

BEFORE
THE HON'BLE BIHAR ELECTRICITY REGULATORY COMMISSION



FILING OF THE PETITION FOR TRUE UP OF FY 2022-23,
ANNUAL PERFORMANCE REVIEW (APR) OF FY 2023-24

AND

ANNUAL REVENUE REQUIREMENT (ARR) AND
DETERMINATION OF TARIFF FOR FY 2024-25

FILED BY,

NORTH BIHAR POWER DISTRIBUTION COMPANY LIMITED, PATNA

CHIEF ENGINEER (COMMERCIAL), NBPDC

3rd FLOOR, VIDYUT BHAWAN, BAILEY ROAD, PATNA - 800 001

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BEFORE THE BIHAR ELECTRICITY REGULATORY COMMISSION, PATNA

IN THE MATTER OF: Filing of the Petition for Truing up for FY 2022-23, Annual Performance Review (APR) for FY 2023-24 and Annual Revenue Requirement (ARR) and Determination of Tariff for FY 2024-25 under Bihar Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2021 and its amendments issued thereof along with the other guidelines and directives issued by the BERC from time to time and under Section 45, 46, 47, 61, 62, 64 and 86 of The Electricity Act 2003 read with the relevant guidelines

AND

IN THE MATTER OF: North Bihar Power Distribution Company Limited (hereinafter referred to as "NBPDC" or "Petitioner" which shall mean for the purpose of this petition the Licensee), having its registered office at Vidyut Bhawan, Bailey Road, Patna.

The Petitioner respectfully submits as under: -

1. The Petitioner was formerly integrated as a part of the Bihar State Electricity Board (hereinafter referred to as "BSEB" or "Board") which was engaged in electricity generation, transmission, distribution and related activities in the State of Bihar.
2. The Board has been unbundled into five (5) successor companies – Bihar State Power (Holding) Company Limited (hereinafter referred to as "BSPHCL"), Bihar State Power Generating Company Limited (hereinafter referred to as "BSPGCL"), Bihar State Power Transmission Company Limited (hereinafter referred to as "BSPTCL"), North Bihar Power Distribution Company Limited and South Bihar Power Distribution Company Limited (hereinafter referred to as "DISCOMs") as per Energy Department, Government of Bihar Notification no: संख्या प्र0-2/बोर्ड पुर्न0 सं0-31/2008 (खंड-1) ~~17~~ under The Bihar State Electricity Reforms Transfer Scheme 2012.
3. Pursuant to the enactment of the Electricity Act, 2003, every utility is required to submit its Aggregate Revenue Requirement (ARR) for the control period and Tariff Petitions as per procedures outlined in section 61, 62 and 64, of Electricity Act 2003, and the governing regulations thereof.
4. The petition for True up for FY 2020-21, Annual Performance Review (APR) of FY 2021-22, Annual Revenue Requirement (ARR) for FY 2022-23 to FY 2024-25 and Tariff Proposal for FY 2022-23 was filed by NBPDC on 15.11.2021, and accordingly the Hon'ble Commission had issued the relevant tariff order on 25.03.2022.
5. The petition for True up for FY 2021-22, Annual Performance Review (APR) of FY 2022-23, Annual Revenue Requirement (ARR) for FY 2023-24 and Tariff Proposal for FY 2023-24 was filed by NBPDC on 15.11.2022, and accordingly the Hon'ble Commission had issued the relevant tariff order on 23.03.2023.
6. The present petition is being filed for True up for FY 2022-23, Annual Performance Review (APR) of FY 2023-24, Annual Revenue Requirement (ARR) and Tariff Proposal for FY 2024-25.
7. This Petition has been prepared in accordance with the provisions of Sections 61 and 62 of the Electricity Act, 2003 and has taken into consideration Bihar Electricity Regulatory Commission (Multi

Year Distribution Tariff) Regulations, 2021 and its amendments, Bihar Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2021.

8. NBPDCCL, along with this petition, is submitting the regulatory formats with data & information to an extent applicable and would make available any further information/ additional data required by the Hon'ble Commission during the course of proceedings.
9. The Petitioner has got an approval from REC Limited, Govt. of India under RDSS for implementation of smart prepaid meters under the urban areas post its State Govt. approval. The same has been approved by the Hon'ble Commission. The Petitioner envisage to provide prepaid smart meter to all its consumers in its licensed area. Further the Petitioner in line with its objective to reduce its AT&C loss has envisaged to provide smart prepaid meters in rural areas. The cost of all the said capital expenditure schemes & its capitalization has been envisaged under the present petition.
10. Due to variable monsoon rainfall in first half of FY 2023-24 compared to the corresponding period of FY 2022-23, hydro generation has dropped by almost 11%. Therefore, in order to ensure uninterrupted power supply across the country, MoP issued Advisory dated 25.10.2023 which allowed blending of imported coal up to 6% till March 2024. Accordingly, the Petitioner has considered the impact of increase in variable cost of the Plants due to coal blending while determining the power purchase cost in FY 2023-24 and FY 2024-25 in this Tariff Petition.

Prayers to the Commission:

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

- a. Admit this Petition on record and treat it as complete.
- b. Examine the proposal submitted by the Petitioner in the enclosed petition for a favorable dispensation.
- c. Approve the Annual Revenue Requirement (ARR) for FY 2024-25 under relevant Regulations considering and allowing appropriate deviations in matters sub-judice under various forums such as APTEL etc. and Orders issued by the Hon'ble Commission from time to time and pass suitable Orders with respect to the True up for FY 2022-23 and Annual Performance Review (APR) for FY 2023-24.
- d. Approve the proposed tariff schedule to be recovered from the different category of consumers, proposed open access charges and general & miscellaneous charges as proposed as to be made applicable from 1st April 2024.
- e. Allow charges paid on account of Deviation Settlement Mechanism (DSM) (including additional DSM) in terms of CERC (**Deviation Settlement Mechanism and Related Matters**) Regulations, 2022 as deviation is an **inherent phenomenon** associated with power system operation which keeps on happening continuously in the integrated power system. Therefore, it is requested that the above-mentioned condition may be treated as uncontrollable and may kindly be allowed.
- f. Approve power purchase cost at higher rate on account of coal blending allowed vide Ministry of Power letter dated 18.05.2022, 26.05.2022 and 25.10.2023 due to sharp increase in electricity demand and less availability of coal than the requirement.
- g. Condone any inadvertent omissions / errors / shortcomings and permit NBPDCCL to add / change / modify / alter this filing and make further submissions as may be required at a future date.

-
- h. Pass such Order, as the Hon'ble Commission may deem fit and appropriate keeping in view the facts and circumstances of the case.

North Bihar Power Distribution Company Limited, Patna

Petitioner

Location: Patna

Date: 14/11/2023

1 Introduction

1.1 Background

1.1.1 Bihar State Electricity Board ("Board" or "BSEB") originally constituted on 1st April 1958 under Section 5 of the Electricity (Supply) Act, 1948 and was engaged in the management of electricity generation, transmission, distribution and related activities in the State of Bihar.

1.1.2 Under the new 'Bihar State Electricity Reforms Transfer Scheme 2012', the BSEB has been unbundled into five companies:

- a. Bihar State Power (Holding) Company Limited (BSPHCL),
- b. Bihar State Power Transmission Company Limited (BSPTCL),
- c. Bihar State Power Generation Company Limited (BSPGCL),
- d. South Bihar Power Distribution Company Limited (SBPDCL),
- e. North Bihar Power Distribution Company (NBPDCCL)

with effect from 1st November' 2012 vide notification no. संख्या प्र0-2/बोर्ड पुर्न0 सं0-31/2008 (खंड-I) 17 dated 30-10-2012.

- a) "Bihar State Power (Holding) Company Limited" means the Company that will own shares of newly incorporated reorganized four companies i.e. Bihar State Power Generation Company Limited, Bihar State Power Transmission Company Limited, South Bihar Power Distribution Company Limited, and North Bihar Power Distribution Company Limited.
- b) "Bihar State Power Generation Company Limited" means the Generating Company to which the Generating Undertakings of the Board are to be transferred in accordance with this Scheme.
- c) "Bihar State Power Transmission Company Limited" means the Transmission Company to which the Transmission Undertakings of the Board are to be transferred in accordance with this Scheme.
- d) "South Bihar Power Distribution Company Limited" And "North Bihar Power Distribution Company Limited", collectively mean the Distribution Companies, to which the Distribution Undertakings of the Board are to be transferred in accordance with this Scheme.

1.1.3 This Petition is being submitted separately by "North Bihar Power Distribution Company Limited".

1.2 Profile of NBPDCCL

1.2.1 NBPDCCL is a company registered under the provisions of the Companies Act 1956 and is a fully owned subsidiary Company of BSPHCL.

- 1.2.2 NBPDCL is engaged primarily in the business of distribution and retail supply of electricity. It has been vested with the distribution assets, interest in property, rights and liabilities of the erstwhile BSEB necessary for the business of distribution in its area of distribution comprising of all 9 circles of North Bihar.
- 1.2.3 NBPDCL has been given the status of a Distribution Licensee as per Section 14 of the Electricity Act 2003, to fulfil the obligations of the Distribution Licensee as mandated under the provisions of the Bihar State Electricity Reforms Transfer Scheme 2012 and the Electricity Act, 2003.
- 1.2.4 The Bihar State Electricity Reforms Transfer Scheme, 2012 details out the following for the distribution business of NBPDCL:
- Schedule-C, Part-I: Description of Assets, Liabilities etc.,
 - Schedule-C, Part-II: Provisional Balance Sheet as on 1st November 2012,
 - Schedule-C, Part-III: Function and Duties of NBPDCL.
- 1.2.5 NBPDCL has divided its area of supply into 9 Distribution Circles which further comprises of 46 divisions and 148 subdivisions.
- 1.2.6 The Petitioner has a total consumer base of more than 119.49 lakhs as on 31st March 2023.
- 1.2.7 The details of the existing distribution infrastructure of the Petitioner as on 31st March 2023 are tabulated below for reference:

Table 1: Existing distribution infrastructure of NBPDCL

S. No.	Particulars	Unit	Quantity
1	No. of electrified villages	No	20552
2	No. of consumers	No	119.49 lakh
3	No. of capacity of 33/11 kV Substations	No/MVA	625 / 9742.4
4	No. of capacity of 11/0.4 kV 3 phase Transformers	No/MVA	192712 / 11477
5	Length of 33 kV line	CKM	9631
6	Length of 11 kV line	CKM	77365
7	Length of LT line	CKM	195031

- 1.2.8 The two distribution companies were created based on reorientation of seven area offices. The reorientation was done based on regrouping of circles. As such from a circle level and below there is no change from the previous system.

Table 2: DISCOMs' Areas and Circles

Area	Circle
PESU	PESU East
	PESU West
Patna Central	Patna
	Bhojpur (Ara)
	Nalanda
Magadh	Gaya
	Aurangabad

Area	Circle
Bhagalpur	Sasaram
	Bhagalpur
	Jamui
	Munger
Tirhut	Muzaffarpur
	Chapra
	Motihari
Mithila	Darbhanga
	Samastipur
	Begusarai
Kosi	Saharsa
	Kishanganj
	Purnea

1.2.9 The four area offices i.e., PESU, Patna central, Magadh and Bhagalpur were regrouped to form one company, i.e., South Bihar Power Distribution Company Limited. Hence the circles – PESU (East), PESU (West), Patna, Ara, Nalanda, Gaya, Aurangabad, Sasaram, Bhagalpur, Jamui and Munger constitute the South Bihar Power Distribution Company Limited (SBPDCL). The remaining three area offices viz. Tirhut, Mithila and Kosi Areas were combined to form another company, i.e., North Bihar Power Distribution Company Limited (NBPDCCL). Consequently Muzaffarpur, Chapra, Motihari, Darbhanga, Samastipur, Begusarai, Saharsa, Kishanganj and Purnea Circles are combined within the company North Bihar Power Distribution Company Limited.

1.3 Procedural History

1.3.1 The procedural history of the filings of petition of erstwhile BSEB, BSPHCL and individual companies is tabulated below for ready reference:

Table 3: Procedural History of Filing

S. No.	Scope of Filing in Petition	Filing Date	Order Date	Remarks
1	ARR & Tariff Petition for FY 2006-07	10.04.2006	29.11.2006	-
2	ARR & Tariff Petition for FY 2007-08	18.12.2007	-	Delayed filing & hence directed to file petition for FY 2008-09 by 31.01.2008
3	ARR & Tariff Petition for FY 2008-09	14.02.2008	26.08.2008	Review of FY 2006-07 was also undertaken in this order
4	ARR & Tariff Petition for FY 2009-10	09.10.2009	-	Delayed filing & hence directed to file petition for FY 2010-11.
5	ARR & Tariff Petition for FY 2010-11	03.02.2010	06.12.2010	Review of FY 2008-09 was also undertaken in this order
6	ARR & Tariff Petition for FY 2011-12	17.02.2011	01.06.2011	Order effective from 1.5.2011
7	True-up Petition for FY 2006-07, FY 2007-08 and FY 2008-09 Addendum to this petition	01.09.2011 17.10.2011	04.01.2012	-
8	True-up Petition for FY 2009-10	13.10.2011	27.01.2012	-
9	Review of ARR for FY 2010-11 based on provisional	13.10.2011	-	Commission directed to file petition for review along with

S. No.	Scope of Filing in Petition	Filing Date	Order Date	Remarks
	accounts Submission of Audited Accounts for FY 2010-11 Submission of True-up petition for FY 2010-11 based on Audited Accounts	02.03.2012 16.03.2012		petition of FY 2012-13
10	ARR & Tariff Petition for FY 2012-13 Supplementary petition for FY 2012-13	15.11.2011 02.01.2012	30.03.2012	Order included True-up of FY 2010-11 & Review of FY 2011-12
11	Business Plan for Control Period FY 2013-14 to FY 2015-16 filed by BSPGCL, BSPTCL and 2 DISCOMs Revised Business Plan as per Commissions directive Re-Revised Business Plan for BSPGCL & BSPTCL Re-Revised Business Plan for 2 DISCOMs	20.09.2012 14.11.2012 03.01.2013 04.01.2013	15.03.2013	Commission directed to submit revise business plan. Commission again directed to submit revised business plan vide letter dated 21.12.2012 Approved along with MYT Order
12	Provisional True-up for FY2011-12, Review petition for FY 2012-13 and MYT Petition for FY 2013-14 to FY 2015-16 for BSPGCL, BSPTCL and 2 DISCOMs Revised petition for True-up of FY 2011-12 based on Audited Accounts	15.11.2012 24.12.2012	15.03.2013	Commission issued MYT order according to petition
13	True up for FY 2012-13 by BSPHCL Annual Performance Review for FY 2013-14 and Revised Annual Revenue Requirement for FY 2014-15 for BSPGCL, BSPTCL and 2 DISCOMs	-	28.02.2014	Commission issued Tariff order according to petition
14	True up for FY 2013-14, Annual Performance Review for FY 2014-15 and Annual Revenue Requirement for FY 2015-16 for NBPDC and SBPDCL	-	16.03.2015	Commission issued Tariff order according to petition
15	True-up for FY 2014-15, Annual Performance Review (APR) for the FY 2015-16 Annual Revenue Requirement (ARR) for the control period FY 2016-17 to FY 2018-19	15.11.2015	21.03.2016	Commission issued Tariff order according to petition, but disallowed various claims.
16	True-up for FY 2015-16, Annual Performance Review (APR) for the FY 2016-17 Annual Revenue Requirement (ARR) for FY 2017-18	06.12.2016	24.03.2017	Commission issued Tariff order according to petition, but disallowed various claims.

S. No.	Scope of Filing in Petition	Filing Date	Order Date	Remarks
17	True-up for FY 2016-17, Annual Performance Review (APR) for the FY 2017-18 Annual Revenue Requirement (ARR) for FY 2018-19	05.12.2017	21.03.2018	Commission issued Tariff order according to petition, but disallowed various claims.
18	Business Plan for Control Period FY 2019-20 to FY 2021-22 filed Bihar DISCOMs True-up for FY 2017-18, Annual Performance Review (APR) for the FY 2018-19 Annual Revenue Requirement (ARR) for FY 2019-20, 2020-21 and 2021-22	05.11.2018 30.11.2018	 25.02.2019	Commission issued Tariff order according to petition, but disallowed various claims
19	True-up for FY 2018-19, Annual Performance Review (APR) for the FY 2019-20 Annual Revenue Requirement (ARR) for FY 2020-21	15.11.2019	20.03.2020	Commission issued Tariff order according to petition, but disallowed various claims.
20	True-up for FY 2019-20, Annual Performance Review (APR) for the FY 2020-21 Annual Revenue Requirement (ARR) for FY 2021-22	31.12.2020	26.03.2021	Commission issued Tariff order according to petition, but disallowed various claims.
21	True-up for FY 2020-21, Annual Performance Review (APR) for the FY 2021-22 Annual Revenue Requirement (ARR) for FY 2022-23, 2023-24 and 2024-25	15.11.2021	25.03.2022	Hon'ble Commission issued Tariff order according to petition, but disallowed various claims.
22	True-up for FY 2021-22, Annual Performance Review (APR) for the FY 2022-23 Annual Revenue Requirement (ARR) for FY 2023-24	15.11.2022	23.03.2023	Hon'ble Commission issued Tariff order according to petition, but disallowed various claims.

1.4 Appeal no 225/2019

1.4.1 The Petitioner has filed an appeal to the Hon'ble Tribunal to set aside the Order dated 25th Feb 2019 passed by the Hon'ble Commission.

1.4.2 The appeal is related to the power purchase cost for FY 2017-18, adjustment of transmission loss at a lower rate, method of calculation of RPO, changing in methodology of calculation of Interest on working capital retrospectively for FY 2017-18, calculation of net depreciation without considering grants etc.

1.4.3 This appeal is sub judice with the Hon'ble Appellate Tribunal.

1.5 Appeal no 293 and 294 of 2019

1.5.1 The Petitioner had filed this appeal before the Hon'ble Appellate Tribunal for rectification of Order dated 19th Dec 2018 and review Order dated 19th Dec 2018 by the Hon'ble Commission by the Tribunal.

1.5.2 This appeal is sub-judice with the Hon'ble Appellate Tribunal.

1.6 Appeal no 278 of 2019

- 1.6.1 The Petitioner had filed this appeal before the Hon'ble Appellate Tribunal for rectification of Order dated 25th Oct 2018 passed by the Tribunal. This is as per the directions given by the Hon'ble Supreme Court in appeal no 239-240 of 2019. This matter is solely related to the treatment of Surplus of the past years pertaining to erstwhile BSEB. The matter is sub judice till date.

1.7 Appeal no 154 of 2017

- 1.7.1 The Petitioner has filed an appeal to the Hon'ble Tribunal to set aside the Order dated 24th March 2017 passed by the Hon'ble Commission.
- 1.7.2 The appeal is related to the treatment of Surplus by the Hon'ble Commission, disallowance of prior period charges, disallowance of late payment surcharge, disallowance of expenses etc.
- 1.7.3 This appeal is sub-judice with the Hon'ble Appellate Tribunal.

1.8 Appeal no 382 of 2023

- 1.8.1 The Petitioner has filed an appeal to the Hon'ble Tribunal regarding the Order dated 26th March 2021 passed by the Hon'ble Commission for Truing up of FY 2019-20, Annual performance review of FY 2020-21 and Annual revenue requirement and determination of retail tariff for FY 2021-22 in case no. 33 of 2020.
- 1.8.2 The appeal is related to the treatment of Surplus by the Hon'ble Commission, disallowance of prior period charges, disallowance of late payment surcharge, disallowance of expenses etc.
- 1.8.3 This appeal is sub-judice with the Hon'ble Appellate Tribunal.

1.9 Appeal no 383 of 2023

- 1.9.1 The Petitioner has filed an appeal to the Hon'ble Tribunal regarding the Order dated 25th March 2022 passed by the Hon'ble Commission for Truing up of FY 2020-21, Annual performance review of FY 2021-22 and Annual revenue requirement and determination of retail tariff for FY 2022-23 in case no. 16 of 2021.
- 1.9.2 The appeal is related to the treatment of Surplus by the Hon'ble Commission, disallowance of prior period charges, disallowance of late payment surcharge, disallowance of expenses etc.
- 1.9.3 This appeal is sub-judice with the Hon'ble Appellate Tribunal.

1.10 Review Petition and APTEL Appeal against Tariff Order dated 20th March 2020

- 1.10.1 The Petitioner has filed a review petition to the Hon'ble Commission vide letter no. 135 dated 09.09.2020 to review some of the Hon'ble Commission's decisions in the tariff order dated 20th March 2020.

- 1.10.2 The appeal is related to the Abolition of Unmetered consumers in the KJ and DS-I category, Introduction of penal charges for use of load beyond contracted demand on the pro-rata additional energy consumption in addition to levy of additional demand charge, Recovery of full fixed charges linked to maintaining supply of power as per scheduled supply hours and other clerical errors in the tariff order.
- 1.10.3 The Hon'ble Commission vide Order dated 26.10.2021 allowed the impact of additional/reduced ARR in the review of truing up of FY 2018-19 on account of revision in adoption of values of supervision, labor and establishment charges.
- 1.10.4 Further, the Petitioner has also challenged few issues as spelt out in the Tariff Order dated 20th March 2020 before the Hon'ble Tribunal vide DFR No. 384/2020 dated 02.11.2020. This appeal is sub-judice with the Hon'ble Appellate Tribunal. The Petitioner in the Appeal has also challenged the Direction of the Hon'ble Commission to deposit into the Regulatory Fund Rs 357.56 Cr (NBPDC Rs.147.67 crore and SBPDCL Rs.209.89 crore) towards RPO obligation in a separate bank account.

1.11 Review Petition against Tariff Order dated 26.03.2021

- 1.11.1 The Petitioner has filed a review petition to the Hon'ble Commission vide letter no. 141 dated 27.08.2021 to review some of the Hon'ble Commission's decisions in the tariff order dated 26th March 2021.
- 1.11.2 Further, the Petitioner vide letter No. 232 dated 02.05.2022 filed additional submission in the matter of treatment of AT&C loss subsidy of Rs. 860 Crore (SBPDCL- Rs 510 Cr and NBPDC- 350 Cr) for FY 2019-20 received from the State Govt. to meet financial loss to the DISCOMs due to higher AT&C loss beyond the trajectory fixed by the Hon'ble Commission.
- 1.11.3 The Hon'ble Commission has passed the Order on 07.11.2022 wherein the Commission has not considered the impact of Rs 510 Crores on account of huge tariff impact on the consumers thereby adopting different treatment in the review order for FY 2021-22 and FY 2022-23 for the same parameter. Further, the Hon'ble Commission has not considered other claims made by the Petitioner. Accordingly, the Petitioner has not considered the said impact in its present Petition but reserves the right to go for any review on the said order at a later stage at an appropriate forum.

1.12 Review Petition against Tariff Order dated 25.03.2022

- 1.12.1 The Petitioner has filed a review petition to the Hon'ble Commission vide letter no. 198 dated 11.04.2022 to review some of the Hon'ble Commission's decisions in the tariff order dated 25th March 2022.
- 1.12.2 The major points of the review Petition include the treatment of AT&C loss subsidy of Rs. 452 Cr for FY 2019-20 received from the State Govt. to meet financial loss to the DISCOMs due to higher AT&C loss beyond the trajectory fixed by the Hon'ble Commission, Distribution Loss and AT&C loss as approved for FY 2022-23 to FY 2024-25 and its corresponding resultant parameters as per the RDSS scheme, etc.

1.12.3 The Order has been passed by the Hon'ble Commission on 07.11.2022 allowing Rs 452 Crores to be passed on to the consumers. The same along with the carrying cost has been considered while determining the Tariff for FY 2023-24. However, the Commission did not consider other claims made by the Petitioner on account of Prudence check. Further, the Commission directed the Petitioner to file separate petitions for CAPEX and Capitalization seeking approval of the Commission in respect of new/existing and old schemes. As per the directions of the Hon'ble Commission, the Petitioner will be submitting CAPEX and Capitalization Plan in due course of filing of this Tariff Petition.

1.13 Review Petition against Tariff Order dated 23.03.2023

1.13.1 The Petitioner has filed a review petition to the Hon'ble Commission dated 23.06.2023 to review some of the Hon'ble Commission's decisions in the tariff order dated 23rd March 2023.

1.13.2 The major points of the review Petition were relating to distribution loss and AT&C loss approved for FY 21-22 to FY 23-24 and its corresponding resultant parameters, disallowance of Power Purchase cost due to additional UI Charges for FY 2021-22, allowing smart prepaid meter rent from FY 2021-22 to FY 20-23-24, calculation of GFA, CAPEX, Capitalisation, O&M Expense, employee expense, Depreciation, Interest on Loan and Interest on Working Capital for FY 2021-22 and FY 2023-24, change in Time-of-Day Tariff structure etc.

1.13.3 The Order has been passed by the Hon'ble Commission vide letter no. 765 dated 27.07.2023 with consideration of the rental charges for Smart prepaid meters after due prudence check and validation of information and reactive energy charge of 6 paise/unit instead of 4 paise/unit for FY 2023-24. However, the Commission did not consider other claims made by the Petitioner.

1.14 Appeal against tariff order FY 23-24

1.14.1 The Petitioner is in process of filing an appeal to the Hon'ble Tribunal regarding the Order dated 23rd March 2023 passed by the Hon'ble Commission for Truing up of FY 2021-22, Annual performance review of FY 2022-23 and Annual revenue requirement and determination of retail tariff for FY 2023-24 in case no. 16 of 2022.

1.14.2 The appeal is related to the treatment of Surplus by the Hon'ble Commission, disallowance of prior period charges, disallowance of late payment surcharge, disallowance of expenses etc.

1.14.3 This appeal is to be filed before the Hon'ble Appellate Tribunal.

1.15 Instant Petition

1.15.1 Section 62 of the Electricity Act, 2003 requires the Distribution Licensee to furnish details as may be specified by the SERC for determination of tariff. In addition, as per the regulations issued by the Hon'ble Commission, BSEB or its unbundled companies are required to file petitions for all reasonable expenses which they believe they would incur over the next financial year and seek the approval of the Hon'ble Commission for the same in advance. The filing is to be done based on the projections of expected costs and revenue.

1.15.2 The current petition has been prepared in accordance with the provisions of the following Acts/ Policies/ Regulations:

- a) The Electricity Act, 2003
- b) The National Electricity Policy
- c) The National Tariff Policy, and amendments issued therein
- d) Bihar Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2021 for True Up of FY 2022-23, APR for FY 2023-24 and ARR & Tariff Petition for FY 2024-25 along with the other guidelines and directives issued by the BERC from time to time.
- e) BERC (Terms and Conditions for Open Access) Regulations, 2005 along with the other guidelines and directives issued by the BERC from time to time.
- f) All other applicable Regulations issued by the Hon'ble Commission

1.15.3 The Petitioner has made genuine efforts for compiling all relevant information relating to the True-up, APR, and ARR petition as required by the regulations issued by the Hon'ble Commission and has also made every effort to ensure that the information provided to the Hon'ble Commission is accurate and free from material errors. However, there may be certain deficiencies owing to the limited operations of Distribution Company on independent basis. The Petitioner therefore prays to the Hon'ble Commission that the information provided be accepted for the current filing and at the same time assures that it is taking appropriate measures to improve its management information system for improved data collection.

1.16 Contents of the Petition

1.16.1 This petition comprises of following sections:

- 1) True up for FY 2022-23
- 2) Annual Performance Review for FY 2023-24
- 3) Annual Revenue Requirement for FY 2024-25
- 4) Revenue Gap and Tariff Proposal for FY 2024-25
- 5) Voltage Wise Cost of Supply
- 6) Miscellaneous and General Charges
- 7) Wheeling and Open access charges
- 8) Report on Compliance of the Directives
- 9) Proposed Tariff Schedule for FY 2024-25

2. Overall approach for present filing

2.1 Present Approach

2.1.1 The Petitioner is filing the True-Up for FY 2022-23, Annual Performance Review for FY 2023-24 and Annual Revenue Requirement for FY 2024-25 in accordance with the BERC (Multi Year Distribution Tariff) Regulations 2021 for kind consideration of the Hon'ble Commission.

2.2 Data and information sources for estimating the Aggregate Revenue Requirement

1.16.2 In this Petition, the True up of FY 2022-23 is based on the information provided in the audited accounts for FY 2022-23 except in cases where separate norms for computation of expenditure have been specified by the Hon'ble Commission.

1.16.3 The APR for FY 2023-24 is based on actual figures for the first 6 months of FY 2023-24 (as available) for power purchase and sales of the financial year. Appropriate pro-rata projections and escalations have been taken over the previous year, keeping in mind guiding principles defined by the Hon'ble Commission.

1.16.4 The ARR for FY 2024-25 is based on projections and escalations over the previous year(s), keeping in mind the historical trends and key initiatives planned, in line with the guidelines provided by the Hon'ble Commission for determining the same.

3 True-up Summary for FY 2022-23

3.1 Preamble

- 3.1.1 This section outlines the performance of the Petitioner for FY 2022-23.
- 3.1.2 In line with the provisions of the BERC (Multi Year Distribution Tariff) Regulations, 2021, the Petitioner hereby submits the True Up petition for FY 2022-23. The expenses of the Petitioner for FY 2022-23 presented for true-up are based on the audited books of accounts, and other principles adopted by the Hon'ble Commission for estimating normative Employee expenses, A&G expenses, R&M expenses, interest on term loan, Return on Equity, interest on working capital loan and depreciation. The ARR so arrived has been compared with that approved by the Hon'ble Commission vide its Tariff Order dated 25.03.2022. Accordingly, the revised Aggregate Revenue Requirement, revenue and gap for FY 2022-23 have been given in the subsequent sub-sections of this chapter.

3.2 Number of Consumers, Connected Load and Sales

Number of Consumers

- 3.2.1 The actual no. of consumers at the end of FY 2022-23 against the no. of consumers approved in the Tariff Order dated 25.03.2022 is provided in the Table below.

Table 4: Number of Consumers as on 31st March 2023

Category of Consumers	Approved by Commission for FY 2022-23 (ARR)	Actual for FY 2022-23
Domestic	10561564	10785533
Kutir Jyoti	4334245	4217514
DS I Rural	4851383	5177639
DS II Demand Based	1375862	1390297
DS III	74	83
Non-Domestic Service	731292	834977
NDS I - Metered Now Demand Based	354565	457453
NDS II - Demand Based	376727	377524
Contract Demand <0.5 kW	793	2364
Contract Demand >0.5 kW	375934	375160
Street Light Services	1752	2239
SS Metered	370	522
SS Unmetered	1382	1717
Irrigation & Allied Services	157728	190341

Category of Consumers	Approved by Commission for FY 2022-23 (ARR)	Actual for FY 2022-23
IAS I	150991	183992
IAS II	6737	6349
Public Service Connections	57622	56269
Public Water Works	1839	2014
Har Ghar Nai	55783	54255
Low Tension Industrial Services	65566	79109
LTIS I (0-19 kW)	64110	77807
LTIS II (>19 kW - 74 kW)	1456	1198
LT Electric Vehicle Charging Station	2	104
High Tension	1274	1447
HTS I - 11 kV	1212	1378
HTS II - 33 kV	56	62
HTS III -132 kV	5	4
HTS IV - 220 kV	-	-
HTSS	1	3
HT Electric Vehicle Charging Station	2	0
Railway Traction Services	4	8
Nepal	1	1
Total	11576807	11949924

3.2.2 The above comparison of consumer numbers in Table 4 clearly brings out the fact that the increase in number of consumers has although not as planned by the petitioner, however, there has still been a significant addition in number of consumers during the year and the actual number of consumers is in fact higher by almost 5% over the previous year (FY 2021-22). Major Increase can be observed in certain categories like IAS-I (45.77%), NDS-I (26.50%), SS-I (24.29%) and LTIS-I (20.49%) over the previous year.

Connected Load

3.2.3 The actual connected load at the end of FY 2022-23 against the connected load approved in the Tariff Order dated 25.03.2022 is provided below:

Table 5: Total connected load (in kW)

Category of Consumers	Approved in ARR	Actual for FY 2022-23
Domestic	8889667	8,659,527
Kutir Jyoti	1083561	1,045,760

Category of Consumers	Approved in ARR	Actual for FY 2022-23
DS I Rural	5248191	5,256,907
DS II Demand Based	2557607	2,356,372
DS III	308	488
Non-Domestic Service	1,628,853	1,682,088
NDS I - Metered Now Demand Based	481250	631,207
NDS II - Demand Based	1147603	1,050,881
Contract Demand <0.5 kW	412	1,295
Contract Demand >0.5 kW	1147191	1,049,586
Street Light Services	23,591	25,457
Street Metered	3367	4,099
Street Unmetered	20224	21,358
Irrigation & Allied Services	417,861	421,645
IAS I	356752	368,711
IAS II	61109	52,934
Public Service Connections	159,696	152,250
Public Water Works	28019	29,403
Har Ghar Nal	131677	122,847
Low Tension Industrial Services	659,362	724,067
LTIS I (0-19 kW)	572973	658,976
LTIS II (>19 kW - 74 kW)	86389	64,793
LT Electric Vehicle Charging Stations	115	299
High Tension	404,730	427,222
HTS I - 11 kV	265215	282,710
HTS II - 33 kV	80948	85,942
HTS III -132 kV	45543	49,170
HTS IV - 220 kV	-	-
HTSS	13024	9400
Railway Traction Services	36241	60000

Category of Consumers	Approved in ARR	Actual for FY 2022-23
HT Electric Vehicle Charging Stations	424	-
Total	12,220,540	12,152,255

Sales

3.2.4 The category wise actual sales (MUs) at the end of FY 2022-23 against the sales approved in the Tariff Order dated 25.03.2022 is provided below:

Table 6: Total Energy Sales (in MU) for FY 2022-23

Category of Consumers	Approved in ARR	Actual for FY 2022-23
Domestic	9468	8,544.97
Kutir Jyoti	2601	2,704.94
DS I Rural	4598	3,827.97
DS II Demand Based	2269	2,011.72
DS III	0	0.34
Non-Domestic Service	1471	1,844.82
NDS I - Metered Now Demand Based	366	598.87
NDS II - Demand Based	1105	1,245.94
Street Light Services	47	99.13
Street Light Metered	6	9.81
Street Light Unmetered	41	89.32
Irrigation & Allied Services	523	1,006
IAS I	480	915.85
IAS II	43	89.87
Public Service Connections	202	436.14
Public Water Works	48	37.36
Har Ghar Nai	154	398.77
Low Tension Industrial Services	501	439
LTIS I (0-19 kW)	455	402.48
LTIS II (>19 kW - 74 kW)	46	36.78
LT Electric Vehicle Charging Station	0.05	0.05
High Tension	856	884.85
HTS I - 11 kV	514	549.74
HTS II - 33 kV	202	219.45
HTS III -132 kV	115	73.40
HTS IV - 220 kV	-	-
HTSS	25	42.27
HT Electric Vehicle Charging Stations	0.21	-
Railway Traction Services	28	99.34
Nepal	683	314.22
SLDC Deviation Charges	-	226.92

Category of Consumers	Approved in ARR	Actual for FY 2022-23
Sugar Mills & Others	-	5.67
Solar Companies	-	0.63
Sale of Power to IEX through PTC	-	2,177.12
Sale of Power to IEX through BSPHCL	-	1,446.28
Total	13779.26	17525.12

3.2.5 The above comparison of energy sale in Table 6 clearly brings out the fact that, there has been a significant increase in sales during the year and the actual sale is in fact higher by almost 20% over the previous year (FY 2021-22). Increase can be observed significantly during FY 2022-23 in certain major categories like irrigation (~115%), Har Ghar Nal (~121%), industrial HT (~15%), Railways (~47%), NDS (~22%) etc. over the previous year (FY 21-22).

3.2.6 The Petitioner would like to make it clear that the SLDC deviation is the adjustment done by BSPTCL with the DISCOMs on account of UI deviation for the Railway Traction Services. It is imperative to note that the UI deviation as submitted in the Petition is at the State periphery and separate entity wise deviation is not computed by the SLDC because the Intra-State DSM is not applicable in Bihar till now. The Energy shown under SLDC deviation is actually the excess drawal of Railways from its schedule quantity from the energy drawal to the DISCOMs. The Commission is requested to first adjust this units i.e. 226.92 MU and the amount of INR 229.82 Crore on this account from the excess deviation of the Petitioner's and then the remaining portion may be allowed as sales along with its proportionate amount.

3.3 AT&C Loss

3.3.1 The Monitoring Committee for RDSS constituted under Chairmanship of Secretary (Power), Govt of India, in its 9th meeting held on 28.04.2022, has approved the Action Plan and Loss Reduction DPR of North Bihar Power Distribution Company Limited under Revamped Distribution Sector Scheme. Accordingly, the Monitoring Committee approved the following trajectory for AT&C loss for the Petitioner.

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
AT&C Loss	25%	22%	19%	16%

3.3.2 The Petitioner mentions that it had been able to bring down the AT&C losses by more than 7% from FY 2017-18 to FY 2022-23. It is worthwhile to mention that the Petitioner has reduced the AT&C loss to 19.12% vis-à-vis loss level of 22.00% as approved under RDSS scheme for FY 2022-23. This has been made possible through a multitude of initiatives on improving the network performance as well as on the services side to enhance billing and collection efficiency.

3.3.3 Further, since, most of the consumers connected to the network of the Petitioner are LT consumers, therefore, the LT network length is significantly higher for the Petitioner as compared to the HT

network length. NBPDCCL serves ~1.19 crore consumers of which ~90% belong to the domestic category.

3.3.4 The impact of the extended LT networks, especially in rural areas, directly leads to increase in losses on the low voltage network. Despite continuous multiple efforts, with the addition of such large number of consumers over the past few years, has led to a decreasing HT:LT network ratio, However, despite these raging challenges, NBPDCCL is geared up to bring down the AT&C losses in line with the target approved by the Monitoring Committee.

3.4 Distribution Loss

3.4.1 The Hon'ble Commission has approved the distribution loss of 15% in its MYT Order for FY 2022-23 dated 25th March 2022. The same trajectory has been approved by the Hon'ble Commission's subsequent year's true-up, APR and ARR. However, it is important to bring into the kind notice of the Hon'ble Commission that the actual distribution losses for the Petitioner is higher than the loss trajectory approved by the Hon'ble Commission. Based on the circle wise losses, the Petitioner has arrived at the Distribution loss of 15.18% (excluding UI) for FY 2022-23.

3.4.2 The following table captures the distribution loss for FY 2022-23:

Table 7: Distribution Losses (in %)

Particulars	Approved in Order dated 25.03.2022	Approved in APR FY 2022-23	Actual for FY 2022-23
Distribution Loss	15%	15%	15.18%

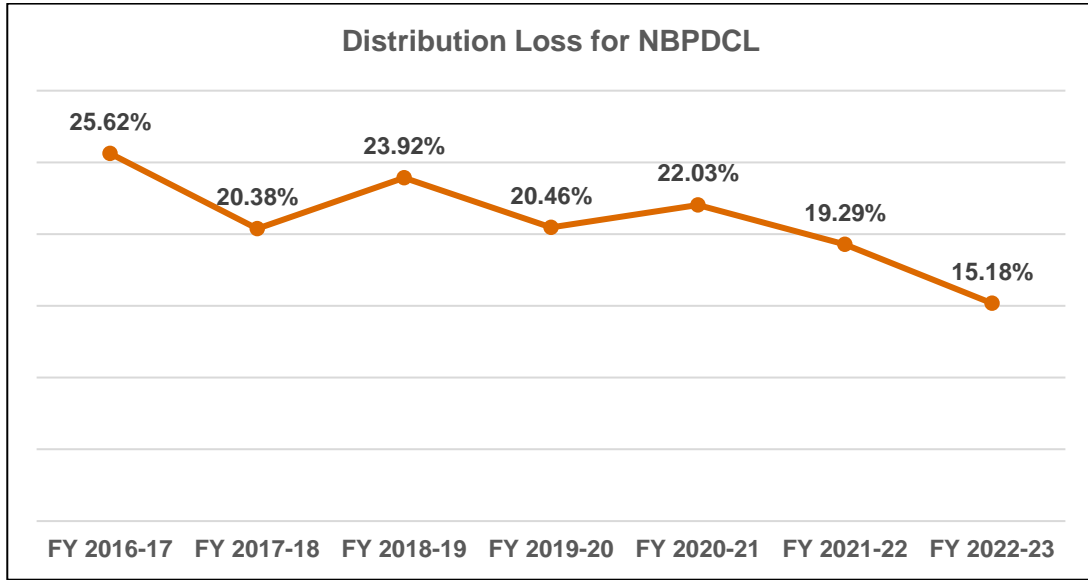
3.4.3 The difference in the approved loss target and the actual loss levels is practically impossible to achieve in the given period. The Hon'ble Commission is also requested to see the growth rates in consumer base of NBPDCCL and consider the challenging operating scenario of the Petitioner wherein most consumers being added are in rural and remote areas further adding to network losses, ongoing measures, and regulatory precedents to approve the actual distribution loss for FY 2022-23.

3.4.4 The Hon'ble Commission in its Order dated 25.03.2022 had set Distribution loss trajectory for the period for FY 2022-23 to align it with the trajectory in the respective tripartite MoUs of UDAY as set for FY 2019-20. The DISCOM has been able to reduce its distribution losses significantly in the period from FY 2016-17 to FY 2022-23. The Distribution losses in FY 2016-17 were 25.62% which reduced to 15.18% in FY 2022-23, as shown in the Graph below. This is quite an achievement on the part of the DISCOM. However, the targets set by the Hon'ble Commission were not feasible to achieve due to practical difficulties.

3.4.5 The domestic consumers constitute around 90% of the total consumer base and sales to domestic consumer form around 62% of the sales mix for FY 2022-23. Further, out of the domestic consumers, low-income strata consumers such as Kutir Jyoti category constitute more than 39% of the domestic consumer base for FY 2022-23. The petitioner is required to upkeep its distribution network in accordance with such consumers profile which is skewed towards domestic category.

Accordingly, the petitioner has to bear higher distribution losses owing to such distribution network having very high percentage of domestic consumers.

3.4.6 In the backdrop of the above, the Hon'ble Commission is kindly requested to consider the actual distribution loss of 15.18% for FY 2022-23.



3.5 Collection Efficiency

3.5.1 Based on the circle wise collection efficiency, the Petitioner has reached the below collection efficiency in FY 2022-23:

Table 8: Collection Efficiency (in %)

Particulars	Approved in ARR of FY 2022-23	Actual for FY 2022-23
Collection Efficiency	100%	95.36%

3.5.2 The Hon'ble Commission had approved the collection efficiency of 100% in the ARR for FY 2022-23 as per the UDAY scheme. However, the per capita income of Bihar, especially for the domestic consumer is very low which restricts their paying capacity, and this has proven to be a challenge to recover the billed amount despite taking various measures for timely billing and easy payment of the bill.

3.5.3 It is also to be noted that to the improve the metering, billing and collection process, the petitioner has also started implementation of smart pre-paid meter project envisaging that the same shall enable Discoms to significantly improve its metering billing & collection and minimize the commercial losses.

3.5.4 Further, the Petitioner has time and again informed the Hon'ble Commission about various initiatives taken for improvement in Collection efficiency through Quarterly Directives. Therefore, the Hon'ble Commission is kindly requested to consider the actual collection efficiency of 95.36% for FY 2022-23.

3.6 Calculation of AT&C Loss

3.6.1 Based on the above figures, the Petitioner has calculated the following AT&C loss for the year FY 2022-23:

Table 9: Computation of AT&C loss (excluding Nepal)

Particulars	Approved in ARR of FY 2022-23	Actual for FY 2022-23
AT&C Loss	15%	19.12%

3.6.2 Further, as per the directions of the Hon'ble Commission, AT&C losses as per Formula and Methodology specified by Regulation 18.5 of BERC Multi Year Tariff Regulation, 2021, is as follows:

Particulars	Unit	Legend	NBPDCL
Gross Energy Purchased at State Periphery	MU	A	16,910
Transmission Losses	MU	B	561
Energy at Distribution Periphery	MU	C=A-B	16,349
SLDC deviation	MU	D	227
Net Energy at Distribution Periphery	MU	E=C-D	16,122
Distribution losses	MU	F=E-G	2,447
Distribution losses	%	F/E*100	15.18%
Energy Sold	MU	G	13,675
Revenue actually realized from sale of power without subsidy	Rs Cr	H	
Tariff Subsidy actually received	Rs Cr	I	
Net Revenue from sale of energy on subsidy received basis	Rs Cr	J=H+I	10,669
Tariff Subsidy booked	Rs Cr	K	
Revenue from sale of energy on subsidy booked basis	Rs Cr	L=H+K	10,669
Opening Debtors for Sale of Energy	Rs Cr	M	2,658
Closing Debtors for Sale of Energy	Rs Cr	N	3,153
Any amount written off during the year directly from "L" above	Rs Cr	O	
Adjusted closing Debtors for Sale of Energy	Rs Cr	P=N+O	3,153
Collection efficiency	%	Q=(J+M-P)/L*100	95.36%
Unit realized	MU	R=G*Q	13,041
Unit Un-realized	MU	S=E-R	3,082
AT&C loss	%	T=S*100/E	19.12%

3.6.3 The Hon'ble Commission is therefore requested to approve the AT&C loss of 19.12% for FY 2022-23.

3.7 Transmission losses

- 3.7.1 **Intra-State Transmission Loss:** It is submitted that the Petitioner has taken the State transmission loss as per actuals i.e., 560.68 MU from the audited accounts for FY 2022-23 and accordingly requests the Hon'ble Commission to approve the same.
- 3.7.2 **Inter-State Transmission Loss:** It is submitted that the Petitioner has taken the Central Transmission loss as per actuals i.e., 677.85 MU from the audited accounts for FY 2022-23 and accordingly requests the Hon'ble Commission to approve the same.
- 3.7.3 The computation of inter- state and intra- state transmission losses is attached herewith the Petition as **Annexure-1**.

3.8 Power Purchase

- 3.8.1 Bihar has historically been a State with limited natural resources which has led to an underdeveloped power generation sector in the State. As a result, the State Power Distribution Companies rely heavily on allocation from central generating stations and other outside State projects for procuring power for sale to consumers within the State. This dependence therefore creates a significant amount of uncertainty in terms of reliability and also significantly pushes up the power purchase costs (due to the fact that sometimes the power allocation is made from inefficient plants in addition to the higher inter-state transmission charges and losses).
- 3.8.2 Power is procured by the power management cell of BSP(H)CL, and this is allocated between the two DISCOMs, NBPDC and SBPDCL, in the Energy Sharing Ratio based on the demand growth requirement and consequent power supply requirement.
- 3.8.3 **Long term power purchase:** The power purchase for existing sources has primarily been NTPC, NHPC and the same has been considered based on the actual quantum with adjustments to capture overall power purchase cost in a reasonable manner. Other sources of power include power procured from State Generating companies (RE and Non-RE Sources) and IPPs.
- 3.8.4 **Medium / Short Term power purchase:** The power purchase from these sources are namely IEX, DEEP Portal etc., and these have been adequately considered as per the actual power purchase data provided.
- 3.8.5 **Renewable Power Purchase Obligation:** It is submitted that the Hon'ble Commission has notified the BERC (Renewable Purchase Obligation, its Compliance and REC Framework Implementation) Regulations, 2010 and BERC (Terms and Conditions for Tariff Determination from Solar Energy Sources) Regulations, 2010. Further Hon'ble Commission initiated a Suo-Motu proceedings no. 42/2016 dated 24.11.2016 to bring in 2nd amendment in the BERC (Renewable Purchase Obligation, its Compliance and REC Framework Implementation) Regulations, 2010 dated 29.03.2017 to incorporate the various new/amended provisions specified in the revised Tariff Policy, 2016 notified by the Ministry of Power Govt. of India vide gazette notification dated 28.01.2016 The Commission has also come up with its 3rd amendment in due course BERC (Renewable Purchase Obligation, its Compliance and REC Framework Implementation)

Regulations, 2010. Further, Ministry of Power, Govt. of India, through its order no. 09/13/2021-RCM dated 22.07.2023 specified separate Wind RPO, HPO and other RPO within the overall RPO target for the FY 2022-23 to FY 2029-30. Subsequently, BERC has adopted the RPO target as specified by the MoP for the year FY 2022-23 to FY 2029-30. Further Hon'ble Commission through a Suo-Motu proceedings brought in 4th amendment in the BERC (Renewable Purchase Obligation, its Compliance and REC Framework Implementation) Regulations, 2010. Minimum quantum of electricity to be procured from Renewable Sources by Obligated Entity as percentage of total consumption is provided in table below.

Table 10: Renewable Purchase Obligation (%)

FY	Wind RPO	HPO	Other RPO	Total RPO
2022-23	0.81%	0.35%	23.44%	24.60%
2023-24	1.60%	0.66%	24.81%	27.08%
2024-25	2.46%	1.08%	26.37%	29.91%
2025-26	3.36%	1.48%	28.17%	33.01%
2026-27	4.29%	1.80%	29.86%	35.95%
2027-28	5.23%	2.15%	31.43%	38.81%
2028-29	6.16%	2.51%	32.69%	41.36%
2029-30	6.94%	2.82%	33.57%	43.33%

3.8.6 In line with the above, the details of the Renewable Energy based power procured during FY 2022-23, has been given in the table below as per the Regulation and amendments issued therein:

Table 11: RPO met for FY 2022-23 (in MU)

Particulars	NBPDCL
Energy Sale (excluding interstate sales)	13,360.57
Hydro Power Purchase	1,244.32
Hydro Power purchase by Bhutan under deviation	(0.00)
Total Hydro Power Purchase	1,244.23
Inter-State Transmission Loss (%)	3.85%
Inter-State Transmission Loss (MU)	47.96
Intra-State Transmission Loss (%)	3.32%
Intra-State Transmission Loss (MU)	39.67
Distribution Loss	15.18%
Distribution Loss	175.59
Hydro Power Consumed	981.11
Conventional Power Consumed	12,379.46
RPO Targets (%)	24.60%
Wind RPO (%)	0.81%
HPO (%)	0.35%

Other RPO (%)	23.44%
RPO Targets (MU)	3,045.35
Wind RPO	100.27
HPO	43.33
Other RPO	2,901.75
Renewable Power Purchased (MU)	2,976.24
Wind RPO	758.79
HPO	0
Other RPO	2,217.45
RPO Shortfall (MU)	69.11
Wind RPO shortfall/ (surplus)	(658.52)
HPO shortfall/ (surplus)	(615.19)
Other RPO shortfall/ (surplus)	69.11
RPO Target Achieved (%)	
Wind RPO	100%
HPO	100%
Other RPO	98%

3.8.7 The Petitioner hereby submit that Wind RPO and HPO target altogether is tune to 143.6 MU in FY 2022-23. However, Petitioner has purchased total of 758.79 MU under these heads. Therefore, Petitioner hereby submit that it has achieved the RPO targets in combination of Wind RPO and HPO altogether.

3.8.8 Further, the Discoms in the Tariff Petition for FY 2020-21 (SBPDCL vide letter dated 18.01.2020 and NBPDCCL vide letter no.67 of 20.01.2020) have submitted the details of RECs purchased earlier (SBPDCL Rs.149.39 Crore and NBPDCCL Rs.106.50 Crore) and cost of which was already factored into the ARR of respective Discoms till FY 2017-18 in truing up. It was submitted by the Discoms that they have fulfilled their RPO Obligations till 2018-19 and requested the Hon'ble Commission to adjudge the RPO related decisions based on units to be purchased instead of the cost associated to it.

3.9 Actual Power Purchase quantum

3.9.1 The details of actual power purchased from various sources in FY 2022-23 is as follows: -

Table 12: Actual Power Purchased (MU) in FY 2022-23

	Name of The Source	Share allocated (MW)	Units purchased (MU)
I	Stations with injection at CTU	2,957.53	16,120.43
1	FSTPP I & II	214.30	1,185.69
2	FSTPP III	42.79	224.90
3	KHSTPP I	151.57	911.39
4	KHSTPP II	27.98	212.15
5	Barh Stage I (Unit I & II)	336.86	1,016.77
7	Barh Stage II	503.03	3,417.90
8	Nabinagar (BRBCL)	44.00	283.56

9	Korba	-	-
10	Talcher Stage I	177.72	1,306.84
11	KBUNL Stage II	127.19	919.55
12	NPGCL	721.44	4,726.19
13	North Karanpura Unit I	130.59	75.91
14	Darlipali STPS	142.28	605.64
15	Chuka	40.96	208.07
16	Rangit	10.13	49.40
17	Tala	114.44	269.17
18	Teesta	47.08	265.10
19	Mangdechhu	125.17	442.20
		-	
II	Stations with injection at STU	340.69	1,476.44
1	BSPHC	23.89	10.38
2	BTPS Stage I	96.80	11.65
3	BTPS Stage II	220.00	1,454.41
		-	
III	IPPs	214.72	1,461.49
1	GMR	114.40	844.02
2	JITPL	100.32	617.47
IV	Renewables	813.39	1,749.3
1	M/s Sunmark Energy Projects Limited (Formerly MBCEL)	4.40	6.81
2	M/s Response renewable Energy Ltd, Kolkata.	4.40	8.17
3	M/s Avantika Contractors Ltd., Hyderabad	2.20	2.89
4	M/s Glatt Solutions Pvt. Ltd, Kolkata.	1.32	2.32
5	Alfa Infraprop Pvt. Ltd.	8.80	14.17
6	Udipta Energy & Equipment Pvt. Ltd.	2.20	3.24
7	Azure Power India Pvt. Ltd.	4.40	6.08
8	Welspun Renewables Project - I	4.40	6.89
9	Welspun Renewables Project – II	6.60	10.07
10	Welspun Renewables Project – III	6.60	10.37
11	Acme Cleantech Project (Nalanda)	6.60	10.12
12	Acme Cleantech Project (Magadh)	4.40	7.11
13	SECI (Focal)	4.40	8.49
14	SECI Phase-III (Renew Sunwaves)	132.00	329.12
15	SB Energy Six Pvt. Ltd. (NTPC)	132.00	338.09
16	GRT Jewellers (SECI-V)	66.00	110.66
17	Wind ISTS Scheme Tranche I (PTC) (Green Infra, Inox, Mytrah & Ostro)	88.00	197.64
18	Wind ISTS Scheme Tranche II (SECI) (Orange)	44.00	121.30
19	SECI Phase-III Wind	-	
20	SECI Green Infra	44.00	120.23
21	Alfanar	22.00	61.45
22	Betam	22.09	57.78
23	SECI Phase-VI Wind	-	
24	Ostro Kannad	132.00	236.36
25	Morjar Windfarm	22.00	14.97
26	New Swadeshi Sugar Mill, Narkataganj	4.40	5.49
27	Hasanpur Sugar Mill, Dalsinghsarai	6.38	6.87
28	Bharat Sugar Mills, Sidhwalia, Gopalganj	6.60	10.49
29	Hari Nagar Sugar Mills, Hari Nagar, West Champaran	6.38	19.56

30	HPCL Biofuels Ltd., Sugauli, East Champaran	8.80	7.12
31	HPCL Biofuels Ltd., Lauria, West Champaran	8.80	8.70
32	Siddhashram Rice Mill Cluster Pvt Ltd	0.44	0.08
33	Bihar Distillers & Bottlers Pvt Ltd	4.14	2.25
34	Tirupati Sugar	2.64	6.65
		-	
V	Others	88.00	401.24
1	PTC(IEX)	-	147.13
2	GTAM IEX	-	-
4	UPPCL	-	1.24
5	NEA	-	0.08
6	UI	-	26.41
7	PTC JITPL	55.00	154.06
8	PTC SKS Power	33.00	72.32
		-	
VII	Total	4,414.33	21,211.15

3.9.2 The Petitioner further submits that it has duly followed the BERC (Power Purchase and Procurement Process of Licensee) Regulations, 2021 for fulfilling its power requirement during the FY 2022-23. Accordingly, the Hon'ble Commission is requested to approve the power purchase quantum for the Petitioner on actual basis as provided above.

