R&M expenses against the actual GFA. Following the similar methodology, the Petitioner herein considers the factor as shown in the table below:

Table 46 - Computation of Average % factor (R&M expenses to GFA)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Average GFA (Net of Land)	1872.41	2159.58	2561.25



Particulars	FY 2019-20	FY 2020-21	FY 2021-22
R&M expenses	20.46	22.54	25.56
% of R&M expenses to GFA (2/1)*100	1.09%	1.04%	1.00%
Average % of R&M expenses to average GFA	1.04%		

The Petitioner submits the claim towards R&M expenses on the basis of the factor derived as above and the GFA as shown in the table below for FY 2024-25:

Table 47 - BGCL estimate of Repair and Maintenance Expenses for the period FY 2024-54

(in Rs Crore)

S.No.	Particulars	Approved by Hon'ble BERC in the Order dated 25.03.2022	BGCL claim
1	Average GFA (excluding land)	2740.34	3856.91
2	% Factor on GFA	0.76%	1.04%
3	R&M Expenses (1x2)	20.83	40.30

5.9.3 Administrative and General Expenses

Administration and General expenses mainly comprise costs towards rent charges, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other debits.

As per Regulation 21.3 of the Tariff Regulations 2021, A&G Expenses are to be computed as follows:

"21.3 Administrative and General (A&G) Expense

A&G expense shall be computed as per the norm escalated by wholesale price index (WPI) and Consumer Price Index (CPI) in the ratio 60:40 and adjusted by provisions for confirmed initiatives (IT etc. initiatives as proposed by the Transmission Licensee and validated by the Commission) or other expected one-time expenses, and shall be governed by following formula:

$$A\&G_n = (A\&G_b * WPI \text{ inflation}) + \text{Provision}$$

Where:

A&G_n: A&G expense for the year n

A&G_b: A&G expense as per the norm

WPI inflation: is the average increase in the Wholesale Price Index (WPI) for immediately preceding three years

Provision: Cost for initiatives or other one-time expenses as proposed by the Transmission Licensee and validated by the Commission. Till the norms of A&G expenses is specified by the Commission, the actual historical cost will be considered for determination of A&G expenses."

As per the aforesaid regulations, the Average WPI and CPI index in the ratio of 60:40 for the preceding three years has been shown in the table below:

Table 48 - Computation of Average WPI (past 3 years)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
April	235.64	245.08	260.333	281.5856
May	237.04	245	261.557	284.912
June	238.2	246.92	263.778	285.4176
July	239.92	250	266.198	286.0672
August	240.6	251.6	267.024	286.2656
September	241.72	253.237	268.022	287.6464
October	243.8	255.936	272.107	290.12
November	245.72	257.227	274.69	289.96
December	247.2	255.446	274.011	288.8144
January	247.36	254.85	273.693	289.7584
February	245.68	256.872	274.12	289.6656
March	243.76	258.629	277.288	290.7424
Annual Average	242.22	252.57	269.40	287.58
CPI Inflation (YOY)		4.27%	6.67%	6.75%
Past 3 Year Average			5.89%	

Based upon the Inflation Index derived above in accordance with the Tariff Regulations 2021, the Petitioner has projected the A&G Expenses as follows:

Table 49 - BGCL estimate of Administrative and General Expenses for the period FY 2024-25

(in Rs Crore)

Sl. No.	Particulars	Approved by Hon'ble BERC in the Order dated 25.03.2022	BGCL claim
1	Base A & G Expenses	5.25	9.36
2	Inflationary index %	3.85%	5.89%
3	Add: Inflationary increase	0.21	0.55
4	A&G expenses	5.67	9.91

5.10 Return on Equity

As per Regulation 22 of Tariff Regulations 2021, Return on Equity is to be computed as follows:

“22. Return on Equity

- a) Return on equity shall be computed on 30% of the capital cost or actual equity, whichever is lower:

Provided that assets funded by beneficiary contribution, capital subsidies/ grants and corresponding depreciation shall not form part of the capital cost. Actual equity invested in the Transmission Licensee or SLDC, as the case may be, as per book value shall be considered as perpetual and shall be used for computation in this Regulation:

Provided further that the premium if any raised by the Licensee while issuing share capital and investment of internal resources created out of its free reserves, for the funding of the Scheme, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the distribution system, and are within the ceiling of 30% of capital cost approved by the Commission.

- b) *The return on the equity invested shall be allowed from the date of start of commercial operation and after put to use:*
- c) *Return on equity shall be computed at the rate of 15.5% for the project which is commissioned w.e.f. 01.04.2015 and further incentive equivalent to 0.5% will be allowed in the form of RoE, if the project is completed within schedule as per the Annexure A or original schedule period as the case may be. However, Return on Equity for the project commissioned prior to 01.04.2015 shall be allowed at the rate of 14%.”*

The Petitioner also submits that the Rate of Return on Equity has been considered at 18.78% assuming 17.47% as the effective MAT rate inclusive of surcharge and cess. Accordingly, the Return on Equity has been tabulated below:

Table 50 – BGCL estimate of Return on Equity for the period FY 2024-25
(in Rs Crore)

S.No.	Particulars	Approved by Hon'ble BERC in the Order dated 25.03.2022	BGCL claim
1	Opening Equity	550.59	782.07
2	Add: Equity During the year	-	-
3	Closing equity balance (1+2)	550.59	782.07
4	Average equity $\{(1+3)/2\}$	550.59	782.07
5	Rate of Return on equity %	15.50%	15.50%

S.No.	Particulars	Approved by Hon'ble BERC in the Order dated 25.03.2022	BGCL claim
6	Tax Rate	25.168%	17.47%
7	Pre Tax Rate of Return on equity % {5/ (1-6)}	20.71%	18.78%
8	Return on Equity (4*7)	114.03	146.89

5.11 Interest on Working Capital

Regulation 26 of Tariff Regulations 2021, stipulates the following methodology for the computation of Interest on Working Capital:

“

26. Interest on working capital

(a) The Transmission Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:

(i) Receivables equivalent to two (2) month of transmission charges calculated on target availability level.

(ii) O&M Expenses of one (01) month.

(iii) Maintenance spares @ 40% of R&M expenses for one month.

Provided that for the purpose of Truing-up for any year, the working capital requirement shall be re-computed on the basis of the values of revised normative Operation & Maintenance expenses and actual Revenue from Transmission Charges as reflected in the Audited Accounts excluding incentive, if any, and other components of working capital approved by the Commission in the Truing-up before sharing of gains and losses.

Less:

(iv) Return on equity and contribution to contingency reserves equivalent to two months.

(v) Amount of security deposits from Transmission System users, if any, held during the year except the security deposits held in the form of Bank Guarantee from Transmission System Users.

(b) Interest on working capital shall be on normative basis and rate of interest shall be equal to the State Bank (one-year tenor) Marginal Cost of Funds-based Lending Rate ('MCLR') as of the date on which petition for determination of tariff is filed plus 150 basis points. The rate of interest for the purpose of Truing-up shall be the weighted average MCLR of the concern Financial Year plus 150 basis points.

(c) Interest shall be allowed on the amount held as security deposit (except the security deposit held in the form of Bank Guarantee) from Transmission System Users at the Bank Rate (RBI Base Rate) as at the date on which the application for determination of tariff is filed. The interest allowed shall be subject to true up at weighted average Bank Rate of the concern Financial Year.

(d) If the State Government is providing resource gap grant and/or subsidy, the working capital shall be reduced by two months equivalent of that amount. “

The Petitioner submits that one year SBI MCLR as on 15th September 2023 was 8.55% as per Annexure G. Accordingly, the Interest on Working Capital has been considered as 10.05% (SBI MCLR: 8.55% +150 basis points).

Table 51 - BGCL estimate of Interest on Working Capital for the period FY 2024-25

(in Rs Crore)

S.No.	Particulars	Approved by Hon'ble BERC in the Order dated 25.03.2022	BGCL claim
1	O&M expenses (1 month)	3.26	6.03
2	Maintenance spares @15% of 1 month O&M expenses	0.69	1.34
3	Receivables - 2 months	72.88	100.62
4	Less: Depreciation, RoE and contribution to contingency reserve for 2 months	19.46	24.48
5	Less: Amount of sec deposit held from consumers during the years	-	-
6	Working capital requirement	57.37	83.51
7	Rate of interest	8.50%	10.05%
8	Interest on working capital	4.88	8.39

5.12 Non- Tariff Income

The Petitioner submits that for FY 2024-25, it has considered the Non-Tariff Income as per the Non-Tariff Income claimed in the True up for FY 2022-23 i.e. Rs. 36.27 Crore in accordance with the methodology adopted by the Hon'ble Commission in its past Orders.

5.13 Annual Revenue requirement for FY 2024-25

As per the submissions made in the preceding sections, the ARR claimed for FY 2024-25 is depicted as shown in the table below:

Table 52 – BGCL estimate of Annual Revenue requirement for FY 2024-25
(in Rs Crore)

S.No.	Particulars	Approved by Hon'ble BERC in the Order dated 25.03.2022	BGCL claim
1	O&M expenses (a+b+c)	39.17	72.40
a.	Employee cost	12.68	22.20
b.	R&M expenses	20.83	40.30
c.	A&G Expenses	5.67	9.91
2	Depreciation	141.95	179.59
3	Interest on loan capital	4.88	230.67
4	Interest on working capital	141.95	8.39
5	Return on Equity	114.03	146.89
6	Contribution to Contingency Reserve	2.74	-
7	Gross Annual Revenue Requirement (1+2+3+4+5)	454.69	637.94
8	Less: Non tariff income	17.42	34.24
9	Net Annual Revenue Requirement (6-7)	437.27	603.70

The Petitioner submits that the above mentioned ARR Charges are projected figures. The actual ARR for the relevant year will be submitted in accordance with applicable Regulations at the time of True-up. The Petitioner prays that the Hon'ble Commission may kindly approve the ARR of Rs. 603.70 for FY 2024-25.

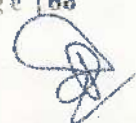
5.14 Revenue Gap/Surplus and Transmission Tariff determination for FY 2024-25

The Petitioner submits before the Hon'ble Commission to pass the impact of the Revenue Surplus accrued during the True-up for FY 2022-23 in the Tariff for FY 2024-25 along with applicable Carrying Cost in accordance with the Regulation 13 of the Tariff Regulations 2021. The relevant extracts of the said Regulation are reproduced below:

"13. True-Up and Annual Performance Review

The Commission shall True-Up expenses of the previous year either as part of the Tariff order or issue Order/s for True-Up of expenses preceding the Tariff order of ensuing year."

.....



.....
 (f) Notwithstanding anything contained in regulation 4 of these Regulations, the Revenue gap/surplus arising out of Truing up shall be considered by the Commission while determining the ARR of ensuing year(s). While approving adjustments towards revenue/expenses in future years, arising out of Truing up exercises, the Commission may allow the carrying costs as determined by the Commission of such expenses/revenues. However the revised estimated gap/surplus as a result of APR may or may not be passed in the ARR of ensuing year."

The Petitioner therefore proposes Surplus adjustment pertaining to the True up of FY 2021-22 along with the applicable Carrying cost considering the prevailing Interest Rate. The working of the Surplus computation is illustrated in the table below:

Table 53 – True up Revenue Surplus including Carrying Cost
 (in Rs. Crore)

S.No.	Particulars	BGCL claim
1	Surplus / (Gap) of the True-up of ARR for the FY 2022-23	33.13
2	Interest for FY 2022-23 @ 9.68% (half year)	1.60
3	Interest for FY 2023-24 @ 10.05%	3.33
4	Interest for FY 2024-25 @ 10.05% (half year)	1.66
5	Total Carrying Cost (2+3+4)	6.60
5	Total Surplus along with carrying cost to be considered for adjustment (1+5)	39.72

Accordingly, the Annual Transmission Charges claimed by the Petitioner for the period FY 2024-25 is shown in the table below:

(in Rs. Crore)

Table 54 – BGCL claim of Transmission Charges for the FY 2024-25

S.No.	Particulars	BGCL claim
1	Net Annual Revenue Requirement	603.70
2	Add: Total Surplus along with carrying cost to be considered for adjustment	(39.72)
3	Annual Transmission Charges (1+2)	563.97
4	Monthly Transmission Charges	47.00

The Petitioner respectfully submits before the Hon'ble Commission to approve Annual Transmission Charges amounting to Rs. 563.97 Crore and Monthly Transmission Charges amounting to Rs. 47.00 Crore for the FY 2024-25.

6 Compliance of Directives

The Hon'ble Commission vide Order dated 25.03.2022 had issued certain Directives to the Petitioner in respect of Operational and Financial performance. In the said regard, the Petitioner submits the compliance status of the said Directives as indicated in the table below:

Table 55 - BGCL submission to Directives

S.No.	Directive as per Order dated 25.03.2021	Petitioner's submission	Compliance status
1	<p>Details of Capitalization</p> <p>BGCL is directed to submit the scheme-wise details of actual capitalization including the following:</p> <p>i. Final cost of project versus approved DPR cost versus awarded cost of project</p> <p>ii. Break up of scheme wise actual BoQ quantity vs LoA BoQ quantity (along with supporting reasons for change in quantity)</p> <p>iii. Breakup of scheme wise actual hard cost in consonance with audited values versus LOA hard cost</p> <p>iv. Calculation of interest from the planned date of infusion of debt fund up to planned date of commercial operation versus calculation of interest</p>	<p>In compliance of the Hon'ble commissions directives as well as disallowances in the CapEx, BGCL has preferred a separate Review Petition to fulfil the compliance of the point mentioned alongside as well as seek necessary relief for the approval of Capex. The said information was also submitted as part of the Tariff proceedings for the FY 2023-24. A copy of said submission is provided as Annexure - B.</p> <p>BGCL shall also endeavour to provide any additional information as desired by the Hon'ble</p>	Complied

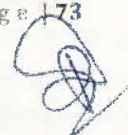
S.No.	Directive as per Order dated 25.03.2021	Petitioner's submission	Compliance status
	<p>from the date of infusion of debt fund up to actual date of commercial operation.</p> <p>v. Detailed working of approved variation due to impact of entry tax, other taxes, foreign exchange rate variation and miscellaneous expenses in MoM of BoD versus these expenses as approved in DPR.</p> <p>vi. Reconciliation with audited value along with supporting documents, of the above mentioned expenses (as mentioned in point v above) separately for each item of deviation .</p>	<p>Commission during the course of instant proceedings.</p>	
2	<p>Summary report</p> <p>It has been observed that BGCL has been submitted multiple times for revision of its project costs. In view of this, the Commission opines a better tracking is needed of the capital projects being executed by BGCL, so that at the end of the year, the Commission is not required to deal with a sudden</p>	<p>The Petitioner in view of project monitoring time and again assesses the project related finances. Based upon the quantum of work left, any changes in scope, revision in Tax/ duty structure, the Petition pro-actively prepares Revised Cost Estimates and submits the</p>	Complied

S.No.	Directive as per Order dated 25.03.2021	Petitioner's submission	Compliance status
	<p>cost over-run. Thus, BGCL is directed to submit summary report on scheme wise capital expenditure and capitalization based on actual physical progress, bi-yearly.</p>	<p>same before the Hon'ble Commission for seeking necessary approval.</p> <p>The details of physical progress of the ongoing schemes will be submitted during the course of instant proceedings.</p>	
3	<p>Online platform for capital project monitoring</p> <p>BGCL should develop a web based platform/portal such it encompasses features tracking the various schemes being carried out by BGCL in terms of cost, time, scope, actual progress and deviations. BGCL shall update all relevant information on the web based on regular basis and provide access of the same to the office of the Commission. This shall enable the Commission to monitor real time data of capital projects and suggest corrective actions as and when needed.</p>	<p>BGCL expects that by the end of current FY all the assets under the current scheme will attain commissioning.</p> <p>Furthermore, a significant chunk of Capex has already been incurred for Part 1 and 2 of 2. Therefore, developing a web based platform for capital project monitoring at this point might not serve any significant purpose.</p>	<p>Not Complied</p>

S.No.	Directive as per Order dated 25.03.2021	Petitioner's submission	Compliance status
4	<p>Adherence to Bihar Electricity Regulatory Commission (Power Regulatory Accounting) Regulations, 2018</p> <p>BGCL is directed to strictly adhere to the provisions of Bihar Electricity Regulatory Commission (Power Regulatory Accounting) Regulations, 2018 including regulation 5 for furnishing of regulatory Audited Accounts and Regulation 9.17 for accounting of all capital expenditure through capital work in progress.</p>	<p>BGCL has already initiated the works towards preparation of Regulatory accounts. The Accounts so prepared shall be presented before BERC as and when the exercise is completed.</p> <p>The Petitioner will make a best-faith attempt to submit the Regulatory Accounts during the course of the current proceeding.</p>	Not Complied
5	<p>Peak and Average Loading of Transmission Elements</p> <p>BGCL should submit month wise peak and average loading of its Transmission elements to the Commission on quarterly basis.</p>	<p>Peak and average loading month wise is enclosed as Annexure- H</p>	Complied
6	<p>Metering & Energy Audit</p> <p>To maintain a transparent energy accounting system and to arrive at monthly energy losses in the transmission</p>	<p>Monthly Energy accounting certificate issued by SLDC is enclosed as Annexure - I</p>	Complied

S.No.	Directive as per Order dated 25.03.2021	Petitioner's submission	Compliance status
	<p>system, appropriate energy meters with communication facilities at all the interface points at distribution periphery is necessary. BGCL should submit monthly energy accounting report certified by SLDC and shall incorporate the transmission loss as certified by SLDC in annual audited accounts. BGCL shall also submit a quarterly report on the status of metering and its availability as its elements commissioned during the ongoing Control Period.</p>		
7	<p>Auxiliary consumption In compliance of previous directive no. 4 (Auxiliary consumption and consumption in staff colonies), BGCL stated that no staff colonies have been provided to the employees at GSS and only auxiliary consumption of substation are billed by Discoms and claimed in Petition under A&G expenses.</p>	<p>Auxiliary consumption details are enclosed as Annexure - J</p>	<p>Complied</p>

S.No.	Directive as per Order dated 25.03.2021	Petitioner's submission	Compliance status
	Hence, BGCL is directed to verify the bills raised by Discoms in accordance to the actual consumption and tariff schedule and rate for relevant category of connection upon serving of bill by Discoms.		



7 Prayers to the Hon'ble Commission

The Petitioner respectfully prays that the Hon'ble Commission may:

- a) Examine the proposal submitted by the Petitioner in the enclosed Petition for a favourable dispensation;
- b) Pass suitable orders with respect to the True Up of FY 2022-23, APR of FY 2023-24, determination of ARR for FY 2024-25 along with Annual Transmission Charges for the FY 2024-25 as submitted in this petition.
- c) Condone any inadvertent omissions, errors, short comings and permit BGCL to add/ change/ modify/ alter this filing and make further submissions as may be required at a future date; and
- d) Pass such Order as the Hon'ble Commission may deem fit and appropriate keeping in view the facts and circumstances of the case.



ANNEXURES



List of Annexures

Annexure	Description	Type
A	Tariff Formats	Hard and Soft Copy
B	Supporting data pertaining to disallowance in Part 1 of 2	Soft Copy
C	Auditor Certificate for Assets made operation during the FY 2022-23 but not capitalized in the Books of accounts	Hard and Soft Copy
D	Breakup of Hard and Soft Cost of the assets commissioned during FY 2022-23	Hard and Soft Copy
E	BGCL Annual Audited Accounts for the FY 2022-23	Hard and Soft Copy
F	Computation of Weighted Average Rate of Interest	Hard and Soft Copy
G	1 year SBI MCLR as on 15.09.2023	Hard and Soft Copy
H	Loading level of Transmission Elements	Hard and Soft Copy
I	SLDC Energy Account Certificates	Hard and Soft Copy
J	Auxiliary Consumption	Hard and Soft Copy

Annexure A

Annexure A

Summary		
SI No	Format	Form No.
1	Statement of Projected Profit and Loss	S1
2	Projected Balance Sheet	S2
3	Projected Cash Flow Statement	S3
4	Annual Revenue Requirement	F1
5	Alloted Transmission Capacity and Charges to be paid by Long Term Transmission, Long Term Transmission Customers (CL)	F2
6	Projection of Sales, Connected Load and Demand	F3
7	Revenue at current tariff rates	F4
8	Details of Transmission Lines and Substations	F5 (a,b,c)
9	Investment Plan (Scheme-wise)	F5 (d,e)
10	Abstract of Capital Cost for the existing Project, Capital Cost Estimates and Schedule of Commissioning for the New projects	F5 (f,g)
11	Capital Cost Estimates and Schedule of commissioning	F5 (h)
12	Break-up of Project Cost for Transmission System	F5 (i)
13	Breakup of Construction/ Supply/ Service packages	F5 (j)
14	Statement of Additional Capitalization	F5 (k)
15	Statement of Capital Works in Progress	F5 (l)
16	Capital Work-In-Progress (CWIP)	F5 (m)
17	Normative Parameters Considered for Tariff Computations	F6
18	Reconciliation of Gross Fixed Assets(GFA) admitted with Gross Fixed	F7 (a)
19	Gross Fixed Assets (GFA) (Information to be supplied for the previous year (actuals), current year (RE) and the ensuing year (s) (projections)	F7 (b,c,d)
20	Value of Depreciation Charges	F7 (e)
21	Statement of Assets Not in Use	F7 (f)
22	User contributions and grants towards cost of capital assets	F8
23	Details of Loans for the year	F9 (a,b,c)
24	Domestic loans, bonds and financial leasing	F9 (d)
25	Statement of Reconciliation of Net Actual Loan (opening) with Net Normative Loan (Opening)	F9 (e)
26	Details of Equity	F10
27	Interest and Finance Charges	F11
28	Lease details	F12
29	Operations & Maintenance Cost	F13
30	Employee Expenses	F14
31	R&M Expenses	F15
32	Administration and General Expenses	F16
33	Short Term Open Access Consumers	F17
34	Details of Non-tariff Income	F18
35	Working Capital Interest	F19

SI No	Format	Form No.
36	Investments in Non business related activities	F20
37	Details of Expenses Capitalised	F21
38	Net Prior Period Expenses / Income	F22
39	Contribution to Contingency Reserve	F23
40	Allocation statement of Expenses of SLDC	F24
41	Transmission Losses (For Transmission Licensee)	P1
42	Energy Delivered by Transmission licensee to the distribution Distribution Licensees/ Bulk consumers at interface points	P2
43	Details of Electrical Accidents	P3
44	Abstract of Outages due to feeder tripping	P4
45	Major System Disturbances	P5
46	Frequency Variation	P6
47	Voltage Fluctuation	P7
48	Licensee wise Load shedding carried out during the year	P8
49	Details of Overloaded Feeders	P9
50	Details of over loaded Transformers	P10
51	Failure of Transformers	P11
52	Key Ratios	P12



Statement of Profit and Loss

(Form No. S1)

Particulars		Previous Year (Rs Cr)	Previous Year (Rs Cr)
		FY 2021-22	FY 2022-23
I	Revenue from operations	452.62	174.62
II	Other Income	65.92	77.68
III	Total Income (I+II)	518.54	252.30
IV	Expenses		
	Employee benefit expenses	14.95	19.98
	Finance cost	175.85	158.50
	Depreciation and amortisation expense	105.38	127.40
	Other expenses	29.03	36.34
	Total expenses (IV)	325.21	342.23
V	Profit/(Loss) before exceptional items and tax (III-IV)	193.33	-89.93
VI	Exceptional Items	-	-
VII	Profit/(Loss) before Tax (V-VI)	193.33	-89.93
VIII	Total Tax expense	49.37	-1.75
	(1) Current Tax	6.35	-
	(2) Deffered Tax	43.02	-1.75
IX	Profit (Loss) for the period from Continuing operations (VII-VIII)	143.97	-88.17
X	Profit/(Loss) from dis continuing operations	-	-
XI	Tax expense of dis continuing operations	-	-
XII	Profit/(Loss) from dis continuing operations (after tax) (X-XI)	-	-
XIII	Profit/(Loss) for the period (IX+XII)	143.97	-88.17
XIV	Other Comprehensive income	-	-
XV	Total Comprehensive income for the period(XIII+XIV)	143.97	-88.17
XVI	Earnings per equity share (for continuing operation)		
	(1) Basic	2.37	-1.28
	(2) Diluted	2.37	-1.28
XVII	Earnings per equity share (for dis continued operation)		
	(1) Basic	-	-
	(2) Diluted	-	-
XVIII	Earnings per equity share (for dis continued & Continuing operations)		
	(1) Basic	2.37	-1.28
	(2) Diluted	2.37	-1.28

Signature of Petitioner



Balance Sheet		
Particulars	As at 31st March, 2022	As at 31st March, 2023
ASSETS		
Non-Current Assets		
(a) Property, Plant and Equipment	1,978.71	2,377.46
(b) Capital Work-in-Progress	789.46	429.80
(c) Other Intangible Assets	1.18	1.21
(d) Intangible Assets under Development	0.17	-
(e) Other non current assets	0.85	0.75
Total Non-Current Assets	2,770.37	2,809.22
Current Assets		
(a) Inventories	1.70	1.70
(b) Financial Assets		
(i) Trade receivables	618.68	498.81
(ii) Cash and Cash Equivalents	129.89	235.64
(c) Other Current Assets	60.99	14.27
Total Current Assets	811.25	750.42
Total Assets	3,581.63	3,559.64
EQUITY AND LIABILITIES		
Equity		
(a) Equity Share Capital	645.07	668.25
(b) Other Equity	379.10	290.93
Total Equity	1,024.17	959.18
Liabilities		
Non-Current Liabilities		
(a) Financial Liabilities		
(i) Borrowings	1,992.98	1,962.28
(ii) Other Non Current financial Liabilities	70.99	93.87
(b) Deferred Tax Liabilities (net)	174.18	172.43
Total non current Liability	2,238.15	2,228.58
Current Liabilities		
(a) Financial Liabilities		
(i) Other Current Financial Liabilities	60.91	36.42
(ii) Current Borrowing	117.94	172.65
(b) Other Current Liabilities	106.51	156.71
(c) Provisions	4.96	6.10
(d) Current Tax Liabilities (Net)	28.99	-
Total Current Liabilities	319.30	371.88
Total Equity and Liabilities	3,581.63	3,559.64

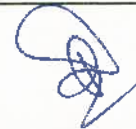
Signature of Petitioner



Cash Flow Statement**Form No: S3**

Particulars		Previous Year FY 2021-22	Previous Year FY 2022-23
A.	<u>CASH FLOW FROM OPERATING ACTIVITIES</u>		
	Net Profit/(Loss) as per Profit & Loss A/c	143.97	-88.17
	Depreciation	105.37	127.40
	Finance Costs	175.85	158.50
	Interest Received from Bank	-2.76	-7.27
	Prior Period Expenses/ Preliminary expenses	-	-
	Operating profit before working capital changes	422.43	190.46
	Adjustment For Increase/Decrease in:		
	Trade Receivables	-112.37	119.87
	Other Current Assets	-5.69	46.71
	Inventories	-	-
	Other Current Liabilities	-24.72	50.20
	Other Current Financial Liabilities	15.77	-24.49
	Current Borrowing	6.95	54.71
	Deferred Tax Liabilities	43.02	-1.75
	Short Term Provisions	0.39	1.14
	Current Tax Liabilities	-13.01	-28.99
	TOTAL	332.77	407.86
B.	<u>CASH FLOW FROM INVESTING ACTIVITIES</u>		
	Tangible/Intangible Assets	-277.33	-526.18
	Capital Work in Progress	42.60	359.83
	Long Term Loans and Advances	2.32	0.11
	Interest Received from Bank	2.76	7.27
	TOTAL	-229.65	-158.98
C.	<u>CASH FLOW FROM FINANCING ACTIVITIES</u>		
	Issue of Share Capital / Other Equity	64.48	23.18
	CSR Expenditure	-	-
	Interest and Finance Costs Paid	-175.85	-158.50
	Other Non Current Financial Liabilities	-38.38	22.88
	Borrowings	66.27	-30.70
	TOTAL	-83.49	-143.13
D.	NET INCREASE/(DECREASE) IN CASH FLOW (A+B+C)	19.63	105.74
E.	CASH & CASH EQUIVALENT AT THE BEGINNING OF THE YEAR	110.26	129.89
F.	CASH & CASH EQUIVALENT AT THE END OF THE YEAR	129.89	235.64

Signature of Petitioner



Annual Revenue Requirement

Form No. F1

S.No.	Particulars	As per Order dated 25.03.2022	Claimed	Current Year	Ensuing years (Projection)
		FY 2022-23		FY 2023-24	FY 2024-25
I.	Energy Available (MU)	N/A	11,818.59	14,182.31	17,018.77
II.	Energy Transmitted/Wheeled (MU)	N/A	11,712.89	14,055.46	16,866.56
III.	Loss %	1.20%	0.89%	0.89%	0.89%
IV.	Transmission Cost per unit (Rs/U)	N/A			
V.	Total Transmission System Capacity (in MW)				
VI.	Transmission Cost per MW	N/A			
VII.	Max Demand handled by the transmission system (in MW)				
A.	Income from Transmission Function				
1	Receipts				
a	Transmission/Wheeling Charges at current tariff rates	433.32	400.19	540.63	604.34
b	Subsidy from Govt. (If any)	-	-	-	-
	Total Receipts (A)	433.32	400.19	540.63	604.34
B	Expenditure				
1	O&M Expenses				
i	Employee Expenses	11.28	19.98	21.06	22.20
ii	R&M Expense	18.53	25.56	30.22	40.34
iii	Λ&G Expense	5.25	8.84	9.36	9.91
	Total O&M expenses (i+ii+iii+iv)	35.06	54.38	60.64	72.44
2	Return on Equity	107.77	81.86	128.84	147.03
3	Depreciation	132.53	127.29	167.71	179.77
4	Interest and finance charges on Loan Capital	168.06	163.08	210.17	230.94
5	Interest on Working Capital	4.88	5.66	7.51	8.40
6	Contribution towards Contingency Reserve	2.44	-	-	-
7	Gain/ Loss sharing	-	-2.83	-	-
9	Availability Incentive (TAF)	-	5.00	-	-
10	Transmission Loss Incentive	-	-	-	-
	Total Expenditure (B)	450.74	434.44	574.87	638.58
C	Other Deductions				
1	Income from other Business	-	-	-	-
2	Non tariff income	17.42	34.24	34.24	34.24
3	Revenue from Short Term transmission charges	-	-	-	-
	Total Other Deductions (C)	17.42	34.24	34.24	34.24
D	Net ARR for Transmission Function (B-C)	433.32	400.19	540.63	604.34
E	Shortfall/ (Excess) before tariff revision impact (A-D)		-33.13		
F	Surplus/ (Gap) Adjustment of Prev. years	-258.70	-		
G	Shortfall/ (Excess) after Gap adjustment (E-F)	-258.70	-33.13		

Signature of Petitioner



**Alloted Transmission Capacity and Charges to be paid by Long Term Transmission
Long Term Transmission Customers (CL) Form F2**

(In MW)

	Particulars	Approved	Actual	FY 2023-24	Ensuing years (Projection)
		FY 2022-23			FY 2024-25
A	Distribution Licensees	All Bills are raised to BSPTCL			
1	North Bihar Power Distribution Company Limited				
2	South Bihar Power Distribution Company Limited				
3	Others				
	i.				
	ii.				
B	Bulk Consumers/Long Term Open Access Customers (If				
1					
2					
Transmission Capacity to all the long term Transmission					

Charges to be paid by Long Term Transmission Customers/month Rs. Crores

A	Distribution Licensees				
1	North Bihar Power Distribution Company Limited	All Bills are raised to BSPTCL			
2	South Bihar Power Distribution Company Limited				
3	Others				
	i.				
	ii.				
B	Bulk Consumers/Long Term Open Access Consumers (If any)				
1					
2					
Total					

Signature of Petitioner



Projection of Sales, Connected Load and Demand

Form No: F3

	Particulars	Approved	Actual	FY 2023-24	Ensuing years (Projection)
		FY 2022-23			FY 2024-25
A) Projection of sales (MU)					
A	Distribution Licensees	Not applicable for BGCL as a fixed tariff bill is raised to BSPTCL			
1	North Bihar Power Distribution Company Limited				
2	South Bihar Power Distribution Company Limited				
3	Others				

B	Bulk Consumers/Long Term Open Access Consumers (If any)				
1					
2					
TOTAL					
B) Projection of Connected Load (in KW)					
A	Distribution Licensees	N/A			
1	North Bihar Power Distribution Company Limited				
2	South Bihar Power Distribution Company Limited				
3	Others				

B	Bulk Consumers/Long Term Open Access Consumers (If any)				
1					
2					
TOTAL					
C) Projection of Maximum or Peak Demand (in MW) (Unrestricted)					
A	Distribution Licensees	N/A			
1	North Bihar Power Distribution Company Limited				
2	South Bihar Power Distribution Company Limited				
3	Others				

B	Bulk Consumers/Long Term Open Access Consumers (If any)				
1					
2					
TOTAL					

Projection of Sales, Connected Load and Demand

Form No: F3

	Particulars	Approved	Actual	FY 2023-24	Ensuing years (Projection)
		FY 2022-23			FY 2024-25
D) Projection of Minimum Demand (in MW)					
A	Distribution Licensees	N/A			
1	North Bihar Power Distribution Company Limited				
2	South Bihar Power Distribution Company Limited				
3	Others				
	'--				
B	Bulk Consumers/Long Term Open Access Consumers (If any)				
1					
2					
	TOTAL				
E) Projection of Average Demand (in MW)					
A	Distribution Licensees	N/A			
1	North Bihar Power Distribution Company Limited				
2	South Bihar Power Distribution Company Limited				
3	Others				
	'--				
B	Bulk Consumers/Long Term Open Access Consumers (If any)				
1					
2					
	TOTAL				

Signature of Petitioner



Revenue At Current Tariff Rates

Form No: F4

Rs. Crores

	Particulars	Approved	Claimed	Current Year	Ensuing years (Projection)
		FY 2022-23		FY 2023-24	FY 2024-25
A	Distribution Licensees	As BGCL bills a fixed tariff to BSPTCL, the section is not relevant			
1	North Bihar Company Limited				
2	South Bihar Company Limited				
3	Others				
	i.				
	ii.				
	TOTAL				
B	Bulk Consumers/Long Term Open Access Consumers (If any)				
1					
2					
	TOTAL				
	Grand Total				

At Proposed Tariff Rates

	Particulars	Approved	Claimed	Current Year	Ensuing years (Projection)
		FY 2022-23		FY 2023-24	FY 2024-25
A	Distribution Licensees	As BGCL bills a fixed tariff to BSPTCL, the section is not relevant			
1	North Bihar Power Distribution Company Limited				
2	South Bihar Power Distribution Company Limited				
3	Others				
	i.				
	ii.				
	TOTAL				
B	Bulk Consumers/Long Term Open Access Consumers (If any)				
1					
2					
	TOTAL				
	Grand Total				
1.e	Tariff at Current Rates				
	Impact of Tariff Revision				

Signature of Petitioner



(a) Details of Transmission Lines and Substations

Transmission Lines

SNo	Name of line	Type of line AC/ HVDC	S/C or D/C	No. of Sub- conductors	Voltage level kV	Line length Ckt.-Km.	Date of Commercial operation /Put in use
1	132 kV D/C Amnour (BGCL) - Chhapra (BSPTCL) T/L	AC	D/C	1	132	51.16	27-Dec-17
2	220 kV D/C Hajipur (BSPTCL) - Amnour (BGCL) T/L	AC	D/C	1	220	95.27	18-Apr-17
3	132 kV D/C Amnour (BGCL) - Siwan (BSPTCL) T/L	AC	D/C	1	132	130.73	• Ckt 2: 24 Apr 2017 • Ckt 1: 12 Aug 2017
4	LILO of 220kV D/C Biharsharif (BSPTCL) - Bodhgaya (BSPTCL) T/L at Khijrisarai (BGCL)	AC	D/C	1	220	25.71	• 220kV BiharSharif - Bodhgaya - 7 Aug 2017 • 220 kV BiharSharif Khijr Sarai - 26 Aug 2017
5	132 kV S/C Khizersarai (BGCL) - Jehanabad (BSPTCL) T/L	AC	D/C	1	132	61.18	26-Feb-20
6	LILO of 132kV S/C Bodhgaya (BSPTCL) - Wazirganj (BSPTCL) T/L at Khijrisarai (BGCL)	AC	S/C	1	132	30.26	• KhijriSarai - Wazirganj - 8 Sep 2017 • Khijrisarai - Bodhgaya- 10 Sep 2017
7	132 kV S/C Khizersarai (BGCL) - Hulasganj (BSPTCL) T/L	AC	S/C	1	132	10.29	26-Aug-17
8	220 kV D/C Patna (PG) - Khagaul (BSPTCL) T/L	AC	D/C	1	220	51.31	8-Aug-19
9	LILO of one circuit of 132 kV D/C Khagaul (BSPTCL) - Digha (BSPTCL) T/L at Bihta New (BSPTCL)	AC	D/C	1	132	53.46	2023-24
10	220 kV D/C Khizersarai (BGCL) - Gaya (PG) T/L	AC	D/C	1	220	115.91	27-May-18
11	220 kV D/C Sekhopur Sarai (BGCL) - Narhat (BGCL) T/L	AC	D/C	1	220	101.69	22-Dec-17
12	220 kV D/C Khizersarai (BGCL) - Narhat (BGCL) T/L	AC	D/C	1	220	109.44	17-Sep-17
13	132 kV D/C Narhat (BGCL) - Nawada (BSPTCL) T/L	AC	D/C	1	132	35.15	17-Sep-17
14	132 kV S/C Sekhopur Sarai (BGCL) - Biharsharif (BSPTCL) T/L	AC	S/C	1	132	43.12	26-Feb-19
15	132 kV D/C Sekhopur Sarai (BGCL) - Sheikhpura (BSPTCL) T/L	AC	D/C	1	132	49.14	23-Dec-17
16	LILO of 220 kV D/C Begusarai (BSPTCL) - Biharsharif (BSPTCL) T/L at Mokama (BGCL)	AC	D/C	1	220	12.86	20-Sep-20
17	132 kV D/C Mokama (BGCL) - Hatidah (BSPTCL) T/L	AC	D/C	1	132	13.96	24-Sep-20
18	220 kV D/C Sekhopur Sarai (BGCL) - Haveli Kharagpur (BGCL) T/L	AC	D/C	1	220	249.03	2-May-18
19	LILO of 132 kV D/C Sultanganj (BSPTCL) - Lakhisarai (BSPTCL) T/L at Haveli Kharagpur (BGCL)	AC	D/C	1	132	73.24	2-May-18
20	132 kV D/C Haveli Kharagpur (BGCL) - Jamalpur (BSPTCL) T/L	AC	D/C	1	132	67.16	21-Jan-19
21	132 kV D/C Goradiah (BGCL) - Sabour (BSPTCL) T/L	AC	D/C	1	132	23.87	16-Jun-19
22	LILO of 132 kV D/C Kahalgaon (BSPTCL) - Sultanganj (BSPTCL) T/L at Goradiah (BGCL)	AC	D/C	1	132	36.07	27-Jan-19
23	220 kV D/C Haveli Kharagpur (BGCL) - Goradiah (BGCL) T/L	AC	D/C	1	220	120.40	26-Jan-19

(b) Substations							
No	Name of Sub- station	Type of Substation Conventional/ GIS	Voltage level kV	No. of transformers / Reactors/ SVC etc (with capacity)		No. of Bays	Date of Commercial operation /Put in use
				Number	Capacity		
1	220/132/33 kV Amnour GIS	GIS	220/132	2	160	220kV-5, 132kV-9, 33kV-11	19-Apr-17
2	220/132/33 kV Amnour GIS	GIS	132/33	2	50		
3	220/132/33 kV Khijirsarai GIS	GIS	220/132/33	1	160	220kV-11, 132kV-13, 33kV-14	7-Aug-17
4	220/132/33 kV Khijirsarai GIS	GIS	132/33	2	50		
5	220/132/33 kV Goradih GIS	GIS	220/132	1	160	220kV-5,	26-Jan-19
6	220/132/33 kV Goradih GIS	GIS	132/33	1	50	132kV-11,	
7	220/132/33 kV Haveli Kharagpur GIS	GIS	220/132	1	160	220kV-7,	2-May-18
8	220/132/33 kV Haveli Kharagpur GIS	GIS	132/33	2	50	132kV-11,	
9	220/132/33 kV Shekhopur Sarai GIS	GIS	220/132	1	160	220kV-7,	22-Dec-17
10	220/132/33 kV Shekhopur Sarai GIS	GIS	132/33	2	50	132kV-8,	
11	220/132/33 kV Narhat GIS	GIS	220/132	1	160	220kV-7,	17-Sep-17
12	220/132/33 kV Narhat GIS	GIS	132/33	2	50	132kV-7,	
13	220/132/33 kV Mokama GIS	GIS	220/132	1	160	220kV-7,	24-Sep-20
14	220/132/33 kV Mokama GIS	GIS	132/33	1	80	132kV-7, 33kV-11	
15	220/132 kV 160 MVA Transformer 2 of GIS, Narhat (Nawade)	GIS	220/132	1	160	220kV-01 132kV-01	14-May-19
16	220/132 kV 160 MVA Transformer 2 of GIS, Khijirsarai (Gaya Manpur)	GIS	220/132	1	160	220kV-01 132kV-01	22-Aug-19
17	220/132 kV 160 MVA Transformer 2 of GIS, Shekhopur Sarai	GIS	220/132	1	160	220kV-01 132kV-01	8-Nov-19
18	132/33 kV 50 MVA Transformer 2 of GIS, Goradih (Sabour)	GIS	132/33	1	50	132kV-01 33kV-01	21-Dec-19
19	220/132 kV 160 MVA Transformer 2 of GIS, Haveli Kharagpur (Jamaipur)	GIS	220/132	1	160	220kV-01 132kV-01	19-Jan-20
20	132/33 kV 50 MVA Transformer 3 of GIS, Khijirsarai (Gaya Manpur)	GIS	132/33	1	50	132kV-01 33kV-01	2023-24
21	220/132 kV 160 MVA Transformer 2 of GIS, Goradih (Sabour)	GIS	220/132	1	160	220kV-01 132kV-01	2023-24
22	132/33 kV Transformer-1 50 MVA of GIS, Mokama (Halidah)	GIS	132/33	1	50	132kV-01 33kV-01	2023-24
23	220/132 kV 160 MVA Transformer 1 of GIS, Mokama (Halidah)	GIS	220/132	1	160	220kV-01 132kV-01	2023-24

(c) Extension of Substations

No	Name of Extension Sub- station	Type of Substation Conventional/ GIS	Voltage level kV	No. of Bays	Date of Commercial operation /Put in use	Covered in this petition (Yes/No)
1	132/33 kV Siwan (BSPTCL)	Conventional	132kV	2	24-Apr-17	Yes
2	132/33 kV Chhapra (BSPTCL)	Conventional	132kV	2	27-Dec-17	Yes
3	220/132 kV Hazipur (BSPTCL)	GIS	220kV	5	18-Apr-17	Yes
5	400/220 kV Gaya (PG)	Conventional	220kV	2	27-May-18	Yes
6	132/33 kV Hulasganj (BSPTCL)	Conventional	132kV	1	26-Aug-17	Yes
4	400/220 kV Gaurichak (PG)	Conventional	220kV	2	8-Aug-19	Yes
7	220/132 kV Khatauli (BSPTCL)	GIS	220kV	2	8-Aug-19	Yes
8	132/33 kV Sabour (BSPTCL)	Conventional	132kV	2	18-Jun-19	Yes
9	132/33 kV Jamaipur (BSPTCL)	Conventional	132kV	2	21-Jan-19	Yes
10	132/33 kV B'Sharif (BSPTCL)	Conventional	132kV	1	27-Feb-19	Yes
11	132/33 kV Seikhpura (BSPTCL)	Conventional	132kV	2	27-Dec-17	Yes
12	132/33 kV Nawada (BSPTCL)	Conventional	132kV	2	17-Sep-17	Yes
13	Sabour Bay Extension (2 * 133 kV Bay AIS)	Conventional	132kV	2	18-Jun-19	Yes
14	Jehanabad Bay Extension (2x132 kV AIS)	Conventional	132kV	2	26-Feb-20	Yes
15	Halidah Bay Extension (2 * 132 kV Bay AIS)	Conventional	132kV	2	24-Sep-20	Yes
16	Bihata Bay Extension (2x132 kV GIS)	GIS	132/33	2	2023-24	Yes

*Note:- Information to be provided for Previous Year, Current Year & Ensuing Control Period

(c) Details of Installed Transformer at Substation							
Sl. No	Voltage Ratio of Transformer (kV/kV)	Details of		Details of		Details of Transformers	
		Total number	Total Capacity (MVA)	Total number	Total Capacity (MVA)	Total number	Total Capacity (MVA)
		Previous Year (FY 2022-23)		Current Year (FY 2023-24)		Ensuing Year (FY 2024-25)	
1	400/220	-	-	-	-	-	-
2	400/132	-	-	-	-	-	-
3	220/132	12 (160MVA)	1,920	14	2,240	14	2,240
4	220/33	-	-	-	-	-	-
5	132/33	12 (50MVA)	600	14	700	14	700
6	132/33	1 (80 MVA)	80	1	80	1	80

Note: Information required for Previous years current year

Phase IV (Part 2 of 2) Form No: F5

(a) Details of Transmission Lines and Substations

Transmission Lines							
SNo	Name of line	Type of line AC/ HVDC	S/C or D/C	No. of Sub-conductors	Voltage level kV	Line length Ckt.-Km.	Date of Commercial operation /Put in use
1	LILO of 400 kV D/C Nabinagar II - Patna (PG) transmission line at Jakkampur - 14km	AC	D/C	1	400	28	4/21/2022
2	LILO of 220 kV D/C Sipara (BSPTCL) - Bihta (BSPTCL) line at Jakkampur (new) (14 kms)	AC	D/C	1	220	28	2023-24
3	LILO of 220 kV S/C Khagaul (BSPTCL) - Sipara (BSPTCL) at Jakkampur (new)(10 kms)	AC	S/C	1	220	10	12/3/2022
4	LILO of 132 kV D/C Jakkampur-Sipara line at Jakkampur(new) (being reconducted with HTLS by BSPTCL) (20 kms)	AC	D/C	1	132	40	2023-24
5	LILO of 132 kV S/C Jakkampur/Mithapur-Fatuha line at Jakkampur New (being reconducted with HTLS by BSPTCL)	AC	S/C	1	132	12	23.07.2022
6	LILO of 220 kV D/C Ara (PG)- Dumraon (New) and LILO of 220 kV D/C line Nadokhar (BSPTCL) - Dumraon (New) (BGCL) (50 kms)	AC	D/C	1	220	100	12/13/2020
7	132 kV D/C Dumraon(New)- Dumraon(BSPTCL) transmission line(8kms)	AC	D/C	1	132	16	7/14/2022
8	132 kV Dumraon (new)-Buxar (BSPTCL) (20 kms)	AC	D/C	1	132	40	3/3/2022
9	LILO of 400 kV D/C quad ckt 3&4 of Patna-baila line at Naubatpur(new)(12 kms)	AC	D/C	1	400	24	3/17/2022
10	LILO of 220kV D/C Ara (PG) - Khagaul (BSPTCL) line at Naubatpur (new) - (22 kms)	AC	D/C	1	220	44	5/12/2022
11	220 kV D/C Naubatpur(New) - Bihta (BSPTCL) transmission line (25 kms)	AC	D/C	1	220	50	6/29/2022
12	220 kV D/C Naubatpur(New)- Bhusaula(new) transmission Line (18 kms)	AC	D/C	1	220	36	6/2/2022
13	LILO of one ckt of 132 kV D/C Purnea - Naugachi /Khagaria line at Kathar (BSPTCL) (30 kms)	AC	D/C	1	132	60	2023-24
14	LILO of 132 kV D/C Ara (BSPTCL) - Jagdishpur (BSPTCL) at Dumraon New (BGCL)	AC	D/C	1	132	88.04	7/14/2022
15	132 kV D/C Naubatpur-Masauhari transmission line (11.5 kms)	AC	D/C	1	132	23	3/29/2022
16	132 kV D/C Naubatpur - Palliganj transmission line (25.5 kms)	AC	D/C	1	132	51	2023-24

(b) Substations							
No	Name of Sub-station	Type of Substation Conventional/ GIS	Voltage level kV	No. of transformers / Reactors/ SVC etc (with capacity)	No. of Bays	Date of Commercial operation /Put in use	Covered in this petition (Yes/No)
	Jakkampur 400kV GIS	GIS	400kV	02(500MVA),03(160MVA),04(80 MVA)		4/21/2022	Yes
1	Dumraon 220kV GIS	GIS	220 kV	02(160MVA),02(80MVA)		1/10/2021	Yes
2	Naubatpur 400kV GIS	GIS	400kV	02(500MVA),02(160MVA),02(80 MVA)		3/17/2022	Yes
3	Bhasaula 220kV GIS	GIS	220 kV	02(100MVA)		6/3/2022	Yes

(c) Extension of Substations							
No	Name of Sub-station	Type of Substation Conventional/ GIS	Voltage level kV	No. of transformers / Reactors/ SVC etc (with capacity)	No. of Bays	Date of Commercial operation /Put in use	Covered in this petition (Yes/No)
1	132 kV Dumraon (BSPTCL)	GIS	132 kV		2	1/10/2021	Yes
2	132 kV Buxar (BSPTCL)	GIS	132 kV		2	3/3/2022	Yes
3	220 kV Bihta GIS (BSPTCL)	GIS	220 kV		2	6/27/2022	Yes
4	132 kV Kathar (BSPTCL)	GIS	132 kV		2	2023-24	Yes
5	132 kV Palliganj (BSPTCL)	GIS	132 kV		2	2023-24	Yes
6	132 kV Masauhari (BSPTCL)	GIS	132 kV		2	3/29/2022	Yes

*Note: Information to be provided for Previous Year, Current Year & Ensuing Control

(c) Details of Installed Transformer at Substation							
Sl. No	Voltage Ratio of Transformer (kV/kV)	Details of		Details of		Details of Transformers	
		Total number	Total Capacity (MVA)	Total number	Total Capacity (MVA)	Total number	Total Capacity (MVA)
		Previous Year (2022-23)		Current Year (2023-24)		Ensuing Year (2024-25)	
1	400/220	3 (150MVA)	1,500.00	4	2,000	4	2,000
2	400/132	-	-	-	-	-	-
3	220/132	2 (160MVA)	320.00	7	1,120	7	1,120
4	220/132	2 (100MVA)	200.00	2	200	2	200
5	220/33	2 (50MVA)	100.00	2	200	2	200
6	132/33	6 (80MVA)	480.00	7	530	7	530

Note: Information required for Previous years, current year and Ensuing years

Phase IV (Supplementary)						Form: F5	
(a) Details of Transmission Lines and Substations							
Sub stations							
No	Name of Sub- station	Type of Substation Conventional/ GIS	Voltage level kV	No. of transformers / Reactors/ SVC etc (with capacity)	No. of Bays	Date of Commercial operation /Put In use	Covered in this petition (Yes/No)
1	Installation of 420kV, 2x125MVAR bus reactor at 400/220/132/33kV GIS Jakkampur S/s along with associated bays	GIS	420	2 (125 KVAR reactor)	2	2023-24	Yes
2	Installation of 420kV, 2x125MVAR bus reactor at 400/220/132/33kV GIS Naubatpur S/s along with associated bays	GIS	420	2 (125 KVAR reactor)	2	2023-24	Yes
3	Installation of 220/132kV, 160MVA 3rd ICT at 220/132/33kV GIS Chapra S/s along with associated bays	GIS	220	1 ICT (160 MVA)	2	2023-24	Yes

(c) Details of Installed Transformer at Substation							
S.No	Voltage Ratio of Transformer (kV/kV)	Details of Transformers		Details of Transformers		Details of Transformers	
		Total number	Total Capacity (MVA)	Total number	Total Capacity (MVA)	Total number	Total Capacity (MVA)
		Previous Year (FY 2022-23)		Current Year (2023-24)		Ensuing Year (2024-25)	
1	400/220	-	-	-	-	-	-
2	400/132	-	-	-	-	-	-
3	220/132	-	-	-	-	-	-
4	220/33	(160MVA)	-	1.00	160.00	1.00	160.00
5	132/33	-	-	-	-	-	-
Note: Information required for Previous years, current year and Ensuing years							

ABT Metering				Form: F5	
S.No	Particulars	Total number		Total number	
		Previous Year (FY 2022-23)	Current Year (2023-24)	Ensuing Year (2024-25)	Ensuing Year (2024-25)
1	ABT Meters	No addition	261	261	

Signature of Petitioner



(d) Investment Plan (Scheme-wise) (Rs. in Cr.)

Form No: F5

S.N	Name of scheme / Project	Name of line/ Sub- station etc	Approved Outlay		Progressive upto beginning of prev. year		Approved as per order dt. 25.03.22			Current year FY 2023-24 Claim		Ensnung Year 2024-25 Claim		Progressive Capital Expenditure upto the end of the ensung year FY 2024-25
			Approved in MYT/RE	Actual	Capitalization	Capital Expenditure (CWIP)	Capitalization	Capital Expenditure (CWIP)	Capitalization	Capital Expenditure (CWIP)	Capitalization	Capital Expenditure (CWIP)		
													2,691.89	
1	Phase IV (Part 1 of 2)		1,688.36		458.50	204.58	150.23	610.74	610.74					
2	Phase IV (part 2 of 2)		111.14							206.39	746.11	541.53		1,815.35
3	Phase IV (Part 2 Supplementary)		12.06											
4	ABT Metering		3,903.45		2,339.44	204.58	150.23	610.74	610.74	231.00	968.15	541.53		3,918.34
Total														

**Must be in agreement with the figures shown in audited account, otherwise a reconciliation statement must be accompanied.
 * Please furnish separately details regarding approval of Capital Investment under BERG (Procedure for Filing Capital Investment and Capitalization Plan) Regulations, 2018 and indicate the portion which is not approved under BERG (Procedure for Filing Capital Investment and Capitalization Plan) Regulations, 2018.
 Note:
 Ø The amount of grants and loans shall be furnished separately scheme wise and funding agency wise. Ø Additional column may be inserted (if required) for Ensung Years (Projection).
 Ø All information for previous year, current year (RE), Ensung year must be in line with information approved in MYT/Business Plan (if any), other-wise a statement showing complete details of variation must be accompanied.
 Ø CWIP shall mean Capital Work in Progress

(e) Investment Plan (Year-wise)

S.N	Project	Year	Originally proposed (DPR Estimate)	Approved by the Commission	Revised	Revised approval by the Commission on in review	Actual expenditure till FY 2022-23
1	Phase IV (Part 1 of 2)		1699.36	1690.36	2091.89	N/A	2,127.60
2	Phase IV (part 2 of 2)	FY 2017-18	1688.36	1688.36		NA	1,480.21
3	Phase IV (Supplementary)	FY 2019-20	111.14	111.14		NA	
4	ABT Metering	FY 2021-22	17.64	10.65		NA	

Note: i) Information for previous year to be given in columns 1 to 7 co-relating the information given in current or earlier MYT/Business Plan (if any).
 ii) Information for the current year to be given in columns 1 to 5 co-relating the information given in MYT/Business Plan (if any)
 iii) Amount of grants and loans shall be furnished separately funding Agencywise and yearwise.

(f) Abstract of Capital Cost for the existing Project, Capital Cost Estimates and Schedule of Commissioning for the New projects (Rs Crores)
Form No:F5

	Particulars	Approved	Claimed	Current Year	Ensuing years
		FY 2022-23		FY 2023-24	FY 2024-25
1	Capital Cost	2,757.11	3,376.81	3,918.34	3,918.34
2	Less : Capital Expenditure(CWIP)	-	426.62	-	-
3	Less : User contributions and Grants				
4	Total Capital Cost admitted	2,757.11	2,950.18	3,918.34	3,918.34
5	Increase /Decrease due to FERV				
6	Capital Cost for Purposes of ARR*	2,757.11	2,950.18	3,918.34	3,918.34

*Must be in agreement with the figures shown in Form No: F5 (page-2), otherwise a reconciliation statement must be accompanied.

Note

1.Copy of approval letter should be enclosed. Deviation in capital cost and scope of work if any, must be submitted in detailed.

(g) Financial Package of Capital cost Admitted

Particulars	Capital Cost as Approved		FY 2022-23		FY 2023-24	FY 2024-25
			Capital Cost Incurred	Capital Cost Admitted	Capital Cost to be Incurred	Capital Cost to be Incurred
	Currency	Amount				
Loans	INR					
PFC/ REC		2,205.69	2,360.15	2,360.15	3,134.67	3,134.67
Total Loan		2,205.69	2,360.15	2,360.15	3,134.67	3,134.67
Equity						
Domestic		551.42	590.04	590.04	783.67	783.67
Total Equity		551.42	590.04	590.04	783.67	783.67
Total Capital		2,757.11	2,950.18	2,950.18	3,918.34	3,918.34
Debt : Equity			80:20			

Provide details for True-up period, Current Year and each of ensuing years seperately.

Signature of Petitioner

(h) Capital Cost Estimates and Schedule of commissioning for New Projects

Form No: F5

Particulars	Present Day Cost	Completed Cost
Price level of approved estimates		
Foreign Exchange rate considered for the Capital cost estimates		
Capital Cost excluding IDC, FC, FERC & Hedging Cost		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. crores)		
Capital cost excluding IDC, FC, FERC & Hedging Cost (Rs. crores) ABT Metering scheme		
IDC, FC, FERC & Hedging Cost		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. crores)		
Total IDC, FC, FERC & Hedging Cost (Rs. crores)		
Rates, taxes & duties considered		
Capital cost Including IDC, FC, FERC & Hedging Cost		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. crores)		
Capital cost Including IDC, FC, FERC & Hedging Cost (Rs. crores) for ABT Metering scheme		
Note:		
1. Copy of approval letter should be enclosed.		
2. Details of Capital cost are to be furnished as per Form F5-5 or Form 14(Additional Capitalization) as applicable.		
3. Details of IDC & Financing Charges are to be furnished as per Form 20		

Not Applicable

Signature of Petitioner



(i) Break-up of Project Cost for Transmission System Phase IV (Part 1 of 2)

Form No: F5

Rs. Crores

No	Break Down	As per original estimates	As per RCE 2	Variation (B-C)	Reasons for Variation
		A	B	C	D
A	Transmission Line				
1	Preliminary works				
1.1	Survey (Incl Substation)	2.41	2.97	-0.56	
1.2	forest clearance, PTCC , general civil works etc.	40.33	40.33	0.00	
	Total Preliminary works	42.74	43.30	-0.56	
2	Transmission Lines material				
2.2	Conductor				
2.4	Insulators				
2.1	Towers Steel				
2.3	Earth Wire				
2.5	Hardware Fittings	544.02	775.18	-231.16	
2.6	Conductor & Earthwire accessories				
2.7	Spares				
2.8	Erection, Stringing & Civil works including foundation				
	Total Transmission Line Materials	544.02	775.18	-231.16	
3	Taxes and Duties				
3.1	Custom Duty				
3.2	Other Taxes & Duties				
	Total Taxes & Duties	0	0	0	
	Total -Transmission lines	586.76	818.48	-231.72	
B.	Substations				
4	Preliminary works & land				
4.1	Design & Engineering				
4.2	Land	31.3	12.92	18.38	
4.3	Site preparation				
	Total Preliminary works & land	31.3	12.92	18.38	
5	Civil Works				
5.1	Control Room including HVAC				
5.2	Township & Colony				
5.3	Roads and Drainage	69.97	107.96	-37.99	
5.4	Foundation for structures				
5.5	Misc. civil works				
	Total Civil Works	69.97	107.96	-37.99	

6	Substation Equipments			
6.1	Transformers			
6.2	Switchgear (CT,PT, Circuit Breaker, Isolator etc)			
6.3	Compensating Equipment (Reactor, SVC's etc)			
6.4	Control , Relay & Protection Panel			
6.5	PLCC			
6.6	HVDC package	637.25	768.62	-131.37
6.7	Bus Bars/ conductors/Insulators			
6.8	Outdoor lighting			
6.9	Emergency D.G. Set			
6.10	Grounding System			
6.11	Structure for switchyard			
	Total Substation Equipments	637.25	768.62	-131.37
7	Spares	13.56	7.81	5.75
8	Taxes and Duties			
8.1	Custom Duty			
8.2	Other Taxes & Duties			
	Total Taxes & Duties	13.56	7.81	5.75
	Total (Sub-station)	752.08	897.31	-145.23
9	Construction and pre-commissioning expenses			
9.1	Site supervision & site admn.etc.			
9.2	Tools and Plants			
9.3	construction Insurance			
	Total Construction and pre-Commissioning expenses	0	0	0
10	Overheads			
10.1	Establishment			
10.2	Audit & Accounts			
10.3	Contingency	40.17	51.47	-11.30
	Total Overheads	40.17	51.47	-11.3
11	Total Cost	1379.01	1767.26	-388.25
12	IDC, FC, FERV & Hedging Cost			
12.1	Interest During Construction (IDC)	159.69	204.52	-44.83
12.2	Financing Charges (FC)			
12.3	Foreign Exchange Rate Variation (FERV)			
12.4	Hedging Cost			
12.5	Incidental Expenditure During Construction (IEDC)	160.66	120.11	40.55
	Total of IDC, FC, FERV & Hedging Cost	320.35	324.63	-4.28
13	Capital Cost incl IDC, FC, FERV & Hedging Cost	1699.36	2091.89	-392.53

Please refer to the Annexure B, provided with the main Petition.

Note:

1. In case of time & Cost over run, a detailed note giving reasons of such time and cost over run should be submitted clearly bring out the agency responsible and whether such time & cost over run was beyond the control of the transmission licensee.
2. Above statement to be provided separately for each transmission line commissioned during the ARR period

(i) Break-up of Project Cost for Transmission System Phase IV (Part 2 of 2)

Form No: F5

Rs. Crores

No	Break Down	As per original estimates	As per RCE	Variation (B-C)	Reasons for Variation
	A	B	C	D	E
A	Transmission Line				
1	Preliminary works				
1.1	Survey (Incl Substation)	1.51			
1.2	forest clearance, PTCC , general civil works etc.	127.32			
	Total Preliminary works	128.83			
2	Transmission Lines material				
2.2	Conductor	271.35			
2.4	Insulators				
2.1	Towers Steel				
2.3	Earth Wire				
2.5	Hardware Fittings				
2.6	Conductor & Earthwire accessories				
2.7	Spares				
2.8	Erection, Stringing & Civil works including foundation				
	Total Transmission Line Materials	271.35			
3	Taxes and Duties				
3.1	Custom Duty				
3.2	Other Taxes & Duties				
	Total Taxes & Duties	0			
	Total -Transmission lines	400.18			
B.	Substations				
4	Preliminary works & land				
4.1	Design & Engineering				
4.2	Land	52.71			
4.3	Site preparation				
	Total Preliminary works & land	52.71			
5	Civil Works				
5.1	Control Room including HVAC	24.06			
5.2	Township & Colony				
5.3	Roads and Drainage				
5.4	Foundation for structures				
5.5	Misc. civil works				
	Total Civil Works	24.06			

6	Substation Equipments		N/A	N/A	N/A
6.1	Transformers				
6.2	Switchgear (CT,PT, Circuit Breaker, Isolator etc)				
6.3	Compensating Equipment (Reactor, SVCs etc)				
6.4	Control , Relay & Protection Panel				
6.5	PLCC				
6.6	HVDC package	901.88			
6.7	Bus Bars/ conductors/Insulators				
6.8	Outdoor lighting				
6.9	Emergency D.G. Set				
6.10	Grounding System				
6.11	Structure for switchyard				
	Total Substation Equipments	901.88			
7	Spares				
8	Taxes and Duties				
8.1	Custom Duty				
8.2	Other Taxes & Duties				
	Total Taxes & Duties	0			
	Total (Sub-station)	978.65			
9	Construction and pre-commissioning				
9.1	Site supervision & site admn.etc.				
9.2	Tools and Plants				
9.3	construction Insurance				
	Total Construction and pre-Commissioning expenses	0			
10	Overheads				
10.1	Establishment				
10.2	Audit & Accounts				
10.3	Contingency	35.20			
	Total Overheads	35.20			
11	Total Cost	1414.03			
12	IDC, FC, FERV & Hedging Cost				
12.1	Interest During Construction (IDC)	158.66			
12.2	Financing Charges (FC)				
12.3	Foreign Exchange Rate Variation (FERV)				
12.4	Hedging Cost				
12.5	Incidental Expenditure During Construction (IFDC)	159.62			
	Total of IDC, FC, FERV & Hedging Cost	318.28			
13	Capital Cost incl IDC, FC, FERV & Hedging Cost	1688.36			

Note:

1. In case of time & Cost over run, a detailed note giving reasons of such time and cost over run should be submitted clearly bring out the agency responsible and whether such time & cost over run was beyond the control of the transmission licensee.
2. Above statement to be provided separately for each transmission line commissioned during the ARR period

(i) Break-up of Project Cost for Transmission System Phase IV (Supplementary)**Form No: F5**

Rs. Crores

No	Break Down	As per original estimates	As per RCE	Variation (B-C)	Reasons for Variation
	A	B	C	D	E
A	Transmission Line				
1	Preliminary works				
1.1	Survey (Incl Substation)				
1.2	forest clearance, PTCC , general civil works etc.				
	Total Preliminary works	0			
2	Transmission Lines material				
2.2	Conductor				
2.4	Insulators				
2.1	Towers Steel				
2.3	Earth Wire				
2.5	Hardware Fittings				
2.6	Conductor & Earthwire accessories				
2.7	Spares				
2.8	Erection, Stringing & Civil works including foundation				
	Total Transmission Line Materials	0			
3	Taxes and Duties				
3.1	Custom Duty				
3.2	Other Taxes & Duties				
	Total Taxes & Duties	0			
	Total -Transmission lines	0.00			
B.	Substations				
4	Preliminary works & land				
4.1	Design & Engineering				
4.2	Land				
4.3	Site preparation				
	Total Preliminary works & land	0			
5	Civil Works				
5.1	Control Room including HVAC				
5.2	Township & Colony				
5.3	Roads and Drainage				
5.4	Foundation for structures				
5.5	Misc. civil works				
	Total Civil Works	0.6			

6	Substation Equipments	
6.1	Transformers	
6.2	Switchgear (CT,PT, Circuit Breaker, Isolator etc)	
6.3	Compensating Equipment (Reactor, SVCs etc)	
6.4	Control , Relay & Protection Panel	
6.5	PLCC	
6.6	HVDC package	88.78
6.7	Bus Bars/ conductors/Insulators	
6.8	Outdoor lighting	
6.9	Emergency D.G. Set	
6.10	Grounding System	
6.11	Structure for switchyard	
Total Substation Equipments		88.78
7	Spares	
8	Taxes and Duties	
8.1	Custom Duty	
8.2	Other Taxes & Duties	
Total Taxes & Duties		0
Total (Sub-station)		89.38
9	Construction and pre-commissioning	
9.1	Site supervision & site admn.etc.	
9.2	Tools and Plants	
9.3	construction Insurance	
Total Construction and pre-Commissioning expenses		0
10	Overheads	
10.1	Establishment	
10.2	Audit & Accounts	
10.3	Contingency	2.68
Total Overheads		2.68
11 Total Cost		92.06
12	IDC, FC, FERV & Hedging Cost	
12.1	Interest During Construction (IDC)	8.34
12.2	Financing Charges (FC)	
12.3	Foreign Exchange Rate Variation (FERV)	
12.4	Hedging Cost	
12.5	Incidental Expenditure During Construction (IEDC)	10.73
Total of IDC, FC, FERV & Hedging Cost		19.07
13 Capital Cost incl IDC, FC, FERV & Hedging Cost		111.14

N/A

N/A

N/A

Note:

1. In case of time & Cost over run, a detailed note giving reasons of such time and cost over run should be submitted clearly bring out the agency responsible and whether such time & cost over run was beyond the control of the transmission licensee.
2. Above statement to be provided separately for each transmission line commissioned during the ARR period

Signature of Petitioner



SN	Particulars	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Name/ No. of Construction / Supply / Service Package (and Schemes/plan)	TW-01	TW-02	TW-03	TW-04	SS-01	SS-02	SS-03	SS-04	TR-01	TR-02	CD-01	CD-02	CD-03	CD-04	CD-05	IS01	PI-01
2	Scope of works ¹ (in line with head of cost break-ups, as applicable)	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB
3	Whether awarded through JCB/DCB/	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB	DCB
4	No. of bids received																	
5	Date of Award	04.11.2014	31.10.2014	31.10.2014	15.01.2015	04.11.2014	30.09.2014	30.09.2014	31.12.2014	31.12.2014	20.08.2015	20.08.2015	30.03.2016	30.03.2016	30.03.2016	30.03.2016	17.08.2015	11.12.2015
6	Actual Date of Start of work	04.11.2014	31.10.2014	31.10.2014	15.01.2015	04.11.2014	30.09.2014	30.09.2014	31.12.2014	31.12.2014	20.08.2015	20.08.2015	30.03.2016	30.03.2016	30.03.2016	30.03.2016	17.08.2015	11.12.2015
7	Actual date of Completion of Work																	
8	Original Scheduled date of Completion of	May'16	Apr'16	Apr'16	Aug'16	May'16	Apr'16	Apr'16	Apr'16	Contract terminated	Oct'16	Nov'16	Nov'16	Nov'16	Nov'16	Nov'16	Oct'16	July'16
9	Original Value of Award ² in (Rs. Cr)	75.58	85.35	93.22	61.07	142.08	141.00	140.04	186.00	48.56	38.46	69.85	57.63	64.76	81.81	52.10	20.37	6.24
10	### Firm or With Escalation in prices	71.68	59.10	84.79	56.18	176.62	177.64	163.04	219.32	24.25	27.11	39.66	47.01	71.78	76.37	44.83	19.91	11.11
11	# Actual capital expenditure till the completion or up to COD whichever is earlier for work capitalized during the period (Rs. Cr.) - Without Taxes & Duties and IEDC																	
12	### Actual capital expenditure till the end of the period (Rs. Cr.) for Capital work under progress - Taxes & Duties and IEDC (included in above) - IDC, FC, FERV & Hedging Cost (included in above)																	
13	Sub-Total (10+11+12)																	

Note:

- a) As the scope of work contains multiple elements, it is difficult to quantify each
- b) The petitioner has already submitted element wise detail as per the BERC

Note: 1. Above statement to be provided separately for each work commissioned
 # Total Capitalisation attained in FY 2022-23 as per actuals (with taxes and IEDC)
 ## Total Capitalisation Projected to attain in FY 2022-23
 ### Total Capitalisation attained till FY 2021-22
 #### Only Equipment Cost

Signature of Petitioner

(j) Break-up of Construction/ Supply/ Service packages Phase IV (Part 2 of 2)

Form No:F5

SL.	Particulars	1	2	3	4	5	6
1	Name/ No. of Construction / Supply / Service Package (and Schemes/plan)	TW-01	TW-02	SS-09	SS-10	TR-02	TR-03
2	Scope of works ¹ (in line with head of cost break-ups as applicable)						
3	Whether awarded through ICB/DCB/ Departmentally/ Deposit Work	DCB	DCB	DCB	DCB	DCB	DCB
4	No. of bids received	Floating of bids and tendering activities was done by POWERGRID under Techno Managerial Services					
5	Date of Award	26.04.18	17.04.18	26.04.18	26.04.18	08.02.18	08.02.18
6	Actual Date of Start of work						
	Original Scheduled date of Start of work	26.04.18	17.04.18	26.04.18	26.04.18	08.02.18	08.02.18
7	Actual date of Completion of Work						
	Original Scheduled date of Completion of work	Mar'20	Mar'20	Feb'20	Feb'20	Feb'20	Feb'20
8	#### Value of Award ² in (Rs. Lakhs)	114.19	101.34	183.34	221.52	53.88	75.96
9	#### Firm or With Escalation in prices	N/A	N/A	N/A	N/A	N/A	N/A
10	# Actual capital expenditure till the completion or up to COD whichever is earlier for work capitalized during the period(Rs.Cr.) - Without Taxes & Duties and IEDC				524		
11	## Actual capital expenditure till the end of the period(Rs.Cr.) for Capital work under progress - Taxes & Duties and IEDC (included in above) - IDC, FC, FERV & Hedging Cost(included in above)				443		
12	### Actual capital expenditure already capitalized in earlier years(Rs.Cr.) - Taxes & Duties and IEDC (included in above) - IDC, FC, FERV & Hedging Cost(included in above)				458		
13	Sub -total (10+11+12)				1426		

Note:

- a) As the scope of work contains multiple elements, it is difficult to quantify each and every element separately within a particular
b) The petitioner has already submitted element wise detail as per the BEREC directive

Note:


1. Above statement to be provided separately for each work commissioned during the period, work under progress and part capitalization done in earlier year
2. Statement as Per Form F5-6 to be duly reconciled with corresponding Cost Break Up to be provided as per Form F5-5, for each transmission line commissioned during the True-up, Review and ARR period

Total Capitalisation attained in FY 2022-23 as per actuals (with taxes and IEDC)

Total Capitalisation Projected to attain in FY 2022-23

Total Capitalisation attained till FY 2021-22

Only Equipment Cost



Signature of Petitioner

(k) Statement of Additional Capitalization **Form No: F5**

Rs. Crores						
No	Year	Work/ Equipment proposed to be added after COD up to Cut off Date/ Beyond Cut off Date	Amount capitalised and Proposed to be capitalised	Justification	Regulations under which covered	Admitted Cost ¹
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
Not Applicable as Projects are under execution						

Note:
1 Fill the form in chronological order year wise along with detailed justification clearly bring out the necessity and the benefits accruing to the beneficiaries.
2 In case initial spares are purchased alongwith any equipment, then the cost of such spares should be indicated separately.

Signature of Petitioner



(I) Statement of Capital Works in Progress (Total)

Form No: F5

Rs. Crores

	Particulars	Approved	Claimed	Current Year	Ensuing years (Projection)	
		FY 2022-23		FY 2023-24	FY 2024-25	
		A	a	Opening Capital Expenditure(CWIP)	244.26	806.37
	b	Amount of IDC, FC, FERV & Hedging cost included in a above		109.06	102.34	-
B	a	Addition/Adjustment in Capital Expenditure(CWIP) during the period	57.64	231.00	541.53	-
	b	Amount of IDC, FC, FERV & Hedging cost included in a above	11.11	47.58	57.01	-
C	a	Capitalization/Transfer to Gross Fixed asset during the period	301.90	610.74	968.15	-
	b	Amount of IDC, FC, FERV & Hedging cost included in a above	8.34	54.30	159.35	-
D	a	Closing Capital Expenditure(CWIP)	-	426.62	-	-
	b	Amount of IDC, FC, FERV & Hedging cost included in a above	-	102.34	-	-

Phase IV (Part 1 of 2) (Rs. Crores)

	Particulars	Approved	Claimed	Current Year	Ensuing years (Projection)	
		FY 2022-23		FY 2023-24	FY 2024-25	
		A	a	Opening Capital Expenditure(CWIP)		197.44
	b	Amount of IDC, FC, FERV & Hedging cost included in a above		72.82	93.01	-
B	a	Addition/Adjustment in Capital Expenditure(CWIP) during the period		24.61	-	-
	b	Amount of IDC, FC, FERV & Hedging cost included in a above*		20.20	-	-
C	a	Capitalization/Transfer to Gross Fixed asset during the period		-	222.05	-
	b	Amount of IDC, FC, FERV & Hedging cost included in a above		-	93.01	-
D	a	Closing Capital Expenditure(CWIP)		222.05	-	-
	b	Amount of IDC, FC, FERV & Hedging cost included in a above		93.01	-	-

Includes adjustment on account of CWIP-Ind AS

Phase IV (Part 2 of 2 and supplementary) (Rs. Crores)

Particulars			Approved	Claimed	Current Year	Ensuing years (Projection)
			FY 2022-23	FY 2023-24	FY 2024-25	
A	a	Opening Capital Expenditure(CWIP)		608.93	204.58	-
	b	Amount of IDC, FC, FERV & Hedging cost included in a above		36.25	9.33	-
B	a	Addition/Adjustment in Capital Expenditure(CWIP) during the period		206.39	541.53	-
	b	Amount of IDC, FC, FERV & Hedging cost included in a above		27.38	57.01	-
C	a	Capitalization/Transfer to Gross Fixed asset during the period		610.74	746.11	-
	b	Amount of IDC, FC, FERV & Hedging cost included in a above		54.30	66.34	-
D	a	Closing Capital Expenditure(CWIP)		204.58	-	-
	b	Amount of IDC, FC, FERV & Hedging cost included in a above		9.33	-	-

Signature of Petitioner



(m) Capital Work-In-Progress (CWIP)

Form No: F5

S.N	Particulars	Previous year FY 2022-23			Current year (RE) FY 2023-24			Ensuing year (\$) (Projections) FY 2024-25		
		Loan	Grant	Equity	Loan	Grant	Equity	Loan	Grant	Equity
1	Opening CWIP	645.10		161.27	341.30		85.32	-	-	
2	New Investment	184.80		46.20	433.22		108.31	-	-	
3	Less Capitalization(a+b)	488.59		122.15	774.52		193.63	-	-	
	a) CWIP Capitalization	488.59		122.15	774.52		193.63	-	-	
	b) New Investment capitalization									
4	Closing CWIP (1+2-3)	341.30	-	85.32	-	-	-	-	-	

Signature of Petitioner



Normative Parameters Considered for Tariff Computations

Form No: F6

S No	Particulars		As per Order dated 25.03.2022	Claimed	Current Year	Ensuing years (Projection)
			FY 2022-23		FY 2023-24	FY 2024-25
1	Target Availability	%	98%	99.90%	98%	98%
	AC System	%	98%	99.90%	98%	98%
	HVDC bi-pole links	%	Not Applicable			
	HVDC back-to-back Stations	%				
2	Normative O&M per ckt.km, if any	Rs. Crores				
3	Normative O&M per bay, if any	Rs. Crores				
4	Normative A&G expenses per ckt.km, if any	Rs. Crores				
5	Normative A&G per bay, if any	Rs. Crores				
6	Normative R&M expenses	% of GFA	0.76%	NA	1.04%	1.04%
7	Maintenance Spares for Working Capital, if any	% of O&M	40% of R&M expenses for one month	40% of R&M expenses for one month	40% of R&M expenses for one month	40% of R&M expenses for one month
8	Receivables for Working Capital	in Months	2	2	2	2
9	Effective Rate of Return on Equity	%	20.71%	15.50%	18.78%	18.78%
10	Base Rate of Reserve Bank as on 1 Apr	%		6.50%	6.50%	6.50%
11	State Bank one-year 'MCLR' as per BERG Regulations 2021	%	7.00%	8.50%	8.50%	8.50%
12	Bank Rate as on ___ Oct 2020	%				

Signature of Petitioner



(a) Reconciliation of Gross Fixed Assets(GFA) admitted with Gross Fixed Assets(GFA) of Financial Account (Total) Form No. F7

	Particulars	As per Order dated 25.03.2022	Actual	Current Year	Ensuing years (Projection)
		FY 2022-23		FY 2023-24	FY 2024-25
A	Gross Fixed Assets (as at begining of the year):				
	1.GFA as per (Financial/Statutory Account)	2,356.34	2,356.34	2,950.18	3,918.34
	2.Expenditure allowed but not capitalized in Financial/Statutory Account	-	-	-	-
	3.Expenditure Capitalized in Financial/Statutory Account but not allowed.	-98.87	16.89	-	-
	4. Admitted GFA(1-2+3)	2,455.21	2,339.44	2,950.18	3,918.34
B	Addition/ adjustment to Gross Fixed Assets (During the year):				
	5.Expenditure capitalized in Financial/Statutory Account	301.90	542.92	968.15	-
	6.Expenditure allowed but not capitalized in Financial/Statutory Account	-	67.82	-	-
	7.Expenditure Capitalized in Financial/Statutory Account but not allowed.	-	-	-	-
C	Gross Fixed Assets (as at end of the year) Admitted by the commisson(4+5+6-7)	2,757.11	2,950.18	3,918.34	3,918.34

Signature of Petitioner



(b) Gross Fixed Assets (GFA) (Information to be supplied for the previous year (actuals), current year (RE) and the ensuring year (s) (projections) (Rs. in Cr.) Format: F7

S. N	Year	GFA at the beginning of the year						Addition to GFA during the year						Adjustment to GFA on account of assets sold/discarded etc 2018-19						GFA at the end of the year					
		Particulars (i.e Assets Group)	Consumption	By Grants	Loan	Equity	Total	Consumption	By Grants	Loan	Equity	Total	Consumption	By Grants	Loan	Equity	Total	Consumption	By Grants	Loan	Equity	Total			
1			3	4	5	6	8	9	10	11	12	13	14	15	16	17	18	19							
1	2022-23	Freehold Land			5.26	1.31											5.26	1.31			6.57				
2		Leasehold Land (perpetual)			27.76	6.92	34.62			13.52	3.38						41.22	10.31			51.53				
3		Building & civil work			147.17	86.79	183.96			67.79	16.95	84.74					214.96	53.74			268.70				
4		Transmissions			776.79	194.20	970.99			182.62	45.66	228.28					959.42	239.85			1,199.27				
5		Sub-stations			906.44	226.61	1,133.05			222.09	55.52	277.61					1,128.53	282.13			1,410.66				
6		Furniture			1.70	0.42	2.12			0.60	0.15	0.75					2.30	0.57			2.87				
7		Electrical installation			0.12	0.03	0.15										0.12	0.03			0.15				
8		Office equipment			0.83	0.21	1.04			1.49	0.37	1.86					2.32	0.58			2.90				
9		Electronic data processing machine			0.65	0.16	0.81										0.65	0.16			0.81				
10		Servers & network component			0.28	0.07	0.35										0.28	0.07			0.35				
11		Servicing equipment			4.61	1.15	5.76			0.48	0.12	0.60					5.09	1.27			6.36				
12		Total			1,871.54	467.89	2,339.43			488.59	122.15	610.74					2,360.14	590.03			2,950.17				
1	2023-24	Freehold Land			5.26	1.31											5.26	1.31			6.57				
2		Leasehold Land (perpetual)			41.22	10.31	51.53										41.22	10.31			51.53				
3		Building & civil work			214.96	53.74	268.70										214.96	53.74			268.70				
4		Transmissions			959.42	239.85	1,199.27			774.52	193.63	968.15					2,862.47	715.62			3,578.08				
5		Sub-stations			1,128.53	282.13	1,410.66																		
6		Furniture			2.30	0.57	2.87										2.30	0.57			2.87				
7		Electrical installation			0.12	0.03	0.15										0.12	0.03			0.15				
8		Office equipment			2.32	0.58	2.90										2.32	0.58			2.90				
9		Electronic data processing machine			0.65	0.16	0.81										0.65	0.16			0.81				
10		Servers & network component			0.28	0.07	0.35										0.28	0.07			0.35				
11		Servicing equipment			5.09	1.27	6.36										5.09	1.27			6.36				
12		Total			2,360.14	590.03	2,950.17			774.52	193.63	968.15					3,134.66	783.66			3,918.32				
1	2024-25	Freehold Land			5.26	1.31											5.26	1.31			6.57				
2		Leasehold Land (perpetual)			41.22	10.31	51.53										41.22	10.31			51.53				
3		Building & civil work			214.96	53.74	268.70										214.96	53.74			268.70				
4		Transmissions			959.42	239.85	1,199.27										2,862.47	715.62			3,578.08				
5		Sub-stations			1,128.53	282.13	1,410.66																		
6		Furniture			2.30	0.57	2.87										2.30	0.57			2.87				
7		Electrical installation			0.12	0.03	0.15										0.12	0.03			0.15				
8		Office equipment			2.32	0.58	2.90										2.32	0.58			2.90				
9		Electronic data processing machine			0.65	0.16	0.81										0.65	0.16			0.81				
10		Servers & network component			0.28	0.07	0.35										0.28	0.07			0.35				
11		Servicing equipment			5.09	1.27	6.36										5.09	1.27			6.36				
12		Total			3,134.66	783.66	3,918.32										3,134.66	783.66			3,918.32				

Signature of Petitioner

(c) Bifurcation of Fixed Assets into IDC and IEDC etc.						Format: F7
S.N	Particulars	As per Order dated 25.03.2022	Actual	Current Year	Ensuing years (Projection)	
		FY 2022-23		FY 2023-24	FY 2024-25	
1	Opening Gross Fixed Assets	2,455.21	2,339.44	2,950.18	3,918.34	
a	Additions in Gross Fixed Assets	301.90	610.74	968.15	-	
b	Amount of IDC, FC, FERV & Hedging cost included in B(a) above	56.15	54.30	159.35	-	
c	Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a)	31.01	44.20	60.89	-	
d	Add/(Less).Adjustment for assets sold/discarded etc	-	-	-	-	
2	Closing Gross Fixed Assets	2,757.11	2,950.18	3,918.34	3,918.34	

(d) Bifurcation of Fixed Assets into Depreciable and Non-Depreciable assets etc.						
S.N	Particulars	As per Order dated 25.03.2022	Actual	Current Year	Ensuing years (Projection)	
		FY 2022-23		FY 2023-24	FY 2024-25	
1	Gross fixed assets of the beginning of the year		2,339.44	2,950.18	3,918.34	
	Less: Value of non depreciable assets (i.e land)		40.75	57.65	57.65	
	Net Assets	2,438.44	2,298.69	2,892.53	3,860.68	
2	Additions during the year		610.74	968.15	-	
	Less: Value of non depreciable assets (i.e land)		16.91	-	-	
	Net Assets	301.90	593.84	968.15	-	
3(i)	IDC, FC, FERV & Hedging cost	56.15	54.30	159.35	-	
3(ii)	Amount of IEDC	31.01	44.20	60.89	-	
4	Adjustment for assets sold/discarded etc		-	-	-	
3	Closing GFA	2,740.34	2,892.53	3,860.68	3,860.68	
6	Average GFA (Excluding Value of non depreciable assets)	2,589.39	2,595.61	3,376.61	3,860.68	
7	Weighted Average Rate of Depreciation on Opening depreciable assets	5.18%	4.66%	4.66%	4.66%	
8	Weighted Average Rate of Depreciation net Depreciable assets during the year	2.06%	3.41%	3.41%	3.41%	
9	Gross Depreciation	132.53	127.29	167.71	179.77	
10	Opening grants*		-	-	-	
11	Grants* during the year		-	-	-	
12	Adjustment for assets sold/discarded etc		-	-	-	
13	Total Grants*		-	-	-	
14	Average Grants*		-	-	-	
15	Weighted Average rate of Depreciation		-	-	-	
16	Depreciation for GFA on Grants		-	-	-	
17	Net Depreciation of GFA(8-15)	132.53	127.29	167.71	179.77	

Signature of Petitioner



(e) Value of Depreciation Charges (Rs. Crores)

Form No 7

S.N.	Particulars (ie Assets Group)	Accumulated depreciation at the beginning of FY 2022-23				Depreciation charges during the FY 2022-23				Accumulated Depreciation on account of assets sold/discarded etc				Accumulated depreciation at the end of FY 2022-23					
		Consumer Contribution	By grants	Loan	Equity	Consumer Contribution	By grants	Loan	Equity	Consumer Contribution	By grants	Loan	Equity	Total	Consumer Contribution	By grants	Loan	Equity	Total
		3	4	5	6	8	9	10	11	12	13	14	15		16	17	18	19	
1	Land																		
1	a) Freehold land																		
	b) Leasehold Land (perpetual)																		
2	Buildings																		
	a) Building & civil work				15.81														22.70
3	Plant and Machinery																		
	a) Transmissions				179.41														237.02
	b) Sub-stations				180.09														241.87
4	Furniture and Fixtures																		
	a) Furniture				0.36														0.53
	b) Electrical installation				0.03														0.04
5	Office Equipment																		
	a) Office equipment				0.19														0.29
	b) Electronic data processing machine				0.73														0.99
	c) Servers & network component				0.19														0.26
	d) Servicing equipment				0.79														1.19
	Total				377.62														504.89

Signature of Petitioner

(f) Statement of Assets Not in Use **Form No: F7**

Rs. Crores

Financial Year*

Sl. No.	Date of Acquisition/Installation	Historical Cost/Cost of Acquisition	Date of withdrawal operations	Accumulated Depreciation on date of withdrawal	Written down value on date of withdrawal
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The petitioner submits that there is no instance of any asset not in use

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*Note.- Information to be provided for Previous Year, Current Year & Ensuing Control Period

Signature of Petitioner



User contributions and grants towards cost of capital assets

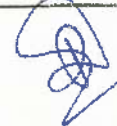
**Form No. F8
(Rs. Crores)**

	Particulars	Previous Year		Current Year		Ensuing Year/years	
		Balance at the start of the year	Additions	Balance at the end of the Year	Additions	Balance at the end of the Year	Additions
1	User contributions Towards Cost Of Capital Assets						
2	Grant Towards Cost Of Capital Assets						
A	Total (1+2)						
forming part of Depreciable GFA							
3	User contributions Towards Cost Of Capital Assets						
4	Grant Towards Cost Of Capital Assets						
B	Total (3+4)						
forming part of non-Depreciable GFA							
5	User contributions Towards Cost Of Capital Assets						
6	Grant Towards Cost Of Capital Assets						
C	Total (5+6)						
Amounts un-utilized (A-B-C)							
7	User contributions Towards Cost Of Capital Assets						
8	Grant Towards Cost Of Capital Assets						
C	Total (7+8)						
D	Amount utilized for CWIP out of "C" above						
E	Amount kept in Bank out of "C" above						
F	Depreciation on assets created out of grants (Admitted)						
G	Depreciation on assets created out of grants (Financial/Statutory Account)						

The petitioner submits that the entire funding is being done through debt and equity, there is no user contribution or grant

* Pertaining to Transmission Business Only, SLDC shall file separately

Signature of Petitioner



Form No: F9

(a) Details of Loans for the year - Phase IV(Part 1 of 2)

S.N	Year	Particulars	Purpose of loan	Opening balance	Weighted Average Rate of Interest in %	Addition during the year	Repayment during the year(As per books of accounts)	Closing balance	Amount of penal interest paid*
		1	2	3	4	5	6	7	8
1	2022-23	Term Loan REC - Phase IV(Part 1 of 2)	Towards Construction	1142.82	10.27%	0.00	99.85	1,042.97	-
2	2023-24	Term Loan REC - Phase IV(Part 1 of 2)	Towards Construction	1042.97					
3	2024-25	Term Loan REC - Phase IV(Part 1 of 2)	Towards Construction						

Form No: F9

(a) Details of Loans for the year - Phase IV(Part 2 of 2)

S.N	Year	Particulars	Purpose of loan	Opening balance	Rate of Interest	Addition during the year	Repayment during the year(As per books of accounts)	Closing balance	Amount of penal interest paid*
		1	2	3	4	5	6	7	8
1	2022-23	Term Loan PFC - Phase IV(Part 2 of 2)	Towards Construction	950.01	9.21%	50.00	-	1,091.96	-
2	2023-24	Term Loan PFC - Phase IV(Part 2 of 2)	Towards Construction	1091.96					
3	2024-25	Term Loan PFC - Phase IV(Part 2 of 2)	Towards Construction						

Note: Rs. 91.95 Crore has been capitalized during the year

(b) Further Details in case of Foreign Loans

S.N	Particulars			Date	Amount (Foreign Currency)	Exchange Rate	Amount (in Rs. Crore)
	Name of Currency						
	Loan drawal						
	Scheduled Principal Repayment						
	Actual Principal Repayment						
	Scheduled Interest payment						
	Actual Interest payment						
	Period of holding						
	Cost of holding						

Not Applicable

(c) Information regarding Restructuring of Outstanding Loan during the year

S.N	Source of Loan	Amount of Original Loan	Old Rate of Interest	Amount already Restructured	Revised Rate of Interest	Amount now being Restructured	New Rate of Interest
1	2	3	4	5	6	7	8

Not Available

Signature of Petitioner



(d) Domestic loans, bonds and financial leasing

Form No: F9

FY 2022-23

Rs. Crores

Sl. No.	Particulars	Opening Balance at the beginning of the				Amount received during the	Principal		Interest			Closing Balance	
		Principal not overdue	Principal overdue	Interest overdue	Total		Due	Paid	Due	Paid	%	Principal	Interest Accrued but not due
A	LONG-TERM												
2	REC	1,142.82	-	-	1,142.82	-	99.85	112.41	112.41			1,042.97	
3	PFC	950.01	-	-	950.01	50.00	-	6.03	6.03			1,091.96	
	Sub Total (A)	2,092.83	-	-	2,092.83	50.00	99.85	118.44	118.44			2,134.93	
B	SHORT-TERM												
	Sub Total (B)	-	-	-	-	-	-	-	-			-	-
	Total (A+B)	2,092.83	-	-	2,092.83	50.00	99.85	118.44	118.44			2,134.93	

*Note:- Loanwise information to be provided for Previous Year, Current Year & Control period. Also indicate rate of interest and other conditions.