3.10 Energy Balance

3.10.1 The Petitioner has calculated the energy balance based on the actual sales, distribution losses and the power availability during FY 2022-23. The details are as provided in the following table:

Table 13: Energy balance (MU) in FY 2022-23

Sr No	Particulars	Unit	NBPDCL
			FY 2022-23
A	Energy Requirement		
1	Energy sales	MU	13,901.70
2	Less: SLDC deviation	MU	226.92
3	Less: Inter-State Sales	MU	
4	Energy sales (exc SLDC deviation and interstate Sales)		13,674.78
5	Distribution Loss	%	15.18%
6	Add: Distribution Loss	MU	2,447.41
7	Energy required at Distribution periphery	MU	16,122.19
8	Add: sales corresponding to SLDC deviation	MU	226.92
9	Add: interstate sales	MU	-
10	Total energy required at Distribution periphery	MU	16,349.11
11	State Transmission Loss	%	3.32%
12	Add: State Transmission Loss	MU	560.68
13	Total energy required at State Transmission Periphery	MU	16,909.78
14	Losses in Regional Transmission system	%	3.85%
15	Losses in Regional Transmission system	MU	677.85
16	Total Energy Requirement at ex-bus	MU	17,587.63
17	Total energy Purchased (inc surplus power)	MU	21,211.15

18	Energy Surplus/(Deficit) at State Periphery	MU	3,623.52
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3.10.2 As shown above, the Petitioner has 3,623.52 MU of surplus which is also shown in the audited accounts as Sale of Power to IEX. The corresponding revenue of this surplus power is Rs 1,810.36 Cr as per the audited accounts that has been deducted from the net ARR. The Petitioner requests the Hon'ble Commission to approve the energy balance based on actual calculations for FY2022-23.

3.11 Power Purchase Cost

3.11.1 The power purchase cost mainly comprises of fixed and energy charges for two part tariff PPAs which are essentially with NTPC, NHPC, GMR Karmangala, Sugar mills, biomass, bagasse and only energy charges in case of single part tariff based PPAs, which are typically for BSHPC, Solar and short term power purchase etc. The Petitioner has presented the actual expenditure incurred on power purchase based on bills raised by the various power sellers. This actual amount has been considered and captured accordingly as a break-up of two part tariff, wherever applicable, as per the audited accounts of the Petitioner. The Petitioner therefore humbly requests the Hon'ble Commission to allow the actual power purchase cost under this true-up process.

3.11.2 The Petitioner also likes to highlight that, in the FY 2022-23, the Petitioner has suffered DSM of 26.41 MU which has resulted into a DSM charge of Rs. 41.40 Crore. The Deviation (inc. Additional Deviation) Charges are specified under CERC DSM and are not penal in nature. This is quite evident from the CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2014 (CERC DSM Regulations) that defines the deviation as a commercial settlement mechanism for settlement of energy/power that is drawn/injected in deviation of the schedule with an overall objective of maintaining the grid discipline and security. This is clear from the Objectives mentioned in Regulation 3 of the CERC DSM Regulations which is reproduced below: -

*“The objective of these regulations is to maintain grid discipline and grid security as envisaged under the Grid Code **through the commercial mechanism for Deviation Settlement** through drawl and injection of electricity by the users of the grid.”*

3.11.3 Thus, from the above it is amply evident that the Deviation charges specified under above Regulations **are merely a commercial mechanism and not penal charges**. The instances of deviation/ additional deviations are solely dependent on the Grid Frequency and Real time Grid conditions both of which are uncontrollable to Bihar DISCOMs. Depending upon the grid operation condition, at any particular time block such deviation might be helping the grid operation viz deviation in the form of over drawal at high frequency, under drawal at low frequency. For example, 5 MW may qualify to be called for Additional Deviation charge if the Grid frequency at that particular time is below specified frequency. Similarly, the over drawal of even 500 MW will not qualify to be called as Additional Deviation charges if the Grid frequency is higher than the specified frequency. Hence, treating the additional deviation charges as penalty is against the CERC DSM Regulations.

3.11.4 The power sector is driven by many parameters of its associated ecosystem majority of which are unforeseen/uncontrollable. The forecasted demand of power being dependent upon unforeseen and uncontrollable factors is liable to deviate from actual demand. Similarly, the power availability from various sources considered in power procurement planning (which are done at least one day in advance) very often changes due to various unforeseen and uncontrollable factors. The variation in any of these parameters associated with integrated power system network leads to variation in either injection or drawal of power and such variation continuously keeps on happening resulting in variation in system frequency as well as mismatch in injection and drawal. Thus, due to factor inherent within the power system dynamics, deviation is an **inherent phenomenon** associated with power system operation which keeps on happening continuously in the integrated power system.

3.11.5 Further, the Petitioner submits that the **disallowance of the actual expenses as per the Audited Accounts of the Petitioner** is a deviation in terms of the Regulation 14 of the BERC (Multi Year Distribution Tariff) Regulations, 2021. As per the BERC MYT Regulations actual expenses as per the Audited Accounts of the Petitioner form the basis for allowing the expenses in the True-Up year. Regulation 14 of the BERC (Multi Year Distribution Tariff) Regulations, 2021 stipulates as follows:

“14. True-up and Annual Performance Review

14.1 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.

a) An order for True-Up of expenses shall be issued on annual basis.

*b) An order for True-Up of expenses shall be on the basis of expense estimates made in the beginning of the year under consideration, **actual expenses booked in the audited books of accounts of the Distribution Licensee, for the year, (Emphasis added)***

.....

3.11.6 As above, non- consideration of Audited accounts for approving the Power Purchase expenses of the Distribution Licensee for the Trued-Up financial year is a deviation from the Regulations formulated by the Hon'ble Commission itself.

3.11.7 Further, in view of the treatment specified for uncontrollable factors in the BERC MYT Distribution Regulations, the Hon'ble Commission is kindly prayed to allow complete deviation charges (including additional deviation charges) to the Petitioner.

3.11.8 It is also to bring into the kind knowledge of the Hon'ble Commission that CERC vide notification dated 14th March 2022, has formulated **CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2022 wherein the sign change violation has been discontinued and removed from the list of Grid Deviations**. However, the Regulations has not come into effect yet and its applicability will be notified separately by the CERC.

3.11.9 Further, the Hon'ble Commission may kindly appreciate that the power requirement of Bihar has increased significantly over the years. As in FY 2011-12, the Energy requirement was 14,311 MU while in FY 2021-22 the energy requirement rose to 36,216 MU (*Source: CEA, PSP*). So, to cater such a huge power requirement the power system of Bihar has evolved gradually over the time. As

such, it is a daunting task to comply with the Grid discipline structured by the Central Commission about the DSM and additional DSM at the same time meeting the huge requirement of the State.

3.11.10 It is also pertinent to mention that if we observe the treatment of additional Deviation charges across the States it is found that the State Regulators allow total DSM charges incurred by the DISCOM(s). The treatment of DSM charges across the states is based on the methodology adopted by the Regulators as per the prevailing applicable Regulations, if any. The summary below provides a snapshot of the treatment of DSM/ additional DSM in different States, including Bihar.

S. No.	States	Treatment	Remarks
1	Bihar	DSM charges are allowed but additional DSM charges are disallowed	Based on prevailing CERC Regulations
2	Haryana	Total DSM/additional DSM charges are allowed	Based on the methodology adopted for approving True-Up of FY 2020-21
3	Madhya Pradesh	Total DSM/additional DSM charges are allowed	Based on the methodology adopted for Truing-Up of FY 2020-21
4	Uttarakhand	Total DSM/additional DSM charges are allowed	Based on the methodology adopted for Truing-Up of FY 2020-21
5	Uttar Pradesh	Total DSM/additional DSM charges are allowed	Based on the methodology adopted for Truing-Up of FY 2019-20
6	Jharkhand	Total DSM/additional DSM charges are allowed	Based on the methodology adopted for Truing-Up of FY 2018-19
7	Chhattisgarh	Total DSM/additional DSM charges are allowed	Based on the methodology adopted for Truing-Up of FY 2020-21

3.11.11 As above, the peer States of Bihar have been allowing the complete deviation charges in view that these charges are uncontrollable in nature to the DISCOMs.

3.11.12 Therefore, in view of the foregoing, the Hon'ble Commission is prayed to allow the complete deviation charges (including additional deviation charges) actually incurred and booked in the audited books of accounts of the Petitioner. The deviation/ additional deviation charges are uncontrollable in nature to the DISCOMs and the disallowance of the same is against the CERC DSM Regulations and the BERC MYT Distribution Regulations.

3.11.13 The Petitioner thus requests the Hon'ble Commission to pass on the complete unit and cost pertaining to DSM in the trued-up ARR of FY 2022-23.

3.11.14 In line with the above, the Petitioner presents its power purchase cost for FY 2022-23 based on audited annual accounts, for the kind consideration of the Hon'ble Commission.

Table 14: Actual Power Purchased in FY 2022-23

Particulars	NBPDC Allocatio n (MW)	Unit purchased (MU)	Fixed Cost (Rs. Cr /MW) NBPDC	NBPDC Total Cost for FY 2022-23 (Rs Crores)				NBPDC Total Cost for FY 2022-23 (Rs/kWh)			
				Fixed Charges	Energy Charge s	Misc. Charge s	Total	Fixed Charge s	Energy Charge s	Misc. Charge s	Total
Stations with injection at CTU	2,957.54	16,120.43	0.98	2,895.30	4,753.47	148.46	7,796.73	1.80	3.69	0.11	5.60
<i>FSTPP I & II</i>	214.30	1,185.69	0.54	116.08	451.35	46.35	613.79	0.98	3.81	0.39	5.18
<i>FSTPP III</i>	42.79	224.90	1.05	44.90	82.25	9.46	136.61	2.00	3.66	0.42	6.07
<i>KHSTPP I</i>	151.57	911.39	0.71	107.48	337.91	15.73	460.64	1.18	3.71	0.17	5.05
<i>KHSTPP II</i>	27.98	212.15	0.65	18.12	74.79	4.38	97.29	0.85	3.53	0.21	4.59
<i>Barh Stage I (Unit I & II)</i>	336.86	1,016.77	0.82	277.08	322.75	5.24	605.08	2.73	3.17	0.05	5.95
<i>Barh Stage II</i>	503.03	3,417.90	1.35	679.62	1,173.22	24.60	1,877.45	1.99	3.43	0.07	5.49
<i>Nabinagar (BRBCL)</i>	44.00	283.56	1.54	67.87	83.28	(0.23)	150.91	2.39	2.94	(0.01)	5.32
<i>Talcher Stage I</i>	177.72	1,306.84	0.68	121.29	250.65	19.11	391.05	0.93	1.92	0.15	2.99
<i>KBUNL Stage II</i>	127.19	919.55	1.89	240.21	258.42	11.46	510.09	2.61	2.81	0.12	5.55
<i>NPGCL</i>	721.44	4,726.19	1.49	1,075.77	1,300.40	1.10	2,377.27	2.28	2.75	0.00	5.03
<i>North Karanpura Unit I</i>	130.59	75.91	0.14	18.23	12.21	0.01	30.45	2.40	1.61	0.00	4.01
<i>Darlipali STPS</i>	142.28	605.64	0.71	100.81	69.73	6.27	176.81	1.66	1.15	0.10	2.92
<i>Chuka</i>	40.96	208.07	-	-	49.97	-	49.97	-	2.40	-	2.40
<i>Rangit</i>	10.13	49.40	1.02	10.36	9.70	0.77	20.83	2.10	1.96	0.16	4.22

Particulars	NBPDC Allocatio n (MW)	Unit purchased (MU)	Fixed Cost (Rs. Cr	NBPDC Total Cost for FY 2022-23 (Rs Crores)				NBPDC Total Cost for FY 2022-23 (Rs/kWh)			
				Fixed	Energy	Misc.	Total		Energy	Misc.	Total
Tala	114.44	269.17	-	-	61.10	-	61.10	-	2.27	-	2.27
Teesta	47.08	265.10	0.71	33.64	30.44	4.19	68.28	1.27	1.15	0.16	2.58
Mangdechu	125.17	442.20	-	-	185.28	-	185.28	-	4.19	-	4.19
Prior period adjustment	-	-	-	(16.17)	-	-	(16.17)	-	-	-	-
Stations with injection at STU	340.69	1,476.44	0.82	279.91	409.22	0.93	689.59	1.90	2.77	0.00	4.67
BSPHC	23.89	10.38	-	-	2.58	-	2.58	-	2.49	-	2.49
BTPS Stage I	96.80	11.65	0.04	3.84	5.34	0.14	9.31	3.29	4.58	0.12	7.99
BTPS Stage II	220.00	1,454.41	1.25	276.07	401.30	0.79	677.70	1.90	2.76	0.00	4.66
IPPs	214.72	1,461.49	1.72	368.56	201.68	1.61	571.85	2.52	1.38	0.01	3.91
GMR	114.40	844.02	1.29	147.07	128.63	47.91	323.61	1.74	1.52	0.57	3.83
JITPL	100.32	617.47	2.21	221.49	73.05	(46.30)	248.24	3.59	1.18	(0.75)	4.02
Renewables	813.39	1,749.3	-	-	526.88	-	526.88	-	3.81	0.39	4.20
M/s Sunmark Energy Projects Limited (Formerly MBCEL)	4.40	6.81	-	-	4.78	-	4.78	-	7.02	-	7.02
M/s Response renewable Energy Ltd, Kolkata.	4.40	8.17	-	-	5.74	-	5.74	-	7.02	-	7.02
M/s Avantika Contractors Ltd., Hyderabad	2.20	2.89	-	-	2.22	-	2.22	-	7.69	-	7.69
M/s Glatt Solutions Pvt. Ltd, Kolkata.	1.32	2.32	-	-	1.63	-	1.63	-	7.02	-	7.02
Alfa Infraprop Pvt. Ltd.											

Particulars	NBPDC Allocatio n (MW)	Unit purchased (MU)	Fixed Cost (Rs. Cr	NBPDC Total Cost for FY 2022-23 (Rs Crores)				NBPDC Total Cost for FY 2022-23 (Rs/kWh)			
				Fixed	Energy	Misc.	Total	Energy	Misc.	Total	
	8.80	14.17	-	-	11.15	-	11.15	-	7.87	-	7.87
<i>Udipta Energy & Equipment Pvt. Ltd.</i>	2.20	3.24	-	-	2.58	-	2.58	-	7.98	-	7.98
<i>Azure Power India Pvt. Ltd.</i>	4.40	6.08	-	-	5.11	-	5.11	-	8.39	-	8.39
<i>Welspun Renewables Project - I</i>	4.40	6.89	-	-	6.00	-	6.00	-	8.70	-	8.70
<i>Welspun Renewables Project – II</i>	6.60	10.07	-	-	8.70	-	8.70	-	8.64	-	8.64
<i>Welspun Renewables Project – III</i>	6.60	10.37	-	-	8.88	-	8.88	-	8.56	-	8.56
<i>Acme Cleantech Project (Nalanda)</i>	6.60	10.12	-	-	8.83	-	8.83	-	8.73	-	8.73
<i>Acme Cleantech Project (Magadh)</i>	4.40	7.11	-	-	6.21	-	6.21	-	8.73	-	8.73
<i>SECI (Focal)</i>	4.40	8.49	-	-	5.03	-	5.03	-	5.93	-	5.93
<i>SECI Phase-III (Renew Sunwaves)</i>	132.00	329.12	-	-	86.23	-	86.23	-	2.62	-	2.62
<i>SB Energy Six Pvt. Ltd. (NTPC)</i>	132.00	338.09	-	-	90.27	-	90.27	-	2.67	-	2.67
<i>GRT Jewellers (SECI-V)</i>	66.00	110.66	-	-	22.62	-	22.62	-	2.04	-	2.04
<i>Wind ISTS Scheme Tranche I (PTC) (Green Infra, Inox, Mytrah & Ostro)</i>	88.00	197.64	-	-	66.78	-	66.78	-	3.38	-	3.38
<i>Wind ISTS Scheme Tranche II (SECI) (Orange)</i>	44.00	121.30	-	-	32.87	-	32.87	-	2.71	-	2.71
<i>SECI Green Infra</i>	44.00	120.23	-	-	30.18	-	30.18	-	2.51	-	2.51
<i>Alfanar</i>	22.00	61.45	-	-	15.49	-	15.49	-	2.52	-	2.52
<i>Betam</i>	22.09	57.78	-	-	14.56	-	14.56	-	2.52	-	2.52

Particulars	NBPDC Allocatio n (MW)	Unit purchased (MU)	Fixed Cost (Rs. Cr	NBPDC Total Cost for FY 2022-23 (Rs Crores)				NBPDC Total Cost for FY 2022-23 (Rs/kWh)			
				Fixed	Energy	Misc.	Total		Energy	Misc.	Total
<i>Ostro Kannad</i>	132.00	236.36	-	-	51.64	-	51.64	-	2.19	-	2.19
<i>Morjar Windfarm</i>	22.00	14.97	-	-	3.27	-	3.27	-	2.19	-	2.19
<i>New Swadeshi Sugar Mill, Narkataganj</i>	4.40	5.49	-	-	2.82	-	2.82	-	5.14	-	5.14
<i>Hasanpur Sugar Mill, Dalsinghsarai</i>	6.38	6.87	-	-	4.27	-	4.27	-	6.22	-	6.22
<i>Bharat Sugar Mills, Sidhwalia, Gopalganj</i>	6.60	10.49	-	-	5.36	-	5.36	-	5.11	-	5.11
<i>Hari Nagar Sugar Mills, Hari Nagar, West Champaran</i>	6.38	19.56	-	-	9.97	-	9.97	-	5.10	-	5.10
<i>HPCL Biofuels Ltd., Sugauli, East Champaran</i>	8.80	7.12	-	-	3.55	-	3.55	-	4.98	-	4.98
<i>HPCL Biofuels Ltd., Lauria, West Champaran</i>	8.80	8.70	-	-	4.44	-	4.44	-	5.10	-	5.10
<i>Siddhashram Rice Mill Cluster Pvt Ltd</i>	0.44	0.08	-	-	0.06	-	0.06	-	7.55	-	7.55
<i>Bihar Distillers & Bottlers Pvt Ltd</i>	4.14	2.25	-	-	1.43	-	1.43	-	6.36	-	6.36
<i>Tirupati Sugar</i>	2.64	6.65	-	-	4.23	-	4.23	-	6.36	-	6.36
Others	88.00	401.24	-	-	225.44	246.98	471.85	-	5.62	-	5.62
<i>PTC(IEX)</i>	-	147.13	-	-	128.66	-	128.66	-	8.74	-	8.74
<i>GTAM IEX</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Prior Period Expenses</i>	-	-	-	-	-	204.14	203.57	-	-	-	-
<i>UPPCL</i>	-	1.24	-	-	-	1.04	1.04	-	-	8.39	8.39
<i>NEA</i>											

Particulars	NBPDC Allocatio n (MW)	Unit purchased (MU)	Fixed Cost (Rs. Cr	NBPDC Total Cost for FY 2022-23 (Rs Crores)				NBPDC Total Cost for FY 2022-23 (Rs/kWh)			
				Fixed	Energy	Misc.	Total		Energy	Misc.	Total
	-	0.08	-	-	-	0.06	0.06	-	-	7.26	7.26
<i>UI</i>	-	26.41	-	-	-	41.40	41.40	-	-	15.68	15.68
<i>PTC JITPL</i>	55.00	154.06	-	-	65.82	0.29	66.11	-	4.27	0.02	4.29
<i>PTC SKS Power</i>	33.00	72.32	-	-	30.96	0.06	31.02	-	4.28	0.01	4.29
Transmission and Other Charges	-	-	-	1,641.21	-	-	1,641.21	-	-	-	-
<i>SLDC</i>	-	-	-	2.20	-	-	2.20	-	-	-	-
<i>BGCL</i>	-	-	-	77.60	-	-	77.60	-	-	-	-
<i>BSPTCL</i>	-	-	-	540.77	-	-	540.77	-	-	-	-
<i>POSOCO</i>	-	-	-	4.11	-	-	4.11	-	-	-	-
<i>Prior Period Transmission charges</i>	-	-	-	-	-	-	-	-	-	-	-
<i>PGCIL</i>	-	-	-	1,016.52	-	-	1,016.52	-	-	-	-
Total	4,414.33	21,211.15	1.17	5,184.97	6,116.69	397.98	11,699.64	1.80	3.69	0.11	5.60

3.11.15 The power purchase cost is INR 11,699.64 Crores including the transmission charges of INR 1,641.21 Cr. Accordingly, the Petitioner requests the Hon'ble Commission to approve an amount of INR 11,699.64 Crores for the FY 2022-23 based on actuals.

3.12 Transmission charges

3.12.1 Interstate Transmission charges

3.12.1.1 It is submitted that the Petitioner has to pay transmission charges to POWERGRID for use of transmission facilities enabling power draw from the Eastern region. The transmission charges payable to POWERGRID are computed based on new transmission pricing mechanism and the figures for computation for FY 2022-23 and based on actual bills.

3.12.1.2 Further, the Petitioner also incurs POSOCO charges.

3.12.1.3 The summary of expenses towards POWERGRID and POSOCO for FY 2022-23 based on actual audited accounts is given in the table below:

Table 15: PGCIL and POSCO charges

Source	Total (in INR Crore)
POWERGRID	1016.52
POSO CO Charges	4.11
Prior Period PGCIL	-

3.12.2 Intrastate Transmission charges

3.12.2.1 The charges payable to State Transmission Utility i.e., BSPTCL, BGCL, SLDC based on actuals for FY 2022-23 is shown below.

Table 16: State transmission charges

Source	Total (in INR Crore)
BSPTCL Charges	540.77
BGCL Charges	77.60
SLDC Charges	2.20

3.12.2.2 Given the above information, the Hon'ble Commission is therefore requested to approve the total transmission charges of INR 1,641.21 Crore (inclusive of prior period charges) as per the Audited books of accounts in true up for FY 2022-23.

3.13 Power purchase corresponding to the Distribution losses more than that approved by the Commission

3.13.1 In FY 2022-23, the Petitioner has added around 5% consumers to the consumer base of FY 2021-22 with mostly increase in LT category. Due to addition in the number of consumers it is imperative that more effort is required to control the losses due to the existing consumers and also to ensure

that the loss due to addition of the new consumers should also not exceed the existing level. Even in such a situation, the Petitioner was able to reduce the actual distribution loss level to 15.18%. The present trajectory of Distribution Losses as per the approved by the Hon'ble Commission aims at 15% losses in FY 2022-23 which is less than the actual losses of the utility.

- 3.13.2 In compliance to the Hon'ble Commission's directive to increase supply hours, the Petitioner has increased the hours of supply in both rural and urban areas. Currently, the utility is providing more than 18-20 hours per day to its rural consumers and around 20-24 hours per day to its urban consumers. The Petitioner is continuously doing efforts to reduce the loss levels by introducing spot billing, door-to-door revenue collection, installation of smart meters in prepaid mode, introducing various payment channels etc.
- 3.13.3 In view of the efforts made by the utility to reduce the losses with increased supply hours and growth in domestic consumers, the Commission is hereby requested to adopt the actual distribution loss of 15.18% for FY 2022-23 for calculation of disallowance of actual power purchase cost due to actual distribution loss excess than that of the approved.
- 3.13.4 The Petitioner further submits that, in previous years, the methodology adopted by the Hon'ble Commission for arriving at surplus is based on very idealistic situation where it is assumed that entire energy purchased less normative loss in a year is billed to consumers in that particular year and difference of the two is termed as surplus energy on account of higher loss than approved one. This assumption is against the pragmatic scenario where some portion of the difference so arrived (energy purchased minus normative loss minus energy billed to consumers) is absorbed in network and some portion is consumed by the consumers to be billed in subsequent year.
- 3.13.5 However, the Petitioner in compliance to the BERG MYT Distribution Regulations, 2021, has shown the surplus energy on account of power purchase corresponding to the Distribution losses more than that approved by the Hon'ble Commission. The Petitioner has considered the average power purchase rate (APPC) (excluding transmission cost) of FY 2022-23 to arrive at the additional power purchase cost on account of the Distribution losses more than that approved by the Hon'ble Commission. The Table below provides Summary of the Power purchase corresponding to the Distribution losses more than that approved by the Commission.

Table 17: Power purchase corresponding to the Distribution losses more than that approved by the Commission (Rs. Crore)

Sr No	Particulars (NBPDCCL)	Unit	Actual	@15% DL
			FY 2022-23	FY 2022-23
A	Energy Requirement			
1	Energy sales	MU	13,901.70	13,901.70
2	Less: Sales corresponding to SLDC deviation	MU	226.92	226.92
3	Less: Inter-State Sales	MU	314.22	314.22
4	Energy sales (exc SLDC deviation and interstate Sales)	%	13,360.57	13,360.57
5	Distribution Loss	%	15.18%	15.00%

6	Add: Distribution Loss	MU	2,391.17	2,357.75
7	Energy required at Distribution periphery	MU	15,751.74	15,718.31
8	Add: sales corresponding to SLDC deviation		226.92	226.92
9	Add: interstate sales		314.22	314.22
10	Total energy required at Distribution periphery	MU	16,292.87	16,259.45
	Additional Energy Required	MU		33.42
	APPC	Rs/kWh		5.52
	Additional PP Cost @APPC	Rs. Cr		18.44
	Gap	Rs. Cr		18.44

3.13.6 As above, the additional power purchase requirement for meeting the actual Energy requirement at actual Distribution losses more than the approved Distribution losses is Rs 18.44 Cr. As per the BERC MYT Distribution Regulations, 2021 in case of controllable factors, losses are to be absorbed by the licensee in the ratio of 2/3 while any gains will be absorbed by the licensee in the ratio of 1/3. So, 2/3rd of the total loss additional power purchase cost of Rs 18.44 Cr is to be absorbed by the licensee which comes to be Rs 12.29 Cr and rest will be passed on to the consumers.

3.13.7 In view of the aforementioned Regulatory provisions, the Petitioner is hereby submitting the summary of the Gain/(Loss) on account of controllable and uncontrollable factors of power purchase as per the regulatory provisions specified in the BERC MYT Distribution Regulations, 2021, in the table below:

Table 18: Gains/(Loss) on account of controllable and uncontrollable factors for Power Purchase for FY 2022-23 (Rs. Crore)

Particulars	Approved in the Tariff Order dated 25.03.2022	Actual Claimed in Truing up	Gains/ (Loss)	Gain/(Loss) due to controllable factors to be absorbed by the licensee	Pass through on account of uncontrollable factors
Purchase of power	7,248.99	10,058.44	(2,809.45)	(12.30)	6.15
Transmission Charges	1,408.25	1,641.21	(232.96)		232.96
Revenue from Sale of Surplus Power	0.00	1,810.36	1,810.36		(1,810.36)
Total	8,657.24	13,510.00	(1,232.04)	(12.30)	(1,571.26)

3.13.8 The Petitioner hereby submits that the Hon'ble Commission is requested to consider the above calculation for allowing gains and losses in truing up the power purchase of FY 2022-23.

3.13.9 Further, the Bihar Govt. provided AT&C loss subsidy of Rs 4,276.92 Cr (SBPDCL- 3,255.00 Cr and NBPDC- 1,021.92 Cr) for FY 2022-23 for meeting the power purchase requirement as per the

actual Distribution losses. While the Petitioner received Rs 1021.92 Cr as AT&C loss subsidy against the disallowance made in the Power purchase corresponding to the Distribution losses more than that approved by the Commission, the disallowance as computed above is Rs 12.30 Cr only. So, the excess amount of Rs 1,009.62 Cr has been reduced from the ARR of the Petitioner for FY 2022-23. The treatment of the same has been done while computing the Net Revenue gap for FY 2022-23.

3.14 Capital Investment Plan, Capitalization and Funding

3.14.1 As per BERC (Multi Year Distribution Tariff) Regulations 2021, the Distribution Licensee must file a Business Plan which shall comprise of detailed capital investment plan, financing plan and physical targets. Relevant extract of the Distribution MYT Regulations 2021 is as follows:

5.1 The Distribution Licensee shall file a Business Plan, for the Control Period by a Petition in accordance with BERC (Conduct of Business) Regulations, 2005 and its amendments from time to time, by 15th September of the year prior to the commencement of the Control Period...

5.2 Such Business Plan shall comprise but not limited to detailed category/sub-category-wise sales and demand projections, power procurement plan, capital investment plan, financing plan and physical targets...

5.3 The Distribution Licensee shall make assessment of infrastructure requirement and prepare capital investment plan in accordance with BERC (Procedure for Filing Capital Investment and Capitalization Plan) Regulations, 2018 that will spill into the year(s) under review and new projects that will commence and may be completed within or beyond the tariff period...

3.14.2 During the Tariff Petition filed by the Petitioner for Truing up of FY 2020-21, APR of FY 2021-22 and ARR of FY 2022-23, the Petitioner didn't submit any projections for the control period 2022-23 to 2024-25 as the said projections for the control period to be submitted post approval under the Revamped Distribution Sector Scheme (RDSS) by the Monitoring Committee as it will form the core of total plan for creation of infrastructure both for AT&C loss reduction and supplying quality, reliable 24x7 power to the consumers.

3.14.3 Therefore, a separate CAPEX Petition was filed by the Petitioner (**Case No. 26/2022- NBPDCCL and 27/2022- SBPDCL**) for approval of schemes- Reconductoring, Mukhyamantri Krishi Vidyut Sambandh Yojana (MKVYS), Smart Metering, and RDSS. The CAPEX petition formed the basis for approval of capex and capitalization for the Tariff Petition filed by the Petitioner on 15th November 2022 for Truing up of FY 2021-22, APR of 2022-23 and ARR of FY 2023-24.

3.14.4 The Hon'ble Commission vide Order dt. April 28, 2023, in Case No. 26/2022 and 27/2022 has pronounced the final Order in the matter of approval of Capital Expenditure and Capitalization Plan for the MYT Control Period FY 2022-23 to FY 2024-25 which granted in-principal approval for implementation of the CAPEX Plan as per the cost estimate, investment schedule and time schedule. Therefore, the Hon'ble Commission allowed the impact of the CAPEX to be filed during the True-Up of FY 2022-23 to FY 2024-25. As per the Regulatory framework, the Petitioner was required to file the

Petition for Truing up of FY 2022-23, APR of FY 2023-24 and ARR of FY 2024-25 by November 15, 2023, wherein the impact of actual CAPEX incurred in FY 2022-23 to be filed.

3.14.5 Accordingly, as per the directions of the Hon'ble Commission the Petitioner has filed the Tue-Up of Capitalization made in FY 2022-23. The Commission is requested to kindly consider the submission of the Petitioner and allow capitalization as shown by the Petitioner.

3.14.6 During the year, Petitioner has capitalized INR 1062.61 Crores of which INR 850.09 Crore pertains to CWIP and INR 212.52 Crore is towards new investment in FY 2022-23. As depicted in the table below, INR 156.43 Crore pertains to grants. These grants were received under various schemes. Apart from grants, fixed assets are funded through loans and equities too. The funding through loans amounts to INR. 39.42 Crore and through equity it is INR 866.76 Crore.

3.14.7 The table given below depicts the audited balance of Capital Works in Progress (CWIP), Gross Fixed Assets (GFA) and Grants etc. for FY 2022-23.

Table 19: CWIP, Capex, Capitalization and Funding (in INR Crore)

S. No.	Particulars	Approved in ARR FY 2022-23	Actual for FY 2022-23
1	Opening CWIP	857.56	1703.52
2	New Investment	1021.07	456.52
3	Less: Capitalization (4+5)	1021.07	1062.61
4	CWIP		850.09
5	New Investment		212.52
6	Closing CWIP (1+2-3)	857.56	1097.47
7	Funding		
8	CWIP Capitalization (9+10+11)		850.09
9	Grant	1021.07	125.15
10	Equity		693.40
11	Loan		31.54
12	New Investment (13+14+15)		212.52
13	Grant		31.29
14	Equity		173.35
15	Loan		7.88
16	Total Capitalization (8+12)	1021.07	1062.61
17	Total Grant (9+13)	1021.07	156.43
18	Total Equity (10+14)		866.76
19	Total Loan (11+15)		39.42

3.14.8 The Hon'ble Commission is therefore requested to approve the capitalization plan for FY 2022-23.

3.15 Gross Fixed Assets

3.15.1 The Petitioner hereby submits the computation of Gross Fixed Assets considering the opening GFA as per Audited Annual Accounts.

3.15.2 The details of the opening and closing GFA for FY 2022-23 have been provided in the table below:

Table 20: Gross Fixed Assets (in INR Crore)

Particulars	Approved in ARR FY 2022-23	Actual for FY 2022-23
Opening GFA	22376.63	21541.25
Additions during the year	1021.07	1062.61
Add : IDC		-
Add: Employee cost capitalized		-
Less: Adjustment for assets sold/ discarded etc		42.39
Closing GFA	23397.70	22561.47

3.15.3 The Petitioner requests the Hon'ble Commission to approve closing Gross Fixed assets as INR 22561.47 Cr for FY 2022-23.

3.16 Depreciation

3.16.1 As per regulation 23 of Bihar Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2021, the Petitioner is claiming the depreciation expense after deducting the value of grant, depreciation on land and consumer contribution amortized in the ratio of depreciation

3.16.2 Depreciation is an important cost component for any Distribution Licensee. The Petitioner in the below table submits the depreciation for FY 2022-23 on the various assets within GFA.

Table 21: Depreciation (in INR Crore)

S. No.	Particulars	Approved in ARR FY 2022-23	Actual for FY 2022-23
1	Opening depreciable GFA	20959.49	21541.25
2	Less: Value of land		1048.55
3	Opening depreciable GFA (excl. value of land)		20492.71
4	Additions during the year (excl. value of land)	950.69	1063.79
5	IDC		-
5A	Adjustment for assets sold/ discarded etc		42.39
6	Expenses capitalized		-
7	Closing GFA (3+4-5A)	21910.18	21514.10
8	Average depreciable GFA (1+7)/2	21434.84	21003.41
9	Weighted average rate of depreciation	4.35%	4.83%
10	Depreciation for the year	932.22	1013.94
11	Opening Grants	12467.99	11755.28
12	Grants during the year	950.69	157.69
13	Less: Adjustment of assets sold/ discarded etc.		14.57

S. No.	Particulars	Approved in ARR FY 2022-23	Actual for FY 2022-23
14	Total Grants (11+12-13)	13418.68	11898.40
15	Average Grants (11+14)/2	12943.34	11826.84
16	Weighted average rate of Depreciation	4.35%	4.80%
17	Depreciation for GFA on Grants (15*16)	562.92	567.14
18	Net Depreciation (10-17)	369.30	446.80

3.16.3 The depreciation expense incurred by the Petitioner in FY 2022-23 amounts to INR 1013.94 Crore of which INR 567.14 Crore pertains to amortization of grants in the ratio of depreciation. The Petitioner is claiming depreciation by reducing the value of grants and consumer contribution amortized in FY 2022-23.

3.16.4 The Petitioner requests the Hon'ble Commission to approve depreciation of INR 446.80 Crore for FY2022-23.

Table 22: Gains/(Loss) on account of controllable and uncontrollable factors for Depreciation for FY 2022-23 (Rs. Crore)

Particulars	Approved in the Tariff Order dated 25.03.2022	Actual Claimed in Truing up	Gains/(Loss)	Gain/(Loss) due to controllable factors to be absorbed by the licensee	Pass through on account of uncontrollable factors
Depreciation	369.30	446.80	(77.50)		77.50

3.17 Operation & Maintenance charges

3.17.1.1 Regulation 22 BERC (Multi Year Distribution Tariff) Regulations 2021 states that:

(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 Distribution Licensee or a class of Distribution Licensees.

(b) Norms shall be defined in terms of combination of number of personnel per 1000 consumers and number of personnel per substation along with annual expenses per personnel for Employee expenses; combination of A&G expense per personnel and A&G expense per 1000 consumers 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 Distribution 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 Distribution 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.*

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

(i) *In absolute analysis, Distribution 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.*

In relative analysis, performance parameters of other Distribution Licensees within the same state or in other states, shall be considered by the Commission to estimate norms. Provided that other Distribution Licensees so chosen shall have similar profile as that of the Distribution Licensee under consideration in terms of consumer mix, type of license area (city, state, etc.) type of distribution networks, viz., underground/ overhead, High Tension (HT) consumer, Low Tension (LT) consumer ratio, etc. 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 Distribution Licensee.

3.17.2 **Employee Expenses:**

3.17.2.1 The Commission, in terms of Regulation 22 of BERC (Multi Year Distribution Tariff) Regulations 2021, had determined Employee cost for the MYT control period of FY 2022-23 to FY 2024-25 in the Tariff Order dated 25.03.2022.

3.17.2.2 The Commission has considered the base value of employee norm for number of employees per 1000 consumers, number of personnel per substation and annual expenses per personnel as determined for FY 2021-22 in the Tariff Order dated 25.03.2022 as detailed in the table below:

Employee expense norm approved for NBPDC & SBPDCL in TO dated 25.03.2022

Particulars	Base employee expense norm for NBPDCCL	Base employee expense norm for SBPDCL
No. of personnel per substation	6.765	9.4117
No. of personnel per 1000 consumers	0.0629	0.1504
Annual expenses per personnel (Rs. Crore)	0.0854	0.0914

Further, the Petitioner observe that the norms approved by the Hon'ble Commission in the tariff order dated 25th March 2023 varies between for NBPDCCL & SBPDCL

Regulation 22.1 specify employee cost shall be computed as per the approved norm escalated by consumer price index (CPI) The CPI inflation shall be considered based on the average increase in CPI for immediately preceding three years i.e. FY 2019-20, FY 2020-21, FY 2021-22 and base year of FY 2018-19. The average CPI inflationary increase is computed as given below:

Particulars	2018-19	2019-20	2020-21	2021-22
Average CPI index points for FY	299.9	322.5	338.7	356.1
Increase in CPI index over the previous year		7.53%	5.02%	5.13%
Average CPI inflationary inc.				5.89%

3.17.2.3 Accordingly, the employee cost computed for 2022-23 is shown in the table below:

Table 23: Employee expenses (in INR Crore)

Sr. No	Particulars	Base Value	FY 2022-23	
			Approved in ARR	Actual
	Particulars			
1	Average annual CPI index		6.00%	5.89%
2	Norms-Number of personnel per 1000 consumers	0.0629	0.0629	0.0629
3	Norms-Number of personal per substation	6.765	6.765	6.765
4	No. of consumers (1000)		11577	11950
5	No of substations		606	628
6	Annual expenses per personnel (Rs. Cr)	0.0854	0.0905	0.09043
(i)	Employee cost per 1000 consumers		65.90	67.97
(ii)	Employee cost per substation		371.01	384.20
7	Total Employee cost		436.91	452.17

3.17.2.4 The Hon'ble Commission is therefore requested to approve the employee expenses of INR 452.17 Crore for FY 2022-23.

Table 24: Gains/(Loss) on account of controllable and uncontrollable factors for Employee expenses for FY 2022-23 Rs. Crore)

Particulars	Approved in the Tariff Order dated 25.03.2022	Actual Claimed in Truing up	Gains/ (Loss)	Gain/(Loss) due to controllable factors to be absorbed by the licensee	Pass through on account of uncontrollable factors
Employee expense	436.91	452.17	(15.26)	(10.17)	5.09

3.17.2.5 The Petitioner has divided the loss and gain due employee expense. The Hon'ble commission is therefore requested to approve the same.

3.17.3 **Repairs and maintenance:**

3.17.3.1 Regulation 22.2 of BERC (Multi Year Distribution Tariff) Regulations 2021, specify R&M expenses as percentage (as per the norm determined) of Gross Fixed Assets excluding land cost for the year.

3.17.3.2 Regulation 22.2 specifies, R&M expenses shall be calculated as per the norm determined of Opening Gross Fixed Assets excluding land cost for year governed by following formulae:

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

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”

3.17.3.3 The Commission had determined the R&M norm i.e., 'K' factor at 1.24% for NBPDC and 1.71% for SBPDCL for the MYT control period of FY 2022-23 to FY 2024-25 in the Tariff Order dated 25.03.2022. Based on the norm determined by the commission, the petitioner accordingly has computed R&M expenditure for FY 2022-23. The detailed computation of R&M expenses for the FY 2022-23 is shown below:

Sr. No.	Particulars	FY 2022-23	
		Approved in ARR	Actual
1	Opening GFA		21462.11
2	Opening Land Cost		1047.14
3	Opening GFA exc land cost	20959.49	20414.97
4	K Factor	1.24%	1.24%
5	R&M Expense	259.90	253.15

Table 25: Gains/(Loss) on account of controllable and uncontrollable factors for R&M expenses for FY 2022-23 (Rs. Crore)

Particulars	Approved in the Tariff Order dated	Actual Claimed in Truing up	Gains/ (Loss)	Gain/(Loss) due to controllable factors to be absorbed by the	Pass through on account of uncontrollable
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	25.03.2022			licensee	factors
R&M expense	259.90	253.15	6.75	2.25	(2.25)

3.17.3.4 The Hon'ble Commission is requested to accordingly approve the R&M expense as well as the Gain/(Loss) for the DISCOM in FY 2022-23 on account of R&M expenses.

3.17.4 **Administrative & General expenses:**

3.17.4.1 The Commission, in terms of regulation 22 of BERC (Multi Year Distribution Tariff) Regulations 2021, had determined Employee and A&G norm for the MYT control period of FY 2022-23 to FY 2024-25 in the Tariff Order dated 25.03.2022.

3.17.4.2 The Commission has considered the base value of A&G expense norm per 1000 consumers and A&G expense per employee and annual A&G expenses per 1000 consumers and per employee as determined for FY 2021-22 in the Tariff Order dated 25.03.2022 as detailed in the table below:

A&G expense norm approved for NBPDC & SBPDCL in TO dated 25.03.2022

Particulars	Base A&G expense norm for NBPDC	Base A&G expense norm for SBPDCL
No. of personnel per 1000 consumers	0.420	1.000
A&G expenses per personal	0.360	0.850
Annual expenses per 1000 consumers (Rs. Crore)	0.0077	0.0099
A&G expenses per employee (Rs. Crore)	0.0225	0.0121

3.17.4.3 Regulation 22.3 specifies A&G expenses shall be computed as per the approved norm escalated by wholesale price index (WPI). The WPI inflation shall be considered based on the average increase in WPI for immediately preceding three years. The WPI inflationary increase for FY 2021-22 is computed as given below:

WPI inflationary increase for FY 2020-21

Years	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Average WPI index points for FY	119.79	121.80	123.38	139.41
Increase in WPI index over previous year		1.68%	1.29%	13.00%
Average WPI inflationary increase	5.32%			

3.17.4.4 Accordingly, the A&G computed for 2022-23 (True-up), is shown in the table below:

Table 26: A&G expenses (in INR Crore)

S. No	Particulars	Base Value	FY 2022-23	
			Approved in ARR	Actual
1	Average annual WPI CPI index		2.42%	5.32%
2	Norms-A&G expenses per 1000 consumers	0.420	0.4200	0.4200
	Norms-A&G expenses per personal	0.360	0.3600	0.3600
3	No. of consumers (1000)		11577	11950
4	No of employees		4074	10223
5	Annual expenses per 1000 consumers (Rs. Cr)	0.0077	0.0079	0.0081
6	Annual expenses per employee (Rs. Cr)	0.0225	0.0230	0.0237
7	A&G cost per 1000 consumers		91.30	96.91
8	A&G cost per employee		93.88	242.26
9	Grand Total		185.18	339.17
10	Rent Charges for Smart Prepaid Meter			44.21
11	Net Total A&G cost		185.18	383.38

In addition to the A&G expense of Rs.339.17 Crore as computed above; the petitioner has additionally claimed rental charges for smart prepaid meter to the extent of Rs. 44.21 crores based on monthly rental per meter and the consideration of meter installed. It is worthwhile to mention that the Petitioner has considered the monthly rental of INR 86.23 per meter which is as per the order of the Hon'ble Commission in Case No. 05/2020. These expenses were not taken into account as the time of computation of A&G norm for the MYT control period of FY 2022-23 to FY 2024-25 in the Tariff Order dated 25.03.2022. The detailed calculation for INR 42.47 Crore on account of the rental charge is provided below.

Phase 1: The total number of smart meters proposed to be installed under phase 1 is 23,50,000 out which 10,30,000 lakhs belongs to NBPDC. The total smart meters under Phase 1 are under Opex mode which will be booked under A&G expenses:

Smart Prepaid Meters under A&G expenses	Month	2022-23		
		Meters installed	Monthly Meter Rent	Total A&G cost
Phase I: 23.5 lakhs North 10.30 Lakhs	Op. Balance	240421	86.23	24.88
	April	37271	86.23	3.54
	May	31749	86.23	2.74
	June	35752	86.23	2.77
	July	35548	86.23	2.45
	August	25615	86.23	1.55
	September	29247	86.23	1.51
	October	14227	86.23	0.61
	November	24392	86.23	0.84
	December	33824	86.23	0.87
	January	20031	86.23	0.35
	February	12720	86.23	0.11
	March	16028	86.23	-

Total	556825		42.22
Less: Government Budgetary Support			
Net expense			42.22

Phase-II:

- Under phase-II, 36 lakhs of smart prepaid meters are scheduled to be installed across the Bihar by the end of March-2024. In Phase-II smart prepaid meters are scheduled to be installed under hybrid mode i.e., CAPEX + OPEX mode in the ratio of 70:30.
- 26,00,000 smart prepaid meters are scheduled to be installed in North Bihar.
- Below table shows the expected expenditure under the OPEX mode for installation of 26 lakhs smart

Smart Prepaid Meters under A&G expenses	Month	2022-23		
		Meters installed	Monthly Meter Rent	Total A&G cost
Phase II: 36 lakhs North 26 Lakhs (70% Opex)	Op. Balance			
	April			
	May			
	June			
	July			
	August			
	September			
	October			
	November			
	December			
	January	7287	80.44	0.12
	February	16665	80.44	0.13
	March	19537	80.44	
Total			0.25	

Accordingly, the total rental charges for smart prepaid meter in FY 2022-23 is shown in the table below:

Particulars	Amount (INR Cr)
Rent Charges for Smart Prepaid Meter (Phase 1) 23.5 Lakhs	42.22
Rent Charges for Smart Prepaid Meter (Phase 2) 36 Lakhs- 70% Opex	0.25
Rent Charges for Smart Prepaid Meter (Phase 3) 1.12 crores- 70% Opex	-
Rent Charge for Smart prepaid Meter FY 21-22	1.74
Total Rental Charges	44.21

Table 27: Gains/(Loss) on account of controllable and uncontrollable factors for A&G expenses for FY 2022-23 (Rs. Crore)

Particulars	Approved in the Tariff Order dated 25.03.2022	Actual Claimed in Truing up	Gains/ (Loss)	Gain/(Loss) due to controllable factors to be absorbed by the licensee	Pass through on account of uncontrollable factors
A&G expense	185.18	339.17	(153.99)	(102.66)	51.33

3.17.4.5 The Hon'ble Commission is therefore requested to approve the A&G expenses as well as the Gain/(Loss) on account of A&G expense for FY 2022-23

3.17.5 Allocation of holding cost:

3.17.5.1 The allocation of the Holding company expenses for FY 2022-23 as per the provisions of the Transfer Scheme 2012, and based on the actual audited accounts has been tabulated below:

Table 28: Holding cost (in INR Crore)

Particulars	Approved in ARR FY 2022-23	Actual for FY 2022-23
Holding company expenses	16.99	23.19

Table 29: Gains/(Loss) on account of controllable and uncontrollable factors for Holding company expenses for FY 2022-23 (Rs. Crore)

Particulars	Approved in the Tariff Order dated 25.03.2022	Actual Claimed in Truing up	Gains/(Loss)	Gain/(Loss) due to controllable factors to be absorbed by the licensee	Pass through on account of uncontrollable factors
Holding company expense	16.99	23.19	(6.20)		6.20

3.17.5.2 It is requested that the Hon'ble Commission approve the above holding expenses of INR 23.19 Crore as a part of O&M expenses and an uncontrollable gain of Rs. 6.20 crore for the Petitioner in FY 2022-23.

3.17.5.3 **Gist of O&M expenses:** The following table captures the total O&M expenses incurred by Petitioner in the FY 2022-23:

Table 30: O&M expenses (in INR Crore)

Particulars	Approved in ARR FY 2022-23	Actual for FY 2022-23
Employee cost	436.91	452.17
R&M expenses	259.90	253.15
A&G Expenses	185.18	381.64
Holding company expenses	16.99	23.19
Total O& M cost	898.96	1,110.15

3.17.6 The Hon'ble Commission is therefore requested to approve INR 1,110.15 Crores as O&M expenses for FY 2022-23 .

3.18 Interest on working capital

3.18.1 Regulation 26 of the BERC (Multi Year Distribution Tariff) Regulations, 2021 stipulates the provision to calculate the Interest on Working Capital for the DISCOMs as shown below:

“The Distribution Licensee shall be allowed interest on estimated level of working capital for the financial year, computed as follows:

a) Two months equivalent of expected revenue

b) Maintenance spares @40% of R&M expenses for one month:

Less:

(i) Power purchase cost, transmission charges and load dispatch charges of one month

(ii) Depreciation, return on equity and contribution to contingency reserves equivalent to two months

(iii) Security deposits from consumers, if any

Provided that the 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.

Provided further that interest shall be allowed on consumer security deposits and security deposits from Distribution System users held during the year at the Bank Rate as of the date on which petition for determination is filed. The interest allowed shall be subject to true up at weighted average Bank Rate of the concern Financial Year.

Provided also that if the State Government is providing resource gap grant and/or direct subsidy to consumers, the working capital shall be reduced by two months equivalent of that amount.”

3.18.2 The Petitioner would like to submit that it has arrived at the working capital requirement according to the regulatory provisions as shown above. The calculation of Working Capital is shown in the following table:

Table 31: Interest on working capital (in INR Crore)

Sr. No	Particulars	Approved in ARR FY 2021-22	FY 2022-23 (Actuals)
1	Receivables - 2 months	1700.27	1635.09
2	Maintenance spares @40% of R&M expenses for one month	8.66	8.44
3	Total working capital (1+2)	1708.93	1643.53
4	Less:		
(i)	Power purchase cost, transmission charges and load dispatch charges of one month	721.44	974.84
(ii)	Depreciation, return on equity and contribution to contingency reserve to two months	130.28	139.67
(iii)	Security deposit from consumers held during the year	457.31	450.71
(iv)	Resource Gap Grant received from State Govt. equivalent to two months		-
(v)	Direct subsidy to consumers equivalents to two months		-

Sr. No	Particulars	Approved in ARR FY 2021-22	FY 2022-23 (Actuals)
5	Sub-total (4(i)+4(ii)+4(iii)+4(iv)+4(v))	1309.03	1,565.22
6	Working capital requirement (3-5)	399.90	78.30
7	Two months of Subsidy		2,437.10
8	Net Working Capital		(2,358.79)
9	Rate of interest %	8.50%	9.30%
10	Interest on working capital (8*9)	33.99	-

- 3.18.3 The Petitioner would like to submit that for calculating the maintenance spares, 40% of R&M expense for one month to arrive at an amount of INR 8.44 Crore. Two months equivalent revenue requirement deducted by non-tariff income has been considered for calculation of gross working capital of INR 1643.53 Crore.
- 3.18.4 The Gross working capital requirement is then reduced by closing Security deposits from consumers in FY 2022-23 and Depreciation amounting to INR 450.71 Crore and INR 139.67 Crore respectively. The power purchase cost inclusive of transmission charges is there by reduced by one month amounting to INR 974.84 Crore.
- 3.18.5 The working capital requirement is then reduced by 2 months of subsidy amounting to INR 2437.10 Crore. Therefore, the net working capital requirement is considered as amounting to INR (2358.79) Crore.
- 3.18.6 An interest rate @ 9.30% at weighted average MCLR + plus 150 basis points for FY 2022-23.
- 3.18.7 Therefore, the Hon'ble Commission is requested to kindly approve the interest on working capital loan for FY 2022-23.

Table 32: Gains/(Loss) on account of controllable and uncontrollable factors for Interest on working capital (in INR Crore)

Particulars	Approved in the Tariff Order dated 25.03.2022	Actual Claimed in Truing up	Gain/ (loss)	Gain/(Loss) due to controllable factors to be absorbed by the licensee	Pass through on account of uncontrollable factors
IoWC	33.99	-	33.99		33.99

- 3.18.8 The Petitioner submits that the Working capital of the petitioner is dependent on factors such as two months receivables of the petitioner, one month power purchase cost including the transmission charges of the petitioner, the security deposit held by the petitioner during the year etc. These parameters are uncontrollable in nature for the petitioner as they are completely dependent on the sales and number of consumers of the petitioner. It further includes a part of the R&M expense as well as a part of the petitioner's depreciation and RoE. Further, the interest rate applicable to calculate the interest on working capital is the weighted average SBI MCLR +150 basis points.

These parameters are also uncontrollable in nature for the petitioner. In view of this, the Petitioner has considered the interest on working capital as an uncontrollable parameter for the Petitioner and has accordingly treated the gains/losses on its account,

3.18.9 The Hon'ble Commission is further requested to kindly approve sharing of gains and losses for interest on working capital loan for FY 2022-23.

3.19 Return on Equity

3.19.1 As per regulation 27 of the BERC MYT regulations 2021, Return on Equity shall be calculated as follows: -

- (a) "Return on equity shall be computed on 30% of the capital base or actual equity, whichever is lower:
Provided that assets funded by consumer contribution, capital subsidies/ grants and corresponding depreciation shall not form part of the capital base. Actual equity invested in the Distribution Licensee as per book value shall be considered as perpetual and shall be used for computation in this Regulation:
- (b) The return on the equity invested shall be allowed from the date of start of commercial operation:
- (c) The project which will be commissioned w.e.f. 01.04.2016 will be allowed RoE of 15.5% and if project is completed in schedule period 0.5% incentives in form of RoE will be allowed."

3.19.2 It is to be noted that the actual equity infused in the company is greater than the norm of 30% of capital base. Hence, in line with the above cited regulation, the return on equity is calculated on 30% of the capital base only.

Table 33: Return on equity (in INR Crore)

S. No.	Particulars	Approved in ARR FY 2022-23	Claimed in True Up for FY 2022-23
1	Closing equity to end of 31.03.2016	440.86	440.86
2	Rate of return on equity %	14.00%	14%
3	Return on Equity (1*2)	61.72	61.72
	Equity with effect from 1st April 2016		
4	Opening equity	2262.41	1989.90
5	Equity Addition during the year		271.85
6	Closing Equity (4+5)	2262.41	2261.75
7	Average Equity (4+6)/2	2262.41	2125.83
8	Rate of return on equity (15.50%	15.50%
9	Return on Equity (7*8)	350.67	329.50
10	Total Return on Equity (3+9)	412.39	391.22

3.19.3 In view of the above, the Petitioner requests the Hon'ble Commission to approve INR 391.22 Crore towards Return on Equity.

Table 34: Gains/(Loss) on account of due to RoE (in INR Crore)

Particulars	Approved in the Tariff	Actual Claimed in	Gains/(Loss)	Gain/(Loss) due to controllable	Pass through on account of
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	Order dated 25.03.2022	Truing up		factors to be absorbed by the licensee	uncontrollable factors
RoE	412.39	391.22	21.17		(21.17)

3.19.4 The Hon'ble Commission is further requested to kindly approve sharing of gains and losses for RoE for FY 2022-23.

3.20 Interest on Loans

3.20.1 Interest on loans includes loans against schemes, central and state government loans, Bank Overdrafts, public bonds etc.

3.20.2 For computing the interest rate on the normative debt, the weighted average rate of actual loan portfolio is calculated as 9.74%. The table provided below captures the calculation of weighted average rate of interest for FY 2022-23

Table 35: Interest on Loans Claimed for FY 2022-23 (in INR Crore)

Sr. No	Particulars	Purpose of loan	Opening balance	Rate of Interest	Addition during the year	Repayment during the year	Closing balance	Amount of interest paid	Average Loan
1	REC (RGGVY) Term Loan	Project	230.18	10.50 %	-	23.57	206.61	30.03	218.40
2	REC (R-APDRP-PART-B) Term Loan	Project	27.41	9.00 %	-	3.90	23.51	4.14	25.46
3	PFC (COUNTER PART FUNDING) Term Loan	Project	83.32	10.63 %	-	7.15	76.17	8.42	79.75
4	State Govt.-Non-Plan Loan	Project Support	242.05	10.50 %	53.93	-	295.98	35.04	269.02
5	BSPHCL (ADB) Loan	Project	56.08	10.50 %	-	-	56.08	7.28	56.08
6	REC (DDUGJY)	Project	1,033.16	9.56 %	-	0.30	1,032.86	98.05	1,033.01
7	REC (IPDS)	Project	302.59	8.83 %	-	0.05	302.54	25.93	302.57
8	Total		1,974.79		53.93	34.97	1,993.75	208.89	1,984.27
Weighted average rate of Interest									9.74%

3.20.3 The Petitioner has considered INR 446.80 Crore claimed under depreciation as normative repayment for the period. The below table captures interest expense against loans as incurred for FY 2022-23

Table 36: Interest on Loans Claimed for FY 2022-23 (in INR Crore)

S. No.	Calculation for Interest on Loan	Approved for FY 2022-23 (ARR)	Particulars
1	Opening loan balance	5632.74	5188.47
2	Additions during the year	0.00	634
3	Normative Repayment	369.30	447
4	Closing Loans (1+2-3)	5263.44	5376
5	Average Loans $\{(1+4)/2\}$	5448.09	5282
6	Interest rate	10.29%	9.74%

S. No.	Calculation for Interest on Loan	Approved for FY 2022-23 (ARR)	Particulars
7	Interest Charges (5*6)	560.61	514.58

3.20.4 The Petitioner therefore requests the Hon'ble Commission to approve Interest on loan of INR 514.58 Crore for FY 2022-23.