FY 2023-24

Rs. Crores

Sl. No.	Particulars	Opening Balance at the beginning of the				Amount received during the	Principal		Interest			Closing Balance	
		Principal not overdue	Principal overdue	Interest overdue	Total		Due	Paid	Due	Paid	%	Principal	Interest Accrued but not due
A	LONG-TERM												
2	REC	1,042.97											
3	PFC	1,091.96											
	Sub Total (A)	2,134.93											
B	SHORT-TERM	-											
	Sub Total (B)	-											
	Total (A+B)	2,134.93											

N/A

FY 2024-25

Rs. Crores

Sl. No.	Particulars	Opening Balance at the beginning of the				Amount received during the	Principal		Interest			Closing Balance	
		Principal not overdue	Principal overdue	Interest overdue	Total		Due	Paid	Due	Paid	%	Principal	Interest Accrued but not due
A	LONG-TERM												
2	REC												
3	PFC												
	Sub Total (A)												
B	SHORT-TERM												
	Sub Total (B)												
	Total (A+B)												

N/A

Signature of Petitioner

(e) Statement of Reconciliation of Net Actual Loan (opening) with Net Normative Loan (Opening) (Rs. In Crore) Form No: F9				
Particulars	Previous year	Current Year	Ensuing years (Projection)	
				FY 2022-23
Net Actual Loan as per Books of Accounts as on : 31.03.2023				
Domestic	2134.93	N/A	N/A	
Foreign	Nil	Nil	Nil	
Add : Repayment	99.85	N/A	N/A	
Gross Actual Loan	2234.78	N/A	N/A	
Add: Equity considered as normative loan	N/A	N/A	N/A	
Gross Normative Loan	2360.15	3134.67	3134.67	
Less : Depreciation Recovered as per claim of the Petitioner in ARR till Dare	864.50	1277.72	670.91	
Net Normative Loan	1495.65	1856.95	2463.76	

Signature of Petitioner



**Details of Equity
Form No: F10**

		Rs. Crores		
		FY 2022-23	FY 2023-24	FY 2024-25
S.No.	Particulars	Actual Amount	Amount	Amount
1	Infusion	122.15	193.63	-
Total		122.15	193.63	-

		Rs. Crores		
		Claimed	Current Year	Ensuing years (Projection)
S.No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Amount of total asset created during the year	610.7	968.2	-
2	Less asset created from grant	-	-	-
3	Less asset created from users contribution	-	-	-
4	Net asset Created	610.7	968.2	-
5	Amount of equity addition	122.15	193.63	-
6	Equity (Opening Balance)	467.05	589.20	782.83
7	Equity (Closing Balance)	589.20	782.83	782.83
8	Average Equity	528.12	686.01	782.83
9	Base rate of Return on Equity%	15.5%	15.5%	15.5%
	Tax Rate (Enclose detailed calculation alongwith supporting documents)%	0.00%	17.47%	17.47%
	Effective Rate of Return on Equity	15.50%	18.78%	18.78%
10	Return on Equity (Rs. In crore)	81.86	128.84	147.03
11	Equity entitled to incentive	-	-	-
12	Incentive	-	-	-
13	Additional Return	-	-	-
14	Total Return on Equity	81.86	128.84	147.03

(d) Details of Total Equity Infused

S.No.	Particulars	Actual	Current Year	Ensuing years (Projection)
		As at 31.03.2023	FY 2023-24	FY 2024-25
	Shareholders' Funds			
1	Equity Share Capital	668.25	861.89	861.89
2	Other Equity	290.93	290.93	290.93
2	Share Premium utilized for Capital Expenditure			
3	Free Reserves utilized for Capital Expenditure			
	Total Equity	959.18	1152.81	1152.81

Signature of Petitioner



Interest and Finance Charges(Rs. Crores)						Form No: F11
S.N.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25		
1		3	5	6		
2	Net Opening Loan	1,495.65	1,856.95	2,463.76		
3	Additions	488.59	774.52	-		
4	Repayment	127.29	167.71	179.77		
5	Net Closing Loan	1,856.95	2,463.76	2,283.99		
6	Average Loan	1,676.30	2,160.35	2,373.88		
7	Weighted average rate of Interest	9.73%	9.73%	9.73%		
8	Interest on Loan	163.08	210.17	230.94		
9	Other Finance charges	-	-	-		
10	Total Interest and finance charges	163.08	210.17	230.94		

* Year-wise details should be submitted with documentary evidence. Further Rate of interest of various loans to be indicated in a separate sheet. Further Details in case of Foreign Loans

Interest (IDC) Capitalized						
S.N.	Name of scheme /Project	Source of loan	Interest capitalized			
			As on beginning of previous year FY 2022-23	Previous year FY 2022-23	During Current year FY 2023-24	During Ensuing year FY 2024-25
1	Phase IV(Part 1 of 2)	REC	3	4	5	6
2	Phase IV(Part 2 of 2)	PFC	171.67	54.30	66.34	-
3	Phase IV (Supplementary)	PFC	-	-	-	-
4	ABT Metering	REC/ PFC	-	-	-	-

Signature of Petitioner

Lease details (Rs. Crores)		Form No: F12						
S.N	Name of Lesser	Assets		Leased on	Lease Rentals	Primary Period		Secondary period ending by
		Descriptions	Gross Amount			ended / ending by	7	
1	2	3	4	5	6	7	8	

The petitioner submits that there are no leased assets

Note: Statement showing Cost benefits analysis of lease must be accompanied.

Signature of Petitioner



Operations & Maintenance Cost**Form No: F13**

Rs. Crores

Sl.No	Particulars	As per Order dated 25.03.2022	Claimed	Current Year	Ensuing years (Projection)
		FY 2022-23		FY 2023-24	FY 2024-25
1	Repair & Maintenance Expenses	0.00	25.56	30.22	40.34
2	Employee Expenses	4.78	19.98	21.06	22.20
2	Administrative and General Expenses	0.00	8.84	9.36	9.91
	Less :				
4	Expenses Capitalized	0.00	0.00	0.00	0.00
	Net O&M Expenses	4.78	54.38	60.64	72.44

Signature of Petitioner

Employee Expenses

Form No:F14

Rs. Crores

S.N	Particulars	As per Order dated 25.03.2022	Claimed	Current Year	Ensuing years (Projection)
		FY 2022-23		FY 2023-24	FY 2024-25
1	Salaries & Allowances				
(i)	Existing Employees				
(ii)	New Employees				
	Total	4.78	19.98	21.06	22.20
2	Contribution to Terminal Benefits (Accrual Basis)		0	0	0
3	Total of Salary & Allowances and Terminal Benefits				
4	Amount Capitalised				
5	Net Amount (To PL)	4.78	19.98	21.06	22.20
6	Grand Total	4.78	19.98	21.06	22.20

Note:

- (i) Terminal benefits paid for the period before the date of reorganisation i.e. 01.11.2012, shall not be considered.
(ii) In respect of continuing employees as on the date of reorganisation and newly appointed employees after re-organisation date the terminal benefits shall be allowed.
(iii) In respect of item 6, a brief description to be appended.
** As per methodology adopted by the Hon'ble Commission vide Order dated 20.03.2020

(b) Consumer Price Inflation

S.No	Particulars	PY 3	PY 2	PY 1	Current Year	Ensuing
		FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
1	Annual Average CPI Index	299.92	322.50	338.69	356.06	377.62
2	CPI Inflation		7.53%	5.02%	5.13%	6.05%
3	Average				5.9%	5.4%
4	Annual Average WPI Index	119.79	121.80	123.38	139.41	152.53
5	WPI Inflation		1.7%	1.3%	13.0%	9.41%
6	Average				5.32%	7.90%

Note

CPI and WPI Inflation computed for current year shall be considered for control period at the time of filing of ARR. CPI inflation shall be determined at the

(c) Employee Strength				
S.N	Particulars	Prev. Year	Current Year	Ensuing years (Projection)
		FY 2022-23	FY 2023-24	FY 2024-25
1	2	3	4	5
1	Number of employees at the beginning of the FY	95	81	81
a)	Technical	84	72	75
b)	Non Technical (Administration)	7	5	3
c)	Non Technical (Revenue, Finance and Accounts)	4	4	3
2	No. of employees added during the FY	7	15	5
a)	Technical	4	15	4
b)	Non Technical (Administration)	1	-	1
c)	Non Technical (Revenue, Finance and Accounts)	2	-	-
3	Number of employees retiring/ leaving during the FY	21	28	18
a)	Technical	16	25	17
b)	Non Technical (Administration)	3	2	1
c)	Non Technical (Revenue, Finance and Accounts)	2	1	-
4	Number of employees at the end of FY (1+2-3)	81	68	68
a)	Technical	72	62	62
b)	Non Technical (Administration)	5	3	3
c)	Non Technical (Revenue, Finance and Accounts)	4	3	3

(d) Employees Productivity Parameters				
S.N	Particulars	Prev. Year	Current Year	Ensuing years (Projection)
		FY 2022-23	FY 2023-24	FY 2024-25
1	2	5	6	7
1	Number of employees	88	75	75
2	Number of Sub-stations	30	33	33
3	Total capacity of Sub-stations (MVA)	5,840	7,070	7,070
4	Transmission line length in ckt/km	2,111		
5	Energy Received at STU-CTU interface (MUs)	6,245	7,494	8,993
6	Employees per MU of energy handled (1/5)	0.0141	0.0099	0.0083
7	Employees cost (Rs Cr)	19.98	21.06	22.20
8	Employees cost in Rs / kWh (7/5)	0.0320	0.0281	0.0247

Signature of Petitioner

R&M Expenses**Form**

Rs. Crores

S.N o.	Particulars	Claimed	Current Year	Ensuing years (Projection)
		FY 2022-23	FY 2023-24	FY 2024-25
1	Average Gross Fixed Assets			
1(a)	Less Land Cost			
1(b)	Net Fixed Assets	2,561.25	2,892.5	3,860.7
2	Percentage point as per the norm (%)	1.00%	1.045%	1.045%
3	Repair & Maintenance Expenses	25.56	30.22	40.34

*Normative/Approved in MYT/RE: If norms are specified by the Commission for concern year, Normative figures shall be given. In case norms are not specified latest approved figures in MYT or Revised Estimate(RE) as the case may be shall be given.

Further details of component wise R&M Expenses

S.N.	Particulars	Claimed	Current Year	Ensuing years (Projection)
		FY 2022-23	FY 2023-24	FY 2024-25
1	Plant & Machinery	28.06		
2	Others	0.06		
3	Total expenses	28.13	30.22	40.34
4	Less capitalized	2.57	-	-
5	Net Expenses	25.56	30.22	40.34
6	Total expenses charged to revenue	25.56	30.22	40.34

* Year-wise details of these charges may be provided with documentary evidence

Signature of Petitioner

Administration and General Expenses

Form No: F16

Rs. Crores

Particulars	Claimed	Current Year	Ensuing years (Projection)
	FY 2022-23	FY 2023-24	FY 2024-25
Advertisement Expenses	0.22	0.23	0.25
Audit Fees	0.02	0.02	0.02
Bank Charges	0.00	0.00	0.00
Books & Periodicals Expenses	0.00	0.00	0.00
Communication Expenses	0.01	0.01	0.01
CSR Exp.-Sports,Art & Culture	1.47	1.56	1.65
CSR Capital Expenditure	0.47	0.50	0.53
Electricity Expenses	2.83	2.99	3.17
Entertainment Expenses	0.08	0.09	0.09
Filing Fee	0.02	0.02	0.02
Insurance	1.08	1.15	1.21
Legal Expenses	0.12	0.12	0.13
Licence Fee	0.10	0.11	0.11
Loss on Sale of Fixed Assets	-	-	-
Meeting Expenses	0.10	0.11	0.11
Office Expenses	1.28	1.36	1.44
Printing & Stationery Expenses	0.10	0.11	0.11
Prof./technical Fee	0.48	0.50	0.53
Recruitment Expenses	-	-	-
Rent	0.77	0.81	0.86
Taxes, Brokerage & Commission	-	-	-
Telephone & Mobile Expenses	0.18	0.19	0.20
Travelling Expenses	0.66	0.70	0.74
Vehicle Expenses	2.04	2.16	2.28
Total expenses	10.08	10.67	11.30
Less Adjustments	-	-	-
Less Capitalised	1.24	-	-
Net expenses	8.84	10.67	11.30
Total expenses charged to revenue	8.84	9.36	9.91

* Year-wise details of these charges may be provided with documentary evidence.

Base A&G Expenses		8.84	9.36
Inflation Index (WPI and CPI weighted average (last 3 yrs))		5.89%	5.89%
Add: Inflationary Increase		0.52	0.55
Add: Provisions (if any)		-	-
A&G Expenses	8.84	9.36	9.91

Signature of Petitioner

Short Term Open Access Consumers			Form
Rs. Crores			
Particulars	Claimed	Current Year	Ensuing years
	FY 2022-23	FY 2023-24	FY 2024-25
Number of Short Term Open Access Customers	The section is not applicable		
Amount			
Retained by Licensee			
Payable to Beneficiaries			

Signature of Petitioner



Details of Non-tariff Income		Form No: F18		
Rs. Crores				
S.N	Particulars	Claimed	Current Year	Ensuing years (Projection)
		FY 2022-23	FY 2023-24	FY 2024-25
1	Surcharge on transmission charges	67.31	67.31	67.31
2	Interest from Bank	7.27	7.27	7.27
3	Interest from Others	0.07	0.07	0.07
4	Interest on Income Tax Refund & Insurance Claim	3.03	3.03	3.03
5	Sale of Scrap	-	-	-
6	Sale of Tender paper	-	-	-
7	Liquidated Damages Recovered	0.0018	0.00	0.00
8	Total Non Tariff Income	77.68	77.68	77.68
9	Principal amount on which DPS is charged	448.71	448.71	448.71
10	Rate of Interest for funding Principal of DPS	9.68%	9.68%	9.68%
11	Less: Interest on funding of Principal DPS	43.43	43.43	43.43
12	Net Non Tariff Income	34.24	34.24	34.24

Signature of Petitioner



Working Capital Interest			Form No:
			Rs. Crores
Particulars	Claimed FY 2022-23	Current Year FY 2023-24	Ensuing years (Projection) FY 2024-25
1 Receivables equivalent to two (2) month of transmission charges calculated on target availability level	66.70	90.10	100.72
2 O&M Expenses of one month	4.53	5.05	6.04
3 Maintenance spares @40% of R&M expenses of one month	0.85	1.01	1.34
Less:			
(i) ROE and contribution to contingency reserve equivalent to two months.	13.64	21.47	24.50
(ii) Security deposit if any, held during the year			
(iii) two months equivalent of grant received from the State Govt.			
Total Working Capital	58.44	74.69	83.60
Interest Rate	9.68%	10.05%	10.05%
Interest on Working Capital	5.66	7.51	8.40

Signature of Petitioner

Investments in Non business related activities
Form No: F20

Rs. Crores

SLN o.	Description of investment	Balance at the beginning of the year	Further Investments during the year	Investments realised during the year	Balance at the end of the year	Remarks

Details of Income from Other Business (Rs. In Crore)

No	Particulars		Previous year	Current year	Ensuing Years
I	Receipts from other Business	I	The petitioner submits that it is not engaged in any other non business activities		
	Less: Expenses from other business	E			
	Revenue of other Business	R=I-E			
II	Assets of Licensed business utilized in other business	A			
	Total assets of other business (including the assets utilized of the Licensed Business)	C			
	Allocation of Revenue to Licensed Business decided by the Commission	X			
III	Due to Licensed Business (to be deducted from ARR)*	$X*(R*A/C)$			

Note:- Information to be provided for Previous Year, Current Year & each year of Control period

*In case Gross Receipts exceed expenditure of other business in (I) above (where Gross receipt is less than expenditure of other business in (I) above no amount shall be deducted from ARR of Licensee).

Signature of Petitioner


Details of Expenses Capitalised**Form No: F21**

Rs. Crores

Sl No.	Particulars	Claimed	Current Year	Ensuing years (Projection)
		FY 2022-	FY 2023-24	FY 2024-25
1	Interest & Finance charges Capitalised	54.30	159.35	-
2	Other expenses capitalised:			
	a. Employee expenses	3.92	-	-
	b. R&M Expenses	2.57	-	-
	c. A&G Expenses	1.24	-	-
	d. Depreciation	-	-	-
	e. Others, if any	-	-	-
	f. IEDC	44.20	60.89	-
	Total of 2	51.93	60.89	-
	Grand Total	106.23	220.24	-

Signature of Petitioner

Net Prior Period Expenses / Income	Form No: F22
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Rs. Crores

Sl.No.	Particulars	Previous Year	Current year (RE)
A	Income relating to previous years:		
1	Interest income for prior periods	The petitioner submits that there have been no prior period expenses/income	
2	Income Tax prior period		
3	Excess Provision for Depreciation		
4	Excess Provision for Interest and Fin. Charges		
5	Other Excess Provision		
6	Others (please specify)		
	Sub-Total A		
B	Expenditure relating to previous years		
1	Employee Cost		
2	Depreciation		
3	Interest and Finance Charges		
4	Admn. Expenses		
5	Withdrawal of Revenue Demand		
6	Material Related		
7	Others (please specify)		
	Sub-Total B		
	Net prior period Credit/(Charges) : A-B		

Extraordinary Items(Rs. Crores)

Sl.No.	Particulars	Previous Year	Current year (RE)
1	Extraordinary Credits	The petitioner submits that there have been no extraordinary debits and credits	
a	---		
	TOTAL CREDITS		
2	Extraordinary Debits		
a	---		
	TOTAL DEBITS		

Signature of Petitioner



Contribution to Contingency Reserve**Form No: F23**

(Rs. Crores)

S.N	Particulars	Claimed	Current Year	Ensuing years (Projection)
		FY 2022-23	FY 2023-24	FY 2024-25
1	Fixed Assets	2,644.81	3,434.26	3,918.34
2	%age appropriation to the contingency reserve	0.10%	0.10%	0.10%
3	Appropriation to the contingency amount	0	0	0
4	Amount invested in securities	Nil	Nil	Nil
5	Drawal from the contingency reserve (Please specify) (i) (ii) (iii) Total drawal	Nil	Nil	Nil

Information Regarding Grant/Subsidy from State Govt/Central Govt.

S.N	Particulars	Claimed	Current Year	Ensuing years (Projection)
		FY 2022-23	FY 2023-24	FY 2024-25
A	Amount from State Govt. i) Purpose for which grant received (a) (b) ii) Targeted categories for subsidy (a) (b)	Not Applicable		
B	Amount from Central Govt. i) Purpose for which grant received (a) (b)			

Signature of Petitioner

Allocation statement of Expenses of SLDC

Form No: F24

Rs. Crores

Particulars	Previous year			Current Year			Ensuing Years		
	Total Expenses of STU	Allocated %	SLDC Share	Total Expenses of STU	Allocated %	SLDC Share	Total Expenses of STU	Allocated %	SLDC Share
Expenditure	The petitioner submits that this section is not applicable								
a O&M Expenses									
i R&M Expense									
ii Employee Expenses									
iii A&G Expense									
Total O&M expenses (i+ii+iii)									
b Depreciation									
c Interest on Loan									
f Return on Equity									
g Others, please specify									
Total Expenditure									

Signature of Petitioner



Transmission Losses (For Transmission Licensee)		All figures in MUs		
S.No.	Details	Previous year FY 2022-23	Current year FY 2023-24	Ensuing Years FY 2024-25
A	Losses in 400 KV system			
1	Total Energy delivered by Generating Stations and Inter State/ Intra State tie- links at the interface points of the Intra State Transmission system	5,573.19	6,687.82	8,025.39
2	Energy Delivered to next (Lower) Voltage level of the Transmission System	5,538.19	6,645.83	7,974.99
3	Sum of all the energy delivered at this voltage level to the State Distribution System	-	-	-
4	Transmission loss in system (A1-A2-A3)	35.00	41.99	50.39
5	Transmission loss in (Transco) system (%) {A4/A1} x 100		0.63%	0.63%
B	Losses in 220 KV system	Previous year FY 2022-23	Current year FY 2023-24	Ensuing Years FY 2024-25
1	Total Energy delivered by Generating Stations and Inter State/ Intra State tie- links at the interface points of the Intra State Transmission system	6,245.41	7,494.49	8,993.39
2	Energy Delivered to next (Lower) Voltage level	5,092.74	6,111.29	7,333.55
3	Sum of all the energy delivered at this voltage level to the State Distribution System	1,081.95	1,298.34	1,558.01
4	Transmission loss in system (B1-B2-B3)	70.71	84.85	101.82
5	Transmission loss in (Transco) system (%) {B4/B1} x 100	1.13%	1.13%	1.13%
C	Loss Calculation at 132 KV	Previous year FY 2022-23	Current year FY 2023-24	Ensuing Years FY 2024-25
1	Total Energy delivered by Generating Stations and Inter State/intra State tie- links at the interface points of the Intra State Transmission system			
2	Energy Delivered to next (Lower) Voltage level			
3	Sum of all the energy delivered at this voltage level to the State Distribution System			
4	Transmission loss in system (C1-C2-C3)			
5	Transmission loss in (Transco) system (%) {C4/C1} x 100			
D	Total Losses in the Transmission system	Previous year FY 2022-23	Current year FY 2023-24	Ensuing Years FY 2024-25
1	Total Energy delivered by Generating Stations and Inter State tie- links at the interface points of the Intra State Transmission system	11,818.59	14,182.31	17,018.77
2	Sum of all the energy delivered by the Transmission system in to the State Distribution System	11,712.89	14,055.46	16,866.56
3	Transmission loss in system (D1-D2)	105.71	126.85	152.22
4	Transmission loss in (Transco) system (%) {(D3/D1) x 100}	0.89%	0.89%	0.89%

The Petitioner submits that currently it is
handelling power at only 220 kV Level.

Signature of Petitioner



Energy Delivered by Transmission licensee to the distribution Distribution Licensee

Month	Distribution Licensee / Bulk Consumer			Total Energy delivered*
	NBPDCL	SBPDCL	BSPTCL	
	MU	MU	MU	MU
1	3	4	9	10
Apr-22	22.7418	60.1047	551.1706	634.02
May-22	24.9804	56.6702	577.9502	659.60
Jun-22	25.7709	62.7427	543.0311	631.54
Jul-22	26.3220	75.8770	582.6073	684.81
Aug-22	25.0158	84.0457	690.7614	799.82
Sep-22	24.1620	70.3719	614.0603	708.59
Oct-22	21.4817	68.6168	563.3709	653.47
Nov-22	15.4440	55.2807	491.0383	561.76
Dec-22	14.3822	57.2723	515.7467	587.40
Jan-23	18.5139	63.8020	583.5854	665.90
Feb-23	14.0964	60.4251	525.4862	600.01
Mar-23	17.6817	65.4674	571.6826	654.83
Total (FY 2022-23)	250.59	780.68	6,810.49	7,841.76
Apr-23	22.1232	77.6405	606.7626	706.53
May-23	25.7747	88.5908	649.1473	763.51
Jun-23	27.8773	90.7807	694.5795	813.24
Jul-23	29.4505	103.5669	698.0263	831.04
Aug-23	28.9490	112.9610	708.4600	850.37
Sep-23	26.6750	105.3510	758.3920	890.42
Oct-23	22.7990	89.0760	631.9210	743.80
Nov-23				
Dec-23				
Jan-24			N/A	
Feb-24				
Mar-24				
Total (Current year FY 23-24 till October)	183.65	667.97	4,747.29	5,598.90
Apr-24				
May-24				
Jun-24				
Jul-24				
Aug-24				
Sep-24				
Oct-24				
Nov-24				
Dec-24				
Jan-25				
Feb-25				
Mar-25				
Total (FY 2023-24)				

Details to be provided for previous years, current year and for each year of control period

*As BGCL has an integrated transmission system, the data is being supplied month wise

Signature of Petitioner



Details of Electrical Accidents

Type of Accident	Previous Year FY 2022-23			Current year (2023-24)		
	No. of Accidents			No. of Accidents		
	Fatal	Non Fatal	Total	Fatal	Non Fatal	Total
Human	0	0	0	0	0	0
Other, if any, (please specify)	0	0	0	0	0	0
Total	0	0	0	0	0	0

Signature of Petitioner



Abstract of Outages due to feeder tripping													
S. No	Detail	Previous Year (FY 2022-23)				Current Year (FY 2023-24)				Ensuing Year (FY 2024-25)			
		Month	No. of feeders under outage	No. of trippings	Total Duration of Trippings (hrs.)	Average duration of interruption per feeder	Month	No. of feeders	No. of trippings	Total Duration of Trippings (hrs.)	Average duration of interruption per feeder	No. of feeders	No. of trippings
1	voltage Level (400 KV)												
		Apr-22	0	0	0	0	Apr-23	0	0	0	0		
		May-22	0	0	0	0	May-23	0	0	0	0		
		Jun-22	0	0	0.00	0.00	Jun-23	0	0	0	0		
		Jul-22	2	2	2.87	1.43	Jul-23	0	0	0	0		
		Aug-22	0	0	0.00	0.00	Aug-23	0	0	0	0		
		Sep-22	0	0	0.00	0.00	Sep-23	0	0	0	0		
		Oct-22	0	0	0.00	0.00	Oct-23	0	0	0	0		
		Nov-22	0	0	0.00	0.00	Nov-23						
		Dec-22	0	0	0.00	0.00	Dec-23						
		Jan-23	0	0	0.00	0.00	Jan-24						
		Feb-23	0	0	0.00	0.00	Feb-24						
		Mar-23	0	0	0.00	0.00	Mar-24						
		Total	2	2	2.87	1.43		0	0	0.00	0.00		
2	voltage Level (220 KV)												
		Apr-22	0	0	0.00	0.00	Apr-23	1	1	0.97	0.97		
		May-22	0	0	0.00	0.00	May-23	1	1	1.17	1.17		
		Jun-22	0	0	0.00	0.00	Jun-23	0	0	0	0.00		
		Jul-22	1	1	1.18	1.18	Jul-23	3	3	323.15	107.72		
		Aug-22	0	0	0.00	0.00	Aug-23	1	1	11.43	11.43		
		Sep-22	1	1	0.52	0.52	Sep-23	0	0	0	0		
		Oct-22	0	0	0.00	0.00	Oct-23	0	0	0	0		
		Nov-22	1	1	18.65	18.65	Nov-23						
		Dec-22	0	0	0.00	0.00	Dec-23						
		Jan-23	0	0	0.00	0.00	Jan-24						
		Feb-23	0	0	0.00	0.00	Feb-24						
		Mar-23	0	0	0.00	0.00	Mar-24						
		Total	3	3	20.35	20.35	Total	6	6	336.72	121.28		
3	voltage Level (132 KV)												
		Apr-22	3	11	3.87	1.29	Apr-23	3	3	12.25	4.08		
		May-22	4	4	9.37	2.34	May-23	3	3	20.45	6.82		
		Jun-22	7	7	17.43	2.49	Jun-23	5	6	3.17	0.65		
		Jul-22	3	5	1.95	0.65	Jul-23	3	3	8.10	2.70		
		Aug-22	7	8	12.58	1.80	Aug-23	7	13	8.57	1.22		
		Sep-22	13	14	9.75	0.75	Sep-23	3	4	4.65	1.55		
		Oct-22	7	15	17.43	2.49	Oct-23	3	8	7.00	2.33		
		Nov-22	2	2	0.90	0.45	Nov-23						
		Dec-22	1	1	0.30	0.30	Dec-23						
		Jan-23	0	0	0.00	0.00	Jan-24						
		Feb-23	2	2	1.33	0.67	Feb-24						
		Mar-23	3	5	34.27	11.42	Mar-24						
		Total	52	74	109.18	24.6	Total	27	40	57.18	19.34		

N/A

Signature of Petitioner

Major System Disturbances							
S.No.	Disturbances	Previous Years		Current Years		Ensuing Years	
		Number	Total Duration (Hrs.)	Number	Total Duration (Hrs.)	Number	Total Duration (Hrs.)
A	Disturbances when DISCOM supply has been effected for more than 1hr.						
i	Due to 400 kV transformer failures						
ii	Due to 400 kV transmission line outage						
iii	Due to 400 kV sub-station equipment (CT, CVT etc.) failure						
iv	Due to 220 kV transformer failure						
v	Due to 220 kV transmission line failure						
vi	Due to 220 kV sub-station equipment (CT, CVT etc.) failure						
vii	Due to 132 kV transformer failure						
viii	Due to 132 kV transmission line failure						
ix	Due to 132 kV sub-station equipment (CT, CVT etc.) failure						
B	Estimated unserved energy due to such interruptions						
C	Other Transmission disturbances when DISCOM supply has got effected						
i							
ii							
iii							
iv							

The petitioner submits that there have been no major system disturbances due to equipment failure

The petitioner submits that there have been no major system disturbances till date

Signature of Petitioner

Frequency Variation

Sl.no.	Frequency	Previous Years		Current Years		Ensuing Years	
		No. of Hours	As percentage of total hours in the year (%)	No. of Hours	As percentage of total hours in the year (%)	No. of Hours	As percentage of total hours in the year (%)
1	Above 50.5 Hz	None	0	None	0	N/A	
2	50.5 - 5.2 Hz	84	2.29	84	2.29		
3	50.2 - 49.8 Hz	3577	97.41	3577	97.41		
4	49.8 - 49.5 Hz	11	0.30	11	0.30		
5	49.5 - 49.0 Hz	None	0	None	0		
6	49.0 - 48.5 Hz	None	0	None	0		
7	Below 48.5 Hz	None	0	None	0		

Signature of Petitioner



Voltage Fluctuation

Name of Sub-Station	Transformation Capacity	Reactive Compensation provided	Previous Year						Current Year						Ensuing Years											
			Time during which voltage in an year			Time during which voltage in an year			Time during which voltage in an year			Time during which voltage in an year			Time during which voltage in an year			Time during which voltage in an year								
			More than upper limit in %age	Between upper & lower limit	Less than lower limit in %age	Hours	%age	Hours	More than upper limit in %age	Between upper & lower limit	Less than lower limit in %age	Hours	%age	Hours	More than upper limit in %age	Between upper & lower limit	Less than lower limit in %age	Hours	%age	Hours	More than upper limit in %age	Between upper & lower limit	Less than lower limit in %age	Hours	%age	Hours
400 kV level																										
i																										
ii																										
iii																										
iv																										
220 kV Level																										
i	a) 160 MVA Amnour (13737)	0	0	7347	83.87	1098	12.53	0	2753	74.97	885	24.10														
ii	b) 160 MVA Amnour (13738)	0	0	7512	85.75	1106	12.63	0	2743	74.70	865	23.56														
iii																										
iv																										
132 kV level																										
i	a) 50 MVA Amnour (6042)	0	34	0.39	8449	96.45	216	2.466	12	0.33	3632	98.91	39	1.062												
ii	b) 50 MVA Amnour (6046)	0	35	0.40	8488	96.89	216	2.466	12	0.33	3594	97.88	38	1.035												
iii																										
iv																										

Note: Upper Limit is 420 kVrms and lower limit is 360 kVrms in case of 400 kv level
 Upper Limit is 245 kVrms and lower limit is 200 kVrms in case of 220 kV level
 Upper Limit is 145 kVrms and lower limit is 120 kVrms in case of 132 kV level

Signature of Petitioner

Licensee wise Load shedding carried out during the year

S. No.	Particulars	NBPDCL	SBPDCL
	Load shedding during the Year (In Hrs.)		
1	On SLDC's instructions	The petitioner submits that there has been no load shedding BGCL. However Load shedding is being done by BSPTCL, SLDC.	
a	To control excess drawal		
b	To control equipment damage		
c	Under force majeure conditions		
2	Due to maintenance or outage of own network		
3	Any other reason		
	Total load shedding for the Year		

Signature of Petitioner



Details of Overloaded Feeders

S.No.	Voltage Level	No. of feeders	Feeder length (ckt. Km.)	No. of feeders overloaded	Line length overloaded feeders (ckt. Km.)	% number of Overloaded feeders in Area	% length of overloaded feeders in Area
Previous Year (FY 2022-23)							
1	400 KV						
2	220 KV						
3	132 KV						
The petitioner submits that there has been no over loading in feeder							
Current Year (FY 2023-24)							
1	400 KV						
2	220 KV						
3	132 KV						
The petitioner submits that there has been no over loading in feeder							

Note:

Equipment considered as overloaded if carrying more than 110% of rated load for average 1 hour per day. Details to be provided for previous two years, base year and for each year of control period.

Signature of Petitioner



Details of over loaded Transformers										
Sl.No.	Rated Voltage	Previous Year (FY 2022-23)			Current Year (FY 2023-24)			Ensuing Year (FY 2024-25)		
		Rated Capacity	Actual Load on Transformer	% of Transformers over loaded	Rated Capacity	Actual Load on Transformer	% of Transformers over loaded	Rated Capacity	Actual Load on Transformer	% of Transformers over loaded
1	400/220/33 KV Transformers									
	Capacity									
	i									
	ii									
	Total									
2	220/132/33KV Transformers									
	Capacity									
	i									
	ii									
	Total									
3	220/132KV Transformers									
	Capacity									
	i									
	ii									
	Total									
4	132/33KV Transformers									
	Capacity									
	i									
	ii									
	Total									

The petitioner submits that there has been no over loading in transformer

Signature of Petitioner

Failure of Transformers

S. No.	Transformation ratio	Previous Year (2022-23)			Current Year (2023-24)			Ensuing Years (2024-25)		
		No. of Transformers	No. of failures	Total Duration of failure (hrs.)	No. of Transformers	No. of failures	Total Duration of failure (hrs.)	No. of Transformers	No. of failures	Total Duration of failure (hrs.)
1	400/220/33 KV									
i	500 MVA	1	-	-	2	1	7	4	-	-
2	220/132/33 kV									
i	160 MVA	4	-	-	8	-	-	9	-	-
3	220/132 kV									
i	160 MVA	10	-	-	10	2	3	12	-	-
4	220/33 kV									
i	100 MVA	-	-	-	1	-	-	2	-	-
4	132/33 kV									
i	80 MVA	4	-	-	9	-	-	8	-	-
ii	50 MVA	12	-	-	12	-	-	15	-	-

	500	1	-	-	2	-	7	4	-	-
	160+ t	4	-	-	8	-	-	9	-	-
	160	10	-	-	10	2	3	12	-	-
	100	-	-	-	1	-	-	2	-	-
	80	4	-	-	9	-	-	8	-	-
	50	12	-	-	12	-	-	15	-	-
	Total number	31	-	-	42	2	9	50	-	-
	i. 400 kV Naubatpur									
	a) 500 MVA	-	-	-	1	-	1	1	-	-
	b) 500 MVA (141307-3)	1	-	-	1	-	7	1	-	-
	c) 160 MVA (14138-7)	1	-	-	1	-	-	1	-	-
	d) 160 MVA	-	-	-	1	-	-	1	-	-
	e) 80 MVA (14139-8)	1	-	-	1	-	-	1	-	-
	f) 80 MVA	-	-	-	1	-	-	1	-	-
	ii 400 kV Jalkanpur									
	a) 500 MVA (141307-4)	-	-	-	1	-	-	1	-	-
	b) 500 MVA	-	-	-	1	-	-	1	-	-
	c) 160 MVA (14138-6)	-	-	-	1	-	-	1	-	-
	d) 160 MVA	-	-	-	1	-	-	1	-	-
	e) 160 MVA	-	-	-	1	-	-	1	-	-
	f) 80 MVA	-	-	-	1	-	-	1	-	-
	g) 80 MVA	-	-	-	1	-	-	1	-	-
	h) 80 MVA	-	-	-	1	-	-	1	-	-
	i) 80 MVA (14139-3)	-	-	-	1	-	-	1	-	-
	Total	3	-	-	15	-	8	15	-	-
2	220/132/33KV									
	i. 220 kV Annour GIS									
	a) 160 MVA (13737)	1	-	-	1	-	-	1	-	-
	b) 160 MVA (13738)	1	-	-	1	-	-	1	-	-
	c) 50 MVA (6042)	1	-	-	1	-	-	1	-	-
	d) 50 MVA (6046)	1	-	-	1	-	-	1	-	-

ii. 220 kV Khijirsarai GIS										
a) 160 MVA (13736)	1	-	-	1	1	4	1	-	-	-
b) 160 MVA (T14138-02)	1	-	-	1	-	-	1	-	-	-
b) 50 MVA (6043)	1	-	-	1	-	-	1	-	-	-
c) 50 MVA (6045)	1	-	-	1	-	-	1	-	-	-
d) 50 MVA	-	-	-	-	-	-	1	-	-	-
iii. 220 kV Narhat GIS										
a) 160 MVA (13735)	1	-	-	1	-	-	1	-	-	-
b) 160 MVA (14138-01)	1	-	-	1	-	-	1	-	-	-
c) 50 MVA (6041)	1	-	-	1	-	-	1	-	-	-
d) 50 MVA (6044)	1	-	-	1	-	-	1	-	-	-
iv. 220 kV Shekhopur Sarai GIS										
a) 160 MVA (13727)	1	-	-	1	-	-	1	-	-	-
b) 160 MVA (13740)	1	-	-	1	-	-	1	-	-	-
c) 50 MVA (6033)	1	-	-	1	-	-	1	-	-	-
d) 50 MVA (6035)	1	-	-	1	-	-	1	-	-	-
v. 220 kV Haveli Kharagpur GIS										
a) 160 MVA (13728)	1	-	-	1	-	-	1	-	-	-
b) 160 MVA (T14138-3)	1	-	-	1	-	-	1	-	-	-
c) 50 MVA (6034)	1	-	-	1	-	-	1	-	-	-
d) 50 MVA (6036)	1	-	-	1	-	-	1	-	-	-
vi. 220 kV Goradih GIS										
a) 160 MVA (13739)	1	-	-	1	2	3	1	-	-	-
b) 160 MVA	-	-	-	-	-	-	1	-	-	-
c) 50 MVA (6037)	1	-	-	1	-	-	1	-	-	-
d) 50 MVA (6038)	1	-	-	1	-	-	1	-	-	-
vii. 220 kV Mokama GIS										
a) 160 MVA	1	-	-	1	-	-	1	-	-	-
b) 160 MVA (T14138-5)	-	-	-	-	-	-	1	-	-	-
c) 80 MVA (T14139-1)	1	-	-	1	-	-	1	-	-	-
d) 50 MVA	-	-	-	-	-	-	1	-	-	-
viii 220 kV Bhusaula										
a) 100 MVA	-	-	-	1	-	-	1	-	-	-
b) 100 MVA	-	-	-	-	-	-	1	-	-	-
ix. Dumraon GIS										
a) 160 MVA (T14138-4)	1	-	-	1	-	-	1	-	-	-
b) 160 MVA	-	-	-	-	-	-	1	-	-	-
c) 80 MVA (T14139-2)	1	-	-	1	-	-	1	-	-	-
d) 80 MVA (T14139-7)	1	-	-	1	-	-	1	-	-	-
Total	31	-	-	29	3	6	35	-	-	-

Signature of Petitioner

Key Ratios**Form No: P12**

S. No	Particulars	Previous Year FY 2021-22	Current Year FY 2023-24	Ensuing Years FY 2024-25
A	Financial & Material Management			
1	Annual capital expenditure/net book value			
2	Total Transmission cost/Energy Transmitted	0.34	0.38	0.36
3	Employee cost as a percentage of total cost	5%	4%	4%
4	Operating expenses / Revenue from Transmission of power	14%	11%	12%
5	Cost of capital invested			
6	Debt Service Coverage Ratio			
7	Cost of total Stores Inventory/100 Km of transmission lines			
9	Working Capital to Revenue from Transmission of power	2.82		
B	HR Management			
1	Energy Transmitted (MU) per Employee	133.10	188.66	226.40
2	Total line length/employee (cktKm.)	23.99	28.34	28.34
3	Connected Load per Employee (MVA)			
4	Transmission Income per Employee	4.55	7.26	8.11
5	Training participation days per employee			
C	Operational Performance			
1	Unplanned outage/total outage (Fault breakdown / total outage)			
	Annual replacement rate of Transmission transformers (%): (Transmission Transformers replaced / Transformers in service)			
2				

Signature of Petitioner



Annexure-C



We hereby confirm that We have examined the books of account and the prescribed documents in respect of the capitalization of assets of **Bihar Grid Company Limited** and hereby certify that:

The following assets commissioned in previous year 2022-23. Erroneously, it was not capitalized in the perspective quarter of previous financial year 2022-23.

The said assets were capitalized in the previous quarter ended as at 30.09.2023 of the financial year 2023-24. The capitalized costs of all the respective assets are as follow:

S. No	Description	DOCO	Amount in ₹
1.	L.I.O of 132 KV S/C Jakkanpur/Mithapur-Fatuha line at Jakkanpur new (with HTLS conductor)	23.07.2022	34,25,10,468/-
2.	L.I.O of both ckt of 132kV Ara-Jagdishpur D/C T/L at Dumraon (new)	14.07.2022	23,58,16,947/-
3.	132kV D/C Dumraon (new) - Dumroan (BSPTCL) transmission line	14.07.2022	9,98,50,721/-
Total			67,81,78,136/-

Detail breakup of costs is enclosed in annexure:

For Kumar Sanjay & Co.
Chartered Accountants
Firm Registration No :- 113362W

CA Binod Kumar
Partner
Membership No.: 417916

Place: Patna
Dated: 11th October, 2023



Summary Sheet							Annexure:
L/O of 132 KV S/C Jakkanpur/Mithapur-Fatuha line at Jakkanpur new (with HTLS conductor)							
		D.O.C.O	23.07.2022				
Sl.No	Description	Supply	Freight & Insurance	Erection	Training/Type Test	Total	Total
1	Towers & Towers accessories	12,80,55,473	44,58,419	5,11,45,081		18,36,58,973	21,59,15,072
2	Crop Compensation						4,97,38,404
3	Tree Compensation						34,55,663
4	Railway Crossing						4,47,195
5	Electrical Inspector						12,774
	Total Amount	12,80,55,473	44,58,419	5,11,45,081		18,36,58,973	26,95,69,108
					Acc: IDC		4,88,37,328
					Acc: EDC		2,41,06,041
				Amount Capitalised in FY 2023-24			34,25,10,468
Summary Sheet							
L/O of both ckt of 132KV Ara-Jagdishpur D/C T/L at Dumraon (new)							
		D.O.C.O	14.07.2022				
Sl.No	Description	Supply	Freight & Insurance	Erection	Training/Type Test	Total	Total
1	Towers & Towers accessories	11,53,79,982	50,37,449	3,46,43,848		15,50,61,280	18,20,65,569
2	Insulators						
3	Crop Compensation						28,27,761
4	Tree Compensation						5,32,713
5	Railway Crossing						1,27,506
6	Electrical Inspector						43,594
	Total Amount	11,53,79,982	50,37,449	3,46,43,848		15,50,61,280	18,55,97,143
					Acc: IDC		3,36,24,278
					Acc: EDC		1,65,95,526
				Amount Capitalised in FY 2023-24			23,58,16,947
Summary Sheet							
132KV D/C Dumraon (new) - Dumraon (BSPTCL) transmission line							
		D.O.C.O	14.07.2022				
Sl.No	Description	Supply	Freight & Insurance	Erection	Training/Type Test	Total	Total
1	Towers & Towers accessories	4,92,97,804	19,52,797	1,16,23,767		6,28,74,368	7,38,40,251
2	Crop Compensation						32,68,172
3	Tree Compensation						4,10,139
4	Forest Clearance						10,38,087
5	Electrical Inspector						29,767
	Total Amount	4,92,97,804	19,52,797	1,16,23,767		6,28,74,368	7,85,86,415
					Acc: IDC		2,42,37,350
					Acc: EDC		70,26,956
				Amount Capitalised in FY 2023-24			9,98,50,721
Total							67,81,78,136



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Annexure-D

BIHAR GRID COMPANY LIMITED

ANNUAL FINANCIAL STATEMENT

2022-2023

Address

2nd Floor, Alankar Place,
Boring Road , Patna- 800001





INDEPENDENT AUDITOR'S REPORT

To the Members of **BIHAR GRID COMPANY LIMITED**

Report on the IND-AS Financial Statements

Opinion

We have audited the accompanying IND-AS Financial Statements of **BIHAR GRID COMPANY LIMITED** ("the Company"), which comprise the Balance Sheet as at 31st March, 2023 and the Statement of Profit and Loss (including Other Comprehensive Income), the Cash Flow Statement and the Statement of Changes in Equity for the year then ended, and a summary of the significant accounting policies and other explanatory information.

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid IND-AS financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the company as at 31st March 2023, its profit including other comprehensive income, its changes in equity and its cash flows for the year ended on that date.

Key Audit Matters

We have determined that there are no key audit matters to communicate in our report.

Basis for Opinion

We conducted our audit in accordance with the Standards on Auditing (SAs) specified under section 143(10) of the Companies Act, 2013. Our responsibilities under those Standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the Code of Ethics issued by the



514, Jagat Trade Centre, Fraser Road, Patna - 800001.

E-mail : binodkumar99@gmail.com,kscooca@yahoo.com Phone :9852058954,9825472500

Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the financial statements under the provisions of the Companies Act, 2013 and the Rules there under, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Management's Responsibility for the Financial Statements

The Company's Board of Directors is responsible for the matters stated in Section 134(5) of the Companies Act, 2013 ("the Act") with respect to the preparation of these IND-AS financial statements that give a true and fair view of the financial position, financial performance including other comprehensive income, changes in equity and cash flows of the Company in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards ("IND-AS") prescribed under Section 133 of the Act, read with relevant rules issued there under.

This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the IND-AS financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these IND-AS financial statements based on our audit. We have taken into account the provisions of the Act, the accounting and auditing standards and matters which are required to be included in the audit report under the provisions of the Act and the Rules made there under and the Order issued under section 143 (11) of the Act.

We conducted our audit of the IND-AS financial statements in accordance with the Standards on Auditing specified under Section 143(10) of the Act. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the IND-AS financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and the disclosures in the IND-AS financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the IND-AS financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers



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internal financial control relevant to the Company's preparation of the IND-AS financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by the Company's Directors, as well as evaluating the overall presentation of the IND-AS financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the IND-AS financial statements.

Report on Other Legal and Regulatory Requirements

1. As required by the Companies (Auditor's Report) Order, 2016 (as amended by CARO 2020) ("the Order"), issued by the Central Government of India in terms of Section 143(11) of the Act, we give in "Annexure "A" a statement on the matters specified in paragraphs 3 and 4 of the Order, to the extent applicable.
2. In terms of sub section (5) of section 143 of the Companies Act, 2013, we give in the Annexure "B" a statement on the directions issued under the aforesaid section by the Comptroller and Auditor General of India.
3. As required by Section 143 (3) of the Act, we report that:
 - a. We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit.
 - b. In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books.
 - c. The Balance Sheet, the Statement of Profit and Loss (including Other Comprehensive Income), the Statement of Changes in Equity and the Statement of Cash Flows dealt with by this Report are in agreement with the books of account.
 - d. In our opinion, the aforesaid IND-AS Financial Statements comply with the Indian Accounting Standards prescribed under section 133 of the Act, read with the relevant rules issued there under.



A handwritten signature in blue ink, appearing to be a stylized representation of the name "Sanjay Kumar Patil".

- e. On the basis of written representations received from the directors as on 31st March, 2023 taken on records by the board of directors, none of the directors are disqualified as on 31st March, 2023, from being appointed as a director in terms of Section 164(2) of the Act pertaining to disqualification of Directors.
- f. With respect to the adequacy of the Internal Financial Controls over Financial Reporting of the Company and the Operating Effectiveness of such Controls, refer to our separate report in Annexure "C".
- g. With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:
- The Company does not have any pending litigations which would impact its Financial Position.
 - The Company did not have any Long-Term Contracts including Derivative Contracts for which there were any material foreseeable losses.
 - There were no amounts which were required to be transferred to the Investor Education and Protection fund by the Company.

For **Kumar Sanjay & Co..**

Chartered Accountants

ICAI FRN: 113362W

(**Binod Kumar**)

Partner

Membership No.- 417916



Place: Patna

Date: 09.06.2023

UDIN- **23417916BGYCGZ4017**

Annexure - "A"

As referred to in our Independent Auditors' Report to the members of the **BIHAR GRID COMPANY LIMITED** ('the Company') on the Financial Statements for the Year Ended 31st March, 2023, we report that:

- (i) a) (A) The Company has generally maintained records, showing full particulars including quantitative details and situation of Property, Plant & Equipment.
- (B) The Company has generally maintained records, showing full particulars of intangible assets.
- b) The Property, Plant & Equipment have been physically verified by the management during the year. In our opinion, frequency of verification is reasonable having regard to the nature of its business. No material discrepancies were noticed on such verification.
- c) In our opinion and according to information and explanations given to us and on the basis of an examination of the records of the Company, the title deeds of immovable properties are held in the name of the Company.
- d) In our opinion and according to the information and explanations given to us, the company has not revalued its Property, Plant and Equipment (including Right of Use assets) or intangible assets or both during the year.
- e) In our opinion and according to the information and explanations given to us, no proceedings have been initiated or are pending against the company for holding any Benami property under the "Benami Transactions (Prohibition) Act, 1988 and Rules made thereunder.
- (ii) (a) The inventories have been physically verified by the independent agency during the year. In our opinion, frequency of verification, coverage & procedure adopted by the company for verification is reasonable having regard nature of its business. No discrepancies of 10% or more in the aggregate for each class of inventory were noticed on such verification.
- (b) The Company has not been sanctioned working capital limits, from banks on the basis of security of current assets.
- (iii) (a) According to the information and explanations given to us, the Company has not made investments in, provided any guarantee or security or granted any loans or advances in the nature of loans, secured or unsecured, to companies, firms, Limited Liability Partnerships or any other parties. Accordingly, paragraph 3(iii) is not applicable to the company.
- (iv) In our opinion and according to information and explanation given to us, the company has complied with the provisions of section 185 and 186 of the Act in respect of loans, investments, guarantees and security.



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- (v) In our opinion and according to the information and explanations given to us, the company has not accepted any deposit from the public & no amounts has been deemed to be deposits in accordance with the provisions of the sections 73 to 76 or any other relevant provisions of the Act, and the rules framed thereunder. Accordingly, paragraph 3(v) of the Order is not applicable to the company.
- (vi) We have broadly reviewed the cost records maintained by the company specified by the Central Government under sub section (1) of section 148 of the Companies Act, 2013, in respect of Transmission of the Company and we are of the opinion that prima facie the prescribed records have been made and maintained. However, we have not made detailed examination of the cost records with a view to determine whether they are accurate or complete.
- (vii) a) According to the information and explanations given to us, the Company is generally regular in depositing undisputed statutory dues with appropriate authorities including Provident Fund, Income Tax, Goods and Services Tax, Duty of Custom, Duty of Excise, Cess and other statutory dues applicable to the Company and that there are no undisputed statutory dues outstanding as at 31 March 2023 for a period of more than six months from the date they became payable. As informed, provisions of the Employees State Insurance Act are not applicable to the Company.
- b) According to information and explanations given to us, there are no statutory dues referred to in sub- clause (a) have not been deposited on account of dispute.
- (viii) In our opinion and according to the information and explanations given to us, the Company has not recorded in the books of account any transaction which have been surrendered or disclosed as income during the year in the tax assessments under the Income Tax Act, 1961.
- (ix) In our opinion and according to the information and explanations given to us,
- (a) the Company has not defaulted during the year in repayment of loans & payment of Interest to its financial institutions, bankers and dues to the Bond holders.
- (b) the company has not been declared wilful defaulter by any bank/financial institution/other lender.
- (c) term loans have been applied for the purpose for which the loans were obtained.
- (d) funds raised on short term basis have not been utilised for long term purpose.
- (e) The Company do not have any Subsidiaries, Joint ventures or Associates. Accordingly, paragraph 3(ix)(e) and 3(ix)(f) are not applicable to the company.
- (x) (a) The company has not raised money by way of initial public offer or further public offer (including debt instruments) during the year.



- (b) In our opinion and according to the information and explanations given to us, the Company has not made any preferential allotment or private placement of shares or convertible debentures (fully, partially or optionally convertible) during the year.
- (xi) (a) According to the information and explanations given to us and as represented by the management, we have been informed that no case of fraud has been committed on or by the company during the year.
- (b) As no fraud has been noticed during the year as mentioned at xi(a) above, report under sub-Section (12) of Section 143 of the Companies Act in the Form ADT-4 as prescribed under Rule 13 of Companies (Audit and Auditors) Rules 2014 is not applicable.
- (c) According to the information and explanations given to us, no whistle-blower complaints have been received during the year by the Company.
- (xii) The company is not a Nidhi Company as prescribed under section 406 of the Act. Accordingly, clause 3(xii)(a), 3(xii)(b) & 3(xii)(c) of the Order is not applicable to the company.
- (xiii) According to the information and explanations given to us and as represented by the management, all transactions with the related parties are in compliance with sections 177 and 188 of the Act, where applicable and the details have been disclosed in the standalone Ind AS financial statements as required by the applicable Indian Accounting Standards.
- (xiv) (a) According to the information and explanations given to us and based on our examination of the records of the company, the company has an internal audit system commensurate with the nature of its business.
- (b) The reports of the Internal Auditors for the period under audit were considered by the statutory auditor.
- (xv) According to the information and explanations given to us and based on our examination of the records of the company, the company has not entered into non-cash transactions with directors or persons connected with them. Accordingly, paragraph 3(xv) is not applicable to the company.
- (xvi) According to the information and explanations given to us, the company is not required to be registered under section 45 IA of the Reserve Bank of India Act, 1934. Accordingly, paragraphs 3(xvi) are not applicable to the company.
- (xvii) According to the information and explanations given to us and based on our examination of the records of the company, the company has not incurred any cash losses in the current Financial Year and in the immediately preceding Financial Year.
- (xviii) There has not been any resignation of the statutory auditors during the year.



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- (xix) On the basis of the financial ratios, ageing and expected dates of realisation of financial assets and payment of financial liabilities, other information accompanying the financial statements, our knowledge of the Board of Directors and management plans and based on our examination of the records of the company, in our opinion, no material uncertainty exists as on the date of the audit report and the company is capable of meeting its liabilities existing at the date of balance sheet as and when they fall due within a period of one year from the balance sheet date.
- xx) According to the information and explanations given to us and based on our examination of the records, the Company has spent the amount required as per section 135(5) of the Companies Act during the financial year. Accordingly, paragraph 3(xx)(a) & 3(xx)(b) are not applicable to the company.
- xxi) The Company do not have any Subsidiaries, Joint ventures or Associates. Accordingly, paragraph 3(ix)(e) and 3(ix)(f) are not applicable to the company.



For Kumar Sanjay & Co.
Chartered Accountants
ICAI FRN : 113362W



(Binod Kumar)

Partner

Membership No.- 417916



Place: Patna

Date: 09.06.2023

UDIN-23417916BGYCGZ4017

As referred to in our Independent Auditors' Report to the Members of the BIHAR GRID COMPANY LIMITED ("The Company"), on the Financial Statements for the Year Ended 31st March 2023, we Report that:

Sl. No.	Directions	Auditor's reply on action taken on the directions	Impact on financial statement
1.	Whether the Company has system in place to process all the accounting transactions through IT system? If yes, the implications of processing of accounting transactions outside IT system on the integrity of the accounts along with the financial implications, if any, may be stated.	The company is having Tally ERP-9 in the place of processing all accounting transaction. No accounting transaction is being recorded/ processed otherwise than the Tally ERP-9.	Nil
2.	Whether there is any restructuring of an existing loan or cases of waiver/write off of debts/loans/interest etc. made by a lender to the company due to the company's inability to repay the loan? If yes, the financial impact may be stated.	As explained to us, there are no cases of restructuring of an existing loan or cases of waiver/ write off of debts/loan/interest etc. made by a lender to the company due to the company's inability to repay the loan.	Nil
3.	Whether funds received/receivable for specific schemes from Central/State agencies were properly accounted for/utilized as per its term and conditions? List the cases of deviation.	As per the information and explanation given to us, no funds from Central/State agencies were received/ receivable for specific schemes during the financial year by the company.	Nil

For Kumar Sanjay & Co.

Chartered Accountants

ICAI FRN: 113362W

Binod Kumar
(Binod Kumar)

Partner

Membership No.- 417916

Date: 09.06.2023

UDIN-23417916BGYCGZ4017



As referred to in our Independent Auditors' Report to the members of the **BIHAR GRID COMPANY LIMITED** ("the Company"), on the Financial Statements for the year ended 31st March 2023

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the act")

We have audited the Internal Financial Controls over Financial Reporting of the company as at 31st March 2023 in conjunction with our audit of the Financial Statements of the Company for the year ended on that date.

Management's Responsibility for Internal Financial Controls

The Company's Management is responsible for establishing and maintaining Internal Financial Control based on "the Internal Control over Financial Reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls over Financial Reporting issued by the Institute of Chartered Accountants of India (ICAI)". These responsibilities include the Design, Implementation and Maintenance of Adequate Internal Financial Controls that were Operating Effectively for ensuring the orderly and efficient conduct of business, including adherence to Company's policies, the safeguarding of its assets, the Prevention and Detection of Frauds and Errors, the accuracy and completeness of the Accounting Records, and the Timely Preparation of Reliable Financial Information, as required under the Act.

Auditors' Responsibility

Our responsibility is to express an opinion on the Company's Internal Financial Controls over Financial Reporting based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Control over Financial Reporting (the "Guidance Note") and the Standards on Auditing, issued by ICAI and deemed to be prescribed under section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of Internal Financial Controls, both applicable to an audit of Internal Financial Controls and, both issued by the Institute of Chartered Accountants of India. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate Internal Financial Controls over Financial Reporting, was established and maintained and if such controls operated effectively in all material respects.



Our audit involves performing procedures to obtain audit evidence about the adequacy of the Internal Financial Controls System over Financial Reporting and their Operating Effectiveness. Our audit of Internal Financial Controls over Financial Reporting included obtaining an understanding of Internal Financial Controls over Financial Reporting, assessing the risk that a material weakness exists and testing and evaluating the design and operating effectiveness of internal Control based on the assessed risk. The procedures selected depend on the Auditor's Judgement, including the Assessment of the Risks of Material Misstatement of the Financial Statements, whether due to Fraud or Error.

We believe that the Audit Evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Company's Internal Financial Controls System over Financial Reporting.

Meaning of Internal Financial Controls over Financial Reporting

A company's Internal Financial Control over Financial Reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of Financial Statements for External Purposes in accordance with Generally Accepted Accounting Principles. A company's Internal Financial Control over Financial Reporting includes those policies and procedures that:

- (1) Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company;
- (2) Provide reasonable assurance that transactions are recorded as necessary to permit preparation of Financial Statements in accordance with Generally Accepted Accounting Principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the company; and
- (3) Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's Assets that could have a material effect on the Financial Statements.

Inherent Limitations of Internal Financial Controls over Financial Reporting

Because of the inherent Limitations of Internal Financial Controls over Financial Reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting to future periods are subject to the risk that the internal financial controls over financial reporting may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.



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Opinion

In our opinion, the Company has, in all material respects, an adequate Internal Financial Controls System over Financial Reporting and such Internal Financial Controls over Financial Reporting were operating effectively as at 31st March 2023, based on "the Internal Financial Controls over Financial Reporting criteria established by the Company considering the essential components of Internal Control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India."

For **Kumar Sanjay & Co.**
Chartered Accountants
ICAI FRN : 113362W

(Binod Kumar)

Partner

Membership No.- 417916



Place: Patna

Date: 09.06.2023

UDIN **23417916BGYCGZ4017**

Particulars	Note	As at 31-March-2023	As at 31-March-2022
ASSETS			
Non-Current Assets			
(a) Property, Plant and Equipment	4	2,37,745.98	1,97,871.25
(b) Capital Work-in-Progress	5	42,980.45	78,946.33
(c) Other Intangible Assets	6	120.69	117.51
(d) Intangible Assets under Development	7	-	16.65
(e) Other non current assets	8	74.71	85.49
Total Non-Current Assets		2,80,921.83	2,77,037.23
Current Assets			
(a) Inventories	9	169.87	169.87
(b) Financial Assets			
(i) Trade receivables	10	49,881.07	61,867.58
(ii) Cash and Cash Equivalents	11	23,563.63	12,989.26
(c) Other Current Assets	12	1,427.25	6,098.71
Total Current Assets		75,041.82	81,125.42
Total Assets		3,55,963.65	3,58,162.65
EQUITY AND LIABILITIES			
Equity			
(a) Equity Share Capital	13	66,825.45	64,507.01
(b) Other Equity	14	29,092.72	37,910.07
Total Equity		95,918.17	1,02,417.08
Liabilities			
Non-Current Liabilities			
(a) Financial Liabilities			
(i) Borrowings	15	1,96,228.36	1,99,298.19
(ii) Other Non Current financial Liabilities	16	9,386.76	7,098.86
(b) Deferred Tax Liabilities (net)	17	17,242.65	17,418.10
Total non current Liability		2,22,857.77	2,23,815.15
Current Liabilities			
(a) Financial Liabilities			
(i) Other Current Financial Liabilities	18	3,642.25	6,091.15
(i) Current Borrowing	19	17,264.64	11,793.76
(b) Other Current Liabilities	20	15,670.57	10,650.54
(c) Provisions	21	610.25	496.16
(d) Current Tax Liabilities (Net)	22	-	2,898.81
Total Current Liabilities		37,187.71	31,930.42
Total Equity and Liabilities		3,55,963.65	3,58,162.65

The Notes to Accounts (1 to 48) form an integral part of these financial statements.

As per our report of even date

For Kumar Sanjay & Co.
Chartered Accountants
Firm Reg. No. : 113362W

For and On behalf of the Board of Directors

Binod Kumar
Binod Kumar
Partner
Membership No.: 417916



Sanjeev Hans
Sanjeev Hans
Chairperson
DIN-05342058

D. K. Javeri
D. K. Javeri
Managing Director
DIN-10130165

Niketa Sinha
Niketa Sinha
Co. Secretary

Prabhat Kumar
Prabhat Kumar
CFO

Place: Patna
Date: 09/06/2023

Place: Patna
Date: 09.06.2023



BHAR GRID COMPANY LIMITED
2nd FLOOR, ALANKAR PLACE, BORING ROAD, PATNA
Statement of Profit and Loss for the year ended 31-March-2023

(₹ in Lakh)

	Particulars	Note no.	For the year ended 31-March 2023	For the year ended 31-March 2022
I	Revenue from operations	23	17,462.00	45,262.00
II	Other Income	24	7,767.77	6,592.38
III	Total Income (I+II)		25,229.77	51,854.38
IV	Expenses			
	Employee benefit expenses	25	1,998.02	1,495.01
	Finance costs	26	15,849.87	17,585.23
	Depreciation and amortisation expense	27	12,740.49	10,537.61
	Other expenses	28	3,634.19	2,903.17
	Total expenses (IV)		34,222.57	32,521.02
V	Profit/(Loss) before exceptional items and tax (III-IV)		(8,992.80)	19,333.36
VI	Exceptional Items		-	-
VII	Profit/(Loss) before Tax (V-VI)		(8,992.80)	19,333.36
VIII	Total Tax expense	29	(175.45)	4,936.80
	(1) Current Tax -Current Year		-	2,898.81
	-Earlier Years		-	(2,264.19)
	(2) Deferred Tax		(175.45)	4,302.18
IX	Profit (Loss) for the period from Continuing operations (VII-VIII)		(8,817.35)	14,396.56
X	Profit/(Loss) from dis continuing operations		-	-
XI	Tax expense of dis continuing operations		-	-
XII	Profit/(Loss) from dis continuing operations (after tax) (X-XI)		-	-
XIII	Profit/(Loss) for the period (IX+XII)		(8,817.35)	14,396.56
XV	Total Comprehensive income for the period(XIII+XIV)		(8,817.35)	14,396.56
XVI	Earnings per equity share (for continuing operation)			
	(1) Basic		(1.28)	2.37
	(2) Diluted		(1.28)	2.37
XVIII	Earnings per equity share (for dis continued & Continuing operations)			
	(1) Basic		(1.28)	2.37
	(2) Diluted		(1.28)	2.37

The Notes to Accounts (1 to 48) form an integral part of these financial statements.
As per our report of even date

For Kumar Sanjay & Co.

Chartered Accountants

Firm Reg. No. 113362W

Binod Kumar

Binod Kumar

Partner

Membership No.: 417916



For and On behalf of the Board of Directors

Sanjeev Hans
Sanjeev Hans
Chairperson
DIN-05342058

D. K. Javeri
D. K. Javeri
Managing Director
DIN-10130165

Niketa Sinha
Niketa Sinha
Co. Secretary

Prahalad Kumar
Prahalad Kumar
CFO

Place: Patna

Date: 09/06/2023

Place: Patna

Date: 09.06.2023



[Signature]

BIHAR GRID COMPANY LTD
2nd FLOOR, ALANKAR PLACE, BORING ROAD, PATNA
Cash Flow Statement for the Year ended 31-March-2023

(₹ in Lakh)

	PARTICULARS	For the year ended 31-March-2023	For the year ended 31-March-2022
A.	CASH FLOW FROM OPERATING ACTIVITIES		
	Net Profit/(Loss) as per Profit & Loss A/c	(8,817.35)	14,396.56
	Depreciation	12,740.49	10,536.90
	Finance Costs	15,849.87	17,585.23
	Interest Received from Bank	(726.75)	(275.58)
	Operating profit before working capital changes	19,046.26	42,243.11
	Adjustment For Increase/Decrease in:		
	Trade Receivables	11,986.51	(11,236.75)
	Other Current Assets	4,671.46	(569.41)
	Other Current Liabilities	5,020.03	(2,471.90)
	Other Current Financial Liabilities	(2,448.90)	1,576.85
	Current Borrowing	5,470.88	695.00
	Deferred Tax Liabilities	(175.45)	4,302.18
	Short Term Provisions	114.09	39.26
	Current Tax Liabilities	(2,898.81)	(1,301.33)
	TOTAL	40,786.07	33,277.01
B.	CASH FLOW FROM INVESTING ACTIVITIES		
	Tangible/Intangible Assets	(52,618.40)	(27,732.62)
	Capital Work in Progress	35,982.53	4,260.19
	Long Term Loans and Advances	10.78	231.56
	Interest Received from Bank	726.75	275.58
	TOTAL	(15,898.34)	(22,965.29)
C.	CASH FLOW FROM FINANCING ACTIVITIES		
	Issue of Share Capital / Other Equity	2,318.44	6,447.62
	Interest and Finance Costs Paid	(15,849.87)	(17,585.23)
	Other Non Current Financial Liabilities	2,287.90	(3,838.32)
	Borrowings	(3,069.83)	6,627.07
	TOTAL	(14,313.36)	(8,348.86)
D.	Net Increase/(Decrease) in Cash Flow (A+B+C)	10,574.37	1,962.86
E.	Cash & Cash Equivalents at the beginning of the year	12,989.26	11,026.40
F.	Cash & Cash Equivalents at the end of the year	23,563.63	12,989.26

Note :

Cash and Cash equivalents consist balances with banks in current accounts.

The Notes to Accounts (1 to 48) form an integral part of these financial statements.

As per our report of even date

For Kumar Sanjay & Co.

Chartered Accountants

Firm Reg. No. : 113362W

Binod Kumar

Binod Kumar

Partner

Membership No.: 417916



For and on behalf of the Board of Directors

Sanjeev Hans
Sanjeev Hans
Chairperson
DIN-05342058

D.K. Javeri
D.K. Javeri
Managing Director
DIN-10130165

Niketa Sinha
Niketa Sinha
Co. Secretary

Prabhat Kumar
Prabhat Kumar
CFO

Place: Patna

Date : 09/06/2023

Place : Patna

Date : 09.06.2023



[Signature]

Statement of Changes in Equity for the year ended 31-March-2023

A. Equity Share Capital

(₹ in Lakh)

As at 01-April-2022	64,507.01
Changes during the year	2,318.44
As at 31-March-2023	66,825.45
As at 01-April-2021	58,059.39
Changes during the year	6,447.62
As at 31-March-2022	64,507.01

(₹ in Lakh)

B. Other Equity

Particulars	Reserves and Surplus			Total
	Capital Reserve	General Reserve	Retained Earnings	
Balance as at 1st April, 2022	-	-	39,209.07	39,209.07
Received during the year	-	-	-	-
Total Comprehensive Income for the Year	-	-	(8,817.35)	(8,817.35)
Balance as at 31st March, 2023	-	-	30,391.72	30,391.72

In ₹ (Rupees)

Particulars	Reserves and Surplus			Total
	Capital Reserve	General Reserve	Retained Earnings	
Balance as at 1st April, 2021	-	-	24,812.51	24,812.51
Received during the year	-	-	-	-
Total Comprehensive Income for the Year	-	-	14,396.56	14,396.56
Shares Alloted During the year	-	-	-	-
Transfer to Retained Earnings	-	-	-	-
Balance as at 31st March, 2022	-	-	39,209.07	39,209.07

Refer to Note 12 for Nature & Movement of Other Equity.

The Notes to Accounts (1 to 48) form an integral part of these financial statements.

As per our report of even date

For Kumar Sanjay & Co.

Chartered Accountants

Firm Reg. No.: 113362W

Binod Kumar
Binod Kumar
Partner

Membership No.: 417916



For and on behalf of the Board of Directors

Sanjeev Hans
Sanjeev Hans
Chairperson
DIN-05342058

Niketa Sinha
Niketa Sinha
Co. Secretary

D. K. Javeri
D. K. Javeri
Managing Director
DIN-10130165

Prabhat Kumar
Prabhat Kumar
CFO

Place: Patna

Date: 09/06/2023

Place: Patna

Date: 09.06.2023



[Signature]

Notes to Standalone Financial Statements

1. Corporate and General Information

Bihar Grid Company Limited ('the Company') is a public company domiciled and incorporated in India under the provisions of The Companies Act. The registered office of the Company is situated at **Second Floor, Alankar Place, Boring Road, Patna, Bihar, India.**

The Company is a 50 : 50 Joint Venture between Bihar State Power (Holding) Company Ltd and Power Grid Corporation of India Ltd. It is principally engaged to build (construct), own, operate and Maintain (BOOM) intra-state transmission lines, substations and associated installations.

The financial statements of the company for the year ended 31 March 2023 were approved for issue by the Board of Directors on 09-06-2023.

2. Significant Accounting Policies

A summary of the significant accounting policies applied in the preparation of the financial statements are as given below. These accounting policies have been applied consistently to all periods presented in the financial statements.

2.1 Basis of Preparation

i) Compliance with Ind AS

The financial statements are prepared in compliance with Indian Accounting Standards (Ind AS) notified under Section 133 of the Companies Act, 2013 (the Act), Companies (Indian Accounting Standards) Rules, 2015, the relevant provisions of the Companies Act, 2013 (to the extent notified), The Companies Act, 1956 and the provisions of Electricity Act, 2003, in each case, to the extent applicable and as amended thereafter.

ii) Basis of Measurement

The financial statements have been prepared on accrual basis and under the historical cost convention except following which have been measured at fair value:

- Certain financial assets and liabilities measured at fair value,
- Defined benefit plans - plan assets measured at fair value

iii) Functional and presentation currency

The financial statements are presented in Indian Rupees in Lakh (₹ in Lakh), which is the Company's functional and presentation currency and all amounts are rounded to the nearest crore and two decimals thereof, except as stated otherwise.

iv) Use of estimates

The preparation of financial statements requires estimates and assumptions that affect the reported amount of assets, liabilities, revenue and expenses during the reporting period. Although, such estimates and assumptions are made on a reasonable and prudent basis taking into account all available information, actual results could differ from these estimates. The estimates and underlying assumptions are reviewed on an on-going basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future years (refer Note no. 3 on critical accounting estimates, assumptions and judgments).



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v) Current and non-current classification

The Company presents assets and liabilities in the balance sheet based on current/non-current classification.

An asset is current when it is:

- Expected to be realized or intended to be sold or consumed in normal operating cycle;
- Held primarily for the purpose of trading;
- Expected to be realized within twelve months after the reporting period; or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

All other assets are classified as non-current.

A liability is current when:

- It is expected to be settled in normal operating cycle;
- It is held primarily for the purpose of trading;
- It is due to be settled within twelve months after the reporting period; or
- There is no unconditional right to defer settlement of the liability for at least twelve months after the reporting period.

All other liabilities are classified as non-current.

Deferred tax assets/liabilities are classified as non-current.

The Company recognizes twelve months period as its operating cycle.

2.2 Property, Plant and Equipment

The Company had opted to consider the carrying value of Property, Plant and Equipment as per previous GAAP on the date of transition to Ind AS (1st April, 2015) to be the deemed cost as per Ind AS 101 'First time Adoption of Indian Accounting Standards'.

Initial Recognition and Measurement

Property, Plant and Equipment is initially measured at cost of acquisition/construction including any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. After initial recognition, Property, Plant and Equipment is carried at cost less accumulated depreciation / amortisation and accumulated impairment losses, if any.

Property, Plant and Equipment acquired as replacement of the existing assets are capitalized and its corresponding replaced assets removed/ retired from active use are derecognized.

If the cost of the replaced part or earlier inspection component is not available, the estimated cost of similar new parts/inspection component is used as an indication of what the cost of the existing part/ inspection component was when the item was acquired or inspection was carried out.

In the case of commissioned assets, deposit works/cost- plus contracts where final settlement of bills with contractors is yet to be affected, capitalization is done on provisional basis subject to necessary adjustments in the year of final settlement.

Assets and systems common to more than one transmission systems are capitalized on the basis of technical estimates/ assessments.



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Transmission system assets are considered as ready for intended use from the date of commercial operation declared in terms of BERC Tariff Regulations and capitalized accordingly.

The cost of land includes provisional deposits, payments/liabilities towards compensation, rehabilitation and other expenses wherever possession of land is taken.

Expenditure on levelling, clearing and grading of land if incurred for construction of building is capitalized as part of cost of the related building.

Spares parts whose cost is ₹5,00,000/- and above, standby equipment and servicing equipment which meets the recognition criteria of Property, Plant and Equipment are capitalized.

The acquisition or construction of some items of property, plant and equipment although not directly increasing the future economic benefits of any particular existing item of property, plant and equipment, may be necessary for the company to obtain future economic benefits from its other assets. Such items are recognized as property, plant and equipment.

Subsequent costs

Subsequent expenditure is recognized as an increase in carrying amount of assets when it is probable that future economic benefits deriving from the cost incurred will flow to the company and cost of the item can be measured reliably.

The cost of replacing part of an item of Property, Plant & Equipment is recognized in the carrying amount of the item if it is probable that future economic benefits embodied within the part will flow to the company and its cost can be measured reliably. The carrying amount of the replaced part is derecognized. The costs of the day-to-day servicing of property, plant and equipment are recognised in the Statement of Profit & Loss as incurred.

Derecognition

An item of Property, Plant and Equipment is derecognized when no future economic benefits are expected from their use or upon their disposal.

The gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the net disposal proceeds and the carrying amount of the asset and is recognised in the Statement of Profit and Loss on the date of disposal or retirement.

2.3 Capital Work-In-Progress (CWIP)

Cost of material, erection charges and other expenses incurred for the construction of Property, Plant and Equipment are shown as CWIP based on progress of erection work till the date of capitalization.

Expenditure of Corporate office and Projects, directly attributable to construction of property, plant and equipment are identified and allocated on a systematic basis to the cost of the related assets.

Interest during construction and expenditure (net) allocated to construction as per policy above are kept as a separate item under CWIP and apportioned to the assets being capitalized in proportion to the closing balance of CWIP.

Deposit works/cost-plus contracts are accounted for on the basis of statement received from the contractors or technical assessment of work completed.

Unsettled liability for price variation/exchange rate variation in case of contracts is accounted for on estimated basis as per terms of the contracts.



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2.4 Intangible Assets and Intangible Assets under development

The Company had opted to consider the carrying value of Intangible Assets as per previous GAAP on the date of transition to Ind AS (1st April, 2015) to be the deemed cost as per Ind AS 101 'First time Adoption of Indian Accounting Standards'.

Intangible assets are measured on initial recognition at cost. After initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses.

Subsequent expenditure on already capitalized Intangible assets is capitalised when it increases the future economic benefits embodied in an existing asset and is amortised prospectively.

The cost of software (which is not an integral part of the related hardware) acquired for internal use and resulting in significant future economic benefits is recognized as an intangible asset when the same is ready for its use.

Afforestation charges for acquiring right-of-way for laying transmission lines are accounted for as intangible assets on the date of capitalization of related transmission lines.

Expenditure incurred, eligible for capitalization under the head Intangible Assets, are carried as "Intangible Assets under Development" till such assets are ready for their intended use.

Expenditure on research is recognised as an expense when it is incurred.

Expenditure on development activities shall be recognised as Intangible asset if it meets the eligibility criteria as per Ind AS 38 'Intangible Assets', otherwise it shall be recognised as an expense.

An item of Intangible asset is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the Statement of Profit and Loss when the asset is derecognised.

2.5 Depreciation / Amortisation

Property, Plant and Equipment

Depreciation/amortisation on the items of property, plant and equipment related to transmission business is provided on straight line method following the rates and methodology notified by the BERC for the purpose of recovery of tariff and on property, plant and equipment of telecom and consultancy business is provided on straight line method as per useful life specified in Schedule II of the Companies Act, 2013 except for property, plant and equipment specified in the following paragraphs.

Depreciation on spares parts, standby equipment and servicing equipment which are capitalized, is provided on straight line method from the date they are available for use over the remaining useful life of the related assets of transmission business, following the rates and methodology notified by the BERC.

Depreciation on following items of property, plant and equipment is provided based on estimated useful life as per technical assessment.

Particulars	Useful life
a. Computers & Peripherals	3 Years
b. Servers & Network Components	5 years
c. Buildings (RCC frame structure)	35 years



d. Transmission line	35 years
c. Substation Equipment	35 years

Residual value of above assets is considered as Nil.

Mobile phones are charged off in the year of purchase.

Property, plant and equipment costing ₹5,000/- or less, are fully depreciated in the year of acquisition.

Where the cost of depreciable property, plant and equipment has undergone a change due to increase/decrease in long term monetary items on account of exchange rate fluctuation, price adjustment, change in duties or similar factors, the unamortized balance of such asset is depreciated prospectively at the rates and methodology as specified by the BERC Tariff Regulations,

Depreciation on additions to/deductions from Property, Plant and Equipment during the year is charged on pro-rata basis from/up to the date on which the asset is available for use/disposed.

The residual values, useful lives and methods of depreciation for items of property, plant and equipment other than items of property, plant and equipment related to transmission business are reviewed at each financial year-end and adjusted prospectively, wherever required.

Intangible Assets

Cost of software capitalized as intangible asset is amortized over the period of legal right to use or 3 years, whichever is less with Nil residual value.

Afforestation charges are amortized over thirty-five years from the date of capitalization of related transmission assets following the rates and methodology notified by Bihar Electricity Regulatory Commission (BERC) Tariff Regulations.

The amortization period and the amortization method for an intangible asset are reviewed at each financial year-end and are accounted for as change in accounting estimates in accordance with Ind AS 8 "Accounting Policies, Changes in Accounting Estimates and Errors"

2.6 Borrowing Costs

All the borrowed funds (except short term funds for working capital) are earmarked to specific projects. The borrowing costs (including bond issue expenses, interest, discount on bonds, front end fee, guarantee fee, management fee etc.) are allocated to the projects in proportion to the funds so earmarked.

Exchange differences arising from foreign currency borrowing to the extent regarded as an adjustment to interest costs are treated as borrowing cost.

Borrowing costs directly attributable to the acquisition or construction of qualifying assets are capitalised (net of income on temporary deployment of funds) as part of the cost of such assets till the assets are ready for the intended use. Qualifying assets are assets which take a substantial period of time to get ready for their intended use.

All other borrowing costs are recognised in Statement of Profit and Loss in the period in which they are incurred.

2.7 Cash and cash equivalents

Cash and cash equivalents include cash on hand and at bank, and deposits held at call with banks having a maturity of three months or less from the date of acquisition that are readily



convertible to a known amount of cash and are subject to an insignificant risk of changes in value.

2.8 Inventories

Inventories are valued at lower of the cost, determined on weighted average basis and net realizable value.

Steel scrap and conductor scrap are valued at estimated realizable value or book value, whichever is less.

Spares which do not meet the recognition criteria as Property, Plant and Equipment, including spare parts whose cost is less than ₹ 5,00,000/- are recorded as inventories.

Surplus materials as determined by the management are held for intended use and are included in the inventory.

The diminution in the value of obsolete/unserviceable/surplus stores and spares and non-moving unserviceable inventories is ascertained on review and provided for.

2.9 Leases

Lease is a contract that conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

To assess whether a contract conveys the right to control the use of an identified asset, the Company assesses whether: (i) the contract involves use of an identified assets, (ii) the customer has substantially all the economic benefits from the use of the asset through the period of the lease and (iii) the customer has the right to direct the use of the asset.

i) As a Lessee

At the date of commencement of the lease, the Company recognises a right-of-use asset (ROU) and a corresponding lease liability for all lease arrangements in which it is a lessee, except for lease with a term of twelve months or less (i.e. short term leases) and leases for which the underlying asset is of low value. For these short-term and leases for which the underlying asset is of low value, the Company recognizes the lease payments on straight-line basis over the term of the lease.

Certain lease arrangements include the options to extend or terminate the lease before the end of the lease term. ROU assets and lease liabilities includes these options when it is reasonably certain that they will be exercised.

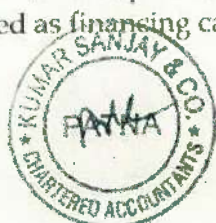
The right-of-use assets are initially recognized at cost, which comprises the amount of the initial measurement of the lease liability adjusted for any lease payments made at or before the inception date of the lease along with any initial direct costs, restoration obligations and lease incentives received.

Subsequently, the right-of-use assets is measured at cost less any accumulated depreciation, accumulated impairment losses, if any and adjusted for any remeasurement of the lease liability. The Company applies Ind AS 36 to determine whether a ROU asset is impaired and accounts for any identified impairment loss as described in the accounting.

The lease liability is initially measured at present value of the lease payments that are not paid at that date.

The interest cost on lease liability is expensed in the Statement of Profit and Loss, unless eligible for capitalization as per accounting policy 2.6 on "Borrowing costs".

Lease liability and ROU asset have been separately presented in the financial statements and lease payments have been classified as financing cash flows.



ii) As a Lessor

A lease is classified at the inception date as a finance lease or an operating lease.

a) Finance leases

A lease that transfers substantially all the risks and rewards incidental to ownership of an asset is classified as a finance lease.

The interest element of lease is accounted in the Statement of Profit and Loss over the lease period based on a pattern reflecting a constant periodic rate of return on the net investment as per the tariff notified by BERC.

b) Operating leases

An operating lease is a lease other than a finance lease. Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases.

For operating leases, the asset is capitalized as property, plant and equipment and depreciated over its economic life. Rental income from operating lease is recognized over the term of the arrangement.

2.10 Employee benefits

2.10.1 Defined contribution plans

A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions into separate entities (Funds) and will have no legal or constructive obligation to pay further contributions, if the Fund does not hold sufficient assets to pay all employee's benefits related to employee service in the current and prior periods. Obligations for contribution to defined contribution plans are recognized as an employee benefits expense in the statement of profit and loss in the period during which services are rendered by employees.

The Company has a defined contribution pension scheme which is administered through a separate trust. The obligation of the Company is to contribute to the trust to the extent of amount not exceeding 30% of basic pay and dearness allowance less employer's contribution towards provident fund, gratuity, post-retirement medical facility (PRMF) or any other retirement benefits. The contributions to the fund for the year are recognized as an expense and charged to the statement of profit and loss.

2.10.2 Defined benefit plans

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan. The Company's liability towards gratuity, post-retirement medical facility, baggage allowance for settlement at home town after retirement, long service award on retirement and provident fund scheme to the extent of interest liability on provident fund contribution are in the nature of defined benefit plans.

The Company pays fixed contribution to Provident Fund at predetermined rates to a separate trust, which invests the funds in permitted securities. The contributions to the fund for the year are recognized as expense and are charged to the statement of profit and loss. The obligation of the Company is limited to such fixed contributions and to ensure a minimum rate of interest on contributions to the members as specified by the Government of India (GoI).

The Company has schemes for payment of baggage allowance towards expenses for settlement at hometown for the superannuated employees & their dependents and for



providing a Long Service Award to all regular employees of the Company on superannuation.

The Company's net obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value. Any unrecognized past service costs and the fair value of any plan assets are deducted. The discount rate is based on the prevailing market yields of Indian government securities as at the reporting date that have maturity dates approximating the terms of the Company's obligations and that are denominated in the same currency in which the benefits are expected to be paid.

The calculation is performed annually by a qualified actuary using the projected unit credit method. When the calculation results in a benefit to the Company, the recognized asset is limited to the total of any unrecognized past service costs and the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. An economic benefit is available to the Company if it is realizable during the life of the plan, or on settlement of the plan liabilities. Any actuarial gains or losses are recognized in OCI in the period in which they arise and subsequently not reclassified to profit or loss.

When the benefits of a plan are improved, the portion of the increased benefit relating to past service by employees is recognized in the statement of profit and loss on a straight-line basis over the average period until the benefits become vested. To the extent that the benefits vest immediately, the expense is recognized immediately in the statement of profit and loss.

2.10.3 Other long-term employee benefits

Benefits under the Company's leave encashment and employee family economic rehabilitation scheme constitute other long term employee benefits.

The Company's net obligation in respect of leave encashment is the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value. The discount rate is based on the prevailing market yields of Indian government securities as at the reporting date that have maturity dates approximating the terms of the Company's obligations. The calculation is performed using the projected unit credit method. Any actuarial gains or losses are recognized in the statement of profit and loss in the period in which they arise.

As per 'POWERGRID Employee Family Economic Rehabilitation Scheme', which is optional, in the event of death or permanent total disability of an employee, the dependent(s) or the employee, as the case may be, is paid a fixed amount based on the last salary drawn by the employee till the notional date of superannuation of the employee upon depositing the final provident fund and gratuity amount which will be interest free.

2.10.4 Short-term benefits

Short term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided.

A liability is recognized for the amount expected to be paid under performance related pay if the Company has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

2.11 Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.



Financial Assets

Classification

The Company classifies its financial assets in the following categories:

- at amortised cost,
- at fair value through other comprehensive income

The classification depends on the following:

- the entity's business model for managing the financial assets and
- the contractual cash flow characteristics of the financial asset

Initial recognition and measurement

All financial assets are recognised initially at fair value plus, in the case of financial assets not recorded at fair value through profit or loss, transaction costs, if any, that are attributable to the acquisition of the financial asset.

Subsequent measurement

Debt Instruments at Amortised cost: Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost. A gain or loss on a debt investment that is subsequently measured at amortised cost is recognised in profit or loss when the asset is derecognised or impaired. Interest income from these financial assets is included in finance income using the effective interest rate method.

Debt Instruments at Fair value through other comprehensive income (FVOCI): Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at fair value through other comprehensive income (FVOCI). On derecognition of the asset, cumulative gain or loss previously recognised in OCI is reclassified from the equity to profit and loss. Interest income from these financial assets is included in finance income using the effective interest rate method.

Derecognition of financial assets

A financial asset is derecognized only when

- The right to receive cash flows from the asset have expired, or
- a) The company has transferred the rights to receive cash flows from the financial asset (or) retains the contractual rights to receive the cash flows of the financial assets, but assumes a contractual obligation to pay the cash flows to one or more recipients and
b) the company has transferred substantially all the risks and rewards of the asset (or) the company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

The difference between the carrying amount and the amount of consideration received/receivable is recognised in the Statement of Profit and Loss.

Impairment of financial assets:

For trade receivables and unbilled revenue, the company applies the simplified approach required by Ind AS 109 Financial Instruments, which requires expected lifetime losses to be recognised from initial recognition of the receivables.

For recognition of impairment loss on other financial assets and risk exposure, the company determines whether there has been a significant increase in the credit risk since initial



recognition. If credit risk has not increased significantly, 12-month Expected Credit Loss (ECL) is used to provide for impairment loss. However, if credit risk has increased significantly, lifetime ECL is used. If, in a subsequent period, credit quality of the instrument improves such that there is no longer a significant increase in credit risk since initial recognition, then the entity reverts to recognizing impairment loss allowance based on 12-month ECL.

Financial Liabilities

Financial liabilities of the Company are contractual obligation to deliver cash or another financial asset to another entity or to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the Company.

The Company's financial liabilities include loans & borrowings, trade and other payables.

Classification, initial recognition and measurement

Financial liabilities are recognised initially at fair value minus, in the case of financial liabilities not recorded at fair value through profit or loss, transaction costs that are directly attributable to the issue of financial liabilities.

Subsequent measurement

After initial recognition, financial liabilities are subsequently measured at amortised cost using the EIR method. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate (EIR). Any difference between the proceeds (net of transaction costs) and the redemption amount is recognised in the Statement of Profit and Loss over the period of the borrowings using the EIR. Gains and losses are recognised in Statement of Profit and Loss when the liabilities are derecognised.

The EIR amortisation is included as finance costs in the Statement of Profit and Loss.

Derecognition of financial liability

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference between the carrying amount of a financial liability that has been extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in Statement of Profit and Loss as other income or finance cost.

Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the Balance Sheet if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

2.12 Foreign Currency Translation

(a) Functional and presentation currency

Items included in the financial statements of the Company are measured using the currency of the primary economic environment in which the Company operates ('the functional currency'). The financial statements are presented in Indian Rupees in Lakh (₹ in Lakh), which is the Company's functional and presentation currency.



(b) Transactions and balances

Transactions in foreign currencies are initially recorded at the exchange rates prevailing on the date of the transaction. Foreign currency monetary items are translated with reference to the rates of exchange ruling on the date of the Balance Sheet. Non-Monetary items denominated in foreign currency are reported at the exchange rate ruling on the date of initial recognition of the non-monetary prepayment asset or deferred income liability, or the date that related item is recognized in the financial statements, whichever is earlier. In case the transaction is recognized in stages, then transaction date is established for each stage.

Foreign exchange gains and losses (other than related to foreign currency loans outstanding) are presented in the statement of profit and loss on a net basis within other gains/ (losses).

2.13 Income Tax

Income tax expense represents the sum of current and deferred tax. Tax is recognised in the Statement of Profit and Loss, except to the extent that it relates to items recognised directly in equity or other comprehensive income. In this case the tax is also recognised directly in equity or in other comprehensive income.

Current income tax

The Current Tax is based on taxable profit for the year under the tax laws enacted and applicable to the reporting period in the countries where the company operates and generates taxable income and any adjustment to tax payable in respect of previous years.

Deferred tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the company's financial statements and the corresponding tax bases used in the computation of taxable profit and is accounted for using the Balance Sheet method. Deferred tax assets are generally recognised for all deductible temporary differences, unused tax losses and unused tax credits to the extent that it is probable that future taxable profits will be available against which those deductible temporary differences, unused tax losses and unused tax credits can be utilised. The carrying amount of deferred tax assets is reviewed at each Balance Sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available against which the temporary differences can be utilised.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the Balance Sheet date.

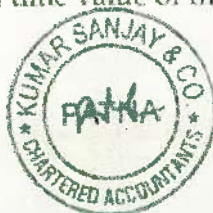
Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority.

2.14 Revenue

Revenue is measured based on the consideration specified in a contract with a customer and excludes amounts collected on behalf of third parties. The Company recognizes revenue when it transfers control over a product or service to a customer.

Significant Financing Component

Where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year, the Company assesses the effects of significant financing component in the contract. As a consequence, the Company makes adjustment in the transaction prices for the effects of time value of money.



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2.15.1 Revenue from Operations

Transmission

Transmission Income is accounted for based on tariff orders notified by the BERC. In case of transmission projects where final tariff orders are yet to be notified, transmission income is accounted for on provisional basis as per tariff regulations and orders of the BERC in similar cases. Difference, if any, is accounted on issuance of final tariff orders by the BERC. Transmission Income in respect of additional capital expenditure incurred after the date of commercial operation is accounted for based on expenditure incurred on year-to-year basis as per BERC tariff regulations. As at each reporting date, transmission income includes an accrual for services rendered to the customers but not yet billed i.e., Unbilled Revenue.

Rebates allowed to beneficiaries as early payment incentives are deducted from the amount of revenue.

The Transmission system incentive / disincentive is accounted for based on certification of availability by the respective Regional Power Committees (RPCs) and in accordance with the BERC tariff regulations. Where certification by RPCs is not available, incentive/disincentive is accounted for on provisional basis as per estimate of availability by the company and differences, if any is accounted upon certification by RPCs.

Advance against depreciation (AAD), forming part of tariff pertaining upto the block period 2004-09, to facilitate repayment of loans, was reduced from transmission income and considered as deferred income to be included in transmission income in subsequent years. The outstanding deferred income in respect of AAD is recognized as transmission income, after twelve years from the end of the financial year in which the asset was commissioned, to the extent depreciation recovered in the tariff during the year is lower than depreciation charged in the accounts.