Table 37: Gains/(Loss) on account of due to Interest on Loan (in INR Crore)

Particulars	Approved in the Tariff Order dated 25.03.2022	Actual Claimed in Truing up	Gains/ (Loss)	Gain/(Loss) due to controllable factors to be absorbed by the licensee	Pass through on account of uncontrollable factors
Interest on Loan	560.61	514.58	46.03	-	(46.03)

3.20.5 The Interest on loan is calculated based on the interest rate as decided by the RBI which is an uncontrollable parameter for the petitioner. The Hon'ble Commission is further requested to kindly approve sharing of gains and losses for Interest on Loan for FY 2022-23.

3.21 Other finance charges

3.21.1 Other finance charges include power factor rebate, interest to suppliers, bank charges etc. The below table captures the various head wise other finance charges as incurred for FY 2022-23: -

Table 38: Other Finance charges (in INR Crore)

S. No.	Particulars	Approved in ARR FY 2022-23	Actual for FY 2022-23
1	Discount to consumers for timely payment of Bills (Rebate)		47.15
2	Power Factor Rebate		0.63
3	Interest on Bill discounting		6.37
3	Other Bank Charges		0.72
4	LC Commission		2.20
	Other finance	41.50	
5	Escalation percentage	10%	
6	Add: increase in finance charges	4.15	
7	Total other finance charges	45.66	57.06

3.21.2 The Petitioner has claimed the bill discounting charge for FY 2022-23 based on their audited accounts.

3.21.3 Further, it is hereby submitted that through the mechanism/ facility of Bill Discounting the Petitioner are able to reduce their requirement of working capital and the Interest on Working Capital (IOWC)

submitted in the tariff Petition. It is worthwhile to mention that had the Petitioner not used the Bill Discounting, there would have been more requirement/ projection in IOWC.

- 3.21.4 The Petitioner requests the Hon'ble Commission to approve INR 57.06 Crore towards Other Finance charges for FY 2022-23.

Table 39: Gains/(Loss) on account of controllable and uncontrollable factors for other finance charges for FY 2022-23 (Rs. Crore)

Particulars	Approved in the Tariff Order dated 25.03.2022	Actual Claimed in Truing up	Gains/ (Loss)	Gain/(Loss) due to controllable factors to be absorbed by the licensee	Pass through on account of uncontrollable factors
Other Finance Charges	45.66	57.06	(11.40)		11.40

- 3.21.5 The Petitioner has categorised the (gains)/losses due to other finance charges as uncontrollable factor because of the nature of its components such as rebate to consumers, power factor rebate, interest to suppliers/contractors, etc.

3.22 Interest on Consumer Security Deposit

- 3.22.1 Section 47(1) (a) of the Electricity Act, 2003 specifies that any person who requires a supply of electricity, should provide a reasonable amount of security deposit in respect of the electricity supplied to such person. BERG Supply Code Regulations 2007 specifies that the distribution licensee shall pay interest at the RBI Bank rate, applicable on security deposits taken from the consumers. The interest amount of previous financial year shall be adjusted in the energy bill issued in May/June of each financial year depending on billing cycle.

- 3.22.2 The BERG (Multi Year Distribution Tariff) Regulations 2021, Regulation 26 (iii) specifies that *“Provided further that interest shall be allowed on consumer security deposit and security deposits from Distribution system users at the Bank Rate as of the date on which the petition for determination of tariff is accepted by the Commission”*.

- 3.22.3 The Petitioner would like to submit that as per the regulation, interest on consumer's security deposit is being passed on to the consumers. A summary of the same has been represented below.

Table 40: Interest on Consumer Security Deposit (in INR Crore)

S. No.	Particulars	Approved in ARR FY 2022-23
1	Opening balance of SD	438.61
2	Addition during the year	18.70
3	Closing SD (1+2)	457.31
4	Average SD (1+3)/2	447.96
5	Rate of interest	4.25%
6	Interest on SD (4*5)	19.04

Particulars	FY 2022-23 (Actual)
Opening balance of interest payable to consumers	150.75
Interest payable during FY 2022-23	25.35
Sub-total (1+2)	176.10
Closing balance of interest payable to consumers	171.2
Interest actually paid to consumers (3-4)	4.91

3.22.4 The Hon'ble Commission is therefore requested to approve INR 4.91 Crore towards interest on consumer security deposits, as per the audited accounts for FY 2022-23.

Table 41: Gains/(Loss) on account of due to Interest on Security Deposit (in INR Crore)

Particulars	Approved in the Tariff Order dated 25.03.2022	Actual Claimed in Truing up	Gains/ (Loss)	Gain/(Loss) due to controllable factors to be absorbed by the licensee	Pass through on account of uncontrollable factors
IoSD	19.04	4.91	14.13		14.13

3.22.5 The Hon'ble Commission is further requested to kindly approve sharing of gains and losses for Interest on Security Deposit for FY 2022-23.

3.23 Non-Tariff income

3.23.1.1 The Non-Tariff Income is as per the audited accounts of NBPDC. The petitioner has not considered Amortisation of grant of Rs. 579.38 crores i.e., depreciation on assets created out of grant which is considered separately in the paragraph related to depreciation.

3.23.1.2 As per the audited annual accounts for FY 2022-23, the Non-tariff income includes Delayed Payment Surcharge (DPS) from consumers. The Discoms charge DPS @ 18% per annum (1.5% per month). The Petitioner has considered rate of interest of 9.30% (7.80% being the weighted average MCLR (1 year tenor) during FY 2022-23 plus 150 basis points i.e. 1.50%) in accordance with regulation 26 (iii) of BERC (Multi Year Distribution Tariff) Regulations 2021 towards the financing cost for DPS.

3.23.2 The Petitioner presents the non-Tariff income earned by it in FY 2022-23 : --

Table 42: Non-Tariff Income (in INR Crore)

Sl.No.	Particulars	Approved in ARR FY 2022-23	Actual for FY 2022-23
1	Interest on Advances to Suppliers/Contractors	9.96	217
2	Interest on Saving Accounts	47.62	11.29
3	Interest from others	2.87	24.06
4	Interest Income		252.46

Sl.No.	Particulars	Approved in ARR FY 2022-23	Actual for FY 2022-23
5	Delayed Payment Surcharge from Consumers	690.10	632.33
6	Income from sale of Tender paper	0.31	-
7	Miscellaneous Receipts	2.99	16.83
	Re-imburement from Disaster Management	-	26
8	Rebate and Discount Received	92.79	33.89
9	SCED Benefits	54.38	14.62
10	Consumer Contribution Income *	10.65	6.92
11	Rental Income	1.68	2.31
12	Income from sale of scrap	-	5.53
13	Supervision Charges	43.68	15.04
14	Misc charges	69.77	43.19
15	Others		796.90
16	Meter Rent	-	4.95
17	Excess provision written back		0.46
18	Miscellaneous Recoveries		22.28
19	Total Non-tariff income	1026.8	1077.06
20	Delayed Payment Surcharge from Consumers	690.10	632.33
21	Principal amount on which DPS Charged	3833.89	3512.92
22	Interest Rate of funding DPS	8.50%	9.30%
23	Interest on funding Principal	325.88	326.66
24	Net Non-Tariff Income	700.92	750.40
25	Add: Additional income on account of supervision charges due to release of new connections	8.11	-
	Add: Rebate @1% on total power purchase (incl. transmission charges) for FY 2022-23	86.57	-
	Total NTI	795.60	750.40

3.23.3 It is prayed to the Hon'ble Commission to consider INR 750.40 Crore as Non-Tariff income during FY 2022-23.

3.24 Revenue from Sale of Power at Existing Tariff

3.24.1 Following is the category wise revenue based on the tariff approved for FY 2022-23.

Table 43: Revenue from sales of power at existing tariff

Sr. No	Category of Consumers	Final Data		
		Sales (MUs)	Total (Rs Crores)	ABR (Rs/kWh)
1	Domestic	8,544.96	5,670.33	6.64
A	Kutir Jyoti	2,704.94	1,756.89	6.50
i	Unmetered (Now Metered)		-	-
ii	Metered 0-50	2,704.94	1,756.89	6.50
B	DS I Rural	3,827.97	2,554.62	6.67

i	Unmetered (Now Metered)		-	-
ii	Metered (Now Demand Based)	3,827.97	2,554.62	6.67
a	First 50 Units	2,830.96	1,726.88	6.10
b	51-100 Units		505.15	-
c	Above 100 Units		139.17	-
C	DS II Demand Based	2,011.71	1,358.54	6.75
i	First 100 Units		1,014.05	-
ii	101-200 Units		175.14	-
iii	Above 200 Units		78.24	-
D	DS III	0.34	0.27	7.89
2	Non Domestic Service	1,844.82	1,493.40	8.10
A	NDS I - Metered Now Demand Based	598.88	433.25	7.23
i	First 100 Units		314.70	-
ii	101-200 Units		47.68	-
iii	Above 200 Units		29.27	-
B	NDS II - Demand Based	1,245.94	1,061.67	8.52
i	Contract Demand <0.5 kW	1.83	1.66	9.09
ii	Contract Demand >0.5 kW	1,244.11	1,058.49	8.51
a	First 100 Units	923.12	632.35	6.85
b	101-200 Units	98.77	73.09	7.40
c	Above 200 Units	222.23	164.45	7.39
3	Street Light Services	99.13	99.14	10.00
A	SS Metered	9.81	7.46	7.60
B	SS Unmetered	89.32	91.69	10.27
4	Irrigation & Allied Services	1,005.72	594.55	5.91
A	IAS I	915.85	526.65	5.75
i	Unmetered	4.62	3.97	8.60
ii	Metered	911.23	522.68	5.74
B	IAS II	89.87	67.89	7.55
i	Metered (Now Demand Based)	89.87	67.89	7.55
A	Public Water Works	37.36	41.18	11.02
B	Har Ghar Nal	398.77	276.43	6.93
5	Low Tension Industrial Services	439.26	377.06	8.58
A	LTIS I (0-19 kW)	402.48	347.50	8.63
B	LTIS II (>19 kW - 74 kW)	36.78	29.56	8.04
6	LT Electric Vehicle Charging Station	0.05	0.04	7.20
7	High Tension	884.85	716.61	8.10
A	HTS I - 11 kV	549.74	449.54	8.18
B	HTS II - 33 kV	219.45	172.21	7.85
C	HTS III -132 kV	73.40	70.56	9.61
D	HTS IV - 220 kV	-	-	-
E	HTSS	42.27	24.30	5.75
8	Railway Traction Services	99.34	79.55	8.01
9	Nepal	314.22	228.59	7.27
10	HT Electric Vehicle Charging Stations.		-	
11	SLDC Deviation	226.92	229.82	10.13
12	Sale to other state	-	-	
13	Sale to Sugar Mills	5.67	3.32	5.86

14	Sale to Solar Companies	0.63	0.51	8.10
15	Sale of Power to IEX through PTC	2,177.12	1,066.99	4.90
16	Sale of Power to IEX through BSPHCL	1,446.28	743.37	5.14
17	Others	-	-	
18	Total	17,525.11	11,620.89	6.63

Subsidy included in the total revenue from sale of power

3.24.2 The Petitioner has considered the tariff for Nepal Sales as agreed upon in the PEC Meeting. The Petitioner requests the Hon'ble Commission to kindly approve the revenue from sale of power as submitted above.

3.24.3 The Petitioner requests the Hon'ble Commission to kindly approve the revenue from sale of power as submitted above.

3.25 Net ARR and revenue gap for FY 2022-23

3.25.1 The Gross ARR for the distribution company consists of the power purchase costs, interest and finance costs, O&M costs, depreciation, and interest on working capital. These costs are then adjusted for Non-Tariff Income and other Income. Following is the total revenue requirement for FY 2022-23 against allocation from total approved revenue requirement by the Hon'ble Commission for FY 2022-23.

Table 44: Net ARR and revenue gap for FY 2022-23 (in INR Crore)

Sr. No.	Particulars	FY 2022-23 (Approved)	FY 2022-23 (Actuals)	Deviation	(Gains)/Loss on account of controllable factors absorbed by licensee	Pass through on account of uncontrollable factors
1	Purchase of power	7,248.99	10,058.89	(2,807.92)	12.30	6.15
2	Transmission Charges	1,408.25	1,641.21	(232.96)		232.96
3	Revenue from Sale of Surplus Power	0.00	1,810.36	1,810.36		(1,810.36)
4	O & M Expenses (A+B+C+D)	898.98	1,067.68	(168.70)		
A	Employee expenses	436.91	452.17	(15.26)	10.17	5.09
B	R&M expenses	259.90	253.15	6.75	(2.25)	(2.25)
C	A&G expenses (normative)	185.18	339.17	(153.99)	102.66	51.33
D	Holding company expenses	16.99	23.19	(6.20)		(6.20)
5	Depreciation	369.30	446.80	(77.50)		77.50
6	Interest on loan	606.26	571.65	34.61		(34.61)
7	Other finance charges			-		-
8	Return on equity	412.39	391.22	21.17		(21.17)

9	Interest on SD	19.04		14.13		14.13
12	Interest on working capital	33.99	-	33.99		33.99
13	Total Revenue requirement (1 to 12)	10,997.20	12,372.00	(1,375)		
14	Less:: Non-tariff income	795.60	750.40	45		45.20
15	Net Revenue requirement (13-14)	10,201.60	11,621.60	(1,420)		

3.25.2 Further, in the BERCLYT (Distribution) Regulation, 2021, the Hon'ble Commission has directed the Petitioner to share the gains/losses on accounts of controllable and uncontrollable factors in the following manner:

10.1 The approved aggregate gain or loss to the Distribution Licensee on account of uncontrollable factors shall be a pass through, as an adjustment in the tariff of the Distribution Licensee, as specified in these Regulations and as may be determined in the Order of the Commission passed under these Regulations

...

...

11.1 The approved aggregate gain or loss to the Distribution Licensee 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 Distribution Licensee, 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 Distribution Licensee and such amount shall be utilized at the discretion of Distribution Licensee.

(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 Distribution Licensee 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 Distribution Licensee;

(ii) The balance two-third of the amount of such loss shall be on account of Distribution Licensee.

3.25.3 Based on the above, the Net ARR and revenue Gap for FY 2022-23 after considering the Gains/losses on account of controllable factors is shown below:

Table 45: Net ARR and revenue gap for FY 2022-23 (in INR Crore)

Particulars	Amount (Rs. Crore)
Actual net ARR for FY 2022-23	11,662.09
Carried forward trued up revenue gap/(Surplus) of FY 2020-21 along with carrying cost	400.63
Total Revenue requirement (1+2)	12,062.72
Gain/(Loss) on account of controllable factor to be absorbed by licensee	122.87
Treatment of excess AT&C loss subsidy for meeting power purchase requirement	1,009.63
Revenue from existing tariff	9810.53
Net Gap/(Surplus)	1,119.69

3.25.4 As above, after adjusting the Gain/(Loss) on account of controllable factor to be passed in tariff and making treatment of excess AT&C loss subsidy for meeting power purchase requirement, the Petitioner has net revenue gap of INR 1,119.69 Cr. The Petitioner requests the Hon'ble Commission to approve INR 1,119.69 Crore as Revenue Gap for FY 2022-23.

4 APR Summary for FY 2023-24

4.1 Preamble

4.1.1 The Petitioner hereby submits that this instant Tariff Petition for Truing up of FY 2022-23 , APR of FY 2023-24 and ARR and Tariff determination for FY 2024-25 . While projecting the APR for FY 2023-24 the Petitioner has considered the actual figures for the first 6 months (i.e. from April 2023 to September 2023) for power purchase and sales and pro-rata projections & escalations based on previous years' performance of the petitioner has been considered, keeping in mind the guiding principles defined by the Hon'ble Commission.

4.2 Estimate of category wise number of consumers, connected load and sales for FY 2023-24

4.2.1 Estimate of category wise number of consumers

4.2.1.1 While projecting the number of consumers for FY 2023-24, the impact due to Central schemes like Saubhagya and UDAY were considered. The Successful implementation of these schemes ensured that all the willing households are connected to the grid, leaving little scope for addition of new consumers from KJY, DS-I and DS-II categories. These initiatives aim for the overall development of the power sector in the State.

4.2.1.2 These plans were mainly targeted for rural consumers in KJ, DS-I category and for IAS-I category, many policies at state level were adopted, hence the growth rate in previous years under this category was above the normal CAGR growth as large number of new connections were to be released in the ensuing years. However, since the state of Bihar has achieved 100% electrification, the growth in consumers have normalized in the past 2 years. Considering the same, the Petitioner has considered growth pattern in the last 2-3 years as well as the 6 months provisional data of FY 2023-24 for revising the growth in number of consumers for FY 2023-24.

Table 46: Category-wise no. of consumers projected for FY 2023-24

Category of Consumers	Approved in ARR FY 2023-24	FY 2023-24 (APR)
Domestic	10915513	11231149
Kutir Jyoti	4386822	4301864
Unmetered (Now Metered)	0	0
Metered 0-50	438682	4301864
DS I Rural	5129605	5492088
First 50 Units	2912964	2669784
51-100 Units	1163312	2822304
101-200 Units	1053329	-
Above 200 Units	0	-
DS II Demand Based	1399001	1437110

Category of Consumers	Approved in ARR FY 2023-24	FY 2023-24 (APR)
First 100 Units	905428	1202301
101-200 Units	264407	234809
201-300 Units	229166	-
Above 300 Units	0	-
DS III	85	87
Non-Domestic Service	814544	925530
NDS I - Metered Now Demand Based	432357	523119
First 100 Units	257536	239807
101-200 Units	55753	283312
Above 200 Units	119068	-
NDS II - Demand Based	382187	402410
Contract Demand <0.5 kW	548	2500
Contract Demand >0.5 kW	381640	399910
First 100 Units	134832	90120
101-200 Unit	29882	309790
Above 200 Units	216927	-
Street Light Services	2255	2608
SS Metered	553	603
SS Unmetered	1703	2005
Irrigation & Allied Services	165398	272741
IAS I	158638	266108
Unmetered	4815	6768
Metered	153823	259339
IAS II	6761	6634
Metered (Now Demand Based)	6761	6634
Public Service Connections	61192	64725
Public Water Works	2048	2198
Har Ghar Nal	59145	62528
LT Electric Vehicle Charging Station	3	224
Low Tension Industrial Services	80803	8913
LTIS I (0-19 kW)	79120	87750
LTIS II (>19 kW - 74 kW)	1682	1264
High Tension	1487	1602
HTS I - 11 kV	1410	1513
HTS II - 33 kV	68	80
HTS III -132 kV	3	6
HTS IV - 220 kV	0	0
HTSS - 33/11 kV	3	3
HT-Industrial Services	0	5
HTIS (Industrial) – I (11 kV)	0	2
HTIS (Industrial)– II (33 kV)	0	1
HTIS (Industrial) – III (132 kV)	0	0
HTIS (Industries)-IV (220 kV)	0	1
HTIS (Oxygen Manufacturers)	0	1
Railway Traction Services	5	8
Nepal	1	1
HT Electric Vehicle Charging Stations.	3	3

Category of Consumers	Approved in ARR FY 2023-24	FY 2023-24 (APR)
Total	12,041,203	12,587,610

4.2.2 Estimate of Category wise Sales

4.2.2.1 DISCOM has already provided electricity access to all willing BPL households in urban areas and both APL & BPL households in rural areas under **Saubhagya Scheme**.

4.2.2.2 The Petitioner has projected the category-wise sales based on the CAGR of the previous years' data, the provisional sales for the first half of FY 2023-24 as well as considering factors like available average consumption per consumer per month, new consumers to be added, population data, expected conversion of unauthorized connections, connected load factor and specific growth factors and wherever the data was incongruous such incongruity was ignored while projecting the load growth for the ensuing years.

4.2.2.3 The Petitioner submits that the forecast model projects the specific consumption level (consumption per consumer) appropriate for each customer category. The Petitioner submits that this forecast is based on expected growth relationships to income and price, effect of Demand Side Management and impact of hours of service.

4.2.2.4 The Petitioner also submits that the specific consumption level along with the number of consumers in each category gives the sales figure for that particular sub-category and the final detailed calculations estimate the connected load for each tariff category. Also, 6 months provisional figure was also used for revising the category wise sales for the above projected number of consumers for FY 2023-24. The units sold are projected by taking average consumption per consumer per month and multiplying the same to the projected number of consumers to arrive at units sold for a year.

Table 47: Category-wise sales (MUs) projected for FY 2023-24

Category of Consumers	Approved in ARR of FY 2023-24	FY 2023-24 (APR)
Domestic	9690.92	9038.07
Kutir Jyoti	2358.09	2815.61
Unmetered (Now Metered)		
Metered 0-50	2358.09	2815.61
DS I Rural	4868.19	4101.05
First 50 Units	2764.52	1993.58
51-100 Units	1104.03	2107.47
101-200 Units	999.65	
Above 200 Units	0	-
DS II Demand Based	2464.24	2121.04
First 100 Units	1594.84	1774.48
101-200 Units	465.73	346.56
201-300 Units	403.66	
Above 300 Units	-	-
DS III	0.39	0.36
Non-Domestic Service	1887.62	2053.59
NDS I - Metered Now Demand Based	539.95	712.24

Category of Consumers	Approved in ARR of FY 2023-24	FY 2023-24 (APR)
First 100 Units	321.63	326.50
101-200 Units	69.63	385.74
Above 200 Units	148.70	-
NDS II - Demand Based	1347.67	1341.35
Contract Demand <0.5 kW	1.93	2.05
Contract Demand >0.5 kW	1345.73	1339.31
First 100 Units	475.44	301.81
101-200 Units	105.37	1037.49
Above 200 Units	764.92	
Street Light Services	74.45	119.11
SS Metered	11.21	11.68
SS Unmetered	63.23	107.44
Irrigation & Allied Services	508.59	1448.15
IAS I	404.93	1352.37
Unmetered	3.27	8.69
Metered	401.66	1343.68
IAS II	103.66	95.77
Public Service Connections	410.86	510.35
Public Water Works	54.86	41.59
Har Ghar Nal	356	468.76
Low Tension Industrial Services	632.73	502.56
LTIS I (0-19 kW)	511.66	463.00
LTIS II (>19 kW - 74 kW)	121.08	39.57
LT Electric Vehicle Charging Station	0.09	9.63
High Tension	1006.66	1058.10
HTS I - 11 kV	646.64	615.70
HTS II - 33 kV	265.37	288.10
HTS III -132 kV	58.72	111.20
HTS IV - 220 kV	0.00	-
HTSS- (33kV/11kV)	35.92	43.11
HT-Industrial Services	-	24
HTIS (Industrial) – I (11 kV)	-	2.49
HTIS (Industrial)– II (33 kV)	-	3.47
HTIS (Industrial) – III (132 kV)	-	-
HTIS (Industries)-IV (220 kV)	-	18.25
HTIS (Oxygen Manufacturers)	-	0.10
Railway Traction Services	81.20	132.21
Nepal	458.95	314.22
HT Electric Vehicle Charging Stations.	0.38	22.58
SLDC Deviation	-	226.92
Sale to other state	-	-
Sale to Sugar Mills	-	5.67
Sale to Solar Companies	-	0.63
Sale of Power to IEX through PTC	-	2177.12
Sale of Power to IEX through BSPHCL	-	1446.28
Others	-	-
Total	14,752.43	19,089.51

4.2.2.5 The Petitioner has calculated the connected load considering average Load per consumer as per the actuals, analysing CAGR of past years and multiplying it by projected number of consumers to arrive at the connected load.

Table 48: Category-wise connected load (kW) for FY 2023-24

Category of Consumers	Approved in ARR FY 2023-24	FY 2023-24 (APR)
Domestic	9320549	9169299
Kutir Jyoti	1096706	1077342
Unmetered (Now Metered)		-
Metered 0-50	1096706	1077342
DS I Rural	5518374	5631932
First 50 Units	3133736	2737765
51-100 Units	1251479	2894168
101-200 Units	1133160	-
Above 200 Units	-	-
DS II Demand Based	2705041	2459508
First 100 Units	1750691	2057649
101-200 Units	511245	401858
201-300 Units	443105	-
Above 300 Units	-	-
DS III	428	518
Non-Domestic Service	1830096	1860435
NDS I - Metered Now Demand Based	610555	729034
First 100 Units	363681	334202
101-200 Units	78732	394832
Above 200 Units	168142	-
NDS II - Demand Based	1219540	1131402
Contract Demand <0.5 kW	544	1383
Contract Demand >0.5 kW	1218996	1130019
First 100 Units	430666	254650
101-200 Units	95445	875369
Above 200 Units	692885	-
Street Light Services	26368	29974
Street Light 1	5310	4782
Street Light 2	21059	25192
Irrigation & Allied Services	442438	594646
IAS I	362037	538786
Unmetered	18591	24514
Metered	343446	514272
IAS II	80401	55860
Public Service Connections	173131	175400
Public Water Works	31654	32406
Har Ghar Nal	141477	142994
LT Electric Vehicle Charging Stations	173	645
Low Tension Industrial Services	810406	819641
LTIS I (0-19 kW)	709767	750617
LTIS II (>19 kW - 74 kW)	100639	69024
High Tension	464558	509233
HTS I - 11 kV	305012	313525
HTS II - 33 kV	102992	111722
HTS III -132 kV	45,543	74493
HTS IV - 220 kV	0	-
HTSS - 33/11 kV	10375	9494
HT-Industrial Services	-	15217
HTIS (Industrial) – I (11 kV)	-	1414
HTIS (Industrial)– II (33 kV)	-	1111
HTIS (Industrial) – III (132 kV)	-	-

Category of Consumers	Approved in ARR FY 2023-24	FY 2023-24 (APR)
HTIS (Industries)-IV (220 kV)	-	12500
HTIS (Oxygen Manufacturers)	-	192
Railway Traction Services	42207	60000
Nepal	0	-
HT Electric Vehicle Charging Stations	636	6048
Total	13,109,925	13,240,538

4.3 AT&C Losses

4.3.1 The Hon'ble Commission that Government of India, through Ministry of Power introduced "Revamped Distribution Sector Scheme – A Reform based, and Results linked scheme" in July 2021. The scheme is applicable for all the State/UTs Utilities or Power Departments to avail such financial assistance under the revamped scheme. The scheme has a total outlay of Rs 3,03,758 Crores with an estimated gross budgetary support of Rs 97,631 Crores (~32% of total outlay) from the Government of India.

4.3.2 The three objectives of the scheme are as follows:

- Improve quality and reliability of power supply to consumers through a financially sustainable and operationally efficient distribution sector
- Reduce the AT&C losses to pan-India levels of 12-15% by FY 2024-25
- Reduce ACS-ARR gap to zero by FY 2024-25

Note:

- *Above targets are national targets*
- *State-wise targets to depend on current levels of AT&C losses and ACS-ARR gap in the respective states*

4.3.3 The scheme has two parts namely:

- Part A – Financial Support of Upgradation of the Distribution Infrastructure & Prepaid Smart Metering & System Metering
- Part B–Training & Capacity Building and other enabling & supporting activities.

4.3.4 The Petitioner participated in the said scheme and submitted the action plan, DPR of the total project outlay & roadmap for AT&C Loss to the State Government for its approval in the month of March 2022. The Monitoring Committee for RDSS constituted under Chairmanship of Secretary (Power), Govt of India, in its 9th meeting held on 28.04.2022, has approved the Action Plan and Loss Reduction DPR of North Bihar Power Distribution Company Limited under Revamped Distribution Sector Scheme. Accordingly, the Monitoring Committee approved the following trajectory for AT&C loss for the Petitioner.

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
AT&C Loss	25%	22%	19%	16%

- 4.3.5 Hence, it would be appropriate and realistic for the DISCOMs that the projections for the AT&C losses be approved by the Hon'ble Commission in line with the trajectory approved in the RDSS.
- 4.3.6 Further, the Petitioner in its Tariff Petition for determination of Tariff for FY 2023-24 dated 15.11.2022 had requested the Hon'ble Commission to consider the distribution loss and AT&C loss as per the targets approved under the RDSS. However, the Hon'ble Commission, in the Tariff Order dated 23rd March 2023, has approved distribution losses at 15% with collection efficiency at 100% and AT&C loss at 15% for the FY 2023-24.
- 4.3.7 Furthermore, it is pertinent to mention here that MoP has directed the Hon'ble Commission vide letter reference No.24/3/3/2019-PFC(MoP)- Part (2)-E-263367 dated 28th August, 2023 (**Annexure-2**) to adopt the AT&C loss trajectory for tariff determination in accordance with the trajectory agreed by the respective State Government and approved by the Central Government (under RDSS). The extract of the said letter is as follows:

Under Rule 20 of the Electricity Rules, it has been prescribed that the AT&C loss reduction trajectory adopted by the SERC for tariff determination shall be in accordance with the trajectory agreed by the respective State Governments and approved by the Central Government.

....

*It has been brought to the notice of the Central Government that BERC has adopted a different trajectory than the one prescribed under the Rules. **This is a violation of the Rules and therefore an offense under the Law. I have been directed to request you that the BERC may adopt the trajectory in accordance with the Rules and correct the tariff accordingly.***

- 4.3.8 The Hon'ble Commission may kindly take into consideration the aforesaid letter dated 28th August, 2023 from MoP and pleading made by the DISCOMs to consider the AT&C loss trajectory approved in the Sanction letter and DPR of RDSS.
- 4.3.9 Accordingly, the Petitioner requests the Hon'ble Commission to approve the Distribution Loss, Billing Efficiency, Collection Efficiency, AT&C Loss for FY 2023-24, as below:

S. No	Particulars	For NBPDCCL
1	Distribution Loss (%)	16.60%
2	Billing Efficiency (%)	83.40%
3	Collection Efficiency (%)	97.12%
4	AT&C Loss (%)	19.00%

- 4.3.10 The Hon'ble Commission had approved the collection efficiency of 100% in the ARR for FY 2023-24 as per the UDAY scheme. However, the per capita income of Bihar, especially for the domestic

consumer is very low which restricts their paying capacity, and this has proven to be a challenge to recover the billed amount despite taking various measures for timely billing and easy payment of the bill.

4.3.11 It is also to be noted that to the improve the metering, billing and collection process, the petitioner has also started implementation of smart pre-paid meter project envisaging that the same shall enable Discoms to significantly improve its metering billing & collection and minimize the commercial losses.

4.3.12 Further, the Petitioner has time and again informed the Hon'ble Commission about various initiatives taken for improvement in Collection efficiency through Quarterly Directives. Therefore, the Hon'ble Commission is kindly requested to consider the collection efficiency of 97.12% for FY 2023-24.

4.3.13 Therefore, it is prayed to the Hon'ble Commission to consider the losses as per the trajectory approved under RDSS plan as provided in the table below.

Table 49: Distribution loss (%)

Particulars	Approved in ARR of FY 2023-24	FY 2023-24 (Projected in APR)
Distribution Losses	15%	16.60%

Table 50: Collection Efficiency (%)

Particulars	Approved in ARR of FY 2023-24	FY 2023-24 (Projected in APR)
Collection Efficiency	100%	97.12%

Table 51: AT&C Loss (%)

Particulars	Approved in ARR of FY 2023-24	FY 2023-24 (Projected in APR)
AT&C losses	15%	19%

4.4 State Transmission losses

4.4.1 The Petitioner has considered Intra-State transmission loss of 3.00% for FY 2023-24 as approved by the Hon'ble Commission for FY 2023-24 in its Tariff Order dated 23rd March 2023. The same loss figure was approved by Hon'ble Commission for FY 2022-23 to FY 2024-25 in the MYT Order dated 25th March, 2022 of BSPTCL.

4.5 Central Transmission Loss

4.5.1 The Petitioner has considered transmission loss of 3.14% as per latest 52 weeks average as per <https://posoco.in/side-menu-pages/applicable-transmission-losses/transmission-losses-2022-23/> and accordingly requests the Hon'ble Commission to consider the same.

4.6 Power Purchase

Approach adopted for Power Purchase Projection for FY 2023-24

4.6.1 Actual Power Purchase cost and quantum has been considered for first 6 months of the FY. For rest 6 months power purchase quantum has been extrapolated based on the actual performance of past 5 years (FY 20 to FY 24, upto Sept 2023)

4.6.2 The DISCOMs rely on allocation from central generating stations and state projects for procuring power for sale in the state. This power has been proposed to be allocated between North and South Bihar in the proportion as determined by the board resolution as detailed below.

4.6.3 Bihar State Power Holding Company Ltd (BSPHCL) issued vide its Resolution No.55-10 dated 14th July 2017 for approval regarding distribution of power purchase agreement between NBPDC and SBPDCL. The notification states that,

“RESOLVED THAT Power Purchase & Transmission charges bills are to be admitted and payment by both DISCOMs i.e., NBPDC and SBPDCL in the ratio 46:54 respectively w.e.f.1-4-2017subjected to the final reconciliation of actual consumption”

RESOLVED FURTHER THAT Chairman cum Managing Director, BSHPCL are here by authorized for deciding the power consumption ratio subsequently as per the actual consumption of both the DISCOMS based on the average consumption of the last 6 months of power draw of both the DISCOMs i.e., NBPDC and SBPDCL”

4.6.4 **NHPC, NTPC & PTC:** The power purchase for existing sources has been NTPC, NHPC and PTC has been considered based on the 24 X 7 Power for All (PFA) projection and recent trends of the power plant. The power purchase is further segregated into NBPDC and SBPDCL as per allocation ratio.

4.6.5 **Open Market Purchase:** Petitioner is currently procuring power from IEX on the basis of Demand.

4.6.6 **New Sources:** The power purchase for the new sources has been considered based on the commissioning status received from generators and CEA reports. Some of the new plants that are scheduled for Commissioning in FY 2023-24 are as follows:

S. No	Name of Unit	Expected COD	Quantum (MW)	Plant type
1	North Karanpura Unit II	Jan-24	295	Thermal
2	Buxar TPP U1	Mar-24	561	Thermal
3	SECI Phase-II Solar (ACME Deoghar/ Acme Dhaulapur)	Mar-24	150	Solar
4	SBE Renewable (SECI Phase-V)	Mar-24	330	Solar
5	SJVN Ltd (BREDA)	Nov-23	200	Solar

S. No	Name of Unit	Expected COD	Quantum (MW)	Plant type
6	Avada (BREDA)	Mar-24	50	Solar

4.6.7 Further the allocation of power from the new projects is in the ratio of 46:54 for NBPDCCL & SBPDCL as per the board resolution.

4.6.8 The State of Bihar has always put its best efforts towards continuous supply to the consumers of the state at any cost and conditions for the sake of health and safety of the consumers. The state has witnessed a severely swinging load demand from every part of the state. The Discoms has shown due diligence in maintaining the uninterrupted power supply.

4.6.9 For projecting the Power Purchase Quantum for FY 2023-24, the Petitioner has considered the actual Power Purchase quantum for the period April to September 2023 and projected for remaining months based on the following methodology.

- i. Share allocation has been considered as per Eastern Regional Power Committee.
- ii. The Plant Load Factor (PLF) for each plant has been considered as per CEA Report-Monthly/Annual Report for existing conventional plants based on average of average PLF of last 4 years as applicable and the current six months PLF of FY 2023-24. For new and upcoming plants, the minimum technical level PLF of 60% is considered for projection.
- iii. Normative auxiliary consumption provided by Central Electricity Regulatory Commission (CERC) for the thermal and hydro plants and the auxiliary consumptions specified for plants.
- iv. For the state plants PLF highest among the PLF norms specified by BERC and the plant wise auxiliary consumption determined by BERC for thermal, and biomass has been considered. For the solar plants CUF has been considered as specified in their respective Power Purchase Agreement/ Power Supply Agreements.
- v. Considering the PLF as mentioned above and using the power purchase allocation data mentioned in the above table total number of units purchased were calculated from every source/ plant for every month separately.

4.6.10 The month wise projections data for the months of October 2023 to March 2024 is added to the actuals of April 2023 to September 2023. Accordingly, the revised projections of power purchase for FY 2023-24 are tabulated below:

Table 52: Power purchase allocation projected for FY 2023-24

Name of Source	Share Allocation for NBPDCCL (MW)	Unit Purchased (MU)
Stations with injection at CTU	3,687.51	17,930.80
<i>FSTPP I & II</i>	49.57	<i>886.83</i>
<i>FSTPP III</i>	44.74	<i>261.36</i>
<i>KHSTPP I</i>	23.70	<i>581.28</i>
<i>KHSTPP II</i>	29.26	<i>193.31</i>

Name of Source	Share Allocation for NBPDCCL (MW)	Unit Purchased (MU)
<i>Barh Stage I (Unit I & II)</i>	352.18	1,517.22
<i>Barh Stage I Unit III</i>	176.09	-
<i>Barh Stage II</i>	525.90	3,339.93
<i>Nabinagar (BRBCL)</i>	46.00	282.03
<i>Korba</i>	-	-
<i>Talcher Stage I</i>	185.79	1,289.29
<i>KBUNL Stage II</i>	132.97	866.71
<i>NPGCL</i>	754.23	4,973.56
<i>North Karanpura Unit I</i>	136.53	904.40
<i>North Karanpura Unit II</i>	105.50	175.25
<i>North Karanpura Unit III</i>	105.50	-
<i>Darlipali STPS</i>	148.75	922.03
<i>Buxar TPP U1</i>	258.06	136.12
<i>Buxar TPP U2</i>	258.06	-
<i>Chuka</i>	42.82	224.76
<i>Rangit</i>	10.59	58.00
<i>Tala</i>	119.65	271.34
<i>Teesta</i>	49.22	313.51
<i>Mangdechhu</i>	130.86	731.22
<i>Kurichu</i>	1.56	2.66
	-	
Stations with injection at STU	356.18	1,238.19
<i>BSPHC</i>	24.98	14.01
<i>BTPS Stage I</i>	101.20	136.78
<i>BTPS Stage II</i>	230.00	1,087.40
	-	
IPPs	224.48	1,606.84
<i>GMR</i>	119.60	862.50
<i>JITPL</i>	104.88	744.34
	-	
Renewables	1,094.89	2,193.06
<i>M/s Sunmark Energy Projects Limited (Formerly MBCEL)</i>	4.60	7.42
<i>M/s Response renewable Energy Ltd, Kolkata.</i>	4.60	8.01
<i>M/s Avantika Contractors Ltd., Hyderabad</i>	2.30	3.50
<i>M/s Glatt Solutions Pvt. Ltd, Kolkata.</i>	1.38	2.38
<i>Alfa Infraprop Pvt. Ltd.</i>	9.20	15.13
<i>Udipta Energy & Equipment Pvt. Ltd.</i>	2.30	3.63
<i>Azure Power India Pvt. Ltd.</i>	4.60	7.21
<i>Welspun Renewables Project - I</i>	4.60	7.29
<i>Welspun Renewables Project – II</i>	6.90	11.01
<i>Welspun Renewables Project – III</i>	6.90	11.00
<i>Acme Cleantech Project (Nalanda)</i>	6.90	10.90
<i>Acme Cleantech Project (Magadh)</i>	4.60	7.50
<i>SECI (Focal)</i>	4.60	8.72
<i>SECI Phase-III (Renew Sunwaves)</i>	138.00	350.12
<i>SB Energy Six Pvt. Ltd. (NTPC)</i>	138.00	342.92

Name of Source	Share Allocation for NBPDC (MW)	Unit Purchased (MU)
GRT Jewellers (SECI-V)	69.00	139.24
Wind ISTS Scheme Tranche I (PTC) (Green Infra, Inox, Mytrah & Ostro)	92.00	246.45
Wind ISTS Scheme Tranche II (SECI) (Orange)	46.00	141.24
Avada (BREDA), Dharbhanga	0.74	1.13
SECI Green Infra	46.00	154.42
Alfanar	23.00	75.98
Betam	23.09	73.96
SECI Phase-VI Wind	-	
Ostro Kannad	138.00	362.02
Morjar Windfarm	23.00	58.42
SBE Renewable (SECI Phase-V)	151.80	-
SJVN Ltd (BREDA)	92.00	58.34
New Swadeshi Sugar Mill, Narkataganj	4.60	9.01
Hasanpur Sugar Mill, Dalsinghsarai	6.67	15.39
Bharat Sugar Mills, Sidhwalia, Gopalganj	6.90	14.74
Hari Nagar Sugar Mills, Hari Nagar, West Champaran	6.67	19.32
HPCL Biofuels Ltd., Sugauli, East Champaran	9.20	7.16
HPCL Biofuels Ltd., Lauria, West Champaran	9.20	7.82
Siddhashram Rice Mill Cluster Pvt Ltd	0.46	(0.03)
Bihar Distillers & Bottlers Pvt Ltd	4.32	5.38
Tirupati Sugar	2.76	6.34
	-	
Others	92.00	290.47
PTC(IEX)	-	281.05
GTAM IEX	-	9.42
PTC JITPL	57.50	-
PTC SKS Power	34.50	-
Total	5,455.06	23,259.35

4.6.11 The petitioner has arrived at a power purchase of 23,259.3 MU for FY 2023-24.

4.7 Energy Balance

4.7.1 Based on above discussed elements such as sales, losses & power availability, the revised projected energy balance for FY 2023-24 is as under –

Table 53: Energy Balance for APR of FY 2023-24

Sr No	Particulars	Unit	NBPDC
			FY 2023-24

Sr No	Particulars	Unit	NBPDCL
			FY 2023-24
A	Energy Requirement		
1	Energy sales	MU	15,232.89
2	Less: Inter-state sales	MU	314.22
3	Energy sales excluding Inter-state sales	MU	14,918.67
4	Distribution Loss	%	16.60%
5	Add: Distribution Loss	MU	2,969.42
6	Energy required at Distribution periphery	MU	17,888.09
7	Add: Inter-state sales	MU	314.22
8	Total energy required at Distribution periphery	MU	18,202.31
9	State Transmission Loss	%	3.00%
10	Add: State Transmission Loss	MU	562.96
11	Total energy required at State Transmission Periphery	MU	18,765.27
12	Losses in Regional Transmission system	%	3.14%
13	Losses in Regional Transmission system	MU	609.16
14	Total Energy Requirement at ex-bus	MU	19,374.43
15	Total energy Purchased	MU	23,259.35
16	Energy Surplus/(Deficit) at State Periphery	MU	3,884.93

4.7.2 As above, there is surplus energy available at ex-bus of 3884.93 MU. The revenue of this surplus power is considered at Rs 5/kWh as during the 1st six months of FY 2023-24 the surplus power has been sold at Rs 5/kWh. So, the corresponding revenue from this surplus power is Rs 1942.46 Cr that has been deducted from the net ARR. The Petitioner requests the Hon'ble Commission to approve the energy balance based on above calculations for FY 2023-24.

4.8 Renewable Power Purchase Obligation

4.8.1 The Hon'ble Commission initiated the Suo-motu proceeding for 4th amendment in BERC (Renewable Purchase Obligation, its compliance and REC Framework Implementation) Regulations, 2010. The Draft BERC (Renewable Purchase Obligation, its compliance and REC Framework Implementation) (4th Amendment) Regulations, 2022 was also floated by the Commission for comments from the Stakeholders. The Hon'ble Commission in the draft Regulations has specified the following:

“Further, Ministry of Power, Govt. of India, through its order no. 09/13/2021-RCM dated 22.07.2022 has specified separate Wind RPO, HPO and other RPO within the overall RPO target for the FY 2022-23 to FY 2029-30.

In view of above, the Commission has decided to adopt the RPO target as specified by the Ministry of Power through its order no. 09/13/2021-RCM dated 22.07.2022 for the FY 2022-23 to FY 2029-30, including introduction of a separate hydro purchase obligation (HPO) as recommended previously by the ministry through MoP Notification F No. 15/2/2016-H-I(Pt.) dated 08.03.2019.

In line with the directions from MoP, the Commission proposes to specify separate Wind RPO, HPO and other RPO within the overall RPO target.

Provided that Wind RPO shall be met through energy produced from wind power projects commissioned after 31st March 2022; HPO shall be met only by energy produced from Large Hydro Projects (including pump storage plants) commissioned after 8th March 2019; other RPO target may be met by energy produced from any RE power project not qualifying for meeting Wind RPO and HPO. Further, as the directives of the MoP, the Commission proposes to specify separate Energy Storage Obligation for the energy consumed from solar/wind along with /through storage. The Energy Storage obligation to the extent of energy stored from RE sources shall be considered as part of fulfilment of the total RPO.”

4.8.2 As above, the Hon'ble Commission in the draft Regulations has adopted the RPO trajectory specified by the MoP. So, the Petitioner has computed RPO for FY 2023-24 as per the trajectory specified by the MoP. The details of RPO to be met by the Petitioner for FY 2023-24 are given in the table below:

Table 54: Details of RPO to be met for FY 2023-24 (APR)

Particular	units	FY 23-24
Energy Sale (excluding interstate sales)	MU	14918.67
RPO Targets (%)		27.07%
Wind % (B)	%	1.60%
HPO % (C)	%	0.66%
Other RPO % (D)		24.81%
RPO Targets		4038.48
Wind (A*B)	MU	238.70
HPO (A*C)	MU	98.46
Other RPO (A*D)	MU	3701.32
Renewable Power Purchase		3817.97
Wind	MU	1,094.00
HPO	MU	
Other RPO	MU	2723.97
RPO Shortfall/ (Surplus)	MU	
Wind	MU	(855.30)
HPO	MU	(756.84)
Other RPO		220.51
Carried forward of FY 22-23	MU	
Balance RPO	MU	

4.8.3 As above, the Petitioner has complied the RPO trajectory specified by the MoP for FY 2023-24 as there is NIL shortfall for Wind, HPO and other RPO.

4.8.4 The Petitioner has already been drawing solar power from a few sources like SECI, Welspun, ACME clean tech, Avantika and Azure Power. The Petitioner has also accounted the RE purchases from new sources coming in FY 2023-24, i.e., SECI Phase-II Solar, Adani Green, Ecoren Energy, Ostro kannad, Morjar Windfarm, BREDA floating Solar.

4.9 Power Purchase Cost

4.9.1 The power purchase cost mainly comprises of fixed charges and energy charges for two-part tariff stations i.e., NTPC, NHPC & PTC in case of Petitioner. The Petitioner has considered the actual energy charges and fixed cost for these power stations based on actual 6 months data for FY 2023-24.

4.9.2 Ministry of Power vide its Letter No. 23/13/2021-R&R (Pt-I) dated 26.03.2022 has informed the following:

“It has been observed that due to sharp increase in electricity demand some areas, in the country, are facing power shortage. With soaring power demand, the generation needs to be maximised. Efforts have been made to increase the supply of domestic coal; however, there is still a gap between the requirement of coal and the supply of coal, because of which the coal stock at the generating stations are depleting at a worrisome rate. The gap in demand and supply of domestic coal is anticipated to continue in next few months.

Looking into the emergent situation due to rise in demand and non-adequate supply of domestic coal, all States and Gencos based on domestic coal have been directed vide letter dated 28th April, 2022 (copy enclosed at Annexure-I) to import at least 10 percent of their requirement of coal for blending. The States were advised to give timely clearance to IPP's, wherever required in the PPA for blending of imported coal. It was also mentioned in the letter that procurement of coal must be done in a transparent manner to obtain competitive rates.

.....

Ministry of Power (MOP) have also issued the direction under Section 107 of the Electricity Act, 2003 on 18.05.2022 (copy enclosed at Annexure-III) to CERC to take suitable action to allow higher amount of blending with imported coal. Copy of this direction was sent to all state governments and SERCs/JERCs with the request to take similar appropriate action.

....

In the light of the present emergent circumstances, and in continuation of the directions to import coal for blending, using the powers under Section 11 of the Act, it is hereby directed that.

.....

This direction is for coal imported for blending by such domestic coal-based power plant up to 31.03.2023”

- 4.9.3 As above, the MoP has accepted there is sharp increase in electricity demand some areas and the country is facing power shortage. There is a gap between the requirement of coal and the supply of coal, because of which the coal stock at the generating stations is depleting at a worrisome rate. And the gap in demand and supply of domestic coal is anticipated to continue in next few months. To fulfil the requirement of coal the MoP allowed imported coal for blending by such domestic coal-based power plant up to 31.03.2023.
- 4.9.4 Further, due to variable monsoon rainfall in H1 of FY 2023-24 compared to the corresponding period of FY 2022-23, hydro generation has dropped by almost 11%. Therefore, in order to ensure uninterrupted power supply across the country, MoP issued Advisory dated 25.10.2023 which allowed blending of imported coal up to 6% till March 2024. Accordingly, the Petitioner has considered the impact of increase in variable cost of the Plants due to coal blending while determining the power purchase cost in FY 2023-24 and FY 2024-25 in this Tariff Petition.
- 4.9.5 Due to the impact of coal blending the variable cost of the Thermal Power Plants increased upto as high as 50% with respect to the cost prevailing in April. Further, the variable cost continues to increase at a much higher rate for Quarter-II of FY 2022-23 as compared to Q-I.
- 4.9.6 Transmission charges have been increased 10% with respect to that approved by the Hon'ble Commission for FY 23-24 in MYT Order dated 23.03.2023.
- 4.9.7 Petitioner has considered the new plants as per information available with the Petitioner. The new plants for which cost details are not available, the cost break-up of similar capacity plants has been considered for projection.
- 4.9.8 The Petitioner requests Hon'ble Commission to allow power purchase costs for APR period FY 2023-24 as provided in the table below.

Table 55: Power Purchase Projection for APR for FY 2023-24

Particulars	Share allocation for NBPDC (MW)	Unit Purchased (MU)	NBPDC Total Cost for FY 2023-24 (Rs Crores)				NBPDC Total Cost for FY 2023-24 (Paisa/kWh)		
			Fixed Charges	Energy Charges	Misc Cost	Total	Fixed Charges	Energy Charges	Total
Stations with injection at CTU	3,687.51	17,930.80	3,605.60	5,045.30	164.88	8,815.78	201.08	281.38	482.46
FSTPP I & II	49.57	886.83	79.44	308.13	66.18	453.75	89.57	347.45	437.03
FSTPP III	44.74	261.36	47.35	87.07	3.43	137.85	181.17	333.13	514.30
KHSTPP I	23.70	581.28	60.81	191.63	6.02	258.46	104.61	329.67	434.28
KHSTPP II	29.26	193.31	18.16	61.79	0.79	80.73	93.94	319.62	413.56
Barh Stage I (Unit I & II)	352.18	1,517.22	374.57	488.66	7.79	871.03	246.88	322.08	568.96
Barh Stage I Unit III	176.09	-	95.97	-	-	95.97	-	-	-
Barh Stage II	525.90	3,339.93	702.59	1,187.71	22.99	1,913.28	210.36	355.61	565.97
Nabinagar (BRBCL)	46.00	282.03	69.70	85.76	(0.03)	155.43	247.13	304.07	551.20
Korba	-	-	-	-	-	-	-	-	-
Talcher Stage I	185.79	1,289.29	126.80	263.93	14.99	405.73	98.35	204.71	303.06
KBUNL Stage II	132.97	866.71	242.77	261.46	(14.74)	489.48	280.10	301.67	581.77
NPGCL	754.23	4,973.56	1,150.67	1,286.52	24.18	2,461.38	231.36	258.67	490.03
North Karanpura Unit I	136.53	904.40	114.20	179.76	12.83	306.79	126.28	198.76	325.03
North Karanpura Unit II	105.50	175.25	7.58	25.80	-	33.38	43.27	147.20	190.47
North Karanpura Unit III	105.50	-	7.58	-	-	7.58	-	-	-
Darlipali STPS	148.75	922.03	130.26	100.92	14.03	245.21	141.27	109.46	250.73
Buxar TPP U1	258.06	136.12	140.64	45.76	-	186.40	1,033.21	336.16	
Buxar TPP U2	258.06	-	179.51	-	-	179.51	-	-	
Chuka	42.82	224.76	-	53.98	-	53.98	-	240.16	240.16
Rangit	10.59	58.00	11.87	11.57	0.01	23.45	204.64	199.42	404.06
Tala	119.65	271.34	-	61.59	-	61.59	-	227.00	227.00
Teesta	49.22	313.51	35.91	36.43	0.05	72.39	114.53	116.20	230.73
Mangdechu	130.86	731.22	-	306.38	-	306.38	-	419.00	419.00
Kurichu	1.56	2.66	9.22	0.46	6.35	16.04	3,464.06	174.34	3,638.40
	-						-	-	
Stations with injection at STU	356.18	1,238.19	292.36	389.52	13.03	694.91	236.12	314.59	550.71
BSPHC	24.98	14.01	9.22	3.49	12.71	25.42	658.08	249.00	907.08
BTPS Stage I	101.20	136.78	7.52	67.91	0.08	75.51	54.99	496.51	551.50
BTPS Stage II	230.00	1,087.40	275.62	318.12	0.24	593.98	253.47	292.55	546.02

Particulars	Share allocation for NBPDC (MW)	Unit Purchased (MU)	NBPDC Total Cost for FY 2023-24 (Rs Crores)				NBPDC Total Cost for FY 2023-24 (Paisa/kWh)		
			Fixed Charges	Energy Charges	Misc Cost	Total	Fixed Charges	Energy Charges	Total
	-		-		-	-	-	-	
IPPs	224.48	1,606.84	393.77	208.53	50.43	652.73	245.06	129.78	374.84
GMR	119.60	862.50	158.28	122.53	75.02	355.83	183.51	142.07	325.58
JITPL	104.88	744.34	235.50	86.00	(24.59)	296.90	316.38	115.54	431.92
	-						-	-	
Renewables	1,094.89	2,193.06	-	656.51	(0.00)	656.51	-	299.36	299.36
M/s Sunmark Energy Projects Limited (Formerly MBCEL)	4.60	7.42	-	5.21	-	5.21	-	702.18	702.18
M/s Response renewable Energy Ltd, Kolkata.	4.60	8.01	-	5.62	-	5.62	-	701.94	701.94
M/s Avantika Contractors Ltd., Hyderabad	2.30	3.50	-	2.69	-	2.69	-	768.50	768.50
M/s Glatt Solutions Pvt. Ltd, Kolkata.	1.38	2.38	-	1.68	-	1.68	-	702.50	702.50
Alfa Infraprop Pvt. Ltd.	9.20	15.13	-	11.90	-	11.90	-	786.96	786.96
Udipta Energy & Equipment Pvt. Ltd.	2.30	3.63	-	2.90	-	2.90	-	797.76	797.76
Azure Power India Pvt. Ltd.	4.60	7.21	-	6.05	-	6.05	-	838.78	838.78
Welspun Renewables Project - I	4.60	7.29	-	6.34	-	6.34	-	870.11	870.11
Welspun Renewables Project – II	6.90	11.01	-	9.51	-	9.51	-	864.13	864.13
Welspun Renewables Project – III	6.90	11.00	-	9.42	-	9.42	-	855.80	855.80
Acme Cleantech Project (Nalanda)	6.90	10.90	-	9.52	-	9.52	-	873.17	873.17
Acme Cleantech Project (Magadh)	4.60	7.50	-	6.55	-	6.55	-	873.23	873.23
SECI (Focal)	4.60	8.72	-	5.15	-	5.15	-	591.15	591.15
SECI Phase-III (Renew Sunwaves)	138.00	350.12	-	96.09	-	96.09	-	274.45	274.45
SB Energy Six Pvt. Ltd. (NTPC)	138.00	342.92	-	91.56	-	91.56	-	267.00	267.00
GRT Jewellers (SECI-V)	69.00	139.24	-	33.04	-	33.04	-	237.29	237.29
Wind ISTS Scheme Tranche I (PTC) (Green Infra, Inox, Mytrah & Ostro)	92.00	246.45	-	85.07	-	85.07	-	345.16	345.16
Wind ISTS Scheme Tranche II (SECI) (Orange)	46.00	141.24	-	38.28	-	38.28	-	271.00	271.00
Avada (BREDA), Dharbhanga	0.74	1.13	-	0.47	-	0.47	-	415.00	415.00
SECI Green Infra	46.00	154.42	-	38.76	-	38.76	-	251.00	251.00
Alfanar	23.00	75.98	-	19.15	-	19.15	-	252.00	252.00

Particulars	Share allocation for NBPDC (MW)	Unit Purchased (MU)	NBPDC Total Cost for FY 2023-24 (Rs Crores)				NBPDC Total Cost for FY 2023-24 (Paisa/kWh)		
			Fixed Charges	Energy Charges	Misc Cost	Total	Fixed Charges	Energy Charges	Total
Betam	23.09	73.96	-	18.64	-	18.64	-	252.00	252.00
SECI Phase-VI Wind	-								
Ostro Kannad	138.00	362.02	-	79.10	-	79.10	-	218.50	218.50
Morjar Windfarm	23.00	58.42	-	9.10	-	9.10	-	155.83	155.83
SBE Renewable (SECI Phase-V)	151.80	-	-	-	-	-	-	-	-
SJVN Ltd (BREDA)	92.00	58.34	-	18.14	-	18.14	-	311.00	
New Swadeshi Sugar Mill, Narkataganj	4.60	9.01	-	4.63	-	4.63	-	513.90	513.90
Hasanpur Sugar Mill, Dalsinghsarai	6.67	15.39	-	9.56	-	9.56	-	621.10	621.10
Bharat Sugar Mills, Sidhwalia, Gopalganj	6.90	14.74	-	7.57	-	7.57	-	513.77	513.77
Hari Nagar Sugar Mills, Hari Nagar, West Champaran	6.67	19.32	-	9.85	-	9.85	-	509.61	509.61
HPCL Biofuels Ltd., Sugauli, East Champaran	9.20	7.16	-	3.56	-	3.56	-	497.09	497.09
HPCL Biofuels Ltd., Lauria, West Champaran	9.20	7.82	-	3.98	-	3.98	-	508.50	508.50
Siddhashram Rice Mill Cluster Pvt Ltd	0.46	(0.03)	-	(0.03)	(0.00)	(0.03)	-	805.03	805.03
Bihar Distillers & Bottlers Pvt Ltd	4.32	5.38	-	3.44	(0.00)	3.44	-	640.27	640.27
Tirupati Sugar	2.76	6.34	-	4.02	0.00	4.02	-	634.70	634.70
	-								
Others	92.00	290.47	-	291.00	-	291.00	-	1,001.84	1,001.84
PTC(IEX)	-	281.05	-	284.20	-	284.20	-	1,011.20	1,011.20
GTAM IEX	-	9.42	-	6.80	-	6.80	-	722.31	722.31
PTC JITPL	57.50	-	-	-	-	-	-	-	-
PTC SKS Power	34.50	-	-	-	-	-	-	-	-
Transmission and Other Charges		-	1,868.70	-	-	1,868.70			
SLDC			2.50	-	-	2.50	-	-	-
BGCL			88.36	-	-	88.36	-	-	-
BSPTCL			615.73	-	-	615.73	-	-	-
POSOCO			4.68	-	-	4.68	-	-	-
Prior Period Transmission charges						-	-	-	-
PGCIL			1,157.42	-		1,157.42	-	-	-

Particulars	Share allocation for NBPDC (MW)	Unit Purchased (MU)	NBPDC Total Cost for FY 2023-24 (Rs Crores)				NBPDC Total Cost for FY 2023-24 (Paisa/kWh)		
			Fixed Charges	Energy Charges	Misc Cost	Total	Fixed Charges	Energy Charges	Total
Total	5,455.06	23,259.35	6,160.44	6,590.86	228.33	12,979.63	264.86	283.36	548.22

4.9.9 The Petitioner humbly requests the Hon'ble Commission to approve the above-mentioned revised power purchase cost for the utility for FY 2023-24.

4.10 Transmission Charges

4.10.1 It is submitted that the Petitioner has to pay transmission charges to POWERGRID, BSPTCL, BGCL for use of transmission facilities. Further, the Petitioner has to pay charges to POSOCO and SLDC. The Petitioner has considered the Transmission charges as approved by the Hon'ble Commission for FY 2022-23 in MYT Order for DISCOMs dated 23.03.2023 with 10% escalation on the approved charges.

4.10.2 We request the Hon'ble Commission to approve the transmission and related charges for inter-state as well as intra-state transmission transactions for FY 2023-24 as per the below given table –

Table 56: Transmission charges for APR (in INR Crore)

Particulars	Charges
SLDC	2.50
BGCL	88.36
BSPTCL	615.73
POSOCO	4.68
Pr Pd PGCIL	-
PGCIL	1,157.42
Total	1,868.70

4.11 Capital Investment Plan, Capitalization and Funding

4.11.1 As per BERC (Multi Year Distribution Tariff) Regulations 2021, the Distribution Licensee must file a Business Plan which shall comprise of detailed capital investment plan, financing plan and physical targets. Relevant extract of the Distribution MYT Regulations 2021 is as follows:

5.1 The Distribution Licensee shall file a Business Plan, for the Control Period by a Petition in accordance with BERC (Conduct of Business) Regulations, 2005 and its amendments from time to time, by 15th September of the year prior to the commencement of the Control Period...

5.2 Such Business Plan shall comprise but not limited to detailed category/sub-category-wise sales and demand projections, power procurement plan, capital investment plan, financing plan and physical targets...

5.3 The Distribution Licensee shall make assessment of infrastructure requirement and prepare capital investment plan in accordance with BERC (Procedure for Filing Capital Investment and Capitalization Plan) Regulations, 2018 that will spill into the year(s) under review and new projects that will commence and may be completed within or beyond the tariff period...

4.11.2 During the Tariff Petition filed by the Petitioner for Truing up of FY 2020-21, APR of FY 2021-22 and ARR of FY 2022-23, the Petitioner didn't submit any projections for the control period 2022-23 to 2024-25 as the said projections for the control period to be submitted post approval under the Revamped Distribution Sector Scheme (RDSS) by the Monitoring Committee as it will form the core

of total plan for creation of infrastructure both for AT&C loss reduction and supplying quality, reliable 24x7 power to the consumers.

- 4.11.3 Therefore, a separate CAPEX Petition was filed by the Petitioner (**Case No. 26/2022- NBPDCCL and 27/2022- SBPDCL**) for approval of schemes- Reconductoring, Mukhyamantri Krishi Vidyut Sambandh Yojana (MKVYS), Smart Metering, and RDSS. The CAPEX petition formed the basis for approval of capex and capitalization for the Tariff Petition filed by the Petitioner on 15th November 2022 for Truing up of FY 2021-22, APR of 2022-23 and ARR of FY 2023-24.
- 4.11.4 The Hon'ble Commission vide Order dt. April 28, 2023, in Case No. 26/2022 and 27/2022 has pronounced the final Order in the matter of approval of Capital Expenditure and Capitalization Plan for the MYT Control Period FY 2022-23 to FY 2024-25 which granted in-principal approval for implementation of the CAPEX Plan as per the cost estimate, investment schedule and time schedule. Therefore, the Hon'ble Commission allowed the impact of the CAPEX to be filed during the True-Up of FY 2022-23 to FY 2024-25. As per the Regulatory framework, the Petitioner was required to file the Petition for Truing up of FY 2022-23, APR of FY 2023-24 and ARR of FY 2024-25 by November 15, 2023, wherein the impact of actual CAPEX incurred in FY 2022-23 to be filed.
- 4.11.5 Accordingly, as per the directions of the Hon'ble Commission the Petitioner has filed the Tue-Up of Capitalization made in FY 2022-23. The Commission is requested to kindly consider the submission of the Petitioner and allow capitalization as shown by the Petitioner.
- 4.11.6 In view of the above, the Petitioner submits that it has estimated Capex, Capitalization and funding considering the capital expenditure and investments to be done as per the recent developments and keeping in mind the targets to be achieved for capitalisation under various schemes during the year of APR. In line with the above, the Petitioner has computed the capitalization of investment on the assumption that other than MKYVS and RDSS scheme, all other ongoing schemes will get capitalized during FY 2023-24.
- 4.11.7 The opening figures of CWIP, Gross Fixed Assets, Grants, etc. are as per the closing balances claimed in truing up for FY 2023-24.
- 4.11.8 The below table represents the capitalization plan for the Petitioner

Table 57: Capitalization plan for FY 2023-24 (in INR Crore)

Name of the Scheme	FY 2023-24
BRGF	10.09
R-APDRP	23.29
NABARD Phase VIII	-
NABARD Phase XI	(0.00)
MP/CM LAD	0.00
Deposit Scheme	4.98
ADB	-
ACA State Plan	-
Burnt DTR State Plan	-
State Plan -Others	522.91

Name of the Scheme	FY 2023-24
CM Seven	-
Reconductoring	256.29
IPDS	19.52
RGGVY	0.00
DDUGJY	20.71
APL Connection/Saubhagya	-
LT Line New Service Connection	-
MKVYS	215.11
State Plan -RDSS	-
Infrastructure works- RDSS	-
IT/OT- RDSS	-
PMA - RDSS	-
Smart Prepaid Meter (Phase 2) 36 Lakhs- 30% Capex	350.66
Smart Prepaid Meter (Phase 3) 1.12 crores- 30% Capex	-
Own Sources	160.49
Total	1,584.04

4.11.9 The Monitoring Committee for RDSS constituted under Chairmanship of Secretary (Power), Govt. of India, in its 9th meeting held on 28.04.2022, has approved the Action plan and Loss Reduction DPR of North Bihar Power Distribution Company Limited (NBPDC) under Revamped Distribution Sector Scheme (RDSS) as per below mentioned details:

Sl. No.	Particulars	NBPDC (Amount in Crore)		
		Approved Amount	Central Govt. Grant- GBS (60%)	State Govt. Finance Share (40%)
1	Loss Reduction			
1.a	Infrastructure Works	3050.89	1830.53	1220.36
1.b	IT/OT	200	120	80
2	PMA	48.76	29.26	19.5
	Total	3299.65	1979.79	1319.86

4.11.10 Under Loss reduction plan of RDSS, no capex and subsequent capitalization is expected to take place in FY 2022-23. Hence proposed capex and capitalization under Loss reduction plan of RDSS is considered NIL for FY 2022-23.

Prepaid Smart Metering:

Phase 1: The total number of smart meters proposed to be installed under phase 1 is 23,50,000 out of which 10,30,000 lakhs belongs to NBPDC. The total smart meters under Phase 1 are under Opex mode which will be booked under A&G expenses. Hence the entire expenditure proposed under Phase I has been considered under A&G expenditure. The same is attached as **Annexure-4**.

Phase-II:

- Under phase-II, 36 lakhs of smart prepaid meters are scheduled to be installed across the Bihar by the end of March-2024. In Phase-II smart prepaid meters are scheduled to be installed under hybrid mode i.e., CAPEX + OPEX mode in the ratio of 70:30.
- 26,00,000 smart prepaid meters are scheduled to be installed in North Bihar.
- Below table shows the expected expenditure under the CAPEX mode for installation of 26 lakhs smart prepaid meters:

Smart Prepaid Meters under Capex	Month	2023-24			2024-25		
		Meters installed	Meter cost	Capex	Meters installed	Meter cost	Capex
Phase II: 36 lakhs North 26 Lakhs (30% Capex)-	Op. Balance	19537					
	April	34288	10342.2	10.64	0	10342.2	-
	May	33294	10342.2	10.33	78022	10342.2	24.21
	June	31127	10342.2	9.66	347202	10342.2	107.72
	July	64851	10342.2	20.12	347200	10342.2	107.72
	August	72397	10342.2	22.46	347201	10342.2	107.72
	September	76813	10342.2	23.83	347200	10342.2	107.72
	October	84356	10342.2	26.17	347201	10342.2	107.72
	November	164232	10342.2	50.96	347201	10342.2	107.72
	December	164232	10342.2	50.96	347201	10342.2	107.72
	January	164232	10342.2	50.96	347200	10342.2	107.72
	February	164232	10342.2	50.96	347201	10342.2	107.72
	March	164232	10342.2	50.96	347201	10342.2	107.72
Less: 7.5% to be given after 6 months				28.35			82.61
Total Capex				350.66			1,047.19

Phase-III

- In the final phase i.e. phase-III 1.12 Crore of smart prepaid meters are scheduled to be installed across the Bihar by the end of March-2024. In Phase-III smart prepaid meters are scheduled to be installed under hybrid mode i.e. CAPEX + OPEX mode in the ratio of 70:30.
- Out of 1.12 Crore, 77 lakhs smart prepaid meters are scheduled to be installed in North Bihar.
- Below table shows the expected expenditure under the OPEX mode for installation of 77 lakhs smart prepaid meters:

Smart Prepaid Meters under Capex	Month	2023-24			2024-25		
		Meters installed	Meter cost	Capex	Meters installed	Meter cost	Capex
Phase III: 1.12 crores North 77 Lakhs (30% Capex)	Op. Balance						
	April				0	10342.198	0
	May				78022	10342.198	24.21
	June				347202	10342.198	107.72
	July				347200	10342.198	107.72
	August				347201	10342.198	107.72
	September				347200	10342.198	107.72
	October				347201	10342.198	107.72
	November				347201	10342.198	107.72
	December				347201	10342.198	107.72
	January				347200	10342.198	107.72
	February				347201	10342.198	107.72

	March				347201	10342.198	107.72
Less: 7.5% to be given after 6 months							82.61
Total Capex							1,018.84

- 4.11.11 The Hon'ble Commission is requested to consider the capitalization plan as estimated for FY 2023-24.
- 4.11.12 The details of the opening CWIP, investment during the year, capitalization and funding for CAPEX for FY 2023-24 is detailed in the table below:

Table 58: CWIP, Capitalization and Funding of Capitalization projected for FY 2023-24 (in INR Crore)

Sl. No.	Particulars	Approved for FY 2023-24	Projected for FY 2023-24 (RE)
1	Opening CWIP	857.56	1,097
2	New Investment		1,556
3	Less Capitalization		1,584
(a)	CWIP		1,267
(b)	New Investment		317
4	Closing CWIP (1+2-3)	857.56	1069.20
5	Funding		
(a)	CWIP Capitalization		1,267
(i)	Grant		183
(ii)	Equity		363
(iii)	Loan		721
(b)	New Investment Capitalization		317
(i)	Grant		46
(ii)	Equity		91
(iii)	Loan		180
6	Total capitalization		1,584
(i)	Total Grant		229
(ii)	Total Equity		453
(iii)	Total Loan		901

4.12 Operation & Maintenance (O&M) Expenses

4.12.1 As per regulation 22 of BERC (Multi Year Distribution Tariff) Regulations, 2021, O&M expenses comprises of Repair and maintenance expenses, Administrative & General expenses and employee expenses. In the below paragraphs the Petitioner would like to submit the estimated expenses on account of O&M for FY 2023-24 along with the reasoning and basis of projections.

4.12.1.1 **Employee Expenses:** The Hon'ble Commission, in terms of regulation 22 of BERC (Multi Year Distribution Tariff) Regulations 2021, had determined norms for computation of Employee cost for the upcoming control period of FY 2022-23 to FY 2024-25.

4.12.1.2 The Commission has computed the employee norm and employee expenses for the control period as given in the table below:

Employee expense norm approved for NBPDC & SBPDCL in TO dated 25.03.2022

Particulars	Base employee expense norm for NBPDC	Base employee expense norm for SBPDCL
No. of personnel per substation	6.7650	9.4117
No. of personnel per 1000 consumers	0.0629	0.1504
Annual expenses per personnel (Rs. Crore)	0.0854	0.0914

However, it is worthwhile to mention that the norms for NBPDC and SBPDCL should not be different rather should be the same for both DISCOMs.

Regulation 22.1 specify employee cost shall be computed as per the approved norm escalated by consumer price index (CPI) The CPI inflation shall be considered based on the average increase in CPI for immediately preceding three years i.e. FY 2020-21, FY 2021-22, FY 2022-23 and base year of FY 2019-20. The average CPI inflationary increase is computed as given below:

Particulars	2019-20	2020-21	2021-22	2022-23
Average CPI index points for FY	322.5	338.7	356.1	377.6
Increase in CPI index over the previous year		5.02%	5.13%	6.05%
Average CPI inflationary inc.				5.40%

Accordingly, the employee cost computed for 2023-24 is shown in the table below:

Table 59: Employee expenses (in INR Crore)

Sr.No	Particulars	Norms approved for Control Period 22-23 to 24-25	Base Value for FY 2023-24	Approved	FY 2023-24 (RE)
	Particulars				
1	Average annual CPI index			5.89%	5.40%
2	Norms-Number of personnel per 1000 consumers	0.0629	0.0629	0.0629	0.0629
3	Norms-Number of personal per substation	6.765	6.765	6.7650	6.765
4	No. of consumers (1000)			12041	12588
5	No of substations			631	643
6	Annual expenses per personnel (Rs. Cr)	0.0854	0.09043	0.09576	0.0953
7	Employee cost per 1000 consumers			72.53	75.47
8	Employee cost per substation			408.76	414.62
9	Total Employee cost			481.29	490.09

4.12.1.3 The Hon'ble Commission is therefore requested to approve the employee expenses for FY 2023-24.

4.12.1.4 **Repair and maintenance expenses:** Regulation 22.2 of BERC (Multi Year Distribution Tariff) Regulations 2021, specify R&M expenses as percentage (as per the norm determined) of Gross Fixed Assets excluding land cost for the year.

4.12.1.5 The Hon'ble Commission had determined the R&M norm i.e 'K' factor at 1.24% for NBPDCCL and 1.71% for SBPDCL for the MYT control period of FY 2022-23 to FY 2024-25 in the Tariff Order dated 25.03.2022. The detailed computation of R&M expenses for the FY 2023-24 is shown below:

Table 60: R&M Expenses for APR (in INR Crore)

Sr.No	Particulars	FY 2023-24	
		Approved in RE	Actual
1	Opening GFA		22561.49
2	Opening Land Cost		1047.36
3	Opening GFA exc land cost	21343.03	21514.12
4	K Factor	1.24%	1.24%
5	R&M Expense	264.65	266.78

4.12.1.6 Therefore, it is requested to the Hon'ble Commission to approve INR 266.78 Crore towards expenses against R&M as claimed by the Petitioner.

4.12.2 **Administrative and General Expenses:**

4.12.2.1 The Commission, in terms of regulation 22 of BERC (Multi Year Distribution Tariff) Regulations 2021, had determined A&G norm for the MYT control period of FY 2022-23 to FY 2024-25 in the Tariff Order dated 25.03.2022.

4.12.2.2 The Commission has considered the base value of A&G expense norm per 1000 consumers and A&G expense per employee and annual A&G expenses per 1000 consumers and per employee in the Tariff Order dated 25.03.2022 as detailed in the table below:

A&G expense norm approved for NBPDCCL & SBPDCL in TO dated 25.03.2022

Particulars	Base A&G expense norm for NBPDCCL	Base A&G expense norm for SBPDCL
Norms-A&G expenses per 1000 consumers	0.420	1.00
Norms-A&G expenses per personal	0.360	0.850
Annual expenses per 1000 consumers (Rs. Cr)	0.0077	0.0099
Annual A&G expenses per employee (Rs. Crore)	0.0225	0.0121

However, it is worthwhile to mention that the norms for NBPDC and SBPDCL should not be different rather should be the same for both DISCOMs.

4.12.2.3 Regulation 22.3 specifies A&G expenses shall be computed as per the approved norm escalated by wholesale price index (WPI). The WPI inflation shall be considered based on the average increase in WPI for immediately preceding three years. The WPI inflationary increase for FY 2022-23 is computed as given below:

WPI inflationary increase for FY 2022-23

Years	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
Average WPI index points for FY	121.80	123.38	139.41	152.37
Increase in WPI index over previous year		1.29%	13.00%	9.30%
Average WPI inflationary increase				7.86%

4.12.2.4 Accordingly, the A&G computed for 2023-24 (APR), is shown in the table below:

Table 61: A&G expenses (in INR Crore)

Sr. No	Particulars	Approved	Norms for control period 22-23 to 24-25	FY 2023-24	
				Base value	Actual
1	Average annual WPI CPI index	5.32%			7.86%
2	Norms-A&G expenses per 1000 consumers	0.42	0.42	0.42	0.42
3	Norms-A&G expenses per personal	0.3600	0.36	0.36	0.36
4	No. of consumers (1000)	12041			12588
5	No of employees	4645			10520
6	Annual expenses per 1000 consumers (Rs. Cr)	0.00854	0.0077	0.0081	0.00875
7	Annual expenses per employee (Rs. Cr)	0.02496	0.0225	0.0237	0.02556
8	A&G cost per 1000 consumers	102.84			110.11
9	A&G cost per employee	115.93			268.89
10	Total	218.77			379.00
	Rent Charge for Smart Prepaid Meter	-			53.95
	Net Total A&G Cost	218.77			432.95

4.12.2.5 In addition to the A&G expenses claimed above, the petitioner has also claimed expenses on account of installation of the Prepaid smart meters. It is worthwhile to mention that the Petitioner has considered the monthly rental of INR 86.23 per meter which is as per the order of the Hon'ble Commission in Case No. 05/2020. The detailed calculation is provided below:

Phase 1: The total number of smart meters proposed to be installed under phase 1 is 23,50,000 out of which 10,30,000 lakhs belongs to NBPDC. The total smart meters under Phase 1 are under Opex mode which will be booked under A&G expenses:

Smart Prepaid Meters under A&G expenses	Month	2023-24		
		Meters installed	Monthly Meter Rent	Total A&G cost
Phase I: 23.5 lakhs North 10.30 Lakhs	Op. Balance	16028	86.23	1.66
	April	19920	86.23	1.89
	May	21409	86.23	1.85
	June	16617	86.23	1.29
	July	12166	86.23	0.84
	August	13250	86.23	0.80
	September	9521	86.23	0.49
	October	6162	86.23	0.27
	November	74826	86.23	2.58
	December	74826	86.23	1.94
	January	74826	86.23	1.29
	February	74826	86.23	0.65
	March	74826	86.23	-
Total		473175		15.53
Less: Government Budgetary Support		58798	900	-
Net expense		15.53		

Phase-II:

- Under phase-II, 36 lakhs of smart prepaid meters are scheduled to be installed across the Bihar by the end of March-2024. In Phase-II smart prepaid meters are scheduled to be installed under hybrid mode i.e., CAPEX + OPEX mode in the ratio of 70:30.
- 26,00,000 smart prepaid meters are scheduled to be installed in North Bihar.
- Below table shows the expected expenditure under the OPEX mode for installation of 26 lakhs smart

Smart Prepaid Meters under A&G expenses	Month	2023-24			2024-25		
		Meters installed	Monthly Meter Rent	Total A&G cost	Meters installed	Monthly Meter Rent	Total A&G cost
Phase II: 36 lakhs North 26 Lakhs (70% Opex)	Op. Balance	19537	80.44	1.89	164232	80.44	15.85
	April	34288	80.44	3.03	131560	80.44	11.64
	May	33294	80.44	2.68	131560	80.44	10.58
	June	31127	80.44	2.25	157872	80.44	11.43
	July	64851	80.44	4.17	157872	80.44	10.16
	August	72397	80.44	4.08	157872	80.44	8.89
	September	76813	80.44	3.71	157872	80.44	7.62
	October	84356	80.44	3.39	157872	80.44	6.35
	November	164232	80.44	5.28	157872	80.44	5.08
	December	164232	80.44	3.96	157872	80.44	3.81
	January	164232	80.44	2.64	0	80.44	-
	February	164232	80.44	1.32	0	80.44	-
	March	164232	80.44	-	0		

Total		Total	38.41			91.41
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Phase-III

- In the final phase i.e. phase-III 1.12 Crore of smart prepaid meters are scheduled to be installed across the Bihar by the end of March-2024. In Phase-III smart prepaid meters are scheduled to be installed under hybrid mode i.e. CAPEX + OPEX mode in the ratio of 70:30.
- Out of 1.12 Crore, 77 lakhs smart prepaid meters are scheduled to be installed in North Bihar.
- Below table shows the expected expenditure under the OPEX mode for installation of 77 lakhs smart prepaid meters:

Smart Prepaid Meters under A&G expenses	Month	2023-24			2024-25		
		Meters installed	Monthly Meter Rent	Total A&G cost	Meters installed	Monthly Meter Rent	Total A&G cost
Phase III: 1.12 crores North 77 Lakhs (70% Opex)	Op. Balance				0	80.44	-
	April				0	80.44	-
	May				78022	80.44	6.28
	June				347202	80.44	25.14
	July				347200	80.44	22.34
	August				347201	80.44	19.55
	September				347200	80.44	16.76
	October				347201	80.44	13.96
	November				347201	80.44	11.17
	December				347201	80.44	8.38
	January				347200	80.44	5.59
	February				347201	80.44	2.79
	March				347201	81.44	-
Total		Total		-		131.95	

Accordingly, the total rental charges for smart prepaid meter in FY 2023-24 is shown in the table below:

Particulars	Amount (INR Cr)
Rent Charges for Smart Prepaid Meter (Phase 1) 23.5 Lakhs	15.53
Rent Charges for Smart Prepaid Meter (Phase 2) 36 Lakhs- 70% Opex	38.41
Rent Charges for Smart Prepaid Meter (Phase 3) 1.12 crores- 70% Opex	-
Total Rental Charges	53.95

4.12.2.6 It is requested to the Hon'ble Commission to approve the Administrative and General expenses of INR 432.01 Crore i.e., Rs 378.07 crores plus Rs 53.95 crores for FY 2023-24.

4.12.3 **Allocation of Holding Company cost:** As per Schedule 'F', the Holding Company shall handle all issues relating to the subsidiary companies in respect of: -

*"SCHEDULE "F" REORGANISATION OF BSEB & TRANSFER OF PERSONNEL
Part II COMMON SERVICES
The Testing Divisions, Training Department at Head-Quarter and all the Departments at the Corporate Head Office like –*

- General Administration
- Accounts and Finance

- IT
- Stores & Purchase
- Transmission/Distribution/Generation
- Personnel
- Publicity
- Legal
- Vigilance and Security
- Commercial
- Planning
- Civil Engineering
- Transmission (O&M)
- Rural Electrification

Shall constitute "Common Services" which shall continue to provide services to all successor entities during the Interregnum period, until issue of further transfer notifications allocating the employees to respective companies."

4.12.3.1 The Petitioner is claiming the holding company expenses taking the expenses incurred in FY 2022-23 as the same and escalating it by 10% for projecting for Annual performance review of FY 2023-24. The below table represents the allocation of Holding Company cost towards the Petitioner for FY 2023-24 :

Table 62: Allocation of Holding Company Cost for FY 2023-24 (in INR Crore)

Particulars	Approved for FY 2023-24	FY 2023-24 (RE)
Holding company expenses considered for FY 2022-23	23.88	23.19
Escalation % considered	5.89%	10%
Increase considered	1.40	2.32
Total	25.28	25.51

4.12.3.2 Therefore, the Petitioner requests the Hon'ble Commission to approve INR 25.51 Crore towards holding company expenses for FY 2023-24.

4.12.4 **Summary of O&M Expenses:** The below table summarizes the O&M expenses estimated by the Petitioner for FY 2023-24:-

Table 63: Summary of O&M Expenses for APR (in INR Crore)

Particulars	Approved for FY 2023-24	FY 2023-24 (RE)
Employee Cost	481.29	489.45
R&M Expense	264.65	266.78
A&G Expenses	218.77	432.01
Holding Company Expenses	25.28	25.51
Total O&M Cost	989.99	1,213.74
Less: Expenses capitalised		
Net O&M expenses (5-6)		1,213.74

4.13 Gross Fixed Assets

- 4.13.1 The Petitioner hereby submits the computation of Gross Fixed Assets considering the opening fixed assets, capitalization as per the new schemes in FY 2022-23.
- 4.13.2 Majority of the projects coming to an end in FY 2022-23 like IPDS, DDUGJY etc., huge Capitalization is planned in FY 2022-23.
- 4.13.3 The table below demonstrates the Asset addition planned in FY 2023-24 and closing balance of Gross Fixed Assets as on FY 2023-24:-

Table 64: Summary GFA for FY 2023-24 (in INR Crore)

Assets group	Closing balance FY 2022-23	Addition during FY 2023-24 (RE)	Closing balance FY 2023-24 (RE)
Land and land rights	1,047.37	58	1,105
Buildings	111.30	8	119
Hydraulic Works	0.00	0	0
Others Civil Works	189.15	12	201
Plant and Machinery	3,252.38	251	3,504
Lines and Cable Network	17,913.93	1,244	19,158
Vehicles	0.97	0	1
Furniture and Fixtures	6.25	0	7
Office Equipment	35.88	10	46
Spare Units/Service Units	4.15	0	4
Assets taken over from Licensees pending final valuation	0.08	0	0
GRAND TOTAL	22,561.47	1,584	24,146

- 4.13.4 The funding of GFA is done through equity, Loan and grants. The Hon'ble Commission is requested to approve the GFA as determined by the Petitioner for FY 2023-24.

4.14 Depreciation on Gross Fixed Assets

- 4.14.1 As per regulation 23 of Bihar Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2021 the Petitioner has estimated the depreciation on the Gross Fixed assets reduced by grants. The Petitioner has calculated depreciation on GFA based on the Capitalization plan for FY 2023-24.
- 4.14.2 The Petitioner would like to clarify that while claiming the depreciation the value of Land and addition thereon is reduced from the opening value and additions during the year.
- 4.14.3 As per the standard practice, the Petitioner is not to be allowed any depreciation on account of assets that has been capitalized through grants. Therefore, the Petitioner has reduced the Depreciation on the assets, which were added through grants.
- 4.14.4 Below is the table representing the calculations for claiming depreciation for FY 2023-24.

Table 65: Depreciation on GFA for APR (in INR Crore)

Sl. No.	Particulars	Approved for FY 2023-24 (ARR)	Projected for FY 2023-24
1	Gross fixed assets of the beginning of the year	21343.03	22561.47
2	Less: Value of land	-	1047.37
3	Net opening GFA (excl. land)	-	21,514

Sl. No.	Particulars	Approved for FY 2023-24 (ARR)	Projected for FY 2023-24
4	Additions during the year	843.26	1,584
5	Employee cost capitalised	-	-
6	IDC	-	-
7	Closing GFA	22186.29	23,098.15
8	Average GFA	21764.66	22,306.13
9	Weighted Average Rate of Depreciation	4.04%	4.79%
10	Gross Depreciation at the end of the year	879.55	1,068.89
11	Opening grants	12608.38	11,898
12	Grants during the year	395.86	215
13	Adjustment for assets sold/discarded etc	-	-
14	Total Grants	13004.24	12,113.85
15	Average Grants	12806.31	12,006.13
16	Weighted Average rate of Depreciation	4.04 %	4.88%
17	Depreciation on Grants used for GFA	517.52	585.32
18	Net Depreciation of GFA on loans (10-17)	362.02	483.56

4.14.5 Therefore, in the light of the above facts and calculations, it is requested to the Hon'ble Commission to approve the above given figure of INR 483.56 Crore towards depreciation on Fixed Assets for FY 2023-24

4.15 Return on Equity

4.15.1 The Regulation 27 of BERC (Multi Year Distribution Tariff) Regulations, 2021 provides for calculation of Return on Equity as demonstrated as under:

- (i) *Return on equity shall be computed on 30% of the capital base or actual equity, whichever is lower. Provided that assets funded by consumer contribution, capital subsidies/ grants and corresponding depreciation shall not form part of the capital base. Actual equity invested in the Distribution Licensee 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 after put to use.

(ii) I Return on equity shall be computed at the rate of 15.5% for the project which is commissioned w.e.f. 01.04.2016 and further incentive equivalent to 0.5% will be allowed in the form of RoE, if the project is completed within original schedule period. However, Return on Equity for the project commissioned prior to 01.04.2016 shall be allowed at the rate of 14%.

4.15.2 The Petitioner has calculated return on equity on the basis of the closing balance of fixed assets as claimed in True-up for FY 2022-23. Further, RoE shall be allowed @14% on the net capital base as on 31.03.2016 and @15.50% on the net capital base w.e.f. 01.04.2016.

4.15.3 The table below demonstrates the calculation for Return on equity:-

Table 66: Return on equity for FY 2023-24 (in INR Crore)

Particulars	Approved in ARR FY 2023-24	Projected for FY 2023-24
Closing equity to end of 31.03.2016	440.86	440.86
Rate of return on equity %	14.00%	14.00%
Return on Equity	61.72	61.72
Equity with effect from 1st April 2016		
Opening equity	2198.48	2262
Equity addition during the year	134.22	406
Closing equity	2332.70	2668.24
Average equity	2265.59	2465.00
Rate of return on equity	15.50%	15.50%
Return on equity	351.17	382.07
Total Return on equity	412.89	443.79

4.15.4 In the light of above facts, the Petitioner requests the Hon'ble Commission to approve INR 443.79 Crore towards return on equity for FY 2023-24.

4.16 Interest on Consumer Security Deposit

4.16.1 The Petitioner has taken the opening balance of consumer security deposit actually paid as per the audited financial statements for FY 2022-23.

4.16.2 It has been assumed that the additions to the balance of consumer security deposits is as per actual addition in FY 2022-23. Therefore, INR 14.25 Crore is considered as addition in consumer security deposits for FY 2022-23. The RBI rate is adopted is 5.05% (<https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=11897&Mode=0>)

Table 67: Interest on consumer security deposit (in INR Crore)

S. No.	Particulars	Approved for FY 2023-24	FY 2023-24 (RE)
1	Opening Security Deposit	452.99	450.71
2	Addition / (Deletion) during the year	16.54	14.25
3	Closing Security Deposit	469.53	464.96
4	Average Security Deposit (1+3)/2	461.26	457.84
5	RBI Bank Rate	5.05%	6.75%
6	Interest on Security Deposit	23.29	30.90

4.16.3 The Petitioner requests Hon'ble Commission to approve the computation of interest on security deposit for FY 2023-24 .

4.17 Interest on Working Capital

4.17.1 The Petitioner has computed the amount of interest on Working capital for FY 2023-24 as per Regulation 26 of Bihar Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2021.

"The Distribution Licensee shall be allowed interest on estimated level of working capital for the financial year, computed as follows:

a) Two months equivalent of expected revenue

b) Maintenance spares @40% of R&M expenses for one month:

(iii) Lesi) Power purchase cost, transmission charges and load dispatch charges of one month

(ii) Depreciation, return on equity and contribution to contingency reserves equivalent to two months

(iii) Security deposits from consumers, if any

Provided that the 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. Provided further that interest shall be allowed on consumer security deposits and security deposits from Distribution System users held during the year at the Bank Rate as of the date on which petition for determination is filed. The interest allowed shall be subject to true up at weighted average Bank Rate of the concern Financial Year. Provided also that if the State Government is providing resource gap grant and/or direct subsidy to consumers, the working capital shall be reduced by two months equivalent of that amount.

4.17.2 The Petitioner has not considered any grant against disallowed power purchase for low distribution loss, since the support in terms of OFR by State Govt. is being infused in terms of equity and not in terms of grant.

- 4.17.3 The interest on working capital is calculated at the rate of 9.45% which is SBI one-year MCLR rate at the date of filing of the Petition plus 150 basis points.
- 4.17.4 In addition, it is pertinent to note that the Petitioner has taken short term loans from REC and PFC for payment of Power Purchase liability. In addition to it there are other short term loans like bank overdraft etc. on which Petitioner is bearing huge interest burden.
- 4.17.5 In the light of the above facts the Petitioner would submit that it is incurring the interest on working capital at a higher level than as calculated as per normative requirement.

Table 68: Interest on working capital for APR (in INR Crore)

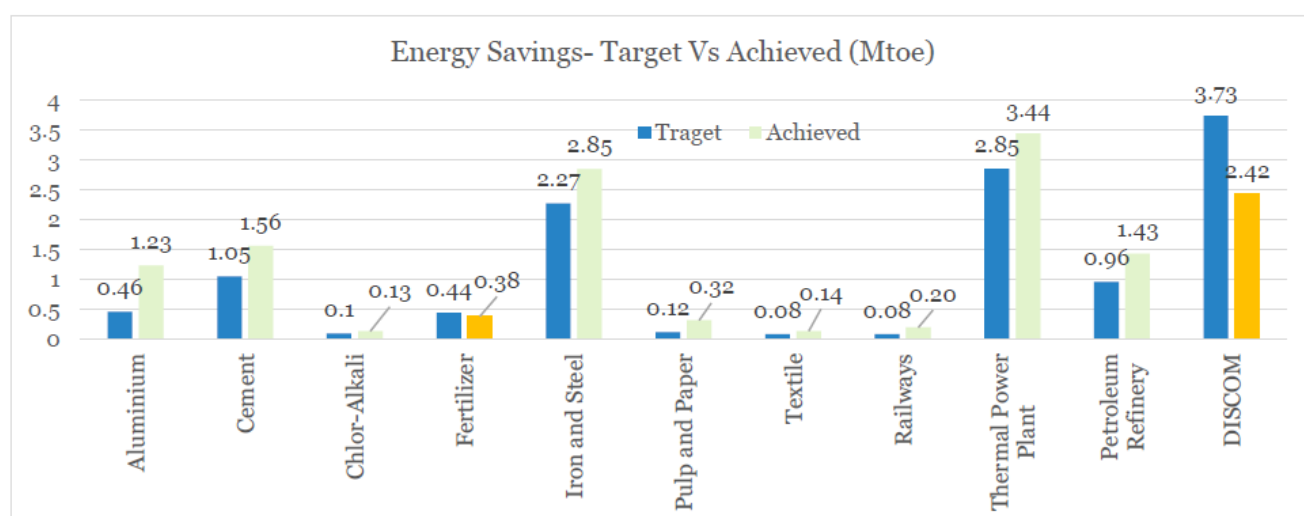
Sl. No.	Particulars	Approved for FY 2023-24	Projected for FY 2023-24 (RE)
1	Two months equivalent expected revenue	1971.04	2,190.42
2	Maintenance spares @40% of R&M expenses for one month	8.82	8.89
3	Sub-total (1+2)	1979.86	2199.32
4	Less:		
(i)	Power purchase cost, transmission charges and load dispatch charges of one month	883.75	1,262.07
(ii)	Depreciation, return on equity and contribution to contingency reserve	129.15	155
(iii)	Resource Gap grant / subsidy for two months	602.23	3,050.50
(iv)	Security Deposit from consumers	469.53	439
5	Sub-total (5(i)+5(ii)+5(iii)+5(iv))	2084.66	5249.82
6	Net working capital requirement (4-6)	(104.80)	(2,706.95)
7	Rate of interest %	9.55%	10.05%
8	Interest on working capital (7*8)		-

- 4.17.6 The Petitioner requests Hon'ble Commission to approve the interest on working capital at INR 0.00 Crore for FY 2023-24 .

4.18 Energy Saving Certificate (ESCerts)

- 4.18.1 Perform, Achieve and Trade (PAT) is a regulatory instrument to reduce Specific Energy Consumption in energy intensive industries, with an associated market based mechanism to enhance the cost effectiveness through certification of excess energy saving which can be traded. PAT is a mechanism for improvements in energy efficiency of energy intensive industries. Specific high energy intensive industries are identified as Designated Consumers (DCs) within certain key sectors.
- 4.18.2 The Petitioner hereby submit the Hon'ble Commission that the 'Distribution Licensee' was also included as DCs under second cycle of PAT. PAT Cycle II commenced from 1st April, 2016 and was completed on 31st March 2019. Implementation of PAT cycle -II has resulted into total energy savings of about 14.08 MTOE translating into avoiding of about 68 million tonne of CO2 emission.

PAT Sector (Demand Side)	PAT Sector (Supply Side)	Number of PAT DCs analyzed for M&V	Energy Savings Achieved (Mtoe)	% Share of Savings (Sector-wise)	% Share of Savings (Demand & Supply wise)
Aluminium		11	1.226	8.7%	48.24%
Cement		99	1.559	11.1%	
Chlor-Alkali		24	0.133	0.9%	
Fertilizer		36	0.383	2.7%	
Iron and Steel		67	2.845	20.2%	
Pulp and Paper		24	0.315	2.2%	
Textile		85	0.135	1.0%	
Railways		22	0.196	1.4%	
	Thermal Power Plant	118	3.435	24.4%	51.76%
	Petroleum Refinery	17	1.430	10.2%	
	DISCOM	39	2.423	17.2%	
Grand Total		544	14.08	100%	100%



4.18.3 The Monitoring and Verification (M&V) Audit of the Petitioner has been carried out by FICCI in accordance with the Energy Conservation (Energy Consumption Norms and standards for Designated Consumers, Forms, Time within which, and Manner of Preparation and Implementation of Scheme, Procedure for Issue of Energy Savings Certificate and Value of Per Metric Ton of Oil Equivalent of Energy Consumed) Rules, 2012, Amendment Rules 2016, Amendment Rules 2018 and Monitoring and Verification Guidelines for DISCOM sector.

During M&V Audit of the Petitioner, following were the observations

4.18.4 :-

- The DC (Designated Consumer) were given a Target to reduce its T&D Loss from 33.66% in FY 2014-15 to 30.81% in FY 2018-19 as notified, net input Energy (baseline) 6019 Million kWh.
- BEE revised the target of DC and intimates the same to DC individually. The revised

target by BEE was given to reduce its T&D Loss from 37.89% in FY 2014-15 to 20% in FY 2018-19 as notified, net input Energy (baseline) 6847.71 Million kWh. The T&D loss determined in the Form-1 of the sector specific pro-forma for FY 2018-19 was calculated as 27.77 %.

- By considering revised target by BEE, DC achieved the PAT Target in PAT Cycle-II. The DC was required to Purchase for Energy Savings Certificates (ESCerts) of 45758 Nos.
- Subsequently, Ministry of Power in exercise of the powers conferred by clauses (g) and(n) of Section 14 of the Energy Conservation Act, 2001 and in consultation with BEE made amendments in the notification no. S.O. 1264(E) dated ³¹st March 2016 where the T&D Loss Target of nos. of DISCOM including of the Petitioner was amended vide its new notification no. S.O. 5045(E) date^d 1st October 2018. As per the said notification BEE intimated the revised T&D Loss Target to the DC individually. In the amended target, the Petitioner was directed to reduce its T&D Loss from 37.89% in FY 2014-15 to 20% by end of FY 2018-19 The base line energy net input energy to DC for FY 2014-15 was amended to 6847.71 MU.
- During M & V Audit, the T&D loss was verified in the Form-1 of the sector specific pro-forma for FY 2014-15 was 38.43 % and verified Input Energy was 5270.96 MU. As discussed with BEE officials, the BEE intervention was required to revise the Baseline T & D Loss as well as targeted T & D Loss and Baseline Input Energy.
- By considering revised target by BEE, DC has not achieved the PAT Target in PAT Cycle-II and eligible for penalty of Energy Savings Certificates (ESCerts) of 45758 nos. of Energy Savings Certificates (ESCerts). The detailed calculation is furnished below.

a.1	Energy consumptions norms & standards in % of T&D losses for baseline year FY 2014-15 as notified	33.66	% of T&D Loss
a.2	Energy consumptions norms & standards in % of T&D losses for baseline year FY 2014-15 as Revised by BEE	37.89	% of T&D Loss
b.1	Net input Energy (baseline) as notified	6019	Million kWh
b.2	Net input Energy (baseline) as notified (Revised)	6847.71	Million kWh
c.1	Energy consumptions norms & standards in % of T&D losses for Target year FY 2018-19 as notified	30.81	% of T&D Loss
c.2	Energy consumptions norms & standards in % of T&D losses for Target year FY 2018-19 as Revised by BEE	20	% of T&D Loss
d.1	Difference of % of T&D Losses in Baseline Year and % of T&D Losses in Target Year as notified	2.85	% of T&D Loss (a.1-c.1)

d.2	Difference of % of T&D Losses in Baseline Year and % of T&D Losses in Target Year as Revised byBEE	17.89	% of T&D Loss (a.2-c.2)
d.3	Normalised % of T&D Losses (Achieved in the target year)	27.77	% of T&D Loss
e.	Energy Saving Certificates to be issued or deficit	-45758	Nos [(c.2-d.3)*b2*860/10/100]

- Monitoring & Verification Audit was completed as per PAT Rules and guidelines given by BEE using the latest DISCOM specific pro forma filled by DC team and sent to SDA / BEE for further review and acceptance.

Both the discoms of Bihar- NBPDC and SBPDCL submitted to Bureau of Energy Efficiency (BEE) that Discoms do not contribute to Green House Gas emissions and are in continuous evolving phase on account of various projects like Smart Metering, Revamped Distribution Sector Scheme (RDSS) etc. Therefore, Discoms may kindly be exempted from PAT Cycle-II .

The office memorandum no. 45/01/ESCerts Trading/22-23 dated 27.06.2023 of BEE read as under

- :-

“This is with reference to the last OM no 45/01/ESCerts Trading/22-23 issued on 6th February 2023 for resumption of trading from 14th Feb’2023 onwards and OM no. 45/01/ESCerts Trading /22-23 dated 10th March .2023 regrding declaring last date for th trading of ESCerts.

*In this regard, it is to intimate **all the DCs of PAT Cycle II, that Trading of ESCerts is further extended till 1st August, 2023. This will be last and final extension.***

DCs (buyers) who will not comply with the entitled obligations shall be liable to pay penalty after 1st August, 2023.

....

.....

“

A letter was also received from SDA (State Designated Agency)-BREDA regarding purchase of ESCerts.

Since, nothing was heard from BEE and last date of transaction was 01.08.2023, both discoms decided to buy 22,500 ESCert for Exchange IEX and informed to BEE.

- Total expense of INR 10.04 Crore was incurred to the Petitioner to buy 45,758 ESCerts.
- An email was received from BEE dated 12.10.2023 to submit Form-D
- Like RECs, this may be passed on in the ARR of the discoms.

4.18.5 The Petitioner requests Hon’ble Commission to approve the expense towards purchase of ESCerts at INR 10.04 Crore for FY 2023-24 .

4.19 Non-Tariff Income

4.19.1 Non-Tariff income includes bank charges, interest on investments and bank balances, miscellaneous recoveries etc. The Petitioner has projected non-tariff income for FY 2023-24 on the basis of ~10% escalation on the non-tariff income in FY 2022-23 (except for rebate on power purchase which has been calculated as 1% of the total cost of power purchase, DPS which is expected to show a 100% YOY growth, and a one-time revenue of Special COVID rebate, Meter Rent and Excess provision written back). The Non-tariff income has been projected at such a rate due to the reasons that the DISCOMs while implementing Smart prepaid meters in the state in the coming years are expecting arrear and DPS recovery at a higher rate as compared to previous years which is further expected to increase the NTI at a higher rate in the coming years.

4.19.2 The Petitioner has further deducted the cost of funding the DPS from the total Non-Tariff Income and calculated the net Non-tariff income as follows:

Table 69: Net-Non-tariff income approved in ARR (in INR Crore)

Particulars	Approved for FY 2023-24
Base Non-tariff income	1175.54
Less: Rebate included in the above	119.50
Sub-total	1056.04
Add: Additional income on account of supervision charges due to release of new connections	8.77
Add: Rebate @1% on total power purchase (incl. transmission charges) for FY 2023-24	105.20
Non-tariff income	1170.01

Table 70: Net-Non-tariff income for APR (in INR Crore)

Particulars	FY 2023-24 (RE)
Interest on Advances to Suppliers/Contractors	217.11
Interest on Saving Accounts	11.29
Interest on Staff Loan & Advances	24.06
Interest Income	252.46
Delayed Payment Surcharge from Consumers	569.09
Income From Interest on TDS Refund	-
Income from sale of tender paper	0.16
Miscellaneous Receipts	16.83
Re-imbursment from Disaster Management	26.09
Rebate and Discount Received	35.59
SCED benefits	14.62
Consumer contribution income	6.92

Particulars	FY 2023-24 (RE)
Rental income	2.31
Income from sale of Scrap	4.42
Supervision Charge	13.54
Miscellaneous charges from Consumers	43.19
Other Income	732.76
Meter Rent/ Service Line Rental	
Excess provision written back	
Miscellaneous Recoveries	22.28
Others	22.28
Total Non-tariff income	1,007.50
Delayed Payment Surcharge from Consumers	569.09
Principal amount on which DPS Charged	3,161.63
Interest Rate of funding DPS	10.05%
Interest on funding Principal	317.74
Net Non-Tariff Income	689.76

4.19.3 The Petitioner requests Hon'ble Commission to approve net non-tariff income for FY 2023-24 amounting to INR 689.76 Crore.

4.20 Interest on Normative Debt

4.20.1 The Petitioner has calculated normative interest on loans on 70% of the addition in GFA in FY 2023-24.

4.20.2 The addition to loan as per the estimations is INR 1,425 Crore which is 70% of the capitalization addition during the year excluding contribution from grant.

4.20.3 The interest on normative debt is calculated at the rate of 9.63 % i.e. weighted average rate on project Loans. The detailed calculation of the weighted average rate of interest is provided in the table below: -

Table 71: Computation of weighted average rate of interest on project loans (in INR Crore)

Particulars	Opening balance	Rate	Addition during the year	Repayment during the year	Closing balance	Average loan	Interest paid
REC (RGGVY) Term Loan	207	10.50%		21	186	196	21
REC (R-APDRP-PART-B) Term Loan	24	9.00%		2	22	23	5

PFC (COUNTER PART FUNDING) Term Loan	76	10.63%		7	69	73	8
State Govt.- Non-Plan Loan	296	10.50%	42	-	338	317	-
BSPHCL (ADB) Loan	56	10.50%	-	-	56	56	7
REC (DDUGJY)	1,033	9.56%		1	1,032	1,032	95
REC (IPDS)	303	8.83%		1	302	302	26
Smart Metering	-	9.30%	1,384	-	1,384	692	43
Total	1,994	-	1,425	31	3,388	2,691	205
Average Interest Rate on Loan							9.63%

Table 72: Interest on Normative debt (in INR Crore)

Particulars	Approved for FY 2023-24 (ARR)	Projected for FY 2023-24 (RE)
Opening loan balance	5338.05	5,376
Addition during the year	313.18	948
Normative Repayment	362.02	484
Closing Loan	5289.20	5,841
Average Loan	5313.62	5,608
Interest Rate	10.29%	9.63%
Interest Charge	546.77	540.32

4.20.4 Therefore, the Petitioner requests the Hon'ble Commission to approve interest on normative debt at INR 540.32 Crores.

4.21 Other Finance Charges

4.21.1 Other Finance charges includes power factor rebate, Interest to suppliers/ contractors, rebate to consumers etc. The finance charges for FY 2023-24 is calculated by escalating the Finance charges for FY 2022-23 by 10%.

4.21.2 The below table demonstrates the Finance charges estimated for FY 2023-24 :-

Table 73: Other finance charges (in INR Crore)

Particulars	Approved for FY 2023-24	Projected for FY 2023-24 (RE)
Other Finance Charges for the base year	51.96	57.06
Escalation Considered	10%	10%
Escalated Amount	5.20	5.71
Finance Charges	57.16	62.77

4.21.3 The detailed calculation of other finance charge for base year of INR 57.06 Crore is provided in the True-up section of this Petition.

4.21.4 Therefore, the Petitioner requests the Hon'ble Commission to approve the finance charges of INR 62.77 Crore for FY 2023-24.

4.22 Revenue from Sale of Power at Existing Tariff

4.22.1 Following is the category wise revenue based on the existing tariff for FY 2023-24 based on existing tariff:

Table 704: Revenue from sales of power at existing tariff for FY 2023-24 (in INR Crore)

Particular	Sales (MU)	Total Revenue (Rs. Cr)
Domestic	9,038.07	7,618
Kutir Jyoti	2,815.61	2,235
Unmetered (Now Metered)	-	-
Metered 0-50	2,815.61	2,235
DS I Rural	4,101.05	3,489
First 50 Units	1,993.58	1,641
Above 50 Units	2,107.47	1,848
DS II Demand Based	2,121.04	1,895
First 100 Units	1,774.48	1,541
Above 100 Units	346.56	354
DS III	0.36	0.38
Non_Domestic Service	2,053.59	2,223
NDS-I - Metered Now Demand Based	712.24	634
First 100 Units	326.50	283
Above 100 Units	385.74	351
NDS -I - Demand Based	1,341.35	1,589
Contract Demand <0.5 kW	2.05	2
Contract Demand >0.5 kW	1,339.31	1,587
First 100 Units	301.81	330
Above 100 Units	1,037.49	1,257
Street Light Services	119.11	238
SS Metered	11.68	11
SS Unmetered	107.44	227
Irrigation & Allied Services	1,448.15	1,133
IAS I	1,352.37	1,018
Unmetered	8.6941	10
Metered	1,343.68	1,009
IAS II	95.77	115
Public Service Connections	510.35	481
Public Water Works	41.59	68
Har Ghar Nal	468.76	413
Low Tension Industrial Services	502.56	765

Particular	Sales (MU)	Total Revenue (Rs. Cr)
LTIS I (0-19 kW)	463.00	697
LTIS II (>19 –W - 74 kW)	39.57	68
LT Electric Vehicle Charging Station	9.63	9.49
High Tension	1,058	1,314.33
HTS-I - 11 kV	615.70	786
HTS –I - 33 kV	288.10	340
HTS III -132 kV	111.20	153
HTS –V - 220 kV	-	-
HTSS	43.11	35
ITIS (Industrial) – I (11 kV)	2.49	3
HTIS (Industrial)– II (33 kV)	3.47	4
HTIS (Industrial) – III (132 kV)	-	-
HTIS (Industries)-IV (220 kV)	18.25	25
HTIS (Oxygen Manufacturers)-11 KV	0.10	0
HTIS (Oxygen Manufacturers)-33 KV	-	-
Railway Traction Services	132.21	165
Nepal	314.22	242
HT Electric Vehicle Charging Stations.	22.58	20.07
Sale to Other State (Banking)	-	-
Total	15,232.89	14,241.99

4.23 Net ARR and Revenue Gap for FY 2023-24

- 4.23.1 The Gross ARR for the distribution company consist of the power purchase costs, interest and finance costs, O&M costs, depreciation and interest on working capital.
- 4.23.2 The below tables demonstrate the net gap for FY 2023-24 considering all the expenses estimated for the entire year reduced by revenue from sale of power and Other income.
- 4.23.3 Following is the total revenue requirement for FY 2023-24 against allocation from total approved revenue requirement by the Hon'ble commission for FY 2023-24.

Table 715:Revenue requirement for FY 2023-24 (in INR Crore)

S. No	Particulars	Approved in ARR of FY 2023-24	FY (2023-24) (RE)
1	Net Purchase of power	-	9,168.47
2	Purchase of power	8981.20	11,110.93
3	Revenue from Sale of Surplus Power		1,942.46
4	PGCIL & Other transmission charges	890.11	1162.11
5	BSPTCL transmission charges	541.25	615.73
6	BGCL transmission charges	100.91	88.36

S. No	Particulars	Approved in ARR of FY 2023-24	FY (2023-24) (RE)
7	SLDC charges	6.15	2.50
8	RECs Purchases	-	-
9	O & M Expenses (A+B+C+D)	990.00	1,215.32
A	Employee expenses	481.29	490.09
B	R&M expenses	264.65	266.78
C	A&G expenses	218.77	432.95
D	Holding company expenses	25.28	25.51
10	Depreciation	362.02	483.56
11	Interest on loan	546.77	540.32
12	Other finance charges	57.16	62.77
13	Return on equity	412.89	443.79
14	Interest on SD	23.29	30.90
15	Contingency Reserve	-	-
16	Interest on working capital	-	-
17	Energy Savings Certificate (ESCerts)		10.00
18	Demand Side Management		-
19	Bad & doubtful debts		-
20	Total Revenue requirement	-	13,823.84
21	Less: Non-tariff income	(1170.01)	689.76
22	ARR for the year	11741.75	13,134.08
23	Revenue from existing tariff	13995.63	14,226.90
24	Gap / (Surplus)	(2253.88)	(1,092.82)
25	Add: Impact of Order (review) dated 07.11.2022 in Case no.7/2022 (NBPDC) and 8/2022 (SBPDCL) relating truing up for FY 2020-21 along with carrying cost	574.16	-
26	(Gains)/Loss on account of controllable factors absorbed by licensee	-	-
27	Treatment of AT&C loss subsidy	-	-

S. No	Particulars	Approved in ARR of FY 2023-24	FY (2023-24) (RE)
28	Revenue Gap/ (Surplus) of previous FY	(195.02)	(195.02)
29	Net Gap / (Surplus)	(1874.74)	(1,287.84)

4.23.4 In the light of the above explanation the Petitioner would request the Hon'ble Commission to approve INR 1,287.84 Crore as net revenue surplus in FY 2023-24.

5 Annual Revenue Requirement (ARR) for FY 2024-25

5.1 Preamble

5.1.1 In this section the Petitioner has projected the Annual Revenue Requirement for the FY 2024-25. Rational estimation of category-wise energy sales for the control period is essential to arrive at the optimum quantum of power to be purchased and the likely revenue by sale of energy. Likewise, it is essential that the cost components driving ARR should be projected in an optimal manner. The below sections deal with the projections of ARR components for FY 2024-25.