2.15.2 Other Income

Interest income is recognized, when no significant uncertainty as to measurability or collectability exists, on a time proportion basis taking into account the amount outstanding and the applicable interest rate, using the effective interest rate method (EIR).

Surcharge recoverable from trade receivables, liquidated damages, warranty claims and interest on advances to suppliers are recognized when no significant uncertainty as to measurability and collectability exists.

Scrap other than steel scrap & conductor scrap are accounted for as and when sold.

Dividend income is recognized when right to receive payment is established.

Insurance claims for loss of profit are accounted for in the year of acceptance. Other insurance claims are accounted for based on certainty of realization.

Revenue from rentals and operating leases is recognized on an accrual basis in accordance with the substance of the relevant agreement.

2.16 Dividends

Annual dividend distribution to the shareholders is recognised as a liability in the period in which the dividends are approved by the shareholders. Any interim dividend paid is recognised on approval by Board of Directors. Dividend payable and corresponding tax on dividend distribution is recognised directly in equity.



2.17 Provisions and Contingencies

a) Provisions

Provisions are recognised when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. If the effect of the time value of money is material, provisions are discounted. Unwinding of the discount is recognised in the Statement of Profit and Loss as a finance cost. Provisions are reviewed at each Balance Sheet date and are adjusted to reflect the current best estimate.

b) Contingencies

Contingent liabilities are disclosed on the basis of judgment of the management / independent experts. These are reviewed at each balance sheet date and are adjusted to reflect the current management estimate.

Contingent liabilities are disclosed when there is a possible obligation arising from past events, the existence of which will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Company or a present obligation that arises from past events where it is either not probable that an outflow of resources will be required to settle or a reliable estimate of the amount cannot be made. Information on contingent liability is disclosed in the Notes to the Financial Statements.

Contingent assets are possible assets that arise from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Company. Contingent assets are disclosed in the financial statements when inflow of economic benefits is probable on the basis of judgment of management. These are assessed continually to ensure that developments are appropriately reflected in the financial statements.

2.18 Share capital and Other Equity

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, from the proceeds.

2.19 Prior Period Items

Material prior period errors are corrected retrospectively by restating the comparative amounts for prior period presented in which the error occurred or if the error occurred before the earliest period presented, by restating the opening statement of financial position.

2.20 Operating Segments

The Board of Directors is the Company's 'Chief Operating Decision Maker' or 'CODM' within the meaning of Ind AS 108 'Operating Segments'. CODM monitors the operating results of its business segments separately for the purpose of making decisions about resource allocation and performance assessment. Segment performance is evaluated based on profit or loss and is measured consistently with profit or loss in the financial statements.

The operating segments have been identified on the basis of the nature of products / services.

- Segment revenue includes sales and other income directly identifiable with / allocable to the segment including inter-segment transactions.
- Expenses that are directly identifiable with / allocable to segments are considered for



determining the segment result. Expenses which relate to the Company as a whole and not allocable to segments are included under unallocable expenditure.

- Income which relates to the Company as a whole and not allocable to segments is included in unallocable income.
- Segment assets and liabilities include those directly identifiable with the respective segments. Unallocable assets and liabilities represent the assets and liabilities that relate to the Company as a whole and not allocable to any segment.
- Segment capital expenditure is the total cost incurred during the period to acquire property, plant and equipment, and intangible assets.

2.21 Earnings per Share

Basic earnings per share is computed using the net profit or loss for the year attributable to the shareholders and weighted average number of shares outstanding during the year.

Diluted earnings per share is computed using the net profit or loss for the year attributable to the shareholders and weighted average number of equity and potential equity shares outstanding during the year, except where the result would be anti-dilutive.

Additionally, basic and diluted earnings per share are computed using the earnings amounts excluding the movements in Regulatory Deferral Account Balances.

2.22 Statement of Cash Flows

Statement of Cash flows is prepared as per indirect method prescribed in the Ind AS 7 'Statement of Cash Flows'.

3. Critical Estimates and Judgments

The preparation of financial statements requires the use of accounting estimates which may significantly vary from the actual results. Management also needs to exercise judgment while applying the company's accounting policies.

This note provides an overview of the areas that involved a higher degree of judgment or complexity, and of items which are more likely to be materially adjusted due to estimates and assumptions turning out to be different than those originally assessed.

The areas involving critical estimates or judgments are:

Revenue Recognition:

Transmission income is accounted for based on tariff orders notified by the BERC. In case of transmission projects where final tariff orders are yet to be notified, transmission income is accounted for as per tariff regulations and other orders of the BERC in similar cases. Differences, if any, are accounted on issuance of final tariff orders by the BERC. Transmission income in respect of additional capital expenditure incurred after the date of commercial operation is accounted for based on expenditure incurred on year-to-year basis as per BERC tariff regulations.

Useful life of property, plant and equipment:

The estimated useful life of property, plant and equipment is based on a number of factors including the effects of obsolescence, demand, competition and other economic factors (such as the stability of the industry and known technological advances) and the level of maintenance expenditures required to obtain the expected future cash flows from the asset.

The Company reviews at the end of each reporting date the useful life of plant and equipment, other than the assets of transmission business which are governed by BERC Regulations, and are adjusted prospectively, if appropriate.



Provisions and contingencies:

The assessments undertaken in recognizing provisions and contingencies have been made in accordance with Ind AS 37 "Provisions, Contingent Liabilities and Contingent Assets". The evaluation of the likelihood of the contingent events has required best judgment by management regarding the probability of exposure to potential loss. Should circumstances change following unforeseeable developments, this likelihood could alter.



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BIHAR GRID COMPANY LIMITED
NOTE 4 - PROPERTY, PLANT & EQUIPMENT

(₹ in Lakhs)

Sl NO.	Particulars	COST			ACCUMULATED DEPRECIATION			NET BOOK VALUE		
		As at 1st April, 2022	Additions during the year	As at 31st March 2023	As at 1st April, 2022	For the year	As at 31st March 2023	As at 31st March 2023	As at 31st March 2022	As at 31st March 2022
1	Land									
	a) Freehold Land	657.06	-	657.06	-	-	-	657.06	657.06	657.06
	b) Leasehold Land (perpetual)	5,152.68	-	5,152.68	-	-	-	5,152.68	5,152.68	5,152.68
2	Buildings									
	a) Building & civil work	18,396.38	8,473.94	26,870.32	1,580.95	689.28	2,270.23	24,600.09	16,813.43	16,813.43
3	Plant and Machinery									
	a) Transmissions	97,099.08	16,046.10	1,13,145.18	17,941.24	5,760.57	23,701.81	89,443.37	79,157.84	79,157.84
	b) Sub-stations	1,13,304.69	27,761.46	1,41,066.16	18,009.16	6,177.85	24,187.00	1,16,879.15	95,295.33	95,295.33
4	Furniture and Fixtures									
	a) Furniture	212.17	74.74	286.91	36.46	16.23	52.69	234.22	173.72	173.72
	b) Electrical installation	15.23	-	15.23	3.07	0.96	4.04	11.20	12.16	12.16
5	Office Equipment									
	a) Office equipment	104.16	185.83	289.99	19.18	10.06	29.24	260.76	84.99	84.99
	b) Electronic data processing machine	81.19	-	81.19	73.47	25.73	99.20	-18.01	7.72	7.72
	c) Servers & network component	34.77	-	34.77	19.30	6.95	26.25	8.51	15.47	15.47
	d) Servicing equipment	576.11	59.68	635.78	79.45	39.40	118.85	516.94	496.66	496.66
	SUB-TOTAL	2,35,633.52	52,601.75	2,88,235.27	37,762.27	12,727.02	50,489.30	2,37,745.98	1,97,871.25	1,97,871.25

Sl NO.	Particulars	COST			ACCUMULATED DEPRECIATION			NET BOOK VALUE		
		As at 1st April, 2021	Additions during the year	As at 31st March 2022	As at 1st April, 2021	For the year	As at 31st March 2022	As at 31st March 2022	As at 31st March 2021	As at 31st March 2021
1	Land									
	a) Freehold Land	657.06	-	657.06	-	-	-	657.06	657.06	657.06
	b) Leasehold Land (perpetual)	5,152.68	-	5,152.68	-	-	-	5,152.68	5,152.68	5,152.68
2	Buildings									
	a) Building & civil work	12,911.09	5,465.29	18,376.38	1,141.44	439.51	1,580.95	16,815.43	11,789.65	11,789.65
3	Plant and Machinery									
	a) Transmissions	92,497.01	4,602.07	97,099.08	13,046.31	4,894.92	17,941.24	79,157.84	79,430.69	79,430.69
	b) Sub-stations	95,807.66	17,497.04	1,13,304.69	12,899.90	5,109.26	18,009.16	95,295.53	82,907.75	82,907.75
4	Furniture and Fixtures									
	a) Furniture	190.74	21.43	212.17	23.53	12.93	36.46	175.72	167.21	167.21
	b) Electrical installation	14.78	0.45	15.23	2.12	0.95	3.07	12.16	12.67	12.67
5	Office Equipment									
	a) Office equipment	52.52	51.64	104.16	14.14	5.04	19.18	84.99	38.38	38.38
	b) Electronic data processing machine	75.88	6.61	81.19	47.65	26.53	73.47	7.72	28.23	28.23
	c) Servers & network component	34.77	-	34.77	12.35	6.95	19.30	15.47	22.42	22.42
	d) Servicing equipment	488.11	86.00	574.11	46.78	32.67	79.45	496.66	441.33	441.33
	SUB-TOTAL	2,07,902.29	27,732.53	2,35,633.52	27,234.21	10,528.77	37,762.27	1,97,871.25	1,80,668.08	1,80,668.08



BIHAR GRID COMPANY LIMITED
NOTE 5 - Capital Work-in-Progress

(₹ in Lakh)

Particulars	As at 1st April, 2022	Additions during the year	Adjustments	Capitalised during the year	As at 31st March 2023
Part-2					
Crop Compensation	2,291.25	902.49	-	1,623.70	1,570.04
CWIP - IDC	3,624.79	2,738.26	-	4,463.05	1,900.00
CWIP - IEDC.	4,492.69	547.20	-	3,943.08	1,096.81
CWIP - Transformers.	5,363.39	2,022.26	-	7,023.54	362.11
Tree Compensation	27.71	42.18	-	31.29	38.60
CWIP - Insulators	557.10	-	-	166.18	390.92
CWIP - Conductors & EW	6,904.30	-	-	3,401.31	3,502.99
CWIP-Substation/Bays	10,245.21	13,529.44	-	23,352.77	421.88
CWIP - Towers	14,167.79	536.82	-	8,276.59	6,428.02
Part-1					
Crop Compensation	768.04	-	-	-	768.04
CWIP - Conductors & EW	914.77	-	0.02	-	914.75
CWIP - IDC.	7,281.68	2,019.72	-	-	9,301.40
CWIP - IEDC.	463.19	225.81	-	-	689.00
CWIP - Insulators	170.27	-	-	-	170.27
CWIP-Substation/Bays	595.34	261.79	-	-	857.13
CWIP - Towers	207.50	-	63.52	-	143.98
CWIP - Transformers	5.20	-	-	-	5.20
Tree Compensation	20.58	16.99	-	-	37.57
	58,100.82	22,842.96	63.54	52,281.51	28,598.73
Part-2					
Constn.Stores with Contractors-Station Materials	8,851.49	4,390.73	-	12,500.00	742.22
Constn.Stores with Contractors- Towers	291.53	112.34	-	232.90	170.97
Const.Stores With Contractors-Conductors&EW	490.58	320.81	-	-	811.39
Const.Stores With Contractors - Insulators.	120.26	17.72	-	0.70	137.28
Const. Stores with Contractors-Transformers	1,774.39	181.23	-	1,946.28	9.34
Part-1					
Constn.Stores with Contractors-Station Materials	7,276.85	3,193.32	-	0.06	10,470.11
Constn.Stores with Contractors- Towers	633.32	-	-	-	633.32
Const.Stores With Contractors-Conductors&EW	1,071.72	-	-	-	1,071.72
Const.Stores With Contractors - Insulators.	335.37	-	-	-	335.37
Total	20,845.51	8,216.15	63.54	14,679.94	14,381.72
	78,946.33	31,059.11	63.54	66,961.45	42,980.45

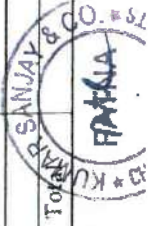


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BIHAR GRID COMPANY LIMITED
NOTE 5 - Capital Work-in-Progress

(₹ in Lakh)

Particulars	As at 1st April, 2021	Additions during the year	Adjustments	Capitalised during the year	As at 31st March 2022
Part-2					
Crop Compensation	1,828.66	860.25	-	397.66	2,291.25
CWIP - IDC	3,021.68	2,450.65	161.85	1,685.69	3,624.79
CWIP - Transformers	7,919.13	490.26	-	3,046.00	5,363.39
Tree Compensation	23.47	36.64	-	32.40	27.71
CWIP - Insulators	475.73	180.44	-	99.07	557.10
CWIP- Ind AS	-323.70	323.70	-	-	-
CWIP - Conductors & EW	4,882.36	3,070.82	-	1,048.88	6,904.30
CWIP - IEDC.	6,514.76	83.57	-	2,105.64	4,492.69
CWIP-Substation/Bays	23,342.18	3,661.02	-	16,757.98	10,245.21
CWIP -Towers	13,885.37	2,673.49	-	2,391.07	14,167.79
Part-1					
Crop Compensation	699.34	68.71	-	-	768.04
CWIP - Conductors & EW	891.21	23.56	-	-	914.77
CWIP - IDC.	5,650.12	1,631.56	-	-	7,281.68
CWIP - IEDC.	272.02	191.18	-	-	463.19
CWIP - Ind AS	-93.30	95.30	-	-	-
CWIP - Insulators	170.27	-	-	-	170.27
CWIP-Substation/Bays	27.57	567.76	-	-	595.34
CWIP -Towers	230.77	-	23.26	-	207.50
CWIP - Transformers	5.20	-	-	-	5.20
Tree Compensation	13.04	7.54	-	-	20.58
	69,433.88	16,416.45	185.12	27,564.40	58,100.82
Part-2					
Constn.Stores with Contractors-Station Materials	6,667.23	3,324.72	1,140.46	-	8,851.49
Constn.Stores with Contractors- Towers	121.16	1,472.66	1,302.28	-	291.53
Const. Stores - In Transit	1,150.24	-	1,150.24	-	-
Const.Stores With Contractors-Conductors&EW	2,546.12	1,015.29	3,070.82	-	490.58
Const.Stores With Contractors - Insulators.	203.65	97.06	180.44	-	120.26
Const. Stores with Contractors-Transformers	1,336.87	900.58	463.07	-	1,774.39
Part-1					
Constn.Stores with Contractors-Station Materials	3.01	7,273.84	-	-	7,276.85
Constn.Stores with Contractors- Towers	633.32	-	-	-	633.32
Const.Stores With Contractors-Conductors&EW	775.68	296.03	-	-	1,071.72
Const.Stores With Contractors - Insulators.	335.37	-	-	-	335.37
Total	13,772.64	14,380.17	7,307.31	27,564.40	20,845.51
	83,206.53	30,796.62	7,492.42	27,564.40	78,946.33



BIHAR GRID COMPANY LIMITED
NOTE 6 - OTHER INTANGIBLE ASSETS

(₹ in Lakh)

Sl. NO.	Particulars	COST			ACCUMULATED AMORTISATION				NET BOOK VALUE		
		As at 1st April, 2022	Additions during the year	Adjustment during the year	As at 31st March 2023	As at 1st April, 2022	Additions during the year	Adjustment during the year	As at 31st March 2023	As at 31st March 2023	As at 31st March 2022
1	EDP Software	15.07	-	-	15.07	12.36	2.71	-	15.07	-	2.71
2	Right of Way- Afforestation Expenses	143.32	16.65	-	159.97	28.52	10.76	-	39.28	120.69	114.80
	SUB-TOTAL	158.39	16.65	-	175.04	40.88	13.47	-	54.35	120.69	117.51

(₹ in Lakh)

Sl. NO.	Particulars	COST			ACCUMULATED AMORTISATION				NET BOOK VALUE		
		As at 1st April, 2021	Additions during the year	Adjustment during the year	As at 31st March 2022	As at 1st April, 2021	Additions during the year	Adjustment during the year	As at 31st March 2022	As at 31st March 2021	
1	EDP Software	13.69	1.39	-	15.07	11.09	1.27	-	12.36	2.71	2.60
2	Right of Way- Afforestation Expenses	143.32	-	-	143.32	20.95	7.57	-	28.52	114.80	122.36
	SUB-TOTAL	157.00	1.39	-	158.39	32.04	8.84	-	40.88	117.51	124.96



BIHAR GRID COMPANY LIMITED
NOTE 7 - INTANGIBLE ASSETS UNDER DEVELOPMENT

(₹ in Lakh)

Particulars	As at 1st April, 2022	Additions during the year	Adjustments	Capitalised during the year	As at 31st March 2023
1 Right of Way- Afforestation Expenses	16.65	-	-	16.65	-
	16.65	-	-	16.65	-

In ₹ (Rupees)

Particulars	As at 1st April, 2021	Additions during the year	Adjustments	Capitalised during the year	As at 31st March 2022
1 Right of Way- Afforestation Expenses	16.65	-	-	-	16.65
	16.65	-	-	-	16.65



BIHAR GRID COMPANY LIMITED
NOTE 8 - Other Non-current Assets

(₹ in Lakh)

Particulars	As at 31-March-2023	As at 31-March-2022
Secured against Bank Guarantee:		
Advance to ABB	45.71	63.40
Advance to TATA PROJECT	17.15	10.24
Un-secured:		
Security Deposit- Alankar Place Office	8.85	8.85
Security Deposit to CDSL	1.50	1.50
Security Deposit to NSDI	1.50	1.50
Grand Total	74.71	85.49

NOTE 9 - Inventories

(₹ in Lakh)

Particulars	As at 31-March-2023	As at 31-March-2022
Conductors & EW	60.44	60.44
Insulators	7.31	7.31
Other Line Materials	48.20	48.20
Tower Materials	53.92	53.92
Total	169.87	169.87

Notes-Inventory lying idle for issue for last 1 year

NOTE 10 - Trade Receivables

(₹ in Lakh)

Particulars	As at 31-March-2023	As at 31-March-2022
Trade receivables		
Unsecured Considered good (Bihar State Power Holding Company Limited)	49,881.07	61,867.58
Total	49,881.07	61,867.58

NOTE 11 - Cash and Cash Equivalents

(₹ in Lakh)

Particulars	As at 31-March-2023	As at 31-March-2022
Balances with banks In Current Accounts (with Sweep TD)	23,563.63	12,989.26
Total	23,563.63	12,989.26

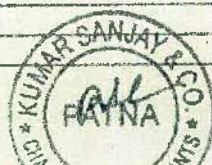
NOTE 12 - Other Current Assets
A. Advances Recoverable

(₹ in Lakh)

Particulars	As at 31-March-2023	As at 31-March-2022
Part-2		
Deposits for Capital Works	92.33	85.44
Recoverable From Con-Sup-Others	44.84	44.84
Part-1		
Employee Advance	46.97	22.76
CSR Advance	77.39	99.85
Interest Accrued	467.82	-
Employee Advance		
Prepaid Expenses	81.52	84.17
Recoverable From Con-Sup-Others	20.24	20.24
Sub Total (A)	831.11	357.30

B. Advance Tax and TDS

Particulars	As at 31-March-2023	As at 31-March-2022
Advance Payment of Income Tax		
Opening Balance	2,105.09	3,981.71
Paid during the year	-	2,105.09
Adjustment during the year	(2,105.09)	(3,981.71)
Total	-	2,105.09
TDS/ICS Collected /to be Collected		
Opening Balance	747.86	204.07
Accounted for during the year	743.61	1,482.49
Adjustment during the year	(895.33)	(938.70)
Total	596.14	747.86
Income tax recoverable		
Opening Balance	2,888.46	863.52
Accounted for during the year	-	2,888.46
Realised during the year	(2,888.46)	(863.52)
Total	-	2,888.46
Sub Total (B)	596.14	5,741.41
Grand Total (A+B)	1,427.25	6,098.71



NOTE 13 - Equity Share Capital.

Authorized, Issued, Subscribed and Paid up share capital

(₹ in Lakh)

Particulars	As at 31-March-2023		As at 31-March-2022	
	Number of Shares	Amount	Number of Shares	Amount
Authorised Share Capital				
Equity Shares of ₹ 10 each	80,00,00,000	80,000.00	80,00,00,000	80,000.00
Total	80,00,00,000	80,000.00	80,00,00,000	80,000.00
Issued Share Capital				
Equity Shares of ₹ 10 each	66,82,54,520	66,825.45	64,50,70,072	64,507.01
Total	66,82,54,520	66,825.45	64,50,70,072	64,507.01

a. Reconciliation of the shares outstanding at the beginning and at the end of the reporting period.

Equity Shares.

Particulars	As at 31-March-2023		As at 31-March-2022	
	No. of Shares	(₹ in Lakh)	No. of Shares	(₹ in Lakh)
At the beginning of the period	64,50,70,072	64,507.01	58,05,93,870	58,059.39
Issued During the period	2,31,84,448	2,318.44	6,44,76,202	6,447.62
Outstanding at the end of the period	66,82,54,520	66,825.45	64,50,70,072	64,507.01

b. Terms/ rights attached to equity shares

The Company has only one class of equity shares having nominal value of Rs.10 per share. Each holder of equity entitled to one vote per share.

In the event of liquidation of the company, the holders of equity shares will be entitled to received remaining assets of the company, after distribution of all preferential amounts. The distribution will be in proportion to the number of equity shares held by the shareholders.

c. Shares held by holding company.

Out of equity shares issued by the company, shares held by the Joint Venture partners are as below:

	(₹ in Lakh)	(₹ in Lakh)
	31.03.2023	31.03.2022
Power Grid Corporation of India Limited		
33,41,27,260 equity shares of Rs. 10 each fully paid	33,412.73	32,253.50
Bihar State Power (Holding) Company Ltd.		
33,41,27,260 equity shares of Rs. 10 each fully paid	33,412.73	32,253.50

d. Details of shareholders holding more than 5% shares in the company

	As at 31-March-2023		As at 31-March-2022	
	No. of Shares	% holding in the class	No. of Shares	% holding in the class
Equity Shares of Rs.10 each fully paid				
Power Grid Corporation of India Ltd.*	33,41,27,260	50%	32,25,35,036	50%
Bihar State Power Holding Co. Ltd.**	33,41,27,260	50%	32,25,35,036	50%
	66,82,54,520	100%	64,50,70,072	100%

* Out of 33,41,27,260 equity shares, 3 shares are held by nominees of Power Grid Corporation of India Limited on its behalf (jointly with Power Grid Corporation of India Limited).

** Out of 33,41,27,260 equity shares, 300 shares are held by nominees of Bihar State Power (Holding) Company Ltd. on its behalf (jointly with Bihar State Power (Holding) Company Ltd.).



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Particulars	As at 31-March-2023	As at 31-March-2022
Deduction during the year		-
Balance at the End of the year	-	-
Share application money pending allotment	-	-
Less : Share Allotted during the year		-
Total	-	-
Retained Earnings		
Balance at the Beginning of the year	37,910.07	23,513.51
Add : Net Profit for the year	(8,817.35)	14,396.56
Less : Appropriations to CSR Reserve	-	-
Balance at the End of the year	29,092.72	37,910.07
Total	29,092.72	37,910.07

NOTE 15 - Long-Term Borrowings

(₹ in Lakh)

Particulars	As at 31-March-2023	As at 31-March-2022
Secured		
Term Loans		
From other parties		
Loan From REC	94,312.18	1,04,297.09
Loan From PFC	1,01,916.18	95,001.10
Total	1,96,228.36	1,99,298.19

Further Notes

The Company has taken term loan from Rural Electrification Corporation Ltd. (REC) for Part-1 Projects (Sanction Date 31-Oct-2014 for Rs. 1359.49 Crores and 06-Jan-2020 for Rs. 189.82 Crores) on which interest rate is fixed for each drawal till its repayment in 15 years. The repayment of interest and principal is on quarterly basis. Assets of the Company created out of this loan is hypothecated to REC as security of the loan up to 110% of the loan amount. The effective rate of interest as at 31.03.2023 is 10.72% p.a. (Previous year as at 31.3.2022 10.54% p.a.). Repayment of principal has been started from quarter ending 30.06.2018. There is no default in payment of Principal and Interest.

The Company has also taken term loan from Power Finance Corporation Ltd. (PFC) for Part-2 Projects (Sanction Date - 18-Jan-2018 for Rs. 1350.69 Crores) on which interest rate is fixed for each drawal till its repayment in 15 years. The repayment of interest and principal is on quarterly basis. Assets of the Company created out of this loan is hypothecated to PFC as security of the loan up to 110% of the loan amount. The effective rate of interest as at 31.03.2023 is 9.15% p.a. (Previous year as at 31.3.2022 9.13%). Repayment of Principal has not been started. There is no default in payment of interest.

NOTE 16 - Other Non-Current Financial Liabilities

(₹ in Lakh)

Particulars	As at 31-March-2023	As at 31-March-2022
Deposit/Retention Money-contractors/Other	9,386.76	7,098.86
Total	9,386.76	7,098.86



NOTE 17 - Deferred Tax Liabilities (Net)

(₹ in Lakh)

Particulars	As at 31-March-2023	As at 31-March-2022
As per Last Account	17,418.10	13,115.92
Additions during the year	(175.45)	4,302.18
Total	17,242.65	17,418.10

NOTE 18 - Other Current Financial Liabilities

(₹ in Lakh)

Particulars	As at 31-March-2023	As at 31-March-2022
Deposit/Retention Money-contractors/Other	3,642.25	6,091.15
Total	3,642.25	6,091.15

NOTE 19 - Current Borrowing

(₹ in Lakh)

Particulars	As at 31-March-2023	As at 31-March-2022
Loan from RBC	9,984.91	9,984.91
Loan from PFC	7,279.73	1,808.85
Total	17,264.64	11,793.76

NOTE 20 - Other Current Liabilities

(₹ in Lakh)

Particulars	As at 31-March-2023	As at 31-March-2022
Statutory Dues	91.75	135.92
Audit Fee Payable	0.68	0.86
Dead Cheque	117.16	113.67
E M D	27.87	18.48
Other Payables	13,641.11	8,344.94
PF/GPF	4.72	5.77
Payable to Power Grid	-	1.79
Vehicle Expenses Payable	6.60	21.16
Security / Manpower Outsource Payable	0.21	213.03
Deposit for Capital Works	1,537.36	1,501.83
Security Deposit	243.11	293.08
Total	15,670.57	10,650.54

NOTE 21 - Provisions

(₹ in Lakh)

Particulars	As at 31-March-2023	As at 31-March-2022
Provisions for Employees Benefits		
Salary, PRP, Leave Encashment & Reimbursement	392.92	369.64
Superannuation benefits	217.33	126.52
Total	610.25	496.16

NOTE 22 - Current Tax Liabilities

(₹ in Lakh)

Particulars	As at 31-March-2023	As at 31-March-2022
As per last year balance sheet	2,898.81	4,200.13
Additions during the year	-	2,898.81
Less: Amount adjusted during the year	2,898.81	4,200.13
Total	-	2,898.81



BIHAR GRID COMPANY LIMITED

NOTE 23 - Revenue from Operations

(₹ in Lakh)

Particulars	For the year ended 31-March 2023	For the year ended 31-March 2022
Sale of Service		
Transmission Charges	17,462.00	45,262.00
Total	17,462.00	45,262.00

Further Notes:

Transmission charges have been recognised as per Tariff orders issued by Bihar Electricity Regulatory Commission (BERC) on 25.03.2022 for the financial year 2022-23, the same was subject to Truing up in the next year. Transmission Charges for the year 2020-21 has been trued up with revenue Surplus & carrying cost of ₹ 25,870 Lakh.

NOTE 24 - Other income

(₹ in Lakh)

Particulars	For the year ended 31-March 2023	For the year ended 31-March 2022
Surcharge on transmission charges	6,730.71	5,989.39
Interest from Bank	726.75	275.58
Interest from Others	7.32	42.70
Interest on Income Tax Refund	302.81	69.08
Liquidated Damages Recovered	0.18	-
Insurance Claim	-	249.87
Sale of Scrap	-	13.24
Total	7,767.77	6,639.86
Less : Transferred to Expenditure during construction (Net) Note - 30	-	47.49
Grand Total	7,767.77	6,592.38

NOTE 25 - Employee Benefit Expenses

(₹ in Lakh)

Particulars	For the year ended 31-March 2023	For the year ended 31-March 2022
Salaries and Wages	2,016.10	1,849.37
Contribution to Provident Fund and Other Funds	269.90	292.05
Staff Welfare Expenses	104.21	83.63
Total	2,390.21	2,225.05
Less : Transferred to Expenditure during construction (Net) Note - 30	392.19	730.04
Grand Total	1,998.02	1,495.01

NOTE 26 - Finance Costs

(₹ in Lakh)

Particulars	For the year ended 31-March 2023	For the year ended 31-March 2022
Interest on REC Loan	11,182.50	12,259.02
Interest on PFC Loan	9,425.35	8,359.05
Total	20,607.85	20,618.07
Less : Transferred to Expenditure during construction (Net) Note - 30	4,757.98	3,032.84
Grand Total	15,849.87	17,585.23

NOTE 27 - Depreciation and Amortization Expenses

(₹ in Lakh)

Particulars	For the year ended 31-March 2023	For the year ended 31-March 2022
Depreciation of Property, Plant & Equipment	12,727.02	10,528.77
Amortisation of Intangible assets	13.47	8.84
Total	12,740.49	10,537.61



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BIHAR GRID COMPANY LIMITED
NOTE 28 - Other expenses

(₹ in Lakh)

Particulars	For the year ended 31-March 2023	For the year ended 31-March 2022
Repair & Maintenance		
-Plant & Machinery		
Repair & Maint.-Sub-Stations	1,036.50	852.50
Repair & Maint.-Trans. Line	8.29	4.29
R&M-Sub-Stn Security-Manpower Outsource	1,495.45	1,363.09
R&M-Transmission-Manpower Outsource	266.23	33.42
-Others	6.04	0.89
Advertisement Expenses	21.87	16.63
Audit Fees	2.09	1.75
Bank Charges	0.24	0.76
Books & Periodicals Expenses	0.15	0.42
Communication Expenses	0.78	1.81
CSR Exp.-Sports,Art & Culture	147.43	11.64
CSR Capital Expenditure	47.19	197.15
Electricity Expenses	282.77	161.32
Entertainment Expenses	8.45	9.93
Filing Fee	2.10	2.56
Insurance	108.18	99.22
Legal Expenses	11.64	8.80
Licence Fee	10.05	15.00
Loss on Sale of Fixed Assets	-	0.26
Meeting Expenses	10.08	4.29
Office Expenses	128.20	107.64
Printing & Stationery Expenses	9.94	18.35
Prof./technical Fee	47.68	11.49
Recruitment Expenses	-	0.31
Rent	76.58	73.47
Taxes, Brokerage & Commission	-	0.34
Telephone & Mobile Expenses	17.58	14.91
Travelling Expenses	65.99	52.38
Vehicle Expenses	203.51	197.39
Total	4,015.01	3,262.01
Less : Transferred to Expenditure during construction (Net) Note - 30	380.82	358.84
Grand Total	3,634.19	2,903.17

NOTE 29 - Tax Expense

In ₹ (Rupees)

Particulars	For the year ended 31-March 2023	For the year ended 31-March 2022
Tax Expense - Current	-	2,898.81
Tax Expense - Deferred	(175.45)	4,302.18
Total	(175.45)	7,200.99



BIHAR GRID COMPANY LIMITED

NOTE 30 - Expenditure during construction (Net)

(₹ in Lakh)

Particulars	For the year ended 31-March 2023	For the year ended 31-March 2022
A. Other expenses		
Repair & Maintenance -Others		
Repair & Maint.-Sub-Stations	103.65	3.03
R&M-Sub-Str Security-Manpower Outsource	152.16	180.93
-Others	0.85	0.99
Advertisement Expenses	3.06	5.46
Bank Charges	0.03	0.25
Books & Periodicals Expenses	0.02	0.14
Electricity Expenses	39.59	4.63
Entertainment Expenses	1.18	3.26
Filing Fee	0.29	0.84
Legal Expenses	1.63	2.89
Meeting Expenses	1.41	1.41
Office Expenses	17.97	34.08
Loss on Sale of Fixed Assets	-	0.09
Printing & Stationery Expenses	1.39	6.02
Prof./technical Fee	6.68	3.77
Recruitment Expenses	-	0.10
Rent	10.72	24.11
Telephone & Mobile Expenses	2.46	4.89
Travelling Expenses	9.24	17.18
Vehicle Expenses	28.49	64.76
Total A	380.82	358.83
B.Employee Benefit Expenses		
Salaries and Wages	330.80	606.78
Contribution to Provident Fund and Other Funds	44.29	95.82
Staff Welfare Expenses	17.10	27.44
Total B	392.19	730.04
C.Finance Cost		
Interest on REC Loan	2,019.72	1,692.05
Interest on PIC Loan	2,738.26	1,340.79
Total C	4,757.98	3,032.84
D. Less Other Income		
Interest from Bank	-	41.62
Interest from Others	-	5.87
Total D	-	47.49
Grand Total (A+B+C-D)	5,530.99	4,074.22



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Notes to Financial Statements

31. Exceptional and Extraordinary Items

There are no exceptional and extraordinary items as at the Balance Sheet date.

32. Auditors Remuneration

S. No.	Particulars	FY 2022-23 (₹. in Lakh)	FY 2021-22 (₹. in Lakh)
1	Audit Fees	0.75	0.75
2	Tax Audit Fee	0.30	0.30
3	Other Matters	0.60	0.60
	Total	1.65	1.65

33. Employee Benefits

The obligation as per Accounting Standard-15 "Employee Benefits" has been provided by the JV Partners. The Company has provided Short term liability in respect of the same.

34. The disclosure as per AS 18 - Related Party Disclosure :

The BIHAR GRID COMPANY LIMITED is a Joint Venture between Power Grid Corporation of India Ltd. and BIHAR STATE POWER(HOLDING) COMPANY LIMITED. All key decisions are taken by the Board of BIHAR GRID COMPANY LIMITED where nominees of POWERGRID and BIHAR STATE POWER(HOLDING) COMPANY LIMITED exercise control.

Details of Related parties and nature of relationship :

S. No.	Name of the Related Party	Nature of Relationship
1.	Power Grid Corporation of India Limited.	JV partner
2.	Bihar State Power (Holding) Company Limited	JV partner

Details of Related party transactions :

The following transactions occurred with related parties:

Particulars	₹ in Lakh	
	As on 31st March 2023	As on 31st March, 2022
Power Grid Corporation of India Ltd. (JV Partner)		
Investments Received during the year (Equity)	2,318.44	3,223.81
Reimbursement of Expenses	543.75	605.10
Post Award Techno Managerial Service	-	148.55

Particulars	₹ in Lakh	
	As on 31st March 2023	As on 31st March, 2022
Bihar State Power (Holding) Company Limited (JV Partner)		
Investments Received during the year (Equity)	2,318.44	3,223.81
Transmission Charges & Surcharge	24,192.71	51,251.39



35. **Borrowing cost**

Borrowing Cost of ₹ 4,757.98/-Lakh e.g. 23 % of total finance cost (Previous ₹ 3,032.83/-Lakh e.g. 15% of total finance cost) has been adjusted in the Property Plant & Equipment (PPE) / Capital Work in Progress (CWIP) as per Ind AS 23- "Borrowing Costs".

36. **Dues to Micro and Small Enterprises**

Based on information available with the company, there are few suppliers/service providers who are registered as micro, small or medium enterprise under The Micro, Small and Medium Enterprises Development Act, 2006 (MSMED Act, 2006). Information in respect of micro and small enterprises as required by Companies Act 2013 and MSMED Act, 2006 is given as under:

(₹ in lakh)

Sr. No	Particulars	For the year ended 31st March, 2023	For the year ended 31st March, 2022
1	Principal amount and interest due thereon remaining unpaid to any supplier as at end of each accounting year: Principal Interest	86.86 Nil	176.98 Nil
2	The amount of Interest paid by the buyer in terms of section 16 of the MSMED Act, 2006 along with the amount of the payment made to the supplier beyond the appointed day during each accounting year	Nil	Nil
3	The amount of interest due and payable for the period of delay in making payment (which have been paid but beyond the appointed day during the year) but without adding the interest specified under MSMED Act, 2006	Nil	Nil
4	The amount of interest accrued and remaining unpaid at the end of each accounting year.	Nil	Nil
5	The amount of further interest remaining due and payable even in the succeeding years, until such date when the interest dues as above are actually paid to the small enterprise for the purpose of disallowance as a deductible expenditure under section 23 of the MSMED Act 2006	Nil	Nil

37. **Key Management Personnel**

Sr. No.	Name of Director	Designation	Date of Appointment	Date of Resignation
1.	Shri. Sanjeev Hans, IAS	Chairman & Director	01.07.2021	Continuing
2.	Shri. Mahendra Kumar Singh	Managing Director	22.12.2020	28.10.2022
3.	Shri Amitava Barat	Managing Director	14.11.2022	Continuing
4.	Shri. K. Sreekant	Director	26.09.2019	Continuing
5.	Shri. Mukul Kumar Gupta, IAS	Additional Director	23.02.2022	07.05.2022
6.	Shri Prabhakar, IAS	Director	25.08.2022	Continuing
7.	Mrs. Seema Gupta	Woman Director	20.09.2018	31.05.2022
8.	Mrs. Manju Gupta	Woman Director	25.08.2022	Continuing
9.	Shri. Raju Lakshmanan, IAS	Nominee Director	19.06.2020	08.02.2023
10.	Shri T. S. C. Bosh	Nominee Director	08.02.2023	Continuing
11.	Shri. Yugesh Kumar Dixit	Director	23.02.2022	08.02.2023
12.	Shri D. N. Rozekar	Additional Director	08.02.2023	Continuing
13.	Shri. Madhav Kumar Choudhary	CFO	19.06.2020	26.08.2022
14.	Shri. Prabhat Kumar	CFO	26.08.2022	Continuing



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Remuneration to Key Managerial Personnel

Remuneration paid to Directors ₹ 63.54 Lakh (previous year ₹ 80.20 Lakh) Advance to directors is ₹ NIL (previous year ₹ NIL).

38. Segment Information

Business Segment

The Board of Directors is the company's Chief operating decision maker who monitors the operating results of its business segments separately for the purpose of making decisions about resource allocation and performance assessment. One reportable segments have been identified on the basis of product/services. The company has a single reportable segment i.e., Power transmission network for transmission system.

The operations of the company are mainly carried out within the country and therefore there is no reportable geographical segment.

39. Earnings Per Share

(₹ in Lakh)

Particulars	For the year ended 31.03.2023	For the year ended 31.03.2022
(a) Basic and diluted earnings per share attributable to the equity holders of the company	(1.28)	2.37
(b) Total Earnings attributable to the equity holders of the company	(8,817.35)	14,396.56
(c) Weighted average number of shares used as the denominator	68,98,82,632	60,76,16,288

40. Fair Value Measurements

(₹. InLakh)

Financial Instruments by category	31 st March, 2023		31 st March, 2022	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Financial Assets				
Trade Receivable	49,881.07	61,867.58	61,867.58	61,867.58
Cash & cash Equivalents	23,563.63	12,989.26	12,989.26	12,989.26
Total Financial assets	73,444.70	73,444.70	74,856.84	74,856.84
Financial Liabilities				
Borrowings	1,96,228.36	1,96,228.36	1,99,298.19	1,99,298.19
Other Non Current financial Liabilities	13,029.01	13,029.01	7098.86	7098.86
Other Financial Liabilities Current	3,642.25	3,642.25	6091.15	6091.15
Total financial liabilities	2,12,899.62	2,12,899.62	2,12,488.20	2,12,488.20

Further notes:

The carrying amounts of trade receivables, cash and cash equivalents and other current financial liabilities are considered to be the same as their fair value, due to their short term nature.

The carrying amount of borrowings are considered to be the same as their fair value, due to their fixed rate of interest for each drawl.



41. Capital management

a) Risk Management

The company's objectives when managing capital are to

- maximize the shareholder value;
- safeguard its ability to continue as a going concern;
- maintain an optimal capital structure to reduce the cost of capital.

For the purpose of the company's capital management, equity capital includes issued equity capital and all other equity reserves attributable to the equity holders of the company. The company manages its capital structure and makes adjustments in light of changes in economic conditions, regulatory framework and requirements of financial covenants with lenders. To maintain or adjust the capital structure, the company may adjust the dividend payment to shareholders, regulate investments in new projects, return capital to shareholders or issue new shares.

No changes were made in the objectives, policies or processes for managing capital during the years ended 31 March 2023.

b) Dividends

No dividend has been declared by the company in the previous year and current year.

42. Financial Risk Management:

The Company's principal financial liabilities comprise loans and borrowings denominated in Indian rupees, trade payables and other payables. The main purpose of these financial liabilities is to finance the Company's capital investments and operations.

The Company's principal financial assets include trade and other receivables, and cash and cash equivalents that are generated from its operations.

The Company's activities expose it to the following financial risks, namely,

- a) Credit risk,
- b) Liquidity risk,
- c) Market risk.



This note presents information regarding the company's exposure, objectives, policies and processes for measuring and managing these risks.

The management of financial risks by the Company is summarized below:-

a) Credit Risk

Credit risk is the risk that counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss.

A default on a financial asset is when the counterparty fails to make contractual payments within 3 years of when they fall due. This definition of default is determined considering the business environment in which the Company operates and other macro-economic factors.

Assets are written-off when there is no reasonable expectation of recovery, such as a debtor declaring bankruptcy or failing to engage in a repayment plan with the Company. Where loans or receivables have been written off, the Company continues to engage in enforcement activity to attempt to recover the receivable due. Where recoveries are made, these are recognized in the statement of profit and loss.



i. Trade Receivables and Unbilled Revenue

The Company primarily provides transmission facilities to intra-state transmission service customers (DTCs) comprising mainly NBPDC and SBPDCL (a wholly owned subsidiaries of Bihar State Power (Holding) Company Limited). BERC tariff regulations allows payment against monthly bills towards transmission charges within a period of 60 days from the date of the bill and levy of charge on delayed payment beyond 60 days. A granted rebate is provided by the company for payment made within 30 days.

Ageing analysis of trade receivables

The ageing analysis of the trade receivables is as below:-

Ageing						(₹. in Lakh)
	0-30 days past due	31-60 days past due	61-90 days past due	91-120 days past due	More than 120 days past due	Total
31.03.2023	4,455.73	1,455.17	1,455.17	1,455.17	41,059.84	49,881.07
31.03.2022	5,555.30	3,772.00	3,772.00	5,355.72	43,412.56	61,867.58

ii. Other Financial Assets (excluding trade receivables and unbilled revenue)

• Cash and cash equivalents

The Company held cash and cash equivalents of ₹ 23,563.63 Lakh on 31st March, 2023. The cash and cash equivalents are held with public sector banks and high rated private sector banks and do not have any significant credit risk.

Considering the above factors and the prevalent regulations, the trade receivables and unbilled revenue continue to have a negligible credit risk on initial recognition and thereafter on each reporting date.

b) Liquidity risk

Liquidity risk management implies maintaining sufficient cash and marketable securities and the availability of funding through an adequate amount of committed credit facilities to meet obligations when due. The Company monitors its risk of a shortage of funds using a liquidity planning tool. The Company has entered into Inter-Corporate Loan Agreement for Funding of its Obligations. For this, Company Provided Quarterly Cash Flows in Advance To Holding Company along with Monthly Requirement.

Management monitors rolling forecasts of the Company's liquidity position comprising the undrawn borrowing facilities below and cash and cash equivalents on the basis of expected cash flows.

The Company depends on both internal and external sources of liquidity to provide working capital and to fund capital expenditure.

c) Market Risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk:

- (i) Currency risk
- (ii) Interest rate risk
- (iii) Other price risk, such as equity price risk and commodity risk



(i) Currency risk

As on Reporting date the Company does not have any exposure to currency risk in respect of foreign currency denominated loans and borrowings and procurement of goods and services whose purchase consideration foreign currency except as following

The Company's exposure to foreign currency risk not hedged by a derivative instrument or otherwise at the end of the reporting period is as follows:



Particulars	Amount in Foreign Currency (in Lakh)			Amount (₹ in Lakh)	
		As at 31.03.2023	As at 31.03.2022	As at 31.03.2023	As at 31.03.2022
Trade Payables/deposits and retention money	USD	19.79	19.79	1,637.42	1,493.24
	JPY	-	-	-	-
	CAD	-	-	-	-
Amount of contracts remaining to be executed	USD	4.253	4.253	351.89	324.63
	JPY	-	-	-	-
	CAD	-	-	-	-

(ii) Interest rate risk

The Company has taken borrowings from PFC & REC at fixed interest rate which get reset at every three years cycle. The Company's interest rate risk is not considered significant; hence sensitivity analysis for the risk is not disclosed.

43. Capital and other Commitments

(₹. in Lakh)

Particulars	As at 31 st March, 2023	As at 31 st March, 2022
Estimated amount of contracts remaining to be executed on capital account and not provided for (net of advances)	18,551.09	1,035.63

44. Contingent Liabilities and contingent assets

A. Contingent Liabilities

Claims against the Company not acknowledged as debts in respect of:



(i) Disputed Income Tax/Sales Tax/Excise/Municipal Tax Matters

Disputed Income Tax Matters amounting to ₹106.49 Lakh (Previous Year ₹106.49 Lakh) are being contested before Appellate Authorities. Many of these matters have been disposed of in favour of the company but are disputed before higher authorities by the concerned departments. Against total claim of ₹104.40 Lakh (Previous Year ₹104.40 Lakh), provision of ₹0.00 Lakh (Previous Year ₹106.49 Lakh) is made as contingent liability as it is not a wilful default and in management opinion, same is not expected to be upheld by the court.

(ii) Others

Other contingent liabilities amounts to ₹0.00 Lakh (Previous Year ₹0.00 Lakh) which includes claim of ₹0.00 Lakh (Previous Year ₹0.00 Lakh) related to Arbitration cases/ROW cases.

B. Contingent Assets

While determining the tariff of the Company, BERC has disallowed certain capital expenditure incurred by the Company. The Company aggrieved over such issues has filed appeals with the Appellate Tribunal for Electricity (APTEL)/Hon'ble Supreme Court against the tariff orders issued by the BERC. Based on past experience, the Company believes that a favourable outcome is probable. However, it is impracticable to estimate the financial effect of the same as its receipt is dependent on the outcome of the judgement

45. Income Tax expense

The company has opted to pay Income tax as per Provisions of Section 115BAA of the Income Tax Act 1961 since financial year 2019-20.



46. Corporate Social Responsibilities (CSR)

As per section 135 of the Companies Act, 2013, every company having net worth of rupees five hundred crore or more, or turnover of rupees one thousand crore or more or a net profit of rupees five crore or more during any financial year, every year the company is required to spend, at least two per cent of the average net profits of the company made during the three immediately preceding financial years, in pursuance of its Corporate Social Responsibility Policy. The details of CSR expenses for the year are as under:-

(₹ in Lakh)

Particulars	For the year ended 31st March 2023	For the year ended 31st March 2022
A. Opening CSR Liability	284.23	263.72
B. Amount approved by the Board to be spent during the year	283.26	229.29
Gross Amount required to be spent during the year	567.49	493.01
C. Amount spent on CSR		
a) Construction or acquisition of any asset	47.19	11.63
b) Education and Skill Development expenses	-	-
c) Sports, Art and Culture expenses	147.43	123.97
d) Amount transferred to The Clean Ganga fund specified under Schedule VII as per second proviso to section 135(5).)	-	73.18
Total Amount spent on CSR	194.62	208.78
Closing CSR Liability	372.87	284.23

47. Additional Regulatory Information as per Schedule III to the Companies Act, 2013

a) Details of immovable properties where title deeds are not in the name of the company: **NIL**.

Type of Property	Description of item of property	Gross carrying value as on 31.03.2023 (₹ in lakh)	Gross carrying value as on 31.03.2022 (₹ in lakh)	Title deeds held in the name of	Whether title deed holder is a promoter, director or relative of promoter/director or employee of promoter/director	Property held since which date	Reason for not being held in the name of the company
Freehold land	-	-	-	-	-	-	-
Freehold land	-	-	-	-	-	-	-
ROU Asset-Land	-	-	-	-	-	-	-
ROU Asset-Land	-	-	-	-	-	-	-
Building	-	-	-	-	-	-	-
Building	-	-	-	-	-	-	-
ROU Asset-Buildings	-	-	-	-	-	-	-
ROU Asset-Buildings	-	-	-	-	-	-	-

b) Aging of Capital Work in Progress is as follows:



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(₹ in lakh)

Particulars	<1 Year	1-2 Years	2-3 Years	>3 Years	Total
As at 31.03.2023					
Project in progress	5936.18	7171.36	12826.37	17046.55	42980.46
Projects temporarily suspended	-	-	-	-	-
Total	5936.18	7171.36	12826.37	17046.55	42980.46
As at 31.03.2022					
Project in progress	17928.41	32065.92	27815.72	1136.24	78946.29
Projects temporarily suspended	-	-	-	-	-
Total	17928.41	32065.92	27815.72	1136.24	78946.29

- c) For capital-work-in progress (CWIP), whose completion is overdue or has exceeded its cost compared to its original plan, CWIP completion schedule is as follows:

(₹ in lakh)

Particulars	Project	<1 Year	1-2 Years	2-3 Years	>3 Years	Total
Project in progress	-	-	-	-	-	-
Project in progress	-	-	-	-	-	-

- d) Aging of Intangible assets under development is as follows:

(₹ in lakh)

Particulars	<1 Year	1-2 Years	2-3 Years	>3 Years	Total
As at 31.03.2023					
Project in progress	-	-	-	-	-
Projects temporarily suspended	-	-	-	-	-
Total	-	-	-	-	-
As at 31.03.2022					
Project in progress	-	0.01	-	16.64	16.65
Projects temporarily suspended	-	-	-	-	-
Total	-	0.01	-	16.64	16.65

- e) For Intangible assets under development, whose completion is overdue or has exceeded its cost compared to its original plan, Intangible assets under development completion schedule is as follows:

(₹ in lakh)

Particulars	Project	<1 Year	1-2 Years	2-3 Years	>3 Years	Total
Project in progress	Right of Way-Afforestation Expenses	-	-	-	-	-
Project in progress	-	-	-	-	-	-

- f) No proceeding has been initiated or pending against the company for holding any benami property under the Prohibition of Benami Property Transactions Act, 1988 (as amended) and rules made thereunder as at the end of the financial year.
- g) The Company is not sanctioned any working capital limit secured against current assets by any Finance Institutions.
- h) The company was not declared as a wilful defaulter by any bank or financial institution or other lender during the financial year.



i) Relationship with Struck off Companies:

(₹ in lakh)

Name of struck off Company	Nature of transactions with struck off Company	Balance outstanding as on 31.03.2023	Balance outstanding as on 31.03.2022	Relationship with the Struck off company
EMCO Ltd.	Receivables	12775.46	12775.46	Vendor
	Payables	1092.39	1092.39	Vendor
	Other outstanding balances (to be specified)	-	-	-

j) The Company has registered charges or satisfaction of charges during the financial year with Registrar within statutory period.

k) The company has complied with the number of layers prescribed under clause (87) of section 2 of the Act read with the Companies (Restriction on number of Layers) Rules, 2017 during the financial year.

l) Ratios

Ratio	Numerator	Denominator	Current Year	Previous Year	Variance	Reason for variance >25%
(a) Current Ratio	Current Assets	Current Liabilities	2.02	2.54	(20.58)	Due to increase of current Assets "Debtors"
(b) Debt-Equity Ratio	Total Debt	Shareholder's Equity	2.05	1.95	5.13	
(c) Debt Service Coverage Ratio	Profit for the period + Depreciation and amortization expense + Finance costs	Interest & Lease Payments + Principal Repayments	0.77	1.72	(55.54)	Due to loss
(d) Return on Equity Ratio	Profit for the period	Average Shareholder's Equity	(0.13)	0.23	(146.93)	Due to loss
(e) Inventory turnover ratio	Revenue from Operations	Average Inventory	102.80	266.46	(61.42)	Decrease in revenue
(f) Trade Receivables turnover ratio	Revenue from Operations	Average Trade Receivables (before deducting provision)	0.31	0.80	(61.16)	Decrease in revenue



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(g) Trade payables turnover ratio	Gross Other Expense (-) FERV, Provisions, Loss on disposal of PPE	Average Trade payables	0.28	0.35	(20.39)	Decrease in trade payable
(h) Net capital turnover ratio	Revenue from Operations	Current Assets - Current Liabilities	0.46	0.92	(49.86)	Decrease in revenue
(i) Net profit ratio	Profit for the period	Revenue from Operations	(0.50)	0.32	(258.75)	Due to Loss
(j) Return on Capital employed	Earnings before interest and taxes	Tangible Net Worth + Total Debt + Deferred Tax Liability	0.02	0.12	(80.84)	Due to Loss
(k) Return on investment	{MV(T1) - MV('10) - Sum [C(t)]}	{MV(T0) + Sum [W(t) * C(t)]}	(0.03)	0.04	(162.68)	Due to Loss

48. Previous Year Figures

1. The Previous Year's Figures have been reclassified/re-grouped wherever necessary.
2. Figures have been rounded off nearest to Rupees in Lakh up to Two Decimal.

The Notes to Accounts (1 to 48) form an integral part of these financial statements.

As per our report of even date

For Kumar Sanjay & Co.

Chartered Accountants

ICAI FRN : 113362W

Binod Kumar

(Binod Kumar)

Partner

Membership No.- 417916



For and on behalf of the Board of Directors

Sanjeev Hans

(Sanjeev Hans)

Chairperson

DIN-05342058

D. K. Javeri

(D. K. Javeri)

Managing Director

DIN- 10130165

Niketa Sinha

(Niketa Sinha)

Company Secretary

Prahlat Kumar

(Prahlat Kumar)

CFO

Place: Patna

Date : 09/06/2023

Place: Patna

Date : 09/06/23



[Signature]

Annexure-E

Weighted Average Rate of Interest Computation

As per demand draft	Amount	Weighted Rate	Weight	Wt. Avg Rate
PFC	1091.959095	9.21%	0.511473012	0.05
REC	998.4914914	10.30%	0.46769284	0.05
REC Sup	44.47944935	9.53%	0.020834148	0.00
	2,134.93			9.73%

Bihar Grid Company Ltd. - Payment of Quarterly Interest to PFC for disbursement up to 17.01.2023 & interest upto 15.04.20

3

Sl.No	Name	From Date	To Date	Disbursement Date	Days	ROI	O/S Bal	Int Amount
1	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	20-04-2018	89	9.15	25,00,00,000.00	55,77,740.00
2	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	15-07-2018	89	9.40	54,52,397.00	1,24,972.00
3	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	16-08-2018	89	9.40	25,00,00,000.00	57,30,137.00
4	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	15-10-2018	89	9.40	96,93,876.00	2,22,189.00
5	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	26-10-2018	89	9.40	31,00,00,000.00	71,05,370.00
6	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	15-01-2019	89	9.40	1,85,14,590.00	4,24,365.00
7	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	25-03-2019	89	9.65	19,00,00,000.00	44,70,726.00
8	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	15-04-2019	89	9.65	2,04,55,220.00	4,81,314.00
9	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	18-06-2019	89	9.15	52,27,00,000.00	1,16,61,938.00
10	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	25-07-2019	89	9.15	38,50,00,000.00	85,89,719.00
11	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	15-07-2019	89	9.15	2,84,10,431.00	6,33,864.00
12	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	02-08-2019	89	9.15	1,50,00,00,000.00	3,34,66,438.00
13	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	15-10-2019	89	9.15	7,60,48,396.00	16,96,713.00
14	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	11-11-2019	89	9.15	75,00,00,000.00	1,67,33,219.00
15	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	03-01-2020	89	9.15	1,00,00,00,000.00	2,23,10,959.00
16	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	15-01-2020	89	9.15	9,89,43,075.00	22,07,515.00
17	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	13-03-2020	89	9.15	50,00,00,000.00	1,11,55,479.00
18	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	15-04-2020	89	9.15	13,70,24,464.00	30,57,147.00
19	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	27-05-2020	89	9.40	50,00,00,000.00	1,14,60,274.00
20	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	15-07-2020	89	9.40	15,08,41,195.00	34,57,363.00
21	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	15-09-2020	89	9.15	50,00,00,000.00	1,11,55,479.00
22	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	15-09-2020	89	9.40	16,53,00,620.00	37,88,781.00
23	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	30-12-2020	89	9.40	50,00,00,000.00	1,14,60,274.00
24	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	15-01-2021	89	9.40	17,90,48,619.00	41,03,892.00
25	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	26-03-2021	89	9.40	20,00,00,000.00	45,84,110.00
26	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	15-04-2021	89	9.15	18,99,09,952.00	42,37,073.00
27	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	07-07-2021	89	9.15	9,00,00,000.00	20,07,986.00
28	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	15-07-2021	89	9.15	19,99,97,891.00	44,62,145.00
29	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	15-10-2021	89	9.15	21,13,34,864.00	47,15,083.00
30	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	15-01-2022	89	9.15	21,14,34,457.00	47,17,305.00
31	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	14-Feb-22	89	9.15	20,00,00,000.00	44,62,192.00
32	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	23-Mar-22	89	9.15	15,00,00,000.00	33,46,644.00
33	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	16-Apr-22	89	9.15	22,02,18,591.00	49,13,288.00
34	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	16-Jul-22	89	9.15	22,67,46,381.00	50,58,929.00
35	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	16-Oct-22	89	9.15	23,11,17,046.00	51,56,443.00
36	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	28-Dec-22	89	9.15	50,00,00,000.00	1,11,55,479.00
37	BIHAR GRID COMPANY LTD	17-Jan-23	15-Apr-23	16-Jan-23	89	9.15	24,13,98,889.00	53,85,841.00
	Total						10,91,95,90,954.00	24,52,78,385.00

REC Limited
(Formerly Rural Electrification Corporation Limited)

REC LNS Consolidated Interest Demand Notice

Run_Date :- 21-Mar-2023 12:54:11

From Date :- 31-MAR-23

To Date :- 31-MAR-23

S.No	Borrower Name	Due Date	From Date	To Date	Credit Amount	Days	Int Rate	Applicable Int	Q/S Bal	Int Amt Due	Net Int Amt	Weight	WtLed Rate in %
1	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	4705282.36	90	10.5	10.5	152941176.6	4995326.35	4995326.35	0.02	0.20
2	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	6685921.35	90	10	10	964322775.5	9882901.31	9882901.31	0.04	0.36
3	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	7560296.85	90	10	10	303972170.7	7643149.41	7643149.41	0.03	0.30
4	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	893140.79	90	11	11	34150772.29	226498.21	226498.21	0.00	0.04
5	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	11340000	90	9.58	9.58	46840000	10362774.47	10362774.47	0.05	0.44
6	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	4725000	90	9.58	9.58	193725000	4576156.03	4576156.03	0.02	0.18
7	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	939314.72	90	9.58	9.58	38520103.82	909918.71	909918.71	0.00	0.04
8	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	3406666.67	90	9.58	9.58	189573333.3	3299852	3299852	0.01	0.13
9	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	7255000	90	9.58	9.58	237455000	7026457.56	7026457.56	0.03	0.28
10	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	5666666.67	90	9.58	9.58	232333333.3	5488158.9	5488158.9	0.02	0.22
11	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	7333333.33	90	9.58	9.58	300666666.7	7102323.29	7102323.29	0.03	0.28
12	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	1000000	90	9.58	9.58	41000000	965498.63	965498.63	0.00	0.04
13	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	11666666.67	90	9.58	9.58	478333333.3	11299150.68	11299150.68	0.05	0.45
14	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	15666666.67	90	9.58	9.58	683333333.3	16141643.83	16141643.83	0.07	0.64
15	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	2500000	90	11	11	102500000	2780136.38	2780136.38	0.01	0.11
16	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	21166666.67	90	9.58	9.58	867833333.3	20499887.67	20499887.67	0.08	0.81
17	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	2784285.77	90	9.58	9.58	114155716.4	2766946.91	2766946.91	0.01	0.11
18	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	13-Feb-23	5900000	45	11	11	225000000	3058150.68	3058150.68	0.02	0.24
19	Bihar Grid Company Ltd	31-Mar-23	14-Feb-23	30-Mar-23	0	45	9.58	9.58	225000000	2732874.66	2732874.66	0.02	0.22
20	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	1525967.32	90	11	11	62564659.92	1696939.27	1696939.27	0.01	0.07
21	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	3474032.69	90	11	11	142433340.1	3863314.7	3863314.7	0.02	0.15
22	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	11666666.67	90	11	11	478333333.3	12979572.6	12979572.6	0.05	0.51
23	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	6500000	90	11	11	265000000	7238356.16	7238356.16	0.03	0.29
24	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	6338925.8	90	11	11	259893957.6	7049232.83	7049232.83	0.03	0.28
25	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	3827740.87	90	11	11	156837375.5	4256657.58	4256657.58	0.02	0.17
26	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	12500000	90	11	11	517500000	13900684.93	13900684.93	0.05	0.55
27	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	7083333.34	90	11	11	126416666.7	3428835.62	3428835.62	0.01	0.14
28	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	5159333.33	90	11	11	213491856.7	5726349.32	5726349.32	0.02	0.23
29	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	4839829.03	90	11	11	198432990.4	5382155.08	5382155.08	0.02	0.21
30	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	4166666.66	90	10	10	170833333.1	4212328.76	4212328.76	0.02	0.17
31	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	346005.66	90	10	10	5986275.12	147606.73	147606.73	0.00	0.01
32	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	5160674.32	90	10	10	211587647.2	5217229.66	5217229.66	0.02	0.21
33	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	5762711.87	90	10	10	235571188.5	5825864.87	5825864.87	0.02	0.23
34	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	4741379.81	90	10	10	194398551.7	4733339.63	4733339.63	0.02	0.19
35	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	3933333.33	90	9.58	9.58	161266666.7	3803427.95	3803427.95	0.02	0.15
36	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	2998214.3	90	9.58	9.58	122926786.3	2903766.44	2903766.44	0.01	0.17
37	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	860772.73	90	9.58	9.58	35284918.8	836131.84	836131.84	0.00	0.03
38	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	2033333.34	90	10	10	85416665.73	2106164.39	2106164.39	0.01	0.08
39	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	4338416.09	90	9.58	9.58	177918059.9	4202718.54	4202718.54	0.02	0.17
40	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	4863326.73	90	10	10	193295398.1	4916623.46	4916623.46	0.02	0.19
41	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	8500000	90	10	10	348403999.8	8593150.68	8593150.68	0.03	0.34
42	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	3411666.66	90	9.58	9.58	140088333.4	3447201.37	3447201.37	0.01	0.14
43	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	4666666.67	90	9.98	9.98	191333333.3	4708372.6	4708372.6	0.02	0.19
44	Bihar Grid Company Ltd	31-Mar-23	31-Dec-22	30-Mar-23	3986666.67	90	9.58	9.58	138853333.3	3279982.03	3279982.03	0.01	0.13
TOTAL - 31-MAR-23					249622872.9				1028453778.7	254197133.3	254197133.3		10.36

RECLimited
(Formerly Rural Electrification Corporation Limited)
RECLNS Consolidated Interest Demand Notice
Run Date:- 21-Mar-2023 12:45:16
FromDate:- 01-APR-23
ToDate :- 01-APR-23

S.No	Borrower Name	Loan Number	Due Date	From Date	To Date	Days	Interest Compounding Frequency	Int Rate	Applicable Int Rate	O/S Bal	Int Amt Due	Rebate
1	Bihar Grid Company Ltd	MM-CPU-446-16764-1	01-Apr-23	01-Mar-23	31-Mar-23	31	MONTHLY	9.75	9.75	44798992.26	370972.48	0
2	Bihar Grid Company Ltd	MM-CPU-446-16764-2	01-Apr-23	01-Mar-23	31-Mar-23	31	MONTHLY	9.5	9.5	199995501.2	1613662.33	0
3	Bihar Grid Company Ltd	MM-CPU-446-16764-3	01-Apr-23	01-Mar-23	31-Mar-23	31	MONTHLY	9.5	9.5	200000000	1613698.63	0
TOTAL - 01-APR-23										444794493.5	3598333.44	0



Annexure-F



Interest Rates | Deposit Rates | Loan Schemes - Interest Rates | SBI NRI Services - Interest Rates
[Show More](#)



MCLR Historical Data

MCLR Historical Data

Marginal Cost Lending Rates

Effective Date	10.00	10.25	10.50	11.00	11.50	12.00	12.50
15.09.2023	8.00	8.15	8.15	8.45	8.55	8.65	8.75
15.08.2023	8.00	8.15	8.15	8.45	8.55	8.65	8.75
15.07.2023	8.00	8.15	8.15	8.45	8.55	8.65	8.75
15.06.2023	7.95	8.10	8.10	8.40	8.50	8.60	8.70
15.05.2023	7.95	8.10	8.10	8.40	8.50	8.60	8.70
15.04.2023	7.95	8.10	8.10	8.40	8.50	8.60	8.70
15.03.2023	7.95	8.10	8.10	8.40	8.50	8.60	8.70
15.02.2023	7.95	8.10	8.10	8.40	8.50	8.60	8.70
15.01.2023	7.85	8.00	8.00	8.30	8.40	8.50	8.60
15.12.2022	7.85	8.00	8.00	8.30	8.30	8.50	8.50
15.11.2022	7.60	7.75	7.75	8.05	8.05	8.25	8.35
15.10.2022	7.60	7.60	7.60	7.90	7.95	8.15	8.25
15.09.2022	7.35	7.35	7.35	7.65	7.70	7.90	8.00
15.08.2022	7.35	7.35	7.35	7.65	7.70	7.90	8.00
15.07.2022	7.15	7.15	7.15	7.45	7.50	7.70	7.80
15.06.2022	7.05	7.05	7.05	7.35	7.40	7.60	7.70
15.05.2022	6.85	6.85	6.85	7.15	7.20	7.40	7.50
15.04.2022	6.75	6.75	6.75	7.05	7.10	7.30	7.40
15.03.2022	6.65	6.65	6.65	6.95	7.00	7.20	7.30
15.02.2022	6.65	6.65	6.65	6.95	7.00	7.20	7.30
15.01.2022	6.65	6.65	6.65	6.95	7.00	7.20	7.30
15.12.2021	6.65	6.65	6.65	6.95	7.00	7.20	7.30
15.11.2021	6.65	6.65	6.65	6.95	7.00	7.20	7.30
15.10.2021	6.65	6.65	6.65	6.95	7.00	7.20	7.30
15.09.2021	6.65	6.65	6.65	6.95	7.00	7.20	7.30
15.08.2021	6.65	6.65	6.65	6.95	7.00	7.20	7.30
15.07.2021	6.65	6.65	6.65	6.95	7.00	7.20	7.30
15.06.2021	6.65	6.65	6.65	6.95	7.00	7.20	7.30
15.05.2021	6.65	6.65	6.65	6.95	7.00	7.20	7.30
15.04.2021	6.65	6.65	6.65	6.95	7.00	7.20	7.30
10.04.2021	6.65	6.65	6.65	6.95	7.00	7.20	7.30
10.03.2021	6.65	6.65	6.65	6.95	7.00	7.20	7.30
10.02.2021	6.65	6.65	6.65	6.95	7.00	7.20	7.30
10.01.2021	6.65	6.65	6.65	6.95	7.00	7.20	7.30
10.12.2020	6.65	6.65	6.65	6.95	7.00	7.20	7.30
10.11.2020	6.65	6.65	6.65	6.95	7.00	7.20	7.30
10.10.2020	6.65	6.65	6.65	6.95	7.00	7.20	7.30
10.09.2020	6.65	6.65	6.65	6.95	7.00	7.20	7.30
10.08.2020	6.65	6.65	6.65	6.95	7.00	7.20	7.30
10.07.2020	6.65	6.65	6.65	6.95	7.00	7.20	7.30
10.06.2020	6.70	6.70	6.75	6.95	7.00	7.20	7.30
10.05.2020	6.95	6.95	7.00	7.20	7.25	7.45	7.55
10.04.2020	7.10	7.10	7.15	7.35	7.40	7.60	7.70
10.03.2020	7.45	7.45	7.50	7.70	7.75	7.95	8.05
10.02.2020	7.60	7.60	7.65	7.80	7.85	8.05	8.15
10.01.2020	7.65	7.65	7.70	7.85	7.90	8.10	8.20
10.12.2019	7.65	7.65	7.70	7.85	7.90	8.10	8.20
10.11.2019	7.65	7.65	7.70	7.85	8.00	8.10	8.20

Annexure-G

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Month: January'2022

Voltage Grade	S.No	Name of TL	Load MW						Avg of Month	Remark
			Max	Time	Date	Min	Time	Date		
A. Power Flow in 220kV transmission line										
220 kV (26 nos.)	1	Hajipur - Amnour ckt-01	-135.92	17:00	08-01-2022	-34.13	15:00	23-01-2022	-68.49	
	2	Hajipur - Amnour ckt-02	-134.46	10:00	07-01-2022	-34.74	15:00	23-01-2022	-65.49	
	3	Patna (PG) - Khagaul ckt-02	-112.92	18:00	07-01-2022	-32.97	04:00	23-01-2022	67.05	
	4	Patna (PG) - Khagaul ckt-03	-113.33	18:00	07-01-2022	-32.69	04:00	23-01-2022	66.26	
	5	Khijirsarai - Biharsharif ckt-01	-162.66	16:00	21-01-2022	-24.42	06:00	23-01-2022	-74.80	
	6	Khijirsarai - Biharsharif ckt-02	-149.27	18:00	20-01-2022	-23.18	23:00	13-01-2022	-74.03	
	7	Khijirsarai - Bodh Gaya ckt-01	79.86	10:00	13-01-2022	0.01	11:00	29-01-2022	-15.17	
	8	Khijirsarai - Bodh Gaya ckt-02	137.48	11:00	03-01-2022	0	14:00	18-01-2022	-12.28	
	9	Khijirsarai - Gaya (PG) ckt-01	-116.32	10:00	03-01-2022	0.11	20:00	02-01-2022	-41.34	
	10	Khijirsarai - Gaya (PG) ckt-02	-116.57	10:00	03-01-2022	-14.19	08:00	23-01-2022	-42.72	
	11	Khijirsarai - Narhat ckt-01	-133.20	19:00	18-01-2022	-28.59	15:00	03-01-2022	61.62	
	12	Khijirsarai - Narhat ckt-02	-133.02	19:00	18-01-2022	-28.60	05:00	23-01-2022	62.88	
	13	Narhat - Sekhopur Sarai ckt-01	95.78	19:00	18-01-2021	20.44	04:00	25-01-2022	39.28	
	14	Narhat - Sekhopur Sarai ckt-02	152.87	12:00	18-01-2021	20.42	04:00	25-01-2022	39.91	
	15	Sekhopur Sarai - Haveli Kharagpur ckt-01	-69.20	19:00	18-01-2021	-9.6	13:00	17.01.2022	-17.68	
	16	Sekhopur Sarai - Haveli Kharagpur ckt-02	-69.10	19:00	18-01-2021	-9.5	13:00	17.01.2022	-30.81	
	17	Haveli Kharagpur - Goradih ckt-01	35.90	19:00	18-01-2021	24.5	14:00	18.01.2022	0.47	
	18	Haveli Kharagpur - Goradih ckt-02	56.90	15:00	07.01.2022	9.00	23:00	18.01.2022	0.70	
	19	Mokama-Biharsharif ckt-1	109.10	18:00	12-01-2022	0.00	20:00	02-01-2022	14.19	
	20	Mokama-Biharsharif ckt-2	109.00	18:00	12-01-2022	0.00	20:00	02-01-2022	13.25	
	21	Mokama-BTPS ckt-1	69.80	23:00	13-01-2022	0.00	00:00	02-01-2022	-18.42	
	22	Mokama-BTPS ckt-2	69.00	23:00	13-01-2022	0.00	00:00	02-01-2022	-18.43	
	23	Ara(PG)-Dumraon New - 01	51.73	13:00	31-01-2022	0.02	22:00	13-01-2022	3.49	
	24	Ara(PG)-Dumraon New - 02	51.91	13:00	31-01-2022	-0.02	06:00	14-01-2022	3.47	
	25	Dumraon New-Nadokhar - 01	-84.11	13:00	31-01-2022	-1.72	17:00	06-01-2022	-23.50	
	26	Dumraon New-Nadokhar - 02	-84.43	13:00	31-01-2022	-1.77	17:00	06-01-2022	-23.74	
B. Power Flow in 132 kV transmission line										
132 kV (29 nos.)	1	Amnour - Siwan ckt-01	65.06	08:00	09-01-2022	0.01	03:00	07-01-2022	28.77	
	2	Amnour - Siwan ckt-02	66.06	08:00	29-01-2022	9.02	13:00	10-01-2022	33.30	
	3	Amnour - Chhapara ckt-01	47.95	20:00	27-01-2022	5.76	04:00	07-01-2022	25.17	
	4	Amnour - Chhapara ckt-02	47.36	20:00	27-01-2022	5.76	04:00	07-01-2022	24.56	
	5	Khijirsarai - Bodh Gaya ckt-03	0.09	06:00	23-01-2022	0	11:00	02-01-2022	0.01	
	6	Khijirsarai - Wajirganj ckt-01	46.02	18:00	17-01-2022	0.05	13:00	22-01-2022	24.65	
	7	Khijirsarai-Hulasganj ckt-01	57.98	10:00	21-01-2022	0	14:00	01-01-2022	11.66	
	8	Khijirsarai - Jehanabad ckt-01	78.94	19:00	29-01-2022	0.07	14:00	16-01-2022	44.13	
	9	Khijirsarai - Jehanabad ckt-02	79.00	19:00	29-01-2022	0.07	14:00	16-01-2022	44.06	
	10	Narhat - Nawadah ckt-01	41.02	10:00	11-01-2022	1.28	13:00	18-01-2022	16.87	
	11	Narhat - Nawadah ckt-02	37.44	10:00	11-01-2022	1.30	13:00	18-01-2022	16.49	
	12	Haveli Kharagpur - Sultanganj ckt-01	65.70	12:00	21-01-2022	41.60	14:00	21-01-2022	0.01	
	13	Haveli Kharagpur - Sultanganj ckt-02	14.80	18:00	20-01-2022	3.70	14:00	25-01-2022	9.46	
	14	Haveli Kharagpur - Lakhisarai ckt-01	0	0	0	0	0	0	0.00	System connected but no power flow
	15	Haveli Kharagpur - Lakhisarai ckt-02	0	0	0	0	0	0	0.00	
	16	Haveli Kharagpur - Jamalpur ckt-01	49.10	10:00	19-01-2022	12.00	11:00	29-01-2022	31.11	
	17	Haveli Kharagpur - Jamalpur ckt-02	0	0	0	0	0	0	0.00	
	18	Sekhopur Sarai - Sekhpura ckt-01	19.40	09:00	20-01-2022	3.1	14:00	24-01-2022	11.20	
	19	Sekhopur Sarai - Sekhpura ckt-02	19.40	09:00	20-01-2022	3.8	14:00	24-01-2022	11.24	
	20	Sekhopur Sarai - Biharsharif	0	0	0	0	0	0	0.00	System connected but no power flow
	21	Goradih - Sultanganj ckt-01	0	0	0	0	0	0	0.01	
	22	Goradih - Sultanganj ckt-02	0	0	0	0	0	0	0.01	
	23	Goradih - Kahalgaon ckt-01	27.90	14:00	07-01-2022	0.00	00:00	01-01-2022	0.12	
	24	Goradih - Kahalgaon ckt-02	28.00	14:00	07-01-2022	0.00	00:00	01-01-2022	0.12	
	25	Goradih - Sabour ckt-01	21.50	19:00	18-01-2022	0.00	12:00	20-01-2022	-5.14	
	26	Goradih - Sabour ckt-02	37.60	18:00	18-01-2022	0.04	12:00	17-01-2022	-4.95	
	27	Mokama-Hatidah ckt-01	50.30	08:00	31-01-2022	0.00	01:00	01-01-2022	16.06	
	28	Mokama-Hatidah ckt-02	50.90	08:00	31-01-2022	0.00	01:00	01-01-2022	16.34	
	29	132kV D/C Dumraon New-Dumraon(BSPTCL) ckt-2	81.52	19:00	19-01-2022	25.39	04:00	23-01-2022	46.97	

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Month: January 2022

Substation Details	S.No.	MVA Capacity	Load						Remark
			Max	Time	Date	Min	Time	Date	
C. Power Flow In transformers									
Amnour GIS	1	Tr-01/160 MVA, 220/132 kV	132.39	18:00	06-01-2022	25.83	12:00	08-01-2022	67.24
	2	Tr-02/160 MVA, 220/132 kV	138.07	18:00	05-01-2022	26.16	12:00	08-01-2022	68.26
	3	Tr-01/50 MVA, 132/33 kV	20.35	18:00	18-01-2022	0.03	12:00	17-01-2022	11.75
	4	Tr-02/50 MVA, 132/33 kV	29.61	11:00	04-01-2022	0.03	15:00	27-01-2022	12.06
KhijirSarai GIS	1	Tr-01/160 MVA, 220/132 kV	113.45	19:00	31-01-2022	20.54	05:00	23-01-2022	65.65
	2	Tr-02/160 MVA, 220/132 kV	116.82	19:00	31-01-2022	21.79	05:00	23-01-2022	68.69
	3	Tr-01/50 MVA, 132/33 kV	Not Commissioned						
	4	Tr-02/50 MVA, 132/33 kV	4.26	08:00	09-01-2022	0.03	09:00	02-01-2022	2.32
Narhat GIS	5	Tr-03/50 MVA, 132/33 kV	11.36	08:00	24-01-2022	0.1	16:00	16-01-2022	6.66
	1	Tr-01/160 MVA, 220/132 kV	49.48	10:00	11-01-2022	2.37	13:00	18-01-2022	12.73
	2	Tr-02/160 MVA, 220/132 kV	45.59	10:00	11-01-2022	2.16	11:00	03-01-2022	11.29
	3	Tr-01/50 MVA, 132/33 kV	5.42	09:00	09-01-2022	0.09	13:00	17-01-2022	3.32
Sekhopur Sarai GIS	4	Tr-02/50 MVA, 132/33 kV	14.69	10:00	09-01-2022	0.03	10:00	05-01-2022	8.46
	1	Tr-01/160 MVA, 220/132 kV	43.30	08:00	07-01-2022	3.90	06:00	23-01-2022	18.32
	2	Tr-02/160 MVA, 220/132 kV	44.18	18:00	19-01-2022	2.40	06:00	23-01-2022	20.02
	3	Tr-01/50 MVA, 132/33 kV	12.80	13:00	06-01-2022	0.20	16:00	01-01-2022	5.12
Haveli Kharagpur GIS	4	Tr-02/50 MVA, 132/33 kV	17.30	07:00	24-01-2022	0.5	06:00	23-01-2022	6.06
	1	Tr-01/160 MVA, 220/132 kV	63.00	12:00	20-01-2022	10.30	13:00	17-01-2022	24.32
	2	Tr-02/160 MVA, 220/132 kV	60.80	12:00	20-01-2022	8.90	13:00	17-01-2022	22.74
	3	Tr-01/50 MVA, 132/33 kV	5.50	18:00	06-01-2022	0.50	14:00	07-01-2022	0.93
Goradih GIS	4	Tr-02/50 MVA, 132/33 kV	9.20	18:00	17-01-2022	0.20	13:00	17-01-2022	4.77
	1	Tr-01/160 MVA, 220/132 kV	-72.40	18:00	18-01-2022	0.00	00:00	01-01-2022	1.12
	2	Tr-02/160 MVA, 220/132 kV	Not Commissioned						
	3	Tr-01/50 MVA, 132/33 kV	16.30	12:00	10-01-2022	0.00	15:00	05-01-2022	1.53
Mokama GIS	4	Tr-02/50 MVA, 132/33 kV	14.60	17:00	17-01-2022	0.00	15:00	16-01-2022	9.38
	1	Tr-01/160 MVA, 220/132 kV	Not Commissioned						
	2	Tr-02/160 MVA, 220/132 kV	100.70	08:00	31-01-2022	0.00	01:00	01-01-2022	41.73
	3	Tr-01/80 MVA, 132/33 kV	Not Commissioned						
Dumraon GIS	4	Tr-02/80 MVA, 132/33 kV	0.00	01:00	01-11-2021	0.00	00:00	30-11-2021	0.07
	1	Tr-01/160 MVA, 220/132 kV	91.78	09:00	18-01-2022	3.39	14:00	06-01-2022	54.80
	2	Tr-01/80 MVA, 132/33 kV	21.76	17:00	01-01-2022	0.26	19:00	19-01-2022	4.60
	3	Tr-02/80 MVA, 132/33 kV	0.04	00:00	01-01-2022	0.02	07:00	22-01-2022	0.12
Note	Negative sign(-) denote import of power and positive sign (+) denote export of power .For example (-) 135.92 MW In Hajipur - Amnour ckt-1 denotes import of 135.92 MW from Hajipur S/S to Amnour S/S and 65.06 MW in Amnour -Siwan ckt-1 denotes 65.06 MW from Amnour to Siwan S/S.								

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Month: February'2022

Voltage Grade	S.No	Name of TL	Load MW						Remark	
			Max	Time	Date	Min	Time	Date		Avg of Month
			A. Power Flow In 220kV transmission line							
220 kV (26 nos.)	1	Hajipur - Amnour ckt-01	-131.73	09:00	04-02-2022	-0.11	06:00	04-02-2022	-65.62	
	2	Hajipur - Amnour ckt-02	-104.72	08:00	07-02-2022	-27.78	00:00	05-02-2022	-63.88	
	3	Patna (PG) - Khagaul ckt-02	108.5	10:00	11-02-2022	0	10:00	09-02-2022	65.72	
	4	Patna (PG) - Khagaul ckt-03	121.64	02:00	10-02-2022	22.61	14:00	27-02-2022	69.77	
	5	Khijirsarai - Biharsharif ckt-01	-178.96	17:00	04-02-2022	-19.87	14:00	27-02-2022	-82.82	
	6	Khijirsarai - Biharsharif ckt-02	-147.21	18:00	21-02-2022	-20.93	14:00	27-02-2022	-81.96	
	7	Khijirsarai - Bodh Gaya ckt-01	-40.07	20:00	19-02-2022	-0.02	02:00	25-02-2022	-16.79	
	8	Khijirsarai - Bodh Gaya ckt-02	-40.16	20:00	19-02-2022	-0.05	02:00	12-02-2022	-13.60	
	9	Khijirsarai - Gaya (PG) ckt-01	-64.30	20:00	19-02-2022	0.55	15:00	08-02-2022	-45.77	
	10	Khijirsarai - Gaya (PG) ckt-02	-64.31	20:00	19-02-2022	0.19	23:00	24-02-2022	47.30	
	11	Khijirsarai - Narhat ckt-01	114.48	09:00	22-02-2022	11.24	03:00	04-02-2022	70.23	
	12	Khijirsarai - Narhat ckt-02	114.77	09:00	22-02-2022	11.25	03:00	04-02-2022	70.12	
	13	Narhat - Sekhopur Sarai ckt-01	75.38	09:00	22-02-2022	13.79	21:00	24-02-2022	32.09	
	14	Narhat - Sekhopur Sarai ckt-02	105.03	19:00	05-02-2022	13.80	21:00	24-02-2022	38.74	
	15	Sekhopur Sarai - Haveli Kharagpur ckt-01	56.30	08:00	28-02-2022	27.7	03:00	25-02-2022	51.65	
	16	Sekhopur Sarai - Haveli Kharagpur ckt-02	63.30	19:00	02-02-2022	10.8	03:00	04-02-2022	57.45	
	17	Haveli Kharagpur - Goradih ckt-01	0.00	00:00	01-02-2022	0.00	00:00	28-02-2022	0	
	18	Haveli Kharagpur - Goradih ckt-02	0.00	00:00	01-02-2022	0.00	00:00	28-02-2022	0.03	
	19	Mokama-Biharsharif ckt-1	92.90	17:00	28-02-2022	0.00	05:00	23-02-2022	5.58	
	20	Mokama-Biharsharif ckt-2	93.80	17:00	28-02-2022	0.00	20:00	17-02-2022	5.74	
	21	Mokama-BTPS ckt-1	60.90	21:00	24-02-2022	0.00	01:00	04-02-2022	-33.51	
	22	Mokama-BTPS ckt-2	62.70	21:00	24-02-2022	0.00	01:00	04-02-2022	-32.83	
	23	Ara(PG)-Dumraon New - 01	-40.27	18:00	02-04-2022	0.02	22:00	27-02-2022	5.55	
	24	Ara(PG)-Dumraon New - 02	-40.32	18:00	02-04-2022	-0.01	04:00	28-02-2022	5.52	
	25	Dumraon New-Nadokhar - 01	-46.71	09:00	02-03-2022	0.11	13:00	02-04-2024	-18.65	
	26	Dumraon New-Nadokhar - 02	-46.91	09:00	02-03-2022	0.03	13:00	02-04-2022	-18.65	
B. Power Flow In 132kV transmission line										
132 kV (29 nos.)	1	Amnour - Siwan ckt-01	55.35	12:00	13-02-2022	0.01	08:00	21-02-2022	23.79	
	2	Amnour - Siwan ckt-02	61.69	10:00	05-02-2022	1.61	04:00	04-02-2022	25.99	
	3	Amnour - Chhapara ckt-01	53.61	19:00	15-02-2022	9.37	19:00	19-02-2022	29.97	
	4	Amnour - Chhapara ckt-02	65.26	07:00	05-02-2022	0.01	07:00	04-02-2022	31.02	
	5	Khijirsarai - Bodh Gaya ckt -03	0.12	00:00	04-02-2022	0	14:00	01-02-2022	0.01	
	6	Khijirsarai - Wajirganj ckt -01	47.44	08:00	24-02-2022	0.06	10:00	15-02-2022	27.29	
	7	Khijirsarai-Hulasganj ckt-01	67.98	10:00	20-02-2022	0	00:00	22-02-2022	12.91	
	8	Khijirsarai - Jehanabad ckt-01	71.10	19:00	17-02-2022	4.36	23:00	03-02-2022	48.86	
	9	Khijirsarai - Jehanabad ckt-02	71.11	19:00	17-02-2022	4.2	23:00	03-02-2022	48.78	
	10	Narhat - Nawadah ckt-01	37.36	11:00	20-02-2022	1.04	03:00	04-02-2022	17.35	
	11	Narhat - Nawadah ckt-02	49.99	19:00	07-02-2022	0.37	12:00	27-02-2022	15.29	
	12	Haveli Kharagpur - Sultanganj ckt-01	0	0	0	0	0	0	0.00	
	13	Haveli Kharagpur - Sultanganj ckt-02	14.80	19:00	02.02.2022	1.30	15:00	05.02.2022	8.76	
	14	Haveli Kharagpur - Lakhisarai ckt-01	23.60	17:00	15.02.2022	16.90	15:00	15.02.2022	0.18	
	15	Haveli Kharagpur - Lakhisarai ckt-02	0	0	0	0	0	0	0.00	System connected but no power flow
	16	Haveli Kharagpur- Jamalpur ckt-01	44.30	09:00	04.02.2022	2.30	14:00	07.02.2022	27.35	
	17	Haveli Kharagpur- Jamalpur ckt-02								
	18	Sekhopur Sarai - Sekhpura ckt-01	42.40	09:00	22-02-2022	3.2	00:00	23-02-2022	17.42	
	19	Sekhopur Sarai - Sekhpura ckt-02	42.40	09:00	22-02-2022	4.0	06:00	04-02-2022	17.52	
	20	Sekhopur Sarai - Biharsharif	0	0	0	0	0	0	0.00	System connected but no power flow
	21	Goradih - Sultanganj ckt-01	0.00	00:00	01-02-2022	0.00	00:00	28-02-2022	0.01	
	22	Goradih - Sultanganj ckt-02	0.00	00:00	01-02-2022	0.00	00:00	28-02-2022	0.01	
	23	Goradih - Kahalgaon ckt-01	0.00	00:00	01-02-2022	0.00	00:00	28-02-2022	0.01	System connected but no power flow
	24	Goradih - Kahalgaon ckt-02	0.00	00:00	01-02-2022	0.00	00:00	28-02-2022	0.00	
	25	Goradih - Sabour ckt-01	-8.30	16:00	12-02-2022	-3.00	05:00	04-02-2022	-4.56	
	26	Goradih - Sabour ckt-02	-8.30	12:00	23-02-2022	0.70	15:00	24-02-2022	-4.61	
	27	Mokama-Hatidah ckt-01	54.00	09:00	16-02-2022	0.00	18:00	21-02-2022	27.3	
	28	Mokama-Hatidah ckt-02	54.60	09:00	16-02-2022	0.00	18:00	21-02-2022	27.54	
	29	132kV D/C Dumraon New-Dumraon(BSPTCL)ckt-2	84.79	18:00	02-12-2022	0.69	02:00	02-04-2022	44.05	

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Month: February'2022

Substation Details	S.No.	MVA Capacity	Load MW						Remark	
			Max	Time	Date	Min	Time	Date		
			C. Power Flow in transformers							
Amnour GIS	1	Tr-01/160 MVA, 220/132 kV	103.8	08:00	07-02-2022	0.06	06:00	04-02-2022	64.78	
	2	Tr-02/160 MVA, 220/132 kV	149.34	11:00	20-02-2022	0.06	06:00	04-02-2022	66.90	
	3	Tr-01/50 MVA, 132/33 kV	37.83	18:00	03-02-2022	0.26	21:00	17-02-2022	10.75	
	4	Tr-02/50 MVA, 132/33 kV	23.26	17:00	24-02-2022	0.03	18:00	21-02-2022	10.17	
KhijirSaraI GIS	1	Tr-01/160 MVA, 220/132 kV	123.47	10:00	20-02-2022	9	00:00	04-02-2022	72.68	
	2	Tr-02/160 MVA, 220/132 kV	126.98	10:00	20-02-2022	9.93	00:00	04-02-2022	76.04	
	3	Tr-01/50 MVA, 132/33 kV								
	4	Tr-02/50 MVA, 132/33 kV	15.33	12:00	21-02-2022	0.03	17:00	02-02-2022	2.56	
	5	Tr-03/50 MVA, 132/33 kV	15.40	08:00	22-02-2022	0.1	00:00	04-02-2022	7.38	
Narhat GIS	1	Tr-01/160 MVA, 220/132 kV	59.29	19:00	07-02-2022	0.08	13:00	11-02-2022	11.84	
	2	Tr-02/160 MVA, 220/132 kV	42.33	11:00	20-02-2022	0.11	01:00	04-02-2022	10.29	
	3	Tr-01/50 MVA, 132/33 kV	5.84	08:00	20-02-2022	0.09	01:00	04-02-2022	3.57	
	4	Tr-02/50 MVA, 132/33 kV	16.83	08:00	21-02-2022	0.03	18:00	24-02-2022	8.57	
Sekhopur Sarai GIS	1	Tr-01/160 MVA, 220/132 kV	47.60	09:00	22-02-2022	0.90	04:00	04-02-2022	21.79	
	2	Tr-02/160 MVA, 220/132 kV	47.2	09:00	22-02-2022	4	15:00	04-02-2022	21.77	
	3	Tr-01/50 MVA, 132/33 kV	10.80	18:00	02-02-2022	0.20	12:00	01-02-2022	1.25	
	4	Tr-02/50 MVA, 132/33 kV	16.40	07:00	18-02-2022	1.5	08:00	27-02-2022	10.80	
Haveli Kharagpur GIS	1	Tr-01/160 MVA, 220/132 kV	32.10	19:00	02.02.2022	7.30	14:00	07.02.2022	21.58	
	2	Tr-02/160 MVA, 220/132 kV	30.70	19:00	02.02.2022	6.20	03:00	04.02.2022	20.25	
	3	Tr-01/50 MVA, 132/33 kV	0	0	0	0	0	0	0	System Connected But no Power flow
	4	Tr-02/50 MVA, 132/33 kV	8.30	18:00	13.02.2022	1.00	02:00	04.02.2022	5.43	
Goradih GIS	1	Tr-01/160 MVA, 220/132 kV	0.00	00:00	01-02-2022	0.00	00:00	28-02-2022	-0.04	
	2	Tr-02/160 MVA, 220/132 kV								
	3	Tr-01/50 MVA, 132/33 kV	12.70	07:00	08-02-2022	0.20	00:00	01-02-2022	3.80	
	4	Tr-02/50 MVA, 132/33 kV	13.10	06:00	01-02-2022	3.60	04:00	01-02-2022	5.24	
Mokama GIS	1	Tr-01/160 MVA, 220/132 kV								
	2	Tr-02/160 MVA, 220/132 kV	107.70	09:00	16-02-2022	0.00	18:00	21-02-2022	40.82	
	3	Tr-01/80 MVA, 132/33 kV								
	4	Tr-02/80 MVA, 132/33 kV	0.00	01:00	01-02-2022	0.00	00:00	28-02-2022	0.00	
Dumraon GIS	1	Tr-01/160 MVA, 220/132 kV	98.8	18:00	02-12-2022	14.03	02:00	02-04-2022	54.87	
	2	Tr-01/80 MVA, 132/33 kV	18.76	09:00	02-01-2022	0.22	21:00	02-03-2022	4.34	
	3	Tr-02/80 MVA, 132/33 kV	18.21	08:00	18/02/2022	3.61	16:00	28/02/2022	6.53	

Note Negative sign(-) denote import of power and positive sign (+) denote export of power .For example (-) 131.73 MW in Hajipur - Amnour ckt-1 denotes Import of 131.73 MW from Hajipur S/S to Amnour S/S and 61.69 MW In Amnour -Siwan ckt-1 denotes 61.69 MW from Amnour to Siwan S/S.