5.2 Historical Assessment of Number of Consumers and Sales

5.2.1 This section examines in detail the consumer category-wise energy sales projected for the Petitioner in this Petition for FY 2024-25.

5.2.2 The Petitioner serves ~119 lakh consumers (as on 31st March 2023). The electricity consumers in the DISCOM have increased by approximately 5.45% over the last year. The historical trend in the number of consumers serviced by the DISCOM as per the data available in its audited books of accounts, has been captured in the following table.

Table 72: Category wise number of consumers over the last six FYs

Sr. No	Category of Consumers	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23
1	Domestic	5,660,323	6,371,581	8,692,899	9,465,335	9,984,126	10,415,432	10,785,533
A	Kutir Jyoti	2,516,282	2,946,325	3,788,049	4,015,781	4,162,883	4,237,872	4,217,514
i	Unmetered (Now Metered)	0	0	71,780.00	66,193.00			
ii	Metered 0-50	2,516,282	2,946,325	3,716,269	3,949,588	4,162,883	4,237,872	4,217,514
B	DS I Rural	1,967,498	2,167,314	3,685,829	4,258,986	4,601,721	4,841,296	5,177,639
i	Unmetered (Now Metered)	0	0	455,517	410,317			
ii	Metered (Now Demand Based)	1,967,498	2,167,314	3,230,312	3,848,669	4,601,721	4,841,296	5,177,639
a	First 50 Units							
b	51-100 Units							
c	101-200 Units							
d	Above 200 Units							
C	DS II Demand Based	1,176,543	1,257,942	1,219,021	1,190,527	1,219,455	1,336,193	1,390,297
i	First 100 Units							
ii	101-200 Units							
iii	201-300 Units							
iv	Above 300 Units							

Sr. No	Category of Consumers	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23
D	DS III				41	67	71	83
2	Non_Domestic Service	294,667	316,217	404,723	487,545	609,912	715,048	834,977
A-NDS I - Metered Now Demand Based		80,110	94,795	128,606	195,954	274,524	361,635	457,453
i	First 100 Units							
ii	101-200 Units							
iii	Above 200 Units							
B	-DS II - Demand Based	214,557	221,422	276,117	291,591	335,388	353,413	377,524
i	Contract Demand <0.5 kW	1331.9771 99	1374.5953 54	1081	1942	2173	2194	2,364
ii	Contract Demand >0.5 kW	213,225	220,047	275,036	289,649	333,215	351,219	375,160
a	First 100 Units							
b	101-200 Units							
c	Above 200 Units							
3	Street Light Services	255	646	1,253	1,044	1,255	1,884	2,239
A	SS Metered	142	306	299	301	339	420	522
B	SS Unmetered	113	340	954	743	916	1,464	1,717
4	Irrigation & Allied Services	14,158	15,645	31,894	79,818	108,224	132,548	190,341
A	IAS I	9,147	10,416	27,429	74,706	101,996	126,217	183,992
i	Unmetered	338	385	4845	4677	4678	4,666	4,601
ii	Metered	8,809	10,031	22,584	70,029	97,318	121,551	179,391
B	IAS II	5,011	5,229	4,465	5,112	6,228	6,331	6,349
i	Metered (Now Demand Based)	5,011	5,229	4,465	5,112	6,228	6,331	6,349
5	Public Service Connections	208	973	1,239	11,453	36,322	51,049	56,269
A	Public Water Works	208	973	1,239	1,586	1,669	1,799	2,014
B	Har Ghar Nal				9,867	34,653	49,250	54,255
6	Low Tension Industrial Services	12,246	24,267	32,374	41,216	53,891	65,642	79,005
A	LTIS I (0-19 kW)	11,593	23,623	31,626	40,314	52,823	64,577	77,807
B	LTIS II (-19 kW - 74 kW)	653	644	748	902	1,068	1,065	1,198
7	LT Electric Vehicle Charging Station							104
8	HT-General	675	775	993	1,111	1,156	1,339	1,447
A	HTS (General)- I (11 kV)	643	735	945	1,058	1,103	1,276	1,378
B	HTS (General)- II (33 kV)	25	32	39	46	46	57	62
C	HTS (General)- III (132 kV)	2	3	4	3	3	3	4
D	HTS (General)- IV (220 kV)						-	-

Sr. No	Category of Consumers	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23
E	HTSS – (33 kV/11 kV)	5	5	5	4	4	3	3
9	HT-Industrial Services	-	-	-	-	-	-	-
A	HTIS (Industrial) – I (11 kV)							
B	HTIS (Industrial)– II (33 kV)							
C	HTIS (Industrial) – III (132 kV)							
D	HTIS (Industries)-IV (220 kV)							
E	HTIS (Oxygen Manufacturers)							
10	Railway Traction Services	7	8	8	4	6	5	8
A	RTS	7	8	8	4	6	5	8
11	Nepal	1	1	1	1	1	1	1
A	Nepal	1	1	1	1	1	1	1
12	DF	313499	344423					
13	HT Electric Vehicle Charging Stations.							
10	Total	6,296,039	7,074,536	9,165,384	10,087,527	10,794,893	11,382,948	11,949,924

5.2.3 The connected load of the consumers has increased by approximately 8.57% over the last FY. The historical trend in the connected load of the consumers serviced by the Petitioner has been captured in the following table:

Table 73: Connected Load over the last six FYs

Category of consumers	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23
Domestic	4,588,669	6,399,640	6,921,189	7,853,370	8,224,510	8,659,527
Kutir Jyoti	319,890	548,952	595,038	1,042,116	1,056,669	1,045,760
DS I Rural	2,184,659	3,754,208	4,319,966	4,674,332	4,904,360	5,256,907
DS II Demand Based	2,084,120	2,096,481	2,006,097	2,136,733	2,263,216	2,356,372
DS III (Optional-Demand Based)			88	189	266	488
–NDS I - Metered Now Demand Based	100,843	142,811	220,760	333,257	469,827	631,207
–DS II - Demand Based	557,785	642,021	638,424	959,524	986,292	1,050,881
Contract Demand <0.5 kW	682.64	646.00	1,150.05	1,064.77	1,207	1,295
Contract Demand >0.5 kW	557,103	641,375	637,274	958,459	985,085	1,049,586
Street Light Services	10,089	14,692	12,969	15,416	20,249	25,457

Category of consumers	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23
SS Metered	4,386	3,584	2,839	2,784	3,491	4,099
SS Unmetered	5,703	11,108	10,130	12,632	16,758	21,358
Irrigation & Allied Services	87,243	111,321	232,774	282,384	324,192	421,645
IAS I	31,406	62,467	180,784	229,139	270,302	368,711
IAS II	55,837	48,854	51,991	53,245	53,891	52,934
Public Service Connections	18,074	19,736	43,731	101,053	135,340	152,250
Public Water Works	18,074	19,736	21,397	23,975	25,114	29,403
Har Ghar Nal			22,334	77,078	110,226	122,847
Low Tension Industrial Services	242,594	313,066	385,075	504,708	606,096	723,768
LTIS I (0-19 kW)	199,993	266,175	333,145	444,997	546,047	658,976
LTIS II (-19 kW - 74 kW)	42,601	46,891	51,930	59,711	60,049	64,793
LT Electric Vehicle Charging Station						299
HT-General	252,724	299,391	310,491	324,028	389,191	427,222
HTS (General)- I (11 kV)	157,336	200,826	213,868	226,705	260,198	282,710
HTS (General)- II (33 kV)	42,481	54,378	62,323	63,023	77,923	85,942
HTS (General)- III (132 kV)	42,170	30,500	22,500	22,500	41,670	49,170
HTS (General)- IV (220 kV)					-	-
HTSS – (33 kV/11 kV)	10,737	13,687	11,800	11,800	9,400	9,400
HT-Industrial Services	-	-	-	-	-	-
HTIS (Industrial) – I (11 kV)	-	-	-	-	-	-
HTIS (Industrial)– II (33 kV)	-	-	-	-	-	-
HTIS (Industrial) – III (132 kV)	-	-	-	-	-	-
HTIS (Industries)-IV (220 kV)	-	-	-	-	-	-
HTIS (Oxygen Manufacturers)	-	-	-	-	-	-
Railway Traction Services	69,900	69,900	36,600	48,300	37,500	60,000
RTS	69,900	69,900	36,600	48,300	37,500	60,000
Nepal	-	-	-	-	-	-
Nepal	-	-	-	-	-	-
DF	477,915	-	-	-	-	-
HT Electric Vehicle Charging Stations.	-	-	-	-	-	-
Total	6,405,836	8,012,578	8,802,013	10,422,039	11,193,198	12,152,255

5.2.4 This increase in the number of consumers leads to further increase in energy sales under various categories of consumers. Following table covers the energy sale trend of the Petitioner in the past few years –

Table 74: Category wise sales for the past few years (in MU)

Category of consumers	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23
Domestic	4,934.36	5,511.78	7,515.56	7,947.81	8,191.10	8,544.96
Kutir Jyoti	1,573	1,421	2,539	2,368	2,663.39	2,704.94

Category of consumers	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23
DS I Rural	2,230	2,067	3,421	3,855	3,645.47	3,827.97
DS II Demand Based	1,132	2,024	1,556	1,724	1,881.97	2,011.71
DS III	0.01		0.02	0.07	0.26	0.34
–NDS I - Metered Now Demand Based	112	132	149	234	341.49	598.88
–DS II - Demand Based	578	943	888	927	1,167.39	1,245.94
Contract Demand <0.5 kW	1	3	1.74	1.95	1.67	1.83
Contract Demand >0.5 kW	577	940	885.81	925.44	1,165.71	1,244.11
Street Light Services	20	27	35	31	99.90	99.13
SS Metered	8	5	6	5	10.85	9.81
SS Unmetered	12	22	29	26	89.05	89.32
Irrigation & Allied Services	163	153	118	313	467.49	1,005.72
IAS I	14	28	80	276	364	916
IAS II	148	124	39	37	103.73	89.87
Public Service Connections	24	27	52	110	240.27	436.14
Public Water Works	24	27	21	36	59.50	37.36
Har Ghar Nal			30	74	180.77	398.77
Low Tension Industrial Services	192	214	227	341	372.39	439.26
LTIS I (0-19 kW)	172	177	201	310	338.58	402.48
LTIS II (~19 kW - 74 kW)	20	37	26	31	33.81	36.78
LT Electric Vehicle Charging Station						0.05
HT-General	468	593	604	669	768.42	884.85
HTS (General)- I (11 kV)	272	375	383	416	483.29	549.74
HTS (General)- II (33 kV)	95	107	118	143	187.72	219.45
HTS (General)- III (132 kV)	58	49	53	62	54.52	73.40
HTS (General)- IV (220 kV)					-	
HTSS – (33 kV/11 kV)	42	62	49	48	42.88	42.27
HT-Industrial Services	-	-	-	-	-	-
HTIS (Industrial) – I (11 kV)						
HTIS (Industrial)– II (33 kV)						
HTIS (Industrial) – III (132 kV)						
HTIS (Industries)-IV (220 kV)						
HTIS (Oxygen Manufacturers)						
Railway Traction Services	106	223	146	32	67.55	99.34
RTS	106	223	146	32	67.55	99.34
Nepal	1,363	1,355	708	632	630.85	314.22

Category of consumers	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23
Nepal	1,363	1,355	708	632	630.85	314.22
DF	785	315				
HT Electric Vehicle Charging Stations.						
SLDC Deviation					184.74	226.92
Sale to other state						
Sale to Sugar Mills					7.23	5.67
Sale to Solar Companies					0.59	0.63
Sale of Power to IEX through PTC					1841.95	2177.12
Sale of Power to IEX through BSPHCL					232.28	1446.28
Others					0.79	
Total	8,745	9,493	10,443	11,237	14,614.41	17,525.11

5.3 Projected Sales (MU), Number of Consumers and Connected Load for 2024-25

- 5.3.1 The DISCOM has already provided electricity access to all willing BPL households in urban areas and both APL & BPL households in rural areas under Saubhagya Scheme.
- 5.3.2 The Petitioner has projected the category-wise sales based on the CAGR of the previous years' data, the provisional sales along with the projected figures of FY 2023-24 as well as considering factors like available average consumption per consumer per month, new consumers to be added, population data, expected conversion of unauthorized connections, connected load factor and specific growth factors and wherever the data was incongruous such incongruity was ignored while projecting the load growth for the ensuing years.
- 5.3.3 The Petitioner submits that the forecast model projects the specific consumption level (consumption per consumer) appropriate for each customer category. The Petitioner submits that this forecast is based on expected growth relationships to income and price and effect of Demand Side Management.
- 5.3.3.1 The Petitioner also submits that the specific consumption level along with the number of consumers in each category gives the sales figure for that particular sub-category and the final detailed calculations estimate the connected load for each tariff category.
- 5.3.4 Segregation of the agricultural feeders will have a positive effect on the overall system stability as well as on demand side management. Hence an appropriate CAGR is assumed in the sales of agricultural category.
- 5.3.5 The initiatives taken by the DISCOM in providing connections under the Har Ghar Nal is already reflecting in the sales of the Petitioner and is further expected to increase the energy sales.
- 5.3.6 However, with release of huge number of connections to the rural households and left-over urban households in recent years under various State and Central Govt. schemes, the scope of adding new consumers is getting minimized. Therefore, lesser number of consumers are expected to be added in FY 2024-25. Taking the same into account, the growth in number of consumers for various categories have been considered at a lower rate as compared to previous years. The number of consumers projected over the next years is provided below:

Table 75: Category-wise no. of consumers projected for 2024-25

Category of Consumers	FY 2022-23 (Actual)	FY 2023-24 (APR)	FY 2024-25 (ARR)
Domestic	10,785,533	11,231,149	11,693,851
Kutir Jyoti	4,217,514	4,301,864	4,387,902
DS I Rural	5,177,639	5,492,088	5,825,635
DS II Demand Based	1,390,297	1,437,110	1,480,223
DS III	83	87	92
–NDS I - Metered Now Demand Based	457,453	523,119	575,431
–DS II - Demand Based	377,524	402,410	426,555
Contract Demand <0.5 kW	2,364	2,500	2,650
Contract Demand >0.5 kW	375,160	399,910	423,905
Street Light Services	2,239	2,608	2,781
SS Metered	522	603	675
SS Unmetered	1,717	2,005	2,105
Irrigation & Allied Services	190,341	272,741	353,946
IAS I	183,992	266,108	347,180
IAS II	6,349	6,634	6,766
Public Service Connections	56,269	64,725	68,027
Public Water Works	2,014	2,198	2,374
Har Ghar Nal	54,255	62,528	65,654
Low Tension Industrial Services	79,005	89,013	97,852
LTIS I (0-19 kW)	77,807	87,750	96,525
LTIS II (–19 kW - 74 kW)	1,198	1,264	1,327
LT Electric Vehicle Charging Station	104	224	280
HT-General	1,447	1,602	1,713
HTS (General)- I (11 kV)	1,378	1,513	1,613
HTS (General)- II (33 kV)	62	80	90
HTS (General)- III (132 kV)	4	6	7
HTS (General)- IV (220 kV)	-		
HTSS – (33 kV/11 kV)	3	3	3
HT-Industrial Services	-	5	5
HTIS (Industrial) – I (11 kV)		2	2
HTIS (Industrial)– II (33 kV)		1	1
HTIS (Industrial) – III (132 kV)		-	-
HTIS (Industries)-IV (220 kV)		1	1
HTIS (Oxygen Manufacturers)		1	1
Railway Traction Services	8	8	8
RTS	8	8	8
Nepal	1	1	1
Nepal	1	1	1

Category of Consumers	FY 2022-23 (Actual)	FY 2023-24 (APR)	FY 2024-25 (ARR)
DF			
HT Electric Vehicle Charging Stations.		3	6
Total	11,949,924	12,587,610	13,220,456

5.3.7 The Petitioner has also been making other efforts to enhance the overall power availability through renewable sources for the consumers of the State. This includes contracting additional power from various sources across the State and the country and enhancing the utilization of State's power transmission capacity for bringing it to the distribution network.

5.3.8 The category wise projections of energy sales for FY 2024-25, has been done taking into account the above factors.

Table 76: Category-wise sales projected for 2024-25

Sr. No	Category of Consumers	FY 2022-23 (Actual)	FY 2023-24 (APR)	FY 2024-25 (ARR)
1	Domestic	8,544.96	9,038.07	9,575.03
A	Kutir Jyoti	2,704.94	2,815.61	2,930.81
i	Unmetered (Now Metered)			
ii	Metered 0-50	2,704.94	2,815.61	2,930.81
B	DS I Rural	3,827.97	4,101.05	4,393.62
i	Unmetered (Now Metered)			
ii	Metered (Now Demand Based)	3,827.97	4,101.05	4,393.62
a	First 50 Units	2,830.96	1,993.58	2,135.80
b	51-100 Units	789.30	2,107.47	2,257.82
c	101-200 Units	207.71		
d	Above 200 Units	-	-	-
C	DS II Demand Based	2,011.71	2,121.04	2,250.21
i	First 100 Units	1,662.51	1,774.48	1,882.55
ii	101-200 Units	252.00	346.56	367.66
iii	201-300 Units	97.19		
iv	Above 300 Units		-	-
D	DS III	0.34	0.36	0.39
2	Non_Domestic Service	1,845	2,053.59	2,250.86
A-NDS I - Metered Now Demand Based		598.88	712.24	814.80
i	First 100 Units	492.01	326.50	373.52
ii	101-200 Units	68.10	385.74	441.28
iii	Above 200 Units	38.76		
B	-DS II - Demand Based	1,245.94	1,341.35	1,436.05
i	Contract Demand <0.5 kW	1.83	2.05	2.19
ii	Contract Demand >0.5 kW	1,244.11	1,339.31	1,433.86
a	First 100 Units	923.12	301.81	323.12
b	101-200 Units	98.77	1,037.49	1,110.74

Sr. No	Category of Consumers	FY 2022-23 (Actual)	FY 2023-24 (APR)	FY 2024-25 (ARR)
c	Above 200 Units	222.23		
3	Street Light Services	99.13	119.11	129.53
A	SS Metered	9.81	11.68	13.34
B	SS Unmetered	89.32	107.44	116.19
4	Irrigation & Allied Services	1,005.72	1,448.15	1,942.17
A	IAS I	916	1,352.37	1,840.57
i	Unmetered	4.62	8.69	9.95
ii	Metered	911.23	1,343.68	1,830.63
B	IAS II	89.87	95.77	101.60
i	Metered (Now Demand Based)	89.87	95.77	101.60
5	Public Service Connections	436.14	510.35	547.86
A	Public Water Works	37.36	41.59	45.82
B	Har Ghar Nal	398.77	468.76	502.05
6	Low Tension Industrial Services	439.26	502.56	561.86
A	LTIS I (0-19 kW)	402.48	463.00	519.48
B	LTIS II (-19 kW - 74 kW)	36.78	39.57	42.38
7	LT Electric Vehicle Charging Station	0.05	9.63	12.28
8	HT-General	884.85	1,058.10	1,176.54
A	HTS (General)- I (11 kV)	549.74	615.70	669.48
B	HTS (General)- II (33 kV)	219.45	288.10	332.06
C	HTS (General)- III (132 kV)	73.40	111.20	131.02
D	HTS (General)- IV (220 kV)			
E	HTSS - (33 kV/11 kV)	42.27	43.11	43.97
9	HT-Industrial Services	-	24	81
A	HTIS (Industrial) - I (11 kV)		2.49	2.54
B	HTIS (Industrial)- II (33 kV)		3.47	3.54
C	HTIS (Industrial) - III (132 kV)		-	-
D	HTIS (Industries)-IV (220 kV)		18.25	74.46
E	HTIS (Oxygen Manufacturers)		0.10	0.42
10	Railway Traction Services	99.34	132.21	159.50
A	RTS	99.34	132.21	159.50
11	Nepal	314.22	314.22	314.22
A	Nepal	314.22	314.22	314.22
12	DF			
13	HT Electric Vehicle Charging Stations.		22.58	184.25

Sr. No	Category of Consumers	FY 2022-23 (Actual)	FY 2023-24 (APR)	FY 2024-25 (ARR)
14	SLDC Deviation	226.92	226.92	226.92
15	Sale to other state		-	-
16	Sale to Sugar Mills	5.67	5.67	5.67
17	Sale to Solar Companies	0.63	0.63	0.63
18	Sale of Power to IEX through PTC	2177.12	2,177.12	2,177.12
19	Sale of Power to IEX through BSPHCL	1446.28	1,446.28	1,446.28
20	Others			
	Total	17,525.11	19,089.51	20,791.68

5.3.9 Further, the Petitioner has projected the connected load for FY 2024-25

Table 81: Category-wise connected load projected for 2024-25

Category of Consumers	FY 2022-23 (Actual)	FY 2023-24 (APR)	FY 2024-25 (ARR)
Domestic	8,659,527	9,169,299	9,702,178
Kutir Jyoti	1,045,760	1,077,342	1,109,877
DS I Rural	5,256,907	5,631,932	6,033,711
DS II Demand Based	2,356,372	2,459,508	2,558,040
DS III (Optional- Demand Based)	488	518	549
-NDS I - Metered Now Demand Based	631,207	729,034	809,956
-DS II - Demand Based	1,050,881	1,131,402	1,211,279
Contract Demand <0.5 kW	1,295	1,383	1,481
Contract Demand >0.5 kW	1,049,586	1,130,019	1,209,798
Street Light Services	25,457	29,974	32,125
SS Metered	4,099	4,782	5,409
SS Unmetered	21,358	25,192	26,716
Irrigation & Allied Services	421,645	594,646	765,215
IAS I	368,711	538,786	707,668
IAS II	52,934	55,860	57,547
Public Service Connections	152,250	175,400	186,994
Public Water Works	29,403	32,406	35,349
Har Ghar Nal	122,847	142,994	151,645
Low Tension Industrial Services	723,768	819,641	907,136
LTIS I (0-19 kW)	658,976	750,617	833,936
LTIS II (-19 kW - 74 kW)	64,793	69,024	73,200
LT Electric Vehicle Charging Station	299	645	806
HT-General	427,222	509,233	562,445
HTS (General)- I (11 kV)	282,710	313,525	337,571
HTS (General)- II (33 kV)	85,942	111,722	127,508
HTS (General)- III (132 kV)	49,170	74,493	87,777
HTS (General)- IV (220 kV)	-		
HTSS – (33 kV/11 kV)	9,400	9,494	9,589
HT-Industrial Services		15,217	15,244
HTIS (Industrial) – I (11 kV)		1,414	1,428

Category of Consumers	FY 2022-23 (Actual)	FY 2023-24 (APR)	FY 2024-25 (ARR)
HTIS (Industrial)– II (33 kV)		1,111	1,122
HTIS (Industrial) – III (132 kV)		-	-
HTIS (Industries)-IV (220 kV)		12,500	12,500
HTIS (Oxygen Manufacturers)		192	194
Railway Traction Services	60,000	60,000	60,000
RTS	60,000	60,000	60,000
Nepal	-		
Nepal			
DF			
HT Electric Vehicle Charging Stations.		6,048	12,338
Total	12,152,255	13,240,538	14,265,716

5.3.10 The general approach followed for projection of all categories include: -

- i. The consumer numbers for FY 2024-25 are projected considering the provisional figures as available for September 2023 and thereafter an appropriate growth rate across the categories have been considered by the end of FY 2023-24 over the previous year. Thereafter, the overall growth rate has been assumed to be around 5% for FY 2024-25.
- ii. Successful implementation of the Saubhagya scheme ensured that all the willing households are connected. Due to the rise in consumerism among consumers in the country, there will be a rise in the consumption of electricity in the coming years. Gradually the customers currently segregated under the Kutir Jyoti category move on to higher categories.
- iii. For projecting the connected load, an average connected load per consumer has been taken as per the actual data of the past few years. This has then been multiplied by projected number of consumers to arrive at the connected Load.
- iv. The energy sales have been projected by considering the average consumption per consumer per month and then multiplying the same to the projected number of consumers.
- v. The number of years taken for estimating the CAGR however varies since the trend in certain categories is impacted by multiple other factors and taking a uniform period for calculating the CAGR skews the outcome.
- vi. In addition to the CAGR, it has also been ensured that other factors impacting demand, such as growth in the no. of consumers, enhanced power procurement, strengthening of distribution network for enhancing quality of supply, energy efficiency and DSM measures etc., have been adequately incorporated to reflect a realistic demand scenario.

The following paragraphs capture highlights of the approach and assumptions used for projecting the specific category wise number of consumers, connected load and energy sales for the ensuing year.

1. The growth rate in KJY consumers was 1.8% in FY 2022-23. The consumer numbers for FY 2023-24 are projected considering the provisional figures as available for September 2023 and thereafter an appropriate growth rate across the categories have been considered. Thereafter, the overall growth rate

has been assumed to be around 2% for FY 2024-25.

2. The growth rate in DS-I consumers was 5% in FY 2022-23. The consumer numbers for FY 2023-24 are projected considering the provisional figures as available for September 2023 and thereafter an appropriate growth rate across the categories have been considered. Thereafter, the overall growth rate has been assumed to be around 2% for FY 2024-25
3. The growth rate in DS-II consumers was 9.57% in FY 2022-23. The consumer numbers for FY 2023-24 are projected considering the provisional figures as available for September 2023 and thereafter an appropriate growth rate across the categories have been considered. Thereafter, the overall growth rate has been assumed to be around 2% for FY 2024-25

Number of Consumers	FY 2024-25
<i>KJY category</i>	4,387,902
<i>DS-I Category</i>	5,825,635
<i>DS-II Category</i>	1,480,223
<i>DS-III Category</i>	92
Total	11,693,851
Energy Sales	FY 2024-25 (in MUs)
<i>KJY category</i>	2,930.81
<i>DS-I Category</i>	4,393.6
<i>DS-II Category</i>	2,250.21
<i>DS-III Category</i>	0.39
Total	9,575.03
Connected Load	FY 2024-25 (kW)
<i>KJY category</i>	1,109,8
<i>DS-I Category</i>	6,033,711
<i>DS-II Category</i>	2,558,040
<i>DS-III Category</i>	549
Total	9,702,178

4. The Petitioner submits that it has estimated growth rate of 6% in NDS-I category while projecting number of consumers for FY 2024-25. The sales projections for NDS-I category is done in a way to rationalize the sales pattern for the category considering that the average consumption per consumer in previous years.

Consumers	FY 2024-25
<i>NDS-I</i>	575,431
Energy Sales	FY 2024-25 (in MUs)
<i>NDS-I</i>	814.8
Connected Load	FY 2024-25 (kW)
<i>NDS-I</i>	809,956

5. The half yearly growth rate in the number of consumers in NDS-II category i.e., September 2023 over FY 2022-23, is 4%. However, in order to keep a conservative approach, a nominal growth rate of 3% is assumed for FY 2024-25. The sales projections for NDS-II category is done in a way to rationalize the sales pattern for the category considering that the average consumption per consumer in previous years.

Consumers	FY 2024-25
<i>NDS-II</i>	426,555
Energy Sales	FY 2024-25 (in MUs)
<i>NDS-II</i>	1,436.0
Connected Load	FY 2023-243 (kW)
<i>NDS-II</i>	1,211,279

6. As per the third agricultural roadmap, Bihar has started work to set up dedicated feeders to provide electricity for agriculture. Hence a growth rate of 10% is estimated in the number of consumers for FY 2023-24 in IAS-I category.

Consumers	FY 2024-25
IAS-I	347,180
Energy Sales	FY 2024-25 (in MUs)
IAS-I	1,840.57
Connected Load	FY 2024-25 (kW)
IAS-I	707,668

7. The petitioner hereby submits that the growth in number of consumers for FY 2024-25 is considered 3% for IAS-II category. A nominal growth rate of 4% is considered for FY 2024-25 to estimated sales under IAS-II category.

Consumers	FY 2024-25
IAS-II	6,766
Energy Sales	FY 2024-25 (in MUs)
IAS-II	101.60
Connected Load	FY 2024-25 (kW)
IAS-II	57,547

8. The petitioner hereby submits that the consumer growth for LTIS-I category in FY 2024-25 is assumed to be a nominal as 8% due to a fluctuant growth rate shown over the years in the LTIS-I category. The average consumption per consumer has decreased over the years and has dipped by 11% in FY 23. Hence the growth in average consumption per consumer is considered to be 10% in 2023-24.

Consumers	FY 2024-25
LTIS-I	96,525
Energy Sales	FY 2024-25 (in MUs)
LTIS-I	519.48
Connected Load	FY 2024-25 (kW)
LTIS-I	833,936

9. The petitioner hereby submits that the consumer growth for LTIS-II in FY 2024-25 is assumed to be 4% even though there has been a sharp increase in the first six months of FY 2024 i.e., 49%. It is further assumed that the increase in consumption will directly be reflected through addition of consumers and an increase of 8% is considered to project the sales of FY 2024-25

Consumers	FY 2024-25
LTIS-II	1,327
Energy Sales	FY 2024-25 (in MUs)
LTIS-II	42.38
Connected Load	FY 2024-25 (kW)
LTIS-II	73,200

10. The Petitioner has estimated a growth rate of 3% in number of consumers in FY 2024-25 in PWW category. In Har Ghar Nal Yojana the Petitioner submits a growth rate of 12% in 2024-25.

Consumers	FY 2024-25
PWW	2,374

<i>Har Ghar Nai</i>	65,654
<i>Total</i>	68,027
Energy Sales	FY 2024-25 (in MUs)
<i>PWW</i>	45.82
<i>Har Ghar Nai</i>	502.05
Total	547.86
Connected Load (kW)	FY 2024-25 (kW)
<i>PWW</i>	35,349
<i>Har Ghar Nai</i>	151,645
Total	186,994

11. The growth in Street Light Services was 13% in the first half year of FY 2023-24. Hence the overall growth in FY 2023-24 is considered to be 15%. However, the projections for the ensuing year i.e., 2024-25 is considered at a normal rate of 4%.

Consumers	FY 2024-25
<i>Street Light Services</i>	2,781
Energy Sales	FY 2024-25 (in MUs)
<i>Street Light Services</i>	129.53
Connected Load	FY 2024-25 (kW)
<i>Street Light Services</i>	32,125

12. The petitioner hereby submits that it does not estimate huge growth in number of consumers in HT category for FY 2024-25 considering trends in past and as per the data released by Ministry of Statistics and Programme Implementation.

Category	Number of consumers
<i>HT-I</i>	1,613
<i>HT-II</i>	90
<i>HT-III</i>	7
<i>HTSS</i>	3
Total	1713
Category	Sales (MU)
<i>HT-1</i>	669.48
<i>HT-II</i>	332.06
<i>HT-III</i>	131.02
<i>HTSS</i>	43.97
Total	1,176.54
Category	Connected Load (kW)
<i>HT-1</i>	337,571
<i>HT-II</i>	127,508
<i>HT-III</i>	87,777
<i>HTSS</i>	9,589
Total	562,445

13. The petitioner hereby submits that it does not estimate huge growth in number of consumers in HT industrial services category for FY 2024-25 considering trends in past and as per the data released by Ministry of Statistics and Programme Implementation

Category	Number of consls
-----------------	-------------------------

ITIS- II	
HTIIII	-
HTIS-IV	1
HTIS (Oxygen Manufacturers)	1
Totl	
IHTIS -12.54	
HTIII	3.54
HTIS - III	-
HTIS-IV	74.46
HTIS (Oxygen Manufacturers)	0.42
Total	81
Igory	Conled LoalW)
HTIS I	1,428
HTIS- II	1,122
HTIS - III	-
HTIS-IV	12,500
HTIS (Oxygen Manufacturers)	194
Total	15,244

14. The petitioner hereby submits that it does not estimate huge growth in number of consumers in LT Electric Vehicle Charging Station category for FY 2024-25 considering trends in past and as per the data released by Ministry of Statistics and Programme Implementation

Consumers	FY 2024-25
LT Electric Vehicle Charging Station	280
Energy Sales	FY 2024-25 (in MUs)
LT Electric Vehicle Charging Station	12.28
Connected Load	FY 2024-25 (kW)
LT Electric Vehicle Charging Station	806

15. The petitioner hereby submits that it does not estimate huge growth in number of consumers in HT Electric Vehicle Charging Stations category for FY 2024-25 considering trends in past and as per the data released by Ministry of Statistics and Programme Implementation

Consumers	FY 2024-25
HT Electric Vehicle Charging Station	6
Energy Sales	FY 2024-25 (in MUs)
HT Electric Vehicle Charging Station	184.25
Connected Load	FY 2024-25 (kW)
HT Electric Vehicle Charging Station	12,338

The Petitioner has considered no projection for consumers for RTS category, load and sales or RTS category for FY 2024-25 since all the consumers have moved to Open access.

5.4 AT&C Losses

5.4.1 The Government of India, through Ministry of Power has introduced “Revamped Distribution Sector Scheme – A Reform based, and Results linked scheme” in July 2021. The scheme is applicable for all the State/UTs Utilities or Power Departments to avail such financial assistance under the revamped scheme. The scheme has a total outlay of Rs 3,03,758 Crores with an estimated gross budgetary support of Rs 97,631 Crores (~32% of total outlay) from the Government of India.

5.4.2 The three objectives of the scheme are as follows:

- Improve quality and reliability of power supply to consumers through a financially sustainable and operationally efficient distribution sector
- Reduce the AT&C losses to pan-India levels of 12-15% by FY 2024-25
- Reduce ACS-ARR gap to zero by FY 2024-25

Note:

- *Above targets are national targets*
- *State-wise targets to depend on current levels of AT&C losses and ACS-ARR gap in the respective states*

5.4.3 The scheme has two parts namely:

- Part A – Financial Support of Upgradation of the Distribution Infrastructure & Prepaid Smart Metering & System Metering
- Part B–Training & Capacity Building and other enabling & supporting activities.

5.4.4 The Petitioner participated in the said scheme and submitted the action plan, DPR of the total project outlay & roadmap for AT&C Loss to the State Government for its approval in the month of March 2022. The Monitoring Committee for RDSS constituted under Chairmanship of Secretary (Power), Govt of India, in its 9th meeting held on 28.04.2022, has approved the Action Plan and Loss Reduction DPR of North Bihar Power Distribution Company Limited under Revamped Distribution Sector Scheme. Accordingly, the Monitoring Committee approved the following trajectory for AT&C loss for the Petitioner.

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
AT&C Loss	25%	22%	19%	16%

5.4.5 Hence, it would be appropriate and realistic for the DISCOMs that the projections for the AT&C losses be approved by the Hon'ble Commission in line with the trajectory approved in the RDSS.

5.4.6 Further, the Petitioner in its Tariff Petition for determination of Tariff for FY 2023-24 dated 15.11.2022 had requested the Hon'ble Commission to consider the distribution loss and AT&C loss as per the targets approved under the RDSS. However, the Hon'ble Commission, in the Tariff Order dated 23rd March 2023, has approved distribution losses at 15% with collection efficiency at 100% and AT&C loss at 15% for the FY 2023-24.

5.4.7 Furthermore, it is pertinent to mention here that MoP has directed the Hon'ble Commission vide letter reference No.24/3/3/2019-PFC(MoP)- Part (2)-E-263367 dated 28th August, 2023 **Annexure-2** to adopt the AT&C loss trajectory for tariff determination in accordance with the trajectory agreed by the respective State Government and approved by the Central Government (under RDSS). The extract of the said letter is as follows:

Under Rule 20 of the Electricity Rules, it has been prescribed that the AT&C loss reduction trajectory adopted by the SERC for tariff determination shall be in accordance with the trajectory agreed by the respective State Governments and approved by the Central Government.

....

*It has been brought to the notice of the Central Government that BERC has adopted a different trajectory than the one prescribed under the Rules. **This is a violation of the Rules and therefore an offense under the Law. I have been directed to request you that the BERC may adopt the trajectory in accordance with the Rules and correct the tariff accordingly.***

5.4.8 The Hon'ble Commission may kindly take into consideration the aforesaid letter dated 28th August, 2023 from MoP and pleading made by the DISCOMs to consider the AT&C loss trajectory approved in the Sanction letter and DPR of RDSS.

5.4.9 Accordingly, the Petitioner requests the Hon'ble Commission to approve the Distribution Loss, Billing Efficiency, Collection Efficiency, AT&C Loss for FY 2024-25 as approved under RDSS scheme as provided below::

Table 77: AT&C loss for FY 2024-25

S. No	Particulars	For NBPDCCL
1	Distribution Loss (%)	14.55%
2	Billing Efficiency (%)	85.45%
3	Collection Efficiency (%)	98.30%
4	AT&C Loss (%)	16.00%

5.4.10 The Hon'ble Commission had approved the collection efficiency of 100% in the ARR for FY 2023-24 as per the UDAY scheme. However, the per capita income of Bihar, especially for the domestic consumer is very low which restricts their paying capacity, and this has proven to be a challenge to recover the billed amount despite taking various measures for timely billing and easy payment of the bill.

5.4.11 It is also to be noted that to the improve the metering, billing and collection process, the petitioner has also started implementation of smart pre-paid meter project envisaging that the same shall enable Discoms to significantly improve its metering billing & collection and minimize the commercial losses.

5.4.12 Further, the Petitioner has time and again informed the Hon'ble Commission about various initiatives taken for improvement in Collection efficiency through Quarterly Directives. Therefore, the

Hon'ble Commission is kindly requested to consider the collection efficiency of 98.30% for FY 2024-25.

5.4.13 In spite of major reforms carried out by the State Government and the Petitioner in association with other stakeholders, there are some issues which had led to decrease in its operations and financial viability and the same are as follows:

- *Inherent demographics and consumer profile*
 - Bihar is majorly an agricultural state with a very low per capita power consumption of less than 400 kWh as against the national average of 1255 kWh for FY 2021-22. Majorly 42.5 lakh consumers belonging to Kutir Jyoti or BPL and 48.41 Rural domestic consumers in FY 2021-22 across rural areas in the jurisdiction of the Petitioner
 - As a result, there was an increased volume of energy consumption on long and low-tension distribution networks increasing losses and creating a cascading effect due to an increase in non-paying consumers and certain habitual pilferers.

5.4.14 The Regulation 18 of BERC MYT (Distribution) Regulation, 2021 also suggests that the Hon'ble Commission has the authority to revise the Distribution loss baseline in the state based on actual situation in the state. The relevant extract of the Regulations is as follows:

"18.2 Distribution Loss

Based on the assessment of metered and un-metered sales as per Regulations 16 and 17 of these regulations, the Commission shall update existing baseline of distribution losses."

5.4.15 It is submitted to the Hon'ble Commission that although the DISCOMs are making the best possible efforts to reduce the losses with the introduction of feeder separation schemes, spot billing etc. and various other IT initiatives, the reduction in losses would still occur in a phased manner.

5.4.16 Therefore, it is prayed to the Hon'ble Commission to consider the Distribution losses, Collection efficiency and AT&C losses as per the projections above in line with the RDSS scheme.

5.5 State Transmission Losses

5.5.1 The Petitioner has considered intra-state transmission loss at 3.00% for FY 2023-24 as approved by the Hon'ble Commission in MYT Order dated 26.03.2022

5.6 Central Transmission Losses

The Petitioner has considered transmission loss of 3.14% as per the latest available data for FY 2023-24 and accordingly requests the Hon'ble Commission to consider the same.

5.7 Power Purchase

5.7.1 The DISCOMs rely on allocation from central generating stations and state projects for procuring power for sale in the state. This power has been proposed to be allocated between

north and south Bihar in the proportion as determined by the board resolution as detailed below:

5.7.2 Bihar State Power Holding Company Ltd (BSPHCL) issued vide its Resolution No.55-10 dated 14th July 2017 for approval regarding distribution of power purchase agreement between NBPDCCL and SBPDCL. The notification states that,

“RESOLVED THAT Power Purchase & Transmission charges bills are to be admitted and payment by both DISCOMs i.e NBPDCCL and SBPDCL in the ratio 46:54 respectively w.e.f. 1-4-2017 subjected to the final reconciliation of actual consumption”

RESOLVED FURTHER THAT Chairman cum Managing Director, BSHPCCL are here by authorized for deciding the power consumption ratio subsequently as per the actual consumption of both the DISCOMs based on the average consumption of the last 6 months of power drawal of both the DISCOMs i.e. NBPDCCL and SBPDCL”

The Board further ratifies the submission made in attached agenda note.

5.7.3 The following plant addition has been considered by the Petitioner in FY 2024-25:

Table 78:Upcoming Plant Addition in FY 2024-25

S.No	Name of Unit	Expected COD	Quantum (MW)	Plant type
1	Barh Stage I Unit III	Mar-25	381	Thermal
2	North Karanpura Unit III	Jul-24	295	Thermal
3	Buxar TPP U2	Jun-24	561	Thermal
4	Adani Green Energy	Jul-24	600	Solar
5	Greenko Energy Pvt. Ltd. (SECI Hybrid)	Jul-24	210	Solar

5.7.4 The Petitioner has considered the projected power purchase computed for 2023-24 and projections for FY 2024-25 which is based on the following methodology.

- a. Share allocation has been considered as per Eastern Regional Power Committee.
- b. The Petitioner has implemented the methodology of Merit Order Despatch (MoD) for projecting its power purchase in order to meet its projected demand. While implementing the MoD, the Petitioner has firstly estimated utilization of its allocated capacity of must run plants i.e., the Solar and Non-solar Renewable generating stations and its hydro stations based on the minimum offtakes or their normative PLF, whichever is maximum. For the purpose of projection, the Petitioner has considered the Medium Term PPAs of the petitioner to be must run due to the fact that the Petitioner has a minimum off-take liability in its Medium Term PPAs. Further, the remaining demand of the Petitioner has been tried to be fulfilled through its conventional power purchase tie-ups. The methodology followed by the Petitioner here is that it has firstly allocated the minimum technical limit to all its conventional plants i.e., up till 60% PLF of the plants based on their variable charge per unit (ECR). Further, the remaining

demand of the system has then been tried to be fulfilled through bucket-filling up to a maximum PLF of 85% for the conventional generating stations based on their ECR. If any more demand is remaining unfilled after the process, the same has been tried to be purchased through Open market purchase.

- c. The overall annual projected demand of the system has been distributed on month-on-month basis based on the monthly power supply data published by CEA for Bihar.
- d. Normative auxiliary consumption provided by Central Electricity Regulatory Commission (CERC) for the thermal and hydro plants and the auxiliary consumptions specified for plants.
- e. Considering the methodology as mentioned above and using the power purchase allocation data mentioned in the above table total number of units purchased were calculated from every source/ plant for every month separately.

5.7.5 Total Power purchase projections data for FY 2024-25 is provided in the below table.

Table 79: Share Allocated (MW) and Units Purchase (MU) for FY 2024-25

Particulars	Share allocation for NBPDCCL (MW)	Unit Purchased (MU)
Stations with injection at CTU	3,643.91	16,527.83
<i>FSTPP I & II</i>	49.57	<i>252.12</i>
<i>FSTPP III</i>	44.74	<i>203.69</i>
<i>KHSTPP I</i>	23.70	<i>128.87</i>
<i>KHSTPP II</i>	29.26	<i>158.21</i>
<i>Barh Stage I (Unit I & II)</i>	352.18	<i>1,579.13</i>
<i>Barh Stage I Unit III</i>	176.09	<i>63.86</i>
<i>Barh Stage II</i>	525.90	<i>2,019.00</i>
<i>Nabinagar (BRBCL)</i>	46.00	<i>248.76</i>
<i>Korba</i>	-	-
<i>Talcher Stage I</i>	185.79	<i>1,044.28</i>
<i>KBUNL Stage II</i>	132.97	<i>688.82</i>
<i>NPGCL</i>	772.09	<i>3,850.08</i>
<i>North Karanpura Unit I</i>	136.53	<i>781.15</i>
<i>North Karanpura Unit II</i>	105.50	<i>603.62</i>
<i>North Karanpura Unit III</i>	105.50	<i>457.66</i>
<i>Darlipali STPS</i>	87.29	<i>540.89</i>
<i>Buxar TPP U1</i>	258.06	<i>1,352.99</i>
<i>Buxar TPP U2</i>	258.06	<i>1,085.14</i>
<i>Chuka</i>	42.82	<i>189.74</i>
<i>Rangit</i>	10.59	<i>54.13</i>
<i>Tala</i>	119.65	<i>268.78</i>
<i>Teesta</i>	49.22	<i>260.46</i>
<i>Mangdechu</i>	130.86	<i>692.47</i>
<i>Kurichu</i>	1.56	<i>3.98</i>
Stations with injection at STU	356.18	1,148.60
<i>BSPHC</i>	24.98	<i>9.94</i>
<i>BTPS Stage I</i>	101.20	<i>161.87</i>
<i>BTPS Stage II</i>	230.00	<i>976.79</i>
IPPs	224.48	1,373.13
<i>GMR</i>	119.60	<i>720.62</i>

Particulars	Share allocation for NBPDCCL (MW)	Unit Purchased (MU)
JITPL	104.88	652.51
Renewables	1,927.49	3,851.42
M/s Sunmark Energy Projects Limited (Formerly MBCEL)	4.60	7.60
M/s Response renewable Energy Ltd, Kolkata.	4.60	7.60
M/s Avantika Contractors Ltd., Hyderabad	2.30	3.80
M/s Glatt Solutions Pvt. Ltd, Kolkata.	1.38	2.28
Alfa Infraprop Pvt. Ltd.	9.20	15.20
Udipta Energy & Equipment Pvt. Ltd.	2.30	3.80
Azure Power India Pvt. Ltd.	4.60	7.60
Welspun Renewables Project - I	4.60	7.60
Welspun Renewables Project – II	6.90	11.40
Welspun Renewables Project – III	6.90	11.40
Acme Cleantech Project (Nalanda)	6.90	11.40
Acme Cleantech Project (Magadh)	4.60	7.60
SECI (Focal)	4.60	8.80
SECI Phase-II Solar (ACME Deoghar/ Acme Dhaulapur)	69.00	131.98
SECI Phase-III (Renew Sunwaves)	138.00	338.11
SB Energy Six Pvt. Ltd. (NTPC)	138.00	347.35
GRT Jewellers (SECI-V)	69.00	113.98
Wind ISTS Scheme Tranche I (PTC) (Green Infra, Inox, Mytrah & Ostro)	92.00	255.96
Wind ISTS Scheme Tranche II (SECI) (Orange)	46.00	127.98
Avada (BREDA), Dharbhanga	0.74	1.22
SECI Green Infra	138.00	383.94
Alfanar	138.00	383.94
Betam	23.09	64.25
SECI Phase-VI Wind	161.00	-
Ostro Kannad	138.00	359.94
Morjar Windfarm	23.00	43.99
SBE Renewable (SECI Phase-V)	151.80	290.35
SJVN Ltd (BREDA)	92.00	175.97
Avada (BREDA)	23.00	43.99
Adani Green Energy	276.00	399.29
Greenko Energy Pvt. Ltd. (SECI Hybrid)	96.60	123.01
New Swadeshi Sugar Mill, Narkataganj	4.60	20.28
Hasanpur Sugar Mill, Dalsinghsarai	6.67	29.40
Bharat Sugar Mills, Sidhwalia, Gopalganj	6.90	30.42
Hari Nagar Sugar Mills, Hari Nagar, West Champaran	6.67	29.40
HPCL Biofuels Ltd., Sugauli, East Champaran	9.20	14.75
HPCL Biofuels Ltd., Lauria, West Champaran	9.20	16.22
Siddhashram Rice Mill Cluster Pvt ltd	0.46	2.95

Particulars	Share allocation for NBPDCCL (MW)	Unit Purchased (MU)
<i>Bihar Distillers & Bottlers Pvt Ltd</i>	4.32	3.47
<i>Tirupati Sugar</i>	2.76	13.20
Others	-	1,511.98
<i>PTC(IEX)</i>	-	1,511.98
Total	6,152.06	24,412.96

5.7.6 The Petitioner requests the Hon'ble Commission to approve the power purchase quantum for the FY 2024-25 as shown in the Table above.

5.8 Energy Balance

5.8.1 Based on above discussed elements such as sales, losses & power availability, the revised projected energy balance for 2024-25 is as under –

Table 80: Energy Balancing for ARR for FY 2024-25

Sr No	Particulars	Unit	NBPDCCL
			FY 2024-25
A	Energy Requirement		
1	<i>Energy sales</i>	MU	16,935.06
2	<i>Less: Inter-state sales</i>	MU	314.22
3	<i>Energy sales excluding Inter-state sales</i>	MU	16,620.84
4	<i>Distribution Loss</i>	%	14.55%
5	<i>Add: Distribution Loss</i>	MU	2,830.11
6	Energy required at Distribution periphery	MU	19,450.95
7	<i>Add: Inter-state sales</i>	MU	314.22
8	Total energy required at Distribution periphery	MU	19,765.17
9	<i>State Transmission Loss</i>	%	3.00%
10	<i>Add: State Transmission Loss</i>	MU	611.29
11	Total energy required at State Transmission Periphery	MU	20,376.46
12	Losses in Regional Transmission system	%	3.14%
13	Losses in Regional Transmission system	MU	661.46
14	Total Energy Requirement at ex-bus	MU	21,037.92
15	Total energy Purchased (inc surplus power)	MU	24,412.96
16	Energy Surplus/(Deficit) at State Periphery	MU	3,375.04

5.8.2 As Petitioner has further calculated a deficit energy at state periphery to be 3,375.04 MU in FY 2024-25 which would be used for an Intra-DISCOM transaction to counter the surplus of SBPDCL at state periphery as the power purchase is undertaken at BSPHCL level and further distributed between SBPDCL and NBPDCCL in the ratio of 54:46, further to be adjusted as per actual ratio of consumption.

5.8.3 The Petitioner humbly requests the Hon'ble Commission to approve the aforementioned revised energy balance for FY 2024-25.

5.9 Renewable Power Purchase Obligation

5.9.1 The Hon'ble Commission initiated the Suo-motu proceeding for 4th amendment in BERC (Renewable Purchase Obligation, its compliance and REC Framework Implementation)

Regulations, 2010. The Draft BERC (Renewable Purchase Obligation, its compliance and REC Framework Implementation) (4thAmendment) Regulations, 2022 was also floated by the Commission for comments from the Stakeholders. The Hon'ble Commission in the draft Regulations has specified the following:

“Further, Ministry of Power, Govt. of India, through its order no. 09/13/2021-RCM dated 22.07.2022 has specified separate Wind RPO, HPO and other RPO within the overall RPO target for the FY 2022-23 to FY 2029-30.

In view of above, the Commission has decided to adopt the RPO target as specified by the Ministry of Power through its order no. 09/13/2021-RCM dated 22.07.2022 for the FY 2022-23 to FY 2029-30, including introduction of a separate hydro purchase obligation (HPO) as recommended previously by the ministry through MoP Notification F No. 15/2/2016-H-I(Pt.) dated 08.03.2019.

In line with the directions from MoP, the Commission proposes to specify separate Wind RPO, HPO and other RPO within the overall RPO target.

Provided that Wind RPO shall be met through energy produced from wind power projects commissioned after 31st March 2022; HPO shall be met only by energy produced from Large Hydro Projects (including pump storage plants) commissioned after 8th March 2019; other RPO target may be met by energy produced from any RE power project not qualifying for meeting Wind RPO and HPO. Further, as the directives of the MoP, the Commission proposes to specify separate Energy Storage Obligation for the energy consumed from solar/wind along with /through storage. The Energy Storage obligation to the extent of energy stored from RE sources shall be considered as part of fulfilment of the total RPO.”

5.9.2 As above, the Hon'ble Commission in the draft Regulations has adopted the RPO trajectory specified by the MoP. So, the Petitioner has computed RPO for FY 2024-25 as per the trajectory specified by the MoP. However, the Petitioner has not considered any Energy Storage Obligation for FY 2024-25 considering the comments submitted in response to the draft BERC (4th amendment) RPO Regulations, 2022. The details of RPO to be met by the Petitioner for FY 2024-25 are given in the table below:

Table 81:Renewable energy purchase obligation for FY 2024-25

Particular	units	FY 24-25
Energy Sale (excluding interstate sales)	MU	16620.84
RPO Targets (%)		29.91%
Wind % (B)	%	2.46%
HPO % (C)	%	1.08%
Other RPO % (D)		26.37%
RPO Targets		4971.29
Wind (A*B)	MU	408.87

HPO (A*C)	MU	179.51
Other RPO (A*D)	MU	4382.91
Renewable Power Purchase		5330.92
Wind	MU	2540.36
HPO	MU	
Other RPO	MU	2790.56
RPO Shortfall/ (Surplus)	MU	
Wind	MU	(2131.49)
HPO	MU	(1951.98)
Other RPO		(359.63)
Carried forward of FY 22-23	MU	69.11
Balance RPO	MU	(290.53)

5.9.3 As above, there is NIL RPO shortfall.

5.9.4 Further, due to high cost of land and lesser solar intensity in the major parts of the State, the Solar power generation in the State of Bihar less lucrative. However, the DISCOMs are always eager to procure power from any renewable source within the State.

5.10 Power Purchase Cost

5.10.1 The power purchase cost mainly comprises of fixed charges and energy charges for two part tariff stations i.e. NTPC, NHPC & PTC in case of Petitioner. The Petitioner has considered the actual fixed cost as prevailing in FY 2023-24 for existing power stations. No increase in fixed charges has been considered in FY 2024-25 with respect to the fixed charges in FY 2023-24.

5.10.2 Further, as there has been increase in Variable cost of the plants due to coal blending allowed by the MP as explained in the previous Chapter, no increase in the Variable cost has been considered in FY 2024-25 and same variable cost has been considered as assumed for 2nd half (September 2023- March 2024) of the FY 2024-25.

5.10.3 Transmission charges have been increased 10% with respect to that approved by the Hon'ble Commission for FY 23-24 in Order dated 23.03.2023.

5.10.4 Petitioner has considered the new plants as per information available with the Petitioner. The new plants for which cost details are not available, the cost break-up of similar capacity plants has been considered for projection.

5.10.5 The Petitioner has considered the upcoming conventional projects power purchase cost as per the approved PPA/PSA. For Non-Conventional, it has considered as per tariff discovered.