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Month: March/2022

Voltage Grade	S.No	Name of TL	Load							Remark
			MW							
			Max	Time	Date	Min	Time	Date	Avg of Month	
400 kV (04 nos.)	1	Patna(PG) - Naubatpur ckt - 01	-390.52	6:00	21-03-2022	-110.39	14:00	29-03-2022	128.03	
	2	Patna(PG) - Naubatpur ckt - 02	-392	6:00	21-03-2022	-111.56	13:00	29-03-2022	126.57	
	3	Naubatpur - Ballia(PG) ckt - 01	389.32	6:00	21-03-2022	109.09	13:00	29-03-2022	92.19	
	4	Naubatpur - Ballia(PG) ckt - 02	392.96	6:00	21-03-2022	112.54	13:00	29-03-2022	128.52	
220 kV (26 nos.)	B. Power Flow in 220kV transmission line									
	1	Hajipur - Amnour ckt-01	126.2	20:00	19-03-2022	-31.46	15:00	01-03-2022	-77.56	
	2	Hajipur - Amnour ckt-02	-126.45	20:00	19-03-2022	-31.46	15:00	07-03-2022	-76.11	
	3	Patna (PG) - Khagaul ckt-02	123.34	20:00	25-03-2022	33.8	14:00	12-03-2022	78.30	
	4	Patna (PG) - Khagaul ckt-03	122.93	20:00	25-03-2022	33.65	14:00	12-03-2022	78.00	
	5	Khijirsarai - Biharsharif ckt-01	-103.80	07:00	01-03-2022	-0.1	13:00	01-03-2022	-45.31	
	6	Khijirsarai - Biharsharif ckt-02	-104.43	07:00	01-03-2022	-0.02	00:00	21-03-2022	-46.21	
	7	Khijirsarai - Bodh Gaya ckt-01	-67.17	14:00	18-03-2022	-4.9	17:00	07-03-2022	-35.05	
	8	Khijirsarai - Bodh Gaya ckt-02	-67.5	14:00	18-03-2022	-4.81	17:00	07-03-2022	-35.20	
	9	Khijirsarai - Gaya (PG) ckt-01	-92.15	21:00	27-03-2022	-19.91	15:00	01-03-2022	-55.98	
	10	Khijirsarai - Gaya (PG) ckt-02	-92.16	21:00	27-03-2022	-19.87	15:00	01-03-2022	-55.88	
	11	Khijirsarai - Narhat ckt-01	94.47	21:00	31-03-2022	34.03	17:00	26-03-2022	68.37	
	12	Khijirsarai - Narhat ckt-02	135.81	11:00	31-03-2022	34.01	17:00	26-03-2022	69.55	
	13	Narhat - Sekhopur Sarai ckt-01	-52.90	19:00	26-03-2022	-9.70	19:00	26-03-2022	48.80	
	14	Narhat - Sekhopur Sarai ckt-02	-54.90	19:00	26-03-2022	-9.80	19:00	26-03-2022	49.24	
	15	Sekhopur Sarai - Haveli Kharagpur ckt-01	56.00	19:00	03-03-2022	3.1	19:00	26-03-2022	31.57	
	16	Sekhopur Sarai - Haveli Kharagpur ckt-02	30.30	19:00	28-03-2022	11.8	19:00	08-03-2022	24.09	
	17	Haveli Kharagpur - Goradih ckt-01	0.00	00:00	01-03-2022	0.00	00:00	01-03-2022	0	
	18	Haveli Kharagpur - Goradih ckt-02	0.00	00:00	01-03-2022	0.00	00:00	01-03-2022	0	
	19	Mokama-Biharsharif ckt-1	-131.70	02:00	21-03-2022	0.00	01:00	02-03-2022	-31.14	
20	Mokama-Biharsharif ckt-2	-130.40	02:00	21-03-2022	0.00	01:00	02-03-2022	-30.55		
21	Mokama-BTPS ckt-1	122.30	02:00	21-03-2022	0.00	21:00	01-03-2022	18.84		
22	Mokama-BTPS ckt-2	120.50	02:00	21-03-2022	0.00	21:00	01-03-2022	15.45		
23	Ara(PG)-Dumraon New - 01	55.21	18:00	03-12-2022	0.01	14:00	17-03-2022	42.74		
24	Ara(PG)-Dumraon New - 02	55.33	18:00	03-12-2022	-0.07	12:00	20-03-2022	42.89		
25	Dumraon New-Nadokhar - 01	-94.35	18:00	03-12-2022	0.16	06:00	15-03-2022	-73.18		
26	Dumraon New-Nadokhar - 02	-94.81	18:00	03-12-2022	0.11	06:00	15-03-2022	-73.49		
132 kV (33 nos.)	C. Power Flow in 132 kV transmission line									
	1	Amnour - Siwan ckt-01	69.03	22:00	31-03-2022	5.85	17:00	31-03-2022	25.08	
	2	Amnour - Siwan ckt-02	82.23	22:00	30-03-2022	10.82	15:00	26-03-2022	28.57	
	3	Amnour - Chhapra ckt-01	84.02	20:00	28-03-2022	10.92	12:00	06-03-2022	39.40	
	4	Amnour - Chhapra ckt-02	72.86	22:00	31-03-2022	10.76	12:00	06-03-2022	35.23	
	5	Khijirsarai - Bodh Gaya ckt -03	0.53	22:00	29-03-2022	0	11:00	07-03-2022	0.01	
	6	Khijirsarai - Wajiranj ckt -01	43.83	09:00	30-03-2022	0.06	14:00	08-03-2022	29.43	
	7	Khijirsarai-Hulasganj ckt-01	0.1	20:00	31-03-2022	0	08:00	09-03-2022	0.00	
	8	Khijirsarai - Jehanabad ckt-01	86.30	19:00	01-04-2022	7.54	02:00	10-03-2022	47.82	
	9	Khijirsarai - Jehanabad ckt-02	86.36	19:00	02-04-2022	7.56	02:00	11-03-2022	47.79	
	10	Narhat - Nawadah ckt-01	34.89	20:00	16-03-2022	7.79	13:00	03-03-2022	22.34	
	11	Narhat - Nawadah ckt-02	31.19	19:00	17-03-2022	5.02	13:00	03-03-2022	19.20	
	12	Haveli Kharagpur - Sultanganj ckt-01	0.00	00:00	01-03-2022	0.00	00:00	01-03-2022	0.00	
	13	Haveli Kharagpur - Sultanganj ckt-02	14.30	19:00	06-03-2022	0.60	15:00	05-03-2022	3.73	
	14	Haveli Kharagpur - Lakhisarai ckt-01	0.00	00:00	01-03-2022	0.00	00:00	01-03-2022	0.02	
	15	Haveli Kharagpur - Lakhisarai ckt-02	0.00	00:00	01-03-2022	0.00	00:00	01-03-2022	0.01	System connected but no power flow
	16	Haveli Kharagpur - Jamalpur ckt-01	39.20	20:00	14-03-2022	15.40	17:00	06-03-2022	13.25	
	17	Haveli Kharagpur - Jamalpur ckt-02	50.60	22:00	21-03-2022	3.60	17:00	26-03-2022	20.38	
	18	Sekhopur Sarai - Sekhpura ckt-01	19.80	19:00	26-03-2022	7.4	08:00	11-03-2022	18.22	
	19	Sekhopur Sarai - Sekhpura ckt-02	20.20	19:00	06-03-2022	6.3	20:00	28-03-2022	18.25	
	20	Sekhopur Sarai - Biharsharif	0	00:00		0	00:00	0	0.00	
	21	Goradih - Sultanganj ckt-01	0.00	00:00	01-03-2022	0.00	00:00	01-03-2022	0.00	
	22	Goradih - Sultanganj ckt-02	0.00	00:00	01-03-2022	0.00	00:00	01-03-2022	0.00	System connected but no power flow
	23	Goradih - Kahaigaon ckt-01	0.00	00:00	01-03-2022	0.00	00:00	01-03-2022	0.00	
	24	Goradih - Kahaigaon ckt-02	0.00	00:00	01-03-2022	0.00	00:00	01-03-2022	0.00	
	25	Goradih - Sebaur ckt-01	-8.60	18:00	31-03-2021	-0.01	20:00	28-03-2021	-5.64	
	26	Goradih - Sebaur ckt-02	-8.60	18:00	31-03-2021	0.00	00:00	28-03-2021	-5.66	
	27	Mokama-Hatidih ckt-01	48.10	18:00	12-03-2022	0.00	09:00	01-03-2022	13.34	
	28	Mokama-Hatidih ckt-02	48.70	18:00	12-03-2022	0.00	09:00	01-03-2022	13.51	
	29	Dumraon New- Dumraon(BSPTCL) ckt-02	66.81	19:00	03-02-2022	-1.36	19:00	03-08-2022	52.78	
	30	Dumraon New-Buxar ckt-01	23.04	19:00	31-03-2022	5.62	16:00	26-03-2022	13.49	
	31	Dumraon New-Buxar ckt-02	22.94	19:00	31-03-2022	5.61	16:00	26-03-2022	13.42	
	32	Naubatpur - Masaurhi ckt - 01	-32.06	19:00	31-03-2022	0.04	1:40	31-03-2022	1.22	
33	Naubatpur - Masaurhi ckt - 02	-32.32	19:00	31-03-2022	0.02	20:00	13-03-2022	1.13		

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Month: **March'2022**

Substation Details	S.No.	MVA Capacity	Load						MW	Remark
			Max	Time	Date	Min	Time	Date		
			D. Power Flow In transformers							
Amnour GIS	1	Tr-01/160 MVA, 220/132 kV	125.66	20:00	19-03-2022	31.19	15:00	07-03-2022	77.37	
	2	Tr-02/160 MVA, 220/132 kV	127.39	20:00	19-03-2022	31.45	15:00	07-03-2022	78.25	
	3	Tr-01/50 MVA, 132/33 kV	23.44	20:00	17-03-2022	0.13	18:00	04-03-2022	13.25	
	4	Tr-02/50 MVA, 132/33 kV	42.61	20:00	31-03-2022	0.13	18:00	04-03-2022	13.54	
KhijirSarai GIS	1	Tr-01/160 MVA, 220/132 kV	112.37	19:00	18-03-2022	18.7	17:00	07-03-2022	69.12	
	2	Tr-02/160 MVA, 220/132 kV	115.67	19:00	18-03-2022	19.84	17:00	07-03-2022	71.46	
	3	Tr-01/50 MVA, 132/33 kV								
	4	Tr-02/50 MVA, 132/33 kV	7.46	18:00	01-03-2022	0.03	14:00	11-03-2022	1.48	
	5	Tr-03/50 MVA, 132/33 kV	13.84	08:00	11-03-2022	0.03	15:00	07-03-2022	9.38	
Narhat GIS	1	Tr-01/160 MVA, 220/132 kV	45.16	19:00	21-03-2022	8.62	07:00	02-03-2022	14.67	
	2	Tr-02/160 MVA, 220/132 kV	40.12	19:00	21-03-2022	5.38	12:00	16-03-2022	13.02	
	3	Tr-01/50 MVA, 132/33 kV	5.47	20:00	21-03-2022	0.09	13:00	31-03-2022	3.70	
	4	Tr-02/50 MVA, 132/33 kV	15.01	08:00	11-03-2022	0.08	09:00	06-03-2022	10.15	
Sekhopur Sarai GIS	1	Tr-01/160 MVA, 220/132 kV	25.20	19:00	26-03-2022	2.00	19:00	26-03-2022	22.52	
	2	Tr-02/160 MVA, 220/132 kV	25.6	19:00	26-03-2022	7.4	19:00	26-03-2022	24.8	
	3	Tr-01/50 MVA, 132/33 kV	1.10	19:00	05-03-2022	0.20	08:00	01-03-2022	0.82	
	4	Tr-02/50 MVA, 132/33 kV	17.50	20:00	22-03-2022	2.6	08:00	02-03-2022	11.80	
Haveli Kharagpur GIS	1	Tr-01/160 MVA, 220/132 kV	30.30	22:00	28-03-2022	4.30	17:00	26-03-2022	22.97	
	2	Tr-02/160 MVA, 220/132 kV	28.70	19:00	26-03-2022	3.00	17:00	26-03-2022	21.64	
	3	Tr-01/50 MVA, 132/33 kV	7.50	21:00	22-03-2022	1.70	14:00	04-03-2022	4	
	4	Tr-02/50 MVA, 132/33 kV	7.80	18:00	01-03-2022	1.00	14:00	11-03-2022	2.90	
Goradih GIS	1	Tr-01/160 MVA, 220/132 kV	0.00	00:00	01-03-2022	0.00	00:00	01-03-2022	0.00	
	2	Tr-02/160 MVA, 220/132 kV								
	3	Tr-01/50 MVA, 132/33 kV	9.40	16:00	08-03-2022	0.00	15:00	02-03-2022	1.05	
	4	Tr-02/50 MVA, 132/33 kV	16.60	19:00	22-03-2022	0.00	13:00	08-03-2022	10.17	
Mokama GIS	1	Tr-01/160 MVA, 220/132 kV								
	2	Tr-02/160 MVA, 220/132 kV	96.40	18:00	12-03-2022	0.00	04:00	01-03-2022	27.49	
	3	Tr-01/80 MVA, 132/33 kV								
Dumraon GIS	1	Tr-02/80 MVA, 132/33 kV	0.00	00:00	01-03-2022	0.00	00:00	01-03-2022	0.00	
	1	Tr-01/160 MVA, 220/132 kV	106.26	19:00	31-03-2022	21.67	16:00	26-03-2022	65.49	
	2	Tr-01/80 MVA, 132/33 kV	0.04	00:00	03-01-2022	0.30	07:00	03-11-2022	-0.20	
Naubatpur GIS	3	Tr-02/80 MVA, 132/33 kV	20.46	19:00	31-03-2022	3.49	17:00	03-03-2022	13.14	
	1	Tr-01/500 MVA, 400/220 kV								
	2	Tr-02/500 MVA, 400/220 kV	64.90	19:00	31-03-2022	0.09	21:00	19-03-2022	24.00	
Naubatpur GIS	3	Tr-01/160 MVA, 220/132 kV								
	4	Tr-02/160 MVA, 220/132 kV	-64.96	19:00	31-03-2022	-0.03	1:00	30-03-2022	24.00	
	5	Tr-01/80 MVA, 132/33 kV								
Naubatpur GIS	6	Tr-02/80 MVA, 132/33 kV	0.09	18:00	28-03-2022	0.02	13:00	20-03-2022	0.10	
	6	Tr-02/80 MVA, 132/33 kV								
Note	Negative sign(-) denote import of power and positive sign (+) denote export of power .For example (-) 126.2 MW In Hajipur - Amnour ckt-1 denotes Import of 126.2 MW from Hajipur S/S to Amnour S/S and 82.23 MW In Amnour -Siwan ckt-1 denotes 82.23 MW from Amnour to Siwan S/S.									

BIHAR GRID COMPANY LIMITED											
Loading level of Transmission Assets											
									Month: April'2022		
Voltage Grade	S.No	Name of TL	Load MW						Avg of Month	Remark	
			Max	Time	Date	Min	Time	Date			
A. Power Flow In 400kV transmission line											
400 kV (08 nos.)	1	Naubatpur - Patna(PG) ckt - 01	-372.54	06:00	30-04-2022	-19.09		14:00	02-04-2022	-207.45	
	2	Naubatpur - Patna(PG) ckt - 02	-374.3	06:00	30-04-2022	-18.71		14:00	02-04-2022	-208.49	
	3	Naubatpur - Balia(PG) ckt - 01	334.19	05:00	15-04-2022	0.77		13:00	02-04-2022	160.66	
	4	Naubatpur - Balia(PG) ckt - 02	336.76	05:00	15-04-2022	0.11		13:00	01-04-2022	173.50	
	5	Jakkanpur - Nabinagar(NPGC) ckt - 01	-307.89	13:00	29-04-2022	-48.7		06:00	26-04-2022	-250.95	
	6	Jakkanpur - Nabinagar(NPGC) ckt - 02	-307.66	13:00	29-04-2022	-49.11		06:00	26-04-2022	-251.42	
	7	Jakkanpur - Patna(PG) ckt - 01	308.16	13:00	29-04-2022	49.04		06:00	26-04-2022	251.72	
	8	Naubatpur - Patna(PG) ckt - 02	306.46	13:00	29-04-2022	49.26		06:00	26-04-2022	250.63	
B. Power Flow in 220kV transmission line											
220 kV (28 nos.)	1	Hajipur - Amnour ckt-01	-144.97	13:00	26-04-2022	-6.66		15:00	24-04-2022	92.68	
	2	Hajipur - Amnour ckt-02	-144.75	13:00	26-04-2022	-6.52		15:00	24-04-2022	87.97	
	3	Patna (PG) - Khagaul ckt-02	-115.93	23:00	19-04-2022	-32.32		14:00	24-04-2022	-85.60	
	4	Patna (PG) - Khagaul ckt-03	-115.42	23:00	19-04-2022	-34.17		14:00	24-04-2022	-84.77	
	5	Khajirasarai - Biharsharif ckt-01	-132.41	20:00	22-04-2022	-6.92		12:00	01-04-2022	-74.86	
	6	Khajirasarai - Biharsharif ckt-02	-133.04	20:00	22-04-2022	-7.64		12:00	01-04-2022	-75.35	
	7	Khajirasarai - Bodh Gaya ckt-01	-62.61	12:00	29-04-2022	-0.75		14:00	24-04-2022	-34.98	
	8	Khajirasarai - Bodh Gaya ckt-02	-62.94	11:00	29-04-2022	-0.62		14:00	24-04-2022	-35.56	
	9	Khajirasarai - Gaya (PG) ckt-01	-93.84	12:00	29-04-2022	-7.48		15:00	24-04-2022	-58.71	
	10	Khajirasarai - Gaya (PG) ckt-02	-87.61	20:00	18-04-2022	-6.89		15:00	24-04-2022	-58.17	
	11	Khajirasarai - Narhat ckt-01	169.45	19:00	26-04-2022	32.71		13:00	23-04-2022	97.08	
	12	Khajirasarai - Narhat ckt-02	170.41	19:00	26-04-2022	32.73		13:00	23-04-2022	95.69	
	13	Narhat - Sekhopur Sarai ckt-01	126.01	19:00	26-04-2022	17.50		15:00	24-04-2022	31.02	
	14	Narhat - Sekhopur Sarai ckt-02	126.96	19:00	26-04-2022	17.55		15:00	24-04-2022	31.00	
	15	Sekhopur Sarai - Haveli Kharagpur ckt-01	154.70	21:00	06-04-2022	3.6		13:00	23-04-2022	64.96	
	16	Sekhopur Sarai - Haveli Kharagpur ckt-02	86.40	13:00	16-04-2022	0.4		00:00	03-04-2022	47.70	
	17	Haveli Kharagpur - Goradit ckt-01	48.90	13:00	16-04-2022	2.2		21:00	07-04-2022	9.54	
	18	Haveli Kharagpur - Goradit ckt-02	68.70	23:00	30-04-2022	2.00		21:00	07-04-2022	7.27	
	19	Mokama-Biharsharif ckt-1	0.00	0:04	01-04-2022	0.00		1:00	01-04-2022	0	System connected but no power flow
	20	Mokama-Biharsharif ckt-2	0.00	0:04	01-04-2022	0.00		1:00	01-04-2022	0	
	21	Mokama-BTPS ckt-1	-58.60	0:29	27-04-2022	0.00		0:46	05-04-2022	-15.64	
	22	Mokama-BTPS ckt-2	-58.60	0:29	27-04-2022	0.00		0:46	03-04-2022	-14.07	
	23	Ara(PG)-Dumraon New - 01	60.4	19:00	24-04-2022	0.05		03:00	24-04-2022	48.29	
	24	Ara(PG)-Dumraon New - 02	60.6	19:00	24-04-2022	-0.02		03:00	24-04-2022	48.50	
	25	Dumraon New-Nadokhar - 01	-84.46	11:00	24-04-2022	0.03		01:00	24-04-2022	39.32	
	26	Dumraon New-Nadokhar - 02	-208.47	19:00	24-04-2022	0.06		03:00	30-04-2022	48.50	
	27	Naubatpur- Ara(PG) Ckt-02	138.53	06:00	30-04-2022	60.04		16:00	30-04-2022	7.87	
	28	Naubatpur- Khagaul Ckt-02	134.41	14:00	28-04-2022	26.51		08:00	30-04-2022	-4.90	
C. Power Flow in 132 kV transmission line											
132 kV (33 nos.)	1	Amnour - Siwan ckt-01	65.12	13:00	26-04-2022	1.48		16:00	24-04-2022	35.15	
	2	Amnour - Siwan ckt-02	73.37	13:00	09-04-2022	1.73		16:00	10-04-2022	31.68	
	3	Amnour - Chhapara ckt-01	64.22	12:00	09-04-2022	1.55		12:00	24-04-2022	41.88	
	4	Amnour - Chhapara ckt-02	96.31	19:00	29-04-2022	1.66		14:00	24-04-2022	45.16	
	5	Khajirasarai - Bodh Gaya ckt -03	0.33	23:00	07-04-2022	0		13:00	04-04-2022	0.01	
	6	Khajirasarai - Wajingan ckt -01	47.13	21:00	19-04-2022	0.06		13:00	03-04-2022	32.10	
	7	Khajirasarai-Hulaganj ckt-01	68.85	18:00	28-04-2022	0		08:00	01-04-2022	3.05	
	8	Khajirasarai - Jehanabad ckt-01	76.36	19:00	04-04-2022	7.43		15:00	24-04-2022	49.27	
	9	Khajirasarai - Jehanabad ckt-02	76.23	19:00	03-04-2022	7.43		15:00	24-04-2022	49.24	
	10	Narhat - Nawadah ckt-01	41.19	18:00	27-04-2022	5.19		14:00	23-04-2022	27.06	
	11	Narhat - Nawadah ckt-02	38.16	18:00	27-04-2022	-0.52		14:00	23-04-2022	24.03	
	12	Haveli Kharagpur - Sultanganj ckt-01	19.70	21:00	29-04-2022	1.10		11:00	29-04-2022	0.04	
	13	Haveli Kharagpur - Sultanganj ckt-02	22.10	12:00	06-04-2022					11.40	
	14	Haveli Kharagpur - Lakhisarai ckt-01	34.10	13:00	26-04-2022	5.10		15:00	26-04-2022	0.36	
	15	Haveli Kharagpur - Lakhisarai ckt-02	34.00	13:00	26-04-2022	5.10		15:00	26-04-2022	0.36	
	16	Haveli Kharagpur - Jamalpur ckt-01	55.40	22:00	26-04-2022	19.70		14:00	24-04-2022	6.02	
	17	Haveli Kharagpur - Jamalpur ckt-02	56.90	20:00	29-04-2022	2.10		23:00	29-04-2022	35.51	
	18	Sekhopur Sarai - Sekhpura ckt-01	46.50	19:00	26-04-2022	4.0		15:00	24-04-2022	20.30	
	19	Sekhopur Sarai - Sekhpura ckt-02	46.80	19:00	26-04-2022	4.1		15:00	24-04-2022	19.87	
	20	Sekhopur Sarai - Bharsarif	0	00:00	0	0		00:00	0	0.00	System connected but no power flow
	21	Goradit - Sultanganj ckt-01	42.40	12:00	16-04-2022	11.70		09:00	08-04-2022	4.11	
	22	Goradit - Sultanganj ckt-02	41.80	12:00	16-04-2022	-0.10		01:00	01-04-2022	4.16	
	23	Goradit - Bahalgaon ckt-01	0.00	00:00	01-04-2022	0.00		00:00	01-04-2022	0.02	
	24	Goradit - Bahalgaon ckt-02	0.00	00:00	01-04-2022	0.00		00:00	01-04-2022	0.01	
	25	Goradit - Sabour ckt-01	-31.40	20:00	14-04-2022	0.00		00:00	05-04-2022	-9.30	
	26	Goradit - Sabour ckt-02	-16.80	21:00	24-04-2022	0.00		00:00	05-04-2022	-3.48	
	27	Mokama-Hatidah ckt-01	57.40	07:00	27-04-2022	0.00		12:00	01-04-2022	17.37	
	28	Mokama-Hatidah ckt-02	58.00	07:00	27-04-2022	0.00		12:00	01-04-2022	17.16	
	29	Dumraon New-Dumraon(BSPTCL) ckt-02	51.12	10:00	04-07-2022	5.00		16:00	25-04-2022	36.90	
	30	Dumraon New-Buxar ckt-01	25.38	20:00	29-04-2022	2.41		15:00	24-04-2022	18.38	
	31	Dumraon New-Buxar ckt-02	25.31	20:00	29-04-2022	2.42		15:00	24-04-2022	18.31	
	32	Naubatpur - Masaurhi ckt - 01	68.28	12:00	08-04-2022	15.2		07:00	30-04-2022	-28.71	
	33	Naubatpur - Masaurhi ckt - 02	41.86	19:00	19-04-2022	15.13		16:00	30-04-2022	-28.70	

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Month: April'2022

Substation Details	S.No.	MVA Capacity	Load MW						Remark
			Max	Time	Date	Min	Time	Date	
			D. Power Flow in transformers						
Amnour GIS	1	Tr-01/160 MVA, 220/132 kV	143.74	13:00	26-04-2022	6.17	14:00	24-04-2022	91.70
	2	Tr-02/160 MVA, 220/132 kV	145.08	13:00	26-04-2022	6.24	14:00	24-04-2022	92.85
	3	Tr-01/50 MVA, 132/33 kV	26.73	21:00	28-04-2022	0.03	19:00	05-04-2022	14.89
	4	Tr-02/50 MVA, 132/33 kV	38.98	00:00	02-04-2022	0.03	07:00	29-04-2022	16.76
KhijirSarai GIS	1	Tr-01/160 MVA, 220/132 kV	108.80	10:00	29-04-2022	19.21	13:00	16-04-2022	69.03
	2	Tr-02/160 MVA, 220/132 kV	112.19	10:00	29-04-2022	20.3	13:00	16-04-2022	71.32
	3	Tr-01/50 MVA, 132/33 kV	Not Commissioned						
	4	Tr-02/50 MVA, 132/33 kV	6.09	17:00	18-04-2022	0.05	15:00	23-04-2022	2.84
	5	Tr-03/50 MVA, 132/33 kV	15.10	19:00	26-04-2022	0.02	16:00	30-04-2022	8.96
Narhat GIS	1	Tr-01/160 MVA, 220/132 kV	49.56	18:00	27-04-2022	11.18	12:00	26-04-2022	17.51
	2	Tr-02/160 MVA, 220/132 kV	45.66	18:00	27-04-2022	10.32	12:00	26-04-2022	15.83
	3	Tr-01/50 MVA, 132/33 kV	7.03	20:00	26-04-2022	0.08	21:00	06-04-2022	4.59
	4	Tr-02/50 MVA, 132/33 kV	16.07	19:00	19-04-2022	0.03	09:00	25-04-2022	11.01
Sekhopur Sarai GIS	1	Tr-01/160 MVA, 220/132 kV	54.40	19:00	26-04-2022	4.50	07:00	28-04-2022	26.70
	2	Tr-02/160 MVA, 220/132 kV	54.5	19:00	26-04-2022	2.8	07:00	28-04-2022	26.99
	3	Tr-01/50 MVA, 132/33 kV	1.00	11:00	18-04-2022	0.20	03:00	01-04-2022	0.84
	4	Tr-02/50 MVA, 132/33 kV	24.30	19:00	29-04-2022	1.2	18:00	17-04-2022	17.39
Haveli Kharagpur GIS	1	Tr-01/160 MVA, 220/132 kV	81.30	12:00	06-04-2022	12.10	14:00	24-04-2022	42.12
	2	Tr-02/160 MVA, 220/132 kV	62.50	18:00	26-04-2022	20.30	21:00	27-04-2022	20.81
	3	Tr-01/50 MVA, 132/33 kV	8.20	22:00	27-04-2022	1.20	18:00	24-04-2022	6
Goradih GIS	1	Tr-02/50 MVA, 132/33 kV	4.50	22:00	12-04-2022	1.50	07:00	14-04-2022	3.30
	2	Tr-01/160 MVA, 220/132 kV	107.80	12:00	16-04-2022	3.20	00:00	08-04-2022	16.48
	3	Tr-02/160 MVA, 220/132 kV	Not Commissioned						
	4	Tr-01/50 MVA, 132/33 kV	12.30	20:00	14-04-2022	1.10	14:00	23-04-2022	8.41
Mokama GIS	1	Tr-02/50 MVA, 132/33 kV	19.50	19:00	12-04-2022	1.10	15:00	23-04-2022	12.05
	2	Tr-01/160 MVA, 220/132 kV	Not Commissioned						
	3	Tr-02/160 MVA, 220/132 kV	115.30	0.29	27-04-2022	0.00	0.50	01-04-2022	34.51
	4	Tr-01/80 MVA, 132/33 kV	Not Commissioned						
Dumraon GIS	1	Tr-02/80 MVA, 132/33 kV	0.00	0.04	01-04-2022	0.00	1.00	30-04-2022	0.09
	2	Tr-01/160 MVA, 220/132 kV	112.55	21:00	29-04-2022	19.95	15:00	24-04-2022	74.08
	3	Tr-01/80 MVA, 132/33 kV	20.88	20:00	28-04-2022	0.30	00:00	04-01-2022	16.46
	4	Tr-02/80 MVA, 132/33 kV	20.80	20:00	04-12-2022	0.03	16:00	20-04-2022	16.62
Naubatpur GIS	1	Tr-01/500 MVA, 400/220 kV	Not Commissioned						
	2	Tr-02/500 MVA, 400/220 kV	242.45	21:00	29-04-2022	33.85	14:00	24-04-2022	40.00
	3	Tr-01/160 MVA, 220/132 kV	84.3	19:00	19-04-2022	32.22	09:00	29-04-2022	32.00
	4	Tr-02/160 MVA, 220/132 kV	Not Commissioned						
	5	Tr-01/80 MVA, 132/33 kV	0.1	15:00	27-04-2022	0.06	07:00	12-04-2022	0.18
	6	Tr-02/80 MVA, 132/33 kV	Not Commissioned						
Jakkanpur GIS	1	Tr-01/500 MVA, 400/220 kV	0.05	07:00	30-04-2022	0.01	09:00	27-04-2022	0.03
Note	Negative sign(-) denote import of power and positive sign (+) denote export of power .For example (-) 144.97 MW in Hajipur - Amnour ckt-1 denotes import of 144.97 MW from Hajipur S/S to Amnour S/S and 73.37 MW in Amnour -Shwan ckt-2 denotes 73.37 MW from Amnour to Shwan S/S.								

BIHAR GRID COMPANY LIMITED										
Loading level of Transmission Assets										
									Month: May'2022	
Voltage Grade	S.No	Name of TL	Load MW						Remark	
			Max	Time	Date	Min	Time	Date		Avg of Month
A. Power Flow in 400kV transmission line										
400 kV (08 nos.)	1	Naubatpur - Patna(PG) ckt - 01	-462.74	05:00	17-05-2022	-119.71	13:00	01-05-2022	-302.14	
	2	Naubatpur - Patna(PG) ckt - 02	-465.4	05:00	17-05-2-22	-120.5	13:00	01-05-2022	-301.80	
	3	Naubatpur - Ballia(PG) ckt -01	426.28	04:00	14-05-2022	43.19	13:00	01-05-2022	212.87	
	4	Naubatpur - Ballia(PG) ckt - 02	362.83	05:00	17-05-2022	45.76	13:00	01-05-2022	215.55	
	5	Jakkanpur - Nabinagar(NPGC) ckt - 01	-464.72	21:00	15-05-2022	-52.56	07:00	20-05-2022	-329.44	
	6	Jakkanpur - Nabinagar(NPGC) ckt - 02	-466.34	21:00	15-05-2020	-53.67	07:00	20-05-2022	-329.87	
	7	Jakkanpur - Patna(PG) ckt - 01	466.8	21:00	15-05-2020	53.07	07:00	20-05-2022	331.19	
	8	Jakkanpur - Patna(PG) ckt - 02	464.62	21:00	15-05-2020	52.38	07:00	20-05-2022	328.85	
B. Power Flow in 220kV transmission line										
220 kV (28 nos.)	1	Hajipur - Amnour ckt-01	-133.4	22:00	11-05-2022	-4.98	05:00	29-05-2022	-93.77	
	2	Hajipur - Amnour ckt-02	-133.3	22:00	11-05-2022	-5.02	05:00	29-05-2022	-89.00	
	3	Patna (PG) - Khagaul ckt-02	151.52	05:00	28-05-2022	33.22	08:00	05-05-2022	72.94	
	4	Patna (PG) - Khagaul ckt-03	149.64	05:00	28-05-2022	33.1	08:00	05-05-2022	72.66	
	5	Khijirsarai - Biharsharif ckt-01	-128.90	18:00	25-05-2022	-18.69	00:00	22-05-2022	-74.23	
	6	Khijirsarai - Biharsharif ckt-02	-125.21	05:00	21-05-2022	-23.66	23:00	21-05-2022	-74.35	
	7	Khijirsarai - Bodh Gaya ckt-01	-76.05	10:00	18-05-2022	0.44	19:00	19-05-2022	-30.81	
	8	Khijirsarai - Bodh Gaya ckt-02	-76.35	10:00	18-05-2022	0.78	19:00	19-05-2022	-32.68	
	9	Khijirsarai - Gaya (PG) ckt-01	-103.19	10:00	18-05-2022	-1.89	05:00	22-05-2022	-56.97	
	10	Khijirsarai - Gaya (PG) ckt-02	-103.15	10:00	18-05-2022	-1.82	05:00	22-05-2022	-56.87	
	11	Khijirsarai - Narhat ckt-01	137.49	20:00	31-05-2022	29.21	01:00	22-05-2022	89.95	
	12	Khijirsarai - Narhat ckt-02	137.37	20:00	31-05-2022	29.18	01:00	22-05-2022	89.89	
	13	Narhat - Sekhopur Sarai ckt-01	95.36	20:00	31-05-2022	11.22	18:00	19-05-2022	26.45	
	14	Narhat - Sekhopur Sarai ckt-02	95.18	20:00	31-05-2022	11.22	18:00	19-05-2022	26.43	
	15	Sekhopur Sarai - Haveli Kharagpur ckt-01	68.50	01:00	01-05-2022	-0.9	17:00	19-05-2022	43.06	
	16	Sekhopur Sarai - Haveli Kharagpur ckt-02	68.60	01:00	01-05-2022	-1.5	17:00	19-05-2022	43.13	
	17	Haveli Kharagpur - Goradhih ckt-01	0	00:00	0	0	00:00	0	0.00	
	18	Haveli Kharagpur - Goradhih ckt-02	66.70	11:00	01-05-2022	8.20	04:00	03-05-2022	1.58	
	19	Mokama-Biharsharif ckt-1	130.10	17:00	20-05-2022	0.00	03:00	03-05-2022	2.51	
	20	Mokama-Biharsharif ckt-2	130.70	17:00	20-05-2022	0.00	03:00	03-05-2022	2.65	
	21	Mokama-BTPS ckt-1	-130.30	17:00	20-05-2022	0.00	11:00	04-05-2022	-35.29	
	22	Mokama-BTPS ckt-2	-130.20	17:00	20-05-2022	0.00	11:00	04-05-2022	-35.37	
	23	Ara(PG)-Dumraon New - 01	72.92	19:00	07-05-2022	-0.05	23:00	04-05-2022	3.00	
	24	Ara(PG)-Dumraon New - 02	72.93	19:00	07-05-2022	-0.01	09:00	30-05-2022	5.00	
	25	Dumraon New-Nadokhar - 01	-125.67	20:00	05-05-2022	-0.86	16:00	19-05-2022	49.09	
	26	Dumraon New-Nadokhar - 02	-125.67	20:00	05-05-2022	0.03	15:00	12-05-2022	49.40	
	27	Naubatpur- Ara(PG) Ckt-01	282.88	00:00	23-05-2022	16.58	20:00	23-05-2022	48.12	
	28	Naubatpur- Ara(PG) Ckt-02	156.78	20:00	05-05-2022	16.59	20:00	23-05-2022	73.83	
	29	Naubatpur- Khagaul Ckt-01	61.74	15:00	18-05-2022	0.01	08:00	23-05-2022	8.66	
	30	Naubatpur- Khagaul Ckt-02	61.95	15:00	18-05-2022	0.02	09:00	20-05-2022	14.98	
C. Power Flow in 132 kV transmission line										
132 kV (33 nos.)	1	Amnour - Siwan ckt-01	50.66	23:00	28-05-2022	0.02	05:00	29-05-2022	53.68	
	2	Amnour - Siwan ckt-02	56.62	12:00	02-05-2022	1.91	05:00	29-05-2022	34.80	
	3	Amnour - Chhapara ckt-01	91.73	12:00	12-05-2022	3.43	05:00	29-05-2022	41.42	
	4	Amnour - Chhapara ckt-02	91.94	00:00	21-05-2022	3.36	05:00	29-05-2022	43.63	
	5	Khijirsarai - Bodh Gaya ckt - 03	0.09	06:00	12-05-2022	0.01	07:00	01-05-2022	0.00	
	6	Khijirsarai - Wajirganj ckt - 01	46.47	20:00	21-05-2022	0.01	00:00	28-05-2022	31.62	
	7	Khijirsarai-Hulasganj ckt-01	50.29	11:00	26-05-2022	0.07	13:00	20-05-2022	17.53	
	8	Khijirsarai - Jehanabad ckt-01	64.97	19:00	17-05-2022	1.55	23:00	21-05-2022	42.72	
	9	Khijirsarai - Jehanabad ckt-02	64.93	19:00	17-05-2022	1.52	23:00	21-05-2022	42.68	
	10	Narhat - Nawadah ckt-01	52.44	20:00	21-05-2022	0.18	00:00	21-05-2022	29.36	
	11	Narhat - Nawadah ckt-02	49.33	20:00	21-05-2022	0.58	15:00	19-05-2022	27.46	
	12	Haveli Kharagpur - Sultanganj ckt-01	0	00:00	0	0	00:00	0	0.00	
	13	Haveli Kharagpur - Sultanganj ckt-02	18.70	20:00	01-05-2022	1.70	10:00	01-05-2022	5.73	
	14	Haveli Kharagpur - Lakhisarai ckt-01	37.20	20:00	31-05-2022	4.90	16:00	26-05-2022	3.48	
	15	Haveli Kharagpur - Lakhisarai ckt-02	37.30	20:00	31-05-2022	5.00	16:00	26-05-2022	3.46	
	16	Haveli Kharagpur - Jamalpur ckt-01	64.90	19:00	30-05-2022	0.80	16:00	26-05-2022	25.14	
	17	Haveli Kharagpur - Jamalpur ckt-02	53.30	20:00	12-05-2022	7.10	03:00	44684.00	17.62	
	18	Sekhopur Sarai - Sekhpura ckt-01	20.90	20:00	17-05-2022	2.3	03:00	22-05-2022	18.89	
	19	Sekhopur Sarai - Sekhpura ckt-02	21.00	20:00	17-05-2022	1.8	17:00	23-05-2022	24.63	
	20	Sekhopur Sarai - Biharsharif	0	00:00	0	0	00:00	0	0.00	System connected but no power flow
	21	Goradhih - Sultanganj ckt-01	34.20	00:00	01-05-2022	28.60	09:00	01-05-2022	0.77	
	22	Goradhih - Sultanganj ckt-02	34.40	00:00	01-05-2022	28.60	09:00	01-05-2022	0.79	
	23	Goradhih - Kahalgao ckt-01	0.00	00:00	01-05-2022	0.00	00:00	01-05-2022	0.02	
	24	Goradhih - Kahalgao ckt-02	7.70	04:00	03-05-2022	3.60	03:00	03-05-2022	0.02	
	25	Goradhih - Sabour ckt-01	14.20	20:00	01-05-2022	0.10	02:00	24-05-2022	-8.34	
	26	Goradhih - Sabour ckt-02	14.30	20:00	01-05-2022	0.10	07:00	24-05-2022	-8.56	
	27	Mokama-Hatidah ckt-01	53.60	08:00	31-05-2022	11.40	15:00	26-05-2022	32.96	
	28	Mokama-Hatidah ckt-02	54.30	08:00	31-05-2022	11.60	15:00	26-05-2022	33.39	
	29	Dumraon New-Dumraon(BSPTCL) ckt-02	56.14	19:00	24-05-2022	0.46	22:00	29-05-2022	44.54	
	30	Dumraon New-Buxar ckt-01	25.50	20:00	15-05-2022	0.06	19:00	24-05-2022	20.25	
	31	Dumraon New-Buxar ckt-02	25.43	20:00	18-05-2022	0.06	19:00	24-05-2022	20.34	
	32	Naubatpur - Masaurhi ckt - 01	37.54	14:00	01-05-2022	1.99	05:00	28-05-2022	15.73	
	33	Naubatpur - Masaurhi ckt - 02	31.11	17:00	09-05-2022	0.98	05:00	28-05-2022	15.45	

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Month: **May'2022**

Substation Details	S.No.	MVA Capacity	Load MW						Remark
			Max	Time	Date	Min	Time	Date	
			D. Power Flow in transformers						
Amnour GIS	1	Tr-01/160 MVA, 220/132 kV	132.34	22:00	11-05-2022	5.01	05:00	29-05-2022	92.84
	2	Tr-02/160 MVA, 220/132 kV	134.26	22:00	11-05-2022	4.99	05:00	29-05-2022	94.08
	3	Tr-01/50 MVA, 132/33 kV	25.71	00:00	29-05-2022	0.07	00:00	25-05-2022	16.78
	4	Tr-02/50 MVA, 132/33 kV	25.82	00:00	29-05-2022	0.07	00:00	25-05-2022	16.87
KhajurSarai GIS	1	Tr-01/160 MVA, 220/132 kV	105.87	07:00	19-05-2022	7.36	00:00	22-05-2022	71.78
	2	Tr-02/160 MVA, 220/132 kV	109.11	07:00	19-05-2022	8.22	00:00	22-05-2022	74.17
	3	Tr-01/50 MVA, 132/33 kV	Not Commissioned						
	4	Tr-02/50 MVA, 132/33 kV	12.52	07:00	28-05-2022	0.03	00:00	09-05-2022	2.85
	5	Tr-03/50 MVA, 132/33 kV	14.84	19:00	27-05-2022	0.09	03:00	28-05-2022	8.51
Narhat GIS	1	Tr-01/160 MVA, 220/132 kV	64.10	20:00	21-05-2022	0.72	00:00	21-05-2022	18.81
	2	Tr-02/160 MVA, 220/132 kV	59.96	20:00	21-05-2022	0.06	00:00	21-05-2022	17.38
	3	Tr-01/50 MVA, 132/33 kV	8.15	19:00	18-05-2022	0.07	19:00	22-05-2022	5.41
	4	Tr-02/50 MVA, 132/33 kV	16.82	08:00	19-05-2022	0.03	16:00	01-05-2022	10.16
Sekhopur Sarai GIS	1	Tr-01/160 MVA, 220/132 kV	27.00	20:00	18-05-2022	0.30	01:00	22-05-2022	24.19
	2	Tr-02/160 MVA, 220/132 kV	26.5	08:00	15-05-2022	2.3	15:00	19-05-2022	24.17
	3	Tr-01/50 MVA, 132/33 kV	1.00	07:00	11-05-2022	0.20	01:00	01-05-2022	0.91
	4	Tr-02/50 MVA, 132/33 kV	16.60	19:00	08-05-2022	1.1	07:00	03-05-2022	12.46
Haveli Kharagpur GIS	1	Tr-01/160 MVA, 220/132 kV	64.30	20:00	31-05-2022	4.00	03:00	03-05-2022	32.49
	2	Tr-02/160 MVA, 220/132 kV	68.30	20:00	31-05-2022	3.00	03:00	03-05-2022	31.12
	3	Tr-01/50 MVA, 132/33 kV	8.40	22:00	31-05-2022	0.60	15:00	24-05-2022	5.44
	4	Tr-02/50 MVA, 132/33 kV	4.20	22:00	31-05-2022	0.50	13:00	02-05-2022	2.73
Goradih GIS	1	Tr-01/160 MVA, 220/132 kV	69.20	00:00	01-05-2022	7.10	03:00	03-05-2022	1.52
	2	Tr-02/160 MVA, 220/132 kV	Not Commissioned						
	3	Tr-01/50 MVA, 132/33 kV	11.10	20:00	01-05-2022	0.30	14:00	28-05-2022	6.44
	4	Tr-02/50 MVA, 132/33 kV	17.40	20:00	01-05-2022	0.20	12:00	28-05-2022	10.52
Mokama GIS	1	Tr-01/160 MVA, 220/132 kV	Not Commissioned						
	2	Tr-02/160 MVA, 220/132 kV	107.60	08:00	31-05-2022	22.60	15:00	26-05-2022	65.89
	3	Tr-01/80 MVA, 132/33 kV	Not Commissioned						
	4	Tr-02/80 MVA, 132/33 kV	0.00	01:00	01-05-2022	0.00	23:59	31-05-2022	0.086
Dumraon GIS	1	Tr-01/160 MVA, 220/132 kV	122.83	21:00	17-05-2022	15.97	07:00	05-05-2022	85.488
	2	Tr-01/80 MVA, 132/33 kV	21.42	21:00	28-05-2022	0.19	07:00	05-05-2022	16.984
	3	Tr-02/80 MVA, 132/33 kV	0.04	04:00	01-05-2022	0.03	00:00	01-05-2022	0.008
Naubatpur GIS	1	Tr-01/500 MVA, 400/220 kV	Not Commissioned						
	2	Tr-02/500 MVA, 400/220 kV	324.99	00:00	18-05-2022	43.53	17:00	05-05-2022	-2.14
	3	Tr-01/160 MVA, 220/132 kV	61.84	19:00	06-05-2022	4.06	05:00	28-05-2022	-30.40
	4	Tr-02/160 MVA, 220/132 kV	Not Commissioned						
	5	Tr-01/80 MVA, 132/33 kV	0.1	13:00	16-05-2022	0.07	05:00	10-05-2022	0.08
	6	Tr-02/80 MVA, 132/33 kV	Not Commissioned						
Jalkanpur GIS	1	Tr-01/500 MVA, 400/220 kV	0.05	17:00	02-05-2022	0.01	19:00	04-05-2022	0.04
	2	Tr-02/500 MVA, 400/220 kV	Not Commissioned						
	3	Tr-01/160 MVA, 220/132 kV	0.08	16:00	26-05-2022	0.03	21:00	05-11-2020	0.04
	4	Tr-02/160 MVA, 220/132 kV	Not Commissioned						
	5	Tr-01/80 MVA, 132/33 kV	Not Commissioned						
	6	Tr-02/80 MVA, 132/33 kV	Not Commissioned						
	7	Tr-03/80 MVA, 132/33 kV	Not Commissioned						
	8	Tr-04/80 MVA, 132/33 kV	0.05	08:00	28-05-2022	0.04	00:00	28-05-2022	0.04
Note	Negative sign(-) denote import of power and positive sign (+) denote export of power. For example (-) 133.4 MW in Hajipur - Amnour ckt-1 denotes import of 133.4 MW from Hajipur S/S to Amnour S/S and 56.62 MW in Amnour -Siwan ckt-2 denotes 56.62 MW from Amnour to Siwan S/S.								

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Month: June'2022

Voltage Grade	S.No	Name of TL	Load MW						Avg of Month	Remark
			Max	Time	Date	M/n	Time	Date		
			A. Power Flow in 400kV transmission line							
400 kV (08 nos.)	1	Naubatpur - Patna(PG) ckt - 01	-492.22	17:00	28-06-2022	-149.23	15:00	30-06-2022	-371.47	
	2	Naubatpur - Patna(PG) ckt - 02	-495.38	17:00	28-06-2022	-150.77	15:00	30-06-2022	-373.31	
	3	Naubatpur - Ballia(PG) ckt - 01	405.39	17:00	28-06-2022	60.76	15:00	30-06-2022	270.04	
	4	Naubatpur - Ballia(PG) ckt - 02	408.95	17:00	28-06-2022	63.35	15:00	30-06-2022	272.17	
	5	Jakkanpur - Nabinagar(NPGC) ckt - 01	-552.41	01:00	08-06-2022	-44.76	07:00	25-06-2022	-284.30	
	6	Jakkanpur - Nabinagar(NPGC) ckt - 02	-553.01	01:00	08-06-2022	-44.36	07:00	25-06-2022	-284.80	
	7	Jakkanpur - Patna(PG) ckt - 01	554.61	01:00	08-06-2022	44.33	07:00	25-06-2022	285.84	
	8	Jakkanpur - Patna(PG) ckt - 02	551.74	01:00	08-06-2022	44.52	07:00	25-06-2022	283.68	
B. Power Flow in 220kV transmission line										
220 kV (34 nos.)	1	Hajipur - Amnour ckt-01	-181.39	14:00	12-06-2022	-22.88	09:00	29-06-2022	97.47	
	2	Hajipur - Amnour ckt-02	-172.67	14:00	22-06-2022	-22.97	09:00	29-06-2022	93.29	
	3	Patna (PG) - Khagaul ckt-02	84.5	16:00	08-06-2022	25.32	15:00	19-06-2022	-60.42	
	4	Patna (PG) - Khagaul ckt-03	84.62	16:00	08-06-2022	25.18	15:00	19-06-2022	-60.23	
	5	Khijisara - Biharsharif ckt-01	-143.13	06:00	09-06-2022	-20.79	16:00	01-06-2022	-84.61	
	6	Khijisara - Biharsharif ckt-02	-143.95	06:00	09-06-2022	-21.59	16:00	01-06-2022	-85.25	
	7	Khijisara - Bodh Gaya ckt-01	-58.71	20:00	23-06-2022	1.13	21:00	18-06-2022	-30.51	
	8	Khijisara - Bodh Gaya ckt-02	-58.99	20:00	23-06-2022	1.11	21:00	18-06-2022	-30.63	
	9	Khijisara - Gaya (PG) ckt-01	-87.86	19:00	05-06-2022	-11.33	18:00	18-06-2022	-56.37	
	10	Khijisara - Gaya (PG) ckt-02	-87.60	19:00	05-06-2022	-11.17	18:00	18-06-2022	-56.26	
	11	Khijisara - Narhat ckt-01	129.13	11:00	02-06-2022	19.2	13:00	29-06-2022	90.04	
	12	Khijisara - Narhat ckt-02	128.98	11:00	02-06-2022	19.21	13:00	29-06-2022	89.98	
	13	Narhat - Sekhopur Sarai ckt-01	81.17	11:00	06-06-2022	8.13	13:00	29-06-2022	24.08	
	14	Narhat - Sekhopur Sarai ckt-02	81.08	11:00	06-06-2022	8.14	13:00	29-06-2022	24.07	
	15	Sekhopur Sarai - Haveli Kharagpur ckt-01	70.10	22:00	24-06-2022	2.1	15:00	15-06-2022	45.99	
	16	Sekhopur Sarai - Haveli Kharagpur ckt-02	57.90	19:00	15-06-2022	1.6	15:00	15-06-2022	27.28	
	17	Haveli Kharagpur - Goradh ckt-01	-1.10	05:00	05-06-2022	-0.2	21:00	04-06-2022	0.04	
	18	Haveli Kharagpur - Goradh ckt-02	0	00:00	0	0	00:00	0	0.00	System connected but no power flow
	19	Mokama-Biharsharif ckt-1	-81.70	19:00	05-06-2022	-6.60	10:00	06-06-2022	-0.92	
	20	Mokama-Biharsharif ckt-2	-80.50	19:00	05-06-2022	-6.40	10:00	06-06-2022	-0.90	
	21	Mokama-BTPS ckt-1	-68.10	18:00	06-06-2022	0.00	18:00	05-06-2022	-32.77	
	22	Mokama-BTPS ckt-2	-68.10	18:00	06-06-2022	0.00	18:00	05-06-2022	-32.85	
	23	Ara(PG)-Dumraon New - 01	-49.71	07:00	19-06-2022	-0.01	10:00	14-06-2022	-39.76	
	24	Ara(PG)-Dumraon New - 02	-49.71	07:00	19-06-2022	0.01	10:00	14-06-2022	-39.776	
	25	Dumraon New-Nadokhar - 01	-70.89	21:00	03-06-2022	-0.85	05:00	19-06-2022	-56.032	
	26	Dumraon New-Nadokhar - 02	-71.31	21:00	03-06-2022	-0.46	17:00	19-06-2022	-56.58	
	27	Naubatpur- Ara(PG) Ckt-01	115.96	06:00	18-06-2022	30.62	17:00	18-06-2022	78.91	
	28	Naubatpur- Ara(PG) Ckt-02	115.65	06:00	18-06-2022	30.11	17:00	18-06-2022	78.91	
	29	Naubatpur- Khagaul Ckt-01	48.05	14:00	01-06-2022	0.00	12:00	28-06-2022	4.08	
	30	Naubatpur- Khagaul Ckt-02	48.16	14:00	01-06-2022	0.02	12:00	28-06-2022	4.10	
	31	Naubatpur-Bhusaula Ckt-01	0.47	17:00	18-06-2022	0.01	18:00	14-06-2022	0.04	
	32	Naubatpur-Bhusaula Ckt-02	0.47	17:00	18-06-2022	0.00	00:00	03-06-2022	0.02	
	33	Naubatpur-Bihta Ckt-01	7.54	05:00	29-06-2022	0.02	12:00	28-06-2022	0.00	
	34	Naubatpur-Bihta Ckt-02	7.66	07:00	29-06-2022	0.03	12:00	28-06-2022	0.03	
C. Power Flow in 132 kV transmission line										
132 kV (33 nos.)	1	Amnour - Siwan ckt-01	72.68	23:00	05-06-2022	0.34	10:00	07-06-2022	38.58	
	2	Amnour - Siwan ckt-02	83.62	10:00	09-06-2022	0.05	17:00	28-06-2022	39.56	
	3	Amnour - Chhapara ckt-01	60.77	13:00	05-06-2022	6.98	18:00	18-06-2022	39.55	
	4	Amnour - Chhapara ckt-02	65.79	14:00	29-06-2022	7.15	18:00	18-06-2022	39.85	
	5	Khijisara - Bodh Gaya ckt - 03	0.09	16:00	21-06-2022	0	14:00	02-06-2022	0.01	
	6	Khijisara - Wajingan ckt -01	49.39	08:00	13-06-2022	0.07	12:00	07-06-2022	35.45	
	7	Khijisara-Hulasganj ckt-01	38.98	20:00	27-06-2022	0.08	15:00	05-06-2022	22.09	
	8	Khijisara - Jehanabad ckt-01	66.84	07:00	26-06-2022	10.21	17:00	01-06-2022	46.96	
	9	Khijisara - Jehanabad ckt-02	66.94	07:00	26-06-2022	10.24	17:00	01-06-2022	46.94	
	10	Narhat - Nawadah ckt-01	55.62	20:00	08-06-2022	1.46	09:00	30-06-2022	32.87	
	11	Narhat - Nawadah ckt-02	55.81	20:00	08-06-2022	0.04	17:00	21-06-2022	30.04	
	12	Haveli Kharagpur - Sultanganj ckt-01	0	00:00	0	0	00:00	0	0.00	System connected but no power flow
	13	Haveli Kharagpur - Sultanganj ckt-02	0	00:00	0	0	00:00	0	0.00	System connected but no power flow
	14	Haveli Kharagpur - Lakhisarai ckt-01	32.20	10:00	02-06-2022	25.00	11:00	02-06-2022	0.18	
	15	Haveli Kharagpur - Lakhisarai ckt-02	32.20	10:00	02-06-2022	25.00	13:00	02-06-2022	0.17	
	16	Haveli Kharagpur - Jamalpur ckt-01	51.00	21:00	30-06-2022	2.10	20:00	20-06-2022	22.58	
	17	Haveli Kharagpur - Jamalpur ckt-02	46.00	14:00	06-06-2022	2.00	20:00	20-06-2022	22.37	
	18	Sekhopur - Sabour - Sekhopur ckt-01	23.70	20:00	15-06-2022	6.2	06:00	16-06-2022	19.28	
	19	Sekhopur Sarai - Sekhopur ckt-02	23.80	20:00	15-06-2022	0.8	17:00	19-06-2022	19.57	
	20	Sekhopur Sarai - Biharsharif	0.00	00:00	01-06-2022	0.00	00:00	30-06-2022	0.01	
	21	Goradh - Sultanganj ckt-01	0.00	00:00	01-06-2022	0.00	00:00	30-06-2022	0.01	
	22	Goradh - Sultanganj ckt-02	0.00	00:00	01-06-2022	0.00	00:00	30-06-2022	0.01	System connected but no power flow
	23	Goradh - Kahalgan ckt-01	0.00	00:00	03-06-2022	0.00	00:00	30-06-2022	0.00	
	24	Goradh - Kahalgan ckt-02	0.00	00:00	01-06-2022	0.00	00:00	30-06-2022	0.00	
	25	Goradh - Sabour ckt-01	-14.20	19:00	14-06-2022	-1.10	21:00	15-06-2022	-9.55	
	26	Goradh - Sabour ckt-02	-14.50	19:00	11-06-2022	-1.10	21:00	15-06-2022	-9.60	
	27	Mokama-Hatidah ckt-01	60.00	07:00	07-06-2022	0.10	18:00	18-06-2022	32.58	
	28	Mokama-Hatidah ckt-02	60.70	07:00	07-06-2022	0.00	18:00	18-06-2022	33.09	
	29	Dumraon New-Dumraon(BSPTCL) ckt-02	59.22	08:00	18-06-2022	3.61	18:00	18-06-2022	44.488	
	30	Dumraon New-Buxar ckt-01	45.79	06:00	09-06-2022	0.21	07:00	29-06-2022	36.454	
	31	Dumraon New-Buxar ckt-02	45.72	06:00	09-06-2022	0.21	07:00	29-06-2022	36.408	
	32	Naubatpur - Masaurhi ckt - 01	23.98	16:00	14-06-2022	6.93	04:00	30-06-2022	18.13	
	33	Naubatpur - Masaurhi ckt - 02	23.83	16:00	14-06-2022	6.89	04:00	30-06-2022	17.85	

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Month: June'2022

Substation Details	S.No	MVA Capacity	Load						Remark
			MW						
			Max	Time	Date	Min	Time	Date	
D. Power Flow In transformers									
Amnour GIS	1	Tr-01/160 MVA, 220/132 kV	143.04	03:00	03-06-2022	22.92	09:00	29-06-2022	95.91
	2	Tr-02/160 MVA, 220/132 kV	144.89	03:00	03-06-2022	23.18	09:00	29-06-2022	97.18
	3	Tr-01/50 MVA, 132/33 kV	28.46	00:00	01-06-2022	0.03	16:00	11-06-2022	17.89
	4	Tr-02/50 MVA, 132/33 kV	28.52	00:00	01-06-2022	0.03	16:00	11-06-2022	18.00
KhijirSarai GIS	1	Tr-01/160 MVA, 220/132 kV	107.08	20:00	26-06-2022	24.32	17:00	01-06-2022	80.39
	2	Tr-02/160 MVA, 220/132 kV	110.15	20:00	26-06-2022	25.47	17:00	01-06-2022	83.01
	3	Tr-01/50 MVA, 132/33 kV							
	4	Tr-02/50 MVA, 132/33 kV	11.86	19:00	19-06-2022	0.03	19:00	13-06-2022	3.01
	5	Tr-03/50 MVA, 132/33 kV	14.44	12:00	21-06-2022	0.05	23:00	13-06-2022	8.87
Narhat GIS	1	Tr-01/160 MVA, 220/132 kV	71.20	01:00	24-06-2022	6.03	21:00	30-06-2022	21.62
	2	Tr-02/160 MVA, 220/132 kV	63.31	20:00	08-06-2022	2.81	07:00	24-06-2022	19.38
	3	Tr-01/50 MVA, 132/33 kV	8.64	10:00	04-06-2022	0.08	22:00	05-06-2022	5.89
	4	Tr-02/50 MVA, 132/33 kV	23.33	08:00	28-06-2022	0.03	17:00	01-06-2022	13.20
Sekhopur Sarai GIS	1	Tr-01/160 MVA, 220/132 kV	50.40	20:00	03-06-2022	1.1	17:00	19-06-2022	24.88
	2	Tr-02/160 MVA, 220/132 kV	48.60	18:00	04-06-2022	1.1	18:00	18-06-2022	24.99
	3	Tr-01/50 MVA, 132/33 kV	1.00	07:00	01-06-2022	0.20	01:00	01-06-2022	0.89
	4	Tr-02/50 MVA, 132/33 kV	19.00	05:00	29-06-2022	0.9	17:00	20-06-2022	13.02
Haveli Kharagpur GIS	1	Tr-01/160 MVA, 220/132 kV	55.10	13:00	20-06-2022	2.30	20:00	20-06-2022	27.47
	2	Tr-02/160 MVA, 220/132 kV	60.50	10:00	02-06-2022	1.20	20:00	20-06-2022	26.30
	3	Tr-01/50 MVA, 132/33 kV	9.40	11:00	17-06-2022	1.00	05:00	19-06-2022	5.86
	4	Tr-02/50 MVA, 132/33 kV	4.30	22:00	12-06-2022	1.10	11:00	09-06-2022	2.89
Goradh GIS	1	Tr-01/160 MVA, 220/132 kV	0.00	00:00	01-06-2022	0.00	00:00	30-06-2022	-0.01
	2	Tr-02/160 MVA, 220/132 kV							
	3	Tr-01/50 MVA, 132/33 kV	11.80	10:00	14-06-2022	1.00	15:00	19-06-2022	6.8
	4	Tr-02/50 MVA, 132/33 kV	17.60	19:00	11-06-2022	0.60	22:00	18-06-2022	12.3
Mokama GIS	1	Tr-01/160 MVA, 220/132 kV							
	2	Tr-02/160 MVA, 220/132 kV	120.80	07:00	07-06-2022	14.20	15:00	15-06-2022	68.93
	3	Tr-01/80 MVA, 132/33 kV							
	4	Tr-02/80 MVA, 132/33 kV	11.60	20:00	15-06-2022	0.80	1:00	01-06-2022	3.450
Dumraon GIS	1	Tr-01/160 MVA, 220/132 kV	151.15	07:00	18-06-2022	21.92	14:00	01-06-2020	103.384
	2	Tr-01/80 MVA, 132/33 kV	22.69	20:00	13-06-2022	0.17	17:00	13-06-2022	18.016
	3	Tr-02/80 MVA, 132/33 kV	0.04	14:00	14-06-2022	0.03	00:00	01-06-2020	0.008
	4	Tr-01/500 MVA, 400/220 kV							
Naubatpur GIS	1	Tr-01/500 MVA, 400/220 kV	262.69	18:00	08-06-2022	103.86	16:00	18-06-2022	-26.77
	2	Tr-02/500 MVA, 400/220 kV	47.93	15:00	14-06-2022	13.93	04:00	30-06-2022	-35.53
	3	Tr-01/160 MVA, 220/132 kV							
	4	Tr-02/160 MVA, 220/132 kV							
	5	Tr-01/80 MVA, 132/33 kV	0.16	09:00	18-06-2022	0.02	11:00	24-06-2022	0.09
	6	Tr-02/80 MVA, 132/33 kV							
Jakkanpur GIS	1	Tr-01/500 MVA, 400/220 kV	0.05	17:00	01-06-2020	0.02	01:00	01-06-2020	0.04
	2	Tr-02/500 MVA, 400/220 kV							
	3	Tr-01/160 MVA, 220/132 kV	0.08	15:00	01-06-2020	0.03	18:00	18-06-2020	0.07
	4	Tr-02/160 MVA, 220/132 kV							
	5	Tr-01/80 MVA, 132/33 kV							
	6	Tr-02/80 MVA, 132/33 kV							
	7	Tr-03/80 MVA, 132/33 kV							
	8	Tr-04/80 MVA, 132/33 kV	0.05	06:00	30-06-2022	0.04	15:00	01-06-2020	0.04
Bhusaula GIS	1	Tr-01 100 MVA, 220/33kV							
Note	Negative sign [-] denote import of power and positive sign [+] denote export of power. For example [-] 181.39 MW in Hajipur - Amnour ckt-2 denotes Import of 181.39 MW from Hajipur S/S to Amnour S/S and 83.62 MW in Amnour -Shan ckt-2 denotes 83.62 MW from Amnour to Swan S/S.								

BIHAR GRID COMPANY LIMITED											
Loading level of Transmission Assets											
										Month:	JULY'2022
Voltage Grade	S.No	Name of TL	Load MW							Avg of Month	Remark
			Max	Time	Date	Min	Time	Date			
A. Power Flow In 400kV transmission line											
400 kV (08 nos.)	1	Naubatpur - Patna(PG) ckt - 01	-524.03	21:00	08-07-2022	0.00	20:00	29-07-2022	-393.23		
	2	Naubatpur - Patna(PG) ckt - 02	-527.36	21:00	08-07-2022	0.00	20:00	29-07-2022	-332.37		
	3	Naubatpur - Ballia(PG) ckt - 01	401.61	21:00	08-07-2022	-0.32	11:00	31-07-2022	219.01		
	4	Naubatpur - Ballia(PG) ckt - 02	404.20	21:00	08-07-2022	0.53	13:00	31-07-2022	223.03		
	5	Jakkanpur - Nabinagar(NPGC) ckt - 01	-548.22	21:00	07-12-2022	-96.61	09:00	24-07-2022	-410.85		
	6	Jakkanpur - Nabinagar(NPGC) ckt - 02	-548.83	21:00	07-12-2022	-96.72	09:00	24-07-2022	-411.08		
	7	Jakkanpur - Patna(PG) ckt - 01	551.27	21:00	07-12-2022	91.81	18:00	24-07-2022	403.25		
	8	Jakkanpur - Patna(PG) ckt - 02	546.97	21:00	07-12-2022	90.99	18:00	24-07-2022	400.28		
B. Power Flow in 220kV transmission line											
220 kV (34 nos.)	1	Hajipur - Amnour ckt-01	-130.51	14:00	08-07-2022	-8.82	02:00	31-07-2022	93.43		
	2	Hajipur - Amnour ckt-02	-130.81	14:00	08-07-2022	-8.77	02:00	31-07-2022	91.71		
	3	Patna (PG) - Khagaul ckt-02	96.35	21:00	29-07-2022	35.67	14:00	21-07-2022	-35.22		
	4	Patna (PG) - Khagaul ckt-03	96.38	21:00	29-07-2022	35.32	14:00	21-07-2022	-35.11		
	5	Khijrisarai - Biharsharif ckt-01	-146.61	07:00	30-07-2022	-2.35	20:00	06-07-2022	-79.74		
	6	Khijrisarai - Biharsharif ckt-02	-147.40	07:00	30-07-2022	-3.22	20:00	06-07-2022	-80.44		
	7	Khijrisarai - Bodh Gaya ckt-01	-72.28	14:00	12-07-2022	-12.93	05:00	13-07-2022	-31.22		
	8	Khijrisarai - Bodh Gaya ckt-02	-72.67	14:00	12-07-2022	-12.83	05:00	13-07-2022	-31.01		
	9	Khijrisarai - Gaya (PG) ckt-01	-122.03	22:00	30-07-2022	-17.29	18:00	28-07-2022	-73.21		
	10	Khijrisarai - Gaya (PG) ckt-02	-122.29	22:00	30-07-2022	-17.16	18:00	28-07-2022	-73.18		
	11	Khijrisarai - Narhat ckt-01	144.6	22:00	30-07-2022	43.58	05:00	13-07-2022	91.76		
	12	Khijrisarai - Narhat ckt-02	144.27	22:00	30-07-2022	43.37	05:00	13-07-2022	91.70		
	13	Narhat - Sekhopur Sarai ckt-01	97.82	13:00	27-07-2022	28.87	18:00	18-07-2022	26.93		
	14	Narhat - Sekhopur Sarai ckt-02	91.78	23:00	23-07-2022	28.89	18:00	28-07-2022	26.79		
	15	Sekhopur Sarai - Haveli Kharagpur ckt-01	67.90	19:00	01-07-2022	6.9	05:00	13-07-2022	36.37		
	16	Sekhopur Sarai - Haveli Kharagpur ckt-02	67.20	19:00	01-07-2022	6.2	05:00	13-07-2022	35.53		
	17	Haveli Kharagpur - Goradhi ckt-01	57.90	20:00	01-07-2022	6.4	18:00	01-07-2022	0.36		
	18	Haveli Kharagpur - Goradhi ckt-02	0	00:00	0	0	00:00	0	0.00	System connected but no power flow	
	19	Mokama-Biharsharif ckt-1	-169.50	03:00	12-07-2022	-12.80	23:00	29-07-2022	-6.32		
	20	Mokama-Biharsharif ckt-2	-168.20	03:00	12-07-2022	-12.90	23:00	29-07-2022	-5.87		
	21	Mokama-BTPS ckt-1	-140.80	07:00	31-07-2022	-2.10	14:00	30-07-2022	-35.40		
	22	Mokama-BTPS ckt-2	-142.90	07:00	31-07-2022	-2.60	14:00	30-07-2022	-36.58		
	23	Ara(PG)-Dumraon New - 01	-31.23	07:00	30-07-2022	-0.01	20:00	11-07-2022	-4.09		
	24	Ara(PG)-Dumraon New - 02	-31.16	07:00	30-07-2022	0.01	01:00	03-07-2022	-4.01		
	25	Dumraon New-Nadokhar - 01	-77.77	09:00	11-07-2022	0.75	07:00	27-07-2022	-45.88		
	26	Dumraon New-Nadokhar - 02	-78.24	21:00	10-07-2022	0.56	07:00	27-07-2022	-46.12		
	27	Naubatpur - Ara(PG) Ckt-01	135.85	06:00	22-07-2022	35.5	13:00	14-07-2022	89.40		
	28	Naubatpur - Ara(PG) Ckt-02	135.67	06:00	22-07-2022	35.43	13:00	14-07-2022	89.41		
	29	Naubatpur - Khagaul Ckt-01	71.88	20:00	29-07-2022	0.13	05:00	21-07-2022	8.76		
	30	Naubatpur - Khagaul Ckt-02	72.44	20:00	29-07-2022	0.02	01:00	21-07-2022	8.84		
	31	Naubatpur - Bhusaola Ckt-01	0.93	10:00	31-07-2022	0.00	10:00	18-07-2022	0.02		
	32	Naubatpur - Bhusaola Ckt-02	0.42	18:00	29-07-2022	0.00	15:00	24-07-2022	0.03		
	33	Naubatpur - Bihta Ckt-01	-37.49	20:00	29-07-2022	0.01	07:00	23-07-2022	-3.96		
	34	Naubatpur - Bihta Ckt-02	-37.07	20:00	29-07-2022	0	23:00	20-07-2022	-2.65		
C. Power Flow In 132 kV transmission line											
132 kV (40 nos.)	1	Amnour - Siwan ckt-01	53.88	04:00	06-07-2022	4.05	04:00	20-07-2022	35.81		
	2	Amnour - Siwan ckt-02	54.21	04:00	06-07-2022	3.99	04:00	20-07-2022	36.06		
	3	Amnour - Chhapara ckt-01	83.60	17:00	22-07-2022	5.14	20:00	28-07-2022	41.28		
	4	Amnour - Chhapara ckt-02	86.54	11:00	13-07-2022	5.16	20:00	28-07-2022	39.62		
	5	Khijrisarai - Bodh Gaya ckt - 03	0	00:00	0	0	00:00	0	0.00	System connected but no power flow	
	6	Khijrisarai - Wajirganj ckt - 01	28.51	20:00	26-07-2022	0.01	07:00	01-07-2022	1.47		
	7	Khijrisarai - Hulaganj ckt-01	49.75	09:00	23-07-2022	0.01	12:00	26-07-2022	29.44		
	8	Khijrisarai - Jehanabad ckt-01	47.02	06:00	28-07-2022	0.04	10:00	20-07-2022	30.67		
	9	Khijrisarai - Jehanabad ckt-02	79.90	18:00	26-07-2022	2.29	05:00	13-07-2022	53.88		
	10	Narhat - Nawadah ckt-01	99.52	12:00	11-07-2022	2.29	05:00	13-07-2022	54.19		
	11	Narhat - Nawadah ckt-02	62.72	23:00	31-07-2022	-0.03	12:00	05-07-2022	28.47		
	12	Haveli Kharagpur - Sultanganj ckt-01	32.70	23:00	23-07-2022	23.9	00:00	23-07-2022	0.11		
	13	Haveli Kharagpur - Sultanganj ckt-02	32.40	23:00	23-07-2022	23.70	00:00	23-07-2022	0.11		
	14	Haveli Kharagpur - Lakhisarai ckt-01	0.00	00:00	01-07-2022	0.00	00:00	01-07-2022	0.00	System connected but no power flow	
	15	Haveli Kharagpur - Lakhisarai ckt-02	0.00	00:00	01-07-2022	0.00	00:00	01-07-2022	0.00	System connected but no power flow	
	16	Haveli Kharagpur - Jamalpur ckt-01	50.40	12:00	01-07-2022	2.00	22:00	04-07-2022	24.65		
	17	Haveli Kharagpur - Jamalpur ckt-02	30.20	21:00	19-07-2022	1.99	22:00	04-07-2022	22.42		
	18	Sekhopur Sarai - Sekhpura ckt-01	31.50	16:00	04-07-2022	2.3	23:00	11-07-2022	22.56		
	19	Sekhopur Sarai - Sekhpura ckt-02	26.40	07:00	26-07-2022	2.3	23:00	11-07-2022	22.41		
	20	Sekhopur Sarai - Biharsharif	0.00	00:00	01-07-2022	0.00	00:00	01-07-2022	0.00		
	21	Goradhi - Sultanganj ckt-01	71.40	18:00	01-07-2022	-1.30	14:00	23-07-2022	0.33		
	22	Goradhi - Sultanganj ckt-02	-8.30	20:00	15-07-2022	-1.00	16:00	19-07-2022	0.03	System connected but no power flow	
	23	Goradhi - Kahaigson ckt-01	0.00	00:00	01-07-2022	0.00	00:00	01-07-2022	0.00		
	24	Goradhi - Kahaigson ckt-02	0.00	00:00	01-07-2022	0.00	00:00	01-07-2022	0.01		
	25	Goradhi - Sabour ckt-01	-23.30	04:00	20-07-2022	-0.60	06:00	28-07-2022	-11.73		
	26	Goradhi - Sabour ckt-02	-23.50	04:00	20-07-2022	-0.60	06:00	28-07-2022	-11.78		
	27	Mokama-Hatidah ckt-01	61.60	06:00	11-07-2022	9.80	20:00	25-07-2022	39.55		
	28	Mokama-Hatidah ckt-02	62.20	06:00	11-07-2022	9.90	20:00	25-07-2022	40.03		
	29	DUMRAON-DUMRAON Ckt 02	63.06	06:00	09-07-2022	6.10	16:00	09-07-2022	36.37		
	30	DUMRAON-BUXAR ckt-01	57.73	13:00	30-07-2022	0.01	17:00	08-07-2022	23.04		
	31	DUMRAON-BUXAR ckt-02	57.60	13:00	30-07-2022	9.46	17:00	02-07-2022	23.09		
	32	DUMRAON-DUMRAON ckt-01	41.62	06:00	24-07-2022	8.00	16:00	28-07-2022	16.26		
	33	DUMRAON-ARA ckt-01	-20.19	18:00	14-07-2022	0.00	18:00	15-07-2022	-6.13		
	34	DUMRAON-ARA ckt-02	-21.07	04:00	16-07-2022	-1.66	16:00	25-07-2022	-6.89		
	35	DUMRAON-JAGDISHPUR ckt-01	-13.78	19:00	19-07-2022	0.03	02:00	25-07-2022	-2.10		
	36	DUMRAON-JAGDISHPUR ckt-02	-13.78	19:00	19-07-2022	0.03	02:00	25-07-2022	-2.05		
	37	Naubatpur - Masaurhi ckt - 01	26.08	13:00	15-07-2022	7.22	05:00	01-07-2022	18.14		
	38	Naubatpur - Masaurhi ckt - 02	26.01	13:00	15-07-2022	7.22	05:00	01-07-2022	17.94		
	39	JAKKANPUR-SIPARA-03	31.83	20:00	26-07-2022	0.02	08:00	24-07-2022	29.69		
	40	JAKKANPUR-FAYAMA	51	22:00	30-07-2022	0.02	07:00	24-07-2022	47.42		



BIHAR GRID COMPANY LIMITED											
Loading level of Transmission Assets											
										Month: JULY 2022	
Substation Details	S.No	MVA Capacity	Load MW						Remark		
			Max	Time	Date	Min	Time	Date			
			D. Power Flow In transformers								
Amnour GIS	1	Tr-01/160 MVA, 220/132 kV	129.70	14:00	08-07-2022	8.71	02:00	31-07-2022	93.34		
	2	Tr-02/160 MVA, 220/132 kV	131.19	14:00	08-07-2022	8.82	02:00	31-07-2022	94.54		
	3	Tr-01/50 MVA, 132/33 kV	36.00	19:00	23-07-2022	0.09	15:00	21-07-2022	17.81		
	4	Tr-02/50 MVA, 132/33 kV	28.31	21:00	16-07-2022	0.09	15:00	21-07-2022	17.67		
KhajirSarai GIS	1	Tr-01/160 MVA, 220/132 kV	125.86	06:00	24-07-2022	17	18:00	28-07-2022	91.15		
	2	Tr-02/160 MVA, 220/132 kV	129.45	06:00	24-07-2022	18.11	18:00	28-07-2022	94.04		
	3	Tr-01/50 MVA, 132/33 kV			Not Commissioned						
	4	Tr-02/50 MVA, 132/33 kV	14.44	08:00	28-07-2022	0.03	17:00	28-07-2022	5.23		
	5	Tr-03/50 MVA, 132/33 kV	20.14	12:00	25-07-2022	0.07	16:00	28-07-2022	10.15		
Narhat GIS	1	Tr-01/160 MVA, 220/132 kV	77.37	22:00	30-07-2022	6.51	07:00	17-07-2022	21.06		
	2	Tr-02/160 MVA, 220/132 kV	72.05	22:00	30-07-2022	3.01	09:00	16-07-2022	19.08		
	3	Tr-01/50 MVA, 132/33 kV	8.45	05:00	30-07-2022	0.08	19:00	27-07-2022	5.85		
	4	Tr-02/50 MVA, 132/33 kV	24.68	06:00	05-07-2022	0.03	17:00	20-07-2022	13.67		
Sekhopur Sarai GIS	1	Tr-01/160 MVA, 220/132 kV	35.50	13:00	28-07-2022	5.0	08:00	21-07-2022	29.46		
	2	Tr-02/160 MVA, 220/132 kV	35.70	20:00	25-07-2022	5.2	08:00	21-07-2022	29.34		
	3	Tr-01/50 MVA, 132/33 kV	1.60	07:00	26-07-2022	0.20	02:00	01-07-2022	1.20		
	4	Tr-02/50 MVA, 132/33 kV	28.30	20:00	30-07-2022	0.9	11:00	14-07-2022	16.35		
Haveli Kharagpur GIS	1	Tr-01/160 MVA, 220/132 kV	65.20	23:00	23-07-2022	8.80	22:00	04-07-2022	25.70		
	2	Tr-02/160 MVA, 220/132 kV	62.80	23:00	23-07-2022	8.00	22:00	04-07-2022	32.13		
	3	Tr-01/50 MVA, 132/33 kV	9.20	21:00	26-07-2022	1.80	17:00	02-07-2022	6.71		
	4	Tr-02/50 MVA, 132/33 kV	5.60	21:00	30-07-2022	0.50	13:00	22-07-2022	3.78		
Goradh GIS	1	Tr-01/160 MVA, 220/132 kV	71.50	18:00	01-07-2022	48.50	19:00	01-07-2022	0.32		
	2	Tr-02/160 MVA, 220/132 kV			Not Commissioned						
	3	Tr-01/50 MVA, 132/33 kV	21.80	15:00	29-07-2022	0.00	19:00	06-07-2022	8.6		
	4	Tr-02/50 MVA, 132/33 kV	27.40	17:00	26-07-2022	0.00	19:00	06-07-2022	14.8		
Mokama GIS	1	Tr-01/160 MVA, 220/132 kV			Not Commissioned						
	2	Tr-02/160 MVA, 220/132 kV	125.60	06:00	11-07-2022	28.40	16:00	14-07-2022	84.14		
	3	Tr-01/80 MVA, 132/33 kV			Not Commissioned						
	4	Tr-02/80 MVA, 132/33 kV	10.80	20:00	15-07-2022	0.00	01:00	01-07-2022	4.50		
Dumraon GIS	1	Tr-01/160 MVA, 220/132 kV	135.14	20:00	10-07-2022	51.75	17:00	14-07-2022	99.83		
	2	Tr-01/80 MVA, 132/33 kV	24.18	20:00	30-07-2022	0.07	17:00	02-07-2022	17.10		
	3	Tr-02/80 MVA, 132/33 kV	0.00	00:00	01-07-2022	0.00	00:00	31-07-2022	0.00		
					Not Commissioned						
Naubatpur GIS	1	Tr-01/500 MVA, 400/220 kV			Not Commissioned						
	2	Tr-02/500 MVA, 400/220 kV	290.85	22:00	13-07-2022	23.6	20:00	29-07-2022	-30.22		
	3	Tr-01/160 MVA, 220/132 kV	54.05	12:00	20-07-2022	14.66	05:00	01-07-2022	-36.43		
	4	Tr-02/160 MVA, 220/132 kV			Not Commissioned						
	5	Tr 01/80 MVA, 132/33 kV	3.13	07:00	19-07-2022	0.08	00:00	01-07-2022	1.26		
	6	Tr-02/80 MVA, 132/33 kV			Not Commissioned						
Jakkanpur GIS	1	Tr-01/500 MVA, 400/220 kV	80.87	21:00	29-07-2022	0.03	17:00	07-05-2022	19.45		
	2	Tr-02/500 MVA, 400/220 kV			Not Commissioned						
	3	Tr-01/160 MVA, 220/132 kV	80.87	18:00	29-07-2022	0.03	11:00	07-05-2022	19.46		
	4	Tr-02/160 MVA, 220/132 kV			Not Commissioned						
	5	Tr-01/80 MVA, 132/33 kV			Not Commissioned						
	6	Tr-02/80 MVA, 132/33 kV			Not Commissioned						
	7	Tr-03/80 MVA, 132/33 kV			Not Commissioned						
	8	Tr-04/80 MVA, 132/33 kV	0.11	11:00	21-07-2022	0.01	00:00	24-07-2022	0.07		
Bhusaula GIS	1	Tr-01 100 MVA, 220/33kV									
Note	Negative sign(-) denote import of power and positive sign (+) denotes export of power .For example {-} 130.81 MW in Hajipur - Amnour ckt-2 denotes import of 130.81 MW from Hajipur S/S to Amnour S/S and 54.21 MW in Amnour -Shwan ckt-2 denotes 54.21 MW from Amnour to Shwan S/S.										

BIHAR GRID COMPANY LIMITED

Loading level of Transmission Assets

Month: August'2022

Voltage Grade	S.No	Name of TL	Load				Avg of Month	Remark		
			Max	Time	Date	MW				
A. Power Flow in 400kV transmission line										
400 kV (08 nos.)	1	Naubatpur - Patna(PG) ckt - 01	445.9	00:00	10-08-2022	-53.58	16:00	16-08-2022	-317.00	
	2	Naubatpur - Patna(PG) ckt - 02	-448.06	00:00	10-08-2022	-53.85	16:00	16-08-2022	-327.34	
	3	Naubatpur - Balia(PG) ckt - 01	337.30	00:00	10-08-2022	4.06	12:00	17-08-2022	220.64	
	4	Naubatpur - Balia(PG) ckt - 02	340.55	00:00	10-08-2022	7.11	12:00	17-08-2022	224.06	
	5	Jakkampur - Nabinagar(NPGC) ckt - 01	-519.35	22:00	21-08-2022	-137.33	08:00	24-08-2022	-444.84	
	6	Jakkampur - Nabinagar(NPGC) ckt - 02	-519.82	22:00	21-08-2022	-138.18	08:00	24-08-2022	-445.22	
	7	Jakkampur - Patna(PG) ckt - 01	488.43	22:00	21-08-2022	108.46	08:00	24-08-2022	412.73	
	8	Jakkampur - Patna(PG) ckt - 02	484.52	22:00	21-08-2022	106.81	08:00	24-08-2022	409.56	
B. Power Flow in 220kV transmission line										
220 kV (34 nos.)	1	Hajipur - Amnour ckt-01	-172.42	10:00	22-08-2022	-6.02	13:00	15-08-2022	92.9	
	2	Hajipur - Amnour ckt-02	-133.17	06:00	27-08-2022	-23.23	17:00	27-08-2022	87.61	
	3	Patna (PG) - Khagaul ckt-02	78.63	12:00	30-08-2022	25.51	12:00	15-08-2022	61.90	
	4	Patna (PG) - Khagaul ckt-03	78.11	12:00	30-08-2022	25.39	12:00	15-08-2022	61.69	
	5	Khijisara - Biharsharif ckt-01	-154.62	08:00	06-08-2022	-23.2	15:00	20-08-2022	-87.70	
	6	Khijisara - Biharsharif ckt-02	-155.48	08:00	06-08-2022	-23.54	15:00	20-08-2022	-87.85	
	7	Khijisara - Bodh Gaya ckt-01	-73.55	20:00	11-08-2022	-10.74	18:00	09-08-2022	-16.41	
	8	Khijisara - Bodh Gaya ckt-02	-94.80	00:00	13-08-2022	1.34	08:00	20-08-2022	-32.27	
	9	Khijisara - Gaya (PG) ckt -01	-124.62	19:00	04-08-2022	-15.56	06:00	15-08-2022	-75.74	
	10	Khijisara - Gaya (PG) ckt -02	-124.98	19:00	04-08-2022	-15.59	06:00	15-08-2022	-75.80	
	11	Khijisara - Narhat ckt-01	144.97	20:00	06-08-2022	24.04	15:00	14-08-2022	102.71	
	12	Khijisara - Narhat ckt-02	144.59	20:00	06-08-2022	23.8	15:00	14-08-2022	102.63	
	13	Narhat - Sekhopur Sarai ckt-01	129.55	11:00	26-08-2022	18.13	15:00	14-08-2022	28.05	
	14	Narhat - Sekhopur Sarai ckt-02	94.07	12:00	04-08-2022	18.08	15:00	14-08-2022	27.86	
	15	Sekhopur Sarai - Haveli Kharagpur ckt-01	63.50	19:00	04-08-2022	6.5	06:00	15-08-2022	36.27	
	16	Sekhopur Sarai - Haveli Kharagpur ckt-02	63.00	19:00	04-08-2022	5.5	06:00	15-08-2022	35.40	
	17	Haveli Kharagpur - Goradith ckt-01	0.00	00:00	00-00-0000	0	00:00	00-00-0000	0	System connected but no power flow
	18	Haveli Kharagpur - Goradith ckt-02	69.4	19:00	12-08-2022	44.77	11:00	10-08-2022	0.74	
	19	Mokama-Biharsharif ckt-1	135.70	07:00	12-08-2022	0.00	23:00	10-08-2022	28.61	
	20	Mokama-Biharsharif ckt-2	136.40	07:00	12-08-2022	0.00	23:00	10-08-2022	29.03	
	21	Mokama-BTPS ckt-1	-162.70	07:00	12-08-2022	0.00	21:00	02-08-2022	-54.34	
	22	Mokama-BTPS ckt-2	-163.40	07:00	12-08-2022	0.00	21:00	02-08-2022	-54.21	
	23	AraI(PG)-Dumraon New - 01	64.73	18:00	03-08-2022	-0.05	14:00	02-08-2022	-62.96	
	24	AraI(PG)-Dumraon New - 02	64.99	18:00	03-08-2022	-0.01	08:00	14-08-2022	-50.97	
	25	Dumraon New-Nadokhar - 01	-116.27	18:00	03-08-2022	0.05	17:00	29-08-2022	-37.71	
	26	Dumraon New-Nadokhar - 02	-116.89	18:00	03-08-2022	0.05	17:00	29-08-2022	-38.08	
	27	Naubatpur - AraI(PG) Ckt-01	145.89	08:00	19-08-2022	5.99	11:00	15-08-2022	92.62	
	28	Naubatpur - AraI(PG) Ckt-02	145.88	08:00	19-08-2022	6.3	11:00	15-08-2022	92.64	
	29	Naubatpur - Khagaul Ckt-01	27.77	06:00	30-08-2022	0.05	23:00	30-08-2022	-7.11	
	30	Naubatpur - Khagaul Ckt-02	27.92	06:00	30-08-2022	0	23:00	30-08-2022	-7.17	
	31	Naubatpur - Bhusaula Ckt-01	0.26	16:00	11-08-2022	0.00	00:00	03-08-2022	0.07	
	32	Naubatpur - Bhusaula Ckt-02	0.35	16:00	11-08-2022	0.00	21:00	01-08-2022	0.01	
	33	Naubatpur - Bihta Ckt-01	-15.08	18:00	02-08-2022	-0.02	16:00	25-08-2022	-2.71	
	34	Naubatpur - Bihta Ckt-02	-15.16	18:00	02-08-2022	-0.01	20:00	16-08-2022	-2.52	
C. Power Flow in 132 kV transmission line										
132 kV (33 nos.)	1	Amnour - Siwan ckt-01	66.35	15:00	26-08-2022	1.25	17:00	09-08-2022	35.63	
	2	Amnour - Siwan ckt-02	66.72	15:00	26-08-2022	6.36	04:00	09-08-2022	34.96	
	3	Amnour - Chhapara ckt-01	62.11	14:00	11-08-2022	15.47	12:00	22-08-2022	39.33	
	4	Amnour - Chhapara ckt-02	71.72	17:00	15-08-2022	12.06	12:00	15-08-2022	39.53	
	5	Khijisara - Bodh Gaya ckt -03	31.23	07:00	44780	0.01	01:00	44774	7.12	
	6	Khijisara - Wajirganj ckt -01	52.25	06:00	03-08-2022	0	12:00	05-08-2022	26.11	
	7	Khijisara - Hulsaganj ckt-01	44.27	09:00	31-08-2022	0.01	16:00	06-08-2022	9.32	
	8	Khijisara - Jehanabad ckt-01	92.92	19:00	12-08-2022	8.53	14:00	19-08-2022	54.76	
	9	Khijisara - Jehanabad ckt-02	92.43	19:00	12-08-2022	8.38	14:00	19-08-2022	54.78	
	10	Narhat - Nawadah ckt-01	72.51	21:00	14-08-2022	1.61	04:00	31-08-2022	37.48	
	11	Narhat - Nawadah ckt-02	58.86	19:00	01-08-2022	1.43	04:00	31-08-2022	33.75	
	12	Haveli Kharagpur - Suitanganj ckt-01	30.60	13:00	16-08-2022	26	14:00	16-08-2022	0.18	
	13	Haveli Kharagpur - Suitanganj ckt-02	46.10	11:00	16-08-2022	25.90	14:00	16-08-2022	0.23	
	14	Haveli Kharagpur - Lakhsara ckt-01	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0.00	System connected but no power flow
	15	Haveli Kharagpur - Lakhsara ckt-02	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0.00	System connected but no power flow
	16	Haveli Kharagpur - Jamsalpur ckt-01	31.40	22:00	25-08-2022	1.00	06:00	15-08-2022	22.08	
	17	Haveli Kharagpur - Jamsalpur ckt-02	31.30	22:00	25-08-2022	0.90	06:00	15-08-2022	22.07	
	18	Sekhopur Sarai - Sekhaura ckt-01	28.40	08:00	06-08-2022	3.0	17:00	04-08-2022	24.28	
	19	Sekhopur Sarai - Sekhaura ckt-02	23.00	08:00	06-08-2022	4.1	16:00	11-08-2022	25.18	
	20	Sekhopur Sarai - Biharsharif	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0.00	
	21	Goradith - Suitanganj ckt-01	0.00	00:00	01-08-2022	0.00	00:00	01-08-2022	0.01	System connected but no power flow
	22	Goradith - Suitanganj ckt-02	-22.50	19:00	10-08-2022	0.00	00:00	01-08-2022	-4.35	
	23	Goradith - Kahalganj ckt-01	31.50	10:00	04-08-2022	0.00	00:00	01-08-2022	0.39	
	24	Goradith - Kahalganj ckt-02	33.20	18:00	04-08-2022	0.00	00:00	01-08-2022	0.36	
	25	Goradith - Sabour ckt-01	-20.40	19:00	19-08-2022	0.30	14:00	18-08-2022	-11.03	
	26	Goradith - Sabour ckt-02	-20.50	19:00	19-08-2022	0.40	10:00	17-08-2022	-11.98	
	27	Mokama - Haridah ckt-01	54.60	09:00	02-08-2022	0.00	16:00	20-08-2022	22.65	
	28	Mokama - Haridah ckt-02	55.30	09:00	02-08-2022	0.00	16:00	20-08-2022	22.88	
	29	DUMRAON-DUMRAON Ckt 02	41.22	08:00	06-08-2022	0.01	15:00	15-08-2022	20.65	
	30	DUMRAON-BUXAR ckt-01	56.58	09:00	08-08-2022	2.52	10:00	15-08-2022	-35.58	
	31	DUMRAON-BUXAR ckt-02	56.85	09:00	08-08-2022	2.53	10:00	15-08-2022	-35.84	
	32	DUMRAON-DUMRAON ckt-01	41.55	08:00	06-08-2022	0.02	15:00	15-08-2022	20.52	
	33	DUMRAON-ARA ckt-01	54.19	23:00	24-08-2022	0.43	11:00	15-08-2022	12.71	
	34	DUMRAON-ARA ckt-02	26.09	19:00	16-08-2022	0.43	11:00	15-08-2022	-12.66	
	35	DUMRAON-JAGDISHPUR ckt-01	47.70	19:00	16-08-2022	0.05	09:00	15-08-2022	-4.51	
	36	DUMRAON-JAGDISHPUR ckt-02	-15.51	06:00	01-08-2022	-0.09	23:00	20-08-2022	4.48	
	37	Naubatpur - Masarhi ckt - 01	23.29	12:00	07-08-2022	0.94	18:00	03-08-2022	13.74	
	38	Naubatpur - Masarhi ckt - 02	23.29	12:00	07-08-2022	0.94	18:00	03-08-2022	13.09	
	39	JAKKANPUR-SIPARIA	50.21	14:00	26-08-2022	13.15	09:00	15-08-2022	34.48	
	JAKKANPUR-PAUHA	49.5	11:00	29-08-2022	17.52	04:00	15-08-2022	41.88		



BIHAR GRID COMPANY LIMITED

Loading Level of Transmission Assets

Month: August'2022

Substation Details	S.No.	MVA Capacity	Load						Remark
			MW						
			Max	Time	Date	Min	Time	Date	
D. Power Flow In transformers									
Amnour GIS	1	Tr-01-160 MVA, 220-132 kV	132.28	05:00	27-08-2022	3.02	13:00	15-08-2022	90.83
	2	Tr-02-160 MVA, 220-132 kV	133.93	05:00	27-08-2022	3.05	13:00	15-08-2022	92.00
	3	Tr-01-50 MVA, 132-33 kV	26.61	22:00	28-08-2022	0.94	22:00	27-08-2022	16.79
	4	Tr-02-50 MVA, 132-33 kV	26.69	22:00	28-08-2022	0.95	22:00	27-08-2022	16.97
Khijir Sarai GIS	1	Tr-01-160 MVA, 220-132 kV	134.11	22:00	12-08-2022	17.84	14:00	19-08-2022	83.53
	2	Tr-02-160 MVA, 220-132 kV	137.93	22:00	12-08-2022	18.91	14:00	19-08-2022	86.22
	3	Tr-01-50 MVA, 132-33 kV							
	4	Tr-02-50 MVA, 132-33 kV	20.26	06:00	30-08-2022	0.03	07:00	06-08-2022	8.06
	5	Tr-03-50 MVA, 132-33 kV	16.20	07:00	06-08-2022	0.08	15:00	19-08-2022	9.47
Narhat GIS	1	Tr-01-160 MVA, 220-132 kV	101.01	06:00	29-08-2022	0.07	19:00	14-08-2022	24.18
	2	Tr-02-160 MVA, 220-132 kV	80.87	21:00	14-08-2022	3.69	13:00	20-08-2022	21.52
	3	Tr-01-50 MVA, 132-33 kV	10.44	20:00	26-08-2022	0.07	22:00	24-08-2022	6.53
	4	Tr-02-50 MVA, 132-33 kV	23.27	08:00	27-08-2022	0.03	13:00	22-08-2022	13.62
Sekhopur Sarai GIS	1	Tr-01-160 MVA, 220-132 kV	38.70	09:00	26-08-2022	1.8	15:00	02-08-2022	33.89
	2	Tr-02-160 MVA, 220-132 kV	38.00	06:00	28-08-2022	2.8	15:00	14-08-2022	33.84
	3	Tr-01-50 MVA, 132-33 kV	1.50	07:00	19-08-2022	0.20	03:00	01-08-2022	1.10
	4	Tr-02-50 MVA, 132-33 kV	28.00	05:00	31-08-2022	1.1	21:00	08-08-2022	19.18
Haveli Kharagpur GIS	1	Tr-01-160 MVA, 220-132 kV	57.10	12:00	16-08-2022	6.90	07:00	30-08-2022	29.13
	2	Tr-02-160 MVA, 220-132 kV	54.80	12:00	16-08-2022	5.50	07:00	30-08-2022	27.88
	3	Tr-01-50 MVA, 132-33 kV	10.50	23:00	31-08-2022	0.20	10:00	20-08-2022	6.88
	4	Tr-02-50 MVA, 132-33 kV	8.20	21:00	28-08-2022	1.20	17:00	19-08-2022	5.34
Goradh GIS	1	Tr-01-160 MVA, 220-132 kV	66.50	18:00	04-08-2022	0.00	00:00	01-08-2022	0.71
	2	Tr-02-160 MVA, 220-132 kV							
	3	Tr-01-50 MVA, 132-33 kV	19.60	20:00	22-08-2022	0.00	19:00	16-08-2022	11.8
Mokama GIS	1	Tr-02-50 MVA, 132-33 kV	30.40	17:00	20-08-2022	0.00	15:00	09-08-2022	14.6
	2	Tr-01-160 MVA, 220-132 kV							
	3	Tr-01-80 MVA, 132-33 kV							
	4	Tr-02-80 MVA, 132-33 kV	11.40	20:00	14-08-2022	0.00	02:00	01-08-2022	4.37
Dumraon GIS	1	Tr-01-160 MVA, 220-132 kV	134.24	21:00	24-08-2022	13.49	10:00	15-08-2022	-95.82
	2	Tr-01-80 MVA, 132-33 kV	25.63	19:00	25-08-2022	0.04	07:00	04-08-2022	-17.36
	3	Tr-02-80 MVA, 132-33 kV	0.00	00:00	01-08-2022	0.00	00:00	31-08-2022	0.00
Naubatpur GIS	1	Tr-01-500 MVA, 400-220 kV							
	2	Tr-02-500 MVA, 400-220 kV	275.35	19:00	18-08-2022	20.63	08:00	20-08-2022	155.00
	3	Tr-01-160 MVA, 220-132 kV	48	13:00	07-08-2022	14.64	08:00	13-08-2022	22.00
	4	Tr-02-160 MVA, 220-132 kV							
	5	Tr-01-80 MVA, 132-33 kV	4.57	08:00	28-08-2022	0.07	11:00	15-08-2022	2.25
	6	Tr-02-80 MVA, 132-33 kV							
Jakkampur GIS	1	Tr-01-500 MVA, 400-220 kV	81.27	23:00	27-08-2022	39.1	05:00	15-08-2022	32
	2	Tr-02-500 MVA, 400-220 kV							
	3	Tr-01-160 MVA, 220-132 kV	81.1	23:00	27-08-2022	35.71	04:00	15-08-2022	10.00
	4	Tr-02-160 MVA, 220-132 kV							
	5	Tr-01-80 MVA, 132-33 kV							
	6	Tr-02-80 MVA, 132-33 kV							
	7	Tr-03-80 MVA, 132-33 kV							
	8	Tr-04-80 MVA, 132-33 kV	0.11	13:00	28-08-2022	0.03	15:00	16-08-2022	0.09
Blusaufa GIS	1	Tr-01 100 MVA, 220-33kV							

Note Negative sign(-) denote import of power and positive sign (+) denote export of power. For example (-) 172.42 MW in Hajipur - Amnour circuit-1 denotes import of 172.42 MW from Hajipur S-S to Amnour S-S and 66.72 MW in Amnour -Sharan circuit-2 denotes 66.72 MW from Amnour to Sharan S-S.

BIHAR GRID COMPANY LIMITED								Loading level of Transmission Assets			Month:	September'2022
Voltage Grade	S.No	Name of TL	Load						Avg of Month	Remark		
			Max		Time		Date				MW	
A. Power Flow in 400kV transmission line												
400 kv (08 nos.)	1	Naubatpur - Patna(PG) ckt - 01	-503.43	06:00	09-09-2022	-62.03	13:00	25-09-2022	-327.57			
	2	Naubatpur - Patna(PG) ckt - 02	-802.28	17:00	10-09-2022	-61.97	13:00	25-09-2022	-333.08			
	3	Naubatpur - Ballia(PG) ckt - 01	396.46	17:00	03-09-2022	4.01	03:00	24-09-2022	228.00			
	4	Naubatpur - Ballia(PG) ckt - 02	399.62	17:00	03-09-2022	-5.52	15:00	24-09-2022	231.53			
	5	Jakkanpur - Nabinagar(NPGC) ckt - 01	-523.82	00:00	01-09-2022	-24.37	08:00	26-09-2022	-394.17			
	6	Jakkanpur - Nabinagar(NPGC) ckt - 02	-525.57	00:00	01-09-2022	-25.26	08:00	26-09-2022	-394.64			
	7	Jakkanpur - Patna(PG) ckt - 01	494.22	00:00	01-09-2022	-2.82	08:00	27-09-2022	362.89			
	8	Jakkanpur - Patna(PG) ckt - 02	490.36	00:00	01-09-2022	-2.18	08:00	27-09-2022	359.91			
B. Power Flow in 220kV transmission line												
220 kv (34 nos.)	1	Hajipur - Amnour ckt-01	-138.96	14:00	26-09-2022	-32.55	16:00	15-09-2022	81.57			
	2	Hajipur - Amnour ckt-02	-174.03	12:00	11-09-2022	-32.48	16:00	15-09-2022	88.73			
	3	Patna (PG) - Khagaul ckt-02	90.45	18:00	19-09-2022	23.68	09:00	24-09-2022	59.23			
	4	Patna (PG) - Khagaul ckt-03	89.8	18:00	19-09-2022	23.72	09:00	24-09-2022	59.05			
	5	Khijirsarai - Biharsharif ckt-01	-163.63	08:00	27-09-2022	-30.09	19:00	17-09-2022	-94.11			
	6	Khijirsarai - Biharsharif ckt-02	-163.91	08:00	27-09-2022	-30.64	19:00	17-09-2022	-94.39			
	7	Khijirsarai - Bodh Gaya ckt-01	-59.23	18:00	01-09-2022	-0.01	07:00	17-09-2022	-25.94			
	8	Khijirsarai - Bodh Gaya ckt-02	-59.52	18:00	01-09-2022	-0.07	07:00	17-09-2022	-26.04			
	9	Khijirsarai - Gaya (PG) ckt-01	-90.69	23:00	09-09-2022	-3.62	16:00	26-09-2022	97.44			
	10	Khijirsarai - Gaya (PG) ckt-02	-90.99	21:00	05-09-2022	-3.7	16:00	26-09-2022	97.38			
	11	Khijirsarai - Narhat ckt-01	140.65	20:00	23-09-2022	41.8	15:00	19-09-2022	-55.09			
	12	Khijirsarai - Narhat ckt-02	140.27	20:00	23-09-2022	41.74	15:00	19-09-2022	-55.36			
	13	Narhat - Sekhopur Sarai ckt-01	83.40	23:00	17-09-2022	24.89	12:00	10-09-2022	26.67			
	14	Narhat - Sekhopur Sarai ckt-02	83.10	23:00	17-09-2022	24.89	12:00	10-09-2022	26.66			
	15	Sekhopur Sarai - Haveli Kharagpur ckt-01	55.50	11:00	22-09-2022	3.70	12:00	10-09-2022	33.29			
	16	Sekhopur Sarai - Haveli Kharagpur ckt-02	55.20	14:00	21-09-2022	2.70	12:00	10-09-2022	32.38			
	17	Haveli Kharagpur - Goradih ckt-01	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0.00	System connected but no power flow		
	18	Haveli Kharagpur - Goradih ckt-02	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0.00			
	19	Mokama-Biharsharif ckt-1	135.30	07:00	15-09-2022	0.00	19:00	01-09-2022	31.10			
	20	Mokama-Biharsharif ckt-2	135.60	07:00	15-09-2022	0.00	19:00	01-09-2022	31.52			
	21	Mokama-BTPS ckt-1	-158.50	07:00	15-09-2022	0.00	22:00	01-09-2022	-56.62			
	22	Mokama-BTPS ckt-2	-158.00	07:00	16-09-2022	0.00	22:00	01-09-2022	-56.58			
	23	Ara(PG)-Dumraon New - 01	-64.81	08:00	08-09-2022	-0.26	03:00	01-09-2022	-19.52			
	24	Ara(PG)-Dumraon New - 02	-64.88	08:00	08-09-2022	-0.18	03:00	01-09-2022	-19.47			
	25	Dumraon New-Nadokhar - 01	-71.26	00:00	01-09-2022	0.07	22:00	17-09-2022	-20.90			
	26	Dumraon New-Nadokhar - 02	-71.61	00:00	01-09-2022	0.01	22:00	17-09-2022	-21.03			
	27	Naubatpur- Ara(PG) Ckt-01	138.75	06:00	05-09-2022	34.51	16:00	15-09-2022	95.71			
	28	Naubatpur- Ara(PG) Ckt-02	138.85	06:00	05-09-2022	34.61	16:00	15-09-2022	95.72			
	29	Naubatpur- Khagaul Ckt-01	53.17	08:00	24-09-2022	0.01	13:00	01-09-2022	7.35			
	30	Naubatpur- Khagaul Ckt-02	53.43	08:00	24-09-2022	0.02	13:00	01-09-2022	7.41			
	31	Naubatpur- Bhuseola Ckt-01	0.27	12:00	06-09-2022	0.00	02:00	18-09-2022	0.07			
	32	Naubatpur- Bhuseola Ckt-02	0.48	02:00	17-09-2022	0.00	11:00	06-09-2022	0.01			
	33	Naubatpur- Bihta Ckt-01	34.25	09:00	24-09-2022	0.02	07:00	26-09-2022	2.30			
	34	Naubatpur- Bihta Ckt-02	34.34	09:00	24-09-2022	-0.01	22:00	01-09-2022	2.60			
C. Power Flow in 132 kV transmission line												
132 kv (33 nos.)	1	Amnour - Siwan ckt-01	65.08	23:00	10-09-2022	5.37	14:00	09-09-2022	35.56			
	2	Amnour - Siwan ckt-02	65.4	23:00	10-09-2022	5.38	14:00	09-09-2022	35.69			
	3	Amnour - Chhapara ckt-01	59.87	02:00	23-09-2022	5.69	22:00	15-09-2022	34.11			
	4	Amnour - Chhapara ckt-02	60.22	02:00	23-09-2022	5.68	22:00	15-09-2022	34.02			
	5	Khijirsarai - Bodh Gaya ckt - 03	18.42	14:00	03-09-2022	0.01	02:00	01-09-2022	0.03			
	6	Khijirsarai - Wajirgan ckt - 01	49.35	10:00	06-09-2022	0.06	17:00	14-09-2022	19.13			
	7	Khijirsarai-Hulasganj ckt-01	56.36	13:00	23-09-2022	0.05	09:00	16-09-2022	25.45			
	8	Khijirsarai - Jehanabad ckt-01	73.65	21:00	05-09-2022	2.82	18:00	21-09-2022	46.81			
	9	Khijirsarai - Jehanabad ckt-02	101.9	20:00	22-09-2022	2.81	18:00	21-09-2022	47.03			
	10	Narhat - Nawadah ckt-01	59.12	19:00	22-09-2022	1.38	17:00	13-09-2022	35.43			
	11	Narhat - Nawadah ckt-02	64.50	18:00	28-09-2022	1.09	17:00	13-09-2022	33.47			
	12	Haveli Kharagpur - Sultanganj ckt-01	15.10	16:00	30-09-2022	14.50	15:00	30-09-2022	0.05			
	13	Haveli Kharagpur - Sultanganj ckt-02	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0	System connected but no power flow		
	14	Haveli Kharagpur - Lakhisarai ckt-01	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0			
	15	Haveli Kharagpur - Lakhisarai ckt-02	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0			
	16	Haveli Kharagpur- Jamalpur ckt-01	30.30	19:00	07-09-2022	7.70	14:00	03-09-2022	21.46			
	17	Haveli Kharagpur- Jamalpur ckt-02	30.20	19:00	07-09-2022	7.60	14:00	03-09-2022	21.47			
	18	Sekhopur Sarai - Sekhpura ckt-01	47.30	23:00	17-09-2022	9.70	09:00	08-09-2022	24.98			
	19	Sekhopur Sarai - Sekhpura ckt-02	48.00	23:00	17-09-2022	1.20	01:00	01-09-2022	25.78			
	20	Sekhopur Sarai - Biharsharif	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0			
	21	Goradih - Sultanganj ckt-01	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0	System connected but no power flow		
	22	Goradih - Sultanganj ckt-02	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0			
	23	Goradih - Kahaigaon ckt-01	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0			
	24	Goradih - Kahaigaon ckt-02	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0			
	25	Goradih - Sabour ckt-01	-17.20	09:00	03-09-2022	0.00	17:00	14-09-2022	-9.87			
	26	Goradih - Sabour ckt-02	-17.30	09:00	03-09-2022	0.00	17:00	14-09-2022	-9.91			
	27	Mokama-Hatidaha ckt-01	55.70	10:00	10-09-2022	0.00	08:00	04-09-2022	23.76			
	28	Mokama-Hatidaha ckt-02	56.40	10:00	10-09-2022	0.00	08:00	04-09-2022	23.98			
	29	DUMRAON-DUMRAON ckt-01	37.76	06:00	09-09-2022	0.48	17:00	19-09-2022	17.68			
	30	DUMRAON-DUMRAON Ckt 02	37.86	06:00	09-09-2022	0.26	17:00	19-09-2022	17.90			
	31	DUMRAON-BUXAR ckt-01	51.30	08:00	20-09-2022	0.01	17:00	14-09-2022	24.09			
	32	DUMRAON-BUXAR ckt-02	51.28	08:00	20-09-2022	0.01	23:00	20-09-2022	24.12			
	33	DUMRAON-ARA ckt-01	53.26	21:00	04-09-2022	0.01	00:00	18-09-2022	-6.96			
	34	DUMRAON-ARA ckt-02	53.48	21:00	04-09-2022	0.01	00:00	19-09-2022	-6.95			
	35	DUMRAON-JAGDISHPUR ckt-01	-32.77	19:00	03-09-2022	0.01	11:00	25-09-2022	-2.41			
	36	DUMRAON-JAGDISHPUR ckt-02	-32.74	19:00	03-09-2022	0.01	00:00	13-09-2022	-2.50			
	37	Naubatpur - Masaurhi ckt - 01	21.36	15:00	27-09-2022	3.9	14:00	10-09-2022	13.68			
	38	Naubatpur - Masaurhi ckt - 02	21.26	15:00	27-09-2022	3.87	14:00	10-09-2022	13.52			
	39	JAKKANPUR-SIPARA-03	39.74	19:00	16-09-2022	-2.45	15:00	26-09-2022	30.68			
	40	JAKKANPUR-FATUHA	48.28	19:00	16-09-2022	2.1	15:00	26-09-2022	43.08			

BIHAR GRID COMPANY LIMITED											
Loading level of Transmission Assets											
										Month: September'2022	
Substation Details	S.No.	MVA Capacity	Load						Avg of Month	Remark	
			MW								
			Max	Time	Date	Min	Time	Date			
D. Power Flow in transformers											
Amnour GIS	1	Tr-01-160 MVA, 220-132 kV	126.89	02:00	23-09-2022	32.36	16:00	15-09-2022	85.76		
	2	Tr-02-160 MVA, 220-132 kV	128.70	02:00	23-09-2022	32.62	16:00	15-09-2022	86.90		
	3	Tr-01-50 MVA, 132-33 kV	25.81	21:00	04-09-2022	0.07	13:00	02-09-2022	16.77		
	4	Tr-02-50 MVA, 132-33 kV	25.75	21:00	04-09-2022	0.12	16:00	03-03-2022	16.87		
KhhijrSarai GIS	1	Tr-01-160 MVA, 220-132 kV	124.33	19:00	07-09-2022	-0.21	19:00	17-09-2022	76.38		
	2	Tr-02-160 MVA, 220-132 kV	149.65	05:00	17-09-2022	0.55	19:00	17-09-2022	79.60		
	3	Tr-01-50 MVA, 132-33 kV	Not Commissioned								
	4	Tr-02-50 MVA, 132-33 kV	18.63	07:00	29-09-2022	0.03	15:00	19-09-2022	8.36		
Narhat GIS	1	Tr-01-160 MVA, 220-132 kV	15.09	08:00	10-09-2022	0.09	18:00	02-09-2022	8.99		
	2	Tr-02-160 MVA, 220-132 kV	71.05	20:00	22-09-2022	3.89	17:00	13-09-2022	22.27		
	3	Tr-01-50 MVA, 132-33 kV	66.72	20:00	22-09-2022	1.59	17:00	13-09-2022	20.79		
	4	Tr-02-50 MVA, 132-33 kV	9.77	20:00	05-09-2022	0.09	15:00	29-09-2022	6.15		
Sekhopur Sarai GIS	1	Tr-02-50 MVA, 132-33 kV	20.48	19:00	10-09-2022	0.03	14:00	09-09-2022	11.07		
	2	Tr-01-160 MVA, 220-132 kV	61.90	13:00	24-09-2022	3.3	10:00	21-09-2022	35.00		
	3	Tr-02-160 MVA, 220-132 kV	54.70	12:00	23-09-2022	4.4	15:00	19-09-2022	35.60		
	4	Tr-01-50 MVA, 132-33 kV	1.60	09:00	29-09-2022	0.20	21:00	13-09-2022	1.31		
Haveli Kharagpur GIS	1	Tr-02-50 MVA, 132-33 kV	24.90	22:00	05-09-2022	1.2	12:00	06-09-2022	16.81		
	2	Tr-01-160 MVA, 220-132 kV	38.10	19:00	07-09-2022	10.3	14:00	03-09-2022	27.87		
	3	Tr-02-160 MVA, 220-132 kV	36.00	19:00	07-09-2022	9.0	14:00	03-09-2022	26.44		
	4	Tr-01-50 MVA, 132-33 kV	10.50	22:00	09-09-2022	1.4	23:00	24-09-2022	8.83		
Goradh GIS	1	Tr-02-50 MVA, 132-33 kV	7.30	21:00	24-09-2022	1.2	14:00	03-09-2022	4.45		
	2	Tr-01-160 MVA, 220-132 kV	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0.00		
	3	Tr-02-160 MVA, 220-132 kV	Not Commissioned								
	4	Tr-01-50 MVA, 132-33 kV	16.10	04:00	02-09-2022	0.00	23:00	01-09-2022	10.74		
Mokama GIS	1	Tr-02-50 MVA, 132-33 kV	21.50	13:00	02-09-2022	0.00	14:00	03-09-2022	8.97		
	2	Tr-01-160 MVA, 220-132 kV	Not Commissioned								
	3	Tr-02-160 MVA, 220-132 kV	111.40	10:00	10-09-2022	0.00	08:00	04-09-2022	50.21		
	4	Tr-01-80 MVA, 132-33 kV	Not Commissioned								
Dumraon GIS	1	Tr-02-80 MVA, 132-33 kV	10.80	19:00	02-09-2022	0.00	09:00	01-09-2022	2.550		
	2	Tr-01-160 MVA, 220-132 kV	138.8	19:00	03-09-2022	13.58	16:00	15-09-2022	75.00		
	3	Tr-01-80 MVA, 132-33 kV	25.04	19:00	04-09-2022	2.32	16:00	29-09-2022	8.00		
	4	Tr-02-80 MVA, 132-33 kV	0.00	00:00	01-09-2022	0.00	00:00	31-09-2022			
Naubatpur GIS	1	Tr-01-500 MVA, 400-220 kV	Not Commissioned								
	2	Tr-02-500 MVA, 400-220 kV	286.79	19:00	22-09-2022	116.69	14:00	10-09-2022	212.00		
	3	Tr-01-160 MVA, 220-132 kV	45.37	15:00	27-09-2022	9.04	14:00	10-09-2022	25.00		
	4	Tr-02-160 MVA, 220-132 kV	Not Commissioned								
	5	Tr-01-80 MVA, 132-33 kV	6.29	08:00	26-09-2022	0.08	15:00	22-09-2022	2.00		
	6	Tr-02-80 MVA, 132-33 kV	Not Commissioned								
Jakkanpur GIS	1	Tr-01-500 MVA, 400-220 kV	82.48	19:00	22-09-2022	45.95	14:00	11-09-2022	71.590		
	2	Tr-02-500 MVA, 400-220 kV	Not Commissioned								
	3	Tr-01-160 MVA, 220-132 kV	82.09	19:00	22-09-2022	45.58	14:00	11-09-2022	71.440		
	4	Tr-02-160 MVA, 220-132 kV	Not Commissioned								
	5	Tr-01-80 MVA, 132-33 kV	Not Commissioned								
	6	Tr-02-80 MVA, 132-33 kV	Not Commissioned								
	7	Tr-03-80 MVA, 132-33 kV	Not Commissioned								
	8	Tr-04-80 MVA, 132-33 kV	0.13	12:00	30-09-2022	0.03	16:00	29-09-2022	0.090		
Bhusaula GIS	1	Tr-01 100 MVA, 220-33kV	0.50	12:00	9-1-2022	0.02	13:00	31-09-2022	0.10		
Note	Negative sign(-) denote import of power and positive sign (+) denote export of power .For example (-) 138.96 MW in Hajipur - Amnour ckt-1 denotes import of 138.96 MW from Hajipur S-S to Amnour S-S and 65.08 MW in Amnour -Siwan ckt-2 denotes 65.08 MW from Amnour to Siwan S-S.										

BIHAR GRID COMPANY LIMITED										Month:	October 2022
Loading level of Transmission Assets											
Voltage Grade	S.No	Name of TL	Load						Avg of Month	Remark	
			Mw	Time	Date	MW	Time	Date			
A. Power Flow in 400kV transmission line											
400 kV (08 nos.)	1	Naubatpur - Patna(PG) ckt - 01	-448.77	06:00	05-10-2022	-18.6	15:00	25-10-2022	-242.52		
	2	Naubatpur - Patna(PG) ckt - 02	-450.11	06:00	05-10-2022	-18.49	15:00	25-10-2022	-243.64		
	3	Naubatpur - Bafia(PG) ckt - 01	363.78	06:00	05-10-2022	0.15	13:00	20-10-2022	153.59		
	4	Naubatpur - Bafia(PG) ckt - 02	399.62	06:00	05-10-2022	0.54	12:00	24-10-2022	156.74		
	5	Jakkanpur - Nabinagar(NPGC) ckt - 01	-480.52	18:00	31-10-2022	-34.37	07:00	25-10-2022	-367.08		
	6	Jakkanpur - Nabinagar(NPGC) ckt - 02	-481.54	18:00	31-10-2022	-33.79	07:00	25-10-2022	-367.68		
	7	Jakkanpur - Patna(PG) ckt - 01	459.82	18:00	31-10-2022	11.89	07:00	25-10-2022	359.71		
	8	Jakkanpur - Patna(PG) ckt - 02	455.67	18:00	31-10-2022	11.51	07:00	25-10-2022	356.94		
B. Power Flow in 220kV transmission line											
220 kV (34 nos.)	1	Hajipur - Amnour ckt-01	-133.19	21:00	03-10-2022	-34.09	16:00	30-10-2022	82.65		
	2	Hajipur - Amnour ckt-02	-200.66	18:00	18-10-2022	-33.9	16:00	30-10-2022	81.73		
	3	Patna (PG) - Khagaul ckt-02	77.01	19:00	07-10-2022	28.12	15:00	30-10-2022	51.57		
	4	Patna (PG) - Khagaul ckt-03	76.92	19:00	07-10-2022	28.07	15:00	30-10-2022	51.23		
	5	Khajirsarai - Biharsharif ckt-01	-166.02	07:00	07-10-2022	-16.03	14:00	31-10-2022	-82.97		
	6	Khajirsarai - Biharsharif ckt-02	-166.32	07:00	07-10-2022	-16.97	14:00	31-10-2022	-83.36		
	7	Khajirsarai - Bodh Gaya ckt-01	-65.44	11:00	14-10-2022	-0.08	15:00	05-10-2022	-21.28		
	8	Khajirsarai - Bodh Gaya ckt-02	-65.77	11:00	14-10-2022	-0.09	15:00	05-10-2022	-21.34		
	9	Khajirsarai - Gaya (PG) ckt-01	-85.14	18:00	17-10-2022	-6.96	07:00	12-10-2022	-48.73		
	10	Khajirsarai - Gaya (PG) ckt-02	-85.08	18:00	17-10-2022	-6.99	07:00	12-10-2022	-48.79		
	11	Khajirsarai - Narhat ckt-01	142.88	19:00	01-10-2022	26.42	17:00	11-10-2022	78.53		
	12	Khajirsarai - Narhat ckt-02	142.6	19:00	01-10-2022	26.44	17:00	11-10-2022	78.50		
	13	Narhat - Sekhopur Sarai ckt-01	81.15	18:00	12-10-2022	11.67	17:00	11-10-2022	23.62		
	14	Narhat - Sekhopur Sarai ckt-02	80.96	18:00	12-10-2022	11.72	17:00	11-10-2022	23.62		
	15	Sekhopur Sarai - Haveli Kharagpur ckt-01	56.10	18:00	13-10-2022	3.40	17:00	11-10-2022	29.80		
	16	Sekhopur Sarai - Haveli Kharagpur ckt-02	60.10	20:00	12-10-2022	2.80	17:00	11-10-2022	32.67		
	17	Haveli Kharagpur - Goradli ckt-01	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0.00	System connected but no power flow	
	18	Haveli Kharagpur - Goradli ckt-02	52.70	14:00	19-10-2022	29.40	16:00	19-10-2022	0.17		
	19	Mokama-Biharsharif ckt-1	129.50	07:00	04-10-2022	0.00	11:00	01-10-2022	26.65		
	20	Mokama-Biharsharif ckt-2	129.10	07:00	04-10-2022	0.00	11:00	01-10-2022	26.82		
	21	Mokama-BTPS ckt-1	-157.60	08:00	07-10-2022	0.00	22:00	01-10-2022	-53.62		
	22	Mokama-BTPS ckt-2	-158.50	08:00	07-10-2022	0.00	22:00	01-10-2022	-53.66		
	23	Arar(PG)-Dumraon New - 01	-48.80	08:00	10-07-2022	0.02	18:00	28-10-2022	-17.13		
	24	Arar(PG)-Dumraon New - 02	-48.80	06:00	07-10-2022	0.02	18:00	26-10-2022	-17.11		
	25	Dumraon New-Nadokher - 01	-43.19	22:00	09-10-2022	-0.01	07:00	16-10-2022	-16.76		
	26	Dumraon New-Nadokher - 02	-43.33	22:00	09-10-2022	-0.01	07:00	16-10-2022	-16.84		
	27	Naubatpur - Arar(PG) Ckt-01	134.65	08:00	07-10-2022	30.29	12:00	29-10-2022	86.71		
	28	Naubatpur - Arar(PG) Ckt-02	134.65	08:00	07-10-2022	30.31	12:00	29-10-2022	86.73		
	29	Naubatpur - Khagaul Ckt-01	29.28	06:00	07-10-2022	0.01	10:00	28-10-2022	-7.63		
	30	Naubatpur - Khagaul Ckt-02	29.47	06:00	07-10-2022	0.06	13:00	24-10-2022	-7.67		
	31	Naubatpur - Ehusaula Ckt-01	0.21	14:00	03-10-2022	0.03	08:00	14-10-2022	0.06		
	32	Naubatpur - Ehusaula Ckt-02	0.21	14:00	03-10-2022	0.01	10:00	14-10-2022	0.02		
	33	Naubatpur - Biltla Ckt-01	-12.44	06:00	07-10-2022	0.01	18:00	18-10-2022	-2.98		
	34	Naubatpur - Biltla Ckt-02	-12.26	06:00	07-10-2022	0.02	18:00	18-10-2022	-2.78		
C. Power Flow in 132 kV transmission line											
132 kV (40 nos.)	1	Amnour - Sewah ckt-01	66.28	02:00	08-10-2022	8.91	17:00	03-10-2022	32.47		
	2	Amnour - Swan ckt-02	68.80	02:00	08-10-2022	0.02	17:00	03-10-2022	31.91		
	3	Amnour - Chhspara ckt-01	68.40	03:00	10-10-2022	14.05	12:00	17-10-2022	37.15		
	4	Amnour - Chhspara ckt-02	68.35	03:00	10-10-2022	14.02	12:00	17-10-2022	37.22		
	5	Khajirsarai - Bodh Gaya ckt -03	25.55	18:00	19-10-2022	0.01	07:00	01-10-2022	2.57		
	6	Khajirsarai - Wajirani ckt -01	43.3	19:00	09-10-2022	0.00	08:00	01-10-2022	28.90		
	7	Khajirsarai-Hulesganj ckt-01	37.97	07:00	08-10-2022	0.07	08:00	14-10-2022	24.78		
	8	Khajirsarai - Jehanshabad ckt-01	62.82	19:00	01-10-2022	15.06	14:00	11-10-2022	38.63		
	9	Khajirsarai - Jehanshabad ckt-02	52.95	19:00	01-10-2022	15.04	14:00	11-10-2022	38.50		
	10	Narhat - Nawadah ckt-01	59.99	19:00	01-10-2022	2.30	13:00	26-10-2022	27.82		
	11	Narhat - Nawadah ckt-02	55.66	19:00	01-10-2022	2.49	13:00	26-10-2022	24.43		
	12	Haveli Kharagpur - Sultanganj ckt-01	28.50	18:00	13-10-2022	12.80	18:00	10-10-2022	9.53		
	13	Haveli Kharagpur - Sultanganj ckt-02	28.30	18:00	13-10-2022	12.70	18:00	10-10-2022	9.53		
	14	Haveli Kharagpur - Lekhsarai ckt-01	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0.00	System connected but no power flow	
	15	Haveli Kharagpur - Lekhsarai ckt-02	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0.00		
	16	Haveli Kharagpur - Jamalpur ckt-01	28.10	21:00	01-10-2022	3.30	17:00	11-10-2022	18.96		
	17	Haveli Kharagpur - Jamalpur ckt-02	28.00	21:00	01-10-2022	3.20	17:00	11-10-2022	18.94		
	18	Sekhopur Sarai - Sekhopur ckt-01	27.60	08:00	02-10-2022	2.80	17:00	09-10-2022	20.69		
	19	Sekhopur Sarai - Sekhopur ckt-02	27.60	08:00	02-10-2022	2.80	18:00	11-10-2022	21.61		
	20	Sekhopur Sarai - Biharsarai	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0.00		
	21	Goradli - Sultanganj ckt-01	0.00	00:00	01-10-2022	0.00	00:00	01-10-2022	0.01	System connected but no power flow	
	22	Goradli - Sultanganj ckt-02	0.00	00:00	01-10-2022	0.00	00:00	01-10-2022	0.00		
	23	Goradli - Kalmagan ckt-01	30.00	14:00	19-10-2022	0.00	00:00	01-10-2022	0.00		
	24	Goradli - Kalmagan ckt-02	30.20	14:00	19-10-2022	0.00	00:00	01-10-2022	0.00		
	25	Goradli - Sabour ckt-01	-19.80	18:00	02-10-2022	-9.10	16:00	11-10-2022	-11.57		
	26	Goradli - Sabour ckt-02	-20.00	19:00	02-10-2022	-9.20	18:00	11-10-2022	-11.61		
	27	Mokama-Huledli ckt-01	53.10	11:00	11-10-2022	0.00	16:00	11-10-2022	22.16		
	28	Mokama-Huledli ckt-02	60.59	23:00	23-10-2022	0.00	18:00	11-10-2022	23.54		
	29	DUMRAON-DUMRAON ckt-01	26.97	17:00	11-10-2022	-1.05	08:00	14-10-2022	16.28		
	30	DUMRAON-DUMRAON Ckt-02	27.17	18:00	02-10-2022	0.01	13:00	10-10-2022	16.34		
	31	DUMRAON-BUXAR ckt-01	27.12	18:00	02-10-2022	0.01	08:00	17-10-2022	18.32		
	32	DUMRAON-BUXAR ckt-02	26.69	17:00	11-10-2022	-1.04	08:00	14-10-2022	18.33		
	33	DUMRAON-ARA ckt-01	-6.65	15:00	03-10-2022	0.01	10:00	12-10-2022	-7.32		
	34	DUMRAON-ARA ckt-02	-6.67	15:00	03-10-2022	-9.01	03:00	10-10-2022	-7.63		
	35	DUMRAON-JAGDISHPUR ckt-01	-14.21	09:00	31-10-2022	-8.69	10:00	11-10-2022	-1.00		
	36	DUMRAON-JAGDISHPUR ckt-02	-14.26	09:00	01-10-2022	-8.63	10:00	11-10-2022	-1.01		
	37	Naubatpur - Mersauri ckt - 01	15.60	16:00	01-10-2022	-1.01	15:00	25-10-2022	16.70		
	38	Naubatpur - Mersauri ckt - 02	15.56	16:00	01-10-2022	-1.01	15:00	25-10-2022	16.58		
	39	JAKKANPUR-SIPARA-03	23.57	17:00	24-10-2022	9.97	14:00	16-10-2022	25.02		
	40	JAKKANPUR-FATUHA	198.00	15:00	12-10-2022	0.16	14:00	12-10-2022	41.54		

BIHAR GRID COMPANY LIMITED										
Loading level of Transmission Assets										
									Month:	October'2022
Substation Details	S No.	MVA Capacity	Load						Avg of Month	Remark
			MW			MW				
			Max	Time	Date	Min	Time	Date		
D. Power Flow In transformers										
Arnour GIS	1	Tr-01-160 MVA, 220-132 kV	133.58	01:00	10-10-2022	29.74	17:00	30-10-2022	83.17	
	2	Tr-02-160 MVA, 220-132 kV	135.25	01:00	10-10-2022	30.12	17:00	30-10-2022	84.26	
	3	Tr-01-50 MVA, 132-33 kV	23.83	22:00	01-10-2022	0.28	09:00	23-10-2022	14.43	
	4	Tr-02-50 MVA, 132-33 kV	23.31	22:00	01-10-2022	0.28	08:00	23-10-2022	14.51	
Khajirsarei GIS	1	Tr-01-160 MVA, 220-132 kV	107	18:00	18-10-2022	19.77	14:00	11-10-2022	73.43	
	2	Tr-02-160 MVA, 220-132 kV	110.28	18:00	18-10-2022	20.96	14:00	11-10-2022	75.86	
	3	Tr-02-50 MVA, 132-33 kV	17.97	07:00	11-10-2022	0.03	15:00	07-10-2022	4.38	
	4	Tr-03-50 MVA, 132-33 kV	26.86	07:00	20-10-2022	0.13	18:00	12-10-2022	11.38	
Narhat GIS	1	Tr-01-160 MVA, 220-132 kV	72.09	19:00	01-10-2022	5.81	13:00	28-10-2022	15.46	
	2	Tr-02-160 MVA, 220-132 kV	67.30	19:00	01-10-2022	5.60	13:00	28-10-2022	15.14	
	3	Tr-01-50 MVA, 132-33 kV	23.31	12:00	09-10-2022	0.09	14:00	11-10-2022	8.46	
	4	Tr-02-50 MVA, 132-33 kV	16.57	19:00	01-10-2022	0.03	17:00	13-10-2022	6.50	
Sekhopur Sarai GIS	1	Tr-01-160 MVA, 220-132 kV	37.80	08:00	02-10-2022	4.2	16:00	11-10-2022	29.01	
	2	Tr-02-160 MVA, 220-132 kV	37.80	08:00	02-10-2022	3.9	16:00	11-10-2022	28.96	
	3	Tr-01-50 MVA, 132-33 kV	1.50	08:00	03-10-2022	0.20	21:00	05-10-2022	0.89	
	4	Tr-02-50 MVA, 132-33 kV	25.00	16:00	01-10-2022	2.8	13:00	12-10-2022	16.04	
Hawali Kharagpur GIS	1	Tr-01-160 MVA, 220-132 kV	56.80	18:00	13-10-2022	3.3	17:00	11-10-2022	24.47	
	2	Tr-02-160 MVA, 220-132 kV	54.80	18:00	13-10-2022	3.4	17:00	11-10-2022	23.09	
	3	Tr-01-50 MVA, 132-33 kV	9.00	22:00	01-10-2022	1.0	06:00	20-10-2022	5.12	
	4	Tr-02-50 MVA, 132-33 kV	6.70	22:00	02-10-2022	0.2	14:00	04-10-2022	3.44	
Goradh GIS	1	Tr-01-160 MVA, 220-132 kV	60.00	14:00	19-10-2022	0.00	00:00	01-10-2022	0.15	
	2	Tr-01-50 MVA, 132-33 kV	17.20	19:00	01-10-2022	0.00	17:00	11-10-2022	9.97	
	3	Tr-02-50 MVA, 132-33 kV	23.50	18:00	02-10-2022	0.00	18:00	04-10-2022	13.16	
Mokama GIS	1	Tr-02-160 MVA, 220-132 kV	78.80	08:00	03-10-2022	14.80	16:00	11-10-2022	47.68	
	2	Tr-02-80 MVA, 132-33 kV	9.70	19:00	09-10-2022	0.00	13:00	01-10-2022	1.43	
Dumraon GIS	1	Tr-01-160 MVA, 220-132 kV	98.47	19:00	09-10-2022	28.68	17:00	04-10-2022	65.21	
	2	Tr-02-160 MVA, 220-132 kV								Not Commissioned
	3	Tr-01-80 MVA, 132-33 kV	22.04	19:00	07-10-2022	0.08	02:00	18-10-2022	65.64	
	4	Tr-02-80 MVA, 132-33 kV	0.00	00:00	01-10-2022	0.00	00:00	31-10-2022	14.18	
Naubatpur GIS	1	Tr-01-500 MVA, 400-220 kV								Not Commissioned
	2	Tr-02-500 MVA, 400-220 kV	234.53	19:00	02-10-2022	95.62	16:00	30-10-2022	175.30	
	3	Tr-01-160 MVA, 220-132 kV	46.20	18:00	08-10-2022	0.85	13:00	18-10-2022	23.22	
	4	Tr-01-80 MVA, 132-33 kV	2.78	19:00	01-10-2022	0.03	18:00	06-10-2022	0.36	
	5	Tr-02-80 MVA, 132-33 kV	3.43	18:00	28-10-2022	0.03	00:00	01-10-2022	1.52	
Jalkanpur GIS	1	Tr-01-500 MVA, 400-220 kV	60.70	15:00	12-10-2022	34.04	13:00	31-10-2022	63.51	
	2	Tr-02-500 MVA, 400-220 kV								Not Commissioned
	3	Tr-01-160 MVA, 220-132 kV	90.50	15:00	12-10-2022	33.80	13:00	31-10-2022	71.44	
	4	Tr-02-80 MVA, 132-33 kV								Not Commissioned
	5	Tr-03-80 MVA, 132-33 kV								Not Commissioned
	6	Tr-04-80 MVA, 132-33 kV	0.13	11:00	08-10-2022	0.07	07:00	28-10-2022	0.090	
Bhusaula GIS	1	Tr-01 100 MVA, 220-33kV	0.30	10:00	10-14-2022	0.10	20:00	10-24-2022	0.20	
	2	Tr-02 100 MVA, 220-33kV								Not Commissioned
Note	Negative sign(-) denotes import of power and positive sign (+) denote export of power. For example (-) 200.68 MW in Hajipur - Arnour ckt-2 denotes import of 200.68 MW from Hajipur S-S to Arnour S-S and 66.80 MW in Arnour -Siwan ckt-2 denotes 66.80 MW from Arnour to Siwan S-S.									

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

									Month: November 2022	
Voltage Grade	S.No	Name of TL	Load						Remark	
			MW							
			Max	Time	Date	Min	Time	Date		Avg of Month
A. Power Flow in 400kV transmission line										
400 kV [06 nos.]	1	Naubatpur - Patna (PG) ckt - 01	-452.42	07:00	22-11-2022	-69.61	13:00	01-11-2022	-230.27	
	2	Naubatpur - Patna (PG) ckt - 02	-772.23	18:00	18-11-2022	-70.13	13:00	01-11-2022	-353.11	
	3	Naubatpur - Baha (PG) ckt - 01	445.48	09:00	24-11-2022	10.87	13:00	01-11-2022	199.01	
	4	Naubatpur - Baha (PG) ckt - 02	491.32	19:00	23-11-2022	14.14	13:00	01-11-2022	260.90	
	5	Jakkanpur - Nabinagar (NPGC) ckt - 01	-477.57	00:00	03-11-2022	-61.99	16:00	08-11-2022	-298.64	
	6	Jakkanpur - Nabinagar (NPGC) ckt - 02	-478.52	00:00	03-11-2022	-62.01	16:00	08-11-2022	-297.47	
	7	Jakkanpur - Patna (PG) ckt - 01	457.61	00:00	03-11-2022	39.94	16:00	08-11-2022	276.98	
	8	Jakkanpur - Patna (PG) ckt - 02	453.87	00:00	03-11-2022	39.53	16:00	08-11-2022	274.69	
B. Power Flow in 220kV transmission line										
220 kV [34 nos.]	1	Hajipur - Amnour ckt-01	-117.93	18:00	03-11-2022	-47.53	14:00	11-11-2022	73.96	
	2	Hajipur - Amnour ckt-02	-118.02	18:00	03-11-2022	-47.79	14:00	11-11-2022	70.43	
	3	Patna (PG) - Khagaul ckt-02	61.87	08:00	30-11-2022	27.76	01:00	29-11-2022	44.90	
	4	Patna (PG) - Khagaul ckt-03	61.83	08:00	30-11-2022	27.55	01:00	29-11-2022	43.32	
	5	Khijirsarai - Biharsharif ckt-01	-141.46	07:00	13-11-2022	-24.3	13:00	03-11-2022	-62.05	
	6	Khijirsarai - Biharsharif ckt-02	-142.18	07:00	13-11-2022	-25.53	13:00	03-11-2022	-62.87	
	7	Khijirsarai - Bodh Gaya ckt-01	-42.30	17:00	11-11-2022	0.18	08:00	09-11-2022	-16.00	
	8	Khijirsarai - Bodh Gaya ckt-02	-42.38	17:00	11-11-2022	0.23	08:00	09-11-2022	-15.98	
	9	Khijirsarai - Gaya (PG) ckt-01	-71.92	17:00	10-11-2022	-12.31	15:00	24-11-2022	-34.25	
	10	Khijirsarai - Gaya (PG) ckt-02	-72.10	17:00	10-11-2022	-12.35	15:00	08-11-2022	-34.29	
	11	Khijirsarai - Narhat ckt-01	98.02	18:00	22-11-2022	39.39	03:00	26-11-2022	58.88	
	12	Khijirsarai - Narhat ckt-02	98.02	18:00	22-11-2022	39.46	03:00	26-11-2022	62.22	
	13	Narhat - Sekhopur Saral ckt-01	53.62	18:00	01-11-2022	22.69	03:00	26-11-2022	17.66	
	14	Narhat - Sekhopur Saral ckt-02	53.66	18:00	01-11-2022	22.83	03:00	26-11-2022	17.17	
	15	Sekhopur Saral - Haveli Kharagpur ckt-01	28.4	14:00	28-11-2022	5.2	06:00	03-11-2022	21.97	
	16	Sekhopur Saral - Haveli Kharagpur ckt-02	36.8	11:00	28-11-2022	4.7	06:00	03-11-2022	22.10	
	17	Haveli Kharagpur - Goradhi ckt-01	0	00:00	00-00-0000	0	00:00	00-00-0000	0.00	System connected but no power flow
	18	Haveli Kharagpur - Goradhi ckt-02	0	00:00	00-00-0000	0	00:00	00-00-0000	0.00	
	19	Mokama-Biharsharif ckt-1	93.80	08:00	13-11-2022	0.00	01:00	01-11-2022	38.28	
	20	Mokama-Biharsharif ckt-2	91.80	08:00	13-11-2022	0.00	01:00	01-11-2022	36.68	
	21	Mokama-BTPS ckt-1	-154.60	10:00	24-11-2022	0.00	20:00	01-11-2022	-57.89	
	22	Mokama-BTPS ckt-2	-116.90	08:00	13-11-2022	0.00	20:00	01-11-2022	-66.46	
	23	Ara (PG)-Dumraon New - 01	-43.93	18:00	25-11-2022	0.04	20:00	30-11-2022	-15.52	
	24	Ara (PG)-Dumraon New - 02	-44.22	18:00	25-11-2022	0.07	11:00	28-11-2022	-15.50	
	25	Dumraon New-Nadokhar - 01	-56.45	18:00	29-11-2022	0.03	10:00	13-11-2022	-13.35	
	26	Dumraon New-Nadokhar - 02	-56.92	18:00	29-11-2022	-0.04	12:00	18-11-2022	-13.47	
	27	Naubatpur - Ara (PG) Ckt-01	162.47	18:00	09-11-2022	18.97	23:00	29-11-2022	71.86	
	28	Naubatpur - Ara (PG) Ckt-02	148.56	17:00	07-11-2022	19.11	23:00	28-11-2022	72.33	
	29	Naubatpur - Khagaul Ckt-01	36.38	08:00	22-11-2022	0.08	01:00	02-11-2022	-13.09	
	30	Naubatpur - Khagaul Ckt-02	36.59	08:00	22-11-2022	0.01	01:00	02-11-2022	-13.16	
	31	Naubatpur - Bhussaula Ckt-01	0.24	02:00	20-11-2022	0.02	17:00	19-11-2022	0.07	
	32	Naubatpur - Bhussaula Ckt-02	0.15	07:00	24-11-2022	0.00	16:00	07-11-2022	0.09	
	33	Naubatpur - Bihta Ckt-01	20.83	13:00	14-11-2022	0.01	23:00	29-11-2022	-6.11	
	34	Naubatpur - Bihta Ckt-02	-15.75	08:00	22-11-2022	0.01	23:00	29-11-2022	-6.00	
C. Power Flow in 132 kV transmission line										
132 kV [40 nos.]	1	Amnour - Swam ckt-01	60.97	18:00	03-11-2022	16.48	15:00	30-11-2022	32.20	
	2	Amnour - Swam ckt-02	61.35	18:00	03-11-2022	16.75	15:00	30-11-2022	32.44	
	3	Amnour - Chhapara ckt-01	52.28	19:00	05-11-2022	18.39	18:00	05-11-2022	30.91	
	4	Amnour - Chhapara ckt-02	51.39	19:00	05-11-2022	18.45	18:00	05-11-2022	30.90	
	5	Khijirsarai - Bodh Gaya ckt - 03	-30.79	18:00	18-11-2022	0.01	08:00	01-11-2022	8.06	
	6	Khijirsarai - Wajrang ckt - 01	41.97	18:00	24-11-2022	0.01	15:00	24-11-2022	27.17	
	7	Khijirsarai - Hulsaganj ckt-01	21.58	07:00	22-11-2022	0.06	14:00	09-11-2022	16.38	
	8	Khijirsarai - Jehanabad ckt-01	69.03	18:00	11-11-2022	13.71	07:00	07-11-2022	38.55	
	9	Khijirsarai - Jehanabad ckt-02	69.04	18:00	11-11-2022	13.68	07:00	07-11-2022	39.54	
	10	Narhat - Nawada ckt-01	43.69	18:00	22-11-2022	7.61	12:00	16-11-2022	19.26	
	11	Narhat - Nawada ckt-02	41.02	18:00	22-11-2022	6.38	12:00	16-11-2022	17.42	
	12	Haveli Kharagpur - Sultanganj ckt-01	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0.00	System connected but no power flow
	13	Haveli Kharagpur - Sultanganj ckt-02	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0.00	
	14	Haveli Kharagpur - Lakhisarai ckt-01	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0.00	
	15	Haveli Kharagpur - Lakhisarai ckt-02	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0.00	
	16	Haveli Kharagpur - Jamalpur ckt-01	20.90	19:00	02-11-2022	3.20	11:00	19-11-2022	14.06	
	17	Haveli Kharagpur - Jamalpur ckt-02	20.70	19:00	02-11-2022	3.05	11:00	19-11-2022	14.05	
	18	Sekhopur Saral - Sekhopur ckt-01	19.40	18:00	01-11-2022	3.10	13:00	19-11-2022	17.97	
	19	Sekhopur Saral - Sekhopur ckt-02	19.60	18:00	01-11-2022	3.60	13:00	03-11-2022	18.05	
	20	Sekhopur Saral - Biharsharif	0.00	00:00	00-00-0000	0.00	00:00	00-00-0000	0.00	
	21	Goradhi - Sultanganj ckt-01	0.00	00:00	01-11-2022	0.00	00:00	01-11-2022	0.01	System connected but no power flow
	22	Goradhi - Sultanganj ckt-02	0.00	00:00	01-11-2022	0.00	00:00	01-11-2022	0.01	
	23	Goradhi - Kehlagaan ckt-01	0.00	00:00	01-11-2022	0.00	00:00	01-11-2022	0.01	
	24	Goradhi - Kehlagaan ckt-02	0.00	00:00	01-11-2022	0.00	00:00	01-11-2022	0.01	
	25	Goradhi - Sobraur ckt-01	-15.60	17:00	01-11-2022	-0.30	18:00	08-11-2022	-9.86	
	26	Goradhi - Sobraur ckt-02	-15.76	17:00	01-11-2022	-0.43	17:00	04-11-2022	-9.92	
	27	Mokama-Haldia ckt-01	29.80	07:00	03-11-2022	6.90	19:00	08-11-2022	17.75	
	28	Mokama-Haldia ckt-02	30.20	07:00	03-11-2022	6.90	19:00	08-11-2022	17.90	
	29	DUMRAON-DUMRAON ckt-01	47.12	08:00	24-11-2022	-1.56	15:00	09-11-2022	16.91	
	30	DUMRAON-DUMRAON Ckt 02	47.49	08:00	24-11-2022	-0.97	15:00	08-11-2022	17.04	
	31	DUMRAON-BUXAR ckt-01	22.14	19:00	08-11-2022	0.12	07:00	18-11-2022	13.12	
	32	DUMRAON-BUXAR ckt-02	36.08	09:00	14-11-2022	0.08	13:00	19-11-2022	13.11	
	33	DUMRAON-ARA ckt-01	-29.09	09:00	25-11-2022	-0.39	13:00	19-11-2022	-5.32	
	34	DUMRAON-ARA ckt-02	-29.14	09:00	25-11-2022	-0.39	13:00	18-11-2022	-5.33	
	35	DUMRAON-JAGDISHPUR ckt-01	18.51	18:00	28-11-2022	0.01	12:00	02-11-2022	-1.40	
	36	DUMRAON-JAGDISHPUR ckt-02	18.60	18:00	28-11-2022	0.01	12:00	02-11-2022	-1.27	
	37	Naubatpur - Masaurhi ckt - 01	17.38	12:00	29-11-2022	0.23	17:00	18-11-2022	7.67	
	38	Naubatpur - Masaurhi ckt - 02	15.19	11:00	23-11-2022	0.00	12:00	29-11-2022	7.98	
	39	JANKANPUR-SIPARA-03	44.00	11:00	15-11-2022	6.19	07:00	09-11-2022	23.06	
	40	JANKANPUR-FATUHA	46.27	17:00	23-11-2022	6.12	07:00	09-11-2022	36.64	



BIHAR GRID COMPANY LIMITED											
Loading level of Transmission Assets											
										Month: November'2022	
Substation Details	S.No.	MVA Capacity	Load						Avg of Month	Remark	
			MW								
			Max	Time	Date	Min	Time	Date			
D. Power Flow in transformers											
Ansnour GIS	1	Tr-01-160 MVA, 220-132 kV	116.59	18:00	03-11-2022	46.43	14:00	11-11-2022	73.30		
	2	Tr-02-160 MVA, 220-132 kV	116.16	18:00	03-11-2022	47.37	14:00	11-11-2022	74.27		
	3	Tr-04-50 MVA, 132-33 kV	17.24	18:00	08-11-2022	9.28	06:00	03-11-2022	10.70		
	4	Tr-02-50 MVA, 132-33 kV	17.30	19:00	08-11-2022	0.05	11:00	22-11-2022	10.75		
KhajirSaraI GIS	1	Tr-01-160 MVA, 220-132 kV	119.38	18:00	20-11-2022	32.25	15:00	09-11-2022	70.92		
	2	Tr-02-160 MVA, 220-132 kV	112.78	18:00	20-11-2022	33.53	15:00	09-11-2022	73.29		
	3	Tr-02-50 MVA, 132-33 kV	9.22	07:00	17-11-2022	0.03	19:00	03-11-2022	3.96		
	4	Tr-03-50 MVA, 132-33 kV	18.17	07:00	02-11-2022	0.16	16:00	11-11-2022	7.50		
Narhat GIS	1	Tr-01-160 MVA, 220-132 kV	53.10	18:00	22-11-2022	13.21	14:00	01-11-2022	12.93		
	2	Tr-02-160 MVA, 220-132 kV	49.55	18:00	22-11-2022	12.48	12:00	16-11-2022	11.64		
	3	Tr-01-50 MVA, 132-33 kV	6.65	09:00	21-11-2022	0.06	15:00	11-11-2022	4.02		
	4	Tr-02-50 MVA, 132-33 kV	13.81	10:00	27-11-2022	0.04	11:00	11-11-2022	8.44		
Sekhopur SaraI GIS	1	Tr-01-160 MVA, 220-132 kV	27.40	18:00	01-11-2022	7.10	13:00	03-11-2022	26.45		
	2	Tr-02-160 MVA, 220-132 kV	39.30	11:00	05-11-2022	7.00	13:00	03-11-2022	26.87		
	3	Tr-01-50 MVA, 132-33 kV	0.90	08:00	07-11-2022	0.20	06:00	01-11-2022	0.73		
	4	Tr-02-50 MVA, 132-33 kV	18.10	18:00	03-11-2022	1.40	14:00	08-11-2022	15.12		
HavelI Kharagpur GIS	1	Tr-01-160 MVA, 220-132 kV	26.20	18:00	01-11-2022	6.70	11:00	19-11-2022	18.05		
	2	Tr-02-160 MVA, 220-132 kV	25.10	15:00	19-11-2022	5.10	11:00	19-11-2022	16.88		
	3	Tr-01-50 MVA, 132-33 kV	5.80	19:00	08-11-2022	1.60	12:00	18-11-2022	4.03		
	4	Tr-02-50 MVA, 132-33 kV	4.60	18:00	01-11-2022	1.00	13:00	21-11-2022	2.72		
GoradhI GIS	1	Tr-01-160 MVA, 220-132 kV	0.00	00:00	01-11-2022	0.00	08:00	01-11-2022	-0.04		
	2	Tr-01-50 MVA, 132-33 kV	13.50	17:00	01-11-2022	0.00	06:00	02-11-2022	5.81		
	3	Tr-02-50 MVA, 132-33 kV	28.00	17:00	12-11-2022	0.00	17:00	02-11-2022	13.62		
Mokama GIS	1	Tr-02-160 MVA, 220-132 kV	63.00	08:00	30-11-2022	17.40	15:00	17-11-2022	39.77		
	2	Tr-02-80 MVA, 132-33 kV	5.20	19:00	08-11-2022	0.00	01:00	01-11-2022	0.77		
Dumraon GIS	1	Tr-01-160 MVA, 220-132 kV	142.26	18:00	28-11-2022	24.48	13:00	19-11-2022	57.03		
	2	Tr-02-160 MVA, 220-132 kV			Not Commissioned						
	3	Tr-01-80 MVA, 132-33 kV	17.60	18:00	03-11-2022	3.45	16:00	15-11-2022	10.81		
	4	Tr-02-80 MVA, 132-33 kV	0.00	00:00	01-09-2022	0.00	00:00	31-09-2022	0.00		
Naubatpur GIS	1	Tr-01-500 MVA, 400-220 kV			Not Commissioned						
	2	Tr-02-500 MVA, 400-220 kV	215.13	20:00	08-11-2022	84.88	14:00	18-11-2022	-123.17		
	3	Tr-01-160 MVA, 220-132 kV	32.16	11:00	23-11-2022	2.17	18:00	05-11-2022	17.51		
	4	Tr-01-80 MVA, 132-33 kV	0.04	00:00	01-11-2022	0.03	08:00	01-11-2022	0.03		
	5	Tr-02-80 MVA, 132-33 kV	3.07	07:00	06-11-2022	0.08	10:00	21-11-2022	1.65		
Jakkampur GIS	1	Tr-01-500 MVA, 400-220 kV	60.31	18:00	04-11-2022	15.93	16:00	07-11-2022	35.04		
	2	Tr-02-500 MVA, 400-220 kV	33.03	11:00	10-11-2022	0.05	12:00	06-11-2022	27.01		
	3	Tr-01-160 MVA, 220-132 kV	85.77	11:00	10-11-2022	29.04	15:00	07-11-2022	57.61		
	4	Tr-01-80 MVA, 132-33 kV			Not Commissioned						
Bhusaula GIS	5	Tr-02-80 MVA, 132-33 kV			Not Commissioned						
	6	Tr-04-80 MVA, 132-33 kV	0.20	23:00	18-11-2022	0.05	08:00	25-11-2022	0.080		
	1	Tr-01 100 MVA, 220-33kV	0.70	08:00	01-11-2022	0.50	00:00	01-11-2022	0.60		
2	Tr-02 100 MVA, 220-33kV			Not Commissioned							
Note	Negative sign (-) denote import of power and positive sign (+) denote export of power. For example (-) 118.02 MW in Hajipur - Ansnour ckt-2 denotes import of 118.02 MW from Hajipur S-5 to Ansnour S-5 and 61.35 MW in Ansnour -Sivan ckt-2 denotes 61.35 MW from Ansnour to Sivan S-5.										

BIHAR GRID COMPANY LIMITED

Loading level of Transmission Assets

Month: **December 2022**

Voltage Grade	S.No	Name of TL	Load							Avg of Month	Remark
			MW								
			Max	Time	Date	Min	Time	Date			
A. Power Flow in 400kV transmission line											
400 kV (08 nos.)	1	Naubatpur - Patna (PG) ckt - 01	-445.27	20:00	16-12-2022	-92.26	03:00	14-12-2022	-282.40		
	2	Naubatpur - Patna (PG) ckt - 02	-446.38	20:00	16-12-2022	-92.75	03:00	14-12-2022	-286.27		
	3	Naubatpur - Bafia (PG) ckt - 01	386.11	20:00	21-12-2022	17.85	17:00	20-12-2022	219.66		
	4	Naubatpur - Baha (PG) ckt - 02	436.66	19:00	06-12-2022	21.62	17:00	20-12-2022	239.93		
	5	Jalkanjpur - Nabinagar (NPGC) ckt - 01	-377.77	20:00	19-12-2022	-19.27	07:00	25-12-2022	-274.21		
	6	Jalkanjpur - Nabinagar (NPGC) ckt - 02	-380.09	20:00	19-12-2022	-19.34	07:00	25-12-2022	-266.73		
	7	Jalkanjpur - Patna (PG) ckt - 01	292.01	11:00	01-12-2022	-0.77	11:00	24-12-2022	199.5		
	8	Jalkanjpur - Patna (PG) ckt - 02	290.03	11:00	01-12-2022	-4.75	06:00	29-12-2022	198.16		
B. Power Flow in 220kV transmission line											
220 kV (36 nos.)	1	Hajipur - Amnour ckt-01	-100.55	10:00	16-12-2022	-20.94	19:00	18-12-2022	60.22		
	2	Hajipur - Amnour ckt-02	-134.65	06:00	01-12-2022	-18.73	13:00	06-12-2022	60.32		
	3	Patna (PG) - Khagaul ckt-02	85.83	08:00	18-12-2022	8.87	16:00	23-12-2022	41.62		
	4	Patna (PG) - Khagaul ckt-03	89.36	08:00	18-12-2022	8.65	16:00	23-12-2022	41.48		
	5	Khajirasai - Biharsharif ckt-01	-140.9	15:00	30-12-2022	-5.85	13:00	13-12-2022	-65.14		
	6	Khajirasai - Biharsharif ckt-02	-142.56	15:00	30-12-2022	-7	13:00	13-12-2022	-65.68		
	7	Khajirasai - Both Gaya ckt-01	-61.44	11:00	28-12-2022	0.13	06:00	29-12-2022	-17.04		
	8	Khajirasai - Both Gaya ckt-02	-61.81	11:00	28-12-2022	0.19	06:00	29-12-2022	-18.65		
	9	Khajirasai - Gaya (PG) ckt-01	-84.55	11:00	28-12-2022	-14.56	05:00	28-12-2022	-36.55		
	10	Khajirasai - Gaya (PG) ckt-02	-85.38	11:00	28-12-2022	-14.83	05:00	28-12-2022	-38.42		
	11	Khajirasai - Narhat ckt-01	143.27	18:00	24-12-2022	36.39	09:00	09-12-2022	64.24		
	12	Khajirasai - Narhat ckt-02	142.89	18:00	24-12-2022	36.38	09:00	09-12-2022	64.23		
	13	Narhat - Sekhopur Sarai ckt-01	89.90	18:00	24-12-2022	21.68	04:00	16-12-2022	17.90		
	14	Narhat - Sekhopur Sarai ckt-02	89.64	18:00	24-12-2022	21.70	04:00	16-12-2022	17.89		
	15	Sekhopur Sarai - Haveli Kharagpur ckt-01	64.40	18:00	24-12-2022	4.9	10:00	13-12-2022	24.71		
	16	Sekhopur Sarai - Haveli Kharagpur ckt-02	63.80	18:00	24-12-2022	4.3	10:00	13-12-2022	24.14		
	17	Haveli Kharagpur - Goradhi ckt-01	26.5	11:00	23-12-2022	11.8	03:00	24-12-2022	0.86		
	18	Haveli Kharagpur - Goradhi ckt-02	0	00:00	00-00-0000	0	00:00	00-00-0000	0.00	System connected but no power flow	
	19	Mokama-Biharsharif ckt-1	80.70	08:00	10-12-2022	0.00	01:00	01-12-2022	8.21		
	20	Mokama-Biharsharif ckt-2	61.00	08:00	10-12-2022	0.00	01:00	01-12-2022	8.26		
	21	Mokama-BTPS ckt-1	-87.80	08:00	01-12-2022	0.00	01:00	02-12-2022	-28.18		
	22	Mokama-BTPS ckt-2	-88.50	08:00	01-12-2022	0.00	01:00	02-12-2022	-27.00		
	23	Arat (PG)-Dumraon New - 01	-60.9	17:00	27-12-2022	0.07	14:00	06-12-2022	-18.38		
	24	Arat (PG)-Dumraon New - 02	-61.18	17:00	27-12-2022	0.07	14:00	06-12-2022	-18.38		
	25	Dumraon New-Nadokhar - 01	-61.3	11:00	20-12-2022	-0.05	08:00	17-12-2022	-19.48		
	26	Dumraon New-Nadokhar - 02	-62.03	11:00	20-12-2022	-0.01	09:00	17-12-2022	-19.58		
	27	Naubatpur - Arat (PG) Ckt-01	206.09	11:00	23-12-2022	27.52	27:00	03-12-2022	84.41		
	28	Naubatpur - Arat (PG) Ckt-02	180.39	17:00	21-12-2022	27.69	22:00	03-12-2022	84.05		
	29	Naubatpur - Khagaul Ckt-01	-140.89	17:00	20-12-2022	-0.01	16:00	23-12-2022	-33.47		
	30	Naubatpur - Khagaul Ckt-02	-127.97	18:00	18-12-2022	-0.14	11:00	01-12-2022	-32.75		
	31	Naubatpur - Bhuseula Ckt 01	5.74	11:00	14-12-2022	0.03	20:00	27-12-2022	2.15		
	32	Naubatpur - Bhuseula Ckt-02	5.45	11:00	14-12-2022	0.01	09:00	01-12-2022	1.88		
	33	Naubatpur - Bihla Ckt-01	-54.48	18:00	18-12-2022	0.02	13:00	23-12-2022	-7.51		
	34	Naubatpur - Bihla Ckt-02	-54.20	18:00	18-12-2022	0.03	13:00	23-12-2022	-7.54		
	35	Jalkanjpur - Sipara ckt-03	76.29	10:00	21-12-2022	19.67	03:00	05-12-2022	44.39		
	36	Jalkanjpur - Khagaul ckt	167.67	18:00	17-12-2022	65.48	03:00	28-12-2022	118.49		
C. Power Flow in 132 kV transmission line											
132 kV (40 nos.)	1	Amnour - Swan ckt-01	68.67	18:00	23-12-2022	0.08	23:00	11-12-2022	31.24		
	2	Amnour - Swan ckt-02	69.28	18:00	23-12-2022	16.93	15:00	24-12-2022	31.05		
	3	Amnour - Chhapara ckt-01	77.83	10:00	14-12-2022	10.26	22:00	06-12-2022	23.15		
	4	Amnour - Chhapara ckt-02	42.08	19:00	19-12-2022	10.19	22:00	06-12-2022	17.92		
	5	Khajirasai - Both Gaya ckt - 03	0.13	04:00	29-12-2022	0.00	14:00	08-12-2022	0.03		
	6	Khajirasai - Wajiganj ckt-01	42.36	08:00	23-12-2022	0.11	10:00	13-12-2022	27.62		
	7	Khajirasai - Hatesganj ckt-01	64.23	18:00	21-12-2022	0.00	00:00	15-12-2022	16.90		
	8	Khajirasai - Jehanabad ckt-01	54.78	18:00	05-12-2022	10.49	14:00	08-12-2022	30.85		
	9	Khajirasai - Jehanabad ckt-02	55.02	18:00	05-12-2022	10.50	14:00	08-12-2022	30.84		
	10	Narhat - Nawadah ckt-01	52.45	18:00	02-12-2022	9.60	05:00	08-12-2022	22.89		
	11	Narhat - Nawadah ckt-02	45.2	09:00	30-12-2022	9.76	13:00	12-12-2022	20.55		
	12	Haveli Kharagpur - Suttanganj ckt-01	25.8	17:00	24-12-2022	11.8	10:00	24-12-2022	0.24		
	13	Haveli Kharagpur - Suttanganj ckt-02	25.7	17:00	24-12-2022	11.4	10:00	24-12-2022	0.24		
	14	Haveli Kharagpur - Lekhisara ckt-01	0	00:00	00-00-0000	0	00:00	00-00-0000	0.00	System connected but no power flow	
	15	Haveli Kharagpur - Lekhisara ckt-02	0	00:00	00-00-0000	0	00:00	00-00-0000	0.00	System connected but no power flow	
	16	Haveli Kharagpur - Jemalpur ckt-01	21.80	09:00	31-12-2022	4.4	15:00	22-12-2022	14.17		
	17	Haveli Kharagpur - Jemalpur ckt-02	21.80	09:00	31-12-2022	4.4	15:00	22-12-2022	14.17		
	18	Sekhopur Sarai - Sekhopura ckt-01	21.80	08:00	16-12-2022	3.2	09:00	02-12-2022	18.52		
	19	Sekhopur Sarai - Sekhopura ckt-02	21.80	08:00	16-12-2022	6.5	04:00	23-12-2022	18.54		
	20	Sekhopur Sarai - Biharsharif	0	00:00	00-00-0000	0	00:00	00-00-0000	0.00		
	21	Goradhi - Suttanganj ckt-01	0.00	00:00	01-12-2022	0.00	00:00	01-12-2022	0.01	System connected but no power flow	
	22	Goradhi - Suttanganj ckt-02	0.00	00:00	01-12-2022	0.00	00:00	01-12-2022	0.01	System connected but no power flow	
	23	Goradhi - Kehalgaon ckt-01	0.00	00:00	01-12-2022	0.00	00:00	01-12-2022	0.01	System connected but no power flow	
	24	Goradhi - Kehalgaon ckt-02	0.00	00:00	01-12-2022	0.00	00:00	01-12-2022	0.01	System connected but no power flow	
	25	Goradhi - Sabour ckt-01	-24.90	17:00	25-12-2022	0.00	11:00	23-12-2022	-9.24		
	26	Goradhi - Sabour ckt-02	12.60	17:00	17-12-2022	0.00	11:00	23-12-2022	-7.28		
	27	Mokama-Haldah ckt-01	33.20	09:00	25-12-2022	0.00	13:00	17-12-2022	17.52		
	28	Mokama-Haldah ckt-02	33.60	09:00	25-12-2022	0.00	13:00	17-12-2022	17.66		
	29	Dumraon new (BGCL)-Dumraon (BSPTCL) ckt-01	61.00	18:00	21-12-2022	8.59	15:00	18-12-2022	28.87		
	30	Dumraon new (BGCL)-Dumraon (BSPTCL) ckt-02	79.49	18:00	18-12-2022	10.51	10:00	27-12-2022	29.43		
	31	Dumraon-Buzar ckt-01	23.89	18:00	25-12-2022	0.01	17:00	20-12-2022	12.82		
	32	Dumraon-Buzar ckt-02	23.84	18:00	29-12-2022	0.02	17:00	20-12-2022	12.84		
	33	Dumraon-Ara ckt-01	0.00	00:00	01-12-2022	0.00	00:00	01-12-2022	0.00	System connected but no power flow	
	34	Dumraon-Ara ckt-02	0.00	00:00	01-12-2022	0.00	00:00	01-12-2022	0.00	System connected but no power flow	
	35	Dumraon Jagdishpur ckt-01	20.08	18:00	18-12-2022	-2.37	18:00	02-12-2022	-8.31		
	36	Dumraon Jagdishpur ckt-02	-20.07	18:00	18-12-2022	-2.36	18:00	02-12-2022	-8.30		
	37	Naubatpur - Misauri ckt - 01	16.42	12:00	13-12-2022	9.17	15:00	25-12-2022	7.77		
	38	Naubatpur - Misauri ckt - 02	20.13	10:00	13-12-2022	0.17	15:00	25-12-2022	7.48		
	39	Jalkanjpur-Sipara-01	23.74	18:00	17-12-2022	2.52	04:00	29-12-2022	16.80		
	40	Jalkanjpur-Patna	93.21	14:00	20-12-2022	16.89	04:00	05-12-2022	34.83		



BIHAR GRID COMPANY LIMITED											
Loading level of Transmission Assets											
										Month:	December'2022
Substation Details	S.No.	MVA Capacity	Load MW						Avg of Month	Remark	
			Max	Time	Date	Min	Time	Date			
D. Power Flow In transformers											
Amnour GIS	1	Tr-01-160 MVA, 220-132 kV	140.59	07:00	11-12-2022	18.69	13:00	06-12-2022	73.30		
	2	Tr-02-160 MVA, 220-132 kV	113.55	09:00	23-12-2022	0.04	07:00	11-12-2022	74.27		
	3	Tr-01-50 MVA, 132-33 kV	9.98	22:00	02-12-2022	0.25	00:00	28-12-2022	10.70		
	4	Tr-02-50 MVA, 132-33 kV	9.99	22:00	13-12-2022	0.25	00:00	28-12-2022	10.75		
Khajirasai GIS	1	Tr-01-160 MVA, 220-132 kV	106.82	11:00	14-12-2022	25.86	10:00	29-12-2022	56.47		
	2	Tr-02-160 MVA, 220-132 kV	107.79	10:00	21-12-2022	27.14	10:00	29-12-2022	58.44		
	3	Tr-01-50 MVA, 132-33 kV								Not Commissioned	
	4	Tr-02-50 MVA, 132-33 kV	13.94	10:00	30-12-2022	0.03	15:00	14-12-2022	3.87		
	5	Tr-03-50 MVA, 132-33 kV	10.89	09:00	23-12-2022	1.28	13:00	09-12-2022	6.78		
Narhat GIS	1	Tr-01-160 MVA, 220-132 kV	55.82	05:00	30-12-2022	4.39	16:00	02-12-2022	14.52		
	2	Tr-02-160 MVA, 220-132 kV	56.50	18:00	02-12-2022	3.99	14:00	19-12-2022	13.27		
	3	Tr-01-50 MVA, 132-33 kV	7.56	10:00	23-12-2022	0.11	08:00	14-12-2022	3.65		
	4	Tr-02-50 MVA, 132-33 kV	14.67	18:00	20-12-2022	0.03	12:00	09-12-2022	8.50		
Sekhopur Sarai GIS	1	Tr-01-160 MVA, 220-132 kV	31.00	08:00	16-12-2022	2.70	01:00	26-12-2022	26.10		
	2	Tr-02-160 MVA, 220-132 kV	41.50	13:00	30-12-2022	1.00	01:00	26-12-2022	26.68		
	3	Tr-01-50 MVA, 132-33 kV	1.20	08:00	25-12-2022	0.20	10:00	02-12-2022	0.90		
	4	Tr-02-50 MVA, 132-33 kV	18.20	10:00	24-12-2022	1.20	05:00	22-12-2022	15.41		
Haveli Kharagpur GIS	1	Tr-01-160 MVA, 220-132 kV	47.50	17:00	24-12-2022	7.90	15:00	22-12-2022	18.37		
	2	Tr-02-160 MVA, 220-132 kV	45.60	17:00	24-12-2022	7.00	15:00	22-12-2022	17.11		
	3	Tr-01-50 MVA, 132-33 kV	5.60	17:00	28-12-2022	2.20	04:00	28-12-2022	4.04		
	4	Tr-02-50 MVA, 132-33 kV	4.00	17:00	17-12-2022	1.10	21:00	26-12-2022	2.56		
Goradih GIS	1	Tr-01-160 MVA, 220-132 kV	23.10	17:00	23-12-2022	0.00	00:00	01-12-2022	0.75		
	2	Tr-02-160 MVA, 220-132 kV								Not Commissioned	
	3	Tr-01-50 MVA, 132-33 kV	12.30	16:00	17-12-2022	1.40	05:00	05-12-2022	7.48		
	4	Tr-02-50 MVA, 132-33 kV	15.40	10:00	27-12-2022	0.00	05:00	05-12-2022	9.63		
Mokeme GIS	1	Tr-01-160 MVA, 220-132 kV								Not Commissioned	
	2	Tr-02-160 MVA, 220-132 kV	69.80	09:00	31-12-2022	4.30	14:00	17-12-2022	39.66		
	3	Tr-01-50 MVA, 132-33 kV								Not Commissioned	
	4	Tr-02-80 MVA, 132-33 kV	8.70	18:00	28-12-2022	0.00	01:00	01-12-2022	1.31		
Dumraon GIS	1	Tr-01-160 MVA, 220-132 kV	157.53	17:00	27-12-2022	33.84	04:00	21-12-2022	74.79		
	2	Tr-02-160 MVA, 220-132 kV								Not Commissioned	
	3	Tr-01-80 MVA, 132-33 kV	19.79	08:00	21-12-2022	0.03	07:00	23-12-2022	10.11		
	4	Tr-02-80 MVA, 132-33 kV	17.84	10:00	23-12-2022	0.03	17:00	23-12-2022	0.38		
Naubatpur GIS	1	Tr-01-500 MVA, 400-220 kV								Not Commissioned	
	2	Tr-02-500 MVA, 400-220 kV	-235.06	15:00	17-12-2022	-50.88	05:00	19-12-2022	-108.57		
	3	Tr-01-160 MVA, 220-132 kV	30.16	18:00	03-12-2022	1.66	14:00	31-12-2022	17.38		
	4	Tr-02-160 MVA, 220-132 kV								Not Commissioned	
	5	Tr-01-80 MVA, 132-33 kV	0.04	06:00	01-11-2022	0.03	06:00	01-11-2022	0.03		
	6	Tr-02-80 MVA, 132-33 kV	3.19	08:00	30-12-2022	0.06	12:00	14-12-2022	1.82		
Jalkanpur GIS	1	Tr-01-500 MVA, 400-220 kV	133.37	18:00	20-12-2022	16.61	03:00	01-12-2022	98.44		
	2	Tr-02-500 MVA, 400-220 kV	133.29	18:00	20-12-2022	16.6	03:00	01-12-2022	98.3		
	3	Tr-01-160 MVA, 220-132 kV	74.44	14:00	20-12-2022	22.54	15:00	17-12-2022	47.91		
	4	Tr-02-160 MVA, 220-132 kV								Not Commissioned	
	5	Tr-01-80 MVA, 132-33 kV								Not Commissioned	
	6	Tr-02-80 MVA, 132-33 kV								Not Commissioned	
	7	Tr-04-80 MVA, 132-33 kV	0.1	05:00	13-12-2022	0.04	14:00	19-12-2022	0.09		
Bhusaula GIS	1	Tr-01 100 MVA, 220-33kV	11.27	11:00	14-12-2022	0.00	05:00	31-12-2022	-5.85		
	2	Tr-02 100 MVA, 220-33kV								Not Commissioned	
Note	Negative sign[-] denotes import of power and positive sign [+] denotes export of power. For example [-]134.69 MW in Hajipur - Amnour ckt-2 denotes import of 134.69 MW from Hajipur S-5 to Amnour S-5 and 69.28 MW in Amnour - Siwan ckt-2 denotes 69.28 MW from Amnour to Siwan S-5.										

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Month: **January 2023**

Voltage Grade	S.No	Name of TL	Load MW							Remark
			Max	Time	Date	Min	Time	Date	Avg of Month	
400 kV (08 nos.)	1	Naubatpur - Patna (PG) ckt - 01	-472.77	20:00	06-01-2023	-43.8	15:00	26-01-2023	-315.60	
	2	Naubatpur - Patna (PG) ckt - 02	-474.26	20:00	06-01-2023	-44.34	15:00	26-01-2023	-316.94	
	3	Naubatpur - Ballia (PG) ckt - 01	366.70	20:00	06-01-2023	0.09	02:00	27-01-2023	239.75	
	4	Naubatpur - Ballia (PG) ckt - 02	369.40	21:00	08-01-2023	-0.66	04:00	27-01-2023	242.75	
	5	Jalgaon - Nabinagar (NPGC) ckt - 01	-437.05	20:00	31-01-2023	-132.2	02:00	02-01-2023	-347.86	
	6	Jalgaon - Nabinagar (NPGC) ckt - 02	-436.93	20:00	31-01-2023	-132.5	02:00	02-01-2023	-348.41	
	7	Jalgaon - Patna (PG) ckt - 01	343.8	21:00	31-01-2023	44.54	08:00	02-01-2023	258.62	
	8	Jalgaon - Patna (PG) ckt - 02	341.11	21:00	31-01-2023	44.62	08:00	02-01-2023	256.91	
220 kV (36 nos.)	B. Power Flow in 220kV transmission line									
	1	Hajipur - Amnour ckt-01	-139.32	18:00	07-01-2023	-41.6	14:00	17-01-2023	86.62	
	2	Hajipur - Amnour ckt-02	-139.57	18:00	07-01-2023	-41.8	14:00	17-01-2023	82.60	
	3	Patna (PG) - Khagaul ckt-02	-122.42	10:00	08-01-2023	-16.17	04:00	21-01-2023	-50.16	
	4	Patna (PG) - Khagaul ckt-03	-121.17	10:00	08-01-2023	-16.17	04:00	21-01-2023	-49.96	
	5	Khajirsara - Biharsharif ckt-01	-121.22	08:00	30-01-2023	-18.1	23:00	09-01-2023	-71.91	
	6	Khajirsara - Biharsharif ckt-02	-123.22	08:00	30-01-2023	-17.82	23:00	09-01-2023	-72.19	
	7	Khajirsara - Both Gaya ckt-01	-52.61	10:00	11-01-2023	0.06	12:00	07-01-2023	-23.44	
	8	Khajirsara - Both Gaya ckt-02	-53.04	10:00	11-01-2023	0.05	12:00	07-01-2023	-23.55	
	9	Khajirsara - Gaya (PG) ckt-01	-92.07	11:00	06-01-2023	-18.76	05:00	07-01-2023	-45.1	
	10	Khajirsara - Gaya (PG) ckt-02	-92.38	11:00	06-01-2023	-18.82	05:00	07-01-2023	-45.16	
	11	Khajirsara - Narhat ckt-01	158.55	18:00	12-01-2023	30.05	19:00	10-01-2023	78.95	
	12	Khajirsara - Narhat ckt-02	159.92	18:00	12-01-2023	30.22	19:00	10-01-2023	78.93	
	13	Narhat - Sekhopur Sarai ckt-01	114.81	18:00	12-01-2023	2.69	19:00	10-01-2023	21.03	
	14	Narhat - Sekhopur Sarai ckt-02	114.78	18:00	12-01-2023	2.82	19:00	10-01-2023	21.03	
	15	Sekhopur Sarai - Haveli Kharagpur ckt-01	87.90	18:00	12-01-2023	2.4	13:00	06-01-2023	35.70	
	16	Sekhopur Sarai - Haveli Kharagpur ckt-02	87.20	18:00	12-01-2023	1.8	13:00	06-01-2023	35.29	
	17	Haveli Kharagpur - Goradhi ckt-01	32.4	17:00	12-01-2023	15.9	15:00	24-01-2023	0.35	
	18	Haveli Kharagpur - Goradhi ckt-02	42.1	10:00	12-01-2023	25.3	12:00	12-01-2023	0.37	
	19	Mokama-Biharsharif ckt-1	0.00	23:59	31-01-2023	0.00	01:00	01-01-2023	0.00	
	20	Mokama-Biharsharif ckt-2	0.00	23:59	31-01-2023	0.00	01:00	01-01-2023	0.00	
	21	Mokama BTPS ckt-1	-70.70	09:00	11-01-2023	0.00	12:00	23-01-2023	-26.24	
	22	Mokama-BTPS ckt-2	-70.70	09:00	11-01-2023	0.00	12:00	23-01-2023	-14.77	
	23	Are (PG)-Dumraon New - 01	-48.63	08:00	02-01-2023	-4.98	02:00	20-01-2023	-32.67	
	24	Are (PG)-Dumraon New - 02	-48.63	08:00	02-01-2023	-4.96	02:00	20-01-2023	-32.69	
	25	Dumraon New-Nadokhar - 01	-53.48	10:00	10-01-2023	-0.02	15:00	25-01-2023	-41.38	
	26	Dumraon New-Nadokhar - 02	-53.83	10:00	10-01-2023	-0.04	15:00	25-01-2023	-41.63	
	27	Naubatpur - Ara (PG) Ckt-01	161.37	08:00	13-01-2023	18.67	04:00	21-01-2023	97.05	
	28	Naubatpur - Ara (PG) Ckt-02	162.62	08:00	14-01-2023	18.86	04:00	21-01-2023	97.10	
	29	Naubatpur - Khagaul Ckt-01	-56.03	19:00	01-01-2023	0.07	10:00	10-01-2023	-25.42	
	30	Naubatpur - Khagaul Ckt-02	-56.23	19:00	01-01-2023	0.06	10:00	10-01-2023	-25.52	
	31	Naubatpur - Bhusaola Ckt-01	5.27	09:00	13-01-2023	0.00	06:00	10-01-2023	3.03	
	32	Naubatpur - Bhusaola Ckt-02	9.74	18:00	11-01-2023	0.01	02:00	08-01-2023	2.89	
	33	Naubatpur - Bihla Ckt-01	-32.81	18:00	17-01-2023	-0.01	04:00	26-01-2023	-9.51	
	34	Naubatpur - Bihla Ckt-02	-32.75	18:00	17-01-2023	-0.05	04:00	26-01-2023	-9.52	
	35	Jalgaon - Sipara ckt-03	91.38	10:00	08-01-2023	20.15	02:00	02-01-2023	59.01	
36	Jalgaon - Khagaul ckt	145.99	10:00	13-01-2023	56.77	04:00	21-01-2023	105.72		
132 kV (40 nos.)	C. Power Flow in 132 kV transmission line									
	1	Amnour - Swan ckt-01	72.08	09:00	13-01-2023	18.64	15:00	31-01-2023	45.15	
	2	Amnour - Swan ckt-02	72.82	09:00	13-01-2023	18.84	15:00	31-01-2023	45.48	
	3	Amnour - Chhapara ckt-01	60.40	08:00	21-01-2023	9.8	00:00	16-01-2023	28.74	
	4	Amnour - Chhapara ckt-02	56.09	09:00	06-01-2023	9.70	00:00	16-01-2023	27.82	
	5	Khajirsara - Both Gaya ckt -03	0.09	00:00	07-01-2023	0.00	14:00	06-01-2023	0.03	
	6	Khajirsara - Wejiganj ckt-01	52.24	20:00	05-01-2023	0.00	14:00	19-01-2023	18.57	
	7	Khajirsara - Hulesganj ckt-01	64.66	11:00	07-01-2023	0.10	13:00	08-01-2023	21.46	
	8	Khajirsara - Jehanabad ckt-01	66.1	19:00	29-01-2023	9.07	23:00	09-01-2023	35.82	
	9	Khajirsara - Jehanabad ckt-02	66.19	18:00	29-01-2023	9.11	23:00	09-01-2023	35.80	
	10	Narhat - Nawadah ckt-01	87.72	11:00	01-01-2023	0.42	16:00	11-01-2023	29.98	
	11	Narhat - Nawadah ckt-02	84.23	11:00	03-01-2023	-0.86	15:00	11-01-2023	28.20	
	12	Haveli Kharagpur - Sultanganj ckt-01	28.5	18:00	22-01-2023	13.2	15:00	14-01-2023	2.13	
	13	Haveli Kharagpur - Sultanganj ckt-02	28.4	18:00	22-01-2023	13.2	15:00	14-01-2023	2.13	
	14	Haveli Kharagpur - Lakhisarai ckt-01	24.8	15:00	11-01-2023	20.2	14:00	11-01-2023	0.08	
	15	Haveli Kharagpur - Lakhisarai ckt-02	24.7	15:00	11-01-2023	20.2	14:00	11-01-2023	0.09	
	16	Haveli Kharagpur - Jamalpur ckt-01	27.20	10:00	21-01-2023	5.5	15:00	29-01-2023	16.82	
	17	Haveli Kharagpur - Jamalpur ckt-02	27.28	09:00	14-01-2023	8.4	15:00	29-01-2023	16.60	
	18	Sekhopur Sarai - Sekhpura ckt-01	21.80	08:00	18-01-2023	3.2	23:00	11-01-2023	19.40	
	19	Sekhopur Sarai - Sekhpura ckt-02	21.90	08:00	18-01-2023	4.6	01:00	02-01-2023	19.46	
	20	Bakhopur Sarai - Biharsharif	0	00:00	00-00-0000	0	00:00	00-00-0000	0.00	System connected but no power flow
	21	Goradhi - Sultanganj ckt-01	0.00	00:00	01-01-2023	0.00	00:00	01-01-2023	0.01	
	22	Goradhi - Sultanganj ckt-02	0.00	00:00	01-01-2023	0.00	00:00	01-01-2023	0.01	
	23	Goradhi - Khatkeon ckt-01	34.00	10:00	12-01-2023	0.09	00:00	01-01-2023	0.37	
	24	Goradhi - Khatkeon ckt-02	33.60	10:00	12-01-2023	0.06	00:00	01-01-2023	0.36	
	25	Goradhi - Sebaur ckt-01	-13.20	17:00	19-01-2023	0.20	11:00	06-01-2023	-8.60	
	26	Goradhi - Sebaur ckt-02	-13.30	17:00	19-01-2023	0.10	11:00	13-01-2023	-8.64	
	27	Mokama-Hadidah ckt-01	35.20	09:00	11-01-2023	0.00	02:00	25-01-2023	19.05	
	28	Mokama-Hadidah ckt-02	35.60	09:00	11-01-2023	0.00	02:00	25-01-2023	19.22	
	29	Dumraon new (BGCL)-Dumraon (BSPTCL) ckt-01	52.28	09:00	14-01-2023	-0.29	14:00	16-01-2023	-40.76	
	30	Dumraon new (BGCL)-Dumraon (BSPTCL) ckt-02	50.00	09:00	15-01-2023	-0.30	14:00	16-01-2023	-39.01	
	31	Dumraon-Bihar ckt-01	28.74	08:00	11-01-2023	2.22	04:00	21-01-2023	-20.03	
	32	Dumraon-Bihar ckt-02	28.66	08:00	11-01-2023	2.20	04:00	21-01-2023	-19.99	
	33	Dumraon-Ara ckt-01	-86.59	17:00	14-01-2023	0.02	04:00	21-01-2023	28.35	
	34	Dumraon-Ara ckt-02	-23.79	18:00	07-01-2023	0.01	00:00	14-01-2023	18.43	
	35	Dumraon-Jagdeshpur ckt-01	-21.22	08:00	04-01-2023	0.01	04:00	07-01-2023	16.44	
	36	Dumraon-Jagdeshpur ckt-02	-21.19	08:00	04-01-2023	0.01	01:00	07-01-2023	16.42	
	37	Naubatpur - Measuria ckt - 01	16.2	10:00	12-01-2023	2.87	06:00	02-01-2023	8.92	
	38	Naubatpur - Measuria ckt - 02	16.11	10:00	12-01-2023	2.84	06:00	02-01-2023	8.73	
	39	Jalgaon - Sipara-03	28.91	10:00	28-01-2023	2.02	04:00	26-01-2023	18.32	
40	Jalgaon - Pathua	48.5	18:00	25-01-2023	19.9	02:00	02-01-2023	41.46		

BIHAR GRID COMPANY LIMITED											
Loading level of Transmission Assets											
										Month:	January'2023
Substation Details	S.No.	MVA Capacity	Load						Avg of Month	Remark	
			MW								
			Max	Time	Date	Min	Time	Date			
D. Power flow in transformers											
Amnour GIS	1	Tr-01-160 MVA, 220-132 kV	138.17	18:00	07-01-2023	42.02	14:00	17-01-2023	94.98		
	2	Tr-02-160 MVA, 220-132 kV	139.84	18:00	07-01-2023	42.55	14:00	17-01-2023	86.29		
	3	Tr-01-50 MVA, 132-33 kV	20.50	09:00	08-01-2023	0.27	14:00	16-01-2023	12.41		
	4	Tr-02-50 MVA, 132-33 kV	20.61	09:00	08-01-2023	0.27	14:00	16-01-2023	12.48		
Khatia Sared GIS	1	Tr-01-160 MVA, 220-132 kV	98.76	17:00	07-01-2023	23.67	23:00	09-01-2023	60.63		
	2	Tr-02-160 MVA, 220-132 kV	101.92	17:00	07-01-2023	24.97	23:00	09-01-2023	62.75		
	3	Tr-01-50 MVA, 132-33 kV								Not Commissioned	
	4	Tr-02-50 MVA, 132-33 kV	14.14	10:00	16-01-2023	0.05	09:00	13-01-2023	4.36		
Narhat GIS	1	Tr-01-160 MVA, 220-132 kV	11.31	18:00	09-01-2023	0.1	17:00	19-01-2023	7.32		
	2	Tr-02-160 MVA, 220-132 kV	97.36	11:00	03-01-2023	3.49	12:00	11-01-2023	18.74		
	3	Tr-01-50 MVA, 132-33 kV	94.35	11:00	04-01-2023	0.53	12:00	11-01-2023	17.21		
	4	Tr-02-50 MVA, 132-33 kV	8.34	10:00	06-01-2023	0.10	09:00	10-01-2023	4.52		
Sekhopur Sarai GIS	1	Tr-02-50 MVA, 132-33 kV	15.64	09:00	14-01-2023	0.05	02:00	04-01-2023	9.27		
	1	Tr-01-160 MVA, 220-132 kV	30.00	08:00	18-01-2023	4.40	09:00	03-01-2023	27.51		
	2	Tr-02-160 MVA, 220-132 kV	30.00	08:00	18-01-2023	4.40	09:00	03-01-2023	27.46		
	3	Tr-01-50 MVA, 132-33 kV	1.10	09:00	03-01-2023	0.20	20:00	01-01-2023	0.98		
Haveli Kharegpur GIS	4	Tr-02-50 MVA, 132-33 kV	18.90	19:00	10-01-2023	0.10	01:00	18-01-2023	16.75		
	1	Tr-01-160 MVA, 220-132 kV	63.50	15:00	11-01-2023	1.40	14:00	06-01-2023	23.15		
	2	Tr-02-160 MVA, 220-132 kV	61.30	15:00	11-01-2023	1.20	14:00	06-01-2023	21.80		
	3	Tr-01-50 MVA, 132-33 kV	6.20	09:00	01-01-2023	1.70	18:00	10-01-2023	4.28		
Goradih GIS	4	Tr-02-50 MVA, 132-33 kV	4.70	18:00	17-01-2023	1.10	04:00	09-01-2023	2.99		
	1	Tr-01-160 MVA, 220-132 kV	67.90	10:00	12-01-2023	0.00	00:00	01-01-2023	0.55		
	2	Tr-02-160 MVA, 220-132 kV								Not Commissioned	
	3	Tr-01-50 MVA, 132-33 kV	12.60	17:00	19-01-2023	0.00	21:00	04-01-2023	7.52		
Mokama GIS	4	Tr-02-50 MVA, 132-33 kV	14.80	07:00	11-01-2023	0.00	08:00	06-01-2023	9.50		
	1	Tr-02-160 MVA, 220-132 kV	72.10	08:00	24-01-2023	0.00	12:00	23-01-2023	42.75		
	2	Tr-01-50 MVA, 132-33 kV								Not Commissioned	
	3	Tr-02-80 MVA, 132-33 kV	9.90	10:00	10-01-2023	0.00	01:00	01-01-2023	2.08		
Dumraon GIS	1	Tr-01-160 MVA, 220-132 kV	125.39	08:00	04-01-2023	33.11	15:00	23-01-2023	-63.97		
	2	Tr-01-160 MVA, 220-132 kV								Not Commissioned	
	3	Tr-01-80 MVA, 132-33 kV	22.78	10:00	08-01-2023	0.17	19:00	10-01-2023	-17.47		
	4	Tr-02-80 MVA, 132-33 kV	0.04	00:00	03-01-2023	0.03	07:00	03-01-2023	0.00		
Nouabhatpur GIS	1	Tr-01-500 MVA, 400-220 kV								Not Commissioned	
	2	Tr-02-500 MVA, 400-220 kV	261.6	09:00	06-01-2023	65.69	04:00	21-01-2023	-149.80		
	3	Tr-01-160 MVA, 220-132 kV	35.52	10:00	12-01-2023	0.23	15:00	27-01-2023	-19.77		
	4	Tr-02-160 MVA, 220-132 kV								Not Commissioned	
Jalkanpur GIS	5	Tr-01-80 MVA, 132-33 kV	3.43	08:00	21-01-2023	0.03	08:00	01-01-2023	-0.68		
	6	Tr-02-80 MVA, 132-33 kV	3.52	09:00	06-01-2023	0.03	18:00	21-01-2023	-1.27		
	1	Tr-01-500 MVA, 400-220 kV	151.67	10:00	13-01-2023	39.15	02:00	05-01-2023	108.27		
	2	Tr-02-500 MVA, 400-220 kV	131.95	10:00	13-01-2023	39.15	02:00	05-01-2023	108.15		
Bhusaula GIS	3	Tr-01-160 MVA, 220-132 kV	68.31	10:00	07-01-2023	20.9	15:00	28-01-2023	56.27		
	4	Tr-02-160 MVA, 220-132 kV								Not Commissioned	
	5	Tr-01-80 MVA, 132-33 kV								Not Commissioned	
	6	Tr-02-80 MVA, 132-33 kV								Not Commissioned	
Note	7	Tr-03-80 MVA, 132-33 kV								Not Commissioned	
	8	Tr-04-80 MVA, 132-33 kV	0.09	00:00	01-01-2023	0.05	09:00	04-01-2023	0.08		
	1	Tr-01 100 MVA, 220-33kV	10.11	09:00	06-01-2023	0	15:00	08-01-2023	-5.85		
	2	Tr-02 100 MVA, 220-33kV								Not Commissioned	

Note: Negative sign(-) denote import of power and positive sign (+) denote export of power. For example (-) 139.57 MW in Hajipur - Amnour ckt-2 denotes import of 139.57 MW from Hajipur S-5 to Amnour S-5 and 72.82 MW in Amnour-Sivan ckt-2 denotes 72.82 MW from Amnour to Sivan S-5.