5.10.6 **Power purchase costs:** The table here provides detailed projected power purchase costs of different Power generating stations for FY 2024-25:

Table 82: Detailed projected power purchase costs for FY 2024-25 (in INR Crore)

Particulars	Share allocation for NBPDC (MW)	Total Purchase by (MU)	NBPDC Total Cost for FY 2024-25 (Rs Crores)			NBPDC Total Cost for FY 2024-25 (Paisa/kWh)		
			Fixed Charges	Energy Charges	Total	Fixed Charges	Energy Charges	Total
Stations with injection at CTU	3,643.91	16,527.83	3,601.21	5,300.86	8,902.08	217.89	320.72	538.61
FSTPP I & II	49.57	252.12	28.75	103.50	132.25	114.04	410.51	524.56
FSTPP III	44.74	203.69	50.27	78.85	129.12	246.78	387.11	633.89
KHSTPP I	23.70	128.87	18.00	50.25	68.25	139.65	389.97	529.63
KHSTPP II	29.26	158.21	20.29	58.45	78.73	128.22	369.43	497.65
Barh Stage I (Unit I & II)	352.18	1,579.13	399.23	583.93	983.15	252.81	369.78	622.59
Barh Stage I Unit III	176.09	63.86	149.71	21.04	170.75	2,344.44	329.45	2,673.89
Barh Stage II	525.90	2,019.00	760.89	828.40	1,589.28	376.86	410.30	787.17
Nabinagar (BRBCL)	46.00	248.76	75.98	87.12	163.10	305.44	350.24	655.67
Korba	-	-	-	-	-	-	-	-
Talcher Stage I	185.79	1,044.28	135.79	247.20	382.99	130.03	236.72	366.75
KBUNL Stage II	132.97	688.82	268.93	240.71	509.64	390.42	349.45	739.87
NPCC	772.09	3,850.08	1,232.91	1,157.00	2,389.91	320.23	300.51	620.74
North Karanpura Unit I	136.53	781.15	20.41	179.47	199.89	26.13	229.76	255.89
North Karanpura Unit II	105.50	603.62	11.83	138.69	150.52	19.60	229.76	249.35
North Karanpura Unit III	105.50	457.66	-	74.10	74.10	-	161.92	161.92
Darlipali STPS	87.29	540.89	66.24	68.23	134.46	122.46	126.14	248.60
Buxar TPP U1	258.06	1,352.99	219.40	500.31	719.71	162.16	369.78	531.94
Buxar TPP U2	258.06	1,085.14	93.34	401.26	494.60	86.02	369.78	455.80
Chuka	42.82	189.74	-	50.12	50.12	-	264.18	264.18
Rangit	10.59	54.13	11.60	11.88	23.47	214.21	219.36	433.57
Tala	119.65	268.78	-	67.11	67.11	-	249.70	249.70
Teesta	49.22	260.46	37.66	33.29	70.96	144.61	127.82	272.43
Mangdechhu	130.86	692.47	-	319.16	319.16	-	460.90	460.90
Kurichu	1.56	3.98	-	0.79	0.79	-	197.21	197.21
	-					-	-	
Stations with injection at STU	356.18	1,148.60	309.08	424.49	733.57	269.10	369.57	638.66
BSPHC	24.98	9.94	-	2.72	2.72	-	273.90	273.90
BTPS Stage I	101.20	161.87	-	90.81	90.81	-	561.02	561.02

Particulars	Share allocation for NBPDC (MW)	Total Purchase by (MU)	NBPDC Total Cost for FY 2024-25 (Rs Crores)			NBPDC Total Cost for FY 2024-25 (Paisa/kWh)		
			Fixed Charges	Energy Charges	Total	Fixed Charges	Energy Charges	Total
<i>BTPS Stage II</i>	230.00	976.79	309.08	330.95	640.03	316.43	338.81	655.24
	-		-		-	-	-	
IPPs	224.48	1,373.13	412.63	220.07	632.70	300.50	160.27	
<i>GMR</i>	119.60	720.62	164.65	132.89	297.54	228.49	184.41	412.90
<i>JITPL</i>	104.88	652.51	247.98	87.18	335.16	380.03	133.61	513.64
	-					-	-	
Renewables	1,927.49	3,851.42	-	1,137.21	1,137.21	-	295.27	
<i>M/s Sunmark Energy Projects Limited (Formerly MBCEL)</i>	4.60	7.60	-	5.34	5.34	-	702.35	702.35
<i>M/s Response renewable Energy Ltd, Kolkata.</i>	4.60	7.60	-	5.33	5.33	-	701.88	701.88
<i>M/s Avantika Contractors Ltd., Hyderabad</i>	2.30	3.80	-	2.92	2.92	-	768.08	768.08
<i>M/s Glatt Solutions Pvt. Ltd, Kolkata.</i>	1.38	2.28	-	1.60	1.60	-	703.06	703.06
<i>Alfa Infraprop Pvt. Ltd.</i>	9.20	15.20	-	11.96	11.96	-	786.91	786.91
<i>Udipta Energy & Equipment Pvt. Ltd.</i>	2.30	3.80	-	3.03	3.03	-	797.53	797.53
<i>Azure Power India Pvt. Ltd.</i>	4.60	7.60	-	6.37	6.37	-	838.58	838.58
<i>Welspun Renewables Project - I</i>	4.60	7.60	-	6.61	6.61	-	870.21	870.21
<i>Welspun Renewables Project – II</i>	6.90	11.40	-	9.85	9.85	-	864.25	864.25
<i>Welspun Renewables Project – III</i>	6.90	11.40	-	9.75	9.75	-	855.61	855.61
<i>Acme Cleantech Project (Nalanda)</i>	6.90	11.40	-	9.95	9.95	-	873.33	873.33
<i>Acme Cleantech Project (Magadh)</i>	4.60	7.60	-	6.64	6.64	-	873.46	873.46
<i>SECI (Focal)</i>	4.60	8.80	-	5.22	5.22	-	593.00	593.00
<i>SECI Phase-II Solar (ACME Deoghar/ Acme Dhaulapur)</i>	69.00	131.98	-	33.95	33.95	-	257.26	257.26
<i>SECI Phase-III (Renew Sunwaves)</i>	138.00	338.11	-	97.33	97.33	-	287.86	287.86
<i>SB Energy Six Pvt. Ltd. (NTPC)</i>	138.00	347.35	-	92.74	92.74	-	267.00	267.00
<i>GRT Jewellers (SECI-V)</i>	69.00	113.98		23.29	23.29	-	204.36	204.36
<i>Wind ISTS Scheme Tranche I (PTC) (Green Infra, Inox, Mytrah & Ostro)</i>	92.00	255.96	-	86.48	86.48	-	337.87	337.87
<i>Wind ISTS Scheme Tranche II (SECI) (Orange)</i>	46.00	127.98	-	34.68	34.68	-	271.00	271.00

Particulars	Share allocation for NBPDC (MW)	Total Purchase by (MU)	NBPDC Total Cost for FY 2024-25 (Rs Crores)			NBPDC Total Cost for FY 2024-25 (Paisa/kWh)		
			Fixed Charges	Energy Charges	Total	Fixed Charges	Energy Charges	Total
Avada (BREDA), Dharbhanga	0.74	1.22		0.50	0.50	-	415.00	415.00
SECI Green Infra	138.00	383.94	-	96.37	96.37	-	251.00	251.00
Alfanar	138.00	383.94	-	96.75	96.75	-	252.00	252.00
Betam	23.09	64.25	-	16.19	16.19	-	252.00	252.00
SECI Phase-VI Wind	161.00	-		-	-	-	-	-
Ostro Kannad	138.00	359.94		78.65	78.65	-	218.50	218.50
Morjar Windfarm	23.00	43.99		9.61	9.61	-	218.50	218.50
SBE Renewable (SECI Phase-V)	151.80	290.35		78.98	78.98	-	272.00	272.00
SJVN Ltd (BREDA)	92.00	175.97	-	54.73	54.73	-	311.00	
Avada (BREDA)	23.00	43.99		13.68	13.68	-	311.00	
Adani Green Energy	276.00	399.29	-	102.62	102.62	-	257.00	
Greenko Energy Pvt. Ltd. (SECI Hybrid)	96.60	123.01	-	47.91	47.91	-	389.50	
New Swadeshi Sugar Mill, Narkataganj	4.60	20.28	-	10.42	10.42	-	513.89	513.89
Hasanpur Sugar Mill, Dalsinghsarai	6.67	29.40	-	18.28	18.28	-	621.59	621.59
Bharat Sugar Mills, Sidhwalia, Gopalganj	6.90	30.42	-	15.54	15.54	-	510.75	510.75
Hari Nagar Sugar Mills, Hari Nagar, West Champaran	6.67	29.40	-	14.99	14.99	-	509.80	509.80
HPCL Biofuels Ltd., Sugauli, East Champaran	9.20	14.75	-	7.35	7.35	-	498.31	498.31
HPCL Biofuels Ltd., Lauria, West Champaran	9.20	16.22	-	8.27	8.27	-	509.63	509.63
Siddhashram Rice Mill Cluster Pvt Ltd	0.46	2.95	-	2.72	2.72	-	921.10	921.10
Bihar Distillers & Bottlers Pvt Ltd	4.32	3.47	-	2.20	2.20	-	635.98	635.98
Tirupati Sugar	2.76	13.20	-	8.39	8.39	-	635.90	635.90
	-				-	-	-	-
Others	-	1,511.98	-	1,514.76	1,514.76	-	1,001.84	
PTC(IEX)	-	1,511.98	-	1,514.76	1,514.76	-	1,001.84	1,001.84
GTAM IEX	-	-			-	-	-	-
Prior Period Expenses	-	-			-	-	-	-
UPPCL	-	-			-	-	-	-

Particulars	Share allocation for NBPDC (MW)	Total Purchase by (MU)	NBPDC Total Cost for FY 2024-25 (Rs Crores)			NBPDC Total Cost for FY 2024-25 (Paisa/kWh)		
			Fixed Charges	Energy Charges	Total	Fixed Charges	Energy Charges	Total
NEA	-	-	-	-	-	-	-	-
UI	-	-	-	-	-	-	-	-
PTC JITPL	-	-	-	-	-	-	-	-
PTC SKS Power	-	-	-	-	-	-	-	-
Transmission and Other Charges		-	2,055.57	-	2,055.57			
SLDC			2.75		2.75	-	-	-
BGCL			97.19		97.19	-	-	-
BSPTCL			677.31		677.31	-	-	-
POSOCO			5.15		5.15	-	-	-
Prior Period Transmission charges			-		-	-	-	-
PGCIL			1,273.17		1,273.17	-	-	-
Total	6,152.06	24,412.96	6,378.49	8,597.39	14,975.88	261.27	352.16	613.44

5.10.7 The Petitioner has made PPA agreements with the new plants according to 24x7 Power For All MoU approved by the Hon'ble Commission. The expected COD from the plants have been considered as per actual scenario. The average cost of power calculated above is subject to change on actual basis since power may be required to be procured from open market, as per demand and availability to the DISCOMs in a particular block.

5.10.7.1 The Hon'ble Commission is kindly requested to approve the above-mentioned projected power purchase costs for FY 2024-25.

5.11 Transmission Charges

5.11.1 It is submitted that the Petitioner has to pay transmission charges to CTU for use of transmission facilities enabling power drawl from eastern region. Further the Petitioner also pays BSPTCL, BGCL and SLDC charges as approved by the Commission for FY 2023-24.

5.11.2 The Petitioner has considered same Transmission charges as approved by the Hon'ble Commission for FY 2023-24 in MYT Orde dated 25.03.2022 with 10% escalation rate.

5.11.3 The Hon'ble Commission is kindly requested to approve the transmission and related charges for inter-state as well as intra-state transmission transactions for FY 2023-24 as per the below table:

Table 83: Transmission charges for ARR (in INR Crore)

Particulars	FY 2023-24
SLDC	2.75
BGCL	97.19
BSPTCL	677.31
POSOCO	5.15
POWERGRID	1,273.17
Total Transmission Purchase	2,055.57

5.12 Capital Investment Plan, Capitalization and Funding

5.12.1 As per BEREC (Multi Year Distribution Tariff) Regulations 2021, the Distribution Licensee must file a Business Plan which shall comprise of detailed capital investment plan, financing plan and physical targets. Relevant extract of the Distribution MYT Regulations 2021 is as follows:

5.1 The Distribution Licensee shall file a Business Plan, for the Control Period by a Petition in accordance with BEREC (Conduct of Business) Regulations, 2005 and its amendments from time to time, by 15th September of the year prior to the commencement of the Control Period...

5.2 Such Business Plan shall comprise but not limited to detailed category/sub-category-wise sales and demand projections, power procurement plan, capital investment plan, financing plan and physical targets...

5.3 The Distribution Licensee shall make assessment of infrastructure requirement and prepare capital investment plan in accordance with BEREC (Procedure for Filing Capital Investment and Capitalization Plan) Regulations, 2018 that will spill into the year(s) under review and new projects that will commence and may be completed within or beyond the tariff period...

- 5.12.2 During the Tariff Petition filed by the Petitioner for Truing up of FY 2020-21, APR of FY 2021-22 and ARR of FY 2022-23, the Petitioner didn't submit any projections for the control period 2022-23 to 2024-25 as the said projections for the control period to be submitted post approval under the Revamped Distribution Sector Scheme (RDSS) by the Monitoring Committee as it will form the core of total plan for creation of infrastructure both for AT&C loss reduction and supplying quality, reliable 24x7 power to the consumers.
- 5.12.3 Therefore, a separate CAPEX Petition was filed by the Petitioner (**Case No. 26/2022- NBPDCCL and 27/2022-SBPDCL**) for approval of schemes- Reconductoring, Mukhyamantri Krishi Vidyut Sambandh Yojana (MKVYS), Smart Metering, and RDSS. The CAPEX petition formed the basis for approval of capex and capitalization for the Tariff Petition filed by the Petitioner on 15th November 2022 for Truing up of FY 2021-22, APR of 2022-23 and ARR of FY 2023-24.
- 5.12.4 The Hon'ble Commission vide Order dt. April 28, 2023, in Case No. 26/2022 and 27/2022 has pronounced the final Order in the matter of approval of Capital Expenditure and Capitalization Plan for the MYT Control Period FY 2022-23 to FY 2024-25 which granted in-principal approval for implementation of the CAPEX Plan as per the cost estimate, investment schedule and time schedule. Therefore, the Hon'ble Commission allowed the impact of the CAPEX to be filed during the True-Up of FY 2022-23 to FY 2024-25. As per the Regulatory framework, the Petitioner was required to file the Petition for Truing up of FY 2022-23, APR of FY 2023-24 and ARR of FY 2024-25 by November 15, 2023, wherein the impact of actual CAPEX incurred in FY 2022-23 to be filed.
- 5.12.5 In view of the above, the Petitioner hereby submit that the capitalization of majority of the existing schemes has been done in FY 2022-23 except MKVYS. The details of the schemes capitalized in FY 2024-25 are mentioned in the below table for the kind reference of the Hon'ble Commission:

Table 84: Capitalization in 2024-25 (in INR Crore)

S.No.	Name of scheme	FY 2024-25
1	BRGF	-
2	R-APDRP	-
3	NABARD Phase VIII	-
4	NABARD Phase XI	-
5	MP/CM LAD	-
6	Deposit Scheme	-
7	ADB	-
8	ACA State Plan	-
9	Burnt DTR State Plan	-
10	State Plan -Others	-
11	CM Seven	-
A	Ongoing Schemes	-
12	State Plan -RDSS	742.61
	Infrastructure works- RDSS	– 1,025.08
	IT/OT- RDSS	67.20
	PMA - RDSS	16.58
13	Reconductoring	-

S.No.	Name of scheme	FY 2024-25
14	IPDS	-
15	Smart Prepaid Meter (Phase 2) 36 Lakhs- 30% Capex	1,047.19
16	Smart Prepaid Meter (Phase 3) 1.12 crores- 30% Capex	1,018.84
17	Any other	-
B	New Schemes	3,917.51
18	RGGVY	-
C	RGGVY	-
19	DDUGJY	-
20	MKVYS	74.37
D	New Schemes	74.37
E	Grand Total (A+B+C+D)	3,991.88
21	Own Sources	-
F	Total	3,991.88

5.12.6 The details of capitalization pertaining to smart prepaid meter installation in FY 2024-25 is provided below.

Phase-II:

- Under phase-II, 36 lakhs of smart prepaid meters are scheduled to be installed across the Bihar by the end of March-2024. In Phase-II smart prepaid meters are scheduled to be installed under hybrid mode i.e., CAPEX + OPEX mode in the ratio of 70:30.
- 10,00,000 smart prepaid meters are scheduled to be installed in South Bihar.
- Below table shows the expected expenditure under the OPEX mode for installation of 10 lakhs smart prepaid meters:

Smart Prepaid Meters under Capex	Month	2024-25		
		Meters installed	Meter cost	Capex
Phase II: 36 lakhs North 26 Lakhs (30% Capex)-	Op. Balance			
	April	0	10342.198	-
	May	78022	10342.198	24.21
	June	347202	10342.198	107.72
	July	347200	10342.198	107.72
	August	347201	10342.198	107.72
	September	347200	10342.198	107.72
	October	347201	10342.198	107.72
	November	347201	10342.198	107.72
	December	347201	10342.198	107.72
	January	347200	10342.198	107.72
	February	347201	10342.198	107.72
	March	347201	10342.198	107.72
Less: 7.5% to be given after 6 months				82.61
Total Capex				1,047.19

Phase-III

- In the final phase i.e. phase-III 1.12 Crore of smart prepaid meters are scheduled to be installed across the Bihar by the end of March-2024. In Phase-III smart prepaid meters are scheduled to be installed under hybrid mode i.e. CAPEX + OPEX mode in the ratio of 70:30.
- Out of 1.12 Crore, 35 lakhs smart prepaid meters are scheduled to be installed in South Bihar.
- Below table shows the expected expenditure under the OPEX mode for installation of 35 lakhs smart prepaid meters:

Smart Prepaid Meters under Capex	Month	2024-25		
		Meters installed	Meter cost	Capex
Phase III: 1.12 crores North 77 Lakhs (30% Capex)	Op. Balance			
	April	0	10342.198	0
	May	78022	10342.198	24.21
	June	347202	10342.198	107.72
	July	347200	10342.198	107.72
	August	347201	10342.198	107.72
	September	347200	10342.198	107.72
	October	347201	10342.198	107.72
	November	347201	10342.198	107.72
	December	347201	10342.198	107.72
	January	347200	10342.198	107.72
	February	347201	10342.198	107.72
	March	347201	10342.198	107.72
	Less: 7.5% to be given after 6 months			
Total Capex				1,018.84

5.12.7 The Petitioner has allocated the investments through various schemes into grant, Loan and Equity. The said allocation is based on the actual source from which funds were received by the Petitioner. The Petitioner has provided the detailed capitalization plan to the Hon'ble Commission as required in the tariff formats.

5.12.8 The Capitalization plan bifurcated into various sources of funds is as follows –

Table 85:Capital works in progress for 2024-25 (in INR Crore)

S. No.	Particulars	Ensuing year (FY 2024-25)
1	Opening CWIP	1069
2	New Investment	3716
3	Less Capitalization	3992
(a)	CWIP	3194
(b)	New Investment	798
4	Closing CWIP (1+2-3)	793.45
5	Funding	
(a)	CWIP Capitalization	3194
(i)	Grant	592
(ii)	Loan	1653
(iii)	Equity	949
(b)	New Investment Capitalization	798
(i)	Grant	148

S. No.	Particulars	Ensuing year (FY 2024-25)
(ii)	Loan	413
(iii)	Equity	237
6	Total capitalization	3992
(i)	Total Grant	740
(ii)	Total Loan	2066
(iii)	Equity	1186

5.12.9 The Petitioner would like to submit that the sources of funds under each scheme is as per the sanctioned documents for every scheme.

5.12.10 Therefore, the Petitioner requests the Hon'ble Commission to approve the Capitalization plan as estimated by the Petitioner.

5.13 Gross Fixed Assets

5.13.1 The Petitioner hereby submits the computation of Gross Fixed Assets considering the opening fixed assets, capitalization as per the new schemes in FY 2024-25

5.13.2 In addition to ongoing schemes, new schemes introduced under RDSS have been considered in the below projection.

5.13.3 The below table demonstrates the Asset addition planned during FY 2024-25 and closing balance of Gross Fixed Assets for FY 2024-25: -

Table 86:GFA for FY 2024-25 (in INR Crore)

Sl. No.	Assets group	Closing balance at the end of Previous Year	Addition during ensuing year	Closing balance at the end of ensuing year
1	Land and land rights	1,105	150	1,255
2	Buildings	119	21	140
3	Hydraulic works	0	0	0
4	Other civil works	201	31	233
5	Plant and Machinery	3,504	627	4,130
6	Lines and cable network	19,158	3,139	22,297
7	Vehicles	1	0	1
8	Furniture and Fixtures	7	1	8
9	Office equipment	46	23	69
10	Spare unit/service unit	4	1	5
11	Assets taken over from licensees pending final valuation	0	0	0
	Total	24,146	3,992	28,137

5.13.4 The Hon'ble Commission is requested to approve the GFA as estimated by the Petitioner for FY 2024-25.

5.14 Depreciation on GFA

5.14.1 The depreciation has been computed annually based on straight line method by applying weighted average rate of depreciation on the average GFA. For this purpose, the Petitioner has

adopted the Regulation 23 of the Bihar Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2021. The Petitioner has followed Straight line depreciation method while calculating depreciation for FY 2024-25.

5.14.2 The rate of depreciations has been taken as per the rates given by the Hon'ble Commission. The Petitioner has reduced the depreciation on assets created out of Grants from the gross depreciation to arrive at the net depreciation to be charged. The computation of depreciation on the assets created out of Grants is based on the actual ratio of 'Grants' in GFA.

5.14.3 Also, it is to bring into kind attention of the Hon'ble Commission that the balance of GFA in the beginning of the year and additions during the year does not include the value of Land as it is a non-depreciable asset.

5.14.4 Further, it is hereby submitted that the Petitioner has considered the opening GFA for FY 2024-25 equals the closing GFA of APR (FY 2023-24) as calculated in this Petition. The Petitioner is in the process of formulating the gross block as per the Regulatory accounts which may take some time.

5.14.5 The table provided below demonstrates the depreciation projected by the Petitioner for FY 2024-25 –

Table 87: Depreciation on GFA (in INR Crore)

Particulars	FY 2024-25
Gross fixed assets of the beginning of the year	23,098
Additions during the year	3,992
IDC	
Adjustment for assets sold/ discarded etc	
Closing GFA	27,090.03
Average GFA	25,094.09
Weighted Average Rate of Depreciation	4.66%
Depreciation for the year	1,169.94
Opening grants	12,114
Grants during the year	696
Adjustment for assets sold/discarded etc	-
Total Grants	12,809.52
Average Grants	12,461.69
Weighted Average rate of Depreciation	4.84%
Depreciation for GFA on Grants	603.65
Net Depreciation of GFA on loans (8-15)	566.30

5.14.6 As seen from the above table, it is clearly evident that the Petitioner has deducted the depreciation on those fixed assets which are funded through grants. It is requested to the Hon'ble Commission to allow the depreciation as provided above.

5.15 Interest on Loans

- 5.15.1 The Petitioner submits that the calculation of interest on Project loans is as per Regulation 25 of the BERC Multi-Year Tariff Regulations 2021.
- 5.15.2 The Petitioner has provided detailed loan schedule depicting the Loans and their additions and repayment during the year. Detailed Loan schedule for FY 2024-25 is provided in the table below:

Table 88: Detailed loan schedule for FY 2024-25 (in INR Crore)

Particulars	Purpose of loan	Opening balance	Rate of Interest	Addition during the year	Repayment during the year	Closing balance	Average Balance	Amount of interest paid
REC (RGGVY) Term Loan	Project	186	10.50%		21	166	176	19
REC (R-APDRP-PART-B) Term Loan	Project	22	9.00%		7		22	5
PFC (COUNTER PART FUNDING) Term Loan	Project	69	10.63%		7		69	7
State Govt.-Non-Plan Loan	Project	338	10.50%	40	-		338	-
BSPHCL (ADB) Loan	Project	56	10.50%		-		56	8
REC (DDUGJY)	Project	1,032	9.56%		24		1,032	96
REC (IPDS)	Project Support	302	8.83%		7		302	25
Smart Metering		1,384	9.30%		-		1,384	172
Total		3,388		40	66	166	3,378	332
Weighted Average rate of Interest								9.56%

- 5.15.3 The interest on normative debt is calculated on the 70% of the amount of capital assets reduced by the value of grants and depreciation representing normative repayment.
- 5.15.4 The below table demonstrates the computation of interest on normative debt for the FY 2024-25:

Table 89: Interest on normative debt for 2024-25 (in INR Crore)

Particulars	FY 2024-25
Opening loan	5,841
Addition during the year	2,277
Less: Normative repayment	566
Closing loan	7,551
Average loan	6,696
Actual Weighted Average Rate of Interest	9.56%
Amount of Interest on Loan	640.47

5.15.5 It is requested to the Hon'ble Commission to approve **INR 640.47** Crore towards interest on normative debt.

5.16 Other Financial Charges

5.16.1 The Petitioner is incurring other Finance charges i.e., Discount to consumers for timely payment of bills, power factor rebate, interest to suppliers/contractors etc. The Petitioner is claiming other Finance charges by escalating the charges estimated for FY 2024-25:-

Table 90:Other finance charges (in INR Crore)

Particulars	Projections for FY 2024-25
Expenses estimated in previous year	62.77
Inflationary index	10%
Finance charges estimated	69.05

5.16.2 The detailed calculation of other finance charge for base year of INR 62.77 Crore is provided in the True-up and APR section of this Petition.

5.16.3 Therefore, the Petitioner requests the Hon'ble Commission to allow the afore-mentioned Finance charges for FY 2024-25.

5.17 Operation & Maintenance (O&M) Expenses

5.17.1.1 Regulation 22 BERC (Multi Year Distribution Tariff) Regulations 2021 states that:

(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 Distribution Licensee or a class of Distribution Licensees.

(b) Norms shall be defined in terms of combination of number of personnel per 1000 consumers and number of personnel per substation along with annual expenses per personnel for Employee expenses; combination of A&G expense per personnel and A&G expense per 1000 consumers 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 Distribution Licensee such as I revision, shall be excluded from the norms in the trajectory.

(e) The One-time expenses and the expenses beyond the control of the Distribution 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.

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

(i) In absolute analysis, Distribution 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. In relative analysis, performance parameters of other Distribution Licensees within the same state or in other states, shall be considered by the Commission to estimate norms. Provided that other Distribution Licensees so chosen shall have similar profile as that of the Distribution Licensee under consideration in terms of consumer mix, type of license area (city, state, etc.) type of distribution networks, viz., underground/ overhead, High Tension (HT) consumer, Low Tension (LT) consumer ratio, etc. 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 Distribution Licensee.

5.17.1.2 **Employee Expenses:** The Hon'ble Commission, in terms of regulation 22 of BERC (Multi Year Distribution Tariff) Regulations 2021, had determined norms for computation of Employee cost for the upcoming control period of FY 2022-23 to FY 2024-25.

5.17.1.3 The Commission has computed the employee norm and employee expenses for the control period as given in the table below:

Employee expense norm approved for NBPDC & SBPDCL in TO dated 25.03.2022

Particulars	Base employee expense norm for NBPDC	Base employee expense norm for SBPDCL
No. of personnel per substation	6.7650	9.4117
No. of personnel per 1000 consumers	0.0629	0.1504
Annual expenses per personnel (Rs. Crore)	0.0854	0.0914

However, it is pertinent to mention that the norms for NBPDC and SBPDCL should not be different rather should be the same for both DISCOMs.

Regulation 22.1 specify employee cost shall be computed as per the approved norm escalated by consumer price index (CPI) The CPI inflation shall be considered based on the average increase in CPI for immediately preceding three years i.e. FY 2020-21, FY 2021-22, FY 2022-23 and base year of FY 2019-20. The average CPI inflationary increase is computed as given below:

Particulars	2019-20	2020-21	2021-22	2022-23
Average CPI index points for FY	322.5	338.7	356.1	377.6
Increase in CPI index over the previous year		5.02%	5.13%	6.05%
Average CPI inflationary inc.				5.40%

5.17.1.4 Accordingly, the employee cost computed for 2024-25 is shown in the table below:

Table 91: Employee expenses (in INR Crore)

Sr. No	Particulars	2024-25
1	Average annual CPI index	5.40%
2	Norms-Number of personnel per 1000 consumers	0.0629
3	Norms-Number of personal per substation	6.765
4	No. of consumers (1000)	13220
5	No of substations	653
6	Annual expenses per personnel (Rs. Cr)	0.1005
7	Employee cost per 1000 consumers	83.54
8	Employee cost per substation	443.81
9	Total Employee cost	527.35

5.17.1.5 The Hon'ble Commission is therefore requested to approve the employee expenses of Rs 527.35 crores for FY 2024-25.

5.17.2 Repairs and maintenance:

5.17.2.1 Regulation 22.2 of BERC (Multi Year Distribution Tariff) Regulations 2021, specify R&M expenses as percentage (as per the norm determined) of Gross Fixed Assets excluding land cost for the year.

5.17.2.2 The Petitioner has computed the R&M norm i.e., 'K' factor 1.24% for NBPDC and has accordingly detailed computation of R&M expenses for the FY 2024-25 as shown below:

Table 92: R&M Expense (in INR Crore)

S. No	Particulars	FY 2024-25
1	Opening GFA	24145.52
2	Opening Land Cost	1105.28
3	Opening GFA exc land cost	23040.24
4	K Factor	1.24%
5	R&M Expense	285.70

5.17.3 Administrative expenses:

5.17.3.1 The Commission, in terms of regulation 22 of BERC (Multi Year Distribution Tariff) Regulations 2021, had determined A&G norm for the MYT control period of FY 2022-23 to FY 2024-25 in the Tariff Order dated 25.03.2022.

5.17.3.2 The Commission has considered the base value of A&G expense norm per 1000 consumers and A&G expense per employee and annual A&G expenses per 1000 consumers and per employee in the Tariff Order dated 25.03.2022 as detailed in the table below:

A&G expense norm approved for NBPDC & SBPDCL in TO dated 25.03.2023

Particulars	Base A&G expense norm for NBPDC	Base A&G expense norm for SBPDCL
Norms-A&G expenses per 1000 consumers	0.420	1.00
Norms-A&G expenses per personal	0.360	0.850
Annual expenses per 1000 consumers (Rs. Cr)	0.0077	0.0099
Annual A&G expenses per employee (Rs. Crore)	0.0225	0.0121

However, it is pertinent to mention that the norms for NBPDC and SBPDCL should not be different rather should be the same for both DISCOMs.

5.17.3.3 Regulation 22.3 specifies A&G expenses shall be computed as per the approved norm escalated by wholesale price index (WPI). The WPI inflation shall be considered based on the average increase in WPI for immediately preceding three years. The WPI inflationary increase for FY 2022-23 is computed as given below:

WPI inflationary increase for FY 2022-23

Years	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
Average WPI index points for FY	121.80	123.38	139.41	152.37
Increase in WPI index over previous year		1.29%	13.00%	9.30%
Average WPI inflationary increase				7.86%

5.17.3.4 Accordingly, the A&G computed for 2024-25 (ARR), is shown in the table below:

Table 93: A&G expenses (in INR Crore)

S. No	Particulars	FY 2024-25
1	Average annual WPI CPI index	7.86%
2	Norms-A&G expenses per 1000 consumers	0.4200
3	Norms-A&G expenses per personal	0.3600
4	No. of consumers (1000)	13220
5	No of employees	11098
6	Annual expenses per 1000 consumers (Rs. Cr)	0.00943
7	Annual expenses per employee (Rs. Cr)	0.02757
8	A&G cost per 1000 consumers	124.73
9	A&G cost per employee	305.97
10	Grand Total	430.70

S. No	Particulars	FY 2024-25
11	Rent Charges for Smart Prepaid Meter	223.37
12	Net Total A&G cost	654.07

5.17.3.5 In addition to the A&G expenses claimed above, the petitioner has also claimed expenses on account of installation of the following smart meters. It is worthwhile to mention that the Petitioner has considered the monthly rental of INR 86.23 per meter which is as per the order of the Hon'ble Commission in Case No. 05/2020. The detailed calculation is provided below:

Phase 1: The total number of smart meters proposed to be installed under phase 1 is 23,50,000 out of which 10,30,000 lakhs belongs to NBPDC. The total smart meters under Phase 1 are under Opex mode which will be booked under A&G expenses:

Smart Prepaid Meters under A&G expenses	Month	2023-24			2024-25		
		Meters installed	Monthly Meter Rent	Total A&G cost	Meters installed	Monthly Meter Rent	Total A&G cost
Phase I: 23.5 lakhs North 10.30 Lakhs	Op. Balance	16028	86.23	1.66			
	April	19920	86.23	1.89			
	May	21409	86.23	1.85			
	June	16617	86.23	1.29			
	July	12166	86.23	0.84			
	August	13250	86.23	0.80			
	September	9521	86.23	0.49			
	October	6162	86.23	0.27			
	November	74826	86.23	2.58			
	December	74826	86.23	1.94			
	January	74826	86.23	1.29			
	February	74826	86.23	0.65			
March	74826	86.23	-				
Total		473175		15.53	Total		
Less: Government Budgetary Support		58798	900	-			
Net expense				15.53	Net expense		

Phase-II:

- Under phase-II, 36 lakhs of smart prepaid meters are scheduled to be installed across the Bihar by the end of March-2024. In Phase-II smart prepaid meters are scheduled to be installed under hybrid mode i.e., CAPEX + OPEX mode in the ratio of 70:30.
- 26,00,000 smart prepaid meters are scheduled to be installed in North Bihar.
- Below table shows the expected expenditure under the OPEX mode for installation of 26 lakhs smart prepaid meters:

Smart Prepaid	Month	2023-24	2024-25
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Meters under A&G expenses		Meters installed	Monthly Meter Rent	Total A&G cost	Meters installed	Monthly Meter Rent	Total A&G cost
Phase II: 36 lakhs North 26 Lakhs (70% Opex)	Op. Balance	19537	80.44	1.89	164232	80.44	15.85
	April	34288	80.44	3.03	131560	80.44	11.64
	May	33294	80.44	2.68	131560	80.44	10.58
	June	31127	80.44	2.25	157872	80.44	11.43
	July	64851	80.44	4.17	157872	80.44	10.16
	August	72397	80.44	4.08	157872	80.44	8.89
	September	76813	80.44	3.71	157872	80.44	7.62
	October	84356	80.44	3.39	157872	80.44	6.35
	November	164232	80.44	5.28	157872	80.44	5.08
	December	164232	80.44	3.96	157872	80.44	3.81
	January	164232	80.44	2.64	0	80.44	-
	February	164232	80.44	1.32	0	80.44	-
	March	164232	80.44	-	0		
Total			Total	38.41			91.41

Phase-III

- In the final phase i.e. phase-III 1.12 Crore of smart prepaid meters are scheduled to be installed across the Bihar by the end of March-2024. In Phase-III smart prepaid meters are scheduled to be installed under hybrid mode i.e. CAPEX + OPEX mode in the ratio of 70:30.
- Out of 1.12 Crore, 77 lakhs smart prepaid meters are scheduled to be installed in North Bihar.
- Below table shows the expected expenditure under the OPEX mode for installation of 77 lakhs smart prepaid meters:

Smart Prepaid Meters under A&G expenses	Month	2023-24			2024-25		
		Meters installed	Monthly Meter Rent	Total A&G cost	Meters installed	Monthly Meter Rent	Total A&G cost
Phase III: 1.12 crores North 77 Lakhs (70% Opex)	Op. Balance				0	80.44	-
	April				0	80.44	-
	May				78022	80.44	6.28
	June				347202	80.44	25.14
	July				347200	80.44	22.34
	August				347201	80.44	19.55
	September				347200	80.44	16.76
	October				347201	80.44	13.96
	November				347201	80.44	11.17
	December				347201	80.44	8.38
	January				347200	80.44	5.59
	February				347201	80.44	2.79
	March				347201	81.44	-
Total			Total	-			131.95

Accordingly, the total rental charges for smart prepaid meter in FY 2024-25 is shown in the table below:

Particulars	Amount
Rent Charges for Smart Prepaid Meter (Phase 1) 23.5 Lakhs	-
Rent Charges for Smart Prepaid Meter (Phase 2) 36 Lakhs- 70% Opex	91.41

Rent Charges for Smart Prepaid Meter (Phase 3) 1.12 crores- 70% Opex	131.95
Total Rental Charges	223.37

It is requested to the Hon'ble Commission to approve the total Administrative and General expenses of INR 654.07 Crore (including meter rental) for FY 2024-25.

Allocation of Holding Company cost: The Petitioner is claiming the holding company expenses by escalating the expenses projected for FY 2023-24 in Annual performance review by 10%.

5.17.4 The below table represents the allocation of Holding Company cost towards Petitioner for FY 2024-25:

Table 94: Holding company cost for 2024-25 (in INR Crore)

Particulars	FY 2024-25
Previous year expenses	25.51
Inflation rate considered	10%
Inflationary increase	2.55
Total	28.06

5.17.5 The Petitioner requests the Hon'ble Commission to approve the above Holding Company cost for FY 2024-25.

5.18 Return on Equity

5.18.1 The Petitioner has projected Return on Equity as per Regulation 27 of the BERC Multi Year Distribution Tariff Regulations 2021 as extracted below:

“(a) Return on equity shall be computed on 30% of the capital base or actual equity, whichever is lower.

Provided that assets funded by consumer contribution, capital subsidies/ grants and corresponding depreciation shall not form part of the capital base. Actual equity invested in the Distribution Licensee 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 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. 01.04.2016 and further incentive equivalent to 0.5% will be allowed in the form of RoE, if the project is completed within original schedule period. However, Return on Equity for the project commissioned prior to 01.04.2016 shall be allowed at the rate of 14%.”

5.18.2 The return on equity is calculated on 30% of the fixed assets reduced by the amount of grants. The table below demonstrates the detailed calculation for return on equity:-

Table 95: Return on equity for ARR (in INR Crore)

Particulars	FY 2024-25
Calculation for Return on Equity	
Closing equity to end of 31.03.2016	440.86
Rate of return on equity (%)	14.00%
Return on Equity	61.72
Equity with effect from 1st April 2016	
Opening equity	2,668
Equity addition during the year	976
Closing equity	3643.90
Average equity	3156.07
<i>Rate of return on equity (%)</i>	15.50%
Return on equity	489.19
Total Return on Equity	550.91

5.18.3 It is requested to the Hon'ble Commission to consider the return on equity of **Rs 550.91** as calculated above.

5.19 Interest on Consumer Security Deposit

5.19.1 The Petitioner submits that Interest on Security Deposit amount has been claimed as per the Regulation 26 of the Multi-Year tariff regulations 2021 which specifies that

“Provided further that interest shall be allowed on consumer security deposits and security deposits from Distribution System users held during the year at the Bank Rate as of the date on which petition for determination is filed. The interest allowed shall be subject to true up at weighted average Bank Rate of the concern Financial Year.”

5.19.2 The below table demonstrates the calculation of interest on consumer security deposits projected for FY 2024-25:-

Table 96: Interest on consumer security deposits (in INR Crore)

S. No.	Particulars	FY 2024-25
1	Opening Security Deposit	464.96
2	Addition / (Deletion) during the year	14.25
3	Closing Security Deposit	479.21
4	Average Security Deposit (1+3)/2	472.09
5	RBI Bank Rate	6.75%
6	Interest on Security Deposit	31.87

5.19.3 The Petitioner has taken closing balance for FY 2023-24 as opening balance for FY 2024-25. The additions are assumed as per the audited financial statement for FY 2022-23 i.e. INR 14.25 Crore. The interest on consumer security deposits calculated at the rate of 6.75%.

5.19.4 Therefore, it is requested to the Hon'ble Commission to approve the above-mentioned amount towards interest on consumer security deposit for FY 2024-25.

5.20 Interest on Working Capital

5.20.1 The Petitioner has estimated the amount towards interest on Working capital for FY 2022-23 to FY 2024-25 as per the Regulation 26 of the Bihar Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2021, as extracted below:

"The Distribution Licensee shall be allowed interest on estimated level of working capital for the financial year, computed as follows:

a) Two months equivalent of expected revenue.

b) Maintenance spares @40% of R&M expenses for one month:

Less:

(i) Power purchase cost, transmission charges and load dispatch charges for one month.

(ii) Depreciation, return on equity and contribution to contingency reserves equivalent to two months.

(iii) Amount of security deposits from consumers, if any, held during the year.

Provided that the 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 Trueing-up shall be the weighted average MCLR of the concern Financial Year plus 150 basis points.

Provided further that interest shall be allowed on consumer security deposits and security deposits from Distribution System users held during the year at the Bank Rate as of the date on which petition for determination is filed. The interest allowed shall be subject to true up at weighted average Bank Rate of the concern Financial Year.

Provided also that if the State Government is providing resource gap grant and/or direct subsidy to consumers, the working capital shall be reduced by two months equivalent of that amount."

5.20.2 The Petitioner has considered two months equivalent expected revenue and 40% of one month of R&M expense as specified in the above Regulation which was further deducted by Power Purchase cost along with transmission charges for one month, depreciation, ROE, contingency reserve for 2 months, consumer security deposit.

5.20.3 It is pertinent to note that the Petitioner has determined the ARR for FY 2024-25 taking into consideration the revised AT&C loss trajectory as submitted to MoP, GoI. Therefore, there will be no state government fund allocated towards disallowance of power purchase cost. In the light of the above explanation the Petitioner has not deducted any amount towards disallowed power purchase from working capital requirement.

5.20.4 The interest on working capital is calculated @ 10.05%, which is SBI one-year MCLR as on the date of filing of the Petition on which 150 basis point is further added as per the applicable Regulations. The detailed working for the interest on working capital requirement is provided in the table below:

Table 97: Interest on working capital for FY 2024-25 (in INR Crore)

Sr. No	Particulars	FY 2024-25
1	Two months equivalent of expected revenue	2,676.69
2	Maintenance spares @40% of R&M expenses for one month	9.52

Sr. No	Particulars	FY 2024-25
3	Less:	
i.	(i) Power purchase cost, Load despatch charges and transmission charges for one month.	1,388.62
ii..	(ii) Depreciation, ROE, and contribution to contingency reserve equivalent to two months.	186
iii.	(iii) Amount of security deposits from consumers, if any, held during the year	457
	Total working capital	654.09
4	2 months of subsidy	
5	Net working capital	654.09
6	Interest rate	10.05%
7	Interest on working capital	65.74

- 5.20.5 It is pertinent to mention that the subsidy for FY 2024-25 has not been declared yet by the State Government, therefore, Petitioner has considered 2 month of subsidy equivalent to zero for FY 2024-25.
- 5.20.6 The Petitioner requests the Hon'ble Commission to approve the interest of working capital as provided in the above Table for FY 2024-25.

5.21 Energy Saving Certificates (ESCerts)

- 5.21.1 Perform, Achieve and Trade (PAT) is a regulatory instrument to reduce Specific Energy Consumption in energy intensive industries, with an associated market based mechanism to enhance the cost effectiveness through certification of excess energy saving which can be traded. PAT is a mechanism for improvements in energy efficiency of energy intensive industries. Specific high energy intensive industries are identified as Designated Consumers (DCs) within certain key sectors.
- 5.21.2 The Petitioner hereby submit the Hon'ble Commission that the 'Distribution Licensee' was also included as DCs under second cycle of PAT. PAT Cycle II commenced from 1st April, 2016 and was completed on 31st March 2019. Implementation of PAT cycle -II has resulted into total energy savings of about 14.08 MTOE translating into avoiding of about 68 million tonne of CO2 emission.
- 5.21.3 The Petitioner submitted to Bureau of Energy Efficiency (BEE) that Discoms do not contribute to Green House Gas emissions and are in continuous evolving phase on account of various projects like Smart Metering, Revamped Distribution Sector Scheme (RDSS) etc. Therefore, Discoms may kindly be exempted from PAT Cycle-II. Despite this, the Petitioner was required to purchase 45758 nos. of Energy Savings Certificates (ESCerts) at the cost of INR 10.00 Crore in FY 2023-24. The detailed calculation of the same is provided in the APR section of this Petition.
- 5.21.4 Accordingly, the Petitioner has projected the expense towards the purchase of ESCerts in FY 2024-25 at the increased cost by 20% as compared to FY 2023-24, and has estimated the ESCerts expense of INR 12.00 Crore for FY 2024-15.
- 5.21.5 The Petitioner requests the Hon'ble Commission to approve the ESCerts expense of INR 12.00 Crore for FY 2024-25.

5.22 Demand Side Management

- 5.22.1 The Petitioner has suffered DSM of 26.41 MU which has resulted into a DSM charge of Rs. 41.40 Crore in FY 2022-23.
- 5.22.2 The DSM objective as specified in the BERC (Demand Side Management) Regulations, 2014 is provided hereunder:
- “3.1 The Commission shall formulate DSM objectives that shall be considered in the advancement and implementation of cost effective DSM initiatives in the State. The objectives may include power shortage mitigation, seasonal peak reduction/peak shifting, cost effective energy savings, lowering the cost of electricity, reduction in emissions of greenhouse gases etc.*
- 3.2 While formulating the DSM objective, the Commission may take into consideration the National DSM objectives/Plans formulated by BEE, if any.”*
- 5.22.3 Further, BERC DSM Regulation 2014 specifies that DISCOMs are required to perform assessment of potential of DSM in the state every year, as mentioned hereunder.”
- 4.1 The Distribution Licensee in the State shall carry out assessment of potential for DSM in the State every year. The first assessment of technical potential for DSM shall be carried out within three months of the notification of these Regulations.”*
- 5.22.4 Therefore, in view of the above, the Hon’ble Commission is prayed to allow the provisioning of DSM charges for FY 2024-25.
- 5.22.5 The Petitioner thus requests the Hon’ble Commission to pass on the projected cost pertaining to DSM to the tune of INR 30.00 Crore for FY 2024-25.

5.23 Non-Tariff Income

- 5.23.1 Non-Tariff income includes bank charges, interest on investments and bank balances, miscellaneous recoveries etc. The Petitioner has projected non-tariff income for FY 2024-25 on the basis of ~10% escalation on the non-tariff income in FY 2023-24 (except for rebate on power purchase which has been calculated as 1% of the total cost of power purchase and DPS which is expected to show a 100% YOY growth). The Non-tariff income has been projected at such a rate due to the reasons that the DISCOMs while implementing Smart prepaid meters in the state in the coming years are expecting arrear and DPS recovery at a higher rate as compared to previous years which is further expected to increase the NTI at a higher rate in the coming years.
- 5.23.2 The Petitioner has further deducted the cost of funding the DPS from the total Non-Tariff Income and calculated the net Non-tariff income as follows:
- 5.23.3 The below table demonstrates the other non-tariff income for FY 2024-25: -

Table 98: Non-tariff income for ARR (in INR Crore)

Particulars	FY 2024-25 (Projections)
Interest on Advances to Suppliers/Contractors	217.11
Interest on Saving Accounts	11.29
Interest on Staff Loan & Advances	24.06
Interest Income	252.46

Delayed Payment Surcharge from Consumers	569.09
Income From Interest on TDS Refund	-
Income from sale of tender paper	0.16
Miscellaneous Receipts	16.83
Re-imbursement from Disaster Management	26.09
Rebate and Discount Received	35.59
SCED benefits	14.62
Consumer contribution income	6.92
Rental income	2.31
Income from sale of Scrap	4.42
Supervision Charge	13.54
Miscellaneous charges from Consumers	43.19
Other Income	732.76
Meter Rent/ Service Line Rental	
Excess provision written back	
Miscellaneous Recoveries	22.28
Others	22.28
Total Non-tariff income	1,007.50
Delayed Payment Surcharge from Consumers	569.09
Principal amount on which DPS Charged	3,161.63
Interest Rate of funding DPS	10.05%
Interest on funding Principal	317.74
Net Non-Tariff Income	689.76

5.23.4 It is worthwhile to submit following inferences of the Petitioner pertaining to the Non-tariff income for FY 2024-25:

- Delayed payment surcharge is estimated to be reduced in FY 24-25 as compared to FY 23-24 on account of smart prepaid meters.
- Income from sale of scrap in FY 24-25 is estimated to be reduced as compared to FY 22-23 on account of enhanced productivity and deployment of efficient equipments in business operation.

5.23.5 The Petitioner requests the Hon'ble Commission to approve the above-mentioned amount towards non-tariff income for FY 2024-25

5.24 Revenue from Sale of Power at Existing Tariff

5.24.1 Revenue from Sale of Power at Existing Tariff for the Petitioner is given in table below-

Table 99: Revenue from sale of power at existing tariff for FY 2024-25 (in INR Crore)

Category of Consumers	Sales (MUs)	Total (Rs Crores)
Domestic	9,575.03	8,067
Kutir Jyoti	2,930.81	2,324
Unmetered (Now Metered)	-	-
Metered 0-50	2,930.81	2,324
DS I Rural	4,393.62	3,738

Category of Consumers	Sales (MUs)	Total (Rs Crores)
Metered (Now Demand Based)	4,393.62	3,738
First 50 Units	2,135.80	1,758
Above 50 Units	2,257.82	1,980
DS II Demand Based	2,250.21	2,005
First 100 Units	1,882.55	1,631
Above 100 Units	367.66	375
DS III	0.39	0.41
Non_Domestic Service	2,250.86	2,425
NDS I - Metered Now Demand Based	814.80	724
First 100 Units	373.52	323
Above 100 Units	441.28	400
NDS II - Demand Based	1,436.05	1,701
Contract Demand <0.5 kW	2.19	2
Contract Demand >0.5 kW	1,433.86	1,699
First 100 Units	323.12	353
Above 100 Units	1,110.74	1,346
Street Light Services	129.53	253
SS Metered	13.34	13
SS Unmetered	116.19	240
Irrigation & Allied Services	1,942.17	1,491
IAS I	1,840.57	1,382
Unmetered	9.95	11
Metered	1,830.63	1,371
IAS II	101.60	109
Metered (Now Demand Based)	101.60	109
Public Service Connections	547.86	522
Public Water Works	45.82	80
Har Ghar Nal	502.05	442
Low Tension Industrial Services	561.86	851
LTIS I (0-19 kW)	519.48	779
LTIS II (>19 kW - 74 kW)	42.38	73
LT Electric Vehicle Charging Station	12.28	12.10
HT-General	1,176.54	1,460
HTS (General)- I (11 kV)	669.48	852
HTS (General)- II (33 kV)	332.06	391
HTS (General)- III (132 kV)	131.02	181
HTS (General)- IV (220 kV)	-	-
HTSS – (33 kV/11 kV)	43.97	35
HT-Industrial Services	80.95	82.71
HTIS (Industrial) – I (11 kV)	2.54	3
HTIS (Industrial)– II (33 kV)	3.54	4
HTIS (Industrial) – III (132 kV)	-	-
HTIS (Industries)-IV (220 kV)	74.46	75
HTIS (Oxygen Manufacturers)	0.42	1
HTIS (Oxygen Manufacturers)- 33 KV	-	-
Railway Traction Services	159.50	190
RTS	159.50	190
Nepal	314.22	255
Nepal	314.22	255

Category of Consumers	Sales (MUs)	Total (Rs Crores)
DF		
HT Electric Vehicle Charging Stations.	184.25	163.78
Total	16,935.06	15,772.02

5.24.2 The Petitioner requests the Hon'ble Commission to approve revenue from existing Tariff as INR 15772.02 Crore for FY 2024-25

5.25 Annual Revenue Requirement for FY 2024-25

5.25.1 The Annual Revenue Requirement for FY 2024-25 is given in the table below-

Table 100:Net ARR for 2024-25 (in INR Crore)

Sr. No.	Particulars	FY 2023-24 (Projections)
1	Net Purchase of power	11,232.79
2	Purchase of power	12,920.31
3	Revenue from Sale of Power at exchange	1,687.52
4	Transmission charges	2,055.57
5	O & M Expenses (A+B+C+D)	1,495.18
A	Employee expenses	527.35
B	R&M expenses	285.70
C	A&G expenses	654.07
D	Holding company expenses	28.06
6	Depreciation	566.30
7	Interest on loan	709.52
8	Other finance charges	
9	Return on equity	550.91
10	Interest on SD	31.87
11	Interest on working capital	65.74
12	Energy Savings Certificate (ESCerts)	12.00
13	Demand Side Management	30.00
14	Bad & doubtful debts	
15	Total Revenue requirement	16,749.87
16	Less:: Non-tariff income	689.76
17	Net Revenue requirement	16,060.11
18	Revenue from Sale of Energy	15,743.65
19	Gap / (Surplus)	316.46
20	(Gains)/Loss on account of controllable factors absorbed by licensee	-
21	Treatment of AT&C loss subsidy	-
22	Revenue Gap/ (Surplus) of previous FY	1,345
22	Net Gap / (Surplus)	1,661.46

5.26 Net Gap at Existing Tariff

5.26.1 The petitioner requests the Hon'ble commission to approve unrecovered gap for FY 2024-25 as calculated in the table below.

Table 101: Unrecovered Gap for FY 2022-23 along with carrying cost (in INR Crore)

Particular	Amount (Rs. Cr)
Revenue Gap /(Surplus) in True-up for FY 2022-23	1123.41
Interest for FY 2022-23 for 6 months	52.23
Interest for FY 2023-24 for 1 year	112.90
Interest for FY 2024-25 for 6 months	56.45
Sub-total carrying/(holding) cost	221.59
Total gap/(Surplus) with interest	1345.00

5.26.2 The petitioner has not considered unrecovered gap for APR of FY 2023-24 while computing net revenue gap for FY 2024-25. The net revenue gap at existing tariff for FY 2024-25 is as below.

Table 102: Net revenue gap at existing tariff for FY 2024-25

S. No.	Particulars	Amount (INR Crore)
1	Aggregate Revenue Requirement (ARR)	16,060.11
2	Less: Revenue from Existing Tariff	15,743.65
3	Revenue Gap / (Surplus)	316.46

5.26.3 It can be observed that a tariff hike is required for meeting the shortfall for FY 2024-25 along with the carried forward revenue gap for FY 2023-24. Considering the net gap for the state of Bihar and with the proposed tariff structure (detailed in chapters following), the Petitioner is proposing an **overall tariff hike of 3.03%**.

5.27 Revenue from Sale of Power at Proposed Tariff

5.27.1 Revenue from sale of power at proposed tariff for FY 2024-25 is given in table below

Table 103: Total revenue from sale of power at proposed tariff for FY 2024-25

Sr. No	Category of Consumers	NBPDCL
		Total (Rs Crores)
1	Domestic	8,392.25
A	Kutir Jyoti	2,421.07
		-
i	Metered 0-50	2,421.07
B	DS I Rural	3,888.47
i	Metered (Now Demand Based)	3,888.47
a	First 50 Units	1,828.38

b	Above 50 Units	2,060.09
C	DS II Demand Based	2,082.28
i	First 100 Units	1,692.93
ii	above 100 Units	389.34
D	DS III	0.43
2	Non_Domestic Service	2,509.39
A	NDS I - Metered Now Demand Based	752.94
i	First 100 Units	336.29
ii	above 100 Units	416.65
B	NDS II - Demand Based	1,756.44
i	Contract Demand <0.5 kW	2.44
ii	Contract Demand >0.5 kW	1,754.01
a	First 100 Units	363.91
b	above 100 Units	1,390.09
3	Street Light Services	149.68
A	SS Metered	13.43
B	SS Unmetered	136.25
4	Irrigation & Allied Services	1,549.12
A	IAS I	1,436.96
i	Unmetered	10.94
ii	Metered	1,426.02
B	IAS II	112.15
i	Metered (Now Demand Based)	112.15
5	Public Service Connections	542.01
A	Public Water Works	82.14
B	Har Ghar Nal	459.87
6	Low Tension Industrial Services	872.75
A	LTIS I (0-19 kW)	798.60
B	LTIS II (>19 kW - 74 kW)	74.16
	LT Electric Vehicle Charging Station	12.63
8	HT-General	1,505.52
A	HTS (General)- I (11 kV)	878.80
B	HTS (General)- II (33 kV)	404.29
C	HTS (General)- III (132 kV)	185.94
D	HTS (General)- IV (220 kV)	-
E	HTS (General)- V (400 kV)	
F	HTSS – (33 kV/11 kV)	36.49
G	HTSS – (132/220 kV)	
9	HT-Industrial Services	85.84
A	HTIS (Industrial) – I (11 kV)	3.44
B	HTIS (Industrial)– II (33 kV)	4.14
C	HTIS (Industrial) – III (132 kV)	-
D	HTIS (Industries)-IV (220 kV)	77.73
E	HTIS (Oxygen Manufacturers)	0.53

8	Railway Traction Services	196.92
A	RTS	196.92
9	Nepal	226.55
A	Nepal	226.55
10	HT Electric Vehicle Charging Stations.	170.95
	Total	16,213.61

5.28 Revenue gap for FY 2024-25 at proposed tariff

5.28.1 The Petitioner is estimating Annual Revenue Requirement for FY 2024-25 on 100% cost coverage basis.

Table 104: The revenue gap at proposed tariff for FY 2024-25 (Rs Cr)

S. No.	Particulars	SBPDCL	NBPDCL	Total
1	Aggregate Revenue Requirement (ARR) for FY 2024-25	18,802.38	16,060.11	34,862.49
2	Add: True Up gap for FY 2022-23 including carrying cost	(903.82)	1,345.54	441.18
4	Total ARR (inc. previous year gap)	17,898.56	17,405.65	35,303.67
3	Less: Revenue from Proposed Tariff	19,090.08	16,213.61	35,303.69
4	Net Revenue Gap / (Surplus)			(0.02)

5.28.2 The Petitioner requests the Hon'ble commission to consider the revenue from proposed tariff as shown above for determination of Tariff for FY 2024-25.

6 Voltage-wise cost of supply

6.1 Preamble

6.1.1 This section deals with the voltage wise cost of service by the Petitioner for the FY 2024-25.

6.2 Background

6.2.1 The Petitioner is submitting to the Hon'ble Commission for determination of ARR for the upcoming control period as notified under BERC MYDT Regulations, 2021.

6.2.2 The Petitioner has considered distribution losses @14.55 % for FY 2024-25.

6.3 Methodology adopted for Computation of Voltage wise Cost of Supply

6.3.1 The Hon'ble APTEL has proposed a simple methodology to functionalize use of Cost of Supply model. The APTEL notes that identical consumers connected at different nodes of distribution system need not to be differentiated. In addition, it is adequate to determine voltage-wise cost of supply considering the major cost elements which would be applicable to all the categories of the consumers connected at the same voltage level at different locations in the distribution system.

6.3.2 In the method suggested by the Hon'ble APTEL, there are five major components to arrive at the voltage wise cost of supply. These elements are:

- **Technical losses at each voltage level of the network:** This value of the technical losses is found by the field studies. Sampling of the feeders which are representative of the consumers in the system will help in identifying the technical losses at each voltage levels. The APTEL recognizes the difficulty in collecting data for technical loss at 11 kV and LT level, hence the suggestion to compute losses using maximum possible representative feeders for various consumer categories at respective voltage levels.
- **Commercial losses at each voltage level of the network:** The commercial loss of the system is the difference between approved loss in the ARR and the total technical loss computed from system study. This difference is to be apportioned according to the sales in each voltage level to arrive at the commercial loss at each voltage level.
- **Voltage wise sales:** The energy sale at a particular voltage level is the sum of energy sold for all the categories of consumers connected at the said voltage level. Due to its share of sales in total sales, the consumers of the 132/220 kV network will be apportioned a share of the commercial losses. The Hon'ble APTEL recognizes that in reality, there may be minimal technical losses at that level and very low probability of commercial losses. However, the APTEL is of the opinion that the consumers at 132/220 kV, being a part of the distribution system will bear these apportioned losses.
- **Power Purchase Cost:** The power purchase cost is the cost of energy purchased for sustaining the energy sales at each voltage level. This power purchase units for each voltage level is arrived by finding the energy input at each voltage level and adding the losses (technical and commercial) for the same voltage level and upstream. The energy input at each

voltage level is the sum of the sales at the voltage level and the losses for the corresponding voltage level.

- **Network Cost:** The network costs are the costs like O&M, interest and finance charges, depreciation, return on equity etc. These costs are a part of the ARR which in turn provides the average cost of supply. Thus, the network cost is essentially the difference between the ARR value and the power purchase cost. The APTEL has suggested apportioning these costs according to the sales volume in each of the voltage level.

6.3.3 The above elements will help to establish the voltage wise Cost of Supply. Due to the methodology applied to apportion losses in the various voltage levels, all the consumer categories at a particular voltage level will have same cost of supply. In this regard, APTEL has noted that refinements in the methodology may be done when more data becomes available.

6.4 Determination of Voltage wise Losses

6.4.1 Transmission & Distribution losses in a system are comprised of two separate components - Technical losses and Commercial losses.

- Technical losses occur naturally and consist mainly of power dissipation in electricity system components such as transmission and distribution lines, and transformers.
- Commercial losses are caused by actions external to the power system and consist primarily of electricity theft, non-payment by customers, and errors in accounting and record-keeping. Since the rationale behind these two components is quite distinct, quantifying them separately is imperative for arriving at meaningful conclusions.

6.4.2 At each voltage level, the technical losses consist of two major components: Transmission losses which refer to the losses in the current carrying wires; and Transformation losses which refer the losses incurred during the voltage transformation in the system. Aggregating the losses in these two elements at each voltage level would give the technical loss at that level. The losses remaining would be the commercial losses.

6.5 Information required for arriving Voltage Wise Cost of Supply

6.5.1 Following is the list of details required in order to carry out voltage wise cost of supply:

- Voltage wise technical losses
- Overall T&D losses
- Voltage wise energy sales
- Power Purchase Cost
- Network Costs

6.5.2 It is submitted that the Petitioner has computed voltage wise losses based on certain assumptions after observing the sample feeder data available with DISCOMs

6.5.3 The Petitioner has computed voltage wise cost of supply as per the projected road map for reduction of AT&C loss submitted to MoP, GoI for FY 2024-25.

Table 105: Voltage wise Technical loss considered for FY 2024-25

8	Voltage Level (KV)	Technical Losses (%)	Cumulative Loss (%)
1	2	3	4
2	220/132	3.32%	3.32%
3	33	3.41%	6.62%
4	11	4.23%	10.57%
5	0.4	4.74%	14.81%

6.5.4 The Petitioner has arrived at voltage wise sales considering the projected sale of power for the FY 2024-25, across various categories at the respective voltages mentioned in the table below

Table 106: Classification of Categories on the basis of Voltage of power supply

S. No.	Voltage Level	Categories
1	220/132 kV	HTS-III, Railways, Nepal
2	33 kV	HTS-II, HTSS
3	11 kV	HTS-I, HT EV, HTIS (Oxygen Manufacturers)
4	LT (0.4 kV)	Domestic, Non-Domestic, Agriculture and Others

6.5.5 The Petitioner further submits that the voltage wise cost of supply study is based on the sample data certain parameters such as total loss, energy input etc.

6.5.6 Voltage Wise Technical Loss: The Petitioner submits that it has taken suitable assumptions to arrive at the loss at 220 kV and 132 kV.

6.6 Methodology adopted for determination of Cost of Supply

6.6.1 Due to lack of data for segregation of technical and commercial losses, it is not feasible to fix the technical and commercial loss levels within proposed loss levels.

6.6.2 In order to understand component of technical losses in total T&D loss, technical loss at each voltage level need to be grossed. Following is the total technical loss at each voltage level and cumulative losses at subsequent voltage levels.

6.6.3 Following is the apportionment of technical losses to the voltage wise sale.

Table 107: Apportionment of technical losses to voltage wise sale for FY 2024-25

	Voltage Level (KV)	Technical Losses (%)	Cumulative Loss (%)	Energy Sale (MU)	Energy input (MU)	Technical Loss (MU)
1	2	3	4	5	6	7=(6-5)
2	220/132	3.32%	3.32%	473.72	489.98	16.27
3	33	3.41%	6.62%	175.00	187.40	12.40

	Voltage Level (KV)	Technical Losses (%)	Cumulative Loss (%)	Energy Sale (MU)	Energy input (MU)	Technical Loss (MU)
1	2	3	4	5	6	7=(6-5)
4	11	4.23%	10.57%	516.32	577.32	61.01
5	0.4	4.74%	14.81%	15,770.02	18,510.73	2,740.70
Total				16,935.06	19,765.43	2,830.38

6.6.4 Commercial losses (difference of total losses and grossed up technical losses) shall be apportioned pro rata to energy sales at each voltage level.

Table 108: Apportionment of Commercial losses to voltage wise sale for FY 2024-25

Sl. No.	Voltage Level (KV)	Energy Sale (MU)	Technical Loss (MU)	Sales + Tech Loss (MU)	Commercial Loss (MU)	Energy Input at State Periphery (MU)
1	2					
2	220/132	473.72	16.27	489.98	17.09	507.08
3	33	175.00	12.40	187.40	6.31	193.71
4	11	516.32	61.01	577.32	18.63	595.95
5	0.4	15,770.02	2,740.70	18,510.73	569.00	19,079.72
Total		16,935.06	2,830.38	19,765.43	611.03	20,376.46

6.6.5 The Projected Power Purchase Cost (including PGCIL, POSOCO & ERLDC transmission costs) of the Petitioner for the Control Period is provided below:

Particulars	FY 2024-25
Gross Power Purchase (MU)	24,614.59
Less: PGCIL Loss (MU)	661.46
Net Power Purchase (MU)	23,953.14
Power Purchase Cost including PGCI Charges (Rs. Crore)	14,342.93
Average Power purchase Cost	5.99

6.6.6 Following is the allocation of power purchase cost to the total energy sales.

Table 109: Allocation of power purchase cost to the energy sales for FY 2024-25

Sl. No.	Voltage Level (KV)	Energy Sale (MU)	Energy Sales + Technical loss + Comm. Loss (MU)	Average power purchase cost (INR/kWh)	Power Purchase Cost (Rs. Crore)	Cost of Power per unit sale of Energy (Rs./unit)
1	2	3	4	5	6 = (4*5)	7= (6÷3)
2	220/132		507.08		303.63	

Sl. No.	Voltage Level (KV)	Energy Sale (MU)	Energy Sales + Technical loss + Comm. Loss (MU)	Average power purchase cost (INR/kWh)	Power Purchase Cost (Rs. Crore)	Cost of Power per unit sale of Energy (Rs./unit)
1	2	3	4	5	6 = (4*5)	7= (6÷3)
		473.72		5.99		6.41
3	33	175.00	193.71	5.99	115.99	6.63
4	11	516.32	595.95	5.99	356.85	6.91
5	0.4	15,770.02	19,079.72	5.99	11,424.78	7.24
Total		16,935.06	20,376.46		12,201.25	7.20

6.6.7 The details of fixed distribution costs for the control period are provided below, which are excluding Power Purchase and PGCIL charges.

Table 110: Allocation of Network Cost for the FY 2024-25

Sl. No.	Particulars	Amount (Rs. Cr)
1	Employee Cost	526.35
2	R&M costs	285.70
3	A&G expenses	652.58
4	Holding Company	28.06
5	Depreciation	566.30
6	Interest & Finance Charges	709.52
7	Interest on Working Capital	63.73
8	RPO fund	
9	Return on Equity	550.91
10	Less: IDC	
11	Total (1 to 7)	3383.15
12	Transmission cost	782.40
13	Total cost	4165.55

6.6.8 Further, the Petitioner has worked out the voltage wise cost of per unit supply based on the methodology followed by the Hon'ble Commission in the tariff order dated 25th March 2022. Accordingly, the Petitioner has apportioned the network cost of Rs.4165.55 Crore arrived in the above table among the consumers of various voltage level i.e., 220/132 kV, 33 kV, 11 kV and LT levels, equitably on pro-rata basis as detailed below:

Voltage-wise Allocation of Network Cost

S.No.	Voltage Level	Energy Sale (MU)	Energy Sales + Technical loss + Comm. Loss (MU)	Network Cost (Rs./Unit)	Total Network Cost (Rs. Cr)
2	220/132	473.72	507.08	103.66	2.19
3	33	175.00	193.71	39.60	2.26

S.No.	Voltage Level	Energy Sale (MU)	Energy Sales + Technical loss + Comm. Loss (MU)	Network Cost (Rs./Unit)	Total Network Cost (Rs. Cr)
4	11	516.32	595.95	121.83	2.36
5	0.4	15,770.02	19,079.72	3,900.46	2.47
Total		16,935.06	20,376.46	4,165.55	2.46

Table 111: Cost of Supply at different Voltage Levels for FY 2024-25

Sl.No.	Supply Voltage	Cost of power purchase (Rs./unit)	Network cost (Rs./unit)	Cost of supply (Rs./unit)
1	2	3	4	5
1	220/132	6.41	2.19	8.60
2	33	6.63	2.26	8.89
3	11	6.91	2.36	9.27
4	LT	7.24	2.47	9.72

6.6.9 The Hon'ble Commission is requested to approve the Voltage wise cost of supply as projected by the Petitioner for the FY 2024-25.

7 FPPCA- Request for change in the provisions of Regulations 20- “Treatment of incremental power procurement cost” of the BERC (Multi Year Distribution Tariff) Regulations, 2021

7.1 Introduction

- 7.1.1 The Hon’ble Commission had notified “BERC (MULTI YEAR DISTRIBUTION TARIFF) REGULATIONS, 2021” dated 25.01.2022 wherein it has specified the mechanism for pass through of fuel cost adjustment through Fuel and Power Purchase Cost Adjustment (FPPCA) under Regulations 20 ‘Treatment of incremental Power procurement cost’.
- 7.1.2 On 29.12.2022, the Ministry of Power, Government of India, notified the Electricity (Amendment) Rules, 2022 to amend the Electricity Rules, 2005, in which Rule 14 regarding “Timely recovery of power purchase costs by distribution licensee” was inserted. According to the newly inserted Rule 14, the Commission has to specify a price adjustment formula for the recovery of costs arising from variations in the price of fuel or power purchase costs and the impact in the cost due to such variation shall be automatically passed through in the consumer tariff on a monthly basis.
- 7.1.3 The South Bihar Power Distribution Company Limited on behalf of both the DISCOMs of Bihar had filed a Petition dated 21.02.2023 for amendment in BERC Multi Year Distribution Tariff Regulations, 2021, incorporating the provisions of automatic recovery of cost on account of Fuel and Power Purchase Cost Adjustment and enabling the DISCOMs to compute and charge the FPPCA automatically to the consumers. The Case was registered as Case No. 03/2023 by the Hon’ble Commission.
- 7.1.4 Hon’ble Commission vide notification dt. 08.06.2023 issued the draft Bihar Electricity Regulatory Commission (Multi Year Distribution Tariff) (First amendment) Regulations, 2023 and invited comments/ suggestions/ objections on the same from the stakeholders.
- 7.1.5 The DISCOMs of Bihar (SBPDCL and NBPDC) vide letter dt. _____ have already submitted their comments on the draft Regulations with a request to consider the same in preparation of the Final Regulations.
- 7.1.6 The Petitioner’s request the Hon’ble Commission to amend the relevant provisions of the BERC MYT Distribution Regulations, 2021 for-
- (i) automatic recovery of the FPPCA by the DISCOMs and
 - (ii) make suitable amendments in the methodology for FPPCA computation as per the comments submitted by the Petitioner as summarized below.

7.2 Summary

7.2.1 The existing fuel cost adjustment mechanism as per BERC MYT Regulations 2021 is a monthly process wherein the State DISCOMs works out the FPPCA charges on monthly basis and submits the detailed calculation before the Commission for its approval. FPPCA is to be submitted on monthly basis for approval and verification by the Commission within first 15 days of the month end and thereafter the Commission examined and approves the same within 7 days which is then allowed to levy on the retail consumers. However, the mechanism for recovery of FPPCA as per the BERC MYT Regulations, 2021 is not in line with the Rules/Orders set out by the Government of India. Further, this provision is becoming a hurdle for the Petitioner in achieving the Standard Operating Procedures (SOPs) laid down by the Ministry in the RDSS scheme.

7.2.2 Summing the above, the Hon'ble Commission is requested to make suitable changes in the provisions for recovery of the FPPCA in the BERC MYT Regulations, 2021 as shown below:

(i) Clause (c) of Regulations 20.1 of the Principal Regulations may be substituted as under:

"FPPCA shall be calculated and billed to consumers, automatically, without going through regulatory approval process, on monthly basis, according to the formula, prescribed by the respective State Commission, subject to true up on annual basis as decided by the State Commission.

Provided that the automatic pass through shall be adjusted for monthly billing in accordance with these Rules."

(ii) Clause (d) of Regulations 20.1 of the Principal Regulations may be substituted as under:

*"FPPCA shall be computed and charged by the Distribution licensee, **in (n+3)th month**, on the basis of actual variation, in cost of fuel and power purchase and Inter-State Transmission Charges for the power procured during the nth month. For example, the FPPAS on account of changes in tariff for power supplied during the month of April of any financial year shall be computed and billed in the month of July of the same financial year."*

(iii) Clause (e) of Regulations 20.1 of the Principal Regulations may be substituted as under:

"The Distribution Licensee shall submit on monthly basis, the details of the incremental cost incurred and charged to all consumers for the nth month, along with the detailed computations and supporting documents as may be required for approval and verification by the Commission by the end of subsequent month."

(iv) Clause (10) of Regulations 20.2 of the Principal Regulations may be substituted as under:

"The incremental cost per kWh due to the FPPCA arrived for a month shall be recovered in the energy bill of the month. The Generating Company and the Distribution Licensee shall provide a compliance report of the previous order of the Commission, if any, in respect of FPPCA."

8 Wheeling and Open Access Charges

8.1 Background

8.1.1 The Petitioner submits that for the purpose of open access on distribution network, determination of wheeling losses and wheeling charges are essential. Further as the consumer is deemed to be moving out of system, the revenue loss from such consumers is recovered through Cross Subsidy Surcharge and Additional Surcharge, as the case may be.

8.2 Wheeling Charges

8.2.1 It is submitted that till date complete segregation of accounts between Wheeling and Retail Supply function has not yet taken place. Thus, ARR proposals for Wheeling and Retail Supply function is submitted on the basis of an allocation statement to be prepared by the Distribution Licensee based on their best judgment and in line with the approach followed by the Hon'ble Commission in its Previous Tariff Orders.

8.2.2 The Licensee, in the instant Petition, has followed the following allocation for calculating segregating its wire and supply business and the total costs (net ARR) of both the DISCOMs are segregated into wire business and retail supply business.

Table 149: Segregation of Wires and Retail Supply Costs

Sl. No.	BIHAR	Total Fixed Cost	Assumption		33kV Wire cost		11kV	
			Wire Business	Retail Supply	Wire business	Retail supply business	Wire business	Retail supply businesses
1	Power purchase cost	28,087.62	0%	100%	-	28,087.62	-	28,087.62
	Less: Power traded through exchange	3,323.68			-	-	-	-
2	PGCIL & other transmission charges	2,778.95	0%	100%	-	2,778.95	-	2,778.95
3	State Transmission charges	1,689.68	0%	100%	-	1,689.68	-	1,689.68
4	O&M Expenses	2,969.52			-	-	-	-
i)	Employee Cost	1,291.02	60%	40%	774.61	516.41	774.61	516.41
ii)	R&M expenses	588.66	90%	10%	529.79	58.87	529.79	58.87
iii)	A&G expenses	1,032.62	50%	50%	516.31	516.31	516.31	516.31

5	Share of Holding Company expenses	57.22	60%	40%	34.33	22.89	34.33	22.89
6	Depreciation	976.86	90%	10%	879.17	97.69	879.17	97.69
7	Interest and Finance charges	1,347.65	90%	10%	1,212.89	134.77	1,212.89	134.77
8	Interest on working capital	128.64	10%	90%	12.86	115.78	12.86	115.78
9	Return on equity	996.74	90%	10%	897.06	99.67	897.06	99.67
10	Income Tax	-	0%	100%	-	-	-	-
11	Interest on security deposit	90.10	0	100%	-	90.10	-	90.10
12	Bad debts (if any)	-	0%	100%	-	-	-	-
13	Contingency reserves (if any)	43.56	0%	100%	-	43.56	-	43.56
	Deposit for RPO Obligation	60.00			-	-	-	-
14	Total Revenue Requirement	35,845.64			4,857.03	34,252.29	4,857.03	34,252.29
15	Less: Non-tariff income	983.15	10%	90%	98.32	884.84	98.32	884.84
16	Aggregate Revenue Requirement	34,862.49			4,758.72	33,367.45	4,758.72	33,367.45

1.1.4. The wheeling charges have been computed on the basis of projected costs of the Petitioner for its distribution wire business and the total energy expected to be wheeled through their distribution network. The average per unit wheeling charge is calculated in the table below

Table 150: Wheeling Charges at 33 kV for FY 2024-25

Sl. No	Particulars	Unit	FY 2023-24
1	Energy Input into 33 kV System	Mus	43,301.48
2	Total Distribution Cost	Rs Crores	9,517.44
3	Distribution cost for 33 kV voltage levels (assuming 50% of item 2)	Rs Crores	4,758.72
4	Wheeling charges for 33 kV voltage level (item 3÷1)	Rs./kWh	1.10

8.2.3 The wheeling cost has been computed for 11 kV level as below

Table 151: Wheeling charges at 11 kV for FY 2024-25

Particulars	FY 2024-25
Energy Input into 33 kV System	43,301.48
Energy Sale in 33 kV System	1,849.15
Loss in 33 kV (5%)	97.32
Energy Input into 11 kV System	41,355.01
Total Distribution Cost	9,517.44
Distribution Cost for 11 kV Voltage Level (Assuming 50%)	4,758.72
Wheeling Charge for 11 kV Level	1.15

8.3 Cross Subsidy Surcharge

8.3.1 The open access consumers are liable to pay cross subsidy surcharge to compensate the distribution utility for any loss of revenue due to shifting of its consumer to the open access system. The cross-subsidy surcharge for open access consumers is calculated as per the following recommended formula in the BERG MYT Distribution Tariff Regulations, 2021.

$$S = T - [C / (1 - L/100) + D + R]$$

Where

S is the surcharge

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation

D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level

R is the per unit cost of carrying regulatory assets.”

8.3.2 The weighted average cost of power purchase for both DISCOMs is shown below:-

Table 152: Power purchase cost for FY 2024-25

Particulars	FY 2024-25
Gross power purchase (MU)	62,301.49
Less:-PGCIL loss (MU)	1,459.64
Net power purchase (MU)	60,841.86
Power purchase cost including PGCIL charges (Rs. Crore)	30,855.38
Average power purchase rate	5.07

Table 152: Intra-state Transmission Charge for FY 2024-25

Particulars	FY 2023-24
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Intra-state Transmission Charge (Rs Cr.)	1,996.68
Energy available at State Transmission Periphery (MU)	44,964.64
State Transmission Charge (Rs./kWh)	0.44

Calculation of Cross Subsidy Surcharge: -

$$S = T - [C(1-L)/100] + D + R$$

Table 153: Cross Subsidy Surcharge for FY 2024-25

	Tariff	APPC	Intra-state Transmission Loss	Transmission Charge	33 kV	11 kV		20% of applicable tariff	
132 kV	10.44	5.98	3.00%	0.38	0	0	3.90	2.09	2.09
33 kV	11.05	5.98	3.00%	0.38	0.01	0	4.50	2.21	2.21
11 kV	11.05	5.98	3.00%	0.38	0.01	0.01	4.49	2.21	2.21
HTSS	10.44	5.98	3.00%	0.38	0.01	0	3.89	2.09	2.09

8.3.3 The Revised Tariff Policy suggest that the cross subsidy shall not increase 20% of applicable tariff to the category of consumers seeking Open Access. The cross-subsidy surcharge for 132 kV, 33 kV, 11 kV and HTSS category is shown above and requested to approve accordingly.

8.4 Additional Surcharge

8.4.1 In order to supply seamless power to the consumers as per the demand projection under the Power for All scheme, the Bihar DISCOMs tied up huge quantum of PPAs. However, the demand has not increased as per the projection as well as due to the movement of consumers from being a consumer to the DISCOM to shifting to Open Access, the DISCOMs are currently in a power surplus situation. This has led to unnecessary fixed cost burden on the DISCOMs which is ultimately being passed on the consumer. In regard to recovering a part of the stranded costs of the DISCOMs, the DISCOMs has proposed the Additional surcharge to be recovered by Open Access consumers for FY 2024-25.

8.4.2 The Hon'ble Commission vide its Tariff Order dated 23.3.2023 ruled on the above-mentioned matter stating the following:

"The Commission has analysed the data submitted by the Discoms in Annexure-5 (Additional surcharge) along with the tariff petition. It seems that only Railway open access data considered in computation sheet submitted by the Discoms and the other open access consumers data is not considered in the computations submitted in Annexure-5 .

Further it is also noticed that some data like OA scheduled energy during the period is replication of the data furnished for FY 2020-21 submitted along with the tariff petition for FY 2022-23.

The data submitted by Discoms for computing the additional surcharge for open access by the Discoms requires further verification and validation by the RLDC/SLDC and Transmission utilities.

In view of the data constraints, it is difficult to determine the additional surcharge for open access consumers in this juncture.

The Discoms have stated that "Bihar Discoms tied up huge quantum of PPAs to supply seamless power to the consumers as per the demand projection under the scheme of Power for All. However, the demand has not increased as per the projection as well as due to movement of consumers to Open Access and the Discoms are currently in a power surplus situation".

"Discoms shall also provide the details of additional capacity for which PPAs are tied-up and action being taken to reduce the capacity not required to avoid payment of capacity charges without of energy as per allocation."

8.4.3

8.4.4 As per the guidelines issued by the Hon'ble Commission in the previous Tariff Order dated 23.3.2023, the DISCOMs have computed the additional surcharge as Rs 0.82/kWh. The detailed working and computation of additional surcharge is provided as **Annexure-5** to this Tariff Petition.

8.4.5 The Hon'ble Commission is requested to approve the additional surcharge of Rs 0.82/kWh for FY 2023-24.

8.5 Reactive Energy charges

8.5.1 The open access consumers should pay a reactive energy charge to Transmission and Distribution companies as the case may be for drawl/ injection of reactive energy. DISCOM proposes the reactive charges of 10 Paisa/ kVAR for the FY 2024-25. The rate proposed by the DISCOMs is based on the actual rate of Reactive Energy Charge billed by ERPC and its escalating trend over the past few years.

8.6 Standby Charges

8.6.1 As per BERC open access regulations

"20 A. Standby Power In case of outage of a power plant supplying power to an open access customer, the licensee will, on request, provide standby supply to meet the requirement of load catered through open access. Such standby supply will be provided by the licensee at day ahead request from the open access customer. The open access customer will, for that supply, be liable to pay charges under tariff for temporary connection to that category of consumer."

8.6.2 The Hon'ble Commission has approved the stand-by charges for drawal of power by open access customer from distribution licensees in accordance with BERC (Term and Conditions of Intra-State Open Access) Regulations 2018 as below:

- In cases of outages of generator supplying to open access customer under open access, stand-by arrangements shall be provided by the distribution licensee for a maximum period of 42 days in a year subject to the load shedding as is applicable to the embedded consumer of the licensee at a charge under Temporary connection tariff for the category of consumer as determined by the Commission from time to time.

- Provided that such charge shall not exceed 125% of the normal tariff for that category of consumers.
- Provided that in cases where temporary rate of charge is not available for that consumer category the distribution licensee shall charge 125% of the normal tariff for the category of consumers.
- Provided also that open access customers would have the option to arrange stand-by power from any other source.

8.6.3 The Hon'ble Commission is requested to approve the same in line with the regulations.

8.7 Parallel Operating Charges

8.7.1 The connectivity of CPP (Captive Power Plants) to Grid or State transmission system shall be governed by the connection conditions stipulated under the State Grid Code and Connectivity Regulations of Central Electricity Authority notified in accordance with sub-section (b) of Section 73 of the Act.

8.7.2 In view of this, the petitioner is hereby proposing Parallel Operation Charges as a part of other charges for Open access consumers to be applicable for parallel operation of the CPP with the grid separately.

Parameter	Values
Total Connected Demand for FY 2024-25 (kW)	27561215
Overall Demand Charges for FY 2024-25 (Rs. Crore)	6033
POC Charge (Rs Crore/month)	502.74
POC Charges (Rs./kW/month)	182.41

8.7.3 The Hon'ble Commission is therefore requested to approve the POC charges of Rs. 182.41/kW/month to captive open access consumers for FY 2024-25.

8.8 Congestion Charges

8.8.1 As per regulation 25 of the BERC open access regulations, 2021

"25. Other Charges

In addition to the above charges, the regulatory charges, congestion charges and any other charges imposed by Central Commission and/or State Commission shall be payable by the open access customers."

8.8.2 In view of the same the Hon'ble Commission is requested to determine and approve congestion charges for Open Access Consumers in order to mitigate the issues related to transmission and distribution of power.

The Hon'ble Commission is requested to approve all the open access charges, Cross Subsidy Charges and other charges as submitted by the Petitioner.

9 Proposed Tariff schedule for FY 2024-25

9.1 Simplification of tariff structures for electricity consumers in Bihar

9.1.1 The two Distribution Licensees in Bihar have taken initiatives in the past couple of years to undertake measures to simplify the tariff structure, under the guidance of the Hon'ble Commission. Key measures undertaken have resulted in the following:

- i. Simplification of the tariff structure,
- ii. Bringing in a progressive tariff structure that helps promote efficiency, and
- iii. Rationalization of electricity tariffs.

9.1.2 For this year as well, the power distribution companies of Bihar have kept the following objectives in mind while proposing the tariff structure for FY 2024-25.

- Ensuring that an adequate balance is maintained between the interest of consumers and the distribution utility;
- Enabling consumers to efficiently and effectively plan their expenditure on electricity;
- Ensuring that tariffs progressively reflect the prudent cost of electricity supply to the consumers, and
- Incentivizing the consumer for efficient utilization of electricity.

9.1.3 The Distribution Licensee have followed the key guiding principles given below for proposing the tariff structure and tariffs which would be applicable for the FY 2024-25.

- i. Preserving kVAh based billing for all consumer categories wherever feasible.
- ii. Introduction of new tariff categories as per the Demand of the prospective consumers
- iii. Rationalizing the payment mechanism for certain category of consumers to facilitate the consumers as per their affordability.

9.1.4 Based on the above principles, the following key changes have been proposed in the tariff structure and schedule for the ensuing year.

- i. kVAh based billing for Non-Domestic and IAS-I category of consumers.
- ii. Facilitating the prospective consumers through introduction of new tariff categories for HTIS at 400 kV and HTSS at 132/220 kV.
- iii. Incentivizing increased consumption through improvement in load factor
- iv. Rationalization of Time of Day (TOD) tariff structure as per the actual Demand of the State
- v. Rationalizing the online payment incentive for each consumer category
- vi. Rationalization of the Billing Demand of the consumers
- vii. Facilitating the Govt. consumers through change in due date of payment.
- viii. Rationalization of the tariff structure of the Street Lights as per the operability of the Street lights.
- ix. Domestic tariff for Homestays establishments
- x. Rationalizing the Billing structure for Agriculture consumers as per their harvesting season
- xi. Rationalization of Tariff structure as per the Revenue Gap/(surplus) for both the DISCOMs.
- xii. Charges for erection and dismantling the Temporary service connection line.
- xiii. Penalty on violation of Contracted Demand/ load

9.2 Key changes proposed in the Tariff Schedule for FY 2024-25

9.2.1 kVAh based billing for Non-Domestic and IAS-I category of consumers.

9.2.1.1 Understanding that the kVAh based tariff has an inbuilt mechanism for incentivizing the consumers who maintain better power factor, the Petitioner proposes the Commission to introduce kVAh based tariff in the state of Bihar for NDS (Non-Domestic) and IAS-I category of consumers. This is bound to encourage Commercial and IAS-I consumers to save on their electricity bills.

9.2.1.2 It is pertinent to mention that the Petitioner in the Tariff Petition for True-Up of FY 2021-22, APR of FY 2022-23 and ARR & Tariff for FY 2023-24 proposed kVAh based tariff for the Non-Domestic (NDS-I and NDS-II) consumers. However, the Hon'ble Commission vide Tariff Order dt. 23.03.2023 did not accept the tariff proposal of the Petitioner on the ground that the Discoms did not submit the report on compatibility of the meters for recording the kVAh reading along with the petition. The Hon'ble Commission directed the Petitioner to submit the report on compatibility of the meters along with next tariff petition.

9.2.1.3 It is pertinent to mention that KVAh is the apparent power drawn by the consumer. Further, KVAh based billing simplifies the tariff as power factor rebate or penalty need not be calculated separately. Moreover, consumers mostly protest while being charged additionally on account of power factor impact. Since, smart metering are being implemented at large scale in the state, the meter is compatible to assess the consumptions in KVAh and charging through KVAh would make the process smooth.

9.2.1.4 In response to the direction of the Hon'ble Commission, this is to submit that the 100% of the installed meters for Non-Domestic and IAS-I category of the consumers are compatible for kVAh based Billing. The Meters can record the kVAh based consumption of the consumers thereby incentivizing the consumers who maintain better power factor.

9.2.1.5 So, the Hon'ble Commission is kindly requested to consider the kVAh based Billing for the NDS and IAS-I category of consumers in the Tariff schedule for FY 2024-25.

9.2.2 Facilitating the prospective consumers through introduction of new tariff categories for HTIS at 400 kV and HTSS at 132/220 kV

9.2.2.1 This is to submit that M/s SJVN Thermal Pvt. Ltd. vide its application for new service connection requested the Petitioner to provide supply at 400 kV for 25 MW load.

9.2.2.2 The DISCOMs have analyzed the feasibility for providing supply at existing 220 kV, however, it has been observed that it is not feasible to provided supply for 25 MW of load at 220 kV. **So, to facilitate the prospective consumers the DISCOMs have proposed new tariff consumer category HTIS at 400 kV.**

9.2.2.3 Similarly, the prospective consumers such as, M/s Vistar Concast Private Limited vides its letter No. VCPL/23-24/005 dated 30.08.2023 requested the Petitioner to provide electricity connection for 30 MVA supply under HTSS category. As per the norms, HTSS tariff is allowable at 33/11 kV and

the maximum supply permissible is 15 MVA. So, the only possible way out is carving out a separate consumer category of HTSS- 132 kV to provide 30 MVA connection.

9.2.2.4 **So, to facilitate the prospective consumers the DISCOMs have proposed new tariff consumer category HTSS at 132 kV.**

9.2.2.5 It is pertinent to mention here that the Electricity Act, 2003 also stipulates to provide supply on the request of the consumer. The relevant excerpt of the Electricity Act, 2003 is as follows:

Section 43. (Duty to supply on request): --- (1) *Save as otherwise provided in this Act, every distribution licensee, shall, on an application by the owner or occupier of any premises, give supply of electricity to such premises, within one month after receipt of the application requiring such supply:*
Provided that where such supply requires extension of distribution mains, or commissioning of new sub-stations, the distribution licensee shall supply the electricity to such premises immediately after such extension or commissioning or within such period as may be specified by the Appropriate Commission:

9.2.2.6 In the backdrop of the above, the Hon'ble Commission is kindly requested to consider the new tariff category proposed by the Petitioner.

9.2.3 **Incentivizing increased consumption through improvement in load factor**

9.2.3.1 To promote efficiency in the system and incentivize electricity consumption, the Petitioner had proposed to introduce Load factor incentives for HT Industrial consumers (excluding HTSS consumers) in the Retail tariff Petition for FY 2022-23. However, the Hon'ble Commission vide its Tariff Order dated 25.03.2022 had Suo-motu allowed Load Factor incentive for all HT industrial category consumers along with HTSS with Load factor above 60%.

9.2.3.2 The Petitioner hereby propose to withdraw the Load Factor incentive for HTSS consumers. The objective behind the Load Factor Incentive to HTSS was to promote the increase in consumption as well as better load utilization by HTSS consumers. However, it has been observed that in 1st six months of FY 2023-24 (April- Sept 2023) there has been no increase in the consumption with respect to the consumption in 1st six months of FY 2022-23 (April- Sept 2022) but the amount of incentive required to pay by the DISCOMs is significantly high. As a result, there has been decrease in the net revenue collection of the DISCOMs through considerable disbursement of incentive by DISCOM to this category of consumers.

9.2.3.3 Further, load factor incentive has been provisioned in the tariff structure with the motive to boost HT consumption in the state. However, the HTSS industries already operate at higher load factor levels (around 90%) by the nature of operations of their businesses. Therefore, including the HTSS industry in the bucket of beneficiaries of load factor rebate will further reduce their tariff which are already getting the benefit of lower energy charges as compared to other HT categories. **Considering the same, the DISCOMs has proposed to withdraw the Load Factor incentive for HTSS. NO Load Factor Incentive may be allowed for HTSS consumers.**

9.2.3.4 The load factor incentive proposed for HT industrial consumers (**excluding HTSS category**) is in three slabs i.e., (30%-50%, 50%-70% and above 70%) for HT Industrial service categories **but on the basis of incremental consumption**. In the proposed incentive, the **HT Industrial category consumers (excluding HTSS category)** with load factor 30% to 70% in FY 2023-24 would be incentivized for improved load factor utilization monthly on incremental consumption, through a rebate in their energy charge. Accordingly, the incentive structure for HT consumer is proposed as follows:

Load Factor Range	Proposed Incentive
30%-50%	10 paise per unit concession on energy charges for energy consumption over 30% and upto 50% load factor during the billing month
50%-70%	20 paise per unit concession on energy charges for energy consumption over 50% and upto 70% load factor during the billing month
Above 70%	30 paise per unit concession on energy charges for energy consumption over and above 70% and upto 100% load factor during billing month

9.2.3.5 The Oxygen gas manufacturers have played vital role during Covid-19 pandemic in spite of all odds. Their contribution was well recognized and rewarded by providing appropriate incentives. To incentivize the Oxygen manufacturers in the State, the Petitioner has proposed load factor incentive to this category **in line with the HT industrial categories on incremental consumption basis**, as follows:

Load Factor Range	Proposed Incentive
65%-75%	10 paise per unit concession on energy charges for energy consumption over 65% and upto 75% load factor during the billing month
Above 75%	20 paise per unit concession on energy charges for energy consumption over and above 75% load factor during the billing month

9.2.3.6 At the same time, it may also be noted that consumers exceeding contract demand in any particular month, will not be eligible for Load Factor Incentive in that month.

9.2.3.7 Methodology for calculation of Load Factor:

$$\text{Load Factor} = \frac{\text{Consumption during the month, in MU (in kVAh)}}{\text{Maximum Consumption possible during Month, in MU (in kVAh)}}$$

9.2.3.8 Maximum consumption possible = Contract Demand (kVA) x Total no. of supply hours recorded in the meter during the month

9.2.4 Rationalization of Time of Day (TOD) tariff structure as per the actual Demand of the State

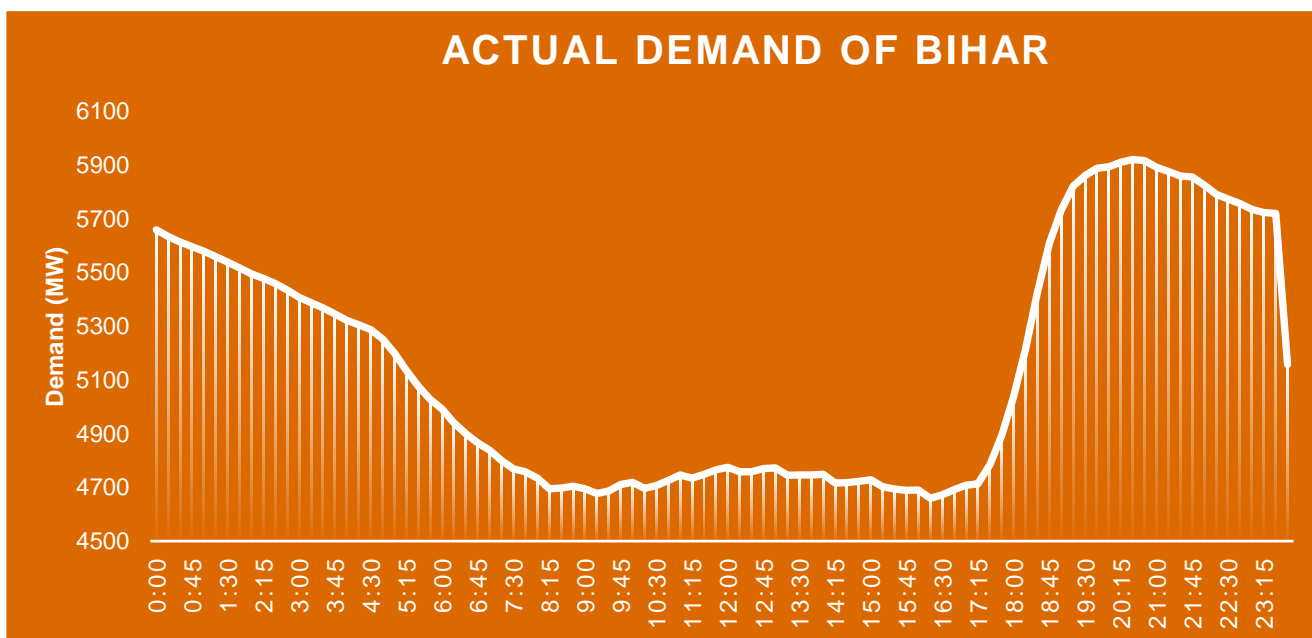
9.2.4.1 The Hon'ble Commission in the Tariff Order dated 23.03.2023 for Truing up of FY 2021-22, Annual Performance Review of FY 2022-23, Annual Revenue Requirement (ARR) and determination of Retail Tariff for FY 2023-24 had approved the Time of Day (TOD) tariff as follows:

Time of Use	Demand Charges	Energy Charges
(i) Normal Period (09:00 am - 05:00 pm)	Normal Rate	Normal rate of energy charges
(i) Evening Peak load Period (05:00 pm - 11:00 pm)	Normal Rate	105% normal rate of energy charges
(iii) off-peak load Period (11:00 pm - 09:00 am)	Normal Rate	85% normal rate of energy charges

9.2.4.2 It is pertinent to mention here that the Ministry of Power, govt. of India vides Electricity (Rights of Consumers) Amendment Rules, 2023 dt. 14.06.2023 has specified that the TOD Tariff specified by the State Commission for Commercial and Industrial consumers during peak period of the day shall **not be less than 1.20 times the normal tariff**. Further the tariff for solar hours of the day, specified by the State Commission **shall be at least twenty percent less than the normal tariff** for consumers and “solar hours” means the duration of eight hours in a day.

9.2.4.3 From the above, it is observed that the Ministry of Power, Gol has fixed the off-peak hours as solar hours of the day (duration of eight hours) and the tariff thereof has been fixed as 20% less than the normal tariff.

9.2.4.4 It is also pertinent to observe that the actual Demand in the State of Bihar dips to the lowest during the Solar hours of the day. The following Demand curve from 1 March 2023 to 10 Oct 2023 substantiates the same.



9.2.4.5 In the backdrop of the above, it is pertinent to have off-peak hours as Solar hours of day (9am to 5pm) wherein the demand in the State is lowest. The charges for the off-peak hours should be same as specified by the Ministry of Power in the Electricity (Rights of Consumers) Amendment Rules, 2023 dt. 14.06.2023.

9.2.4.6 Accordingly, the DISCOMs have proposed the following TOD tariff for all the HT consumers (HTIS, HT General, HTSS Oxygen manufacturers) for FY 2024-25.

Time of Use	Demand Charges	Energy Charges
(i) off-peak Period (9:00 am - 05:00 pm)	Normal Rate	80% normal rate of energy charges
(ii) Peak Period (05:00 pm - 11:00 pm)	Normal Rate	120% normal rate of energy charges
(iii) Normal Period (11:00 pm - 09:00 am)	Normal Rate	Normal rate of energy charges

9.2.4.7 The Hon'ble Commission is requested to kindly consider the change in TOD timing as proposed by the Petitioner for FY 2024-25.

9.2.5 Rationalizing the online payment incentive for each consumer category

9.2.5.1 For encouraging the consumers to make online payment of the bills a rebate of 1% of the billed amount has been allowed by the Hon'ble Commission. However, this is of utmost importance to consider that the online payment system has been devised to encourage majorly the domestic and commercial consumers. Industrial and other large consumers have already adapted completely the online payment system thereby enjoying the online payment rebate of 1%.

9.2.5.2 As per the actual revenue realization in FY 2022-23, the per consumer per month assessment of HTS-III is Rs 1.47 Cr. By making online payment of their monthly Bills, the HTS-III and HTSS consumers are enjoying rebate of around 5 lakhs per month.

9.2.5.3 It is pertinent to note that the online payment rebate that the Petitioner is passing on to the consumers has been charged in the Aggregate Revenue Requirement (ARR) and loaded on all the consumers while the benefit of online payment rebate is heavily enjoyed by large HT consumers only.

9.2.5.4 In the backdrop there is need to limit the extravagant rebate that the HT consumers are enjoying through this online payment rebate. So, the Petitioner hereby proposes to limit the online payment rebate **for HT consumers upto Rs 20,000 or 1% whichever is lower.**

9.2.5.5 The Hon'ble Commission is requested to kindly consider the change proposed by the Petitioner in the online rebate payment system for FY 2024-25.

9.2.6 Rationalization of the Billing Demand of the consumers

9.2.6.1 The Petitioner in the Tariff Petition for ARR & Tariff for FY 2023-24 propose the Billing Demand to increase to 85% from the existing 75% of the Contract Demand or actual Demand whichever is higher. The petitioner needs to develop and maintain infrastructure in line with the contracted load of the consumer.

9.2.6.2 The billing demand in many states/utilities as a percentage of contract demand is higher than that of the Bihar which is currently 75%. Some of the examples are BRPL- Delhi (100%), Madhya Pradesh State DISCOMs (90%), BESCO State DISCOM Karnataka (85%), TANGEDCO

Tamilnadu (90%) and Haryana State DISCOMs (100%) which has higher billing demand than the contract demand.

- 9.2.6.3 It is pertinent to note that upto FY 2019-20 the Billing Demand was 85% of the Contract Demand or actual Demand whichever is higher, however, the Hon'ble Commission in the Tariff Order for ARR & Tariff for FY 2020-21 has reduced the Billing Demand from 85% to 75% basis the following:

*Billing demand is the maximum demand recorded during the month or 85% of the contract demand whichever is higher is the present provision. The contracted demand/sanctioned load is generally higher than the maximum demand recorded by the meter during its running condition especially for domestic and commercial establishments. With present provision of minimum billing of 85% of the sanctioned load/contract demand, **any consumer having less than 6 kw load cannot avail benefit of such provision.** Therefore, the Commission decides to implement the billing demand at 75% of the contract demand or actual recorded demand whichever is higher from FY 2021-22 for all the consumers covered under the demand-based billing.*

- 9.2.6.4 As above, the Hon'ble Commission reduced the Billing Demand from 85% to 75% to benefit the consumers with less than 6kW load. However, the Hon'ble Commission failed to consider that with the Demand based Billing in place the Consumers also get the benefit of reduced Fixed charges if the power supply is not maintained regularly for 24 hours. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.
- 9.2.6.5 So, the Billing Demand may again be restored to 85% of the Contract Demand or actual Demand whichever is higher. In the backdrop of the above, the Hon'ble Commission is requested to kindly consider the change proposed by the Petitioner with regard to the Billing Demand.

9.2.7 **Facilitating the Govt. consumers though change in due date of payment.**

- 9.2.7.1 At present, the due date for making payment of energy bills or other charges is **15 days from the date of issue of the bill**. Rebate of 1.5% on the billed amount for timely payment of bills for all the consumers is allowed. Further, in case a consumer makes full payment after due date but **within 10 days after the due date**, no DPS shall be levied for this period and rebate for prompt payment will not be admissible.
- 9.2.7.2 This is to submit that the Govt. bodies (inc. local bodies in Urban and Rural areas) are unable to process their Energy Bills within the specified timeline and need some more time for payment of their energy Bills. As a result of non-payment of the energy Bills on time, the outstanding receivables of the DISCOMs increases.
- 9.2.7.3 To reduce the outstanding receivables and to enable the Govt. bodies to process their payment on time, the Petitioner hereby propose that the due date for making payment of energy bills or other charges for Govt. bodies is **30 days from the date of issue of the bill**. Rebate of 1.5% on the billed amount for timely payment of bills within this timeline to be allowed for Govt. bodies. Further, there will be no grace period **after this due date of 30 days** and DPS will be levied after this

period. The Hon'ble Commission is requested to kindly consider the change proposed by the Petitioner with regard to the due date of Govt. bodies.

9.2.8 Rationalization of the tariff structure of the Street Lights as per the operability of the Street lights

9.2.8.1 At present, the tariff for Street light (SS-2) category is Rs 7500/kW, however, the operability of the Street lights is only for 12 hours. So, it is logical to reduce the tariff for Street lights as per the operability.

9.2.8.2 It is worthwhile to mention that the operation of streetlight is usually maximum for 12 hours only instead of 24 hours. Therefore, the fixed charge for this category may be reduced accordingly.

9.2.8.3 In view of the above, the proposed tariff for Street lights (SS-2) may be considered as Rs 4250/kW. The Hon'ble Commission is requested to kindly consider the change proposed by the Petitioner with regard to the fixed charges for SS-2 category.

9.2.9 Domestic tariff for Homestays establishments

9.2.9.1 Govt. of India, Mistry of Tourism vide notification dated 10.12.2018 have formulated guidelines in the subject matter "**Common National Standards and Guidelines for Classification of Incredible India Bed & Breakfast Establishments and Incredible India Homestay Establishments**" wherein the Ministry has provided detailed guidelines for classification for Incredible India Homestay Establishment. The Ministry has also provided that the rate of electricity to be paid for Homestay Establishments will be those prescribed by the appropriate authorities. The relevant extract of the guidelines is as follows:

17. The rate of taxes for property, electricity and water to be paid for classified Incredible India Bed & Breakfast Establishments and Homestay Establishments will be those prescribed by the appropriate authorities.

9.2.9.2 It is pertinent to mention that the Bihar Govt, Tourism Department has also approved the **Mukhymantri Homestay Motivation Scheme 2024** wherein it has provided detailed guidelines for the promotion of Homestays establishments in the State of Bihar. The Scheme also stipulates that the tariff applicable for Homestay establishments is same as that of the Domestic (Residential) tariff.

9.2.9.3 So, in pursuance to the aforementioned guidelines of Gol and the Homestay Scheme of the Govt. of Bihar, the Petitioner hereby propose to include Homestays in the Domestic category in the Tariff Schedule for FY 2024-25

9.2.9.4 It is pertinent to mention that the following states have already framed guidelines for Homestay establishments wherein it has been mentioned that the electricity tariff applicable for Homestay establishments shall be same as that for residential consumers.

- Kerala

- Madhya Pradesh
- Uttarakhand
- West Bengal
- Himachal Pradesh
- Andaman & Nicobar Islands

9.2.9.5 In the backdrop of above, the Petitioner hereby propose to include Homestays in the Domestic category in the Tariff Schedule for FY 2024-25. The Hon'ble Commission is requested to kindly consider the change proposed by the Petitioner regarding the introduction of Homestays in domestic category.

9.2.10 **Rationalizing the Billing structure for Agriculture consumers as per their harvesting season**

9.2.10.1 This is to submit that a suggestion received in CM Janta Darbar (Online) for raising Bills to the agriculture consumers according to the harvesting time of Rabi and Kharif crops. The request was made to allow the Agriculture consumers to make payment according to the harvesting time of Rabi and Kharif crops.

9.2.10.2 So, it is proposed to change the process of Billing for Agriculture consumers from monthly to 4 times in a year as per the harvesting season of Rabi and Kharif crops. Bill to Agriculture consumers to be raised four (4) times in a year after the harvesting season, i.e., March, May, August and December in a Financial Year. The Hon'ble Commission is requested to kindly consider the change proposed by the Petitioner regarding the Billing process of Agriculture consumers.

9.2.11 **Rationalization of Tariff structure as per the Revenue Gap/(surplus) for both the DISCOMs**

9.2.11.1 This is to submit that based on the BERC Multi Year Distribution Tariff Regulations 2021 the DISCOMs have prepared and submitted the Tariff Petition for True-Up of FY 2022-23, Annual Performance Review for FY 2023-24 and ARR & Tariff for FY 2024-25 wherein the **DISCOMs have proposed 3.03% tariff hike on the existing tariff for FY 2024-25 to recover the net revenue gap of Rs 1036.97 Cr at Bihar level.**

9.2.11.2 As per the tariff structure of the Bihar DISCOMs, to recover the net revenue gap of Rs 1096.67 Cr at Bihar level the DISCOMs **need to increase the tariff by 4.38% uniformly across all the tariff categories.** This is notwithstanding the changes made in other Tariff categories such as reduction in fixed charges of Streetlights (SS-2) category, increase in the tariff for HTSS (11/33 kV) category, as mentioned in the aforementioned part.

9.2.11.3 The Hon'ble Commission is requested to kindly consider the rationalization proposed by the Petitioner in the Tariff Structure as per the Revenue Gap/(surplus) of the DISCOMs.

9.2.12 **Charges for erection and dismantling the Temporary service connection line**

- 9.2.12.1 The Hon'ble Commission in the Tariff Schedule has specified the Supervision, Labour and Establishment charge for service connection. Further, the Hon'ble Commission has also specified the Terms and Conditions for Temporary Tariff wherein the tariff and terms of supply has been mentioned. However, the charges for erection and dismantling of temporary service line has not been mentioned in the Tariff Schedule.
- 9.2.12.2 This is to submit that as per the existing practice in field, Cost of erection and dismantling of temporary service line is charged equivalent to the Supervision, Labour and Establishment charge for service connection.
- 9.2.12.3 So, the Petitioner request the Hon'ble Commission to specify in the Tariff Schedule that the cost of erection and dismantling of temporary service line would be equivalent to the Supervision, Labour and Establishment charge for service connection. The Hon'ble Commission is requested to kindly consider the request of the Petitioner for specifying the charges for erection and dismantling of temporary service line in the Tariff Schedule for FY 2024-25.

9.2.13 **Penalty on violation of Contracted Demand/ load**

- 9.2.13.1 In the present situation, there is no provision of automatic enhancement of load by the DISCOM in case the actual Demand exceeds the contracted load of the consumers. The DISCOMs can only issue notice for enhancement of load and may disconnect the line for non- abeyance of notice issued to the consumer. So, it is proposed to Suo- moto enhance the load based on average load of last three months if it exceeds 105% of the contract demand continuously for 3 months.
- 9.2.13.2 It has been observed that consumers demand especially in seasonal consumers is over and above the contracted demand. The Petitioner needs to develop and maintain its infrastructure as per the contract demand to supply quality and interrupted power to its consumers.
- 9.2.13.3 Further, it is also proposed that the Railways may also be applicable for the Penalty on violation of Contracted Demand/ load. The Hon'ble Commission is requested to kindly consider the change proposed by the Petitioner regarding the Billing process of Agriculture consumers.

9.3 **Roadmap for reduction of Cross Subsidy Surcharge**

- 9.3.1 Section 8.3 (2) of the Tariff Policy 2016 specifies that:
"For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the Appropriate Commission would notify a roadmap such that tariffs are brought within $\pm 20\%$ of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy".
- 9.3.2 The Tariff Policy provides that SERCs may notify a roadmap such that tariffs are in $\pm 20\%$ of ACoS. The First proviso to para 8.5.1 of Tariff Policy 2016 also specifies that Cross Subsidy Surcharge (CSS) should be capped at 20% of the tariff applicable to the category of the consumers. The Petitioner aims at gradual reduction of cross subsidy surcharge in line with National Tariff policy.

**PROPOSAL FOR TARIFF SCHEDULE FOR
RETAIL TARIFF RATES AND TERMS AND CONDITIONS OF SUPPLY FOR FY 2024-25
(To be effective from 1st April, 2024)**

9.4 Tariff SCHEDULE- PART - A: LOW TENSION SUPPLY

System of supply: Low Tension – Alternating Current, 50 cycles per second

Single Phase supply at 230 Volts

Three Phase supply at 400 Volts

The tariffs are to be made applicable for supply of electricity to L.T consumers with a connected / contracted demand up to **45 kW for domestic, non-domestic and Street Light Category, up to 50 kVA for industrial (LTIS) and for public water works (PWW) category** and up to 100 HP for irrigation category under single or three phase supply as detailed below:

- Single Phase supply up to 7 kW
- Three Phase supply 5 kW and above.
- Consumers having load between 5 kW and 7 kW have the option to take single phase or three phase supply.
- LT Industrial and Agriculture load up to 5 kW have option to avail supply at single phase or three phase

Category of Service and TARIFF RATES

9.4.1 DOMESTIC: Kutir Jyoti

- This will be applicable to all dwelling houses of rural and urban families below the poverty line (BPL) as per the list / notification published by Rural Development Department, Govt. of Bihar from time to time.
- At present, the consumption of Kutir Jyoti consumers is capped at 50 units per month, with the balance consumption being levied as per relevant DS-I or DS-II tariffs.
- The total connected load of Kutir Jyoti connection in a rural and urban area should not exceed 250 watts.
- At present, two-part tariff structure is applicable for metered Kutir Jyoti consumers, with fixed charges to be levied on a-per connection basis per month.
- The Distribution Licensees propose to retain the two-part tariff structure for metered Kutir Jyoti consumers, with fixed charges being levied on a-per month connection basis per month
- The tariff structure is proposed below.

Table 135: Proposed tariff structure for KJ category

S. No.	Consumer Category	Fixed charges (Rs/connection/month)	Energy charge (Rs/ Unit.)
1	Kutir Jyoti (Consumption up to 50 units per month)		
	K.J. (Metered)	20	1 st 50 units at Rs 7.90/kWh Remaining units, rate as per DS-I/ DS-II as applicable.

9.4.2 **DOMESTIC: Others**

- The Domestic category, comprising of the existing DS-I DS-II and DS-III sub-categories, had been developed for APL consumers, consuming electricity for household purposes and Homestay establishments.
- DS-I consumers are consumers in rural areas (i.e., areas not covered by areas indicated under DS-II), DS-II fall within urban areas notified by Department of Urban Development, Government of Bihar from time to time. DS-III is available on optional basis and Homesta applicable for group residential consumers willing to avail supply at single point for the purpose of use of electricity in residential townships, registered societies, multi-storied residential complex (including lifts, water pumps and common lighting within the premises). The maximum allowable contract demand shall be 74KW.
- DS-I tariff shall be confined to 2 slabs viz, 0-50 units & >50 units.
- DS-II tariff shall be confined to 2 slabs viz, 0-100 units & >100 units.
- For levying of fixed charges, tariff to be levied on the connected / sanctioned load in the absence of meters with the feature of capturing Maximum-Demand.
- The revised tariff structure is proposed below.

Table 136: Proposed tariff structure for DS category

S. No.	Consumer Category	Fixed charges (Rs/kW/month)	Energy charge (Rs/ Unit.)
1	DS-I	40	First 50 units- 7.90
			Above 50- 8.47
2	DS-II	80	First 100 units- 7.90
			Above 100- 9.50
3	DS-III	80	9.58

9.4.3 **NON-DOMESTIC**

- The non-domestic category is for consumers using electricity for commercial purposes in the State of Bihar such as for light, fan and power loads for non-domestic purposes like shops, hospitals, nursing homes, clinics, dispensaries, restaurants, hotels, clubs, guest houses, lodge, hostels, marriage houses, public halls, show rooms, centrally air-conditioning units, offices, commercial establishments, cinemas, X- ray plants, non-government schools, colleges, libraries and research institutes, boarding/lodging houses, libraries, railway stations, fuel/oil stations, service stations, All India Radio/T.V. installations, printing presses, commercial trusts, societies, banks, theatres, circus, coaching institutes, common facilities in multistoried commercial office/buildings, Government and semi-government offices, public museums, Government educational institutions, their hostels and libraries, Government hospitals and government research institutions and non-profitable government aided educational institutions their hostels and libraries, non-profitable recognized charitable cum public institutions, places of worship like temples, mosques, gurudwaras, churches, etc. and burial/crematorium grounds, glow signboards, banners and hoardings for advertisement and other installations not covered

under any other tariff schedule. Sub-categories have been created on the basis of connected load and point of connected load.