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Month: February 2023

Voltage Grade	S.No	Name of TL	Load MW						Avg of Month	Remark
			Max	Time	Date	Min	Time	Date		
A. Power Flow in 400kV transmission line										
400 kV (08 nos.)	1	Naubatpur - Patna(PG) ckt - 01	-477.24	19:00	14-02-2023	-205.8	16:00	12-02-2023	-327.94	
	2	Naubatpur - Patna(PG) ckt - 02	-479.32	19:00	14-02-2023	-204.5	16:00	12-02-2023	-329.34	
	3	Naubatpur - Balia(PG) ckt - 01	405.25	20:00	07-02-2023	131.9	14:00	26-02-2023	255.15	
	4	Naubatpur - Balia(PG) ckt - 02	481.57	19:00	11-02-2023	135.4	14:00	26-02-2023	256.80	
	5	Jakkanpur - Nabinagar(NPGC) ckt - 01	-447.88	20:00	04-02-2023	-151.6	04:00	28-02-2023	-392.76	
	6	Jakkanpur - Nabinagar(NPGC) ckt - 02	-448.54	21:00	04-02-2023	-151.7	04:00	28-02-2023	-393.28	
	7	Jakkanpur - Patna(PG) ckt - 01	354.18	22:00	01-02-2023	71.03	09:00	28-02-2023	296.99	
	8	Jakkanpur - Patna(PG) ckt - 02	351.25	22:00	01-02-2023	70.4	09:00	28-02-2023	299.62	
B. Power Flow in 220kV transmission line										
220 kV (36 nos.)	1	Hajipur - Amnour ckt-01	-115.48	19:00	13-02-2023	-26.88	15:00	12-02-2023	-72.64	
	2	Hajipur - Amnour ckt-02	-115.31	19:00	13-02-2023	-28.21	19:00	12-02-2023	-69.64	
	3	Paina (PG) - Khagaul ckt-02	-53.52	08:00	06-02-2023	-12.41	13:00	11-02-2023	-34.77	
	4	Patna (PG) - Khagaul ckt-02	-53.56	08:00	06-02-2023	-12.33	13:00	11-02-2023	-34.62	
	5	Khijrisaral - Biharsharif ckt-01	-131.44	07:00	14-02-2023	-3.61	15:00	12-02-2023	-72.05	
	6	Khijrisaral - Biharsharif ckt-02	-132.78	07:00	14-02-2023	-3.83	15:00	12-02-2023	-72.43	
	7	Khijrisaral - Bোধ Gaya ckt-01	-50.88	14:00	19-02-2023	-0.01	04:00	14-02-2023	-24.68	
	8	Khijrisaral - Bোধ Gaya ckt-02	-50.86	14:00	19-02-2023	0	00:00	27-02-2023	-23.17	
	9	Khijrisaral - Gaya (PG) ckt-01	-72.21	20:00	24-02-2023	-10.96	04:00	14-02-2023	-42.63	
	10	Khijrisaral - Gaya (PG) ckt-02	-71.04	20:00	22-02-2023	-10.94	04:00	14-02-2023	-41.90	
	11	Khijrisaral - Narkhat ckt-01	118.66	09:00	05-02-2023	23.05	16:00	27-02-2023	68.85	
	12	Khijrisaral - Narkhat ckt-02	133.34	13:00	15-02-2023	23.06	16:00	27-02-2023	70.02	
	13	Narkhat - Sekhopur Saral ckt-01	54.79	08:00	08-02-2023	-7.18	14:00	28-02-2023	18.23	
	14	Narkhat - Sekhopur Saral ckt-02	101.08	18:00	15-02-2023	-7.17	14:00	28-02-2023	18.50	
	15	Sekhopur Sara - Haveli Kharagpur ckt-01	39.30	11:00	16-02-2023	-1.0	15:00	28-02-2023	23.84	
	16	Sekhopur Sara - Haveli Kharagpur ckt-02	44.80	19:00	15-02-2023	-1.2	16:00	28-02-2023	24.27	
	17	Haveli Kharagpur - Goradli ckt-01	0	00:00	01-02-2023	0	00:00	28-02-2023	0.00	System connected but no power flow
	18	Haveli Kharagpur - Goradli ckt-02	0	00:00	01-02-2023	0	00:00	28-02-2023	0.00	System connected but no power flow
	19	Mokama-Biharsharif ckt-1	114.8	02:00	28-02-2023	0.00	01:00	01-02-2023	18.37	
	20	Mokama-Biharsharif ckt-2	115.1	02:00	28-02-2023	0.00	01:00	01-02-2023	18.30	
	21	Mokama-BTPS ckt-1	-139.7	07:00	28-02-2023	0.00	13:00	03-02-2023	-37.53	
	22	Mokama-BTPS ckt-2	-139.4	07:00	28-02-2023	0.00	13:00	03-02-2023	-37.76	
	23	Ara(PG)-Dumraon New - 01	-53.17	19:00	28-02-2023	-0.16	18:00	01-02-2023	45.41	
	24	Ara(PG)-Dumraon New - 02	-53.04	19:00	28-02-2023	-0.02	18:00	01-02-2023	45.44	
	25	Dumraon New-Nadokhar - 01	-41.55	18:00	01-02-2023	-0.01	09:00	06-02-2023	35.60	
	26	Dumraon New-Nadokhar - 02	-42.07	18:00	01-02-2023	-0.03	10:00	06-02-2023	36.03	
	27	Naubatpur - Ara(PG) Ckt-01	155.97	18:00	01-02-2023	46.37	02:00	02-02-2023	96.60	
	28	Naubatpur - Ara(PG) Ckt-02	189.6	18:00	02-02-2023	46.10	02:00	02-02-2023	96.66	
	29	Naubatpur - Khagaul Ckt-01	-58.37	14:00	11-02-2023	-4.67	12:00	27-02-2023	-30.84	
	30	Naubatpur - Khagaul Ckt-02	-59.04	14:00	11-02-2023	-4.70	12:00	27-02-2023	-30.95	
	31	Naubatpur - Bhusaula Ckt-01	8.90	08:00	11-02-2023	0.13	06:00	28-02-2023	4.80	
	32	Naubatpur - Bhusaula Ckt-02	8.60	08:00	10-02-2023	-0.02	01:00	03-02-2023	4.60	
	33	Naubatpur - Bilhita Ckt-01	-16.88	19:00	14-02-2023	-0.01	14:00	02-02-2023	-7.00	
	34	Naubatpur - Bilhita Ckt-02	-17.06	19:00	14-02-2023	0.01	06:00	26-02-2023	-7.03	
	35	Jakkanpur - Sipara ckt-03	63.2	13:00	09-02-2023	25.66	03:00	28-02-2023	49.88	
	36	Jakkanpur - Khagaul ckt	128.08	10:00	24-02-2023	64.14	04:00	28-02-2023	96.60	
C. Power Flow in 132 kV transmission line										
132 kV (40 nos.)	1	Amnour - Sivan ckt-01	67.62	09:00	24-02-2023	0.02	01:00	07-02-2023	31.32	
	2	Amnour - Sivan ckt-02	68.38	18:00	24-02-2023	8.54	14:00	12-02-2023	34.65	
	3	Amnour - Chhapara ckt-02	63.00	06:00	04-02-2023	8.03	04:00	26-02-2023	28.95	
	4	Amnour - Chhapara ckt-02	72.7	07:00	05-02-2023	0.01	03:00	04-02-2023	29.25	
	5	Khijrisaral - Bোধ Gaya ckt - 03	21.33	14:00	19-02-2023	0.00	12:00	03-02-2023	0.08	
	6	Khijrisaral - Wajirganj ckt-01	53.03	09:00	26-02-2023	0.00	12:00	01-02-2023	17.60	
	7	Khijrisaral - Hulasganj ckt-01	40.07	08:00	12-02-2023	0.05	13:00	13-02-2023	19.88	
	8	Khijrisaral - Jehanabad ckt-01	67.82	19:00	12-02-2023	13.43	15:00	12-02-2023	44.07	
	9	Khijrisaral - Jehanabad ckt-02	67.78	19:00	12-02-2023	13.45	15:00	12-02-2023	44.05	
	10	Narkhat - Nawadah ckt-01	55.77	18:00	08-02-2023	-2.36	14:00	28-02-2023	22.49	
	11	Narkhat - Nawadah ckt-02	57.98	18:00	10-02-2023	9.67	14:00	12-02-2023	26.94	
	12	Haveli Kharagpur - Sultanpur ckt-01	0.00	00:00	01-02-2023	0.00	00:00	28-02-2023	0.00	System connected but no power flow
	13	Haveli Kharagpur - Sultanpur ckt-02	0.00	00:00	01-02-2023	0.00	00:00	28-02-2023	0.00	System connected but no power flow
	14	Haveli Kharagpur - Lakhisarai ckt-01	0.00	00:00	01-02-2023	0.00	00:00	28-02-2023	0.00	System connected but no power flow
	15	Haveli Kharagpur - Lakhisarai ckt-02	0.00	00:00	01-02-2023	0.00	00:00	28-02-2023	0.00	System connected but no power flow
	16	Haveli Kharagpur - Jemalpur ckt-01	21.30	08:00	09-02-2023	6.5	14:00	19-02-2023	20.16	
	17	Haveli Kharagpur - Jemalpur ckt-02	23.20	17:00	12-02-2023	6.5	14:00	19-02-2023	20.25	
	18	Sekhopur Saral - Seohpara ckt-01	21.80	08:00	20-02-2023	2.2	04:00	11-02-2023	19.35	
	19	Sekhopur Saral - Seohpara ckt-02	21.00	08:00	10-02-2023	6.7	02:00	03-02-2023	19.40	
	20	Sekhopur Saral - Biharsharif	-27.4	19:00	28-02-2023	1.5	18:00	28-02-2023	0.98	
	21	Goradli - Sultanpur ckt-03	0.00	00:00	01-02-2023	0.00	00:00	28-02-2023	0.01	System connected but no power flow
	22	Goradli - Sultanpur ckt-02	0.00	00:00	01-02-2023	0.00	00:00	28-02-2023	0.01	System connected but no power flow
	23	Goradli - Sahalganj ckt-01	0.00	00:00	01-02-2023	0.00	00:00	28-02-2023	0.01	System connected but no power flow
	24	Goradli - Sahalganj ckt-02	0.00	00:00	01-02-2023	0.00	00:00	28-02-2023	0.00	System connected but no power flow
	25	Goradli - Sabone ckt-01	-12.40	17:00	09-02-2023	-0.20	10:00	26-02-2023	-8.75	
	26	Goradli - Sabone ckt-02	-12.50	17:00	09-02-2023	-0.20	10:00	26-02-2023	-8.78	
	27	Mokama-Hatula ckt-01	32.30	08:00	06-02-2023	0.00	12:00	03-02-2023	17.30	
	28	Mokama-Hatula ckt-02	32.50	08:00	06-02-2023	0.00	12:00	03-02-2023	17.25	
	29	Dumraon New (BGC)-Dumraon (BSPTEL) ckt-01	28.51	12:00	03-02-2023	5.17	14:00	09-02-2023	-19.27	
	30	Dumraon New (BGC)-Dumraon (BSPTEL) ckt-02	28.80	12:00	03-02-2023	5.25	14:00	09-02-2023	-19.44	
	31	Dumraon-Buwar ckt-01	21.67	08:00	03-02-2023	5.44	14:00	12-02-2023	-13.13	
	32	Dumraon-Buwar ckt-02	21.64	08:00	03-02-2023	5.44	14:00	12-02-2023	-13.11	
	33	Dumraon-Ara ckt-01	-14.05	18:00	10-02-2023	-3.36	14:00	12-02-2023	8.68	
	34	Dumraon-Ara ckt-02	-13.84	19:00	26-02-2023	-3.38	14:00	12-02-2023	8.48	
	35	Dumraon-Jagdishpur ckt-01	-14.20	12:00	05-02-2023	0.05	04:00	07-02-2023	12.22	
	36	Dumraon-Jagdishpur ckt-02	-14.10	12:00	05-02-2023	0.04	04:00	02-02-2023	12.13	
	37	Naubatpur - Masaurhi ckt - 01	14.35	18:00	27-02-2023	2.01	13:00	09-02-2023	8.04	
	38	Naubatpur - Masaurhi ckt - 02	14.27	18:00	27-02-2023	2.01	13:00	09-02-2023	7.98	
	39	Jakkanpur - Sipara ckt-01	14.25	11:00	01-02-2023	1.32	14:00	24-02-2023	10.98	
	40	Jakkanpur - Patna	55.27	17:00	24-02-2023	20.38	00:00	02-02-2023	43.66	

BIHAR GRID COMPANY LIMITED											
Loading level of Transmission Assets											
										Month:	February 2023
Substation Details	S.No.	MVA Capacity	Load						Avg of Month	Remark	
			MW								
			Max	Time	Date	Min	Time	Date			
D. Power Flow In transformers											
Amnour GIS	1	Tr-01-160 MVA, 220-132 kV	114.18	19:00	13-02-2023	0.06	16:00	12-02-2023	71.69		
	2	Tr-02-160 MVA, 220-132 kV	115.60	08:00	14-02-2023	0.05	16:00	12-02-2023	72.81		
	3	Tr-01-50 MVA, 132-33 kV	17.52	08:00	06-02-2023	0.04	17:00	12-02-2023	10.45		
	4	Tr-02-50 MVA, 132-33 kV	17.58	08:00	06-02-2023	0.14	12:00	26-02-2023	10.53		
KhijirSaraI GIS	1	Tr-01-160 MVA, 220-132 kV	113.17	09:00	26-02-2023	16.61	15:00	12-02-2023	67.76		
	2	Tr-02-160 MVA, 220-132 kV	116.44	09:00	26-02-2023	17.72	15:00	12-02-2023	70.08		
	3	Tr-01-50 MVA, 132-33 kV			Not Commissioned						
	4	Tr-02-50 MVA, 132-33 kV	15.32	19:00	12-02-2023	0.03	12:00	13-02-2023	4.20		
	5	Tr-03-50 MVA, 132-33 kV	12.35	08:00	15-02-2023	0.08	18:00	12-02-2023	7.94		
Narhat GIS	1	Tr-01-160 MVA, 220-132 kV	66.80	18:00	08-02-2023	0.41	15:00	24-02-2023	15.99		
	2	Tr-02-160 MVA, 220-132 kV	66.22	19:00	04-02-2023	0.04	15:00	24-02-2023	16.05		
	3	Tr-01-50 MVA, 132-33 kV	20.76	18:00	21-02-2023	0.08	15:00	12-02-2023	9.77		
	4	Tr-02-50 MVA, 132-33 kV	22.12	18:00	24-02-2023	0.03	13:00	02-02-2023	4.99		
Sekhopur SaraI GIS	1	Tr-01-160 MVA, 220-132 kV	29.90	08:00	08-02-2023	3.60	12:00	28-02-2023	27.72		
	2	Tr-02-160 MVA, 220-132 kV	35.80	17:00	27-02-2023	3.40	12:00	28-02-2023	28.15		
	3	Tr-01-50 MVA, 132-33 kV	1.10	09:00	05-02-2023	0.20	16:00	01-02-2023	0.99		
	4	Tr-02-50 MVA, 132-33 kV	19.00	19:00	13-02-2023	1.60	16:00	27-02-2023	16.60		
Haveli Kharagpur GIS	1	Tr-01-160 MVA, 220-132 kV	26.80	08:00	10-02-2023	3.80	18:00	28-02-2023	13.17		
	2	Tr-02-160 MVA, 220-132 kV	45.00	18:00	06-02-2023	6.30	15:00	12-02-2023	12.52		
	3	Tr-01-50 MVA, 132-33 kV	9.60	18:00	23-02-2023	1.60	01:00	03-02-2023	3.43		
	4	Tr-02-50 MVA, 132-33 kV	4.90	18:00	09-02-2023	1.70	16:00	12-02-2023	1.79		
Goradih GIS	1	Tr-01-160 MVA, 220-132 kV	2.00	17:00	13-02-2023	0.00	00:00	01-02-2023	0.17		
	2	Tr-02-160 MVA, 220-132 kV			Not Commissioned						
	3	Tr-01-50 MVA, 132-33 kV	12.10	17:00	09-02-2023	0.20	12:00	13-02-2023	7.38		
	4	Tr-02-50 MVA, 132-33 kV	14.00	07:00	10-02-2023	0.00	17:00	13-02-2023	9.29		
Mokama GIS	1	Tr-02-160 MVA, 220-132 kV	72.30	08:00	06-02-2023	0.00	14:00	03-02-2023	39.38		
	2	Tr-01-50 MVA, 132-33 kV			Not Commissioned						
	3	Tr-02-80 MVA, 132-33 kV	8.30	08:00	07-02-2023	0.00	01:00	01-02-2023	1.27		
Dumraon GIS	1	Tr-01-160 MVA, 220-132 kV	90.24	08:00	02-02-2023	17.95	14:00	12-02-2023	-59.40		
	2	Tr-01-160 MVA, 220-132 kV			Not Commissioned						
	3	Tr-01-80 MVA, 132-33 kV	19.53	09:00	03-02-2023	0.06	17:00	08-02-2023	-16.68		
	4	Tr-02-80 MVA, 132-33 kV	9.93	13:00	18-02-2023	0.03	09:00	03-02-2023	-8.48		
Naubatpur GIS	1	Tr-01-500 MVA, 400-220 kV	197.85	10:00	24-02-2023	0.1	19:00	22-02-2023	63.99		
	2	Tr-02-500 MVA, 400-220 kV	195.76	19:00	11-02-2023	71.95	15:00	12-02-2023	128.97		
	3	Tr-01-160 MVA, 220-132 kV	31.18	19:00	27-02-2023	1.02	14:00	17-02-2023	18.12		
	4	Tr-02-160 MVA, 220-132 kV			Not Commissioned						
	5	Tr-01-80 MVA, 132-33 kV	6.12	08:00	09-02-2023	0.03	17:00	28-02-2023	2.01		
	6	Tr-02-80 MVA, 132-33 kV	0.04	00:00	01-02-2023	0.01	05:00	01-02-2023	0.03		
Jakkanpur GIS	1	Tr-01-500 MVA, 400-220 kV	121.99	10:00	24-02-2023	51.84	14:00	09-02-2023	109.58		
	2	Tr-02-500 MVA, 400-220 kV	121.97	10:00	24-02-2023	51.79	14:00	09-02-2023	109.48		
	3	Tr-01-160 MVA, 220-132 kV	60.68	19:00	24-02-2023	27.96	00:00	02-02-2023	52.66		
	4	Tr-02-160 MVA, 220-132 kV			Not Commissioned						
	5	Tr-01-80 MVA, 132-33 kV			Not Commissioned						
	6	Tr-02-80 MVA, 132-33 kV			Not Commissioned						
	7	Tr-03-80 MVA, 132-33 kV			Not Commissioned						
	8	Tr-04-80 MVA, 132-33 kV	0.1	00:00	01-02-2023	0.05	08:00	04-02-2023	0.09		
Bhusaula GIS	1	Tr-01-100 MVA, 220-33kV	16.97	08:00	17-02-2023	0	13:00	02-02-2023	9.34		
	2	Tr-02-100 MVA, 220-33kV			Not Commissioned						
Note	Negative sign(-) denote import of power and positive sign (+) denote export of power. For example (-) 115.48 MW In Hajipur - Amnour ckt-1 denotes Import of 115.48 MW from Hajipur S-5 to Amnour S-5 and 68.38 MW In Amnour-Siwan ckt-2 denotes 68.38 MW from Amnour to Siwan S-5.										

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Voltage Grade	S.No	Name of TL	Load MW						Month:	Remark
			Max	Time	Date	Min	Time	Date	Avg of Month	
			A. Power Flow in 400kV transmission line						March'2023	
400 kV (06 nos.)	1	Naubatpur - Patna(PG) ckt - 01	-407.30	19:00	06-03-2023	-52.22	15:00	20-03-2023	-263.40	
	2	Naubatpur - Patna(PG) ckt - 02	-409.08	19:00	06-03-2023	-52.29	15:00	20-03-2023	-264.62	
	3	Naubatpur - Ballia(PG) ckt - 01	302.06	20:00	06-03-2023	-0.17	12:00	26-03-2023	162.97	
	4	Naubatpur - Ballia(PG) ckt - 02	303.79	20:00	06-03-2023	0.71	12:00	21-03-2023	167.80	
	5	Jakkampur - Nabinagar(NPGC) ckt - 01	479.31	21:00	19-03-2023	205.21	15:00	21-03-2023	433.22	
	6	Jakkampur - Nabinagar(NPGC) ckt - 02	480.1	21:00	19-03-2023	205.15	15:00	21-03-2023	429.77	
	7	Jakkampur - Patna(PG) ckt - 01	559.93	15:00	17-03-2023	145.91	16:00	21-03-2023	362.62	
	8	Jakkampur - Patna(PG) ckt - 02	395.18	15:00	05-03-2023	144.91	15:00	21-03-2023	339.32	
220 kV (36 nos.)	B. Power Flow In 220kV transmission line									
	1	Hajipur - Amnour ckt-01	-129.67	10:00	19-03-2023	-23.49	16:00	30-03-2023	-75.14	
	2	Hajipur - Amnour ckt-02	-121.95	23:00	30-03-2023	-23.36	16:00	30-03-2023	-68.61	
	3	Patna (PG) - Khagaul ckt-02	-40.04	19:00	03-03-2023	-9.58	14:00	31-03-2023	-26.14	
	4	Patna (PG) - Khagaul ckt-03	-39.92	19:00	03-03-2023	-9.75	14:00	31-03-2023	-25.99	
	5	Khjirsarai - Biharharif ckt-01	-100.73	07:00	01-03-2023	0.82	12:00	31-03-2023	-48.10	
	6	Khjirsarai - Biharharif ckt-02	-101.41	08:00	10-03-2023	0.68	12:00	31-03-2023	-48.30	
	7	Khjirsarai - Bodh Gaya ckt-01	-48.98	20:00	31-03-2023	-0.05	04:00	22-03-2023	-23.01	
	8	Khjirsarai - Bodh Gaya ckt-02	-49.22	20:00	31-03-2023	0.02	04:00	22-03-2023	-23.72	
	9	Khjirsarai - Gaya (PG) ckt-01	-56.62	20:00	29-03-2023	-5.6	01:00	22-03-2023	-41.62	
	10	Khjirsarai - Gaya (PG) ckt-02	-66.84	20:00	29-03-2023	-5.58	01:00	22-03-2023	-41.67	
	11	Khjirsarai - Narhat ckt-01	92.63	18:00	01-03-2023	20.38	04:00	19-03-2023	47.20	
	12	Khjirsarai - Narhat ckt-02	74.81	19:00	30-03-2023	20.07	06:00	19-03-2023	46.98	
	13	Narhat - Sekhopur Sarai ckt-01	59.40	21:00	25-03-2023	11.72	07:00	19-03-2023	14.69	
	14	Narhat - Sekhopur Sarai ckt-02	64.15	11:00	30-03-2023	11.67	07:00	19-03-2023	14.90	
	15	Sekhopur Sarai - Haveli Kharagpur ckt-01	53.30	21:00	25-03-2023	2.3	15:00	14-03-2023	25.19	
	16	Sekhopur Sarai - Haveli Kharagpur ckt-02	52.70	21:00	25-03-2023	1.6	14:00	14-03-2023	24.72	
	17	Haveli Kharagpur - Goradiah ckt-01	0	00:00	01-03-2023	0	00:00	31-03-2023	0.08	System connected but no power flow
	18	Haveli Kharagpur - Goradiah ckt-02	0	00:00	01-03-2023	0	00:00	31-03-2023	0.01	System connected but no power flow
	19	Mokama-Biharharif ckt-1	124.5	06:00	19-03-2023	0.00	12:00	22-03-2023	48.06	
	20	Mokama-Biharharif ckt-2	123.9	06:00	19-03-2023	0.00	12:00	22-03-2023	48.13	
	21	Mokama-BTPS ckt-1	-136.3	06:00	19-03-2023	0.00	22:00	22-03-2023	-65.25	
	22	Mokama-BTPS ckt-2	-136.1	08:00	01-03-2023	0.00	22:00	22-03-2023	-64.45	
	23	Ara(PG)-Dumraon New - 01	-49.3	07:00	01-03-2023	0.04	11:00	27-03-2023	38.21	
	24	Ara(PG)-Dumraon New - 02	-49.14	07:00	01-03-2023	0.17	11:00	27-03-2023	38.21	
	25	Dumraon New-Nadokhar - 01	32.66	00:00	22-03-2023	-0.02	13:00	02-03-2023	-25.31	
	26	Dumraon New-Nadokhar - 02	32.81	00:00	22-03-2023	0.01	15:00	19-03-2023	-25.39	
	27	Naubatpur- Ara(PG) Ckt-01	134.18	07:00	01-03-2023	28.02	14:00	31-03-2023	85.40	
	28	Naubatpur- Ara(PG) Ckt-02	133.98	07:00	01-03-2023	27.84	14:00	31-03-2023	86.79	
	29	Naubatpur- Khagaul Ckt-01	-25.25	06:00	09-03-2023	-0.04	12:00	17-03-2023	-8.55	
	30	Naubatpur- Khagaul Ckt-02	-24.01	07:00	01-03-2023	-0.01	17:00	19-03-2023	-8.43	
	31	Naubatpur- Bhusaula Ckt-01	9.22	19:00	30-03-2023	1.27	16:00	03-03-2023	5.93	
	32	Naubatpur- Bhusaula Ckt-02	9.02	19:00	30-03-2023	1.12	16:00	03-03-2023	5.77	
	33	Naubatpur- Bihta Ckt-01	17.58	12:00	31-03-2023	0.01	17:00	01-03-2023	3.58	
	34	Naubatpur- Bihta Ckt-02	17.49	12:00	31-03-2023	0	21:00	19-03-2023	3.54	
	35	Jakkampur - Sipara ckt-03	48.99	20:00	29-03-2023	24.47	03:00	09-03-2023	44.97	
36	Jakkampur - Khagaul ckt	109.44	19:00	01-03-2023	56.03	15:00	20-03-2023	102.14		
132 kV (40 nos.)	C. Power Flow In 132 kV transmission line									
	1	Amnour - Swan ckt-01	67.22	20:00	19-03-2023	0.03	16:00	20-03-2023	36.46	
	2	Amnour - Swan ckt-02	71.72	20:00	20-03-2023	3.29	21:00	18-03-2023	37.78	
	3	Amnour - Chhapara ckt-01	59.84	11:00	22-03-2023	5.8	23:00	18-03-2023	26.40	
	4	Amnour - Chhapara ckt-02	51.99	20:00	28-03-2023	7.94	20:00	26-03-2023	22.96	
	5	Khjirsarai - Bodh Gaya ckt - 03	0.11	21:00	31-03-2023	0.00	16:00	16-03-2023	0.01	
	6	Khjirsarai - Wejangan ckt - 01	47.47	10:00	06-03-2023	1.17	15:00	01-03-2023	27.97	
	7	Khjirsarai-Hulesganj ckt-01	60.01	07:00	10-03-2023	0.06	10:00	04-03-2023	18.78	
	8	Khjirsarai - Jehanabad ckt-01	60.02	19:00	17-03-2023	0.14	00:00	22-03-2023	36.79	
	9	Khjirsarai - Jehanabad ckt-02	50.45	19:00	17-03-2023	0.14	00:00	22-03-2023	36.77	
	10	Narhat - Nawadah ckt-01	37.07	19:00	27-03-2023	0.58	14:00	08-03-2023	18.98	
	11	Narhat - Nawadah ckt-02	48.57	19:00	01-03-2023	1.55	23:00	31-03-2023	2.02	
	12	Haveli Kharagpur - Sultanganj ckt-01	0.00	00:00	01-03-2023	0.00	00:00	31-03-2023	0.01	System connected but no power flow
	13	Haveli Kharagpur - Sultanganj ckt-02	0.00	00:00	01-03-2023	0.00	00:00	31-03-2023	0.01	System connected but no power flow
	14	Haveli Kharagpur - Lakhtisarai ckt-01	0.00	00:00	01-03-2023	0.00	00:00	31-03-2023	0.01	System connected but no power flow
	15	Haveli Kharagpur - Lakhtisarai ckt-02	0.00	00:00	01-03-2023	0.00	00:00	31-03-2023	0.01	System connected but no power flow
	16	Haveli Kharagpur - Jamalpur ckt-01	-14.20	18:00	26-03-2023	-1.3	03:00	20-03-2023	-8.93	
	17	Haveli Kharagpur - Jamalpur ckt-02	-14.30	18:00	26-03-2023	-1.9	02:00	20-03-2023	-8.97	
	18	Sekhopur Sarai - Sekhpura ckt-01	22.20	12:00	18-03-2023	3.1	12:00	20-03-2023	17.06	
	19	Sekhopur Sarai - Sekhpura ckt-02	18.50	07:00	03-03-2023	5.1	05:00	19-03-2023	17.02	
	20	Sekhopur Sarai - Biharharif	-30.6	09:00	10-03-2023	-2.7	00:00	31-03-2023	-23.85	
	21	Goradiah - Sultanganj ckt-01	30.80	21:00	25-03-2023	10.90	10:00	25-03-2023	0.34	System connected but no power flow
	22	Goradiah - Sultanganj ckt-02	30.50	21:00	25-03-2023	10.80	10:00	25-03-2023	0.34	System connected but no power flow
	23	Goradiah - Kamehagan ckt-01	26.60	14:00	28-03-2023	2.20	11:00	28-03-2023	0.21	System connected but no power flow
	24	Goradiah - Kamehagan ckt-02	26.40	14:00	28-03-2023	2.20	11:00	28-03-2023	0.21	System connected but no power flow
	25	Goradiah - Sabour ckt-01	22.40	19:00	29-03-2023	7.50	14:00	05-03-2023	14.07	
	26	Goradiah - Sabour ckt-02	36.00	09:00	20-03-2023	7.40	14:00	05-03-2023	17.24	
	27	Mokama-Hatidah ckt-01	28.00	09:00	11-03-2023	0.00	13:00	04-03-2023	13.70	
	28	Mokama-Hatidah ckt-02	28.30	09:00	11-03-2023	0.00	13:00	04-03-2023	13.84	
	29	Dumraon new (BGCL)-Dumraon (BSPFCL) ckt-01	21.95	19:00	04-03-2023	1.19	00:00	22-03-2023	-15.80	
	30	Dumraon new (BGCL)-Dumraon (BSPFCL) ckt-02	30.24	19:00	04-03-2023	1.53	00:00	27-03-2023	-21.88	
	31	Dumraon-Buxar ckt-01	21.95	19:00	04-03-2023	1.19	00:00	22-03-2023	-15.80	
	32	Dumraon-Buxar ckt-02	22.13	19:00	04-03-2023	1.19	00:00	22-03-2023	-15.84	
	33	Dumraon-Ara ckt-01	-13.63	19:00	13-03-2023	0.07	23:00	21-03-2023	10.62	
	34	Dumraon-Ara ckt-02	-13.58	19:00	13-03-2023	0.07	23:00	21-03-2023	10.54	
	35	Dumraon-Jagdishpur ckt-01	-6.34	18:00	11-03-2023	-0.13	21:00	30-03-2023	4.78	
	36	Dumraon-Jagdishpur ckt-02	-6.35	18:00	11-03-2023	0.18	23:00	30-03-2023	5.10	
	37	Naubatpur - Masaurhi ckt - 01	15.94	19:00	15-03-2023	4.40	01:00	22-03-2023	10.81	
	38	Naubatpur - Masaurhi ckt - 02	15.25	19:00	15-03-2023	4.41	01:00	22-03-2023	10.76	
	39	Jakkampur-Sipara-03	14.36	20:00	29-03-2023	1.36	03:00	22-03-2023	11.68	
40	Jakkampur-Fathua	50.59	19:00	17-03-2023	22.1	14:00	20-03-2023	41.71		

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Substation Details		S.No	MVA Capacity	Load						Month:	March'2023
				MW						Avg of Month	Remark
				Max	Time	Date	Min	Time	Date		
D. Power Flow in transformers											
Amnour GIS	1	Tr-01-160 MVA, 220-132 KV	121.12	22:00	30-03-2023	19.76	23:00	18-03-2023	72.76		
	2	Tr-02-160 MVA, 220-132 KV	122.58	22:00	30-03-2023	20.01	23:00	18-03-2023	73.97		
	3	Tr-01-50 MVA, 132-33 KV	29.22	11:00	19-03-2023	0.06	23:00	18-03-2023	11.95		
	4	Tr-02-50 MVA, 132-33 KV	20.57	19:00	30-03-2023	0.06	23:00	18-03-2023	11.82		
KhijirSarai GIS	1	Tr-01-160 MVA, 220-132 KV	106.15	19:00	09-03-2023	6.15	01:00	22-03-2023	64.91		
	2	Tr-02-160 MVA, 220-132 KV	109.26	19:00	09-03-2023	7.08	01:00	22-03-2023	67.17		
	3	Tr-01-50 MVA, 132-33 KV	Not Commissioned								
	4	Tr-02-50 MVA, 132-33 KV	19.69	19:00	18-03-2023	0.04	08:00	12-03-2023	5.07		
	5	Tr-03-50 MVA, 132-33 KV	12.16	07:00	04-03-2023	0.13	21:00	31-03-2023	6.68		
Narhat GIS	1	Tr-01-160 MVA, 220-132 KV	36.74	11:00	03-03-2023	2.68	22:00	31-03-2023	12.84		
	2	Tr-02-160 MVA, 220-132 KV	34.60	16:00	29-03-2023	1.79	22:00	31-03-2023	8.34		
	3	Tr-01-50 MVA, 132-33 KV	20.24	10:00	04-03-2023	0.09	08:00	16-03-2023	4.41		
	4	Tr-02-50 MVA, 132-33 KV	16.88	08:00	03-03-2023	0.04	14:00	27-03-2023	8.86		
Sekhopur Sarai GIS	1	Tr-01-160 MVA, 220-132 KV	24.40	07:00	18-03-2023	1.10	23:00	18-03-2023	14.24		
	2	Tr-02-160 MVA, 220-132 KV	24.70	18:00	29-03-2023	1.20	12:00	08-03-2023	11.57		
	3	Tr-01-50 MVA, 132-33 KV	1.00	08:00	04-03-2023	0.20	06:00	01-03-2023	0.89		
	4	Tr-02-50 MVA, 132-33 KV	16.50	09:00	08-03-2023	1.10	00:00	18-03-2023	14.06		
Haveli Kharagpur GIS	1	Tr-01-160 MVA, 220-132 KV	56.00	21:00	25-03-2023	2.50	15:00	14-03-2023	20.56		
	2	Tr-02-160 MVA, 220-132 KV	54.00	21:00	25-03-2023	1.20	12:00	14-03-2023	19.24		
	3	Tr-01-50 MVA, 132-33 KV	10.50	21:00	26-03-2023	1.30	15:00	13-03-2023	4.57		
	4	Tr-02-50 MVA, 132-33 KV	4.60	18:00	15-03-2023	0.20	13:00	20-09-2023	2.78		
Goradih GIS	1	Tr-01-160 MVA, 220-132 KV	2.00	04:00	03-03-2023	0.00	00:00	01-03-2023	-0.10		
	2	Tr-02-160 MVA, 220-132 KV	Not Commissioned								
	3	Tr-01-50 MVA, 132-33 KV	13.60	18:00	29-03-2023	1050.00	02:00	20-03-2023	8.13		
	4	Tr-02-50 MVA, 132-33 KV	16.50	18:00	26-03-2023	0.00	09:00	17-03-2023	9.57		
Mokama GIS	1	Tr-02-160 MVA, 220-132 KV	63.20	07:00	06-03-2023	0.00	15:00	22-03-2023	32.89		
	2	Tr-01-50 MVA, 132-33 KV	Not Commissioned								
	3	Tr-02-80 MVA, 132-33 KV	8.70	19:00	15-03-2023	0.00	01:00	01-03-2023	1.55		
Dumraon GIS	1	Tr-01-160 MVA, 220-132 KV	87.65	19:00	04-03-2023	0.03	17:00	23-03-2023	-67.83		
	2	Tr-01-160 MVA, 220-132 KV	Not Commissioned								
	3	Tr-01-80 MVA, 132-33 KV	20.02	20:00	30-03-2023	0.06	07:00	29-03-2023	-15.44		
	4	Tr-02-80 MVA, 132-33 KV	0.04	00:00	01-03-2023	0.03	19:00	02-03-2023	0.00		
Naubatpur GIS	1	Tr-01-500 MVA, 400-220 KV	145.66	19:00	17-03-2023	54.22	00:00	22-03-2023	99.43		
	2	Tr-02-500 MVA, 400-220 KV	146.46	19:00	15-03-2023	54.21	00:00	22-03-2023	98.24		
	3	Tr-01-160 MVA, 220-132 KV	37.55	19:00	15-03-2023	9.58	01:00	22-03-2023	24.37		
	4	Tr-02-160 MVA, 220-132 KV	Not Commissioned								
	5	Tr-01-80 MVA, 132-33 KV	5.92	07:00	17-03-2023	0.06	17:00	05-03-2023	2.76		
	6	Tr-02-80 MVA, 132-33 KV	0.04	00:00	01-03-2023	0.03	13:00	01-03-2023	0.02		
Jakkampur GIS	1	Tr-01-500 MVA, 400-220 KV	105.43	19:00	15-03-2023	57.08	03:00	09-03-2023	98.12		
	2	Tr-02-500 MVA, 400-220 KV	105.25	19:00	16-03-2023	57.08	03:00	09-03-2023	97.25		
	3	Tr-01-160 MVA, 220-132 KV	57.97	19:00	16-03-2023	22.21	23:00	18-03-2023	49.99		
	4	Tr-02-160 MVA, 220-132 KV	Not Commissioned								
	5	Tr-01-80 MVA, 132-33 KV	Not Commissioned								
Bhusaula GIS	6	Tr-02-80 MVA, 132-33 KV	0.04	16:00	28-03-2023	0.03	19:00	28-03-2023	0.05	Charged on 28-03-2023 at 15:31	
	7	Tr-03-80 MVA, 132-33 KV	0.04	00:00	29-03-2023	0.03	01:00	28-03-2023	0.04	Charged on 28-03-2023 at 16:40	
	8	Tr-04-80 MVA, 132-33 KV	0.11	18:00	02-03-2023	0.03	16:00	22-03-2023	0.10		
	1	Tr-01 100 MVA, 220-33kV	16.2	19:00	01-03-2023	0.04	18:00	30-03-2023	2.42		
Note	2	Tr-02 100 MVA, 220-33kV	17.43	20:00	29-03-2023	0.04	18:00	02-03-2023	9.24		

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

								Month:	April'2023			
Voltage Grade	S.No	Name of TL	Load						Avg of Month	Remark		
			Max	Time	Date	MW		Date				
						Min	Time					
A. Power Flow in 400kV transmission line												
400 kV (08 nos.)	1	Naubatpur - Patna(PG) ckt - 01	-671.06	19:00	14-04-2023	-18.18	13:00	12-04-2023	-276.00			
	2	Naubatpur - Patna(PG) ckt - 02	-462.59	00:00	30-04-2023	-28.89	15:00	24-04-2023	-234.88			
	3	Naubatpur - Ballia(PG) ckt - 01	330.50	00:00	30-04-2023	1.09	14:00	01-04-2023	147.39			
	4	Naubatpur - Ballia(PG) ckt - 02	333.44	00:00	30-04-2023	0.25	12:00	23-04-2023	146.62			
	5	Jakkampur - Nabinagar(NPGC) ckt - 01	501.61	22:00	17-04-2023	154.2	07:00	25-04-2023	434.87			
	6	Jakkampur - Nabinagar(NPGC) ckt - 02	501.75	22:00	17-04-2023	193.9	23:00	24-04-2023	433.76			
	7	Jakkampur - Patna(PG) ckt - 01	739.21	13:00	26-04-2023	67.36	00:00	25-04-2023	340.31			
	8	Jakkampur - Patna(PG) ckt - 02	539.55	12:00	25-04-2023	66.34	00:00	25-04-2023	333.45			
B. Power Flow in 220kV transmission line												
220 kV (36 nos.)	1	Hajipur - Amnour ckt-01	-171.88	17:00	19-04-2023	-21.3	02:00	24-04-2023	-81.65			
	2	Hajipur - Amnour ckt-02	-149.91	12:00	28-04-2023	-27.8	12:00	20-04-2023	-71.43			
	3	Patna (PG) - Khagaul ckt-02	-56.55	19:00	09-04-2023	-13.78	14:00	01-04-2023	-32.42			
	4	Patna (PG) - Khagaul ckt-03	-56.5	19:00	09-04-2023	-13.62	14:00	01-04-2023	-32.28			
	5	Khijisara - Biharsharif ckt-01	-106.49	07:00	12-04-2023	0.02	02:00	25-04-2023	-49.49			
	6	Khijisara - Biharsharif ckt-02	-106.86	07:00	12-04-2023	0.14	15:00	30-04-2023	-49.78			
	7	Khijisara - Both Gaya ckt-01	-66.49	18:00	13-04-2023	0.02	01:00	17-04-2023	-27.36			
	8	Khijisara - Both Gaya ckt-02	-99.87	19:00	20-04-2023	-0.01	09:00	17-04-2023	-29.27			
	9	Khijisara - Gaya (PG) ckt-01	-141.14	20:00	18-04-2023	-9.77	06:00	01-04-2023	-63.17			
	10	Khijisara - Gaya (PG) ckt-02	-141.98	20:00	18-04-2023	-9.78	06:00	01-04-2023	-64.37			
	11	Khijisara - Narhat ckt-01	118.19	19:00	19-04-2023	2.17	00:00	22-04-2023	61.68			
	12	Khijisara - Narhat ckt-02	117.97	19:00	19-04-2023	2.23	00:00	22-04-2023	61.66			
	13	Narhat - Sekhopur Sarai ckt-01	88.99	19:00	19-04-2023	1.55	00:00	21-04-2023	38.83			
	14	Narhat - Sekhopur Sarai ckt-02	88.93	19:00	19-04-2023	1.58	00:00	21-04-2023	38.81			
	15	Sekhopur Sarai - Haveli Kharagpur ckt-01	78.70	19:00	19-04-2023	1.5	00:00	21-04-2023	38.76			
	16	Sekhopur Sarai - Haveli Kharagpur ckt-02	78.30	19:00	19-04-2023	0.8	00:00	21-04-2023	38.19			
	17	Haveli Kharagpur - Goradhi ckt-01	16.5	21:00	19-04-2023	10.00	00:00	21-04-2023	0.10		System connected but no power flow	
	18	Haveli Kharagpur - Goradhi ckt-02	34.5	23:00	21-04-2023	1.2	11:00	21-04-2023	3.53			
	19	Mokama-Biharsharif ckt-1	86.3	06:00	16-04-2023	0.00	09:00	01-04-2023	0.77			
	20	Mokama-Biharsharif ckt-2	92.9	05:00	22-04-2023	0.00	03:00	01-04-2023	-8.34			
	21	Mokama-BTPS ckt-1	-111.5	06:00	16-04-2023	0.00	10:00	01-04-2023	-19.08			
	22	Mokama-BTPS ckt-2	-111.2	06:00	16-04-2023	0.00	10:00	01-04-2023	-19.09			
	23	Ara(PG)-Dumraon New - 01	-47.37	19:00	14-04-2023	0.12	00:00	23-04-2023	38.02			
	24	Ara(PG)-Dumraon New - 02	-47.3	19:00	14-04-2023	0.01	21:00	21-04-2023	37.85			
	25	Dumraon New-Nadokhar - 01	-48.81	20:00	21-04-2023	-0.01	17:00	06-04-2023	39.04			
	26	Dumraon New-Nadokhar - 02	-49.13	20:00	21-04-2023	0.04	16:00	11-04-2023	39.34			
	27	Naubatpur - Ara(PG) Ckt-01	150.7	19:00	14-04-2023	18.44	00:00	25-04-2023	86.39			
	28	Naubatpur - Ara(PG) Ckt-02	150.79	19:00	14-04-2023	0.94	20:00	16-04-2023	86.43			
	29	Naubatpur - Khagaul Ckt-01	-95.09	19:00	15-04-2023	0	05:00	27-04-2023	-7.47			
	30	Naubatpur - Khagaul Ckt-02	-95.46	19:00	15-04-2023	-0.05	18:00	18-04-2023	-7.52			
	31	Naubatpur - Bhusaula Ckt-01	12.24	22:00	19-04-2023	1.53	14:00	30-04-2023	8.50			
	32	Naubatpur - Bhusaula Ckt-02	11.89	21:00	20-04-2023	1.24	14:00	30-04-2023	8.29			
	33	Naubatpur - Bihta Ckt-01	-32.80	19:00	15-04-2023	-0.03	14:00	30-04-2023	5.59			
	34	Naubatpur - Bihta Ckt-02	-32.91	19:00	15-04-2023	-0.07	10:00	07-04-2023	5.59			
	35	Jakkampur - Sipara ckt-03	78.84	12:00	17-04-2023	14.74	14:00	07-04-2023	56.51			
	36	Jakkampur - Khagaul ckt	184.06	19:00	15-04-2023	61.68	14:00	01-04-2023	131.87			
C. Power Flow in 132 kV transmission line												
132 kV (40 nos.)	1	Amnour - Siwan ckt-01	68.4	18:00	18-04-2023	0.01	12:00	20-04-2023	38.96			
	2	Amnour - Siwan ckt-02	69.18	18:00	18-04-2023	0.34	01:00	24-04-2023	41.45			
	3	Amnour - Chhapara ckt-01	74.11	17:00	19-04-2023	10.85	15:00	05-04-2023	24.35			
	4	Amnour - Chhapara ckt-02	65.45	13:00	19-04-2023	7.61	02:00	24-04-2023	26.38			
	5	Khijisara - Both Gaya ckt -03	10.37	10:00	09-04-2023	0.00	12:00	02-04-2023	0.04			
	6	Khijisara - Wajirganj ckt -01	55.27	20:00	13-04-2023	0.17	22:00	21-04-2023	30.24			
	7	Khijisara - Hutaganj ckt-01	62.55	19:00	02-04-2023	0.09	18:00	30-04-2023	23.70			
	8	Khijisara - Jehanabad ckt-01	76.39	20:00	18-04-2023	-0.19	01:00	25-04-2023	47.48			
	9	Khijisara - Jehanabad ckt-02	76.42	20:00	18-04-2023	-0.22	01:00	25-04-2023	47.46			
	10	Narhat - Nawadah ckt-01	26.31	19:00	20-04-2023	1.22	01:00	22-04-2023	14.86			
	11	Narhat - Nawadah ckt-02	26.21	19:00	20-04-2023	1.22	01:00	22-04-2023	14.82			
	12	Haveli Kharagpur - Suttanganj ckt-01	36.60	19:00	19-04-2023	29.40	17:00	19-04-2023	0.14			
	13	Haveli Kharagpur - Suttanganj ckt-02	35.40	19:00	19-04-2023	29.10	17:00	19-04-2023	0.14			
	14	Haveli Kharagpur - Lakhisara ckt-01	0.00	00:00	01-04-2023	0.00	00:00	30-04-2023	0.01		System connected but no power flow	
	15	Haveli Kharagpur - Lakhisara ckt-02	0.00	00:00	01-04-2023	0.00	00:00	30-04-2023	0.03			
	16	Haveli Kharagpur - Jemalpur ckt-01	37.90	02:00	14-04-2023	0.8	00:00	21-04-2023	22.21			
	17	Haveli Kharagpur - Jemalpur ckt-02	37.90	02:00	14-04-2023	0.8	00:00	21-04-2023	22.19			
	18	Sekhopur Sarai - Sekhpura ckt-01	39.10	07:00	12-04-2023	3.2	13:00	13-04-2023	19.52			
	19	Sekhopur Sarai - Sekhpura ckt-02	22.20	19:00	14-04-2023	4.8	16:00	30-04-2023	18.19			
	20	Sekhopur Sarai - Biharsharif	-45.5	18:00	13-04-2023	-3.8	16:00	09-04-2023	28.24			
	21	Goradhi - Suttanganj ckt-01	-17.20	10:00	22-04-2023	0.00	00:00	01-04-2023	-0.03			
	22	Goradhi - Suttanganj ckt-02	-17.10	10:00	22-04-2023	0.03	02:00	21-04-2023	-0.05		System connected but no power flow	
	23	Goradhi - Kahalgan ckt-01	39.10	07:00	22-04-2023	0.00	13:00	01-04-2023	0.85			
	24	Goradhi - Kahalgan ckt-02	25.80	09:00	22-04-2023	0.00	00:00	01-04-2023	0.10			
	25	Goradhi - Sabour ckt-01	-26.50	09:00	22-04-2023	0.00	12:00	26-04-2023	-9.29			
	26	Goradhi - Sabour ckt-02	-26.60	09:00	22-04-2023	0.00	12:00	26-04-2023	-9.34			
	27	Mokama-Hetideh ckt-01	54.10	19:00	19-04-2023	0.00	01:00	01-04-2023	19.87			
	28	Mokama-Hetideh ckt-02	54.80	19:00	19-04-2023	0.00	01:00	01-04-2023	20.07			
	29	Dumraon new (BGCL)-Dumraon (BSPTCL) ckt-01	28.84	19:00	14-04-2023	1.37	15:00	05-04-2023	-21.70			
	30	Dumraon new (BGCL)-Dumraon (BSPTCL) ckt-02	29.05	19:00	14-04-2023	1.36	15:00	05-04-2023	-21.88			
	31	Dumraon-Buxar ckt-01	27.06	20:00	17-04-2023	1.69	09:00	27-04-2023	-19.96			
	32	Dumraon-Buxar ckt-02	27.00	20:00	17-04-2023	0.98	15:00	15-04-2023	-20.62			
	33	Dumraon-Ara ckt-01	-15.26	19:00	14-04-2023	0.04	18:00	11-04-2023	12.25			
	34	Dumraon-Ara ckt-02	-15.30	19:00	14-04-2023	-0.01	14:00	06-04-2023	12.23			
	35	Dumraon-Jagdishpur ckt-01	-8.23	06:00	22-04-2023	0.01	06:00	27-04-2023	6.59			
	36	Dumraon-Jagdishpur ckt-02	-8.24	06:00	22-04-2023	0.01	14:00	13-04-2023	6.60			
	37	Naubatpur - Masauri ckt - 01	22.86	19:00	20-04-2023	3.69	14:00	30-04-2023	14.48			
	38	Naubatpur - Masauri ckt - 02	22.71	19:00	20-04-2023	3.67	14:00	30-04-2023	14.40			
	39	Jakkampur-Sipara-03	22.69	23:00	20-04-2023	2.14	17:00	18-04-2023	18.02			
	40	Jakkampur-Patna	92.17	15:00	18-04-2023	23.9	16:00	30-04-2023	46.48			

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Substation Details		S.No.	MVA Capacity	Load						Avg of Month	Month:	April 2023	Remark
				MW									
				Max	Time	Date	Min	Time	Date				
D. Power Flow in transformers													
Amnour GIS	1	Tr-01-160 MVA, 220-132 kV	130.57	19:00	18-04-2023	10.55	02:00	24-04-2023	79.47				
	2	Tr-02-160 MVA, 220-132 kV	132.25	19:00	18-04-2023	10.67	02:00	24-04-2023	80.66				
	3	Tr-01-50 MVA, 132-33 kV	25.54	21:00	22-04-2023	0.27	11:00	24-04-2023	14.83				
	4	Tr-02-50 MVA, 132-33 kV	25.64	21:00	22-04-2023	0.27	11:00	24-04-2023	14.91				
KhijirSarai GIS	1	Tr-01-160 MVA, 220-132 kV	128.96	20:00	13-04-2023	0.02	01:00	25-04-2023	78.74				
	2	Tr-02-160 MVA, 220-132 kV	132.66	20:00	13-04-2023	0.7	01:00	25-04-2023	81.31				
	3	Tr-01-50 MVA, 132-33 kV			Not Commissioned								
	4	Tr-02-50 MVA, 132-33 kV	12.39	05:00	21-04-2023	0.01	18:00	03-04-2023	3.72				
	5	Tr-03-50 MVA, 132-33 kV	13.16	19:00	19-04-2023	0.06	06:00	01-04-2023	7.35				
Nahat GIS	1	Tr-01-160 MVA, 220-132 kV	95.91	19:00	10-04-2023	1.95	01:00	22-04-2023	23.12				
	2	Tr-02-160 MVA, 220-132 kV	34.26	19:00	10-04-2023	-0.09	00:00	21-04-2023	21.70				
	3	Tr-01-50 MVA, 132-33 kV	8.90	20:00	13-04-2023	0.09	00:00	21-04-2023	5.30				
	4	Tr-02-50 MVA, 132-33 kV	18.64	20:00	13-04-2023	0.03	11:00	13-04-2023	9.83				
Sekhopur Sarai GIS	1	Tr-01-160 MVA, 220-132 kV	24.00	08:00	20-04-2023	1.00	13:00	11-04-2023	13.40				
	2	Tr-02-160 MVA, 220-132 kV	25.50	12:00	26-04-2023	0.80	21:00	11-04-2023	15.41				
	3	Tr-01-50 MVA, 132-33 kV	16.40	09:00	21-04-2023	0.20	06:00	01-04-2023	1.52				
	4	Tr-02-50 MVA, 132-33 kV	19.40	19:00	15-04-2023	0.20	02:00	14-04-2023	16.15				
Havell Kharagpur GIS	1	Tr-01-160 MVA, 220-132 kV	62.50	19:00	19-04-2023	1.70	01:00	22-04-2023	27.88				
	2	Tr-02-160 MVA, 220-132 kV	60.30	19:00	19-04-2023	1.60	01:00	22-04-2023	26.45				
	3	Tr-01-50 MVA, 132-33 kV	8.70	22:00	21-04-2023	1.00	09:00	21-04-2023	5.69				
	4	Tr-02-50 MVA, 132-33 kV	6.80	22:00	21-04-2023	1.10	13:00	03-04-2023	3.94				
Goreidh GIS	1	Tr-01-160 MVA, 220-132 kV	-35.10	22:00	21-04-2023	0.10	16:00	19-04-2023	4.70				
	2	Tr-02-160 MVA, 220-132 kV			Not Commissioned								
	3	Tr-01-50 MVA, 132-33 kV	20.80	18:00	26-04-2023	0.00	00:00	01-04-2023	11.20				
	4	Tr-02-50 MVA, 132-33 kV	20.10	18:00	07-04-2023	0.00	00:00	01-04-2023	11.71				
Mokama GIS	1	Tr-02-160 MVA, 220-132 kV	118.30	19:00	19-04-2023	0.00	13:00	05-04-2023	45.41				
	2	Tr-01-50 MVA, 132-33 kV			Not Commissioned								
	3	Tr-02-80 MVA, 132-33 kV	10.40	20:00	20-04-2023	0.00	01:00	01-04-2023	4.33				
Dumraon GIS	1	Tr-01-160 MVA, 220-132 kV	99.8	21:00	18-04-2023	15.41	15:00	05-04-2023	-64.43				
	2	Tr-01-160 MVA, 220-132 kV			Not Commissioned								
	3	Tr-01-80 MVA, 132-33 kV	99.8	21:00	18-04-2023	15.41	15:00	05-04-2023	-64.43				
	4	Tr-02-80 MVA, 132-33 kV	0.04	00:00	01-04-2023	0.03	14:00	01-04-2023	0.00				
Naubatpur GIS	1	Tr-01-500 MVA, 400-220 kV	227.41	20:00	13-04-2023	13.47	19:00	15-04-2023	136.22				
	2	Tr-02-500 MVA, 400-220 kV	198.11	19:00	04-04-2023	13.18	19:00	15-04-2023	80.17				
	3	Tr-01-160 MVA, 220-132 kV	47.58	19:00	19-04-2023	7.6	14:00	30-04-2023	30.88				
	4	Tr-02-160 MVA, 220-132 kV			Not Commissioned								
	5	Tr-01-80 MVA, 132-33 kV	6.28	19:00	08-04-2023	0.03	00:00	10-04-2023	1.97				
	6	Tr-02-80 MVA, 132-33 kV	0.04	00:00	01-04-2023	0.03	00:00	01-04-2023	0.03				
Jakkampur GIS	1	Tr-01-500 MVA, 400-220 kV	162.85	19:00	15-04-2023	51.95	16:00	30-04-2023	120.35				
	2	Tr-02-500 MVA, 400-220 kV	163.02	19:00	15-04-2023	51.49	16:00	30-04-2023	119.22				
	3	Tr-01-160 MVA, 220-132 kV	89.34	15:00	18-04-2023	31.75	16:00	30-04-2023	61.12				
	4	Tr-02-160 MVA, 220-132 kV			Not Commissioned								
	5	Tr-01-80 MVA, 132-33 kV			Not Commissioned								
	6	Tr-02-80 MVA, 132-33 kV	0.04	00:00	01-04-2023	0.03	11:00	01-04-2023	0.04			Changed on 29-06-2023 at 15:51	
	7	Tr-03-80 MVA, 132-33 kV	0.04	01:00	01-04-2023	0.03	00:00	01-04-2023	0.04			Changed on 29-06-2023 at 16:02	
	8	Tr-04-80 MVA, 132-33 kV	0.14	11:00	19-04-2023	0.07	07:00	01-04-2023	0.10				
Bhusaule GIS	1	Tr-01 100 MVA, 220-33kV	0.05	00:00	01-04-2023	0.04	23:00	17-04-2023	0.04				
	2	Tr-02 100 MVA, 220-33kV	22.05	22:00	19-04-2023	2.16	14:00	30-04-2023	15.42				

Note Negative sign(-) denote import of power and positive sign (+) denote export of power. For example (-) 171.88 MW in Hajipur - Amnour ckt-1 denotes import of 171.88 MW from Hajipur S-5 to Amnour S-5 and 69.18 MW in Amnour -Shwan ckt-2 denotes 69.18 MW from Amnour to Shwan S-5.

BIHAR GRID COMPANY LIMITED											
Loading level of Transmission Assets											
Voltage Grade	S.No	Name of TL	Load								Month:
			MW								May'2023
			Max	Time	Date	Min	Time	Date	Avg of Month	Remark	
A. Power Flow in 400kV transmission line											
400 KV (08 nos.)	1	Naubatpur - Patna(PG) ckt - 01	-531.96	01:00	15-05-2023	-34.02	14:00	02-05-2023	-296.74		
	2	Naubatpur - Patna(PG) ckt - 02	-534.09	01:00	15-05-2023	-34.5	14:00	02-05-2023	-298.10		
	3	Naubatpur - Ballia(PG) ckt - 01	388.77	01:00	15-05-2023	0.43	13:00	11-05-2023	162.74		
	4	Naubatpur - Ballia(PG) ckt - 02	391.31	01:00	15-05-2023	-0.02	09:00	30-05-2023	165.69		
	5	Jakkampur - Nabinagar(NPGC) ckt - 01	-845.58	13:00	13-05-2023	-154.6	08:00	26-05-2023	493.66		
	6	Jakkampur - Nabinagar(NPGC) ckt - 02	-552.52	14:00	11-05-2023	-154.2	08:00	26-05-2023	473.56		
	7	Jakkampur - Patna(PG) ckt - 01	462.24	14:00	11-05-2023	80.74	08:00	26-05-2023	388.58		
	8	Jakkampur - Patna(PG) ckt - 02	458.15	14:00	11-05-2023	80.12	08:00	26-05-2023	385.23		
B. Power Flow in 220kV transmission line											
220 KV (36 nos.)	1	Hajipur - Amnour ckt-01	-167.94	15:00	23-05-2023	-13.72	12:00	22-05-2023	-82.62		
	2	Hajipur - Amnour ckt-02	-181.95	13:00	19-05-2023	-18.47	09:00	22-05-2023	-81.24		
	3	Patna (PG) - Khagaul ckt-02	-90.45	22:00	16-05-2023	-1.32	19:00	26-05-2023	-42.16		
	4	Patna (PG) - Khagaul ckt-03	-89.97	22:00	16-05-2023	-1.22	19:00	26-05-2023	-42.20		
	5	Khijisara - Biharsharif ckt-01	-101.27	06:00	20-05-2023	-0.92	10:00	03-05-2023	-40.13		
	6	Khijisara - Biharsharif ckt-02	-112.05	17:00	26-05-2023	0.83	09:00	06-05-2023	-40.81		
	7	Khijisara - Booh Gaya ckt-01	-84.49	13:00	13-05-2023	0.03	16:00	08-05-2023	-48.05		
	8	Khijisara - Booh Gaya ckt-02	-84.94	13:00	13-05-2023	0.01	16:00	08-05-2023	-48.27		
	9	Khijisara - Gaya (PG) ckt-01	-119.67	12:00	16-05-2023	-19.08	20:00	26-05-2023	-73.21		
	10	Khijisara - Gaya (PG) ckt-02	-119.87	12:00	16-05-2023	-19.14	20:00	26-05-2023	-73.28		
	11	Khijisara - Narhat ckt-01	103.93	15:00	18-05-2023	29.16	18:00	25-05-2023	73.46		
	12	Khijisara - Narhat ckt-02	103.64	15:00	18-05-2023	29.25	18:00	25-05-2023	73.44		
	13	Narhat - Sekhopur Sarai ckt-01	82.29	13:00	16-05-2023	9.71	00:00	14-05-2023	44.61		
	14	Narhat - Sekhopur Sarai ckt-02	82.20	13:00	16-05-2023	9.70	00:00	14-05-2023	44.59		
	15	Sekhopur Sarai - Haveli Kharagpur ckt-01	77.30	12:00	16-05-2023	4.2	00:00	14-05-2023	60.29		
	16	Sekhopur Sarai - Haveli Kharagpur ckt-02	77.00	12:00	16-05-2023	4.2	00:00	14-05-2023	58.40		
	17	Haveli Kharagpur - Goradih ckt-01	81.3	15:00	18-05-2023	16.48	15:00	23-05-2023	6.81		
	18	Haveli Kharagpur - Goradih ckt-02	0.00	00:00	01-05-2023	0.00	00:00	31-05-2023	0.01	System connected but no power flow	
	19	Mokama-Biharsharif ckt-1	107.5	05:00	15-05-2023	0.00	17:00	03-05-2023	1.84		
	20	Mokama-Biharsharif ckt-2	123.8	06:00	01-05-2023	0.00	18:00	03-05-2023	3.71		
	21	Mokama-BTPS ckt-1	-123.2	05:00	15-05-2023	0.00	13:00	02-05-2023	-17.68		
	22	Mokama-BTPS ckt-2	-122.8	05:00	15-05-2023	0.00	02:00	01-05-2023	-17.62		
	23	Ara(PG)-Dumraon New - 01	-53.47	17:00	25-05-2023	-0.60	12:00	03-05-2023	40.93		
	24	Ara(PG)-Dumraon New - 02	-53.53	17:00	25-05-2023	-0.37	12:00	03-05-2023	41.16		
	25	Dumraon New-Nadokhar - 01	-68.21	15:00	22-05-2023	-0.17	01:00	01-05-2023	52.68		
	26	Dumraon New-Nadokhar - 02	-62.56	13:00	31-05-2023	-0.39	01:00	01-05-2023	48.13		
	27	Naubatpur-Ara(PG) Ckt-01	130.39	07:00	13-05-2023	13.5	19:00	26-05-2023	91.26		
	28	Naubatpur-Ara(PG) Ckt-02	129.97	07:00	13-05-2023	13.42	19:00	26-05-2023	91.29		
	29	Naubatpur- Khagaul Ckt-01	52.96	15:00	16-05-2023	0.02	17:00	05-05-2023	7.74		
	30	Naubatpur- Khagaul Ckt-02	53.21	15:00	16-05-2023	-0.03	00:00	20-05-2023	7.90		
	31	Naubatpur- Bhusaula Ckt-01	13.45	23:00	31-05-2023	1.58	07:00	22-05-2023	9.05		
	32	Naubatpur- Bhusaula Ckt-02	21.88	18:00	31-05-2023	1.07	04:00	22-05-2023	8.93		
	33	Naubatpur- Bihta Ckt-01	25.25	14:00	31-05-2023	0.11	02:00	27-05-2023	8.05		
	34	Naubatpur- Bihta Ckt-02	25.11	14:00	31-05-2023	-0.09	02:00	27-05-2023	8.12		
	35	Jakkampur - Sipara ckt-03			System under shutdown since 27-04-2023						
36	Jakkampur - Khagaul ckt	158.86	23:00	20-05-2023	74.01	20:00	26-05-2023	128.77			
C. Power Flow in 132 kV transmission line											
132 KV (40 nos.)	1	Amnour - Siwan ckt-01	69.99	13:00	21-05-2023	0.57	09:00	23-05-2023	40.49		
	2	Amnour - Siwan ckt-02	70.37	20:00	22-05-2023	1.96	21:00	01-05-2023	41.26		
	3	Amnour - Chhapara ckt-01	56.01	00:00	28-05-2023	7.76	06:00	23-05-2023	24.25		
	4	Amnour - Chhapara ckt-02	60.61	13:00	23-05-2023	7.75	06:00	23-05-2023	27.59		
	5	Khijisara - Booh Gaya ckt - 03	0.09	01:00	02-05-2023	0.09	01:00	16-05-2023	0.00		
	6	Khijisara - Wajrang ckt - 01	53.32	11:00	23-05-2023	0.08	16:00	01-05-2023	35.09		
	7	Khijisara - Hultaganj ckt-01	38.03	07:00	30-05-2023	0.05	12:00	04-05-2023	23.43		
	8	Khijisara - Jehanabad ckt-01	90.93	15:00	26-05-2023	3.86	19:00	26-05-2023	52.39		
	9	Khijisara - Jehanabad ckt-02	90.45	14:00	26-05-2023	3.87	19:00	26-05-2023	52.25		
	10	Narhat - Nawadeh ckt-01	30.16	14:00	13-05-2023	-0.24	20:00	25-05-2023	19.08		
	11	Narhat - Nawadeh ckt-02	30.05	14:00	13-05-2023	-0.23	20:00	25-05-2023	19.03		
	12	Haveli Kharagpur - Sultanganj ckt-01	36.40	12:00	16-05-2023	30.50	13:00	16-05-2023	0.29		
	13	Haveli Kharagpur - Sultanganj ckt-02	36.30	12:00	16-05-2023	30.40	15:00	16-05-2023	0.29		
	14	Haveli Kharagpur - Lakhisarai ckt-01	0.00	00:00	01-05-2023	0.00	00:00	31-05-2023	0.01	System connected but no power flow	
	15	Haveli Kharagpur - Lakhisarai ckt-02	0.00	00:00	01-05-2023	0.00	00:00	31-05-2023	0.01	System connected but no power flow	
	16	Haveli Kharagpur - Jamalpur ckt-01	33.30	01:00	21-05-2023	3.3	23:00	14-05-2023	23.40		
	17	Haveli Kharagpur - Jamalpur ckt-02	33.50	01:00	21-05-2023	6.4	23:00	14-05-2023	23.39		
	18	Sekhopur Sarai - Sekhopur ckt-01	40.30	20:00	21-05-2023	3.2	13:00	01-05-2023	20.30		
	19	Sekhopur Sarai - Sekhopur ckt-02	33.90	16:00	19-05-2023	1.3	14:00	26-05-2023	20.88		
	20	Sekhopur Sarai - Biharsharif	-44	12:00	16-05-2023	-0.5	17:00	25-05-2023	-26.70		
	21	Goradih - Sultanganj ckt-01	0.00	00:00	01-05-2023	0.00	00:00	01-05-2023	0.01	System connected but no power flow	
	22	Goradih - Sultanganj ckt-02	0.00	00:00	01-05-2023	0.00	00:00	01-05-2023	-0.01	System connected but no power flow	
	23	Goradih - Kehalgauha ckt-01	33.20	14:00	18-05-2023	0.00	06:00	01-05-2023	0.25		
	24	Goradih - Kehalgauha ckt-02	33.60	14:00	18-05-2023	0.00	00:00	01-05-2023	0.25		
	25	Goradih - Sabour ckt-01	-16.20	19:00	21-05-2023	0.00	22:00	01-05-2023	-7.03		
	26	Goradih - Sabour ckt-02	-16.10	19:00	21-05-2023	0.00	22:00	26-04-2023	-7.06		
	27	Mokama-Haldigh ckt-01	26.90	08:00	05-05-2023	0.00	14:00	05-05-2023	10.23		
	28	Mokama-Haldigh ckt-02	27.10	08:00	05-05-2023	0.00	14:00	05-05-2023	10.37		
	29	Dumraon new (BGCL)-Dumraon (BSPTCL) ckt-01	27.81	20:00	13-05-2023	0.83	20:00	26-05-2023	-20.85		
	30	Dumraon new (BGCL)-Dumraon (BSPTCL) ckt-02	28.02	20:00	13-05-2023	0.88	20:00	26-05-2023	-21.01		
	31	Dumraon-Buxar ckt-01	28.04	19:00	18-05-2023	0.67	12:00	15-05-2023	-21.65		
	32	Dumraon-Buxar ckt-02	28.05	19:00	18-05-2023	0.67	12:00	15-05-2023	-21.66		
	33	Dumraon-Ara ckt-01	-12.69	20:00	12-05-2023	0.36	22:00	17-05-2023	10.10		
	34	Dumraon-Ara ckt-02	-12.72	20:00	12-05-2023	0.40	27:00	17-05-2023	10.16		
	35	Dumraon-Jagdehpur ckt-01	-5.84	04:00	30-05-2023	0.01	00:00	09-05-2023	4.53		
	36	Dumraon-Jagdehpur ckt-02	-5.83	04:00	30-05-2023	0.01	00:00	09-05-2023	4.52		
	37	Naubatpur - Mesauli ckt - 01	23.57	16:00	31-05-2023	7.66	04:00	02-05-2023	14.98		
	38	Naubatpur - Mesauli ckt - 02	26.95	11:00	27-05-2023	7.49	07:00	05-05-2023	15.31		
	39	Jakkampur-Sipara-03	35.37	22:00	16-05-2023	0.06	12:00	04-05-2023	22.97		
	40	Jakkampur-Fathus	80.16	19:00	10-05-2023	21.57	21:00	26-05-2023	56.10		

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Substation Details		S.No.	MVA Capacity	Load						Month:	May/2023	
				MW						Avg of Month	Remark	
				Max	Time	Date	Min	Time	Date			
D. Power Flow in transformers												
Amnour GIS	1	Tr-01-160 MVA, 220-132 kV	130.00	15:00	21-05-2023	6.83	12:00	22-05-2023	82.63			
	2	Tr-02-160 MVA, 220-132 kV	131.71	15:00	21-05-2023	6.89	12:00	22-05-2023	84.59			
	3	Tr-01-50 MVA, 132-33 kV	27.19	23:00	11-05-2023	0.08	08:00	23-05-2023	17.24			
	4	Tr-02-50 MVA, 132-33 kV	27.24	23:00	11-05-2023	0.08	08:00	23-05-2023	17.41			
KhijrSarae GIS	1	Tr-01-160 MVA, 220-132 kV	120.14	20:00	17-05-2023	7.3	19:00	26-05-2023	86.96			
	2	Tr-02-160 MVA, 220-132 kV	123.55	20:00	17-05-2023	8.19	19:00	26-05-2023	89.74			
	3	Tr-01-50 MVA, 132-33 kV			Not Commissioned							
	4	Tr-02-50 MVA, 132-33 kV	15.16	20:00	18-05-2023	0.03	19:00	26-05-2023	4.87			
	5	Tr-03-50 MVA, 132-33 kV	13.54	08:00	31-05-2023	0.11	09:00	15-05-2023	8.64			
Narhat GIS	1	Tr-01-160 MVA, 220-132 kV	40.43	11:00	13-05-2023	6.76	20:00	26-05-2023	29.05			
	2	Tr-02-160 MVA, 220-132 kV	38.64	11:00	13-05-2023	5.78	20:00	26-05-2023	27.48			
	3	Tr-01-50 MVA, 132-33 kV	9.31	19:00	18-05-2023	0.10	20:00	11-05-2023	6.20			
	4	Tr-02-50 MVA, 132-33 kV	18.92	08:00	23-05-2023	0.03	14:00	13-05-2023	12.22			
Sakhopur Saral GIS	1	Tr-01-160 MVA, 220-132 kV	21.20	07:00	08-05-2023	1.30	05:00	02-05-2023	17.11			
	2	Tr-02-160 MVA, 220-132 kV	27.70	18:00	17-05-2023	1.00	17:00	25-05-2023	19.64			
	3	Tr-01-50 MVA, 132-33 kV	1.30	07:00	08-05-2023	0.20	13:00	01-05-2023	1.20			
	4	Tr-02-50 MVA, 132-33 kV	19.20	08:00	21-05-2023	0.20	13:00	01-05-2023	15.92			
Haveli Kharagpur GIS	1	Tr-01-160 MVA, 220-132 kV	67.50	12:00	16-05-2023	5.50	00:00	14-05-2023	29.70			
	2	Tr-02-160 MVA, 220-132 kV	64.90	12:00	16-05-2023	4.00	00:00	14-05-2023	28.41			
	3	Tr-01-50 MVA, 132-33 kV	8.90	00:00	20-05-2023	1.30	14:00	23-05-2023	6.35			
	4	Tr-02-50 MVA, 132-33 kV	6.40	22:00	17-05-2023	1.10	15:00	04-05-2023	4.37			
Goradith GIS	1	Tr-01-160 MVA, 220-132 kV	81.00	14:00	18-05-2023	0.00	00:00	01-05-2023	6.60			
	2	Tr-02-160 MVA, 220-132 kV			Not Commissioned							
	3	Tr-01-50 MVA, 132-33 kV	15.60	19:00	14-05-2023	0.00	22:00	01-05-2023	10.12			
	4	Tr-02-50 MVA, 132-33 kV	18.00	19:00	10-05-2023	0.00	22:00	01-04-2023	10.05			
Mokama GIS	1	Tr-02-160 MVA, 220-132 kV	61.50	08:00	05-05-2023	0.00	13:00	23-05-2023	29.70			
	2	Tr-01-50 MVA, 132-33 kV			Not Commissioned							
	3	Tr-02-80 MVA, 132-33 kV	11.30	22:00	11-05-2023	0.00	02:00	01-05-2023	6.35			
Dumraon GIS	1	Tr-01-160 MVA, 220-132 kV	103.22	20:00	31-05-2023	6.54	19:00	26-05-2023	-74.85			
	2	Tr-01-160 MVA, 220-132 kV			Not Commissioned							
	3	Tr-01-80 MVA, 132-33 kV	23.57	20:00	18-05-2023	0.08	00:00	27-05-2023	-18.19			
	4	Tr-02-80 MVA, 132-33 kV	0.04	00:00	01-05-2023	0.03	19:00	02-05-2023	-0.01			
Naubatpur GIS	1	Tr-01-500 MVA, 400-220 kV	190.6	22:00	16-05-2023	34.09	20:00	26-05-2023	133.05			
	2	Tr-02-500 MVA, 400-220 kV	190.15	22:00	16-05-2023	34.34	20:00	26-05-2023	132.69			
	3	Tr-01-160 MVA, 220-132 kV	48.99	20:00	30-05-2023	0.15	19:00	26-05-2023	33.79			
	4	Tr-02-160 MVA, 220-132 kV			Not Commissioned							
	5	Tr-01-80 MVA, 132-33 kV	6.71	20:00	30-05-2023	0.03	13:00	06-05-2023	3.45			
Jakkampur GIS	6	Tr-02-80 MVA, 132-33 kV	0.04	00:00	01-05-2023	0.03	01:00	01-05-2023	0.03			
	1	Tr-01-500 MVA, 400-220 kV	114.32	23:00	12-05-2023	29.89	08:00	18-05-2023	95.97			
	2	Tr-02-500 MVA, 400-220 kV	114.02	23:00	12-05-2023	29.79	08:00	18-05-2023	95.77			
	3	Tr-01-160 MVA, 220-132 kV	84.89	19:00	15-05-2023	18.64	20:00	26-05-2023	69.34			
	4	Tr-02-160 MVA, 220-132 kV			Not Commissioned							
	5	Tr-01-80 MVA, 132-33 kV			Not Commissioned							
	6	Tr-02-80 MVA, 132-33 kV	0.12	20:00	31-05-2023	0.03	00:00	01-05-2023	0.07			
	7	Tr-03-80 MVA, 132-33 kV	0.08	00:00	07-05-2023	0.03	00:00	01-05-2023	0.04			
Bhuseula GIS	8	Tr-04-80 MVA, 132-33 kV	0.11	19:00	04-05-2023	0.03	11:00	31-05-2023	0.06			
	1	Tr-01 100 MVA, 220-33kV	0.05	03:00	01-05-2023	0.04	01:00	10-05-2023	0.04			
	2	Tr-02 100 MVA, 220-33kV	24.23	23:00	31-05-2023	2.47	07:00	22-05-2023	16.64			

Note Negative sign(-) denote import of power and positive sign (+) denote export of power. For example (-) 181.95 MW in Hajipur - Amnour ckt-2 denotes import of 181.95 MW from Hajipur S-5 to Amnour S-5 and 70.37 MW in Amnour -Siwan ckt-2 denotes 70.37 MW from Amnour to Siwan S-5.

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Voltage Grade	S.No	Name of TL	Month: June 2023							Remark
			Load MW		Avg of Month					
			Max	Time	Date	Min	Time	Date	Avg of Month	
A. Power Flow in 400kV transmission line										
400 kV (08 nos.)	1	Naubatpur - Patna(PG) ckt - 01	-539.38	05:00	22-06-2023	12.84	15:00	25-06-2023	-311.20	
	2	Naubatpur - Patna(PG) ckt - 02	-541.88	05:00	22-06-2023	3.86	12:00	25-06-2023	-312.59	
	3	Naubatpur - Bafra(PG) ckt - 01	414.59	05:00	22-06-2023	-2.89	12:00	01-06-2023	159.13	
	4	Naubatpur - Bafra(PG) ckt - 02	418.20	05:00	22-06-2023	-0.22	12:00	01-06-2023	175.45	
	5	Jalakanpur - Nabinagar(NPGC) ckt - 01	-564.77	14:00	08-06-2023	-1.27	03:00	30-06-2023	494.73	
	6	Jalakanpur - Nabinagar(NPGC) ckt - 02	-562.30	14:00	08-06-2023	-96.96	09:00	30-06-2023	486.40	
	7	Jalakanpur - Patna(PG) ckt - 01	453.65	11:00	01-06-2023	16.55	15:00	16-06-2023	378.45	
	8	Jalakanpur - Patna(PG) ckt - 02	448.65	11:00	01-06-2023	16.08	15:00	16-06-2023	375.48	
B. Power Flow in 220kV transmission line										
220 kV (36 nos.)	1	Hajipur - Amnour ckt-01	-141.3	13:00	20-06-2023	-12.04	12:00	14-06-2023	-96.20	
	2	Hajipur - Amnour ckt-02	-145.97	14:00	30-06-2023	-11.4	05:00	30-06-2023	-99.41	
	3	Patna (PG) - Khagaul ckt-02	-58.71	22:00	30-06-2023	-0.62	07:00	25-06-2023	-36.94	
	4	Patna (PG) - Khagaul ckt-01	-58.32	22:00	30-06-2023	-0.72	07:00	25-06-2023	-36.78	
	5	Khijisraai - Biharsharif ckt-01	-124.39	07:00	21-06-2023	0.25	22:00	08-06-2023	-44.09	
	6	Khijisraai - Biharsharif ckt-02	-125.02	08:00	16-06-2023	-0.04	22:00	03-06-2023	-44.54	
	7	Khijisraai - Bodh Gaya ckt-01	-83.94	14:00	08-06-2023	-0.37	06:00	30-06-2023	-45.90	
	8	Khijisraai - Bodh Gaya ckt-02	-83.6	11:00	08-06-2023	-1.87	07:00	20-06-2023	-42.26	
	9	Khijisraai - Gaya (PG) ckt-01	-114.44	21:00	03-06-2023	-5.54	13:00	16-06-2023	-73.36	
	10	Khijisraai - Gaya (PG) ckt-02	-114.75	21:00	03-06-2023	-5.5	13:00	16-06-2023	-73.43	
	11	Khijisraai - Namat ckt-01	176.83	07:00	19-06-2023	15.38	12:00	30-06-2023	77.46	
	12	Khijisraai - Namat ckt-02	114.26	20:00	06-06-2023	15.38	12:00	30-06-2023	76.35	
	13	Narhat - Sekhopur Sarai ckt-01	95.42	14:00	20-06-2023	5.85	12:00	30-06-2023	44.41	
	14	Narhat - Sekhopur Sarai ckt-02	95.11	14:00	20-06-2023	5.85	12:00	30-06-2023	44.38	
	15	Sekhopur Sarai - Haveli Kharagpur ckt-01	72.80	14:00	20-06-2023	0.1	15:00	16-06-2023	32.03	
	16	Sekhopur Sarai - Haveli Kharagpur ckt-02	72.40	14:00	20-06-2023	-0.3	14:00	16-06-2023	32.69	
	17	Haveli Kharagpur - Goradh ckt-01	0.00	00:00	01-06-2023	0.00	00:00	30-06-2023	0.01	System connected but no power flow
	18	Haveli Kharagpur - Goradh ckt-02	0.00	00:00	01-06-2023	0.00	00:00	30-06-2023	0.01	
	19	Mokama-Biharsharif ckt-1	-134.7	00:00	24-06-2023	0.00	05:00	01-06-2023	-20.96	
	20	Mokama-Biharsharif ckt-2	-152	02:00	22-06-2023	0.00	05:00	01-06-2023	-21.87	
	21	Mokama-BTPS ckt-1	-135	07:00	30-06-2023	0.00	06:00	01-06-2023	7.16	
	22	Mokama-BTPS ckt-2	-135.11	07:00	30-06-2023	0.00	06:00	01-06-2023	7.00	
	23	Arar(PG)-Dumraon New - 01	-51.04	06:00	21-06-2023	0.04	12:00	14-06-2023	40.86	
	24	Arar(PG)-Dumraon New - 02	-50.72	06:00	21-06-2023	0.03	11:00	14-06-2023	40.60	
	25	Dumraon New-Nadokhar - 01	-81.46	14:00	24-06-2023	-0.54	02:00	29-06-2023	64.66	
	26	Dumraon New-Nadokhar - 02	-82.06	14:00	24-06-2023	0.37	15:00	30-06-2023	65.94	
	27	Naubatpur - Arar(PG) Ckt-01	208.39	08:00	24-06-2023	28	12:00	30-06-2023	91.15	
	28	Naubatpur - Arar(PG) Ckt-02	186.04	20:00	07-06-2023	28.11	12:00	30-06-2023	92.94	
	29	Naubatpur - Khagaul Ckt-01	37.67	14:00	19-06-2023	0.03	02:00	22-06-2023	7.57	
	30	Naubatpur - Khagaul Ckt-02	37.87	14:00	19-06-2023	-0.07	01:00	23-06-2023	7.75	
	31	Naubatpur - Bhusaula Ckt-01	14.58	23:00	23-06-2023	0.17	03:00	10-06-2023	9.91	
	32	Naubatpur - Bhusaula Ckt-02	14.34	23:00	23-06-2023	-0.08	04:00	10-06-2023	9.65	
	33	Naubatpur - Bihta Ckt-01	61.90	08:00	25-06-2023	0.03	18:00	09-06-2023	13.20	
	34	Naubatpur - Bihta Ckt-02	60.81	08:00	25-06-2023	0.03	18:00	09-06-2023	13.11	
	35	Jalakanpur - Sipara ckt-03	80.52	22:00	30-06-2023	25.62	05:00	30-06-2023	61.33	
	36	Jalakanpur - Khagaul ckt	162.71	23:00	04-06-2023	56.35	05:00	30-06-2023	138.41	
C. Power Flow in 132 kV transmission line										
132 kV (40 nos.)	1	Amnour - Siwan ckt-01	74.12	21:00	29-06-2023	0.01	13:00	14-06-2023	42.10	
	2	Amnour - Siwan ckt-02	74.68	21:00	29-06-2023	0.08	06:00	30-06-2023	42.80	
	3	Amnour - Chhapara ckt-01	66.58	14:00	20-06-2023	2.99	15:00	04-06-2023	35.17	
	4	Amnour - Chhapara ckt-02	65.26	14:00	20-06-2023	3.06	15:00	04-06-2023	34.98	
	5	Khijisraai - Bodh Gaya ckt-03	0.09	11:00	25-06-2023	0.01	00:00	01-06-2023	0.00	
	6	Khijisraai - Wajiganj ckt-01	54.23	19:00	08-06-2023	0.03	13:00	21-06-2023	34.87	
	7	Khijisraai-Hufanganj ckt-01	74.36	11:00	11-06-2023	0.10	06:00	12-06-2023	25.18	
	8	Khijisraai - Jehanabad ckt-01	69.76	07:00	18-06-2023	2.00	22:00	19-06-2023	47.30	
	9	Khijisraai - Jehanabad ckt-02	69.67	07:00	18-06-2023	1.99	22:00	19-06-2023	47.28	
	10	Narhat - Nawadah ckt-01	54.38	13:00	10-06-2023	0.39	11:00	30-06-2023	22.27	
	11	Narhat - Nawadah ckt-02	54.34	13:00	10-06-2023	0.39	11:00	30-06-2023	22.21	
	12	Haveli Kharagpur - Sultanganj ckt-01	0.00	00:00	01-06-2023	0.00	00:00	30-06-2023	0.01	System connected but no power flow
	13	Haveli Kharagpur - Sultanganj ckt-02	0.00	00:00	01-06-2023	0.00	00:00	30-06-2023	0.01	
	14	Haveli Kharagpur - Lakhisarai ckt-01	38.90	14:00	20-06-2023	3.90	11:00	20-06-2023	0.18	
	15	Haveli Kharagpur - Lakhisarai ckt-02	38.90	14:00	20-06-2023	3.90	11:00	20-06-2023	0.18	
	16	Haveli Kharagpur - Jamalpur ckt-01	89.00	23:00	24-06-2023	17.4	13:00	03-06-2023	26.83	
	17	Haveli Kharagpur - Jamalpur ckt-02	35.60	11:00	06-06-2023	17.3	13:00	03-06-2023	8.05	
	18	Sekhopur Sarai - Sekhopura ckt-01	41.20	13:00	12-06-2023	2.5	13:00	29-06-2023	21.99	
	19	Sekhopur Sarai - Sekhopura ckt-02	35.60	13:00	14-06-2023	2.5	13:00	29-06-2023	21.10	
	20	Sekhopur Sarai - Biharsharif	-23.7	08:00	09-06-2023	-3.6	14:00	06-06-2023	-4.22	
	21	Goradh - Sultanganj ckt-01	-7.90	21:00	30-06-2023	0.00	00:00	01-06-2023	-0.05	
	22	Goradh - Sultanganj ckt-02	-7.80	21:00	30-06-2023	0.00	00:00	01-06-2023	-0.05	
	23	Goradh - Keshwapur ckt-01	0.00	00:00	01-06-2023	0.00	00:00	01-06-2023	0.01	System connected but no power flow
	24	Goradh - Keshwapur ckt-02	0.00	00:00	01-06-2023	0.00	00:00	01-06-2023	0.01	
	25	Goradh - Sabour ckt-01	-18.60	20:00	08-06-2023	0.20	20:00	13-06-2023	-11.61	
	26	Goradh - Sabour ckt-02	-18.90	20:00	08-06-2023	0.20	20:00	13-06-2023	-11.43	
	27	Mokama-Hafiah ckt-01	32.30	07:00	18-06-2023	0.00	15:00	01-06-2023	9.41	
	28	Mokama-Hafiah ckt-02	32.70	07:00	18-06-2023	0.00	15:00	01-06-2023	9.52	
	29	Dumraon new (BGCL)-Dumraon (BSPTCL) ckt-01	52.54	17:00	17-06-2023	0.31	19:00	20-06-2023	-46.02	
	30	Dumraon new (BGCL)-Dumraon (BSPTCL) ckt-02	77.08	18:00	19-06-2023	0.45	12:00	20-06-2023	-61.50	
	31	Dumraon-Buzar ckt-01	30.26	18:00	18-06-2023	0.01	09:00	21-06-2023	-24.14	
	32	Dumraon-Buzar ckt-02	30.13	18:00	18-06-2023	0.01	09:00	21-06-2023	-24.10	
	33	Dumraon-Ara ckt-01	-23.86	09:00	17-06-2023	-6.13	14:00	16-06-2023	18.98	
	34	Dumraon-Ara ckt-02	-23.91	09:00	17-06-2023	-6.17	14:00	16-06-2023	18.99	
	35	Dumraon-Jagdishpur ckt-01	22.85	10:00	17-06-2023	-0.01	01:00	01-06-2023	18.16	
	36	Dumraon-Jagdishpur ckt-02	22.60	10:00	17-06-2023	-0.02	01:00	01-06-2023	-18.10	
	37	Naubatpur - Maseurhi ckt - 01	26.89	14:00	23-06-2023	6.58	14:00	15-06-2023	20.28	
	38	Naubatpur - Maseurhi ckt - 02	26.81	14:00	23-06-2023	6.55	14:00	15-06-2023	20.03	
	39	Jalakanpur - Sipara 03	33.04	13:00	06-06-2023	3.63	04:00	30-06-2023	27.97	
	40	Jalakanpur - Patna	48.86	13:00	20-06-2023	18.43	23:00	11-06-2023	43.25	

BIHAR GRID COMPANY LIMITED
Loading level of Transmission Assets

Substation Details		S.No	MVA Capacity	Load						Month:	June'2023	
				MW						Avg of Month	Remark	
				Max	Time	Date	Min	Time	Date			
D. Power Flow In Transformers												
Amnour GIS	1	Tr-01-160 MVA, 220-132 kV	135.84	13:00	20-06-2023	5.74	05:00	30-06-2023	95.71			
	2	Tr-02-160 MVA, 220-132 kV	141.57	13:00	20-06-2023	5.80	05:00	30-06-2023	97.63			
	3	Tr-01-80 MVA, 132-33 kV	28.11	15:00	13-06-2023	0.07	13:00	15-06-2023	19.30			
	4	Tr-02-50 MVA, 132-33 kV	23.30	20:00	13-06-2023	0.07	13:00	15-06-2023	19.41			
Khhirsarai GIS	1	Tr-01-160 MVA, 220-132 kV	117.99	20:00	17-06-2023	20.88	14:00	15-06-2023	83.46			
	2	Tr-02-160 MVA, 220-132 kV	121.31	20:00	17-06-2023	22.14	14:00	15-06-2023	86.17			
	3	Tr-01-50 MVA, 132-33 kV			Not Commissioned							
	4	Tr-02-50 MVA, 132-33 kV	18.08	08:00	15-06-2023	0.03	19:00	20-06-2023	6.52			
Narhat GIS	1	Tr-01-160 MVA, 220-132 kV	13.88	08:00	05-06-2023	0.03	07:00	04-06-2023	8.33			
	2	Tr-02-180 MVA, 220-132 kV	65.19	19:00	10-06-2023	8.56	11:00	30-06-2023	32.52			
	3	Tr-01-50 MVA, 132-33 kV	9.66	20:00	13-06-2023	0.09	00:00	21-06-2023	6.61			
	4	Tr-02-50 MVA, 132-33 kV	18.64	20:00	13-06-2023	0.10	17:00	27-06-2023	12.58			
Sekhapur Serei GIS	1	Tr-01-160 MVA, 220-132 kV	35.20	06:00	18-06-2023	1.30	12:00	29-06-2023	28.01			
	2	Tr-02-180 MVA, 220-132 kV	59.20	11:00	18-06-2023	1.30	13:00	15-06-2023	34.25			
	3	Tr-01-50 MVA, 132-33 kV	16.50	20:00	26-06-2023	0.30	08:00	29-06-2023	2.17			
	4	Tr-02-50 MVA, 132-33 kV	20.80	06:00	18-06-2023	0.80	13:00	14-06-2023	16.90			
Havali Khasagpur GIS	1	Tr-01-160 MVA, 220-132 kV	72.60	14:00	20-06-2023	0.90	14:00	27-06-2023	24.09			
	2	Tr-02-180 MVA, 220-132 kV	69.80	14:00	20-06-2023	0.30	14:00	16-06-2023	22.60			
	3	Tr-01-50 MVA, 132-33 kV	14.20	00:00	02-06-2023	1.60	17:00	30-06-2023	7.09			
	4	Tr-02-50 MVA, 132-33 kV	6.50	21:00	09-06-2023	0.20	23:00	27-06-2023	4.33			
Goreidih GIS	1	Tr-01-160 MVA, 220-132 kV	0.00	00:00	01-06-2023	0.00	00:00	01-06-2023	0.04			
	2	Tr-02-180 MVA, 220-132 kV			Not Commissioned							
	3	Tr-01-50 MVA, 132-33 kV	17.80	07:00	09-06-2023	0.20	02:00	12-06-2023	10.80			
	4	Tr-02-50 MVA, 132-33 kV	20.90	20:00	08-06-2023	0.20	17:00	11-06-2023	12.11			
Mokama GIS	1	Tr-02-160 MVA, 220-132 kV	74.40	07:00	13-06-2023	0.00	00:00	11-06-2023	28.01			
	2	Tr-01-50 MVA, 132-33 kV			Not Commissioned							
Dumraon GIS	3	Tr-02-80 MVA, 132-33 kV	12.20	20:00	04-06-2023	0.00	13:00	01-06-2023	2.61			
	1	Tr-01-160 MVA, 220-132 kV	143.63	21:00	17-06-2023	16.81	04:00	30-06-2023	-101.46			
	2	Tr-01-160 MVA, 220-132 kV			Not Commissioned							
Naubatpur GIS	3	Tr-01-80 MVA, 132-33 kV	23.37	20:00	13-06-2023	0.03	19:00	16-06-2023	-18.67			
	4	Tr-02-80 MVA, 132-33 kV	23.19	07:00	18-06-2023	0.03	03:00	01-06-2023	-18.53			
	1	Tr-01-500 MVA, 400-220 kV	208.69	20:00	07-06-2023	59.8	05:00	30-06-2023	144.56			
	2	Tr-02-500 MVA, 400-220 kV	211.32	16:00	09-06-2023	59.58	05:00	30-06-2023	143.78			
Jalktanpur GIS	3	Tr-01-160 MVA, 220-132 kV	58.29	19:00	17-06-2023	0.18	18:00	06-06-2023	43.72			
	4	Tr-02-160 MVA, 220-132 kV			Not Commissioned							
	5	Tr-01-80 MVA, 132-33 kV	7.74	08:00	25-06-2023	0.07	07:00	07-06-2023	3.26			
	6	Tr-02-80 MVA, 132-33 kV	0.04	03:00	01-06-2023	0.03	00:00	01-06-2023	0.01			
	1	Tr-01-500 MVA, 400-220 kV	139.49	20:00	07-06-2023	57.63	05:00	30-06-2023	126.12			
	2	Tr-02-500 MVA, 400-220 kV	139.38	20:00	07-06-2023	57.4	05:00	30-06-2023	125.92			
Bhuseula GIS	3	Tr-01-160 MVA, 220-132 kV	71.92	15:00	06-06-2023	32.75	05:00	30-06-2023	66.54			
	4	Tr-02-160 MVA, 220-132 kV			Not Commissioned							
	5	Tr-01-80 MVA, 132-33 kV			Not Commissioned							
	6	Tr-02-80 MVA, 132-33 kV	0.12	13:00	14-06-2023	0.03	12:00	20-06-2023	0.10			
	7	Tr-03-80 MVA, 132-33 kV	0.04	05:00	02-06-2023	0.03	00:00	01-06-2023	0.03			
Bhuseula GIS	8	Tr-04-80 MVA, 132-33 kV	0.06	07:00	01-06-2023	0.03	11:00	01-06-2023	0.05			
	1	Tr-01 100 MVA, 220-33kV	4.66	10:00	26-06-2023	0.04	00:00	01-06-2023	0.75			
Note	2	Tr-02 100 MVA, 220-33kV	29.43	22:00	18-06-2023	0	18:00	06-06-2023	18.47			

Negative sign(-) denote import of power and positive sign (+) denote export of power. For example (-) 145.97 MW in Hajipur - Amnour ckt-2 denotes import of 145.97 MW from Hajipur S-5 to Amnour S-5 and 74.68 MW in Amnour -Shwan ckt-1 denotes 74.68 MW from Amnour to Shwan S-5.

BIHAR GRID COMPANY LIMITED										
Loading level of Transmission Assets										
									Month:	July 2023
Voltage Grade	S.No	Name of TL	Load						Avg of Month	Remark
			MW							
			Max	Time	Date	Min	Time	Date		
A. Power Flow in 400kV transmission line										
400 kV (08 nos.)	1	Naubatpur - Patna (PG) ckt - 01	-149.43	03:00	04-07-2023	-98.11	13:00	30-07-2023	-313.24	
	2	Naubatpur - Patna (PG) ckt - 02	-450.62	03:00	04-07-2023	-98.85	13:00	30-07-2023	-314.58	
	3	Naubatpur - Ballia (PG) ckt - 01	329.91	03:00	04-07-2023	-1.78	15:00	15-07-2023	158.06	
	4	Naubatpur - Ballia (PG) ckt - 02	332.69	03:00	04-07-2023	1.05	15:00	15-07-2023	160.98	
	5	Jakkampur - Nabnagar (NPGC) ckt - 01	-681.73	15:00	18-07-2023	-141.76	08:00	29-07-2023	493.78	
	6	Jakkampur - Nabnagar (NPGC) ckt - 02	-659.48	20:00	17-07-2023	-141.96	08:00	29-07-2023	494.89	
	7	Jakkampur - Patna (PG) ckt - 0	428.78	23:00	09-07-2023	32.29	08:00	29-07-2023	370.05	
	8	Jakkampur - Patna (PG) ckt - 02	425.43	23:00	09-07-2023	31.93	08:00	29-07-2023	363.68	
B. Power Flow in 220kV transmission line										
220 kV (36 nos.)	1	Hajipur - Amnour ckt-01	-125.72	20:00	03-07-2023	-13.8	16:00	14-07-2023	-59.80	
	2	Hajipur - Amnour ckt-02	-125.91	20:00	03-07-2023	-8.41	18:00	29-07-2023	-58.72	
	3	Patna (PG) - Khagaul ckt-02	-66.06	14:00	20-07-2023	-0.18	08:00	18-07-2023	36.38	
	4	Patna (PG) - Khagaul ckt-03	-65.49	14:00	20-07-2023	-0.15	08:00	18-07-2023	36.20	
	5	Khijisaraï - Biharsharif ckt-01	-107.06	07:00	14-07-2023	-0.09	00:00	10-07-2023	-48.59	
	6	Khijisaraï - Biharsharif ckt-02	-107.11	07:00	14-07-2023	-0.06	00:00	10-07-2023	-50.11	
	7	Khijisaraï - Bodh Gaya ckt-01	-69.75	06:00	20-07-2023	0.02	09:00	19-07-2023	-38.10	
	8	Khijisaraï - Bodh Gaya ckt-02	-70.09	06:00	20-07-2023	0.02	07:00	19-07-2023	-38.03	
	9	Khijisaraï - Gaya (PG) ckt-01	-132.96	19:00	18-07-2023	-13.05	07:00	01-07-2023	-72.64	
	10	Khijisaraï - Gaya (PG) ckt-02	-133.13	19:00	18-07-2023	-13.15	07:00	01-07-2023	-72.68	
	11	Khijisaraï - Narhat ckt-01	134.54	10:00	15-07-2023	26.01	16:00	02-07-2023	74.28	
	12	Khijisaraï - Narhat ckt-02	127.96	21:00	19-07-2023	26.03	16:00	02-07-2023	73.95	
	13	Narhat - Sekhopur Sarai ckt-01	85.72	14:00	22-07-2023	7.55	21:00	11-07-2023	35.96	
	14	Narhat - Sekhopur Sarai ckt-02	85.58	14:00	22-07-2023	7.55	21:00	11-07-2023	35.94	
	15	Sekhopur Sarai - Haveli Kharagpur ckt-01	64.90	06:00	03-07-2023	0.8	16:00	06-07-2023	17.07	
	16	Sekhopur Sarai - Haveli Kharagpur ckt-02	57.80	14:00	22-07-2023	0.2	16:00	06-07-2023	14.61	
	17	Haveli Kharagpur - Goradih ckt-01	0.00	00:00	01-07-2023	0.00	00:00	01-07-2023	0.00	System connected but no power flow
	18	Haveli Kharagpur - Goradih ckt-02	0.00	00:00	01-07-2023	0.00	00:00	01-07-2023	0.00	
	19	Mokama-Biharsharif ckt-1	-97.40	20:00	11-07-2023	0.00	19:00	01-07-2023	-10.25	
	20	Mokama-Biharsharif ckt-2	-96.5	02:00	07-07-2023	0.00	19:00	01-07-2023	-10.27	
	21	Mokama-BTPS ckt-1	131.3	22:00	04-07-2023	0.00	15:00	01-07-2023	-15.30	
	22	Mokama-BTPS ckt-2	-117.8	08:00	21-07-2023	0.00	15:00	01-07-2023	-16.73	
	23	Ara (PG) Dumraon New - 01	-46.8	06:00	14-07-2023	0.16	15:00	05-07-2023	36.36	
	24	Ara (PG) Dumraon New - 02	-46.7	06:00	14-07-2023	0.20	15:00	05-07-2023	36.31	
	25	Dumraon New-Nadokhar - 01	-53.29	13:00	08-07-2023	0.07	08:00	05-07-2023	43.51	
	26	Dumraon New-Nadokhar - 02	-54.96	13:00	08-07-2023	-0.18	06:00	14-07-2023	42.10	
	27	Naubatpur - Ara (PG) Ckt-01	153.91	07:00	25-07-2023	41.65	17:00	04-07-2023	107.28	
	28	Naubatpur - Ara (PG) Ckt-02	153.78	07:00	25-07-2023	41.66	17:00	04-07-2023	107.33	
	29	Naubatpur - Khagaul Ckt-01	-50.66	08:00	18-07-2023	0.02	14:00	13-07-2023	0.39	
	30	Naubatpur - Khagaul Ckt-02	-50.7	08:00	18-07-2023	-0.02	12:00	19-07-2023	0.39	
	31	Naubatpur - Bhussaula Ckt-01	15.20	22:00	20-07-2023	1.44	11:00	02-07-2023	10.50	
	32	Naubatpur - Bhussaula Ckt-02	14.95	22:00	20-07-2023	1.24	11:00	02-07-2023	10.31	
	33	Naubatpur - Bihra Ckt-01	27.66	14:00	28-07-2023	-0.04	20:00	01-07-2023	13.02	
	34	Naubatpur - Bihra Ckt-02	27.54	13:00	24-07-2023	-0.04	20:00	01-07-2023	12.97	
	35	Jakkampur - Sipara ckt-03	97.46	15:00	20-07-2023	29.75	10:00	28-07-2023	64.20	
	36	Jakkampur - Khagaul ckt	195.17	22:00	17-07-2023	77.18	11:00	02-07-2023	136.25	
C. Power Flow in 132 kV transmission line										
132 kV (40 nos.)	1	Amnour - Siwan ckt-01	70.4	14:00	09-07-2023	0.01	11:00	10-07-2023	39.81	
	2	Amnour - Siwan ckt-02	70.57	14:00	09-07-2023	0.17	17:00	29-07-2023	40.76	
	3	Amnour - Chhapara ckt-01	49.45	14:00	07-07-2023	12.26	09:00	16-07-2023	27.06	
	4	Amnour - Chhapara ckt-02	58.29	00:00	30-07-2023	12.23	09:00	16-07-2023	27.99	
	5	Khijisaraï - Bodh Gaya ckt-03	43.03	14:00	19-07-2023	0.01	09:00	01-07-2023	2.24	
	6	Khijisaraï - Wajirani ckt - 01	56.76	00:00	23-07-2023	0.00	00:00	04-07-2023	19.08	
	7	Khijisaraï - Hulesjani ckt-01	64.25	15:00	23-07-2023	0.00	06:00	04-07-2023	12.50	
	8	Khijisaraï - Jehanabad ckt-01	108.95	13:00	15-07-2023	14.78	04:00	01-07-2023	58.72	
	9	Khijisaraï - Jehanabad ckt-02	90.76	20:00	12-07-2023	14.77	04:00	01-07-2023	58.30	
	10	Narhat - Nawadah ckt-01	53.91	15:00	23-07-2023	4.04	06:00	03-07-2023	28.22	
	11	Narhat - Nawadah ckt-02	53.69	15:00	23-07-2023	4.02	06:00	03-07-2023	28.15	
	12	Haveli Kharagpur - Suitangan ckt-01	0.00	00:00	01-07-2023	0.00	00:00	01-07-2023	0.01	System connected but no power flow
	13	Haveli Kharagpur - Suitangan ckt-02	0.00	00:00	01-07-2023	0.00	00:00	01-07-2023	0.01	
	14	Haveli Kharagpur - Lakhisarai ckt-01	16.80	13:00	22-07-2023	14.70	14:00	22-07-2023	0.06	
	15	Haveli Kharagpur - Lakhisarai ckt-02	16.90	13:00	22-07-2023	14.90	14:00	22-07-2023	0.05	
	16	Haveli Kharagpur - Jamalpur ckt-01	57.40	06:00	03-07-2023	10.5	17:00	21-07-2023	6.22	
	17	Haveli Kharagpur - Jamalpur ckt-02	52.80	16:00	04-07-2023	21.1	15:00	04-07-2023	1.34	
	18	Sekhopur Sarai - Sekhpura ckt-01	29.00	07:00	29-07-2023	3.2	18:00	02-07-2023	24.06	
	19	Sekhopur Sarai - Sekhpura ckt-02	44.90	12:00	21-07-2023	5.4	22:00	11-07-2023	25.04	
	20	Sekhopur Sarai - Biharsharif	0.00	00:00	01-07-2023	0.00	00:00	01-07-2023	0.01	
	21	Goradih - Suitangan ckt-01	-30.40	20:00	19-07-2023	0.00	00:00	01-07-2023	-5.66	
	22	Goradih - Suitangan ckt-02	-48.20	21:00	15-07-2023	0.00	00:00	14-07-2023	-6.76	
	23	Goradih - Kahelgaon ckt-01	50.80	17:00	08-07-2023	0.00	00:00	01-07-2023	0.78	
	24	Goradih - Kahelgaon ckt-02	30.60	20:00	19-07-2023	0.00	00:00	01-07-2023	0.56	
	25	Goradih - Sibour ckt-01	-31.10	17:00	08-07-2023	0.00	20:00	01-07-2023	-7.15	
	26	Goradih - Sibour ckt-02	-31.20	17:00	08-07-2023	0.00	20:00	01-07-2023	-7.03	
	27	Mokama-Halidih ckt-01	40.60	20:00	24-07-2023	0.00	17:00	02-07-2023	22.84	
	28	Mokama-Halidih ckt-02	41.00	20:00	24-07-2023	0.00	17:00	02-07-2023	23.10	
	29	Dumraon new (BGCL)-Dumraon (BSPTCL) ckt-01	39.16	18:00	28-07-2023	1.45	20:00	04-07-2023	24.55	
	30	Dumraon new (BGCL)-Dumraon (BSPTCL) ckt-02	32.52	18:00	28-07-2023	1.35	20:00	04-07-2023	24.13	
	31	Dumraon-Buxar ckt-01	35.36	12:00	29-07-2023	5.30	17:00	09-07-2023	22.30	
	32	Dumraon-Buxar ckt-02	35.32	12:00	29-07-2023	6.36	17:00	09-07-2023	22.42	
	33	Dumraon-Ara ckt-01	-21.89	08:00	20-07-2023	-5.82	16:00	22-07-2023	12.40	
	34	Dumraon-Ara ckt-02	-21.91	08:00	20-07-2023	-5.80	16:00	22-07-2023	12.42	
	35	Dumraon-Jagdishpur ckt-01	-13.89	19:00	17-07-2023	-0.01	04:00	13-07-2023	10.75	
	36	Dumraon-Jagdishpur ckt-02	-13.89	18:00	17-07-2023	-0.03	04:00	13-07-2023	10.73	
	37	Naubatpur - Masauri ckt - 01	33.54	15:00	18-07-2023	8.53	05:00	02-07-2023	23.13	
	38	Naubatpur - Masauri ckt - 02	33.36	15:00	18-07-2023	8.47	05:00	02-07-2023	21.90	
	39	Jakkampur-Sipara-03	36.4	15:00	18-07-2023	6.52	05:00	02-07-2023	26.03	
	40	Jakkampur-Fathua	47.33	16:00	04-07-2023	24.02	16:00	06-07-2023	44.35	

BIHAR GRID COMPANY LIMITED										
Loading level of Transmission Assets										
										Month:
										July 2023
Substation Details	S.No	MVA Capacity	Load						Avg of Month	Remark
			MW							
			Max	Time	Date	Min	Time	Date		
D. Power Flow in transformers										
Amnour GIS	1	Tr-01-160 MVA, 220-132 kV	133.09	23:00	26-07-2023	21.46	18:00	29-07-2023	90.59	
	2	Tr-02-160 MVA, 220-132 kV	155.12	23:00	26-07-2023	22.08	18:00	29-07-2023	91.95	
	3	Tr-01-50 MVA, 132-33 kV	28.04	23:00	24-07-2023	0.12	19:00	04-07-2023	19.74	
	4	Tr-02-50 MVA, 132-33 kV	28.16	23:00	24-07-2023	0.12	19:00	04-07-2023	19.84	
KhjirSarai GIS	1	Tr-01-160 MVA, 220-132 kV	135.07	11:00	27-07-2023	18.59	17:00	04-07-2023	84.56	
	2	Tr-02-160 MVA, 220-132 kV	139.04	11:00	27-07-2023	19.83	17:00	04-07-2023	87.30	
	3	Tr-01-50 MVA, 132-33 kV			Not Commissioned					
	4	Tr-02-50 MVA, 132-33 kV	21.45	05:00	22-07-2023	0.03	00:00	02-07-2023	11.96	
	5	Tr-03-50 MVA, 132-33 kV	16.78	06:00	30-07-2023	0.05	00:00	04-07-2023	8.98	
Narhat GIS	1	Tr-01-160 MVA, 220-132 kV	58.62	00:00	09-07-2023	4.92	06:00	03-07-2023	38.43	
	2	Tr-02-160 MVA, 220-132 kV	56.34	00:00	09-07-2023	3.96	06:00	03-07-2023	36.86	
	3	Tr-01-50 MVA, 132-33 kV	10.21	05:00	28-07-2023	0.10	19:00	11-07-2023	6.36	
	4	Tr-02-50 MVA, 132-33 kV	22.32	19:00	31-07-2023	0.03	15:00	04-07-2023	12.34	
Sekhopur Sarai GIS	1	Tr-01-160 MVA, 220-132 kV	33.40	07:00	11-07-2023	0.90	02:00	02-07-2023	26.94	
	2	Tr-02-160 MVA, 220-132 kV	81.20	07:00	29-07-2023	6.00	17:00	02-07-2023	54.26	
	3	Tr-01-50 MVA, 132-33 kV	11.80	08:00	04-07-2023	0.20	09:00	20-07-2023	2.75	
	4	Tr-02-50 MVA, 132-33 kV	24.50	18:00	26-07-2023	1.10	18:00	06-07-2023	17.45	
Haveli Kharagpur GIS	1	Tr-01-160 MVA, 220-132 kV	56.10	14:00	22-07-2023	1.80	16:00	06-07-2023	10.41	
	2	Tr-02-160 MVA, 220-132 kV	54.00	14:00	22-07-2023	1.10	13:00	09-07-2023	9.39	
	3	Tr-01-50 MVA, 132-33 kV	15.10	22:00	09-07-2023	1.60	07:00	03-07-2023	7.95	
	4	Tr-02-50 MVA, 132-33 kV	14.20	22:00	14-07-2023	1.20	13:00	03-07-2023	4.28	
Goradih GIS	1	Tr-01-160 MVA, 220-132 kV	0.00	00:00	01-07-2023	0.00	00:00	01-07-2023	0.00	
	2	Tr-02-160 MVA, 220-132 kV			Not Commissioned					
	3	Tr-01-50 MVA, 132-33 kV	20.30	07:00	26-07-2023	0.00	14:00	04-07-2023	11.22	
	4	Tr-02-50 MVA, 132-33 kV	36.80	05:00	20-07-2022	0.00	17:00	02-07-2023	13.68	
Mokama GIS	1	Tr-02-160 MVA, 220-132 kV	94.00	20:00	24-07-2023	3.90	17:00	02-07-2023	53.30	
	2	Tr-01-50 MVA, 132-33 kV			Not Commissioned					
	3	Tr-02-80 MVA, 132-33 kV	13.40	20:00	23-07-2023	0.00	07:00	01-07-2023	7.04	
Dumraon GIS	1	Tr-01-160 MVA, 220-132 kV	117.17	21:00	31-07-2023	18.3	17:00	04-07-2023	-76.54	
	2	Tr-01-160 MVA, 220-132 kV			Not Commissioned					
	3	Tr-01-80 MVA, 132-33 kV	27.5	08:00	28-07-2023	0.09	17:00	01-07-2023	-21.22	
	4	Tr-02-80 MVA, 132-33 kV	0.04	00:00	01-07-2023	0.03	20:00	01-07-2023	-0.01	
Naubalpur GIS	1	Tr-01-500 MVA, 400-220 kV	200.88	14:00	28-07-2023	86.81	01:00	02-07-2023	154.22	
	2	Tr-02-500 MVA, 400-220 kV	200.65	14:00	28-07-2023	87.06	01:00	02-07-2023	153.43	
	3	Tr-01-160 MVA, 220-132 kV	69.44	15:00	18-07-2023	17.17	05:00	02-07-2023	46.41	
	4	Tr-02-160 MVA, 220-132 kV			Not Commissioned					
	5	Tr-01-80 MVA, 132-33 kV	4.23	07:00	01-07-2023	0.08	14:00	14-07-2023	2.26	
	6	Tr-02-80 MVA, 132-33 kV	0.04	00:00	01-07-2023	0.01	00:00	06-07-2023	0.05	
Jakkampur GIS	1	Tr-01-500 MVA, 400-220 kV	204.07	23:00	27-07-2023	55	14:00	01-07-2023	133.52	
	2	Tr-02-500 MVA, 400-220 kV	146.83	16:00	24-07-2023	54.9	14:00	01-07-2023	129.07	
	3	Tr-01-160 MVA, 220-132 kV	76.91	16:00	20-07-2023	43.53	09:00	02-07-2023	64.04	
	4	Tr-02-160 MVA, 220-132 kV			Not Commissioned					
	5	Tr-01-80 MVA, 132-33 kV			Not Commissioned					
	6	Tr-02-80 MVA, 132-33 kV	0.12	20:00	20-07-2023	0.03	00:00	07-07-2023	0.08	
	7	Tr-03-80 MVA, 132-33 kV	0.09	10:00	07-07-2023	0.03	00:00	01-07-2023	0.03	
	8	Tr-04-80 MVA, 132-33 kV	0.09	17:00	27-07-2023	0.03	16:00	18-07-2023	0.06	
Bhuseul GIS	1	Tr-01 100 MVA, 220-33kV	20.66	23:00	19-07-2023	0.7	11:00	02-07-2023	20.59	
	2	Tr-02 100 MVA, 220-33kV	9.64	00:00	01-07-2023	0	12:00	01-07-2023	0.13	
Note	Negative sign(-) denote import of power and positive sign (+) denote export of power. For example (-) 125.91 MW in Hajipur - Amnour ckt-2 denotes import of 125.91 MW from Hajipur S-S to Amnour S-S and 70.57 MW in Amnour -Siwan ckt-2 denotes 70.57 MW from Amnour to Siwan S-S.									

Annexure-H



Bihar State Power Transmission Company Ltd., Patna
A subsidiary company of Bihar State Power (Holding) Company Ltd., Patna
CIN - U74110BR2012SGC018889
[SAVE ENERGY FOR BENEFIT OF SELF AND NATION]
Head Office, Vidyut Bhawan, Bailey Road, Patna - 800021.

Letter No.
File no. BGCL Loss Transmission 06/2022

Dated.....

From,

Chief Engineer (System Operation)
Bihar State Power Transmission Co. Ltd.

To

AGM- O&M (Commercial)
Bihar Grid Company Limited
2nd floor, Alankar place, Boring Road
Patna, 800001

Sub: Certification of Energy accounting of BGCL power system for the month of May 2022.
Ref: (i) Your office letter no. JV/P/BG/O&M/Energy meter/May 22/469 dated:13.06.2022.

Sir,

With reference to the subject mention above, monthly energy loss in the transmission system of BGCL is prepared as per the compliance of Directive 6: Metering and Energy Audit of "Transmission Tariff for FY 2021-22 for BGCL" dated:12.03.2021 of BERC. All the interface points of BGCL and BSPTCL are considered in the calculation of transmission loss of BGCL.

Monthly energy accounting and hence loss in BGCL system has been verified on the basis of energy meter data received from BGCL as well as from AMB in SAMASAT. In compliance of the above mentioned directive, transmission loss % in the BGCL power system for the month of May 2022 is calculated as 0.98 %.

End: as above

Yours faithfully

Sd/-

(A.K.Chaudhary)

Chief Engineer (System Operation)

Memo No. 360

Copy forwarded to CE (STU), BSPTCL/Director (operation), BSPTCL OSD to MD, BSPTCL for kind information.

Date 30.06.22

(A.K.Chaudhary)

Chief Engineer (System Operation)



Bihar State Power Transmission Company Ltd., Patna
A subsidiary company of Bihar State Power (Holding) Company Ltd., Patna
CIN - U74110BR2012SGC018889
[SAVE ENERGY FOR BENEFIT OF SELF AND NATION]
Head Office, Vidyut Dhawan, Bailey Road, Patna - 800021,

Letter No. 333
File no. BGCL/Loss/Transmission/06/2022

Dated 06-06-22

From,

Chief Engineer (System Operation)
Bihar State Power Transmission Co. Ltd.

To

AGM- O&M (Commercial)
Bihar Grid Company Limited
2nd floor, Alankar place, Boring Road
Patna, 800001

Sub: Certification of Energy accounting of BGCL power system for the month of April-2022.
Ref: Your office letter no. JV/PT/BG/O&M/Energy meter/April'22/426 dated 24.05.2022.

Sir,

With reference to the subject mention above, monthly energy loss in the transmission system of BGCL is prepared as per the compliance to Directive 6: Metering and Energy Audit, of "Transmission Tariff for FY 2021-22 for BGCL" dated 12.03.2021 of BERC. All the interface points of BGCL and BSPTCL are considered in the calculation of transmission loss of BGCL.

Monthly energy accounting and hence loss in BGCL system has been verified on the basis of data received from BGCL as well as from AMR in SAMAST. In compliance of the above mentioned directive, energy loss % in the BGCL power system for the month of April'22 is calculated as 1.45 %.

Encl: as above

Yours faithfully

(Kumar Prasant)

Chief Engineer (System Operation)

Memo No. 333

Copy forwarded to CE (STU), BSPTCL/ Director (operation), BSPTCL/ OSD to MD, BSPTCL for kind information and necessary action.

Date 06-06-22

(Kumar Prasant)

Chief Engineer (System Operation)



Bihar State Power Transmission Company Ltd., Patna
A subsidiary company of Bihar State Power (Holding) Company Ltd., Patna
CIN - U74110BR2012SGC018889
[SAVE ENERGY FOR BENEFIT OF SELF AND NATION]
Head Office, Vidyut Bhawan, Bailey Road, Patna - 800021,

Letter No. 425
File no: BGCL/Loss/Transmission/06/2022

Dated 02.08.22

From,

Chief Engineer (System Operation)
Bihar State Power Transmission Co. Ltd.

To

GM- O&M (Commercial)
Bihar Grid Company Limited
2nd floor, Alankar place, Boring Road
Patna, 800001

Speed
DST

Ch. Manoj (O&M)
PI note & file.
9/9/2022

Sub: Certification of Energy accounting of BGCL power system for the month of June-2022.
Ref: Your office letter no. JV/PT/BG/O&M/Energy meter/June'22/560 dated 18.07.2022.

Sir,

With reference to the subject mention above, monthly energy loss in the transmission system of BGCL is prepared as per the compliance to *Directive 6: Metering and Energy Audit, of "Transmission Tariff for FY 2021-22 for BGCL"* dated 12.03.2021 of BEREC. All the interface points of BGCL and BSPTCL are considered in the calculation of transmission loss of BGCL.

Monthly energy accounting and hence loss in BGCL system has been verified on the basis of data received from BGCL as well as from AMR in SAMAST. In compliance of the above mentioned directive, energy loss % in the BGCL power system for the month of April'22 is calculated as 1.52 %.

BGCL transmission loss received from BGCL is different from loss calculated by considering ABT meter data received in SAMAST module, is due to discrepancies in meter data entered for 132kV D/C Naubatpur - Masaurhi and 132 kV Haveli Kharagpur(BGCL) - Jamaipur Ckt-1 by BGCL. Also net injection from PGCIL to BGCL is considered for BGCL loss calculation in SAMAST module.

Encl: as above

Yours faithfully


(A.K. Chaudhary)

Chief Engineer (System Operation)





Bihar State Power Transmission Company Ltd
State Load Despatch Centre

MONTHLY BGCL LOSS ACCOUNTING REPORT JUN 2022			
S.No.	Name of Injecting Entities	Energy Injection Jun'22 (In MU)	Cumulative Energy Injection (Apr'22 - Jun'22) (In MU)
1	Total import from regional grid (purchases from ISGS, PX, bilateral etc.)	208.536029	693.758263
2	Sharing Of ISTS Transformer Loss (as per MoM Dated - 23.12.2021)	0.456299	2.385242
3	Import from BSPTCL	435.117239	1266.300321
Total Injection (All Sources) (1 + 2 + 3)		644.109567	1962.443826
S.No.	Name of Drawee Entities	Energy Drawal Jun'22 (In MU)	Cumulative Energy Drawal (Apr'22 - Jun'22) (In MU)
1	Export to BSPTCL	545.462863	1682.954479
2	Discom Drawal		
i	SBPDCL	63.030390	180.134890
ii	NBPDCL	25.837400	73.669300
	Total of Discom Drawal	88.867790	253.804190
Net Drawal of BGCL (In MU) (1 + 2)		634.330653	1936.758669
S.No.	Transmission Loss	Loss of JUN 2022	Cumulative Loss (Apr'22 - Jun'22)
1	(In MU)	9.778914	25.685157
2	(In %)	1.52	1.31
ILLUSTRATION:-	1. Transmission Loss of a month (In MU)= Total Injection(All Sources) of that month-Total Drawal of that month		
	2. Transmission Loss of a month (In%)=Transmission Loss of a month (In MU)*100/Total Injection(All Sources) of that month		
	3. Cumulative Transmission Loss (In MU)= Total Cumulative Injection(All Sources)-Total Cumulative Drawal		
	4. Cumulative Transmission Loss(In%)=Cumulative Transmission Loss(in MU)*100/Total Cumulative Injection(All Sources)		

MK-

Power injection from PGCIL to BGCL system for JUNE-2022				
Sl.No.	Line Name	Main Meter No	Check Meter No	Energy (MWH)
1	220 KV Patna(PG) - Khagaul Ckt-3	ER-1962-A	ER-1958-A	43680.816
2	220 KV GAYA(PG)-KHIZIRSARAI(BGCL)LINE-2	ER-1380-A	ER-1377-A	40750.4
3	220 KV Dumraon New - Ara (PG) Ckt-1	ER-1305-A	NP-8742-A	3756.48
4	220 KV Dumraon New - Ara (PG) Ckt-2	ER-1866-A	NP-8743-A	3705.6
5	400 KV Naubatpur - Balia Ckt-1	ER-1880-A	NP-6576-A	-194354.6836
6	400 KV Patna (PG) - Naubatpur Ckt-1	ER-1879-A	NP-7684-A	267390.7536
7	400 KV Patna (PG) - Naubatpur Ckt-2	ER-1848-A	NP-8634-A	268716.7172
8	400 KV Naubatpur - Balia Ckt-2	ER-1828-A	NP-6574-A	-195890.9017
9	220 KV Ara (PG) - Naubatput Ckt-2	ER-1829-A	ER-1888-A	-56795.104
10	220 KV D/C Naubatpur(BGCL) - Ara(PG) Ckt - 1	ER-1871-A	ER-1881-A	-56794.736
12	220 KV GAYA(PG)-KHIZIRSARAI(BGCL)LINE-1	ER-1375-A	ER-1373-A	40837.568
13	220 KV Patna(PG) - Khagaul Ckt-2	ER-1963-A	ER-1961-A	43533.12
Total power injection from PGCIL to BGCL system				208536.029
Total power injection from PGCIL to BGCL system (in MU)				208.536029

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Sharing of ISTS Transformer loss for the month on June-22

Sl. No.	Name of Metering Point	Meter No.	Metering end	Energy in MU
A	PGCIL ICT Injection Points to be shared			
1	400 KV BSF_ ICHV1	NP-6063-A	PG end	49.972054
2	400 KV BSF_ ICHV2	NP-6069-A	PG end	90.343272
3	400 KV BSF_ ICHV3	NP-6068-A	PG end	45.775751
4	400 KV BSF_ ICHV4	ER-1386-A	PG end	143.686544
5	400 KV GYA_ ICT-2	ER-1419-A	PG end	77.551876
6	400 KV GYA_ ICT-3	ER-1442-A	PG end	122.752544
7	400 KV GYA_ ICT-1	ER-1411-A	PG end	130.403599
8	400 KV PAT_ ICT-1	ER-1877-A	PG end	150.140069
9	400 KV PAT_ ICT-2	ER-1407-A	PG end	155.873453
10	400 KV PAT_ ICT-3	ER-1231-A	PG end	143.544799
	Total of PGCIL ICT Injection Points to be shared			1110.044
B	Drawal points used for calculating sharable PGCIL ICT loss			
1	220 KV Patna(PG) - Khagaul Ckt-3	ER-1962-A	PG end	43.680816
2	220 KV Patna(PG) - Khagaul Ckt-2	ER-1963-A	PG end	43.53312
3	220 KV Gaya (PG)- Dehri -2 T/L	NP-6098-A	PG end	49.299456
4	220 KV Gaya (PG)- Dehri -1 T/L	NP-7857-A	PG end	49.245552
5	220 KV Gaya (PG)- Bodhgaya -1 T/L	ER-1893-A	PG end	76.162304
6	220 KV Gaya (PG)- Bodhgaya -2 T/L	NP-8661-A	PG end	76.443712
7	220 KV Patna (PG)- Sipara -3 T/L	NP-8862-A	PG end	94.51392
8	220 KV Patna (PG)- Sipara -1 T/L	NP-7864-A	PG end	99.760672
9	220 KV Patna (PG)- Sipara -2 T/L	NP-7838-A	PG end	85.884128
10	220 KV Patna (PG)- Khagaul -1 T/L	NP-5832-A	PG end	40.575212
11	220 KV Patna (PG)- Fathua -1 T/L	ER-1921-A	PG end	39.958027
12	220 KV GAYA(PG)-KHIZIRSARAI(BGCL)LINE-1	ER-1375-A	PG end	40.837568
13	220 KV GAYA(PG)-KHIZIRSARAI(BGCL)LINE-2	ER-1380-A	PG end	40.7504
14	220 KV Biharsharif- Biharsharif (PG)-3 T/L	Q0384406	BSPTCL	45.59806
15	220 KV Biharsharif- Biharsharif (PG)-4 T/L	Q0384392	BSPTCL	143.00121
16	220 KV Biharsharif- Biharsharif (PG)-2 T/L	Q0384358	BSPTCL	89.65597
17	220 KV Biharsharif- Biharsharif (PG)-1 T/L	Q0384389	BSPTCL	49.62279
	Total of Drawal points used for calculating sharable PGCIL ICT loss			1108.523
C	Sharable PGCIL ICT Loss(A-B)			1.5209961
D	BGCL Share (30%)(C*0.3)			0.456299
E	BSPTCL share (70%)(C*0.7)			1.0646973

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Monthly T-T Energy Drawl total for the month of JUNE 2022

Sl. No.	Circle	Substation	Transmission Line	Meter S.No.	Energy (MJ)				Total Export	Total Import
					Actual Energy From BSPTCL	To BSPTCL	Corrected Energy From BSPTCL	To BSPTCL		
1	BEGUSARAI(N)	BTPS	220 KV BTPS-Mokama crt-1	Q0201227	24.814612	0.437975	0	0	24.814612	0.437975
2	BEGUSARAI(N)	BTPS	220 KV BTPS-Mokama crt-2	Q0200889	24.950183	0.426135	0	0	24.950183	0.426135
3	BEGUSARAI(S)	132/33 KV Jamalpur	132 KV JAMALPUR (NEW) GIS CRT -1	Q0201459	0.000005	17.154496	0	0	0.000005	17.154496
4	BEGUSARAI(S)	132/33 KV Jamalpur	132 KV JAMALPUR (NEW) GIS CRT -2	Q0201128	0	16.067103	0	0	0	16.067103
5	BEGUSARAI(S)	220/132 KV Jamalpur GIS	132 KV JAMALPUR (NEW)- Sultanganj CRT -1	ABB07205	0	0	0	0	0	0
6	BEGUSARAI(S)	220/132 KV Jamalpur GIS	132 KV JAMALPUR (NEW)- Lakhisarai CRT -1	ABB07211	0	0.129	0	0	0	0.129
7	BEGUSARAI(S)	220/132 KV Jamalpur GIS	132 KV JAMALPUR (NEW)- Lakhisarai CRT -2	ABB07210	0	0.125	0	0	0	0.125
8	BEGUSARAI(S)	220/132 KV Jamalpur GIS	132 KV JAMALPUR (NEW)- Sultanganj CRT -2	ABB07209	0	0	0	0	0	0
9	BHAGALPUR	132/33 KV Sabour	132 KV SABOUR (NEW) GIS CRT - 1	Q0200873	6.921138	0	0	0	6.921138	0
10	BHAGALPUR	132/33 KV Sabour	132 KV SABOUR (NEW) GIS CRT - 2	Q0238423	6.888809	0	0	0	6.888809	0
11	BHAGALPUR	220/132 KV Sabour New GIS(BGCL)	132 KV SABOUR (NEW)-Kahaigaon CRT - 1	ABB07242	0	0	0	0	0	0
12	BHAGALPUR	220/132 KV Sabour New GIS(BGCL)	32 KV SABOUR (NEW) GIS-SULTANGANJ CRT	ABB07241	0.001	0.008	0.001	0.008	0.001	0.008
13	BHAGALPUR	220/132 KV Sabour New GIS(BGCL)	32 KV SABOUR (NEW) GIS-SULTANGANJ CRT	ABB07240	0.001	0.007	0.001	0.007	0.001	0.007
14	BHAGALPUR	220/132 KV Sabour New GIS(BGCL)	132 KV SABOUR (NEW)-Kahaigaon CRT - 2	ABB07244	0	0	0	0	0	0
15	BHOJPUR	132/33 KV Buxar	KV Buxar (BSPTCL) - Dumtraon New (BGCL) CK	Q0332957	0	18.147912	0	0	18.147912	0
16	BHOJPUR	132/33 KV Buxar	KV Buxar (BSPTCL) - Dumtraon New (BGCL) CK	Q0332957	0	18.125122	0	0	18.125122	0
17	BHOJPUR	132/33 KV Dumtraon	132KV DUMRAON New(GIS)-DUMRAON CRT-2	Q0332763	0.001033	18.869959	0	0	0.001033	18.869959
18	BHOJPUR	220/132/33 KV Pusouli	220KV DUMRAON New(GIS)- Pusouli CRT-1	Q0200798	30.331451	0.019964	0	0	30.331451	0.019964
19	BHOJPUR	220/132/33 KV Pusouli	220KV DUMRAON New(GIS)-Pusouli CRT-2	Q0201378	30.415334	0.016028	0	0	30.415334	0.016028
20	BIHARSARIF	220/132/33 KV Biharsharif(S)	132 KV Sheikhpura (New) GIS CRT -1	Q0384385	61.163238	0	0	0	61.163238	0
21	BIHARSARIF	220/132/33 KV Biharsharif(S)	220 KV KHIZERSARAI GIS CRT-1	Q0384362	0	0	0	0	0	0
22	BIHARSARIF	220/132/33 KV Biharsharif(S)	220 KV KHIZERSARAI GIS CRT-2	Q0384399	61.753158	23.657337	0	0	61.753158	23.657337
23	BIHARSARIF	132/33 KV Nawada	132 KV GIS NARHAT LINE-1	Q0200525	0.000931	0	0	0	0.000931	0
24	BIHARSARIF	132/33 KV Nawada	132 KV GIS NARHAT LINE-2	Q0200687	0.008499	0	0	0	0.008499	0
25	BIHARSARIF	132/33 KV Shekhpura	132 KV Sheikhpura (New) GIS CRT -1	Q0384442	0	11.085606	0	0	11.085606	0
26	BIHARSARIF	132/33 KV Shekhpura	132 KV Sheikhpura (New) GIS CRT -2	Q0384417	0	0.004	0	0	0.004	0
27	GAYA (MAGADH)	220/132 KV Khizersarai GIS(BGCL)	132 KV KHIZERSARAI - Bodhgaya CRT -1	XC581465	0	25.52096	0	0	25.52096	0
28	GAYA (MAGADH)	220/132 KV Khizersarai GIS(BGCL)	132 KV KHIZERSARAI - Bodhgaya CRT -2	XC581825	0	0.030763	0	0	0.030763	0
29	GAYA (MAGADH)	220/132/33 KV Bodhgaya	220 KV KHIZERSARAI GIS CRT -1	Q0200713	21.996565	0.030763	0	0	21.996565	0.030763
30	GAYA (MAGADH)	220/132/33 KV Bodhgaya	220 KV KHIZERSARAI GIS CRT -2	Q0201012	22.255454	0.031388	0	0	22.255454	0.031388
31	GAYA (MAGADH)	132/33 KV Hulaseganj	132 KV KHILARSARAI-2	Q0200554	0	15.926314	0	0	15.926314	0
32	GAYA (MAGADH)	132/33 KV Jehanabad	132 KV Jehanabad -Khizersarai GIS CRT-1	Q0303062	0	33.588742	0	0	33.588742	0
33	GAYA (MAGADH)	132/33 KV Jehanabad	132 KV Jehanabad -Khizersarai GIS CRT-2	Q0287788	0	33.558739	0	0	33.558739	0
34	PATINA(EAST)	132/33 KV Hathidah	132KV Hathidah - Mokama (BGCL) crt-1	Q0332765	0.000002	23.410684	0	0	0.000002	23.410684
35	PATINA(EAST)	132/33 KV Hathidah	132KV Hathidah - Mokama (BGCL) crt-2	Q0332773	0.000001	23.665843	0	0	0.000001	23.665843
36	PATINA(EAST)	Mokama BGCL	220KV Biharsharif - Mokama (BGCL) crt-1	XC4859931	0.843	0.266	0.843	0.266	0.843	0.266
37	PATINA(EAST)	Mokama BGCL	220KV Biharsharif - Mokama (BGCL) crt-2	XC4859935	0.846	0.268	0.846	0.268	0.846	0.268
38	PATINA(EAST)	132/33 KV Masaudhi	32KV Naudabpur - Masudhi crt-1 (BAV NO-105	Q0332792	0	13.049659	0	0	13.049659	0
39	PATINA(EAST)	132/33 KV Masaudhi	32KV Naudabpur - Masudhi crt-2(BAV NO-103	Q0332951	0.000001	13.005882	0	0	0.000001	13.005882
40	PATINA(WEST)	220/132/33 KV Khagaul	220KV Patnal(PG)-Khagaul crt-II	ER-1961-A	0	43.5232	0	0	43.5232	0
41	PATINA(WEST)	220/132/33 KV Khagaul	220KV Patnal(PG)-Khagaul crt-III	ER-1958-A	0	43.38272	0	0	43.38272	0

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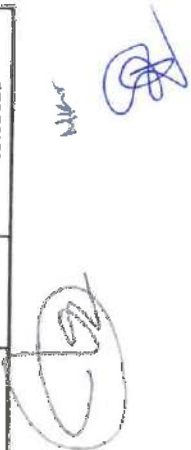
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42	PATNA(WEST)	Naubatpur (400 KV) BGCL	220 KV Naubatpur - Khagaul CKT - 1	X1199521	1.221	4.151	1.221	4.151	1.221	4.151	0
43	PATNA(WEST)	Naubatpur (400 KV) BGCL	0 KV Naubatpur GIS - Bihta New(BSPTCL) CKT	X1356730	0	0	0	0	0	0	0
44	PATNA(WEST)	Naubatpur (400 KV) BGCL	0 KV Naubatpur GIS - Bihta New(BSPTCL) CKT	X1356731	0	0	0	0	0	0	0
45	PATNA(WEST)	Naubatpur (400 KV) BGCL	220 KV Naubatpur - Khagaul CKT - 2	X1199520	0.738	4.238	0.738	4.238	0.738	4.238	4.238
46	SARANI(Chapra)	132/33 KV Chapra	132 KV AMNOUR-1	Q0238486	0.000002	27.915371	0	0	0.000002	0	27.915371
47	SARANI(Chapra)	132/33 KV Chapra	132 KV AMNOUR-2	Q0201457	0	28.089393	0	0	0	0	28.089393
48	SARANI(Chapra)	132/33 KV Siwan	132 KV AMNOUR-1	Q0201412	0.000001	27.169138	0	0	0.000001	0	27.169138
49	SARANI(Chapra)	132/33 KV Siwan	132 KV AMNOUR-2	Q0201620	0.000001	27.664553	0	0	0.000001	0	27.664553
50	VAISHALI(Hajipur)	220/132/33 KV Hazipur	220 KV AMNOUR CKT-1	Q0287786	70.578791	0.000001	0	0	70.578791	0	0.000001
51	VAISHALI(Hajipur)	220/132/33 KV Hazipur	220 KV AMNOUR CKT-2	Q0287797	69.38803	0	0	0	69.38803	0	0
			BSPTCL-BGCL (I)						435.117239		
			BGCL-BSPTCL (II)								545.462863

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Monthly Energy Drawl Total of SBPDCL Discom for the month of JUNE 2022												
Energy Drawal from 33 KV side of Transformers of BSPTCL												
Sl. No.	Circle	Division	Substation	Feeder / Metering Point	Meter S.No.	Energy (MU)						
						Actual Energy From Transco	To Transco	Energy Drawalin (MU)				
BGCL-DISCOM POINTS												
1	BEGUSARAI(S)	Munger	220/132 KV Jamalpur GIS	50 MVA 132/33 KV TRANSFORMER No.-1	XC579642	4.2012	0	4.2012				
2	BEGUSARAI(S)	Munger	220/132 KV Jamalpur GIS	50 MVA 132/33 KV TRANSFORMER No.-2	XC579645	2.073	0	2.073				
3	BHAGALPUR	Bhagalpur	220/132 KV Sabour New GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-1	X0383222	4.8298	0	4.8298				
4	BHAGALPUR	Bhagalpur	220/132 KV Sabour New GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	X0383223	8.8624	0	8.8624				
5	BHOJPUR	ARA	Dumraon New(BGCL)	80 MVA 132/33 KV TRANSFORMER No.-1	19007483	11.9147	0	11.9147				
6	BHOJPUR	ARA	Dumraon New(BGCL)	80 MVA 132/33 KV TRANSFORMER No.-2	19001312	0	0	0				
7	BIHARSARIF	NAWADA	220/132 KV Nawada GIS (BGCL)	50 MVA 132/33 KV TRANSFORMER No.-1	X8426777	4.2574	0	4.2574				
8	BIHARSARIF	NAWADA	220/132 KV Nawada GIS (BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	X8426776	9.565	0	9.565				
9	BIHARSARIF	NAWADA	220/132 KV Sheikhpura GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-1	XC579637	0.4793	0	0.4793				
10	BIHARSARIF	NAWADA	220/132 KV Sheikhpura GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	XC579636	5.6208	0	5.6208				
11	GAYA (MAGADH)	GAYA	220/132 KV Khisersarai GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	X8426797	2.1654	0	2.1654				
12	GAYA (MAGADH)	GAYA	220/132 KV Khisersarai GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-3	X8426798	6.4352	0	6.4352				
13	PATNA(EAST)	BARH	Mokama BGCL	80 MVA 132/33 KV TRANSFORMER No.-2	XF466571	2.62619	0	2.62619				
SUB TOTAL-BGCL								63.03039				



Monthly Energy Drawl Total of NBPDCCL Discom for the period JUN 2022
Energy Drawal from 33 kV side of Transformers of BSPTCL (BGCL-DISCOM POINTS)

Sl. No.	Circle	Substation	Feeder / Metering Point	Meter S.No.	Energy (MU)		
					Actual Energy From Transco	To Transco	Energy Drawalin (MU)
1	SARAN(Chapra)	220/132/33 KV Amnour GIS(BGCL)	50 MVA 132/33 kV TRANSFORMER No.-1	XB426779	12.9564	0	12.9564
2	SARAN(Chapra)	220/132/33 KV Amnour GIS(BGCL)	50 MVA 132/33 kV TRANSFORMER No.-2	XB426778	12.881	0	12.881
SUB TOTAL-BGCL							25.8374

(Signature)

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(Signature)

S. Prasad Poddar



Bihar State Power Transmission Company Ltd., Patna
A subsidiary company of Bihar State Power (Holding) Company Ltd., Patna
CIN – U74110BR2012SGC018889
[SAVE ENERGY FOR BENEFIT OF SELF AND NATION]
Head Office, Vidyut Bhawan, Bailey Road, Patna – 800021,

Reg.
post

Letter No. 556...../
File no: BGCL/Loss/Transmission/06/2022

Dated...07/10/2022

From,

Chief Engineer (System Operation)
Bihar State Power Transmission Co. Ltd.

To

GM- O&M (Commercial)
Bihar Grid Company Limited
2nd floor, Alankar place, Boring Road
Patna, 800001

Pl note & file.
10/10/2022

Sub: Certification of Energy accounting of BGCL power system for the month of August-2022.
Ref: Your office letter no. JV/PT/BG/O&M/Energy meter/August'22/703 dated 13.09.2022.


Sir,

With reference to the subject mention above, this is to mention that monthly energy loss in the transmission system of BGCL is prepared as per the compliance to *Directive 6: Metering and Energy Audit*, of "BGCL Tariff Order for FY2022-23" dated 25.03.2022 of BERC. All the interface points of BGCL and BSPTCL are considered in the calculation of transmission loss of BGCL.

Monthly energy accounting and hence loss in BGCL system has been verified on the basis of data received from BGCL as well as from AMR in SAMAST. In compliance of the above mentioned directive, transmission loss % in the BGCL power system for the month of August'22 is calculated as 1.32 %.

Encl: as above

Yours faithfully


07/10/22
(A.K. Chaudhary)

Chief Engineer (System Operation)




13.10.22



Bihar State Power Transmission Company Ltd
State Load Despatch Centre

MONTHLY BGCL LOSS ACCOUNTING REPORT AUG 2022			
S.No.	Name of Injecting Entities	Energy Injection Aug'22 (In MU)	Cumulative Energy Injection (Apr'22 - Aug'22) (In MU)
1	Total import from regional grid (purchases from ISGS, PX, bilateral etc.)	274.986480	1181.765497
2	Sharing Of ISTS Transformer Loss (as per MoM Dated - 23.12.2021)	0.831116	4.399182
3	Import from BSPTCL	534.972028	2292.644513
Total Injection (All Sources) (1 + 2 + 3)		810.789623	3478.809192
S.No.	Name of Drawee Entities	Energy Drawal Aug'22 (In MU)	Cumulative Energy Drawal (Apr'22 - Aug'22) (In MU)
1	Export to BSPTCL	690.685132	2969.623056
2	Discom Drawal		
i	SBPDCL	84.296250	341.498790
ii	NBPDCL	25.119300	125.184100
Total of Discom Drawal		109.415550	466.682890
Net Drawal of BGCL (In MU) (1 + 2)		800.100682	3436.305946
S.No.	Transmission Loss	Loss of AUG 2022	Cumulative Loss (Apr'22 - Aug'22)
1	(In MU)	10.688941	42.503246
2	(In %)	1.32	1.22
ILLUSTRATION:-	1. Transmission Loss of a month (in MU)= Total Injection(All Sources) of that month-Total Drawal of that month 2. Transmission Loss of a month (in%)=Transmission Loss of a month (in MU)*100/Total Injection(All Sources) of that month 3. Cumulative Transmission Loss (In MU)= Total Cumulative Injection(All Sources)-Total Cumulative Drawal 4. Cumulative Transmission Loss(in%)=Cumulative Transmission Loss(in MU)*100/Total Cumulative Injection(All Sources)		

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BGCL Import from regional grid for the month of August'22				
Sl.No.	Line Name	Main Meter No	Check Meter No	Energy (MWH)
1	220 KV Patna(PG) - Khagaul Ckt-3	ER-1962-A	ER-1958-A	46199.952
2	220 KV GAYA(PG)-KHIZIRSARAI(BGCL)LINE-2	ER-1380-A	ER-1377-A	56864.336
3	220 kv Dumraon New - Ara (PG) Ckt-1	ER-1305-A	NP-8742-A	7529.168
4	220 kv Dumraon New - Ara (PG) Ckt-2	ER-1866-A	NP-8743-A	7471.04
5	400 KV Naubatpur - Balia Ckt-1	ER-1880-A	NP-6576-A	-146579.849
6	400 KV Patna (PG) - Naubatpur Ckt-1	ER-1879-A	NP-7684-A	224909.737
7	400 KV Patna (PG) - Naubatpur Ckt-2	ER-1848-A	NP-8634-A	226404.5006
8	400 KV Naubatpur - Balia Ckt-2	ER-1828-A	NP-6574-A	-148803.9944
9	220 KV Ara (PG) - Naubatput Ckt-2	ER-1829-A	ER-1888-A	-74744.144
10	220 KV D/C Naubatpur(BGCL) - Ara(PG) Ckt - 1	ER-1871-A	ER-1881-A	-74398.944
11	400 KV D/C Nabinagar(NPGC)-Jakkanpur (BGCL) Ckt - 1	ER-1943-A	ER-1954-A	247441.7362
12	400 KV D/C Nabinagar(NPGC)-Jakkanpur (BGCL) Ckt - 2	ER-1944-A	ER-1956-A	247822.318
13	400 KV D/C Patna(PG)-Jakkanpur (BGCL) Ckt - 1	ER-1941-A	ER-1964-A	-224872.937
14	400 KV D/C Patna(PG)-Jakkanpur (BGCL) Ckt - 2	ER-1942-A	ER-1965-A	-223111.9916
15	220 KV GAYA(PG)-KHIZIRSARAI(BGCL)LINE-1	ER-1375-A	ER-1373-A	56816.48
16	220 KV Patna(PG) - Khagaul Ckt-2	ER-1963-A	ER-1961-A	46039.072
Total BGCL drawl from PGCIL (in MWH)				274986.480
Total BGCL drawl from PGCIL (in MU)				274.986480

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Sharing of ISTS Transformer loss for August'22

Sl. No.	Name of Metering Point	Meter No.	Metering end	Energy in MU
A	PGCIL ICT Injection Points to be shared			
1	400 KV BSF_ ICHV1	NP-6063-A	PG end	44.412765
2	400 KV BSF_ ICHV2	NP-6069-A	PG end	94.872528
3	400 KV BSF_ ICHV3	NP-6068-A	PG end	48.036436
4	400 KV BSF_ ICHV4	ER-1386-A	PG end	149.442035
5	400 KV GYA_ ICT-2	ER-1419-A	PG end	82.718814
6	400 KV GYA_ ICT-3	ER-1442-A	PG end	131.095417
7	400 KV GYA_ ICT-1	ER-1411-A	PG end	139.198362
8	400 KV PAT_ ICT-1	ER-1877-A	PG end	145.424414
9	400 KV PAT_ ICT-2	ER-1407-A	PG end	151.382035
10	400 KV PAT_ ICT-3	ER-1231-A	PG end	139.378435
	Total of PGCIL ICT Injection Points to be shared			1125.9613
B	Drawal points used for calculating sharable PGCIL ICT loss			
1	220 KV GAYA(PG)-KHIZIRSARAI(BGCL)LINE-1	ER-1375-A	PG end	56.81648
2	220 KV Patna(PG) - Khagaul Ckt-3	ER-1962-A	PG end	46.199952
3	220 KV Patna(PG) - Khagaul Ckt-2	ER-1963-A	PG end	46.039072
4	220 KV Patna (PG)- Fathua -1 T/L	ER-1921-A	PG end	32.60198
5	220 KV GAYA(PG)-KHIZIRSARAI(BGCL)LINE-2	ER-1380-A	PG end	56.864336
6	220 KV Gaya (PG)- Dehri -2 T/L	NP-6098-A	PG end	47.749072
7	220 KV Gaya (PG)- Dehri -1 T/L	NP-7857-A	PG end	46.942528
8	220 KV Gaya (PG)- Bodhgaya -1 T/L	ER-1893-A	PG end	68.070512
9	220 KV Gaya (PG)- Bodhgaya -2 T/L	NP-8661-A	PG end	77.294784
10	220 KV Patna (PG)- Sipara -3 T/L	NP-8862-A	PG end	95.294912
11	220 KV Patna (PG)- Sipara -1 T/L	NP-7864-A	PG end	92.14544
12	220 KV Patna (PG)- Sipara -2 T/L	NP-7838-A	PG end	80.56072
13	220 KV Patna (PG)- Khagaul -1 T/L	NP-5832-A	PG end	42.036912
14	220 KV Biharsharif- Biharsharif (PG)-3 T/L	Q0384406	BSPTCL	47.83683
15	220 KV Biharsharif- Biharsharif (PG)-4 T/L	Q0384392	BSPTCL	148.60775
16	220 KV Biharsharif- Biharsharif (PG)-2 T/L	Q0384358	BSPTCL	94.05972
17	220 KV Biharsharif- Biharsharif (PG)-1 T/L	Q0384389	BSPTCL	44.06984
	Total of Drawal points used for calculating sharable PGCIL ICT loss			1123.1909
C	Sharable PGCIL ICT Loss(A-B)			2.7703857
D	BGCL Share (30%)(C*0.3)			0.831116
E	BSPTCL Share (70%)(C*0.7)			1.93927

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Monthly T-I Energy Drawl total for the period AUG 2022

Sl. No.	Circle	Division	Substation	Transmission Line	Meter S. No.	Energy (MWh)			Total Energy		NetIn (MWh)
						Actual Energy From BSPTCL	To BSPTCL	Corrected Energy From BSPTCL	Total Export	Total Import	
1	BEGUSARAINI	BEGUSARAI	BTPS	220 KV BTPS-Mokama dkt-1	C0201227	46.484519	4.32791	0	46.48459	4.32791	42.156728
2	BEGUSARAINI	BEGUSARAI	BTPS	220 KV BTPS-Mokama dkt-2	C0200889	46.674136	4.437551	0	46.674136	4.437551	42.236585
3	BEGUSARAINI	Munger	132/33 KV Jamalpur	132 KV JAMALPUR (NEW) GIS CKT -1	C0201459	16.379764	0	0	16.379764	0	-16.379764
4	BEGUSARAINI	Munger	132/33 KV Jamalpur	132 KV JAMALPUR (NEW) GIS CKT -2	C0201128	16.379764	0	0	16.379764	0	-16.379764
5	BEGUSARAINI	Munger	220/132 KV Jamalpur GIS	132 KV JAMALPUR (NEW)-Lakhisarai CKT -1	A9807211	0	0.134	0	0	0.134	-0.134
6	BEGUSARAINI	Munger	220/132 KV Jamalpur GIS	132 KV JAMALPUR (NEW)-Sultanganj CKT -1	A9807205	0.001	0.169	0.001	0.001	0.169	-0.168
7	BEGUSARAINI	Munger	220/132 KV Jamalpur GIS	132 KV JAMALPUR (NEW)-Sultanganj CKT -2	A9807209	0.016	0.016	0.016	0.016	0.016	-0.016
8	BEGUSARAINI	Munger	220/132 KV Jamalpur GIS	132 KV JAMALPUR (NEW)-Lakhisarai CKT -2	A9807210	8.252175	0	0	8.252175	0	8.252175
9	BHAGALPUR	Bhagalpur	132/33 KV Sabour	132 KV SABOUR (NEW) GIS CKT -1	C0200873	8.216679	0	0	8.216679	0	8.216679
10	BHAGALPUR	Bhagalpur	132/33 KV Sabour	132 KV SABOUR (NEW) GIS CKT -2	C0200873	0	0.281	0	0	0.281	-0.281
11	BHAGALPUR	Bhagalpur	220/132 KV Sabour New GIS(BGCL)	132 KV SABOUR (NEW)-Kahalgaon CKT -1	A9807242	0.001	0.007	0.001	0.001	0.007	-0.006
12	BHAGALPUR	Bhagalpur	220/132 KV Sabour New GIS(BGCL)	132 KV SABOUR (NEW) GIS-SULTANGANJ CKT -1	A9807241	3.243	0.006	3.243	3.243	0.006	3.137
13	BHAGALPUR	Bhagalpur	220/132 KV Sabour New GIS(BGCL)	132 KV SABOUR (NEW) GIS-SULTANGANJ CKT -2	A9807240	0.001	0.006	0.001	0.001	0.006	-0.265
14	BHAGALPUR	Bhagalpur	220/132 KV Sabour New GIS(BGCL)	132 KV SABOUR (NEW)-Kahalgaon CKT -2	A9807244	0.001	0.266	0.001	0.266	0.001	9.513318
15	BHOJIPUR	ARA	132/33 KV Ara	132KV D/C DUMRAON NEW(BGCL)-ARA (BSPTCL) CKT-01	C0201205	9.470216	0.002367	0	9.470216	0.002367	9.467849
16	BHOJIPUR	ARA	132/33 KV Ara	132KV D/C DUMRAON NEW(BGCL)-ARA (BSPTCL) CKT-02	C0201205	0	0	0	0	0	-26.430951
17	BHOJIPUR	ARA	132/33 KV Buxar	132KV D/C DUMRAON NEW(BGCL)-ARA (BSPTCL) CKT -1	C0332961	0	26.430951	0	0	26.430951	-26.430951
18	BHOJIPUR	ARA	132/33 KV Buxar	132KV D/C DUMRAON NEW(BGCL)-ARA (BSPTCL) CKT -2	C0332961	0	26.391659	0	0	26.391659	-26.391659
19	BHOJIPUR	ARA	132/33 KV Dumraon	132KV DUMRAON NEW(GIS)-DUMRAON CKT -1	C0332957	0.005333	0	0	0.005333	0	-15.248532
20	BHOJIPUR	ARA	132/33 KV Dumraon	132KV DUMRAON NEW(GIS)-DUMRAON CKT -2	C0332957	0.005333	0	0	0.005333	0	-15.248532
21	BHOJIPUR	ARA	Dumraon New(BGCL)	132KV DUMRAON NEW(BGCL)-JAGDISHPUR(BSPTCL) CKT-01	X1199535	3.387	0.032	3.387	3.387	0.032	3.355
22	BHOJIPUR	ARA	220/132/33 KV Pusouli	132KV D/C DUMRAON NEW(BGCL)-JAGDISHPUR(BSPTCL) CKT-02	X1199536	3.39	0.06	3.39	3.39	0.06	3.33
23	BHOJIPUR	MOHANIA	220/132/33 KV Pusouli	220KV DUMRAON New(GIS)-Pusouli CKT-1	C0201378	28.719641	0.052746	0	28.719641	0.052746	28.466895
24	BHOJIPUR	MOHANIA	220/132/33 KV Pusouli	220KV DUMRAON New(GIS)-Pusouli CKT-2	C0201378	0	0	0	0	0	0
25	BHARSARIF	BHARSARIF	220/132/33 KV Biharsharif(SG)	132 KV Sheikhpura (New) GIS CKT -1	C0384385	65.14166	0	0	65.14166	0	65.14166
26	BHARSARIF	BHARSARIF	220/132/33 KV Biharsharif(SG)	220 KV KHIZERSARAI GIS CKT -1	C0384382	65.764727	0	0	65.764727	0	65.764727
27	BHARSARIF	BHARSARIF	220/132/33 KV Biharsharif(SG)	220 KV KHIZERSARAI GIS CKT -2	C0384382	27.800493	0	0	27.800493	0	-27.800493
28	BHARSARIF	MAMADA	132/33 KV Nawada	132KV D/C DUMRAON NEW(BGCL)-JAGDISHPUR(BSPTCL) CKT-01	C0200687	0.002817	25.116054	0	0.002817	25.116054	-25.116054
29	BHARSARIF	MAMADA	132/33 KV Nawada	132KV D/C DUMRAON NEW(BGCL)-JAGDISHPUR(BSPTCL) CKT-02	C0200687	0	0	0	0	0	-14.95377
30	BHARSARIF	MAMADA	132/33 KV Nawada	220KV DUMRAON New(GIS)-Pusouli CKT-1	C0384417	0	5.29902	0	0	5.29902	-5.29902
31	BHARSARIF	MAMADA	132/33 KV Nawada	220KV DUMRAON New(GIS)-Pusouli CKT-2	C0384417	0	5.29902	0	0	5.29902	-5.29902
32	GAYA (MAGADH)	GAYA	220/132/33 KV Bodhgaya	132 KV Sheikhpura (New) GIS CKT -1	XC581875	12.242	0.013	12.242	12.242	0.013	12.229
33	GAYA (MAGADH)	GAYA	220/132/33 KV Bodhgaya	132 KV KHIZERSARAI GIS CKT -1	C0200713	24.216624	0.012692	1.912601	24.216624	0.012692	24.203932
34	GAYA (MAGADH)	GAYA	220/132/33 KV Bodhgaya	220 KV KHIZERSARAI GIS CKT -2	C0200554	6.94155	0	0	6.94155	0	6.94155
35	GAYA (MAGADH)	GAYA	132/33 KV Hulasganj	132KV KHIZERSARAI-2	C0383062	0.000001	0	0	0.000001	0	-40.433837
36	GAYA (MAGADH)	JEHANABAD	132/33 KV Jehanabad	132 KV Jehanabad -Khizerasari GIS CKT-1	C0287788	0	40.420044	0	0	40.420044	-40.420044
37	GAYA (MAGADH)	JEHANABAD	132/33 KV Jehanabad	132KV KHIZERSARAI-1	C0383765	0.000026	17.067911	0	0.000026	17.067911	-17.067911
38	GAYA (MAGADH)	JEHANABAD	132/33 KV Hatkhidab	132KV Hatkhidab - Mokama (BGCL) dkt-1	C0332773	0.000007	17.207773	0	0.000007	17.207773	-17.207766
39	GAYA (MAGADH)	JEHANABAD	132/33 KV Hatkhidab	132KV Hatkhidab - Mokama (BGCL) dkt-2	XE485931	7.978	31.118	7.978	7.978	31.118	-23.14
40	PATNA(EAST)	BARH	132/33 KV Hatkhidab	220KV Bharatpur - Mokama (BGCL) dkt-1	XE485935	8.018	30.927	8.018	8.018	30.927	-22.909
41	PATNA(EAST)	BARH	132/33 KV Hatkhidab	220KV Biharsharif - Mokama (BGCL) dkt-1	XE485935	11.183352	0	0	0.001651	11.183352	-11.181701
42	PATNA(EAST)	BARH	132/33 KV Hatkhidab	132KV Naubatpur - Masahard dkt-1 (BAY NO-105)	C0332951	0.001646	11.183352	0	0.001646	11.183352	-11.155234
43	PATNA(EAST)	BARH	132/33 KV Hatkhidab	132KV Naubatpur - Masahard dkt-2 (BAY NO-103)	C0332951	0.001646	11.183352	0	0.001646	11.183352	-20.337
44	PATNA(EAST)	BARH	132/33 KV Hatkhidab	132KV Naubatpur - Masahard dkt-1	A9801710	0	20.337	0	0	20.337	-20.337
45	PATNA(EAST)	BARH	132/33 KV Hatkhidab	132KV Naubatpur - Masahard dkt-2	XC532988	0	26.936	0	0	26.936	-26.936
46	PATNA(EAST)	BARH	132/33 KV Hatkhidab	132 KV S/C FATIHA - JAKKANPUR (BGCL) TL	X1356730	2.969	0.218	2.969	2.969	0.218	2.751
47	PATNA(EAST)	BARH	132/33 KV Hatkhidab	220 KV Naubatpur GIS - Bihra New(BSPTCL) CKT -1	X1356731	2.901	0.235	2.901	2.901	0.235	2.666
48	PATNA(EAST)	BARH	132/33 KV Hatkhidab	220 KV Naubatpur GIS - Bihra New(BSPTCL) CKT -2	ER-1961-A	46.05088	0	46.05088	0	46.05088	-46.05088
49	PATNA(EAST)	BARH	132/33 KV Hatkhidab	220KV Patna(PG)-Khagaul dkt-1	ER-1958-A	0	45.89632	0	0	45.89632	-45.89632
50	PATNA(EAST)	BARH	132/33 KV Hatkhidab	220KV Patna(PG)-Khagaul dkt-2	X1199531	0	0	0	0	0	0
51	PATNA(EAST)	BARH	132/33 KV Hatkhidab	220KV D/C BHUSAULA-NAUBATPUR CKT-1	X1199531	6.437	0.528	6.437	6.437	0.528	5.909
52	PATNA(EAST)	BARH	132/33 KV Hatkhidab	220 KV Naubatpur - Khagaul CKT -1	X1199520	6.564	6.564	6.564	6.564	6.564	6.03
53	PATNA(EAST)	BARH	132/33 KV Hatkhidab	220KV D/C BHUSAULA-NAUBATPUR CKT -2	X1199532	0	0	0	0	0	0
54	PATNA(EAST)	BARH	132/33 KV Hatkhidab	220KV D/C BHUSAULA-NAUBATPUR CKT -2	C0201386	0	29.205165	0	0	29.205165	-29.205165
55	SARAN(Chepra)	Chepra	132/33 KV Chepra	132 KV AMNHOUR-1							

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Energy Drawal from 33 KV side of Transformers of BGCL

Monthly Energy Drawl Total of SBPDCL Discom for the period AUG 2022

Sl. No.	Circle	Division	Substation	Feeder / Metering Point	Meter S.No.	Actual Energy		Energy Drawal (In MU)	
						From BGCL	To BGCL		
						Energy (MU)			
1	BEGUSARAI(S)	Munger	220/132 KV Jamalpur GIS	50 MVA 132/33 KV TRANSFORMER No.-1	XC579642	5.0941	0	5.0941	
2	BEGUSARAI(S)	Munger	220/132 KV Jamalpur GIS	50 MVA 132/33 KV TRANSFORMER No.-2	XC579645	3.9704	0	3.9704	
3	BHAGALPUR	Bhagalpur	220/132 KV Sabour New GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-1	X0383222	8.7989	0	8.7989	
4	BHAGALPUR	Bhagalpur	220/132 KV Sabour New GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	X0383223	10.7503	0	10.7503	
5	BHOJPUR	ARA	Dumraon New(BGCL)	80 MVA 132/33 KV TRANSFORMER No.-1	19007483	12.9162	0	12.9162	
6	BHOJPUR	ARA	Dumraon New(BGCL)	80 MVA 132/33 KV TRANSFORMER No.-2	19001312	0	0	0	
7	BIHARSARIF	NAWADA	220/132 KV Nawada GIS (BGCL)	50 MVA 132/33 KV TRANSFORMER No.-1	XB426777	4.8704	0	4.8704	
8	BIHARSARIF	NAWADA	220/132 KV Nawada GIS (BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	XB426776	10.1832	0	10.1832	
9	BIHARSARIF	NAWADA	220/132 KV Sheikhpura GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-1	XC579637	0.54725	0	0.54725	
10	BIHARSARIF	NAWADA	220/132 KV Sheikhpura GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	XC579636	8.7778	0	8.7778	
11	GAYA (MAGADH)	GAYA	220/132 KV Khisersarai GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	XB426797	6.033	0	6.033	
12	GAYA (MAGADH)	GAYA	220/132 KV Khisersarai GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-3	XB426798	7.0928	0	7.0928	
13	PATNA(EAST)	BARH	Mokama BGCL	80 MVA 132/33 KV TRANSFORMER No.-2	XF466571	3.5719	0	3.5719	
14	PATNA(WEST)	Patna(West)	Maubatpur (400 KV) BGCL	80 MVA TRANSFORMER-01	X1198657	1.69	0	1.69	
SUB TOTAL-BGCL (IV)									84.29625

Monthly Energy Drawl Total of NBPDCL Discom for the period AUG 2022

1	SARAM(Chapra)	Chapra	220/132/33 KV Amnour GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-1	XB426779	12.6291	0	12.6291
2	SARAM(Chapra)	Chapra	220/132/33 KV Amnour GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	XB426778	12.4902	0	12.4902
SUB TOTAL-BGCL (IV)								25.1193

(Signature)

W/m

(Signature)

Sl. No.	Consumer Name	Address	Transformer	132 KV AMB	220 KV AMB	00201477	00201478	00201479	00201480	00201481	00201482	00201483	00201484	00201485	00201486	00201487	00201488	00201489	00201490
58	VAISHALI(Hajipur)	Hajipur	132/33 KV Chapra	132 KV AMB	220 KV AMB	00201477	00201478	00201479	00201480	00201481	00201482	00201483	00201484	00201485	00201486	00201487	00201488	00201489	00201490
60	VAISHALI(Hajipur)	Hajipur	132/33 KV Chapra	132 KV AMB	220 KV AMB	00201477	00201478	00201479	00201480	00201481	00201482	00201483	00201484	00201485	00201486	00201487	00201488	00201489	00201490
BSPTCL-BGCL (I)																			
BGCL-BSPTCL (II)																			

Note:- (i) 220KV D/C Maubapur-Bhusola Ckt-1 & Ckt-2 has been removed from BGCL energy accounting as this is BGCL-BGCL (Internal) T/L of BGCL.
(ii) Metering of BGCL from PGCIL T/L has been considered for BGCL energy accounting as per MOM dated 18.05.2022.
(iii) BSPTCL metering and considered for 132KV DUMRAON NEW(BGCL)-ARA (BSPTCL) CKT-01 & 02 and BGCL metering and considered for 132KV DUMRAON NEW(BGCL)-AGDISHUPH(BSPTCL) CKT-01 & CKT-02 on the basis of MOM dated 18.05.2022 prepared on the basis of line length.

(2)

[Signature]



Bihar State Power Transmission Company Ltd., Patna
A subsidiary company of Bihar State Power (Holding) Company Ltd., Patna
CIN – U74110BR2012SGC018889
[SAVE ENERGY FOR BENEFIT OF SELF AND NATION]
Head Office, Vidyut Bhawan, Bailey Road, Patna – 800021,

Letter No. 182
File no. BGCL/Cos/Transmission/06/2022

Dated 01-03-23

From,

Chief Engineer (System Operation)
/ **Bihar State Power Transmission Co. Ltd.**

To

GM- O&M (Commercial)
Bihar Grid Company Limited
2nd floor, Alankar palace, Boring Road
Patna, 800001, Mob: 8102924200

Sub: Certification of Energy accounting of BGCL power system for the month of January'23.
Ref: Your office letter no. JV/PT/BG/O&M/Energy meter/ January'23/96 dated 07.02.2023.

Sir,

With reference to the subject mention above, this is to mention that monthly energy loss in the transmission system of BGCL is prepared as per the compliance to *Directive 6: Metering and Energy Audit*, of "BGCL Tariff Order for FY-2022-23" dated 25.03.2022 of BERCL. All the interface points of BGCL and BSPCL are considered in the calculation of transmission loss of BGCL power system.

Monthly energy accounting and hence loss in BGCL system has been verified on the basis of data received from BGCL as well as from AMR in SAMAST. In compliance of the above mentioned directive, transmission loss % in the BGCL power system for the month of January'23 is calculated as 1.53 %.

The revised BGCL transmission loss accounting report for Oct'22 to Dec'22 have been attached as cumulative loss changed (because of software issues but BGCL transmission losses for these months are the same as submitted before).

Encl: As above

Yours faithfully


(A.K. Chaudhary)

Chief Engineer (System Operation)





Bihar State Power Transmission Company Ltd
State Load Despatch Centre

MONTHLY BGCL LOSS ACCOUNTING REPORT JAN 2023

S.No.	Name of Injecting Entities	Energy Injection Jan'23 (In MU)	Cumulative Energy Injection (Apr'22 - Jan'23) (In MU)
1	Total Import from regional grid (purchases from ISGS, PX, bilateral etc.)	273.252871	2289.332107
2	Sharing Of ISTS Transformer Loss (as per MoM Dated - 23.12.2021)	0.207312	7.369336
3	Import from BSPTCL	402.610652	4402.375077
Total Injection (All Sources) (1 + 2 + 3)		676.270835	6699.076520

S.No.	Name of Drawee Entities	Energy Drawal Jan'23 (In MU)	Cumulative Energy Drawal (Apr'22 - Jan'23) (In MU)
1	Export to BSPTCL	583.626805	5737.671259
2	Discom Drawal		
	SBPDCL	63.790461	657.360511
	NBPCL	18.484092	219.252592
	Total of Discom Drawal	82.274553	876.613103
Net Drawal of BGCL (In MU) (1 + 2)		665.901358	6614.284362

S.No.	Transmission Loss	Loss of JAN 2023	Cumulative Loss (Apr'22 - Jan'23)
1	(In MU)	10.369477	84.792158
2	(In %)	1.53	1.27

ILLUSTRATION:-	
1.	Transmission Loss of a month (in MU)= Total Injection(All Sources) of that month-Total Drawal of that month
2.	Transmission Loss of a month (in%)=Transmission Loss of a month (in MU)*100/Total Injection(All Sources) of that month
3.	Cumulative Transmission Loss (in MU)= Total Cumulative Injection(All Sources)-Total Cumulative Drawal
4.	Cumulative Transmission Loss(in%)=Cumulative Transmission Loss(in MU)*100/Total Cumulative Injection(All Sources)

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UKR



Bihar State Power Transmission Company Ltd., Patna
 A subsidiary company of Bihar State Power (Holding) Company Ltd., Patna
 CIN - U74110BR2012SCC018889
 [SAVE ENERGY FOR BENEFIT OF SELF AND NATION]
 Head Office, Viyayut Bhawan, Bailey Road, Patna - 800021.

Letter No. 502
 of 13/09/2022

Dated 07-09-22

From: Chief Engineer (System Operation)
 Bihar State Power Transmission Co. Ltd.

*Ch. Mayr (O&M)
 Pl note & fig.*

To: ✓ AGM- O&M (Commercial)
 Bihar Grid Company Limited
 2nd floor, Alankar place, Boring Road
 Patna - 800001

12/9/2022

Regd

Sub: Verification of Energy accounting of BGCL power system for the month of July 2022.
 Ref: Bihar Order No. 10/P/AG/O&M/Energy meter/July 22/668 dated: 29.08.2022.

Sir,

With reference to the subject mention above, monthly energy loss in the transmission system of BGCL is prepared as per the compliance of Directive on Metering and Energy Audit of "Transmission Tariff for FY 2021-22 for BGCL" dated: 12.03.2021 of BERC. All the interface points of BGCL and BSPTCL are considered in the calculation of transmission loss of BGCL.

Monthly energy accounting and hence loss in BGCL system has been verified on the basis of energy meter data received from BGCL as well as from AMR in SAMASA1. In compliance of the above mentioned directive, energy loss % in the BGCL power system for the month of July 2022 is calculated as 0.87 %.

Encl: as above

Yours faithfully

(Signature)
 07/09/22
 (A.K. Choudhary)

Chief Engineer (System Operation)

(Signature)





Binar State Power Transmission Company Ltd
State Load Despatch Centre

MONTHLY BGCL LOSS ACCOUNTING REPORT JUL 2022			
S.No.	Name of Injecting Entities	Energy Injection Jul'22 (In MU)	Cumulative Energy Injection (Apr'22 - Jul'22) (In MU)
1	Total import from regional grid (purchases from SGS, PX, bilateral etc.)	213.020754	906.779017
2	Sharing of ISTS Transformer Loss (as per MoM Dated - 23.12.2021)	1.182825	3.568066
3	Import from BSPTCL	491.372164	1757.672485
Total Injection (All Sources) (1 + 2 + 3)		705.575743	2668.019569

S.No.	Name of Drawee Entities	Energy Drawal Jul'22 (In MU)	Cumulative Energy Drawal (Apr'22 - Jul'22) (In MU)
1	Export to BSPTCL	595.983445	2278.937924
2	Discom Drawal		
	SEPDCL	77.067650	257.202540
	NBPDCL	26.395500	100.004800
	Total of Discom Drawal	103.463150	357.267340
Net Drawal of BGCL (In MU) (1 + 2)		699.446595	2636.205264

S.No.	Transmission Loss	Loss of JUL 2022	Cumulative Loss (Apr'22 - Jul'22)
1	(in MU)	6.129148	31.814305
2	(in %)	0.87	1.19

ILLUSTRATION:-

- Transmission Loss of a month (in MU) = Total Injection (All Sources) of that month - Total Drawal of that month
- Transmission Loss of a month (in %) = $\frac{\text{Transmission Loss of a month (in MU)} \times 100}{\text{Total Injection (All Sources) of that month}}$
- Cumulative Transmission Loss (in MU) = Total Cumulative Injection (All Sources) - Total Cumulative Drawal
- Cumulative Transmission Loss (in %) = $\frac{\text{Cumulative Transmission Loss (in MU)} \times 100}{\text{Total Cumulative Injection (All Sources)}}$

Power Injection from PGCIL to BGCL System				
Sl.No.	Line Name	Main Meter No	Check Meter No	Energy (MWH)
1	400 KV D/C Nabinagar(NPGC)-Jakkanpur (BGCL) Ckt - 2	ER-1944-A	ER-1956-A	229978.6096
2	220 KV GAYA(PG)-KHIZIRSARAI(BGCL)LINE-2	ER-1380-A	ER-1377-A	54874.256
3	400 KV D/C Patna(PG)-Jakkanpur (BGCL) Ckt - 2	ER-1942-A	ER-1965-A	-224344.7916
4	220 KV D/C Naubatpur(BGCL) - Ara(PG) Ckt - 1	ER-1871-A	ER-1881-A	-66494.496
5	400 KV D/C Nabinagar(NPGC)-Jakkanpur (BGCL) Ckt 1	ER-1943-A	ER-1954-A	230564.5732
6	220 KV Patna(PG) - Khagaul Ckt-3	ER-1962-A	ER-1958-A	26158.8
7	220 KV Patna(PG) - Khagaul Ckt-2	ER-1963-A	ER-1961-A	26069.568
8	220 kv Dumraon New - Ara (PG) Ckt 1	ER-1305-A	NP-8742-A	3040.928
9	220 kv Dumraon New - Ara (PG) Ckt-2	ER-1866-A	NP-8743-A	2980.592
10	400 KV Naubatpur - Balia Ckt-1	ER-1880-A	NP-6576-A	-162866.903
11	400 KV Patna (PG) - Naubatpur Ckt 1	ER-1879-A	NP-7684-A	247850.4634
12	400 KV Patna (PG) - Naubatpur Ckt 2	ER-1848-A	NP-8634-A	-247217.7362
13	400 KV Naubatpur - Balia Ckt-2	ER-1828-A	NP-6574-A	-165859.9938
14	220 KV Ara (PG) - Naubatpur Ckt-2	ER-1829-A	ER-1888-A	-66500.272
15	220 KV GAYA(PG)-KHIZIRSARAI(BGCL)LINE-1	ER-1375-A	ER-1373-A	54909.712
16	400 KV D/C Patna(PG)-Jakkanpur (BGCL) Ckt - 1	ER-1941-A	ER-1964-A	-224558.0279
Total Power Injection from PGCIL to BGCL system				213020.7541
Total Power Injection from PGCIL to BGCL system (in MU)				213.0207541

Sharing of ISTS Transformer Loss for July 2022

Sl. No.	Name of Metering Point	Meter No.	Metering end	Energy in MU
A	PGCIL ICT Injection Points to be shared			
1	400 KV BSF_ICHV1	NP-6063-A	PG end	37.984368
2	400 KV BSF_ICHV2	NP-6069-A	PG end	102.447335
3	400 KV BSF_ICHV3	NP-6068-A	PG end	42.075
4	400 KV BSF_ICHV4	ER-1386-A	PG end	162.800907
5	400 KV GYA_ ICT-2	ER-1419-A	PG end	85.598246
6	400 KV GYA_ ICT-3	ER 1442-A	PG end	132.830217
7	400 KV GYA_ ICT-1	ER 1411-A	PG end	144.078689
8	400 KV PAT_ ICT-1	ER 1577-A	PG end	157.327053
9	400 KV PAT_ ICT-2	ER 1407-A	PG end	163.906871
10	400 KV PAT_ ICT-3	ER 1231-A	PG end	150.86258
	Total of PGCIL ICT Injection Points to be shared			1179.9113
B	Drawal points used for calculating sharable PGCIL ICT loss			
1	220 KV GAYA(PG)-KHIZIRSARAI(BGCL)LINE-1	ER-1375-A	PG end	54.909712
2	220 KV Patna(PG) - Khagauli Ckt-3	ER-1962-A	PG end	26.1588
3	220 KV Patna(PG) - Khagauli Ckt-2	ER-1963-A	PG end	26.069568
4	220 KV Patna (PG)- Fathua -1 T/L	ER-1921-A	PG end	44.032416
5	220 KV GAYA(PG)-KHIZIRSARAI(BGCL)LINE-2	ER-1380-A	PG end	54.874258
6	220 KV Gaya (PG)- Dehri -2 T/L	NP-6098-A	PG end	46.498896
7	220 KV Gaya (PG)- Dehri -1 T/L	NP-7857-A	PG end	44.772112
8	220 KV Gaya (PG)- Bodhgaya -1 T/L	ER-1893-A	PG end	81.248512
9	220 KV Gaya (PG)- Bodhgaya -2 T/L	NP-8661-A	PG end	80.576416
10	220 KV Patna (PG) - Sipara -3 T/L	NP-8862-A	PG end	119.088832
11	220 KV Patna (PG) - Sipara -1 T/L	NP-7864-A	PG end	106.080384
12	220 KV Patna (PG) - Sipara -2 T/L	NP-7838-A	PG end	94.643456
13	220 KV Patna (PG) - Khagauli -1 T/L	NP-5832-A	PG end	54.546788
14	220 KV Biharsharif- Biharsharif (PG)-3 T/L	Q0384406	BSPTCL	41.87481
15	220 KV Biharsharif- Biharsharif (PG)-4 T/L	Q0384392	BSPTCL	161.51692
16	220 KV Biharsharif- Biharsharif (PG)-2 T/L	Q0384358	BSPTCL	101.41365
17	220 KV Biharsharif- Biharsharif (PG)-1 T/L	Q0384389	BSPTCL	37.66344
	Total of Drawal points used for calculating sharable PGCIL ICT loss			1175.9688
C	Sharable PGCIL ICT Loss(A-B)			
				3.942749
D	BGCL Share (30%)(C*0.3)			
				1.1828247
E	BSPTCL Share (70%)(C*0.7)			
				2.7599242

Monthly T-1 Energy Drawl total for the period JUL 2022

Sl. No.	Substation	Transmission Line	Meter S.No.	Total Energy	
				Total Export	Total Import
1	BTPS	220 KV BTPS-Mokama ckt-1	Q0201227	-30.061993	3.131539
2	BTPS	220 KV BTPS-Mokama ckt-2	Q0200889	30.839346	3.163321
3	132/33 KV Jamalpur	132 KV JAMALPUR (NEW) GIS CKT -1	Q0201459	0	17.350942
4	132/33 KV Jamalpur	132 KV JAMALPUR (NEW) GIS CKT -2	Q0201128	0	16.651392
7	220/132 KV Jamalpur GIS	132 KV JAMALPUR (NEW)-Sultanganj CKT -1	ABB07205	0.001	0.081
8	220/132 KV Jamalpur GIS	132 KV JAMALPUR (NEW)-Lakhisarai CKT -1	ABB07211	0	0.001
9	220/132 KV Jamalpur GIS	132 KV JAMALPUR (NEW)-Sultanganj CKT -2	ABB07209	0.001	0.08
10	220/132 KV Jamalpur GIS	132 KV JAMALPUR (NEW)-Lakhisarai CKT -2	ABB07210	0	0.017
13	132/33 KV Sabour	132 KV SABOUR (NEW) GIS CKT -1	Q0200873	8.776579	0
14	132/33 KV Sabour	132 KV SABOUR (NEW) GIS CKT -2	Q0238423	8.738759	0
19	220/132 KV Sabour New GIS(BGCL)	132 KV SABOUR (NEW) GIS SULTANGANJ CKT -1	ABB07241	0.151	0.399
20	220/132 KV Sabour New GIS(BGCL)	132 KV SABOUR (NEW) -Kahalgaon CKT -1	ABB07242	0	0
21	220/132 KV Sabour New GIS(BGCL)	132 KV SABOUR (NEW) GIS-SULTANGANJ CKT -2	ABB07240	0.153	0.173
22	220/132 KV Sabour New GIS(BGCL)	132 KV SABOUR (NEW)-Kahalgaon CKT -2	ABB07244	0	0
23	132/33 KV Buxar	132 KV Buxar (BSPTCL) - Dumraon New (BGCL) CKT -1	Q0332961	0	17.05411
24	132/33 KV Buxar	132 KV Buxar (BSPTCL) - Dumraon New (BGCL) CKT -2	Q0332957	0	17.091701
25	132/33 KV Dumraon	132KV DUMRAON New(GIS)-DUMRAON CKT-1	Q0332997	-0.000547	12.352623
26	132/33 KV Dumraon	132KV DUMRAON New(GIS)-DUMRAON CKT-2	Q0332763	0.000549	27.058143
27	Dumraon New(BGCL)	132KV D/C DUMRAON NEW(BGCL)-ARA (BSPTCL) CKT-01	X1199538	3.82	0
30	Dumraon New(BGCL)	132KV D/C DUMRAON NEW(BGCL)-JAGDISHPUR(BSPTCL) CKT-01	X1199535	1.591	0.032
32	Dumraon New(BGCL)	132KV D/C DUMRAON NEW(BGCL)-JAGDISHPUR (BSPTCL) CKT-02	X1199536	1.587	0.033
33	Dumraon New(BGCL)	132KV D/C DUMRAON NEW(BGCL)-ARA (BSPTCL) CKT-02	X1199537	5.126	0
34	220/132/33 KV Pusouli	220KV DUMRAON New(GIS)-Pusouli CKT-1	Q0200798	34.586395	0.000182
35	220/132/33 KV Pusouli	220KV DUMRAON New(GIS)-Pusouli CKT-2	Q0201378	34.700679	0.000172
36	220/132/33 KV Biharsharif(SG)	132 KV Shekhpura (New) GIS CKT -1	Q0384385	0	0
37	220/132/33 KV Biharsharif(SG)	220 KV KHIZERSARAI GIS CKT-1	Q0184362	59.611968	0.004036
38	220/132/33 KV Biharsharif(SG)	220 KV KHIZERSARAI GIS CKT-2	Q0384399	60.255936	0.003406
39	132/33 KV Nawada	132 KV GUNNARHAT LINE -1	Q0200525	0.000651	23.249706
40	132/33 KV Nawada	132 KV GUNNARHAT LINE -2	Q0200687	0.008793	20.499351
41	132/33 KV Shekhpura	132 KV Shekhpura (New) GIS CKT -1	Q0384442	0	12.692733
42	132/33 KV Shekhpura	132 KV Shekhpura (New) GIS CKT -2	Q0384417	0	12.669535
44	220/132 KV Khaserai (S/BGCL)	132 KV KHIZERSARAI - Bodhgaya CKT -1	XC581465	0	4.092
45	220/132 KV Khaserai (S/BGCL)	132 KV KHIZERSARAI -Wahganj	XC581825	0	21.904
47	220/132/33 KV Bodhgaya	220 KV KHIZERSARAI GIS CKT -1	Q0200713	22.338896	0.000079
48	220/132/33 KV Bodhgaya	220 KV KHIZERSARAI GIS CKT -2	Q0201012	23.261402	0.000077
49	132/33 KV Hulasganj	132 KV KHIZERSARAI-2	Q0200554	0	21.842104
50	132/33 KV Jehanabad	132 KV Jehanabad -Khizersarai GIS CKT-1	Q0803062	0	29.7857
51	132/33 KV Jehanabad	132 KV Jehanabad -Khizersarai GIS CKT-2	Q0287788	0	39.981724
52	132/33 KV Hatidah	132KV Hatidah - Mokama (BGCL) ckt-1	Q0332765	0	29.373808
53	132/33 KV Hatidah	132KV Hatidah - Mokama (BGCL) ckt-2	Q0332773	0	29.645664
54	Mokama BGCL	220KV Biharsharif - Mokama (BGCL) ckt-2	XE485931	6.97	2.906
55	Mokama BGCL	220KV Biharsharif - Mokama (BGCL) ckt-1	XE485935	7.273	2.937
56	132/33 KV Masaudhi	132KV Naubatpur -Masahari ckt-2(BAY NO-103)	Q0332951	0	13.48358
57	132/33 KV Masaudhi	132KV Naubatpur -Masahari ckt-1 (BAY NO-105)	Q0332792	0	13.527679
58	Jakkanpur New (400 KV) BGCL	132 KV S/C ATUNIA -JAKKANPUR (BGCL) TL	XD532988	0	7.42345
59	Jakkanpur New (400 KV) BGCL	132 KV S/C SIPARA -JAKKANPUR (BGCL) TL	ABB01710	0.003	4.32
60	220/132/33 KV Khagaul	220KV Patna(G) Khagaul ckt-II	ER-1958-A	0	26.10048
61	220/132/33 KV Khagaul	220KV Patna(G) Khagaul ckt-II	ER-1961-A	0	26.2528
62	Naubatpur (400 KV) BGCL	220 KV Naubatpur -G.S. Baita New(BSPTCL) CKT -1	X1356730	3.451	0.542
63	Naubatpur (400 KV) BGCL	220 KV D/C BHUSALTA NAUBATPUR CKT-1	X1199533	0.007	0.03
64	Naubatpur (400 KV) BGCL	220 KV Naubatpur -Khagaul CKT -1	X1199521	2.004	3.486
65	Naubatpur (400 KV) BGCL	220 KV Naubatpur -Khagaul CKT -2	X1199520	2.039	3.692
66	Naubatpur (400 KV) BGCL	220KV D/C BHUSALTA NAUBATPUR CKT-2	X1199532	0	0.015
67	Naubatpur (400 KV) BGCL	220 KV Naubatpur G.S. Baita New(BSPTCL) CKT -2	X1356731	3.352	0.557
68	132/33 KV Chapra	132 KV AMNOUR-1	Q0238486	0.000002	30.653994
69	132/33 KV Chapra	132 KV AMNOUR-2	Q0201457	0	29.376931
70	132/33 KV Siwan	132 KV AMNOUR-1	Q0201442	0.000003	26.132295
71	132/33 KV Siwan	132 KV AMNOUR-2	Q0201620	0	26.144132
72	220/132/33 KV Hazipur	220 KV AMNOUR CKT -1	Q0287786	70.240806	0
73	220/132/33 KV Hazipur	220 KV AMNOUR CKT -2	Q0287797	70.41996	0
		BSPTCL-BGCL (I)		491.372164	
		BGCL-BSPTCL (II)			595.983445

Monthly Energy Drawl Total of SBPDCL Discom for the period July 2022

Energy Drawal from 33 kV side of Transformers of BGCL

Sl. No.	Substation	Metering Point	Meter S.No.	Energy DrawalIn (MU)
BGCL-DISCOM POINTS				
1	220/132 KV Jamalpur GIS	50 MVA 132/33 KV TRANSFORMER No.-1	XC579642	4.9681
2	220/132 KV Jamalpur GIS	50 MVA 132/33 KV TRANSFORMER No.-2	XC579645	2.7972
3	220/132 KV Sabour New GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-1	X0383222	6.3935
4	220/132 KV Sabour New GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	X0383223	11.0571
5	Dumraon New(BGCL)	80 MVA 132/33 KV TRANSFORMER No.-1	19007483	12.7693
6	Dumraon New(BGCL)	80 MVA 132/33 KV TRANSFORMER No.-2	19001312	0
7	220/132 KV Nawada GIS (BGCL)	50 MVA 132/33 KV TRANSFORMER No.-1	XB426777	4.224
8	220/132 KV Nawada GIS (BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	XB426776	9.9
9	220/132 KV Sheikhpara GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-1	XC579637	0.59567
10	220/132 KV Sheikhpara GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	XC579636	8.33127
11	220/132 KV Khisersarai GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	XB426797	3.9094
12	220/132 KV Khisersarai GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-3	XB426798	7.604
13	Mokama BGCL	80 MVA 132/33 KV TRANSFORMER No.-2	XF466571	3.60411
14	Naubatpur (400 KV) BGCL	80 MVA TRANSFORMER D1	X1198657	0.914
		SUB TOTAL-BGCL (I)		77.06765
Monthly Energy Drawl Total of NBPDCCL Discom for the period MAY 2022				
1	220/132/33 KV Amour GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-1	XB426779	13.1439
2	220/132/33 KV Amour GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	XB426778	13.2516
		SUB TOTAL BGCL (II)		26.3955
Total Drawl from 33kV side of Transformers of BGCL to DISCOMS (I+II)				103.46315



Bihar State Power Transmission Company Ltd., Patna
A subsidiary company of Bihar State Power (Holding) Company Ltd., Patna
CIN – U74110BR2012SGC018889
[SAVE ENERGY FOR BENEFIT OF SELF AND NATION]
Head Office, Vidyut Bhawan, Bailey Road, Patna – 800021,

Letter No. 31/
File no: BGCL/Loss/Transmission/06/2022

Dated... 08/05/23

From,

Chief Engineer (System Operation)
Bihar State Power Transmission Co. Ltd.

To

GM- O&M (Commercial)
Bihar Grid Company Limited
2nd floor, Alankar place, Boring Road
Patna, 800001

Sub: Certification of Energy accounting of BGCL power system for the month of March-2023.
Ref: Your office letter no. JV/PT/BG/O&M/Energy meter/ March-2023/238 dated 06.04.2023.


Sir,

With reference to the subject mention above, this is to mention that monthly energy loss in the transmission system of BGCL is prepared as per the compliance to *Directive 6: Metering and Energy Audit, of "Transmission Tariff for FY 2022-23 for BGCL"* dated 25.03.2022 of Hon'ble BER. All the interface points of BGCL and BSPTCL are considered in the calculation of transmission loss of BGCL.

Monthly energy accounting and hence loss in BGCL system has been verified on the basis of data received from BGCL as well as from AMR in SAMAST. In compliance of the above mentioned Directive, transmission loss % in the BGCL power system for the month of March-2023 is calculated as 0.99 %.

Encl: as above

Yours faithfully


(A.K. Chaudhary)

Chief Engineer (System Operation)





Bihar State Power Transmission Company Ltd
State Load Despatch Centre

MONTHLY BGCL LOSS ACCOUNTING REPORT MAR 2023			
S.No.	Name of Injecting Entities	Energy Injection Mar'23 (In MU)	Cumulative Energy Injection (Apr'22 - Mar'23) (In MU)
1	Total import from regional grid (purchases from SGS, PX, bilateral etc.)	278.264703	2806.513143
2	Sharing Of ISTS Transformer Loss (as per MoM Dated - 23.12.2021)	1.223548	10.351721
3	Import from BSPTCL	381.829574	5151.518433
Total Injection (All Sources) (1 + 2 + 3)		661.317824	7968.383298
S.No.	Name of Drawee Entities	Energy Drawal Mar'23 (In MU)	Cumulative Energy Drawal (Apr'22 - Mar'23) (In MU)
1	Export to BSPTCL	571.768488	6634.661591
2	Discom Drawal		
i	SBPDCL	65.416497	783.183504
ii	NBPDCL	17.617388	250.939121
	Total of Discom Drawal	83.033885	1034.122625
Net Drawl of BGCL (In MU) (1 + 2)		654.802373	7868.784216
S.No.	Transmission Loss	Loss of MAR 2023	Cumulative Loss (Apr'22 - Mar'23)
1	(In MU)	6.515451	99.599082
2	(In %)	0.99	1.25
ILLUSTRATION:-	1. Transmission Loss of a month (in MU)= Total injection(All Sources) of that month-Total Drawal of that month		
	2. Transmission Loss of a month (in%)=Transmission Loss of a month (in MU)*100/Total Injection(All Sources) of that month		
	3. Cumulative Transmission Loss (in MU)= Total Cumulative Injection(All Sources)-Total Cumulative Drawal		
	4. Cumulative Transmission Loss(in%)=Cumulative Transmission Loss(in MU)*100/Total Cumulative Injection(All Sources)		

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Report from regional grid (purchases from ISGS, PX, bilateral etc.) for the month of March-2023

Line Name	Main Meter No	Check Meter No	Main+Check Meter RDNG (%)	Corrected Energy (MWH)	Energy (MWH)
GAYA(PG)-KHIZIRSARAI(BGCL)LINE-1	ER-1375-A	ER-1373-A	100	0	31171.808
PATNA(PG)-KHAGAJUL CKT-3	ER-1962-A	ER-1958-A	100	0	19503.616
PATNA(PG)-KHAGAJUL CKT-2	ER-1963-A	ER-1961-A	100	0	19324.336
DUMRAON NEW - ARA(PG) CKT-1	ER-1305-A	NP-8742-A	100	0	17232.528
DUMRAON NEW - ARA(PG) CKT-2	ER-1866-A	NP-8743-A	100	0	17203.008
NAUBATPUR - BALIA CKT-1	ER-1880-A	NP-6576-A	100	0	-121100.3591
PATNA(PG)-NAUBATPUR CKT-1	ER-1879-A	NP-7684-A	100	0	195899.3381
PATNA(PG)-NAUBATPUR CKT-2	ER-1848-A	NP-8634-A	100	0	196809.9563
NAUBATPUR - BALIA CKT-2	ER-1828-A	NP-6574-A	100	0	-124768.868
ARA(PG)-NAUBATPUR CKT-2	ER-1829-A	ER-1888-A	100	0	-63553.664
D/C NAUBATPUR(BGCL)-ARA(PG)CKT-1	ER-1871-A	ER-1881-A	100	0	-63520.304
D/C NABINAGAR(NPG)-JAKKANPUR(BGCL)	ER-1943-A	ER-1954-A	100	0	275085.2988
D/C NABINAGAR(NPG)-JAKKANPUR(BGCL)	ER-1944-A	ER-1956-A	100	0	275558.0988
D/C PATNA(PG)-JAKKANPUR(BGCL) CKT - 1	ER-1941-A	ER-1964-A	100	0	-216982.3919
D/C PATNA(PG)-JAKKANPUR(BGCL) CKT - 2	ER-1942-A	ER-1965-A	100	0	-210793.0103
GAYA(PG)-KHIZIRSARAI(BGCL)LINE-2	ER-1380-A	ER-1377 A	100	0	31195.312
Total draw from regional grid (from PGCL) in MWH					278264.7026
Total draw from regional grid (from PGCL) in MU					278.2647026

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Sharing of ISTS Transformer Loss for the month of March-2023

Sl. No.	Name of Metering Point	Meter No.	Metering end	Energy in MU
A	PGCIL ICT Injection Points to be shared			
1	400 KV BSF_ ICHV1	NP-6063-A	PG end	-4.545945
2	400 KV BSF_ ICHV2	NP-6069-A	PG end	71.191954
3	400 KV BSF_ ICHV3	NP-6068-A	PG end	-4.332654
4	400 KV BSF_ ICHV4	ER-1386-A	PG end	111.374181
5	400 KV GYA_ ICT-2	ER-1419-A	PG end	67.055214
6	400 KV GYA_ ICT-3	ER-1442-A	PG end	106.272108
7	400 KV GYA_ ICT-1	ER-1411-A	PG end	112.472726
8	400 KV PAT_ ICT-1	ER-1877-A	PG end	84.699926
9	400 KV PAT_ ICT-2	ER-1407-A	PG end	88.090872
10	400 KV PAT_ ICT-3	ER-1231-A	PG end	80.808326
	Total of PGCIL ICT Injection Points to be shared			713.0868
B	Drawal points used for calculating sharable PGCIL ICT loss			
1	220 KV GAYA(PG)- KHIZIRSARAI(BGCL)LINE-1	ER-1375-A	PG end	31.171808
2	220 KV PATNA(PG) - KHAGAUL CKT-3	ER-1962-A	PG end	19.503616
3	220 KV PATNA(PG) - KHAGAUL CKT-2	ER-1963-A	PG end	19.324336
4	220 KV PATNA(PG)- FATUHA -1 T/L	ER-1921-A	PG end	53.570304
5	220 KV GAYA(PG)- KHIZIRSARAI(BGCL)LINE-2	ER-1380-A	PG end	31.195312
6	220 KV GAYA(PG) - DEHRI -2 T/L	NP-6098-A	PG end	55.479666
7	220 KV GAYA(PG) - DEHRI -1 T/L	NP-7857-A	PG end	55.523858
8	220 KV GAYA(PG) - BODHGAYA -1 T/L	ER-1893-A	PG end	55.069333
9	220 KV GAYA(PG) - BODHGAYA -2 T/L	NP-8661-A	PG end	55.92901
10	220 KV PATNA(PG) - SIPARA -3 T/L	NP-8862-A	PG end	62.972928
11	220 KV PATNA(PG) - SIPARA -1 T/L	NP-7864-A	PG end	45.159728
12	220 KV PATNA(PG) - SIPARA -2 T/L	NP-7838-A	PG end	34.004272
13	220 KV PATNA(PG) - KHAGAUL CKT-1	NP-5832-A	PG end	18.096752
14	220 KV Biharsharif- Biharsharif (PG)-2 T/L	Q0384358	BSPTCL	70.46841
15	220 KV Biharsharif- Biharsharif (PG)-4 T/L	Q0384392	BSPTCL	110.55049
16	220 KV Biharsharif- Biharsharif (PG)-3 T/L	Q0384406	BSPTCL	-4.40409
17	220 KV Biharsharif- Biharsharif (PG)-1 T/L	Q0384389	BSPTCL	-4.60738
	Total of Drawal points used for calculating sharable PGCIL ICT loss			709.0083
C	Sharable PGCIL ICT Loss(A-B)			
				4.078491
D	BGCL Share (30%)(C*0.3)			
				1.2235475
E	BSPTCL Share (70%)(C*0.7)			
				2.8549438

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Monthly T-T Energy Drawl total for the period MAR 2023

Sl. No.	Circle	Division	Substation	Transmission Line	Meter S.No.	Energy (MU)				Total Energy Import	
						Actual Energy From BSPTCL	To BSPTCL	Corrected Energy From BSPTCL	To BSPTCL		
1	BEGUSARAI(W)	BEGUSARAI	BTPS	130 KV BTPS-Mokama ckt-1	Q0201227	51.820792	2.8994	0	0	51.820792	2.16094
2	BEGUSARAI(W)	BEGUSARAI	BTPS	220 KV BTPS-Mokama ckt-2	Q0200889	51.367432	2.207739	0	0	51.367432	2.207739
3	BEGUSARAI(S)	Munger	132/132 KV Jamalpur	132 KV JAMALPUR (NEW) GIS CKT -1	Q0201459	0	10.44455	0	0	0	10.44455
4	BEGUSARAI(S)	Munger	132/132 KV Jamalpur	132 KV JAMALPUR (NEW) GIS CKT -2	Q0201128	0	12.808846	0	0	0	12.808846
5	BEGUSARAI(S)	Munger	220/132 KV Jamalpur GIS	132 KV JAMALPUR (NEW)-Laktisarai CKT -1	AB807211	0	0.154	0	0.154	0	0.154
6	BEGUSARAI(S)	Munger	220/132 KV Jamalpur GIS	132 KV JAMALPUR (NEW)-Sultanganj CKT -1	AB807205	0.001	0.255	0.001	0.255	0.001	0.255
7	BEGUSARAI(S)	Munger	220/132 KV Jamalpur GIS	132 KV JAMALPUR (NEW)-Laktisarai CKT -2	AB807210	0	0.155	0	0.155	0	0.155
8	BEGUSARAI(S)	Munger	220/132 KV Jamalpur GIS	132 KV JAMALPUR (NEW)-Sultanganj CKT -2	AB807209	0	0.254	0	0.254	0	0.254
9	BHAGALPUR	Bhagalpur	132/132 KV Sabour	132 KV SABOUR (NEW) GIS CKT -1	Q0200878	6.677788	0	0	0	6.677788	0
10	BHAGALPUR	Bhagalpur	132/132 KV Sabour	132 KV SABOUR (NEW) GIS CKT -2	Q0238423	6.645355	0	0	0	6.645355	0
11	BHAGALPUR	Bhagalpur	220/132 KV Sabour New GIS(BGCL)	132 KV SABOUR (NEW)-Kahalgaon CKT -1	AB807242	0.001	0.006	0.001	0.006	0.001	0.006
12	BHAGALPUR	Bhagalpur	220/132 KV Sabour New GIS(BGCL)	132 KV SABOUR (NEW) GIS-SULTANGANJ CKT -1	AB807241	0.001	0.008	0.001	0.008	0.001	0.008
13	BHAGALPUR	Bhagalpur	220/132 KV Sabour New GIS(BGCL)	132 KV SABOUR (NEW) GIS-SULTANGANJ CKT -2	AB807240	0.001	0.007	0.001	0.007	0.001	0.007
14	BHAGALPUR	Bhagalpur	220/132 KV Sabour New GIS(BGCL)	132 KV SABOUR (NEW)-Kahalgaon CKT -2	AB807244	0.001	0.005	0.001	0.005	0.001	0.005
15	BHOJIPUR	ARA	132/132 KV Ara	132KV D/C ARA(BSPTCL) - DUMRAON NEW(BGCL) CKT-01	Q0384384	4.426902	0.002018	0	0	4.426902	0.002018
16	BHOJIPUR	ARA	132/132 KV Ara	132KV D/C ARA(BSPTCL) - DUMRAON NEW(BGCL) CKT-02	Q0201205	4.382377	0.000382	0	0	4.382377	0.000382
17	BHOJIPUR	ARA	132/132 KV Buxar	132 KV Buxar (BSPTCL) - Dumraon New (BGCL) CKT -1	Q0332961	0	8.32454	0	0	0	8.32454
18	BHOJIPUR	ARA	132/132 KV Buxar	132 KV Buxar (BSPTCL) - Dumraon New (BGCL) CKT -2	Q0332957	0	8.31308	0	0	0	8.31308
19	BHOJIPUR	ARA	132/132 KV Dumraon	132KV DUMRAON New(GIS) DUMRAON CKT-1	Q0332997	0.000001	9.902351	0	0	0.000001	9.902351
20	BHOJIPUR	ARA	132/132 KV Dumraon	132KV DUMRAON New(GIS) DUMRAON CKT-2	Q0332763	0.000001	9.988888	0	0	0.000001	9.988888
21	BHOJIPUR	ARA	Dumraon New(BGCL)	132KV D/C DUMRAON NEW(BGCL)-JAGDISHIPUR(BSPTCL) CKT-01	KX119855	1.319	0.02	1.319	0.02	1.319	0.02
22	BHOJIPUR	ARA	Dumraon New(BGCL)	132KV D/C DUMRAON NEW(BGCL)-JAGDISHIPUR(BSPTCL) CKT-02	X1199536	1.318	0.02	1.318	0.02	1.318	0.02
23	BHOJIPUR	MOHANIA	220/132/33 KV Pusoh	220KV DUMRAON New(GIS)-Pusohi CKT-1	Q0200798	1.689922	2.659907	0	0	1.689922	2.659907
24	BHOJIPUR	MOHANIA	220/132/33 KV Pusoh	220KV DUMRAON New(GIS)-Pusohi CKT-2	Q0201378	1.710263	2.619566	0	0	1.710263	2.619566
25	BHARSARAI	BHARSARAI	220/132/33 KV Biharsharif(SG)	132 KV Shekhpura (New) GIS CKT -1	Q0384385	12.378944	0.000032	0	0	12.378944	0.000032
26	BHARSARAI	BHARSARAI	220/132/33 KV Biharsharif(SG)	220 KV KHIZERSARAI GIS CKT -1	Q0384362	35.988559	0.04094	0	0	35.988559	0.04094
27	BHARSARAI	BHARSARAI	220/132/33 KV Biharsharif(SG)	220 KV KHIZERSARAI GIS CKT -2	Q0384399	36.221333	0.047148	0	0	36.221333	0.047148
28	BHARSARAI	NAWADA	132/33 KV Nawada	132 KV GIS NAWADA LINE-1	Q0200525	0.001427	14.130107	0	0	0.001427	14.130107
29	BHARSARAI	NAWADA	132/33 KV Nawada	132 KV GIS NAWADA LINE-2	Q0200587	0.000018	1.503805	0	0	0.000018	1.503805
30	BHARSARAI	NAWADA	132/33 KV Shekhpura	132 KV Shekhpura (New) GIS CKT -1	Q0384442	0	5.476984	0	0	0	5.476984
31	BHARSARAI	NAWADA	132/33 KV Shekhpura	132 KV Shekhpura (New) GIS CKT -2	Q0384427	0	9.425967	0	0	0	9.425967
32	GAYA (MAGADHI)	GAYA	220/132 KV Khizersarai GIS(BGCL)	132 KV KHIZERSARAI - Bodhigaya CKT-1	XCS81465	0.001	0.005998	0.001	0.00598	0.001	0.00598
33	GAYA (MAGADHI)	GAYA	220/132 KV Khizersarai GIS(BGCL)	220 KV KHIZERSARAI GIS CKT -1	Q0200713	16.64183	0.092607	0	0	16.64183	0.092607
34	GAYA (MAGADHI)	GAYA	220/132 KV Khizersarai GIS(BGCL)	220 KV KHIZERSARAI GIS CKT -2	Q0200712	17.819161	0.092879	0	0	17.819161	0.092879
35	GAYA (MAGADHI)	GAYA	220/132/33 KV Bodhigaya	132 KV KHIZERSARAI GIS CKT -1	Q0200554	0.000001	13.999244	0	0	0.000001	13.999244
36	GAYA (MAGADHI)	JEHANABAD	132/33 KV Hulesarai	132 KV KHIZERSARAI GIS CKT -1	Q0303062	0	27.237487	0	0	0	27.237487
37	GAYA (MAGADHI)	JEHANABAD	132/33 KV Hulesarai	132 KV Jehanabad Khizersarai GIS CKT -1	Q0287788	0	27.210852	0	0	0	27.210852
38	GAYA (MAGADHI)	JEHANABAD	132/33 KV Jehanabad	132 KV Jehanabad Khizersarai GIS CKT -2	Q0332765	0.000011	10.716332	0	0	0.000011	10.716332
39	PATNA(EAST)	BARH	132/33 KV Hathiganj	132KV Hathiganj - Mokama (BGCL) ckt-1	Q0332773	0.000011	10.809523	0	0	0.000011	10.809523
40	PATNA(EAST)	BARH	132/33 KV Hathiganj	132 KV S/C FATIHA - JAMUNAPUR (BGCL) TL	Q0200848	0	26.370228	0	0	0	26.370228
41	PATNA(EAST)	BARH	220/132/33 KV Fatuha	220KV Biharsharif - Mokama (BGCL) ckt-2	XE485931	3.49E	40.1	3.49E	40.1	3.49E	40.1
42	PATNA(EAST)	BARH	Mokama BGCL	220KV Biharsharif - Mokama (BGCL) ckt-1	XF481935	3.479	40.0491	3.479	40.0491	3.479	40.0491
43	PATNA(EAST)	FATMA(EAST)	132/33 KV Masaurin	132KV Narepatpur - Masaurin ckt-1(BAY NO.105)	Q0332792	0	8.054088	0	0	0	8.054088
44	PATNA(EAST)	FATMA(EAST)	132/33 KV Masaurin	132KV Narepatpur - Masaurin ckt-2(BAY NO.103)	Q0332551	0	8.028861	0	0	0	8.028861
45	PATNA(EAST)	FATMA(EAST)	132/33 KV Masaurin								

Handwritten signature and initials.

Monthly Energy Drawl from 33 kv side of Transformers of BGCL for MAR 2023

BGCL- South Bihar

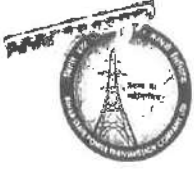
Sl. No.	Substation	Feeder / Metering Point	Meter S.No.	Energy (MU)		
				Actual Energy From Transco	To Transco	Energy DrawalIn (MU)
1	220/132 KV Jamalpur Gis	50 MVA 132/33 KV TRANSFORMER No.-1	Q0426659	3.37853	0	3.37853
2	220/132 KV Jamalpur Gis	50 MVA 132/33 KV TRANSFORMER No.-2	Q0426605	2.054599	0	2.054599
3	220/132 KV Sabour New GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-1	Q0426660	6.056752	0	6.056752
4	220/132 KV Sabour New GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	Q0426613	7.142304	0.000002	7.142302
5	Dumraon New(BGCL)	80 MVA 132/33 KV TRANSFORMER No.-1	19007483	7.118	0	7.118
6	Dumraon New(BGCL)	80 MVA 132/33 KV TRANSFORMER No.-2	19001312	0	0	0
7	220/132 KV Nawada GIS (BGCL)	50 MVA 132/33 KV TRANSFORMER No.-1	Q0426636	3.283118	0	3.283118
8	220/132 KV Nawada GIS (BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	Q0426663	6.604839	0	6.604839
9	220/132 KV Sheikhpura GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-1	Q0426664	0.403608	0	0.403608
10	220/132 KV Sheikhpura GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	Q0426640	6.403559	0	6.409559
11	220/132 KV Khisersarai GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	Q0426379	3.770535	0	3.770535
12	220/132 KV Khisersarai GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-3	Q0426661	4.970855	0	4.970855
13	Mokama BGCL	80 MVA 132/33 KV TRANSFORMER No.-2	XF466571	3.5298	0	3.5298
14	Bhusaula BGCL	100 MVA 220/33 KV ICT-1	X1199534	1.806	0	1.806
15	Bhusaula BGCL	100 MVA 220/33 KV ICT-2	X1199533	6.854	0	6.854
16	Naubatpur (400 KV) BGCL	80MVA 132/33KV ICT-2 (BAY NO-109)	X1198656	0	0	0
17	Naubatpur (400 KV) BGCL	80 MVA TRANSFORMER-01	X1198657	2.034	0	2.034
		SUB TOTAL-BGCL (IV)				65.416497

BGCL- Norht Bihar

1	220/132/33 KV Amnour GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-1	Q0426645	8.765751	0	8.765751
2	220/132/33 KV Amnour GIS(BGCL)	50 MVA 132/33 KV TRANSFORMER No.-2	Q0426665	8.851637	0	8.851637
		SUB TOTAL-BGCL (IV)				17.617388

NBR





Bihar State Power Transmission Company Ltd., Patna
A subsidiary company of Bihar State Power (Holding) Company Ltd., Patna
CIN – U74110BR2012SGC018889
[SAVE ENERGY FOR BENEFIT OF SELF AND NATION]
Head Office, Vidhut Bhawan, Bailey Road, Patna – 800021,

Letter No./
File no: BGCL/Loss/Transmission/06/2022

Dated...../

From,

Chief Engineer (System Operation)
Bihar State Power Transmission Co. Ltd.

To

GM- O&M (Commercial)
Bihar Grid Company Limited
2nd floor, Alankar palace, Boring Road
Patna, 800001, Mob: 8102924200

Sub: Certification of Energy accounting of BGCL power system for the month of February'23.

Ref: Your office letter no. JV/PT/BG/O&M/Energy meter/ February'23/167 dated 07.03.2023.

Sir,

With reference to the subject mention above, this is to mention that monthly energy loss in the transmission system of BGCL is prepared as per the compliance to *Directive 6: Metering and Energy Audit, of "BGCL Tariff Order for FY-2022-23"* dated 25.03.2022 of BERC. All the interface points of BGCL and BSPTCL are considered in the calculation of transmission loss of BGCL power system.

Monthly energy accounting and hence loss in BGCL system has been verified on the basis of data received from BGCL as well as from AMR in SAMAST. In compliance of the above mentioned directive, transmission loss % in the BGCL power system for the month of February'23 is calculated as 1.36 %.

Encl: As above

Yours faithfully

Sd/-

(A.K. Chaudhary)

Chief Engineer (System Operation)

Date.....

Memo No.....

Copy forwarded to CE (Comm.), NBPDC/ SBPDCL/ CE (Energy Accounting), NBPDC/ SBPDCL for kind information.

Sd/-

(A.K. Chaudhary)

Chief Engineer (System Operation)

Date.....

Memo No.....

Copy forwarded to CE (STU), BSPTCL for kind information and necessary action.

(A.K. Chaudhary)

Chief Engineer (System Operation)



355

Bihar State Power Transmission Company Ltd., Patna
A subsidiary company of Bihar State Power (Holding) Company Ltd., Patna
CIN – U74110BR2012SGC018889
[SAVE ENERGY FOR BENEFIT OF SELF AND NATION]
Head Office, Vidyut Bhawan, Bailey Road, Patna – 800021,

Letter No./
File no: BGCL/Loss/Transmission/06/2022

Dated...../

From,

Chief Engineer (System Operation)
Bihar State Power Transmission Co. Ltd.

To

GM- O&M (Commercial)
Bihar Grid Company Limited
2nd floor, Alankar palace, Boring Road
Patna, 800001, Mob: 8102924200

Sub: Certification of Energy accounting of BGCL power system for the month of January'23.
Ref: Your office letter no. JV/PT/BG/O&M/Energy meter/ January'23/96 dated 07.02.2023.

Sir,

With reference to the subject mention above, this is to mention that monthly energy loss in the transmission system of BGCL is prepared as per the compliance to *Directive 6: Metering and Energy Audit*, of "BGCL Tariff Order for FY-2022-23" dated 25.03.2022 of BERC. All the interface points of BGCL and BSPTCL are considered in the calculation of transmission loss of BGCL power system.

Monthly energy accounting and hence loss in BGCL system has been verified on the basis of data received from BGCL as well as from AMR in SAMAST. In compliance of the above mentioned directive, transmission loss % in the BGCL power system for the month of January'23 is calculated as 1.53 %.

The revised BGCL transmission loss accounting report for Oct'22 to Dec'22 have been attached as cumulative loss changed (because of software issues but BGCL transmission losses for these months are the same as submitted before).

Encl: As above

Yours faithfully

Sd/-

(A.K. Chaudhary)

Chief Engineer (System Operation)

Date.....

Memo No.....

Copy forwarded to CE (Comm.), NBPDC/ SBPDCL/ CE (Energy Accounting), NBPDC/ SBPDCL for kind information.

Sd/-

(A.K. Chaudhary)

Chief Engineer (System Operation)

Date..... 01-03-23

Memo No..... 182

Copy forwarded to CE (STU), BSPTCL for kind information and necessary action.

(A.K. Chaudhary)

Chief Engineer (System Operation)



Bihar State Power Transmission Company Ltd., Patna
A subsidiary company of Bihar State Power (Holding) Company Ltd., Patna
CIN - U74110BR2012SGC018889
[SAVE ENERGY FOR BENEFIT OF SELF AND NATION]
Head Office, Vidyut Bhawan, Bailey Road, Patna - 800021, 329

Letter No./
File no: BGCL/Loss/Transmission/06/2022

Dated...../

From,

Chief Engineer (System Operation)
Bihar State Power Transmission Co. Ltd.

To

GM- O&M (Commercial)
Bihar Grid Company Limited
2nd floor, Alankar place, Boring Road
Patna, 800001

Sub: Certification of Energy accounting of BGCL power system for the month of December-2022.
Ref: Your office letter no. JV/PT/BG/O&M/Energy meter/ December'22/48 dated 17.01.2023.

Sir,

With reference to the subject mention above, this is to mention that monthly energy loss in the transmission system of BGCL is prepared as per the compliance to *Directive 6: Metering and Energy Audit, of "BGCL Tariff Order for FY-2022-23"* dated 25.03.2022 of BERC. All the interface points of BGCL and BSPTCL are considered in the calculation of transmission loss of BGCL power system.

Monthly energy accounting and hence loss in BGCL system has been verified on the basis of data received from BGCL as well as from AMR in SAMAST. In compliance of the above mentioned directive, transmission loss % in the BGCL power system for the month of December'22 is calculated as 1.59 %.

Encl: As above

Yours faithfully

Sd/-

(A.K. Chaudhary)

Chief Engineer (System Operation)

Date.....

Memo No.....

Copy forwarded to CE (Comm.), NBPDC/ SBPDCL/ CE (Energy Accounting), NBPDC/ SBPDCL for kind information.

Sd/-

(A.K. Chaudhary)

Chief Engineer (System Operation)

Date.....

Memo No. 125

Copy forwarded to CE (STU), BSPTCL/ Director (operation), BSPTCL for kind information and necessary action.

(A.K. Chaudhary)

Chief Engineer (System Operation)



-o/c-

(305)

Bihar State Power Transmission Company Ltd., Patna
A subsidiary company of Bihar State Power (Holding) Company Ltd., Patna
CIN - U74110BR2012SGC018889
[SAVE ENERGY FOR BENEFIT OF SELF AND NATION]
Head Office, Vidyut Bhawan, Bailey Road, Patna - 800021,

Letter No. /
File no: BGCL/Loss/Transmission/06/2022

Dated..... /

From,

Chief Engineer (System Operation)
Bihar State Power Transmission Co. Ltd.

To

GM- O&M (Commercial)
Bihar Grid Company Limited
2nd floor, Alankar place, Boring Road
Patna, 800001

Sub: Certification of Energy accounting of BGCL power system for the month of November-2022.
Ref: Your office letter no. JV/PT/BG/O&M/Energy meter/ November'22/895 dated 09.11.2022.

Sir,

With reference to the subject mention above, this is to mention that monthly energy loss in the transmission system of BGCL is prepared as per the compliance to *Directive 6: Metering and Energy Audit*, of "BGCL Tariff Order for FY-2022-23" dated 25.03.2022 of BERC. All the interface points of BGCL and BSPTCL are considered in the calculation of transmission loss of BGCL power system.

Monthly energy accounting and hence loss in BGCL system has been verified on the basis of data received from BGCL as well as from AMR in SAMAST. In compliance of the above mentioned directive, transmission loss % in the BGCL power system for the month of November'22 is calculated as 1.05 %.

Encl: As above

Yours faithfully

Sd/-

(A.K. Chaudhary)

Chief Engineer (System Operation)

Date.....

Memo No.....

Copy forwarded to CE (Comm.), NBPDC/ SBPDCL for kind information and necessary action.

Sd/-

(A.K. Chaudhary)

Chief Engineer (System Operation)

Date.....

02
Memo No.....

Copy forwarded to CE (STU), BSPTCL/ Director (operation), BSPTCL for kind information and necessary action.


(A.K. Chaudhary)

Chief Engineer (System Operation)





O/C

282

Bihar State Power Transmission Company Ltd., Patna
A subsidiary company of Bihar State Power (Holding) Company Ltd., Patna
CIN - U74110BR2012SGC018889
[SAVE ENERGY FOR BENEFIT OF SELF AND NATION]
Head Office, Vidyut Bhawan, Bailey Road, Patna - 800021,

Letter No./
File no: BGCL/Loss/Transmission/06/2022

Dated...../

From,

Chief Engineer (System Operation)
Bihar State Power Transmission Co. Ltd.

To

GM- O&M (Commercial)
Bihar Grid Company Limited
2nd floor, Alankar place, Boring Road
Patna, 800001

Sub: Certification of Energy accounting of BGCL power system for the month of October-2022.
Ref: Your office letter no. JV/PT/BG/O&M/Energy meter/ October'22/812 dated 09.11.2022.

Sir,

With reference to the subject mention above, this is to mention that monthly energy loss in the transmission system of BGCL is prepared as per the compliance to *Directive 6: Metering and Energy Audit*, of "BGCL Tariff Order for FY-2022-23" dated 25.03.2022 of BEREC. All the interface points of BGCL and BSPTCL are considered in the calculation of transmission loss of BGCL power system.

Monthly energy accounting and hence loss in BGCL system has been verified on the basis of data received from BGCL as well as from AMR in SAMAST. In compliance of the above mentioned directive, transmission loss % in the BGCL power system for the month of October'22 is calculated as 1.11 %.

Encl: As above

Yours faithfully

Sd/-

(A.K. Chaudhary)

Chief Engineer (System Operation)

Date.....

Memo No.....

667
Copy forwarded to CE (STU), BSPTCL/ Director (operation), BSPTCL for kind information and necessary action.


22/11/22
(A.K. Chaudhary)

Chief Engineer (System Operation)





O/C

282

Bihar State Power Transmission Company Ltd., Patna
A subsidiary company of Bihar State Power (Holding) Company Ltd., Patna
CIN - U74110BR2012SGC018889
[SAVE ENERGY FOR BENEFIT OF SELF AND NATION]
Head Office, Vidyut Bhawan, Bailey Road, Patna - 800021,

Letter No./
File no: BGCL/Loss/Transmission/06/2022

Dated...../

From,

Chief Engineer (System Operation)
Bihar State Power Transmission Co. Ltd.

To

GM- O&M (Commercial)
Bihar Grid Company Limited
2nd floor, Alankar place, Boring Road
Patna, 800001

Sub: Certification of Energy accounting of BGCL power system for the month of October-2022.
Ref: Your office letter no. JV/PT/BG/O&M/Energy meter/ October'22/812 dated 09.11.2022.

Sir,

With reference to the subject mention above, this is to mention that monthly energy loss in the transmission system of BGCL is prepared as per the compliance to *Directive 6: Metering and Energy Audit*, of "BGCL Tariff Order for FY-2022-23" dated 25.03.2022 of BERC. All the interface points of BGCL and BSPTCL are considered in the calculation of transmission loss of BGCL power system.

Monthly energy accounting and hence loss in BGCL system has been verified on the basis of data received from BGCL as well as from AMR in SAMAST. In compliance of the above mentioned directive, transmission loss % in the BGCL power system for the month of October'22 is calculated as 1.11 %.

Encl: As above

Yours faithfully

Sd/-

(A.K. Chaudhary)

Chief Engineer (System Operation)

Date.....

Memo No. 667

Copy forwarded to CE (STU), BSPTCL/ Director (operation), BSPTCL for kind information and necessary action.

(A.K. Chaudhary)

Chief Engineer (System Operation)



Bihar State Power Transmission Company Ltd., Patna
A subsidiary company of Bihar State Power (Holding) Company Ltd., Patna
CIN - U74110BR2012SGC018889
[SAVE ENERGY FOR BENEFIT OF SELF AND NATION]
Head Office, Vidyut Bhawan, Bailey Road, Patna - 800021,

Dated... 25.10.2022

Letter No. 598
File no. BGCL/Transmission/06/2022

From,

Chief Engineer (System Operation)
Bihar State Power Transmission Co. Ltd.

To

GM- O&M (Commercial)
Bihar Grid Company Limited
2nd floor, Alankar place, Boring Road
Patna, 800001

Sub: Certification of Energy accounting of BGCL power system for the month of September'2022.
Ref: (i) Your office letter no. JV/PT/BG/O&M/Energy meter/September'22/775 dated:14.10.2022.

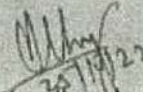
Sir,

With reference to the subject mention above, monthly energy loss in the transmission system of BGCL is prepared as per the compliance of Directive 6: Metering and Energy Audit, of "BGCL Tariff Order for FY 2022-23" dated: 25.03.2022 of BERC. All the interface points of BGCL and BSPTCL are considered in the calculation of transmission loss of BGCL.

Monthly energy accounting and hence loss in BGCL system has been verified on the basis of energy meter data received from BGCL as well as from AMR in SAMASAT. In compliance of the above mentioned directive, transmission loss % in the BGCL power system for the month of September 2022 is calculated as 1.27 %.

Encl: as above

Yours faithfully


(A.K. Chaudhary)
Chief Engineer (System Operation)





Bihar State Power Transmission Company Ltd., Patna
A subsidiary company of Bihar State Power (Holding) Company Ltd., Patna
CIN - U74110BR2012SGC018889
[SAVE ENERGY FOR BENEFIT OF SELF AND NATION]
Head Office, Vidyut Bhawan, Bailey Road, Patna - 800021,

Letter No. 387/.....
File no. BGCL/Loss/Transmission/06/2022

Dated 06-06-23

From,

Chief Engineer (System Operation)
Bihar State Power Transmission Co. Ltd.

To

GM- O&M (Commercial)
Bihar Grid Company Limited
2nd floor, Alankar palace, Boring Road
Patna, 800001, Mob: 8102924200

Sub: Certification of Energy accounting of BGCL power system for the month of April-2023.
Ref: Your office letter no. JV/PT/BG/O&M/Energy meter/ April'23/295 dated 10.05.2023.

Sir,

With reference to the subject above, this is to mention that monthly energy loss in the transmission system of BGCL is prepared as per the compliance to *Directive 6: Metering and Energy Audit, of "BGCL Tariff Order for FY-2022-23"* dated 25.03.2022 of BERC. All the interface points of BGCL and BSPTCL are considered in the calculation of transmission loss of BGCL power system.

Monthly energy accounting and hence loss in BGCL system has been verified on the basis of data received from BGCL as well as from AMR in SAMAST. In compliance of the above mentioned directive, transmission loss % in the BGCL power system for the month of April-2023 is calculated as 0.84 %.

Encl: As above

Yours faithfully,

(A.K. Chaudhary)
Chief Engineer (SO)

Annexure-I

BIHAR GRID COMPANY LIMITED

Name of the GIC	Details With Service Connection Number taken to measure Auxillary Consumption		Consumption (Meter Reading)		Electricity charges paid in FY 2022-23			
	Customer ID	Meter Sl. No.	Meter wise (in MWH)	Total (in MWH)	From Date	To Date	Bill Amount (in Rs.)	Total Amount (in Rs.)
Haveli Kharagpur	236702198791	LT-01(NBPD2842)	23.59	398.90	11-03-22	15-04-22	167,967	2,449,682
			21.03		15-04-22	14-05-22	161,925	
			24.66		14-05-22	17-06-22	181,742	
			19.58		17-06-22	14-07-22	150,439	
			21.76		14-07-22	13-08-22	167,740	
			21.76		13-08-22	12-09-22	167,577	
			21.04		12-09-22	11-10-22	161,935	
			21.04		11-10-22	09-11-22	161,995	
			22.49		09-11-22	10-12-22	173,275	
			26.33		10-12-22	20-01-23	202,831	
	22.14	20-01-23	21-02-23		170,724			
	20.75	21-02-23	23-03-23		160,239			
	236702198873	LT-02(NBPD2831)	6.90		11-03-22	15-04-22	60,317	
			24.59		15-04-22	17-06-22	202,440	
			10.53		17-06-22	14-07-22	85,085	
			11.71		14-07-22	13-08-22	95,848	
			11.71		13-08-22	12-09-22	95,755	
			11.32		12-09-22	11-10-22	92,535	
			11.71		11-10-22	10-11-22	95,786	
			11.71		10-11-22	10-12-22	95,762	
6.66			10-12-22	11-01-23	56,235			
10.40			11-01-23	08-02-23	-257,424			
Narhat	222102440273	LT-01(XB426793)	15.59	344.00	08-02-23	01-03-23	-21,026	1,222,941
			55.00		12-03-22	10-05-22	269,018	
			37.00		10-05-22	14-06-22	269,832	
			29.00		14-06-22	11-07-22	203,070	
			27.00		11-07-22	07-08-22	-17,744	
			34.00		07-08-22	14-09-22	235,469	
			30.00		14-09-22	12-10-22	-18,358	
			28.00		12-10-22	12-11-22	173,700	
			21.00		12-11-22	15-12-22	107,955	
			24.00		15-12-22	16-01-23	180,096	
			19.00		16-01-23	14-02-23	966,877	
			20.00		14-02-23	15-03-23	155,266	
			22.00		15-03-23	15-04-23	157,578	
			Khujir Sarai		22720049667	LT-01(XB426808)	84.52	
24.50	09-08-22	13-09-22		119,931				
19.30	13-09-22	11-10-22		104,932				
28.15	11-10-22	23-11-22		141,162				
18.99	23-11-22	22-12-22		94,571				
17.68	22-12-22	18-01-23		88,383				
21.61	18-01-23	20-02-23		106,299				
69.20	20-02-23	09-03-23		-88,919				
16.00	09-03-23	06-04-23		-6,589				
Ammour	102510099642	LT-01(XB426792)		24.85			366.26	09-03-22
			25.80	09-04-22	07-05-22	178,090		
			30.10	07-05-22	06-06-22	221,379		
			27.90	06-06-22	04-07-22	200,112		
			33.20	04-07-22	04-08-22	243,715		
			31.32	04-08-22	03-09-22	229,541		
			26.78	03-09-22	04-10-22	197,136		
			23.80	04-10-22	05-11-22	114,629		
			29.51	05-11-22	05-12-22	147,925		
			36.50	06-12-22	05-01-23	22,232		
			28.90	05-01-23	08-02-23	130,290		
			21.90	08-02-23	07-03-23	99,932		
Shekhopur Sarai	23820016859	LT-02(XC579640)	114.80	285.60	23-03-22	02-08-22	866,101	2,131,525
			27.00		02-08-22	06-09-22	194,700	
			27.00		06-09-22	12-10-22	198,941	
			27.00		12-10-22	08-11-22	197,415	
			27.00		08-11-22	06-12-22	197,602	
			1.50		06-12-22	04-01-23	15,906	
			18.30		04-01-23	01-02-23	138,253	
			19.70		01-02-23	10-03-23	149,273	
			23.30		10-03-23	12-04-23	174,634	
			2.40		22-03-22	23-04-22	29,580	
			3.40		23-04-22	21-05-22	33,301	
			3.60		21-05-22	17-06-22	36,079	
			3.83		17-06-22	21-07-22	40,194	
			3.89		21-07-22	30-08-22	42,857	

Goradhi	234203806544	LT-01(00059011)	2.93	382.08	30-08-22	28-09-22	31,750	2,873,742
			2.94		26-09-22	26-10-22	32,283	
			2.75		26-10-22	22-11-22	27,835	
			2.27		22-11-22	27-12-22	26,906	
			1.85		27-12-22	23-01-23	21,410	
			0.72		23-01-23	20-02-23	13,317	
			1.56		20-02-23	21-03-23	22,987	
			5.47		21-03-23	17-04-23	48,568	
			18.75		22-03-22	23-04-22	147,149	
	234203806661	LT-02(NBPD4751)	22.31		23-04-22	21-05-22	170,120	
			22.09		21-05-22	17-06-22	187,755	
			20.57		17-06-22	21-07-22	160,643	
			20.61		21-07-22	30-08-22	163,402	
			20.17		30-08-22	28-09-22	155,728	
			20.20		28-09-22	26-10-22	159,381	
			31.28		26-10-22	22-11-22	232,412	
			23.06		22-11-22	23-12-22	176,761	
			93.29		23-12-22	23-01-23	514,415	
			23.03		23-01-23	20-02-23	168,193	
Mokarna	213405922815	LT-02(2175375)	13.12	250.03	20-02-23	21-03-23	111,768	2,171,840
			15.99		21-03-23	17-04-23	138,968	
			39.39		08-03-22	11-04-22	297,518	
			33.11		11-04-22	07-05-22	243,930	
			18.28		07-05-22	05-06-22	147,149	
			40.85		05-06-22	06-07-22	307,732	
			11.20		06-07-22	03-08-22	84,328	
			31.01		03-08-22	03-09-22	232,525	
			28.71		03-09-22	10-10-22	215,137	
			23.70		10-10-22	04-11-22	176,514	
	218303815747	LT-01(20001826)	0.00		04-11-22	07-12-22	8,630	
			13.14		07-12-22	01-01-23	108,303	
			10.64		01-01-23	08-02-23	89,869	
			13.52		06-02-23	05-03-23	110,121	
			19.62		05-03-23	05-04-23	150,084	
			1.63		08-03-22	11-04-22	21,426	
			1.20		11-04-22	06-05-22	15,889	
			1.87		06-05-22	14-06-22	24,650	
			2.74		14-06-22	10-08-22	36,011	
218507890108	LT-01(20001826)	3.31	10-08-22	18-10-22	43,532			
		0.96	18-10-22	07-11-22	12,290			
		191.18	N/A	06-07-22	1,441,850			
		43.74	16-08-22	07-10-22	-324,060			
		26.92	07-10-22	09-11-22	-124,718			
		19.24	09-11-22	07-12-22	25,448			
		19.93	07-12-22	05-01-23	154,091			
		19.93	05-01-23	03-02-23	154,046			
		21.99	03-02-23	07-03-23	170,140			
		25.05	07-03-23	11-04-23	220,569			
Khagrauli Excn	102244393	31500525(BSPTCL meter)	5.66	97.83	10-03-22	09-04-22	62,553	777,969
			8.47		10-04-22	09-05-22	72,075	
			9.05		10-05-22	14-06-22	81,239	
			10.59		15-06-22	16-07-22	70,059	
			9.04		17-07-22	20-08-22	75,889	
			9.06		21-08-22	07-09-22	35,213	
			10.18		08-09-22	17-10-22	82,317	
			5.53		18-10-22	10-11-22	40,888	
			6.25		11-11-22	12-12-22	54,399	
			5.59		13-12-23	13-01-2023	51,560	
	216207759164	LT-02(20004231)	5.47		14-01-23	13-02-23	50,949	
			6.20		14-02-23	15-03-23	54,952	
			6.15		16-03-23	11-04-23	45,895	
			94.26		01-04-22	06-06-22	758,312	
			31.35		06-06-22	05-07-22	235,810	
			87.31		01-08-22	01-09-22	319,252	
			39.44		01-09-22	01-10-22	315,388	
			31.82		01-10-22	01-11-22	267,751	
			22.38		01-11-22	01-12-22	198,048	
Kusabpur	216207759164	LT-02(20004231)	412.35	412.35	01-12-22	01-12-22	198,048	3,094,272
			94.26		01-04-22	06-06-22	758,312	
			31.35		06-06-22	05-07-22	235,810	
			87.31		01-08-22	01-09-22	319,252	
			39.44		01-09-22	01-10-22	315,388	

N			24.75	01-12-22	02-01-23	244,879	
			31.38	02-01-23	01-02-23	299,394	
			20.06	01-02-23	01-03-23	186,656	
			29.60	01-03-23	01-04-23	268,802	
Jakkampur	102203666	LT-01(X1674496)	33.92	30-04-22	31-05-22	258,844	2,606,090
			39.15	31-05-22	30-06-22	291,557	
			20.30	30-06-22	31-07-22	163,806	
			2.78	31-07-22	31-08-22	41,022	
			0.28	31-08-22	30-09-22	23,348	
			0.22	30-09-22	31-10-22	21,922	
			0.20	31-10-22	30-11-22	22,505	
	58.79		N/A	11-11-22	536,483		
	71.99		11-11-22	05-12-22	523,632		
	41.90		05-12-22	12-01-23	341,343		
	24.50		12-01-23	10-02-23	199,711		
	22.62		10-02-23	10-03-23	181,917		
	0.34		09-05-22	10-06-22	4,486		
	0.46		10-06-22	09-07-22	4,977		
0.28	09-07-22	09-08-22	3,878				
0.12	09-08-22	07-09-22	2,719				
0.53	07-09-22	10-10-22	5,741				
70.72	N/A	01-12-22	447,142				
8.09	01-12-22	09-01-23	52,934				
10.35	09-01-23	01-02-23	122,125				
13.77	01-02-23	01-03-23	91,554				
Bhusaula	216203340947	LT-01(20004227)	104.65	N/A	06-09-22	8,741	735,556
	216108294331		06-09-22	08-10-22	12,123		
			08-10-22	10-11-22	11,054		
			10-11-22	07-12-22	5,974		
			07-12-22	04-01-23	5,938		
			04-01-23	08-02-23	6,614		
			08-02-23	07-03-23	8,770		
			07-03-23	06-04-23	11,466		
Bihla Esin	212107892225	X1674471	13.40	Total Amount		24,540,159	22,263,031

Annexure-J

BIHAR GRID COMPANY LIMITED
2nd FLOOR, ALANKAR PLACE, BORING ROAD, PATNA
CIN: 040100BR2013PLC019722

Trial Balance
1-Apr-23 to 30-Sep-23

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	Opening Balance	Transactions		Closing Balance
		Debit	Credit	
Capital Account	9,59,18,17,265 Cr	6,53,02,880	13,06,05,760	9,65,71,20,145 Cr
Reserves & Surplus	2,90,92,72,065 Cr	6,53,02,880	6,53,02,880	2,90,92,72,065 Cr
Share Capital	6,68,25,45,200 Cr		6,53,02,880	6,74,78,48,080 Cr
2 Bihar State Power (H) Co. Ltd.	1,30,17,42,780 Cr		3,26,51,440	1,33,43,94,220 Cr
2 Power Grid Corporation of India Limited	1,30,17,42,780 Cr		3,26,51,440	1,33,43,94,220 Cr
Bihar State Power (H) Co. Ltd.	1,92,83,89,820 Cr			1,92,83,89,820 Cr
Bihar State Power (H) Co. Ltd.-Supple	11,11,40,000 Cr			11,11,40,000 Cr
Power Grid Corporation of India Limited	1,92,83,89,820 Cr			1,92,83,89,820 Cr
Power Grid Corporation of India Limited-Supple	11,11,40,000 Cr			11,11,40,000 Cr
Loans (Liability)	24,37,64,66,265 Cr	1,04,16,85,376	97,95,91,143	24,31,43,72,032 Cr
Borrowings	21,34,93,00,323 Cr	86,32,32,114	50,00,00,000	20,98,60,68,209 Cr
Non- Current Financial Liabilities(Retention)	1,30,29,01,167 Cr	17,84,53,262	6,85,81,085	1,19,30,28,990 Cr
2 Retention Money-Bajaj Electricals Ltd.	4,80,90,750 Cr		4,04,344	4,84,95,094 Cr
2 Retention Money- Godrej & Boyce Mfg Co.Ltd.	25,61,39,976 Cr	3,95,80,864	26,43,040	21,92,02,152 Cr
2 Retention Money- KEC Int. Ltd.	10,36,12,578 Cr	1,54,87,425	8,39,086	8,89,64,239 Cr
2 Retention Money-Shandong Taikai SG Mfg Co. Ltd.	34,46,29,245 Cr	8,79,25,673		25,67,03,572 Cr
2 Retention Money- Taikai Electric (India) Pvt Ltd.	85,32,759 Cr			85,32,759 Cr
2 Retention Money-TBEA Energy (India) Pvt Ltd	6,40,45,349 Cr			6,40,45,349 Cr
Retention Money-ABB HVS Xiamen Co.Ltd	14,92,93,867 Cr			14,92,93,867 Cr
Retention Money-Aditya Birla Insulators	5,96,402 Cr			5,96,402 Cr
Retention Money BHEL	3,97,78,344 Cr	3,43,45,380	6,18,55,470	6,72,88,434 Cr
Retention Money-EMCO	10,92,38,911 Cr			10,92,38,911 Cr
Retention Money- Godrej & Boyce Mfg Co.Ltd.-SS28	7,38,47,190 Cr	10,07,120	23,19,499	7,51,59,569 Cr
Retention Money- Hitachi Energy India Limited	6,69,06,599 Cr		5,19,646	6,74,26,245 Cr
Retention Money- LS Cable.	30,29,383 Cr			30,29,383 Cr
Retention Money-Siemens	72,78,071 Cr			72,78,071 Cr
Retention Money - Smita Conductors Ltd	6,20,051 Cr			6,20,051 Cr
Retention Money-Tata Projects	2,72,61,692 Cr	1,06,800		2,71,54,892 Cr
Deferred Tax Liabilities (Net)	1,72,42,64,775 Cr		41,10,10,058	2,13,52,74,833 Cr
Current Liabilities	1,62,79,33,433 Cr	1,19,89,02,684	1,21,12,12,053	1,64,02,42,802 Cr
Fixed Assets	28,08,47,12,602 Dr	1,51,83,61,503	1,72,58,19,953	27,87,72,54,152 Dr
CAPITAL WORK IN PROGRESS	4,29,80,46,217 Dr	60,56,44,171	95,29,10,520	3,95,07,79,868 Dr
2 Constn.Stores with Contractors-Station Materials	7,42,21,771 Dr	29,62,801	4,34,31,585	3,37,52,987 Dr
2 Constn.Stores with Contractors- Towers	1,70,96,666 Dr	47,71,262		2,18,67,928 Dr
2 Const.Stores With Contractors-Conductors&EW	8,11,38,944 Dr			8,11,38,944 Dr
2 Const.Stores With Contractors - Insulators.	1,37,28,580 Dr			1,37,28,580 Dr
2 Const. Stores with Contractors-Transformers	9,33,193 Dr			9,33,193 Dr
2 Crop Compensation	15,70,04,289 Dr	1,16,31,142	7,12,70,571	9,73,64,860 Dr
2 CWIP - Conductors & EW	35,02,99,440 Dr		4,13,11,860	30,89,87,580 Dr
2 CWIP - IDC.	19,00,00,604 Dr	6,95,29,728	12,53,39,546	13,41,90,786 Dr
2 CWIP - IEDC.	10,96,80,832 Dr	1,93,69,783	6,28,19,701	6,62,30,914 Dr
Carried Over	7,51,15,04,361 Cr	3,82,42,52,443	4,04,72,28,909	7,73,44,80,827 Cr

continued ...

	Opening Balance	Transactions		Closing Balance
		Debit	Credit	
Brought Forward	7,51,15,04,361 Cr	3,82,42,52,443	4,04,72,28,909	7,73,44,80,827 Cr
2 CWIP - Insulators	3,90,92,408 Dr		98,30,639	2,92,61,769 Dr
2 CWIP-Substation/Bays	4,21,88,778 Dr	1,09,83,264		5,31,72,042 Dr
2 CWIP - Towers	64,28,01,986 Dr	1,02,33,083	59,37,03,992	5,93,31,077 Dr
2 CWIP - Transformers.	3,62,11,612 Dr			3,62,11,612 Dr
2 Tree Compensation	38,59,765 Dr	62,90,019	52,02,626	49,47,158 Dr
Constn.Stores with Contractors-Station Materials	33,81,22,731 Dr	36,12,39,523		69,93,62,254 Dr
Constn.Stores with Contractors-Station Mat-SS28	43,39,85,983 Dr	73,66,143		44,13,52,126 Dr
Constn.Stores with Contractors- Towers	6,33,32,363 Dr			6,33,32,363 Dr
Const.Stores With Contractors-Conductors&EW	10,71,71,517 Dr			10,71,71,517 Dr
Const.Stores With Contractors - Insulators.	3,35,36,744 Dr			3,35,36,744 Dr
Const. Stores with Contractors-Reactors	27,49,02,334 Dr			27,49,02,334 Dr
Crop Compensation	7,68,04,423 Dr			7,68,04,423 Dr
CWIP - Conductors & EW	9,14,75,225 Dr			9,14,75,225 Dr
CWIP - IDC.	89,87,91,899 Dr	5,59,95,498		95,47,87,397 Dr
CWIP- IDC (SS28)	3,48,30,810 Dr	2,13,13,284		5,61,44,094 Dr
CWIP - IEDC.	6,95,62,894 Dr	1,48,64,108		8,44,27,002 Dr
CWIP - Insulators	1,70,27,271 Dr			1,70,27,271 Dr
CWIP-Substation/Bays	8,15,67,579 Dr	89,69,653		9,05,37,232 Dr
CWIP - Towers	1,43,98,435 Dr	34,880		1,44,33,315 Dr
CWIP - Transformers.	5,19,610 Dr			5,19,610 Dr
Tree Compensation	37,57,531 Dr	90,000		38,47,531 Dr
Intangible Assets	1,20,68,552 Dr		4,23,468	1,16,45,084 Dr
2 Accumulated Dep Intangible Asset- Afforestation Exp	6,755 Cr			6,755 Cr
2 Intangible Assets- Afforestation Expenses	5,69,474 Dr			5,69,474 Dr
Accumulated Dep Intangible Asset- Afforestation Exp	36,90,028 Cr		4,23,468	41,13,496 Cr
Accumulated Dep on Intangible Asset-EDP Software	17,38,412 Cr			17,38,412 Cr
Intangible Assets - Afforestation Expenses	1,54,27,161 Dr			1,54,27,161 Dr
Intangible Assets- EDP Software.	15,07,112 Dr			15,07,112 Dr
Tangible Assets	23,77,45,97,833 Dr	91,27,17,332	77,24,85,965	23,91,48,29,200 Dr
Building	2,46,00,08,744 Dr		4,49,96,375	2,41,50,12,369 Dr
2 Accumulated Dep on Building & Civil Work	4,92,64,118 Cr		2,42,35,789	7,34,99,907 Cr
2 Building & Civil Work	1,44,72,79,674 Dr			1,44,72,79,674 Dr
Accumulated Dep on Building & Civil Work	17,77,59,092 Cr		2,07,60,586	19,85,19,678 Cr
Building & Civil Work	1,23,97,52,280 Dr			1,23,97,52,280 Dr
Furniture and Fixtures	2,45,42,154 Dr	23,300	9,59,541	2,36,05,913 Dr
2 Accumulated Dep. Furniture A/c	3,68,589 Cr		1,25,580	4,94,169 Cr
2 Furniture & Fixtures	39,37,086 Dr			39,37,086 Dr
Accumulated Dep. Furniture A/c	49,00,083 Cr		7,85,613	56,85,696 Cr
Accumulated Dep. on Electric Installation	4,03,718 Cr		48,348	4,52,066 Cr
Electrical Installation	15,23,394 Dr			15,23,394 Dr
Furniture & Fixtures	2,47,54,064 Dr	23,300		2,47,77,364 Dr
Land	58,09,73,695 Dr			58,09,73,695 Dr
2 Leasehold Land (Perpetual)	45,19,26,953 Dr			45,19,26,953 Dr
Freehold Land	6,57,05,617 Dr			6,57,05,617 Dr
Leasehold Land (Perpetual)	6,33,41,125 Dr			6,33,41,125 Dr
Carried Over	7,51,15,04,361 Cr	3,82,42,52,443	4,04,72,28,909	7,73,44,80,827 Cr

continued ...

	Opening Balance	Transactions		Closing Balance
		Debit	Credit	
Brought Forward	7,51,15,04,361 Cr	3,82,42,52,443	4,04,72,28,909	7,73,44,80,827 Cr
Office Equipment	7,68,20,377 Dr	39,03,934	46,56,769	7,60,67,542 Dr
2 Accumulated Dep.on Electronic Data Processing	5,03,853 Cr	1,71,072	66,767	3,99,548 Cr
2 Electronic Data Processing Machines	3,99,548 Dr			3,99,548 Dr
Accumulated Dep.on Electronic Data Processing	96,46,275 Cr	29,86,187	12,89,973	79,50,061 Cr
Accumulated Dep. on Office Equipment	29,23,530 Cr		9,33,645	38,57,175 Cr
Accumulated Dep on Server & Network Component	26,25,277 Cr		3,48,614	29,73,891 Cr
Accumulated Dep on Servicing Equipment	1,18,84,607 Cr		20,17,770	1,39,02,377 Cr
Electrically Operated Vehicles	40,12,000 Dr			40,12,000 Dr
Electronic Data Processing Machines	86,74,821 Dr			86,74,821 Dr
Office Equipment	1,28,88,317 Dr	7,46,675		1,36,34,992 Dr
Server & Network Component	34,76,617 Dr			34,76,617 Dr
Servicing Equipment	7,49,52,616 Dr			7,49,52,616 Dr
Plant & Machinery	20,63,22,52,863 Dr	90,87,90,098	72,18,73,280	20,81,91,69,681 Dr
Sub-Stations Equipment & Switchyard	14,10,66,15,766 Dr			14,10,66,15,766 Dr
Transmissions	11,31,45,18,069 Dr	90,87,90,098		12,22,33,08,167 Dr
2 Accumulated Dep on Con & EW	3,48,72,797 Cr		1,60,30,862	5,09,03,659 Cr
2 Accumulated Dep on Insulator	21,58,232 Cr		11,95,773	33,54,005 Cr
2 Accumulated Dep on Sub Station	27,99,25,398 Cr		11,05,34,219	39,04,59,617 Cr
2 Accumulated Dep on Tower	9,61,18,087 Cr		9,59,77,932	19,20,96,019 Cr
2 Accumulated Dep on Transformer	5,95,90,820 Cr		3,77,64,438	9,73,55,258 Cr
Accumu. Depm-Sub Strn & S/yard	1,82,73,01,097 Cr		19,46,68,246	2,02,19,69,343 Cr
Accumulated Dep on Conductors & EW	1,01,26,73,353 Cr		10,64,70,677	1,11,91,44,030 Cr
Accumulated Dep on Insulators	6,50,72,958 Cr		68,30,535	7,19,03,493 Cr
Accumulated Dep on Towers	1,15,92,85,198 Cr		12,19,32,530	1,28,12,17,728 Cr
Accumulated Dep on Transformers	25,18,83,032 Cr		3,04,68,068	28,23,51,100 Cr
Current Assets	7,51,15,04,361 Dr	22,60,02,91,974	23,23,81,76,877	6,87,36,19,458 Dr
Security Deposits	11,85,480 Dr			11,85,480 Dr
Security Deposit - Alankar Place Office.	8,85,480 Dr			8,85,480 Dr
Security Deposit to CDSL.	1,50,000 Dr			1,50,000 Dr
Security Deposit to NSDL	1,50,000 Dr			1,50,000 Dr
Loans & Advances (Asset)	4,26,14,563 Dr	3,24,28,426	3,69,05,105	3,81,37,884 Dr
Sundry Debtors	4,98,79,57,418 Dr	1,40,38,85,566	1,50,61,64,486	4,88,56,78,498 Dr
Bank Accounts	2,35,63,63,194 Dr	21,07,43,73,180	21,63,15,72,157	1,79,91,64,217 Dr
Auto Sweep-006	16,04,62,708 Dr	5,26,19,57,809	5,42,10,17,027	14,03,490 Dr
TD-440049110001302	7,61,768 Dr	93	7,61,861	
TD-440049110001311	3,00,925 Dr	375	3,01,300	
TD-440049110001327	2,00,015 Dr	231	2,00,246	
TD-440049110001328	15,92,00,000 Dr	4,11,746	15,96,11,746	
TD-440049110001329		8,00,658	8,00,658	
TD-440049110001339		4,93,91,171	4,93,91,171	
TD-440049110001341		10,08,58,390	10,08,58,390	
TD-440049110001342		3,92,72,493	3,92,72,493	
TD-440049110001343		2,00,36,986	2,00,36,986	
TD-440049110001346		2,00,36,986	2,00,36,986	
TD-440049110001347		3,92,72,493	3,92,72,493	
Carried Over		26,42,45,44,417	27,28,54,05,786	86,08,61,369 Cr

continued ...

	Opening Balance	Transactions		Closing Balance
		Debit	Credit	
Brought Forward		26,42,45,44,417	27,28,54,05,786	86,08,61,369 Cr
TD-440049110001350		5,95,09,849	5,95,09,849	
TD-440049110001352		3,00,55,479	3,00,55,479	
TD-440049110001353		2,00,00,000	2,00,00,000	
TD-440049110001355		6,95,28,342	6,95,28,342	
TD-440049110001356		10,10,48,548	10,10,48,548	
TD-440049110001357		3,92,72,493	3,92,72,493	
TD-440049110001358		2,01,37,171	2,01,37,171	
TD-440049110001360		2,00,36,986	2,00,36,986	
TD-440049110001361		3,93,72,678	3,93,72,678	
TD-440049110001365		5,95,73,048	5,95,73,048	
TD-440049110001366		3,00,55,479	3,00,55,479	
TD-440049110001366		6,96,28,527	6,96,28,527	
TD-440049110001369		10,13,65,907	10,13,65,907	
TD-440049110001371		3,92,72,493	3,92,72,493	
TD-440049110001373		2,02,37,356	2,02,37,356	
TD-440049110001375		4,00,73,973	4,00,73,973	
TD-440049110001378		6,95,28,342	6,95,28,342	
TD-440049110001379		4,90,90,616	4,90,90,616	
TD-440049110001382		8,96,65,514	8,96,65,514	
TD-440049110001384		4,90,90,616	4,90,90,616	
TD-440049110001386		7,92,09,295	7,92,09,295	
TD-440049110001387		96,11,836	96,11,836	
TD-440049110001390		14,16,60,025	14,16,60,025	
TD-440049110001392		3,93,72,678	3,93,72,678	
TD-440049110001393		2,03,37,541	2,03,37,541	
TD-440049110001394		4,01,74,158	4,01,74,158	
TD-440049110001396		6,96,28,527	6,96,28,527	
TD-440049110001398		4,91,90,801	4,91,90,801	
TD-440049110001400		8,98,65,884	8,98,65,884	
TD-440049110001402		10,84,75,688	10,84,75,688	
TD-440049110001404		1,92,11,836	1,92,11,836	
TD-440049110001407		64,32,80,240	64,32,80,240	
TD-440049110001408		3,93,00,000	3,93,00,000	
TD-440049110001410		2,04,00,000	2,04,00,000	
TD-440049110001411		5,97,58,882	5,97,58,882	
TD-440049110001414		8,97,77,412	8,97,77,412	
TD-440049110001416		8,83,00,000	8,83,00,000	
TD-440049110001418		12,95,00,000	12,95,00,000	
TD-440049110001419		1,96,00,000	1,96,00,000	
TD-440049110001421		8,84,00,000	8,84,00,000	
TD-440049110001422		1,01,12,452	1,01,12,452	
TD-440049110001424		46,85,77,926	46,85,77,926	
TD-440049110001426		1,96,00,000	1,96,00,000	
TD-440049110001433		2,00,00,000	2,00,00,000	
TD-440049110001434		6,00,740	6,00,740	
TD-440049110001437				
Carried Over		26,42,45,44,417	27,28,54,05,786	86,08,61,369 Cr

continued ...

	Opening Balance	Transactions		Closing Balance
		Debit	Credit	
Brought Forward		26,42,45,44,417	27,28,54,05,786	86,08,61,369 Cr
TD-440049110001442		15,79,04,538	15,79,04,538	
TD-440049110001444		2,00,25,299	2,00,25,299	
TD-440049110001445		4,00,49,315	4,00,49,315	
TD-440049110001449		2,00,17,260	2,00,17,260	
TD-440049110001450		4,00,00,000	4,00,00,000	
TD-440049110001451		2,00,00,000	2,00,00,000	
TD-440049110001452		46,00,000	46,00,000	
TD-440049110001459		15,83,04,970	15,83,04,970	
TD-440049110001462		1,74,18,592	1,74,18,592	
TD-440049110001468		17,61,51,284	17,61,51,284	
TD-440049110001470		5,27,97,459	5,27,97,459	
TD-440049110001472		2,00,36,986	2,00,36,986	
TD-440049110001473		2,00,23,425	2,00,23,425	
TD-440049110001474		5,00,39,452	5,00,39,452	
TD-440049110001476		2,00,00,000	2,00,00,000	
TD-440049110001478		3,00,00,000	3,00,00,000	
TD-440049110001482		2,00,00,000	2,00,00,000	
TD-440049110001484		18,87,95,255	18,87,95,255	
TD-440049110001488		5,28,91,480	5,28,91,480	
TD-440049110001489		2,00,17,260	2,00,17,260	
TD-440049110001490		1,00,00,000	1,00,00,000	
TD-440049110001494		2,00,36,986	2,00,36,986	
TD-440049110001498		18,92,63,518	18,78,60,028	14,03,490 Dr
TD-440049110001500		6,29,78,263	6,29,78,263	
TD-440049110001503		4,00,35,507	4,00,35,507	
TD-440049110001504		2,00,00,000	2,00,00,000	
TD-440049110001507		10,00,00,000	10,00,00,000	
TD-440049110001508		2,00,00,000	2,00,00,000	
TD-440049110001510		2,00,00,000	2,00,00,000	
Auto Sweep-009	49,46,01,312 Dr	1,95,47,57,661	2,33,27,73,030	11,65,85,943 Dr
TD-440049110001169	75,15,888 Dr	925	75,16,813	
TD-440049110001192	64,92,767 Dr	799	64,93,566	
TD-440049110001229	91,08,765 Dr	6,730	91,15,495	
TD-440049110001244	1,87,38,555 Dr	11,537	1,87,50,092	
TD-440049110001325	45,04,44,958 Dr	9,79,833	45,14,24,791	
TD-440049110001326	23,00,379 Dr	2,457	23,02,836	
TD-440049110001330		1,41,17,384	1,41,17,384	
TD-440049110001333		2,75,49,192	2,75,49,192	
TD-440049110001338		7,97,45,726	7,97,45,726	
TD-440049110001344		1,41,17,384	1,41,17,384	
TD-440049110001348		2,65,42,534	2,65,42,534	
TD-440049110001354		8,15,45,356	8,15,45,356	
TD-440049110001359		1,40,17,137	1,40,17,137	
TD-440049110001362		2,31,41,425	2,31,41,425	
TD-440049110001367		1,97,24,288	1,97,24,288	
Carried Over		26,42,45,44,417	27,28,54,05,786	86,08,61,369 Cr

continued ...

	Opening Balance	Transactions		Closing Balance
		Debit	Credit	
Brought Forward		26,42,45,44,417	27,28,54,05,786	86,08,61,369 Cr
TD-440049110001370		7,77,43,507	7,77,43,507	
TD-440049110001376		1,39,17,137	1,39,17,137	
TD-440049110001380		2,24,39,945	2,24,39,945	
TD-440049110001389		1,83,22,562	1,83,22,562	
TD-440049110001391		7,79,41,103	7,79,41,103	
TD-440049110001395		1,39,17,137	1,39,17,137	
TD-440049110001399		2,17,37,541	2,17,37,541	
TD-440049110001405		1,84,22,685	1,84,22,685	
TD-440049110001409		7,60,40,363	7,60,40,363	
TD-440049110001412		1,39,16,151	1,39,16,151	
TD-440049110001417		2,03,20,589	2,03,20,589	
TD-440049110001423		1,84,22,685	1,84,22,685	
TD-440049110001425		7,61,37,589	7,61,37,589	
TD-440049110001428		1,27,15,658	1,27,15,658	
TD-440049110001431		1,67,20,466	1,67,20,466	
TD-440049110001436		8,75,21,575	8,75,21,575	
TD-440049110001438		7,46,37,774	7,46,37,774	
TD-440049110001439		5,00,92,466	5,00,92,466	
TD-440049110001443		1,27,15,658	1,27,15,658	
TD-440049110001446		1,56,16,340	1,56,16,340	
TD-440049110001453		1,75,21,575	1,75,21,575	
TD-440049110001455		7,46,37,774	7,46,37,774	
TD-440049110001458		4,94,91,356	4,94,91,356	
TD-440049110001460		1,27,15,164	1,27,15,164	
TD-440049110001463		1,42,14,918	1,42,14,918	
TD-440049110001465		1,65,20,342	1,65,20,342	
TD-440049110001467		4,85,89,692	4,85,89,692	
TD-440049110001469		8,69,35,456	8,69,35,456	
TD-440049110001479		3,27,60,473	3,27,60,473	
TD-440049110001481		1,56,19,233	1,56,19,233	
TD-440049110001483		4,85,89,692	4,85,89,692	
TD-440049110001485		20,30,20,925	20,30,20,925	
TD-440049110001492		37,04,562	37,04,562	
TD-440049110001495		4,86,89,877	4,86,89,877	
TD-440049110001501		18,83,41,326	10,28,59,041	8,54,82,285 Dr
TD-440049110001509		39,00,641		39,00,641 Dr
TD-440049110001511		4,87,03,017	2,15,00,000	2,72,03,017 Dr
Fixed Deposit	1,57,99,99,970 Dr	1,15,52,34,850	1,10,99,99,976	1,62,52,34,844 Dr
FD	1,57,99,99,970 Dr	1,15,52,34,850	1,10,99,99,976	1,62,52,34,844 Dr
BOI-440021110000006	50,83,875 Dr	7,55,48,76,669	7,55,43,48,790	56,11,754 Dr
BOI-440021110000009	42,50,952 Dr	3,13,28,24,574	3,13,23,64,222	47,11,304 Dr
BOI- 440021110000012 (Unspent CSR)	53,21,389 Dr	2,42,26,693	1,54,14,262	1,41,33,820 Dr
STATE BANK OF INDIA	10,66,42,988 Dr	1,99,04,94,924	2,06,56,54,850	3,14,83,062 Dr
Advance Tax & TDS/TCS	5,96,14,669 Dr	4,86,67,103		10,82,81,772 Dr
2 TDS on Bank Interest	14,40,508 Dr	4,70,934		19,11,442 Dr
Carried Over		26,42,45,44,417	27,28,54,05,786	86,08,61,369 Cr

continued ...

	Opening Balance	Transactions		Closing Balance
		Debit	Credit	
Brought Forward		26,42,45,44,417	27,28,54,05,786	86,08,61,369 Cr
<i>Balance with Income Tax Department</i>	94,78,576 Dr			94,78,576 Dr
<i>TCS on Purchase</i>	7,078 Cr			7,078 Cr
<i>TDS From NBPDC</i>	3,07,55,014 Dr	2,51,18,840		5,58,73,854 Dr
<i>TDS From NHAIL</i>	5,000 Dr	4,33,238		4,38,238 Dr
<i>TDS From SBPDCL</i>	1,66,46,220 Dr	98,33,435		2,64,79,655 Dr
<i>TDS on Bank Interest</i>	8,96,996 Dr	10,77,602		19,74,598 Dr
<i>TDS on Fixed Deposit in SBI</i>	3,97,021 Dr	1,17,33,054		1,21,30,075 Dr
<i>TDS on Scap Sale</i>	2,412 Dr			2,412 Dr
Inventories	1,69,86,550 Dr			1,69,86,550 Dr
<i>Inventory- Conductors& EW.</i>	60,43,344 Dr			60,43,344 Dr
<i>Inventory- Insulators.</i>	7,31,377 Dr			7,31,377 Dr
<i>Inventory- Other Line Materials.</i>	48,19,343 Dr			48,19,343 Dr
<i>Inventory- Tower Material</i>	53,92,486 Dr			53,92,486 Dr
<i>Interest Accrued on Fixed Deposit</i>	4,67,82,487 Dr	4,07,60,199	6,33,57,629	2,41,85,057 Dr
<i>Sodexo-Meal Coupons</i>		1,77,500	1,77,500	
Direct Incomes			1,09,69,00,002	1,09,69,00,002 Cr
<i>Revenue From Operations</i>			1,09,69,00,002	1,09,69,00,002 Cr
<i>Transmission Charges</i>			1,09,69,00,002	1,09,69,00,002 Cr
Direct Expenses		3,06,250	3,06,250	
OTHER RECEIPTS		3,06,250	3,06,250	
Indirect Incomes			37,22,65,427	37,22,65,427 Cr
<i>2 Interest From Bank</i>			42,61,587	42,61,587 Cr
<i>Interest From Bank</i>			98,53,372	98,53,372 Cr
<i>Interest on Fixed Deposit</i>			5,19,59,986	5,19,59,986 Cr
<i>Supervisory Charges</i>			44,17,129	44,17,129 Cr
<i>Surcharge A/C</i>			30,17,73,353	30,17,73,353 Cr
Indirect Expenses		2,52,09,34,794	19,09,07,996	2,33,00,26,798 Dr
<i>Depreciation and Amortisation Exp.</i>		77,29,09,433	31,57,259	76,97,52,174 Dr
<i>Depreciation A/c-P&L</i>		77,29,09,433	31,57,259	76,97,52,174 Dr
Employee Benefit Expenses		10,23,46,477	1,94,40,894	8,29,05,583 Dr
<i>Allocation Employee Benefit</i>			1,79,72,569	1,79,72,569 Cr
<i>Arrear Consolidated Pay</i>		20,141	10,500	9,641 Dr
<i>Arrear DA</i>		28,302		28,302 Dr
<i>Arrears- Basic Pay</i>		89,664		89,664 Dr
<i>Arrears Pay-Perks-Others</i>		1,88,382	10,000	1,78,382 Dr
<i>Basic Pay</i>		2,54,74,601		2,54,74,601 Dr
<i>Bonus</i>		4,05,500		4,05,500 Dr
<i>Consolidated Monthly Remuneration</i>		1,02,02,232		1,02,02,232 Dr
<i>Conv Remb</i>		2,31,590	68,400	1,63,190 Dr
<i>Conv Remb - Petrol.</i>		17,86,183		17,86,183 Dr
<i>Crockery</i>		1,27,000		1,27,000 Dr
<i>Dearness Allowance</i>		97,87,694		97,87,694 Dr
<i>Deputation Allowance</i>		14,90,088		14,90,088 Dr
<i>Employer's Cont. to Gratuity, PMRS, Baggage Etc.</i>		31,73,607		31,73,607 Dr
Carried Over		28,94,57,85,461	28,94,57,85,461	

continued ...

	Opening Balance	Transactions		Closing Balance
		Debit	Credit	
Brought Forward		28,94,57,85,461	28,94,57,85,461	
Employer's Cont to PF-Other Fund		72,41,293	3,600	72,37,693 Dr
Honorarium		37,500		37,500 Dr
HRA		48,66,211	80,056	47,86,155 Dr
Leave Encashment		55,69,340	12,95,769	42,73,571 Dr
Medical Exp		20,61,273		20,61,273 Dr
Pension Employers Contribution		31,84,200		31,84,200 Dr
Performance Related Pay		1,70,75,202		1,70,75,202 Dr
Perk-Dom.Assisst.		1,04,727		1,04,727 Dr
Perks-Canteen Allow.		10,49,550		10,49,550 Dr
Perks-Child. Edu Exp		9,65,538		9,65,538 Dr
Perks-Child Hostel Allow.		6,82,080		6,82,080 Dr
Perks-Community Work Allow		36,888		36,888 Dr
Perks-Driver Allow. Official Duties		4,86,500		4,86,500 Dr
Perks-Elect.Allow.		1,22,962		1,22,962 Dr
Perks-Fest-Cele. Allow.		10,338		10,338 Dr
Perks-Green Meas		55,053		55,053 Dr
Perks-Helper Allowance		8,88,843		8,88,843 Dr
Perks-HHhold Upkp.		1,19,349		1,19,349 Dr
Perks-Ltc		21,71,955		21,71,955 Dr
Perks-News/Prof./Lit.		7,31,517		7,31,517 Dr
Perks-Reim.-Vehicle Rep.		1,11,749		1,11,749 Dr
Perks-Trprt.Allow.		2,95,002		2,95,002 Dr
Perks-Uniform Maintenance		9,31,130		9,31,130 Dr
Perks-Vacation Allowance		33,951		33,951 Dr
Perks-Wash Allow.		98,880		98,880 Dr
Salaries		2,22,833		2,22,833 Dr
Service Weightage Sup/W/men		16,080		16,080 Dr
Transfer Settlement Benefit		502		502 Dr
Welfare Exp.		1,71,047		1,71,047 Dr
Finance Cost		1,02,05,97,411	15,15,95,689	86,90,01,722 Dr
2 Interest on Loan- PFC		49,19,91,378	7,42,86,907	41,77,04,471 Dr
Interest on Loan		50,72,92,749	5,59,95,498	45,12,97,251 Dr
Interest on Loan-SS-28		2,13,13,284	2,13,13,284	
Other Expenses		21,40,71,415	1,67,14,154	19,73,57,261 Dr
Audit Fee		70,000		70,000 Dr
Quarterly Audit Fee		40,000		40,000 Dr
Tax Audit		30,000		30,000 Dr
CSR Expenses		1,46,19,143		1,46,19,143 Dr
CSR Capital Expenditure		5,75,000		5,75,000 Dr
CSR Exp- Sports,Art & Culture.		1,40,44,143		1,40,44,143 Dr
Advertisement Exp.		1,50,520		1,50,520 Dr
Allocation of O&M Expenses			1,62,61,322	1,62,61,322 Cr
Bandwidth Charges		16,00,736		16,00,736 Dr
Bank Charges		38,921		38,921 Dr
Bay Maintenance Expenses		60,98,240		60,98,240 Dr
Carried Over		28,94,57,85,461	28,94,57,85,461	

continued ...

	Opening Balance	Transactions		Closing Balance
		Debit	Credit	
Brought Forward		28,94,57,85,461	28,94,57,85,461	
<i>Books & Periodicals Exp.</i>		9,494		9,494 Dr
<i>Communication Exp.</i>		30,427		30,427 Dr
<i>DG Set Expenses</i>		2,32,185		2,32,185 Dr
<i>Electricity Exp.</i>		12,57,958		12,57,958 Dr
<i>Electricity - Substations.</i>		1,23,04,868	36,011	1,22,68,857 Dr
<i>Entertainment Exp.</i>		1,75,509		1,75,509 Dr
<i>Filing Fee</i>		9,093		9,093 Dr
<i>Horticulture Expenses</i>		1,76,731		1,76,731 Dr
<i>House Keeping & Allied Services</i>		1,09,81,462	3,900	1,09,77,562 Dr
<i>Insurance</i>		52,52,783		52,52,783 Dr
<i>Legal Fee/Services</i>		5,65,233		5,65,233 Dr
<i>Licence Fee</i>		3,00,00,000		3,00,00,000 Dr
<i>Meeting Exp</i>		98,631		98,631 Dr
<i>Office Exp.</i>		18,36,651		18,36,651 Dr
<i>Out of Pocket Expenses</i>		15,690		15,690 Dr
<i>Printing & Stationery Exp.</i>		1,90,321		1,90,321 Dr
<i>Prof./technical Fee</i>		19,84,009	32	19,83,977 Dr
<i>Recruitment Exp.</i>		2,68,198		2,68,198 Dr
<i>Rent</i>		38,13,768		38,13,768 Dr
<i>Repair and Maint.- Sub Stations</i>		1,51,65,800	4,07,045	1,47,58,755 Dr
<i>Repair and Maint.- Trans. Lines.</i>		11,966		11,966 Dr
<i>Repair & Maintenance Exp - Others.</i>		8,87,852		8,87,852 Dr
<i>R & M -Sub Stn-Security/Manpower Outsource</i>		5,83,71,614		5,83,71,614 Dr
<i>Safety Expenses</i>		7,59,281		7,59,281 Dr
<i>Security Services</i>		3,72,09,371	5,844	3,72,03,527 Dr
<i>Telephone & Mobile Exp.</i>		7,03,030		7,03,030 Dr
<i>Travelling Exp.</i>		15,71,772		15,71,772 Dr
<i>Vehicle Exp.</i>		76,10,158		76,10,158 Dr
<i>Tax Expense - Deferred</i>		41,10,10,058		41,10,10,058 Dr
Grand Total		28,94,57,85,461	28,94,57,85,461	