- The NDS-II tariff is proposed to be applicable for Non- domestic premises in urban areas notified by the Department of Urban Development, Govt. of Bihar from time to time. NDS-I tariff will be applicable to areas where NDS-II is not applicable.
- There are currently two sub-categories within NDS; NDS-I serving rural consumers and NDS-II serving loads up to 45 kW for urban consumers for commercial uses of electricity under LT category.
- The Distribution licensee proposes to introduce kVAh based billing and retain the two-part tariff structure for NDS Category. For levying of fixed charges, tariff to be levied on the connected / sanctioned load in the absence of meters with the feature of capturing Maximum-Demand
- NDS-I tariff be confined to 2 slabs viz, 0-100 units & >100 units.
- NDS-II tariff be confined to 2 slabs viz, 0-100 units & >100 units.
- The tariff structure is proposed below.

Table 137: Proposed tariff structure for NDS category

S. No.	Consumer Category	Fixed charges (Rs/kVA/month)	Energy charge (Rs/ kVAh)
1	NDS-I	60	First 100 units- 8.29 Above 100- 8.73
2	NDS-II (Contract load up to 0.5 kW)	200	8.23
3	NDS-II (Contract load above 0.5 kW and upto 70 kW)	300	First 100 units- 8.23 Above 100- 9.48

9.4.4

IRRIGATION AND ALLIED SERVICES

- This is applicable for supply of electrical energy for bonafide use for agricultural purposes including processing of Agricultural Produce, confined to chaff-cutter, thrasher, cane crusher and rice Huller when operated by the agriculturist in the field or farm. This is also applicable to Mushroom farming, hatcheries, poultries (with more than 1000 birds) and fisheries (fish ponds).
- ***There will be no un-metered connections for Hatcheries, poultries and fisheries. They will necessarily have to be metered connections.***
- Under the Irrigation and Allied Services, there are currently two separate sub-categories for private and State owned tube-wells, with differentiated tariffs for providing benefit of lower tariffs to private consumers.
- Given the existing scenario, it is proposed to retain the unmetered class till the time metering arrangements are introduced covering all the consumer.
- For levying of fixed charges, tariff to be levied on the connected / sanctioned load in the absence of meters with the feature of capturing Maximum-Demand.

- For metered consumers, it is proposed to retain two-part tariff structure
- The tariff structure is proposed below.

Table 138: Proposed tariff structure for IAS category

S. No.	Consumer Category	Fixed charges (Rs)	Energy charge (Rs/ Unit.)
1	IAS-I (Unmetered)	Rs 1350/ HP or part thereof / month	
2	IAS-I (Metered)	Rs. 100 / HP or part thereof / month	7.19
3	IAS-II	Rs.500 / kVA or part thereof / month	7.64

9.4.5 **LOW TENSION INDUSTRIAL**

- LTIS category is applicable for supply of electricity to low tension industrial consumers with connected load /contract demand up to 50 kVA, which includes incidental lighting for industrial processing or agro – industries purposes, arc welding sets, flour mills, oil mills, rice mills, dal mills, atta chakki, Huller, expellers and any type of agro processing industries such as **Mushroom processing, poultry feed processing, etc.**
- LTIS-I is for consumers with contract demand up to 19 kW and LTIS-II is for three phase connection with a contracted load above 19 kW and up to 50 kVA. Further, demand-based tariff is mandatory for three phase connection and optional for single phase connection.
- LTIS-II is for consumers with 3 phase supply and with contract demand above 19kW and up to 50 KVA.
- The tariff structure is proposed below.

Table 139: Proposed tariff structure for LTIS category

S. No.	Consumer Category	Fixed charges (Rs/kVA/month)	Energy charge (Rs/ kVAh)
1	LTIS-I	288	8.29
2	LTS-II	360	8.29

9.4.6 **PUBLIC Water Works**

- PWW category is applicable to public water works, sewerage treatment plant and sewerage pumping stations functioning under state government and state government undertakings and local bodies.
- At present, a two part tariff is in place with fixed charges being levied on per kVA basis and all energy charges are to be charged on a kVAh basis.
- Har Ghar Nal is for water distribution facility provided by the Public Health Engineering Department at the village panchayats and ward levels. This sub-category shall be applicable to connections released under “Har Ghar Nal” Scheme only.

- The tariff for Har Ghar Nal scheme is proposed to be two part with fixed charge to be made applicable on per HP basis and the energy charge to be levied on the basis of kWh consumption.
- The tariff structure is proposed below.

Table 140: Proposed tariff structure for PWW category

S. No.	Consumer Category	Fixed charges (Rs/month)	Energy charge (Rs)
1	PWW (Contract demand up to 74 kW)	Rs 630/kVA/month	Rs 10.30/kVAh
2	Har Ghar Nal	Rs 100/ HP or part thereof / month	Rs 8.67/kWh

9.4.7 STREET LIGHT SERVICES

- This category is for supply of electricity for street light system including signal system. Also applicable for Traffic Lights, Mast lights/Blinkers etc. with separate sub-categories for metered and unmetered connections.
- Given the existing scenario, it is proposed to retain the unmetered class till the time metering arrangements are introduced covering all the consumer.
- All energy charges are to be charged on a kWh basis and fixed charges are proposed to be levied on kW basis.
- The tariff structure is proposed below.

Table 141: Proposed tariff structure for SS category

S. No.	Consumer Category	Fixed charges (Rs/month)	Energy charge (Rs)
1	SS (Metered)	Rs 100/kW/month	Rs 9.58/kWh
2	SS (unmetered)	4250 /kW or part thereof / month	-

9.4.8 LT Electric Vehicle Charging Station

- This Tariff category is applicable for Electric Vehicle Charging Station including battery swapping station for electric vehicle. In case the consumer uses the electricity supply for charging his own electric vehicle at his premises, the tariff applicable shall be as per the category of such premises. Electricity consumption for other facilities and purposes at Charging Station such as office, restaurant, rest rooms, convenience stores, public amenities, etc., shall be charged at tariff applicable to Non-Domestic Category.
- This category should be applicable to only those consumers who have set-up charging infrastructure for commercial purpose.

Table 141: Proposed tariff structure for LT EV Charging Station

S. No.	Consumer Category	Energy Charges (Rs/kVAh)
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1	LT EV Charging Station	9.26
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9.5 **TARIFF SCHUDULE- PART: B- HIGH TENSION SUPPLY**

- High Tension supply is applicable to consumers with contract demand equal to or more than 50kVA.
- The HT-General category is applicable for all other HT consumers which are out of the ambit of HTSS, HTIS and HTIS (oxygen manufacturers)
- HTSS (11/33 kV) is applicable for supply of electricity to all consumers who have contract demand of 300 kVA and more for induction furnace including Ferro Alloy loads. This tariff will not apply to casting units having induction furnace of melting capacity of 500 Kg and below. The capacity of induction furnace shall be 600 kVA per metric ton as existing for determining the contract demand of induction furnace in the existing HTSS service connections.
- HTSS (132/220 kV) is applicable for supply of electricity to all consumers who have contract demand of more than 300 kVA.
- High Tension Industrial Services (HTIS) category is for HT industrial consumers with manufacturing units with connected load of 50kVA and above. The condition of applicability remains same as HTS (General) except that the HTIS category is applicable for industries only.
- HTIS (Oxygen Manufacturers) is applicable for supply of electricity for Oxygen Manufacturing industries only with installations of a minimum contract demand of 50 kVA.
- HTS-I (11 kV)- This is Applicable for supply of electricity for use in installations with a minimum contract demand of 50 kVA and maximum contract demand of 1500 kVA.
- HTS-II (33 kV)- This is applicable for use in installations with a minimum contract demand of 500 kVA and maximum contract demand of 15,000 kVA.
- HTS-III (132 kV)- This is applicable for installations with a minimum contract demand of 7.5MVA. Character of service: AC, 50 cycles, 3-phase at 132 kV.
- HTS-IV (220 kV)- This is applicable for installation with a minimum contract demand of 10MVA. Character of service: AC, 50 cycles, 3 phase at 220 kV.
- HTS-V (400 kV)- This is applicable for installation with a minimum contract demand of 20MVA. Character of service: AC, 50 cycles, 3 phase at 400 kV

Table 142: Proposed tariff structure for HT category

S. No.	Consumer Category	Fixed charges (Rs/kVA/month)	Energy charge (Rs/kVAh)
1	HTS-I and HTIS- I	550	8.49
2	HTS-II and HTIS- II	550	8.42
3	HTS-III and HTIS- III	550	8.35
4	HTS-IV and HTIS- IV	550	8.29
5	HTS-V and HTIS-V	550	7.88
5	HTSS (11/33 kV)	800	5.39
6	HTSS (132/220 kV)	800	5.32
6	HTIS (Oxygen Manufacturers)	1000	5.82

9.5.1 RAILWAYS

- This category is for supplying power to Railway Traction Services (RTS) wherein the connection is to be provided only at 132 kV level.
- There is also a provision of rebate/surcharge at 13 paise/kVAh for higher voltage/lower voltage than 132 kV which may be allowed.
- No change is proposed in this category and the following existing structure may continue.
- The billing demand shall be the maximum demand recorded during the month or **85% of the contract demand whichever is higher**. If in any month the recorded maximum demand exceeds 105% of contract demand, the enhanced demand in excess of the contract demand shall be billed at twice the normal charges.
- **If the instances of overdrawal occur consecutively for three months, the Demand of such consumers will be increased by the Licensee for the respective load slab in which recorded demand falls for that billing cycle only.**

Table 143: Proposed tariff structure for RTS category

S. No.	Consumer Category	Fixed charges (Rs/kVA/month)	Energy charge (Rs/kVAh)
1	RTS	540	8.67

9.5.2 HT Electric Vehicle Charging Station

- This Tariff category is applicable for Electric Vehicle Charging Station at HT including battery swapping station for electric vehicle. In case the consumer uses the electricity supply for charging his own electric vehicle at his premises, the tariff applicable shall be as per the category of such premises. Electricity consumption for other facilities and purposes at Charging Station such as office, restaurant, rest rooms, convenience stores, public amenities, etc., shall be charged at tariff applicable to Non-Domestic Category.
- This category should be applicable to only those consumers who have set-up charging infrastructure for commercial purpose.

Table 141: Proposed tariff structure for HT EV Charging Station

S. No.	Consumer Category	Energy Charges (Rs/kVAh)
1	HT EV Charging Station	8.35

9.5.3 The above structure has been proposed for the tariff schedule for FY 2024-25. However, it is pertinent to mention the following key points on the designing of tariff structure and rates.

- **Existence of special categories:** In Bihar, a separate category exists as HTSS for specifically supplying power to arc furnaces, and in line with their consumption, their tariff structure provides for a high fixed charge with a low per unit energy charge. Similarly, another special category namely Har Ghar Nal (HGN) also exists in the state of Bihar.

- **Levying of fixed charges:** The endeavor of the DISCOMs is to levy the fixed tariff on consumers based on their maximum demand in the long term, and on their contracted demand in the short term. However, for some specific unmetered consumer categories and sub-categories, the fixed charge is proposed to be levied on the basis of connected load.
- **Demand Based tariffs:** The DISCOMs are planning to gradually move to demand based tariffs for all consumers, and most meters being currently installed, have the feature of recording the maximum demand.
- **Implementation of flat tariff:** In order to simplify the tariff structure further, and also encourage energy efficiency for consumers especially with higher specific consumption, the DISCOMs have been exploring the concept of implementing a flat tariff for each energy slab.
- **Recovery of fixed charges:** The fixed costs include the establishment and network costs, as well as the fixed costs payable to the Generators, irrespective whether power is drawn from them. The variable costs are the energy cost paid to Generators for supply of energy. On one hand wherein the cost structure of the two DISCOMs is heavily tilted towards fixed charges, the recovery of revenue through the existing tariff approved by the Hon'ble Commission is tilted more towards energy tariffs. Due to this skewed nature of tariff recovery, the DISCOMs have limited revenue assurance and therefore face uncertainty.
- In the tariff order dated 25th March 2022, the Hon'ble Commission linked the recovery of fixed charges in full only if the supply of power duly recorded by a consumer meter (except streetlights, Agriculture and all unmetered categories of consumers) is maintained for at least 21 hours/ day during the billing month. In any month if the supply of power is less than 21 hours/ day, then the demand charge for that month shall be levied on pro-rata basis.
- In view of the above, the Petitioner is hereby requesting the Hon'ble Commission to link the recovery of fixed charges with supply hours with the proposed roadmap of smart meter installation in the state. The same may also be made applicable in current scenario as well wherein the linking of fixed charges with hours of supply should be applicable to those consumers who have smart meters installed in their premises.
- **General and miscellaneous charges:** The Petitioner has also proposed open access charges such as Additional Surcharge, PoC, Congestion charges etc.
- In order to meet the total revenue gap for FY 2024-25, the Petitioner requests the Hon'ble Commission to allow additional costs in the electricity tariff. The Petitioner therefore propose the following tariff schedule to be adopted for the FY 2024-25, w.e.f. 01.04.2025, without taking the impact of any subsidy to be provided by the Government of Bihar for tariff relief.

Table 144: Tariff schedule considering 'Zero' GoB Subsidy

Category	Proposed Tariff- FY 2024-25			
	Fixed charge	Units	Energy Charge	Units
Domestic				
Kutir Jyoti				
Metered 0-50	20	Rs./Connection/Month	7.90	Rs./kWh
DS I Rural				

Category	Proposed Tariff- FY 2024-25			
	Fixed charge	Units	Energy Charge	Units
Metered (Demand Based)	-		-	
First 50 Units	40	Rs./kW/Month	7.90	Rs./kWh
Above 50 Units	40	Rs./kW/Month	8.47	Rs./kWh
DS II Demand Based				
First 100 Units	80	Rs./kW/Month	7.90	Rs./kWh
Above 100 Units	80	Rs./kW/Month	9.50	Rs./kWh
DS III	80	Rs./kW/Month	9.58	Rs./kWh
Non_Domestic Service				
NDS I - Metered (Demand Based)				
First 100 Units	60	Rs./kVA/Month	8.29	Rs./kVAh
Above 100 Units	60	Rs./kVA/Month	8.73	Rs./kVAh
NDS II - Demand Based				
Contract Demand <0.5 kW	200	Rs./Connection/Month	8.23	Rs./kVAh
Contract Demand >0.5 kW				
First 100 Units	300	Rs./kVA/Month	8.23	Rs./kVAh
Above 100 Units	300	Rs./kVA/Month	9.48	Rs./kVAh
Street Light Services				
SS Metered	100	Rs./kW/Month	9.58	Rs./kWh
SS Unmetered	4250	Rs./kW/Month	-	Rs./kWh
Irrigation & Allied Services				
IAS I				
Unmetered	1350	Rs./HP/Month	-	Rs./kWh
Metered	100	Rs./HP/Month	7.19	Rs./kVAh
IAS II				
Metered (Demand Based)	500	Rs./kVA/Month	7.64	Rs./kVAh
Public Service Connections				
Public Water Works	630	Rs./kVA/Month	10.30	Rs./kVAh
Har Ghar Nal	100	Rs./HP/Month	8.67	Rs./kWh
	-		-	
Low Tension Industrial Services	-		-	
LTIS I (0-19 kW)	288	Rs./kVA/Month	8.29	Rs./kVAh
LTIS II (>19 kW - 74 kW)	360	Rs./kVA/Month	8.29	Rs./kVAh
	-		-	
LT Electric Vehicle Charging Station	-		9.26	Rs./kVAh
HTS I - 11 kV	550	Rs./kVA/Month	8.49	Rs./kVAh
HTS II - 33 kV	550	Rs./kVA/Month	8.42	Rs./kVAh
HTS III -132 kV	550	Rs./kVA/Month	8.35	Rs./kVAh
HTS IV - 220 kV	550	Rs./kVA/Month	8.29	Rs./kVAh
HTS V – 400 kV	550	Rs./kVA/Month	7.88	Rs./kVAh
HTSS (11/33 kV)	800	Rs./kVA/Month	5.38	Rs./kVAh
HTSS (132/220 kV)	800	Rs./kVA/Month	5.32	Rs./kVAh
	-		-	
HTIS- I - 11 kV	550	Rs./kVA/Month	8.49	Rs./kVAh
HTIS -II - 33 kV	550	Rs./kVA/Month	8.42	Rs./kVAh
HTIS - III -132 kV	550	Rs./kVA/Month	8.35	Rs./kVAh

Category	Proposed Tariff- FY 2024-25			
	Fixed charge	Units	Energy Charge	Units
HTIS- IV - 220 kV	550	Rs./kVA/Month	8.29	Rs./kVAh
HTIS V- 400 kV	550	Rs./kVA/Month	7.88	Rs./kVAh
HTIS (Oxygen Manufacturers)	1000	Rs./kVA/Month	5.82	Rs./kVAh
Railway Traction Services	-		-	
RTS	540	Rs./kVA/Month	8.67	Rs./kVAh
HT Electric Vehicle Charging Stations.			8.35	Rs./kVAh

9.6 Terms and Conditions of Low-Tension Tariff

The foregoing tariffs are subject to the following conditions:

9.6.1 Demand Based Tariff

The billing demand shall be the maximum demand recorded during the month or **85% of the contract demand** whichever is higher (minimum demand shall be taken as 1kW except for NDS-II where separate 0.5kW cap is there and SS-unmetered). If in any month the recorded maximum demand exceeds 105% of contract demand, the enhanced demand in excess of the contract demand shall be billed at twice the normal charges. **If the instances of overdrawal occur consecutively for three months, the Demand of such consumers will be increased by the Licensee for the respective load in which recorded demand falls for that billing cycle only.**

9.6.2 Recovery of full Fixed / Demand Charge

The demand charges would be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis. It is further proposed by the Petitioner to make this mandatory for such consumers who have smart meters installed in their premises. Since, all the meters currently installed in the state don't have the capability to record the number of hours of supply, the linking of fixed cost recovery with hours of supply may please be aligned with the roadmap of installation of smart meters in the state.

This shall not be applicable to Street light, Agriculture as well as un-metered tariff categories of consumers.

Supply of power hours may be reckoned as recorded at 33/11kV substation, in Case where installed consumers meters does not have features of recording hours of supply. This shall not be applicable to Street light, Agriculture as well as un-metered tariff categories of consumers.

9.6.3 Fuel and Power Purchase Cost Adjustment (FPPCA)

In addition to the above tariff Fuel and Power Purchase Cost Adjustment (FPPCA) charges as applicable will be charged extra based on the methodology approved by the Hon'ble Commission in the MYT (Distribution) Regulations.

9.6.4 **Rebate for prompt payment**

The due date for making payment of energy bills or other charges shall be 15 days from the date of issue of the bill. To motivate consumers to make timely payment of their bills it is proposed to provide a rebate of 1.5% on the billed amount for timely payment of the bills for all the consumers served in LT category.

In case a consumer makes full payment after due date but within 10 days after the due date, no DPS shall be levied for this period but rebate for prompt payment will not be admissible.

The due date for making payment of energy bills or other charges for Govt. bodies is **30 days from the date of issue of the bill**. Rebate of 1.5% on the billed amount for timely payment of bills within this timeline to be allowed for Govt. bodies. Further, there will be no grace period **after this due date of 30 days** and DPS will be levied after this period.

9.6.5 **Rebate for online payment**

To motivate the consumers to make online payment of the bills through online mode. It is proposed to provide a rebate of 1% of the billed amount in addition to rebate @ 1.5% on the billed amount for timely payment of the bills for all the consumers served in LT category.

Payment made through all electronic modes or digital mode including RTGS and NEFT made directly in the DISCOM account will be considered as online payment. However, online payment rebate shall be applicable if the consumer makes the payment within due date in full.

9.6.6 **Rebate for pre-paid Smart meter**

For encouraging the consumers to avail pre-paid smart meter connection, a rebate of 2% on the recharged amount in addition to rebate for online or digital payment of 1% shall be allowed. However, rebate for online or digital payment shall not be applicable if the consumer purchases recharge coupons.

9.6.7 **Rebate for consistent payment**

For encouraging the postpaid Rural consumers, a rebate of 1% of the total monthly Bill of last Quarter in the coming next month. However, rebate for consistent payment shall be applicable only for the consumers making offline payment.

For ex. if a postpaid Rural consumer makes regular offline payment of its monthly bill within the due date during the previous quarter, then, such consumer shall be entitled to a rebate of 1% of total amount of monthly bills of last Quarter in its next monthly bill amount.

9.6.8 **Accounting of Partial Payment**

All payment made by consumers in full or part shall be adjusted in the following order of priority:

- a. Statutory taxes and duties on current consumption
- b. Arrear of Statutory taxes and duties
- c. Delayed payment surcharge
- d. Balance of arrears
- e. Balance of current bill

9.6.9 **Delayed Payment Surcharge (DPS)**

In case a consumer does not pay energy bills in full within 10 days grace period after due date specified in the bill, a delayed payment surcharge of one and half (1.5) percent per month or part thereof on the outstanding principal amount of bill will be levied from the due date for payment until the payment is made in full without prejudice to right of the licensee to disconnect the supply in accordance with Section 56 of the Electricity Act, 2003. The licensee shall clearly indicate in the bill itself the total amount, including DPS, payable for different dates after the due date after allowing for the grace period of 10 days. No DPS shall be charged on DPS arrear. The bill shall indicate the energy charges for the month, arrears of energy charges and DPS separately.

9.6.10 **Duties and Taxes**

Other statutory levies like electricity duty or any other taxes, duties etc., imposed by the State Government / Central Government or any other competent authority, shall be extra and shall not be part of the tariff as determined under this order.

9.6.11 **Charges to Tatkal Connections (Optional)**

If any consumer (other than High Tension and Railway) opts for availing connection under Tatkal scheme, the licensee shall release the Tatkal connection to such consumer with the following conditions:

- The Tatkal connections shall be released by licensee in half the time limit prescribed in the Supply code for that consumer category.
- Two (2) times of the following charges approved under head miscellaneous and general charges will be taken from the consumers willing to avail Tatkal connection.
- Application fees for new connection, and;
- Supervision, labor and establishment charge for service connection
- In case licensee fails to release connection within this time limit, licensee will refund the additional amount claimed to the consumer in the first energy bill.

9.6.12 **Contract Demand for billing under Domestic Tariff**

- For computation of the connected load of a domestic consumer either load of coolers/ fans or room heaters whichever is higher shall be considered. For the premises having Air conditioner (without heater) and that of geysers, the computation of connected load shall be as per the provision of Bihar Electricity Supply Code, 2007.
- The contract demand of those consumers for the monthly billing purpose in the premises who have opted for demand-based tariff, the recorded demand or the contract demand, whichever is higher, shall be considered.
- Subject to the minimum load of 1 kW, the fraction of the load below 500 W shall be rounded to its nearest lower level of whole number and 500 W and above shall be rounded to its nearest higher level of whole number, as specified in the Bihar Electricity Supply Code, 2007.
- In case of demand-based tariff, verification of connected load is not required.

All the other terms and conditions for the LT supply as has been decided by the Hon'ble Commission in its tariff order dated 23.03.2023 shall remain applicable for the FY 2024-25 also.

9.7 Terms and Conditions of High Tension Tariff

The foregoing tariffs are subject to the following conditions:

9.7.1 Demand Based Tariff

The billing demand shall be the maximum demand recorded during the month or **85% of the contract demand whichever is higher**. If in any month the recorded maximum demand exceeds 105% of contract demand, the enhanced demand in excess of the contract demand shall be billed at twice the normal charges.

If the instances of overdrawal occur consecutively for three months, the Demand of such consumers will be increased by the Licensee for the respective load in which recorded demand falls for that billing cycle only. Further, Railways will also be applicable for the Penalty on violation of maximum Contracted Demand/ load.

9.7.2 Recovery of full Fixed/Demand Charge

The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.

Supply of power hours may be reckoned as recorded at 33/11kV substation, in Case where installed consumers meters does not have features of recording hours of supply. This shall not be applicable to Street light, Agriculture as well as un-metered tariff categories of consumers.

9.7.3 Fuel and Power Purchase Cost Adjustment (FPPCA)

In addition to the above tariff Fuel and Power Purchase Cost Adjustment (FPPCA) charges as applicable will be charged extra based on the methodology approved by the Hon'ble Commission in the MYT (Distribution) Regulations.

9.7.4 **Rebate for prompt payment**

The due date for making payment of energy bills or other charges shall be 15 days from the date of issue of the bill. To motivate the consumers to make timely payment of the bills it is proposed to provide a rebate of 1.5% on the billed amount for timely payment of the bills for all the consumers served in HT category.

In case a consumer makes full payment after due date but within 10 days after the due date, no DPS shall be levied for this period but rebate for prompt payment will not be admissible.

The due date for making payment of energy bills or other charges for Govt. bodies is **30 days from the date of issue of the bill**. Rebate of 1.5% on the billed amount for timely payment of bills within this timeline to be allowed for Govt. bodies. Further, there will be no grace period **after this due date of 30 days** and DPS will be levied after this period.

9.7.5 **Rebate for online payment**

To motivate the consumers to make online payment of the bills through online mode, the Petitioner it is proposed to provide a rebate of 1% of the billed amount **or upto Rs 20,000 or 1% whichever is lower** in addition to rebate @ 1.5% on the billed amount for timely payment of the bills for all the consumers served in HT category.

Payment made through all electronic modes or digital mode including RTGS and NEFT made directly in the DISCOM account will be considered as online payment. However, online payment rebate shall be applicable if the consumer makes the payment within due date in full.

In case a consumer makes full payment after due date but within 10 days after the due date, no DPS shall be levied for this period and rebate for prompt payment will not be admissible.

9.7.6 **Accounting of Partial Payment**

All payment made by consumers in full or part shall be adjusted in the following order of priority:

- a. Statutory taxes and duties on current consumption
- b. Arrear of Statutory taxes and duties
- c. Delayed payment surcharge
- d. Balance of arrears
- e. Balance of current bill

9.7.7 **Delayed Payment Surcharge (DPS)**

In case of consumer does not pay energy bills in full within 10 days grace period after due date specified in the bill, a delayed payment surcharge of one and half (1.5) % per month or part thereof on the outstanding principal amount of bill will be levied from the original due date for payment until the payment is made in full without prejudice to right of the licensee to disconnect the supply in accordance with Section 56 of the Electricity Act, 2003. The licensee shall clearly indicate in the bill itself the total amount, including DPS, payable for different dates after the due date after allowing for the grace period of 10 days. No DPS shall be charged on DPS arrear.

9.7.8 Time of Day tariff (ToD) structure

ToD tariff shall be mandatory for all HT consumers. Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of HT consumers for different periods of the day, i.e., normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter.

The petitioner proposes the following ToD tariff structure - The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer.

Slab	Period	Energy Tariff Rate
Off-Peak	09:00 am-05:00 pm	80% of Normal Tariff
Peak	05:00 pm- 11:00 pm	120% of Normal Tariff
Normal	11:00 pm- 09:00 am	Normal Tariff as per consumer category

9.7.9 Duties and Taxes

Other statutory levies like electricity duty or any other taxes, duties etc., imposed by the State Government / Central Government or any other competent authority, shall be extra and shall not be part of the tariff as determined under this order.

9.7.10 Contract Demand for Induction Furnaces

The prevailing practice will continue for determining the contract demand of induction furnaces in the existing services connections. However, for new connections and where the furnaces are replaced in existing connections, contract demand shall be based on the total capacity of the furnace and equipment as per manufacturer technical specifications and in case of difference of opinion, the provisions of clause No.6.39 and 6.40 of Bihar Electricity Supply Code shall apply.

9.7.11 Incentivizing increased consumption through improving of load factor

To promote load factor utilization in the state, the Petitioner hereby proposes the following Load Factor incentive in the already applicable Load factor incentives in the state for HT industrial category consumers in the Tariff of FY 2024-25.

The following slabs of Load factor range are proposed for HTIS (Industrial) consumer only:

Load Factor Range	Incentive
30%-50%	10 paise per unit concession on energy charges for energy consumption over 30% and upto 50% load factor during billing month
50%-70%	20 paise per unit concession on energy charges for energy consumption over 50% and upto 70% load factor during billing month
Above 70%	30 paise per unit concession on energy charges for energy consumption over and above 70% and upto 100% load factor during billing month

The following slabs of Load factor range are proposed for HTIS (Oxygen Manufacturers) only:

Load Factor	Incentive
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Range	
65%-75%	15 paise per unit concession on energy charges for energy consumption over 65% and upto 75% load factor during billing month
Above 75%	25 paise per unit concession on energy charges for energy consumption over 75% load factor during billing month

It may further be note that consumer exceeding contract demand in any month will not be eligible for Load Factor Incentive in that month.

Methodology for calculation of Load Factor:

- Load Factor =
$$\frac{\text{Consumption during the month, in MU (in kVAh)}}{\text{Maximum Consumption possible during Month, in MU (in kVAh)}}$$
- Maximum consumption possible = Contract Demand (kVA) x Total no. of hours of supply recorded in the meter during the month

9.7.12 Exceeding Contract Demand

If in any month the recorded maximum demand exceeds 105% of contract demand, the enhanced demand in excess of the contract demand shall be billed at twice the normal charges.

If the instances of overdrawal occur consecutively for three months, the Demand of such consumers will be increased by the Licensee for the respective load slab in which recorded demand falls for that billing cycle only. Further, Railways will also be applicable for the Penalty on violation of maximum Contracted Demand/ load.

9.8 Temporary Supply (LT and HT)

9.8.1 Applicability: This tariff is for connection of temporary in nature for period of less than one year. The applicability shall be as given in the respective category tariff rate schedule. Temporary supply cannot be claimed by a prospective consumer as a matter of right but will normally be arranged by the Licensee when a requisition is made giving due notice subject to technical feasibility and in accordance with electricity supply code issued by the Commission.

9.8.2 Tariff: Fixed charge and energy charge shall be chargeable at 1.25 times the normal tariff as applicable to the corresponding appropriate tariff category.

9.8.3 Terms of Supply:

- Temporary supply under any category of service may be given for a period not exceeding 30 days in the first instance, the duration of which, however may be extended on month-to-month basis subject to maximum of one year.
- In addition to the charges mentioned above, the consumer shall have to deposit the following charges before commencement of the temporary supply:

- Estimated cost of erection of temporary service line and dismantling.
 - Cost of irretrievable materials which cannot be taken back to service.
 - Meter rent for the full period of temporary connection as per appropriate Tariff Schedule and miscellaneous charges.
 - Rental on the cost of materials as per estimate framed but not payable by the consumer shall be payable at the rate of Rs. 15/- per month on every Rs. 100/- or part thereof.
 - Ten per cent on the total cost of the estimate for the temporary service connection to cover as security for loss of materials and contingencies. In case such loss is not noticed, the amount will be refunded.
- The applicants for temporary supply shall be required to make a deposit in advance of the cost as detailed above including the energy consumption charges estimated for full period on the basis of connected load. This will, however, be adjusted against the final bill that will be rendered on disconnection of supply month to month basis.
 - If the consumer intends to extend the temporary supply beyond the period originally applied for, he will have to deposit in advance all charges as detailed above including the estimated electricity consumption charges, for the period to be extended and final bill for the previous period, as well.

9.8.4 The temporary supply shall continue as such and be governed by the terms and conditions specified above until the supply is terminated or converted into permanent supply at the written request of the consumer. The supply will be governed by the terms and conditions of permanent supply only after the consumer has duly completed all the formalities like execution of agreement, deposit of security money, cost of service connection and full settlement of the account in respect of the temporary supply etc.

9.9 Seasonal Supply (LT and HT)

9.9.1 The Petitioner proposes to provide seasonal supply to any consumer on written request to the Licensee subject to the following conditions.

Table 147: Proposed tariff rate for seasonal supply

Period of Supply	Tariff Rate
Upto 3 consecutive months in a year	Appropriate tariff plus 30 percent
More than 3 consecutive months and upto 6 consecutive months in a year	Appropriate tariff plus 20 percent
More than 6 consecutive months and upto 9 consecutive months in a year	Appropriate tariff plus 15 percent
More than 9 consecutive months but less than one year	Appropriate tariff plus 5 percent.

-
- 9.9.2 The meter rent and other charges as provided in the appropriate tariff are applicable to seasonal loads and would be charged extra for the entire period of supply.
 - 9.9.3 The supply would be disconnected after the end of the period unless the consumer wants the supply to be continued. Any reconnection charges have to be borne by the consumer.
 - 9.9.4 Consumer proposing to avail seasonal supply shall sign an agreement with the Licensee to avail power supply for a minimum period of 3 years in the case of HT, and 2 years in the case of LT category of supply.
 - 9.9.5 The consumers must avail supply in terms of whole calendar month continuously.
 - 9.9.6 The consumer is required to apply for seasonal supply and pay initial cost and security deposit as an applicant for normal electricity supply.
 - 9.9.7 The consumer shall ensure payment of monthly energy bills within 7 days of its receipt. The supply will be disconnected if payment is not made on due date.
Incremental charges will not be applicable for fixed charge component of the electricity bill in case of seasonal supply.

10 Miscellaneous and General Charges

Schedule of Miscellaneous and General Charges

10.1 Application fees

10.1.1 Application fee for new connection/ reduction of load/ enhancement of load/ request for permanent disconnection/ request for tatkal connection:

10.1.1.1 The following application fees will be charged for requesting a new connection or Tatkal connection or a reduction of load or enhancement of load or permanent disconnection

Table 112: Application fee

S. No.	Category / class	Rate (INR)
1	Kutir Jyoti	20.00
2	LT Single phase except Kutir Jyoti	75.00
3	LT Three phase	200.00
4	LT Industrial	300.00
5	HT Connection	750.00
6	For tatkal connection	Two (2) times the normal

10.1.2 **Testing / Inspection of consumer's installation:**

10.1.2.1 The following fees will be applicable for testing or inspection of customer's installation:

Table 113: Meter testing fee

S. No.	Category / class	Rate (INR)
1	Initial Test / Inspection	Free of cost
2	Subsequent test and inspection necessitated by fault in installation or by not complying with terms and conditions of supply	Rs. 100.00 for single phase connection Rs. 200.00 for three phase LT connection Rs. 800 for HT connection.

10.1.3 **Meter Testing Fee:**

10.1.3.1 The meter testing fee at the following rates will be charged from the consumers opting to provide their own meters

Table 114: Meter testing fee for own installation

S. No.	Category / class	Rate (INR)
1	Single Phase meter (L.T.)	100.00
2	Three Phase meter (L.T.)	200.00
3	Three Phase meter with CT	300.00

S. No.	Category / class	Rate (INR)
4	Tri-vector and special type meter	1,800.00
5	33 kV or 11 kV metering equipment	5,000.00
6	132 kV/220 kV metering equipment	8,000.00

Note:

- No meter testing fee shall be charged from the consumers if the meter has been provided by the licensee.
- If the meter is tested at third party testing laboratory at the request of the consumer then the fees charged by the testing laboratory will be payable by the consumer.

10.1.4 Meter Testing fees for Bi-directional meters:

10.1.4.1 The state government in order to encourage renewable energy generation has incentivized rooftop solar generation. As a result, many new consumers have begun installing Solar PV panels on their premises. Such consumers are needed to install bi-directional or net meter if they wish to sell power to the grid and at the same time draw power from the grid.

10.1.4.2 Bi-directional meters can be installed on the consumer premises by the licensee or the consumer can purchase the same and get it installed by the licensee at his/her premises. Before the installation of meter, it needs to be tested in a lab. The testing of the meter can be conducted either by licensee or the consumer can get it tested by a third party. For getting the meter tested by the licensee, the consumer needs to pay the meter testing fee as per the following rates.

S.No.	Category	Rate (INR)
1	Single Phase bi-directional meter	₹ 200.00
2	Three phase LT CT Operated Bidirectional meter	₹ 800.00
2	Three Phase meter (L.T.) Bidirectional meter	₹ 400.00
3	Three Phase meter with CT Bidirectional meter	₹ 600.00
4	Tri-vector and special type Bidirectional meter	₹ 2000.00
3	Three phase HT TOD Bidirectional	₹ 1,100.00

Note:

- No meter testing fee shall be charged from the consumers if the meter has been provided by the licensee.
- If the meter is tested at third party testing laboratory at the request of the consumer then the fees charged by the testing laboratory will be payable by the consumer

10.1.4.3 Such testing charges shall be applicable only in case the consumer/ Generator requests the licensee for such services.

10.1.5 Removing / Re-fixing / Changing of Meter / Meter Licensee at consumer's request:

10.1.5.1 The following fees will be charged from the consumers opting to remove or re-fix or change their meter:

Table 115: Removal/ refixing/ change of meter fee

S. No.	Category / class	Rate (INR)	
1	Single Phase meter	200.00	Cost of material, as required, will be borne by
2	Three Phase meter	400.00	
3	Three Phase meter with CT	500.00	
4	Tri-vector and special type meter	600.00	

5	High tension metering equipment	1,200.00	the consumer
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10.1.6 Reconnection/ Disconnection Charge:

10.1.6.1 The following reconnection/ disconnection charges will be charged from consumers:

Table 116:Reconnection charges

S. No.	Category/class	Rate (INR)
1	Single Phase supply, LT	100.00
2	Three Phase supply other than LT industrial	200.00
3	Three Phase LT industrial supply	900.00
4	HT supply	3,000.00

10.1.7 Supervision, Labour and Establishment charge for service connection:

10.1.7.1 The following supervision, labour and establishment fees will be charged from consumers for service connections:

Table 117:Supervision, labour and establishment charges for service connection

S. No.	Category/ Class	Rate (INR)
1	Single Phase LT	400.00
2	Three Phase LT other than industrial	900.00
3	Three Phase industrial	1,500.00
4	HT	As per approved estimate
5	For tatkal connection	Two (2) times the normal rate

10.2 Security Deposit

10.2.1 The consumer (except Kutir Jyoti rural and Kutir Jyoti urban) shall pay initial security deposit equivalent to the estimated energy charges including fixed / demand charges for a period of two months or as per the provisions of Bihar Electricity Supply Code notified by the Commission.

10.2.2 In case of Smart Prepaid Connection, the Security deposit is not applicable. All Central Government and State Government departments are exempted from payment of security deposit. However, all public sector undertakings and local bodies shall pay security deposit, as applicable.

10.2.3 The amount of security deposit obtained from the consumer is liable to be enhanced every year, in April-May of next year on the basis of consumption during previous years or as specified in clause 7.15 of Bihar Electricity Supply Code. In default of payment of additional security deposit, wherever payable after review, the service line may be disconnected on serving thirty days' notice and connection thereafter can be restored only if the deposit is made in full along with the prescribed reconnection charges and surcharge @1.5% per month or part thereof on the amount of outstanding.

10.3 Interest on Security Deposit

Security deposit made by a consumer shall bear interest as specified in Bihar Electricity Supply Code, payable at Bank rate notified by RBI from time to time. The interest will be calculated for full calendar

months only and fraction of a month in which the deposit is received or refunded, shall be ignored. The interest for the period ending 31st March shall be adjusted and allowed to the consumer in the energy bill for May issued in June and in subsequent month(s), if not adjusted completely against the bill for the month _____ of _____ May.

11 Compliance of Directives for Q1 and Q2 for FY 2023-24

Compliance of Directives for Q1 and Q2 for FY 2023-24 is provided hereunder.

Sr. No	Directives																																																																																				
1	<p>Billing Efficiency and Collection Efficiency:</p> <p>The Commission has observed the target of achieving 85% Billing Efficiency (Distribution loss of 15%) and 100% collection efficiency (including arrears collection) is still far off for the Discoms. Unless targets are given and responsibility is fixed to the employees and officers, the stipulated targets cannot be achieved</p> <p>The Commission directs the Discoms to submit the following month-wise details in the quarterly report to be submitted.</p> <table border="1"> <thead> <tr> <th>Particulars</th> <th>Unit</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Revenue Billed</td> <td>Rs. Crore</td> <td></td> </tr> <tr> <td>Revenue Collected</td> <td>Rs. Crore</td> <td></td> </tr> <tr> <td>Collection Efficiency</td> <td>%</td> <td></td> </tr> <tr> <td>Energy Input to the Discoms</td> <td>MU</td> <td></td> </tr> <tr> <td>Energy Sales</td> <td>MU</td> <td></td> </tr> <tr> <td>Billing Efficiency</td> <td>%</td> <td></td> </tr> </tbody> </table>	Particulars	Unit	Value	Revenue Billed	Rs. Crore		Revenue Collected	Rs. Crore		Collection Efficiency	%		Energy Input to the Discoms	MU		Energy Sales	MU		Billing Efficiency	%																																																																
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	<p>Response of DISCOM:</p> <p>The Petitioner hereby submits the following details, in response to the directive for Q1 and Q2 of FY 2023-24:</p> <p>Operational Performance of Q1 FY 2023-24</p> <table border="1"> <thead> <tr> <th>Particulars</th> <th>Unit</th> <th>Apr-23</th> <th>May-3</th> <th>Jun-23</th> <th>Q1</th> </tr> </thead> <tbody> <tr> <td>Revenue Billed</td> <td>Rs. Crore</td> <td>765.62</td> <td>1009.77</td> <td>1101.55</td> <td>2876.93</td> </tr> <tr> <td>Revenue Collected</td> <td>Rs. Crore</td> <td>713.04</td> <td>932.13</td> <td>1032.93</td> <td>2678.10</td> </tr> <tr> <td>Collection Efficiency</td> <td>%</td> <td>93.13%</td> <td>92.31%</td> <td>93.77%</td> <td>93.09%</td> </tr> <tr> <td>Energy Input to the Discoms</td> <td>MU</td> <td>1398.69</td> <td>1553.22</td> <td>1753.73</td> <td>4705.63</td> </tr> <tr> <td>Energy Sales</td> <td>MU</td> <td>880.38</td> <td>1044.78</td> <td>1145.01</td> <td>3070.17</td> </tr> <tr> <td>Billing Efficiency</td> <td>%</td> <td>62.94%</td> <td>67.27%</td> <td>65.29%</td> <td>65.24%</td> </tr> </tbody> </table> <p>Operational Performance of Q2 FY 2023-24</p> <table border="1"> <thead> <tr> <th>Particulars</th> <th>Unit</th> <th>Jul-23</th> <th>Aug-3</th> <th>Sep-23</th> <th>Q2</th> </tr> </thead> <tbody> <tr> <td>Revenue Billed</td> <td>Rs. Crore</td> <td>1272.94</td> <td>1251.54</td> <td>1439.88</td> <td>3964.37</td> </tr> <tr> <td>Revenue Collected</td> <td>Rs. Crore</td> <td>1201.18</td> <td>1155.30</td> <td>1256.36</td> <td>3612.85</td> </tr> <tr> <td>Collection Efficiency</td> <td>%</td> <td>94.36%</td> <td>92.31%</td> <td>87.25%</td> <td>91.13%</td> </tr> <tr> <td>Energy Input to the Discoms</td> <td>MU</td> <td>1878.47</td> <td>1777.71</td> <td>1713.92</td> <td>5370.10</td> </tr> <tr> <td>Energy Sales</td> <td>MU</td> <td>1360.52</td> <td>1342.09</td> <td>1545.00</td> <td>4247.61</td> </tr> <tr> <td>Billing Efficiency</td> <td>%</td> <td>72.43%</td> <td>75.50%</td> <td>90.14%</td> <td>79.10%</td> </tr> </tbody> </table>	Particulars	Unit	Apr-23	May-3	Jun-23	Q1	Revenue Billed	Rs. Crore	765.62	1009.77	1101.55	2876.93	Revenue Collected	Rs. Crore	713.04	932.13	1032.93	2678.10	Collection Efficiency	%	93.13%	92.31%	93.77%	93.09%	Energy Input to the Discoms	MU	1398.69	1553.22	1753.73	4705.63	Energy Sales	MU	880.38	1044.78	1145.01	3070.17	Billing Efficiency	%	62.94%	67.27%	65.29%	65.24%	Particulars	Unit	Jul-23	Aug-3	Sep-23	Q2	Revenue Billed	Rs. Crore	1272.94	1251.54	1439.88	3964.37	Revenue Collected	Rs. Crore	1201.18	1155.30	1256.36	3612.85	Collection Efficiency	%	94.36%	92.31%	87.25%	91.13%	Energy Input to the Discoms	MU	1878.47	1777.71	1713.92	5370.10	Energy Sales	MU	1360.52	1342.09	1545.00	4247.61	Billing Efficiency	%	72.43%	75.50%	90.14%	79.10%
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2	<p>Cent Percent Consumer Metering</p> <p>The Commission has noted that providing of meters to IAS-I and Street Light (Unmetered) categories is not yet completed. The Commission desires to remove unmetered tariff categorization. The Commission directs the Discoms to put forth more efforts to achieve 100% metering to IAS-I and Street light (unmetered) categories before 31.03.2024 positively. The monthly progress of metering of IAS-I and Street Light categories to be submitted in the quarterly report in the desired format.</p>																																																																																				
	<p>Response of DISCOM:</p> <p>The Petitioner hereby submits the following details, in response to the directive for Q1 and Q2 of FY 2023-24:</p> <p>Status of metering status of Un-metered category for Q1 of FY 2023-24</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Number of Connections Existing</th> <th>Number of Connections provided with meters</th> <th>Balance connections to be provided with meters</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Category	Number of Connections Existing	Number of Connections provided with meters	Balance connections to be provided with meters																																																																																
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Sr. No	Directives																											
	IAS-I (Unmetered)	206088	201593	4495																								
	Street-Light (Unmetered)	2375	533	1842																								
	<i>Status of metering status of Un-metered category for Q2 of FY 2023-24</i>																											
	Category	Number of Connections Existing	Number of Connections provided with meters	Balance connections to be provided with meters																								
	IAS-I (Unmetered)	231688	224920	6761																								
	Street-Light (Unmetered)	2461	969	1492																								
3	Energy Accounting/Audit																											
	<p><i>The Commission directs the Discoms to install 100% metering to all 33 KV and 11 KV feeders and conduct energy accounting / audit at the end of every month. Monthly progress of providing feeder meters to be submitted in the quarterly report in the given format:</i></p> <p><i>Discoms have not yet installed 100% metering to all 33 KV and 11 KV feeders to conduct proper energy auditing. Metering of 33 KV and 11 KV feeders at EHT substations of BSPTCL shall be completed immediately and the meters should always be kept in perfect working condition so that the energy sent out to Discoms can be accurately assessed for energy audit.</i></p>																											
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	<p><i>The Petitioner hereby submits the following details which shows the current number of 11kV and 33 kV feeders, number of feeders provided with meters and balance number of feeders to be provided with meters.</i></p> <p><i>Statue of Q1 FY 2023-24</i></p> <p><i>(A) 33 KV Feeders Metering</i></p> <table border="1"> <thead> <tr> <th><i>Number of 33 KV feeders existing</i></th> <th><i>Number of feeders provided with Meters</i></th> <th><i>Balance number of feeders to be provided with meters</i></th> </tr> </thead> <tbody> <tr> <td>736</td> <td>736</td> <td>0</td> </tr> </tbody> </table> <p><i>(B) 11 KV Feeders Metering</i></p> <table border="1"> <thead> <tr> <th><i>Number of 11 KV feeders existing</i></th> <th><i>Number of feeders provided with Meters</i></th> <th><i>Balance number of feeders to be provided with meters</i></th> </tr> </thead> <tbody> <tr> <td>3145</td> <td>3145</td> <td>0</td> </tr> </tbody> </table> <p><i>Statue of Q2 FY 2023-24</i></p> <p><i>(A) 33 KV Feeders Metering</i></p> <table border="1"> <thead> <tr> <th><i>Number of 33 KV feeders existing</i></th> <th><i>Number of feeders provided with Meters</i></th> <th><i>Balance number of feeders to be provided with meters</i></th> </tr> </thead> <tbody> <tr> <td>747</td> <td>747</td> <td>0</td> </tr> </tbody> </table> <p><i>(B) 11 KV Feeders Metering</i></p> <table border="1"> <thead> <tr> <th><i>Number of 11 KV feeders existing</i></th> <th><i>Number of feeders provided with Meters</i></th> <th><i>Balance number of feeders to be provided with meters</i></th> </tr> </thead> <tbody> <tr> <td>3155</td> <td>3155</td> <td>0</td> </tr> </tbody> </table>				<i>Number of 33 KV feeders existing</i>	<i>Number of feeders provided with Meters</i>	<i>Balance number of feeders to be provided with meters</i>	736	736	0	<i>Number of 11 KV feeders existing</i>	<i>Number of feeders provided with Meters</i>	<i>Balance number of feeders to be provided with meters</i>	3145	3145	0	<i>Number of 33 KV feeders existing</i>	<i>Number of feeders provided with Meters</i>	<i>Balance number of feeders to be provided with meters</i>	747	747	0	<i>Number of 11 KV feeders existing</i>	<i>Number of feeders provided with Meters</i>	<i>Balance number of feeders to be provided with meters</i>	3155	3155	0
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3155	3155	0																										
4	Reduction of AT&C Loss																											
	<p><i>The Commission has noted that DISCOMs are far away from achieving their target of both Distribution loss (15%) and AT&C loss (15%). The Commission directs the Discoms to monitor reduction of distribution loss and AT&C loss, Division-wise and Circle-wise every month, duly fixing the targets for each Division and Circle.</i></p> <p><i>Discoms are directed to submit the month-wise details of AT&C loss in the quarterly report in the given format.</i></p>																											

Sr. No	Directives							
	Response of DISCOM:							
	<i>The Petitioner hereby submits the following details, in response to the directive:</i>							
	Summary of AT&C Loss for the quarter ending on 30th June-2023							
Name of Division	Input Units (MU)	Unit Billed (MU)	Units Loss		Revenue Billed (Rs. Cr)	Revenue Collected (Rs. Cr)	Collection Efficiency (%)	AT&C Loss (%)
			(MU)	(%)				
Muzaffarpur East	102	56	47	45	52	49	95	48
Muzaffarpur West	155	88	66	43	83	73	88	50
Muzaffarpur Urban-I	90	39	51	56	41	60	148	36
Muzaffarpur Urban-II	127	73	55	43	69	73	107	39
Sitamarhi	110	61	49	45	55	53	96	47
Sheohar	41	25	16	39	23	19	85	49
Pupri	98	86	12	13	79	63	80	30
Muzaffarpur Circle	723	427	296	41	401	391	98	42
Motihari	160	88	72	45	82	81	98	46
Bettiah	195	99	96	49	109	85	78	60
Bagaha	76	51	25	33	48	44	92	38
Raxaul	98	78	20	20	71	61	86	32
Chakia	130	71	59	45	64	58	91	50
Motihari Circle	658	387	271	41	373	329	88	48
Chapra (E)	163	100	62	38	92	88	96	41
Chapra (W)	169	112	57	34	101	91	90	40
Siwan	141	117	24	17	103	96	93	23
Gopalganj	80	56	24	30	52	49	94	34
Mirganj	107	56	51	48	52	48	92	52
Maharajganj	104	82	21	21	76	61	81	36
Chapra Circle	762	523	239	31	475	432	91	38
Darbhangha (U)	79	57	22	28	56	52	93	33
Darbhangha (R)	123	80	43	35	74	67	91	41
Madhubani	107	79	28	26	72	68	95	30
Jhanjharpur	83	55	28	34	52	49	95	37
Benipur	79	64	15	19	59	53	90	27

Sr. No	Directives							
Jainagar	62	42	19	31	39	37	94	35
Darbhanga Circle	532	377	155	29	352	326	93	34
Samastipur	144	97	47	33	90	86	95	36
Dalsingsarai	92	72	20	22	66	58	87	31
Rosera	75	54	21	27	51	46	90	35
Hajipur	180	117	63	35	117	103	88	43
Mahua	118	93	25	21	85	79	93	26
Samastipur Circle	610	434	176	29	409	372	91	35
Barauni	96	68	28	29	67	64	96	31
Begusarai	160	99	61	38	93	84	90	44
Khagaria	108	75	33	30	71	62	87	40
Begusarai Circle	364	243	121	33	231	210	91	39
Saharsa	74	49	26	34	47	42	89	42
Supaul	66	52	14	21	46	40	86	33
Madhepura	67	45	22	33	41	35	86	42
Simri Bakhtiyarpur	43	38	5	11	35	28	81	28
Raghopur	72	43	28	40	40	41	101	39
Udakishanganj	47	26	20	43	27	25	92	48
Saharsa Circle	369	254	115	31	236	211	89	39
Purnea East	103	25	79	76	24	66	273	34
Purnea West	122	86	36	30	81	75	93	34
Katihar	125	88	37	30	79	70	89	38
Barsoi	81	47	34	42	48	39	82	52
Purnea Circle	432	246	186	43	231	251	108	38
Kishanganj	44	35	10	21	33	31	92	28
Araria	87	52	36	41	50	45	90	47
Forbesganj	61	38	23	38	37	36	97	40
Bahadurganj	64	56	8	12	48	46	94	18
Kishanganj Circle	256	180	76	30	169	157	93	35
Total	4706	3070	1635	35	2877	2678	93	39

Summary of AT&C Loss for the quarter ending on 30th September-2023

Sr. No	Directives								
	Name of Division	Input Units (MU)	Unit Billed (MU)	Units Loss		Revenue Billed (Rs. Cr)	Revenue Collected (Rs. Cr)	Collection Efficiency (%)	AT&C Loss (%)
				(MU)	(%)				
	Chapra (E)	189	167	22	12	147	135	92	19
	Chapra (W)	184	163	21	11	145	129	89	21
	Siwan	156	138	19	12	127	119	93	18
	Maharjganj	113	99	14	13	89	79	89	22
	Gopalganj	86	88	-2	-3	83	69	83	14
	Mirganj	125	110	15	12	94	84	89	22
	CHAPRA CIRCLE	854	766	88	10	685	615	90	20
	Darbhangha (U)	87	71	16	18	77	71	92	25
	Darbhangha (R)	134	114	20	15	104	95	92	22
	Jhanjharpur	97	75	22	23	70	62	89	32
	Madhubani	129	100	29	23	95	87	92	29
	Benipur	102	86	16	15	79	71	89	25
	Jainagar	74	54	20	27	50	45	90	34
	DARBHANGA CIRCLE	623	500	123	20	474	429	91	27
	Motihari	193	140	53	28	133	120	90	35
	Chakia	144	92	51	36	85	73	86	45
	Bettiah	224	127	97	43	122	121	99	44
	Bagaha	86	65	21	24	61	57	93	29
	Raxaul	113	81	32	28	76	67	89	36
	MOTIHARI CIRCLE	760	505	255	34	476	438	92	39
	Muzaffarpur (E)	132	75	57	43	68	63	93	47
	Muzaffarpur (W)	169	114	55	33	105	98	93	37
	Muzaffarpur (U1)	92	107	15	17	111	93	84	2
	Muzaffarpur (U2)	135	100	35	26	96	96	100	27
	Sitamarhi	134	76	57	43	76	67	87	50
	Sheohar	51	43	8	16	38	33	85	28

Sr. No	Directives								
	Pupri	121	84	37	30	78	74	95	34
	MUZAFFARPUR CIRCLE	834	600	234	28	572	523	91	34
	Purnea(E)	112	95	17	15	91	86	94	20
	Purnea(W)	137	115	22	16	106	98	92	22
	Katihar	146	105	41	28	101	92	91	34
	Barsoi	94	68	26	28	61	56	92	34
	PURNEA CIRCLE	489	383	106	22	359	332	92	28
	Forbesganj	74	54	20	28	52	47	91	34
	Bahadurganj	77	67	11	14	62	56	90	22
	Kishanganj	54	47	7	13	46	43	93	19
	Araria	98	87	11	11	78	62	79	30
	KISHANGANJ CIRCLE	303	255	49	16	238	207	87	27
	Saharsa	87	65	22	26	63	57	91	32
	Madhepura	80	58	22	28	55	49	89	35
	Supaul	77	64	13	17	60	54	91	25
	Raghopur	88	64	24	27	59	56	94	31
	Simri Bakhtiyarpur	49	39	10	21	36	35	97	23
	Udakishanganj	56	45	11	20	43	38	87	30
	SAHARSA CIRCLE	438	335	103	23	315	288	91	30
	Khagaria	119	96	23	19	90	81	91	27
	Begusarai	172	141	31	18	133	127	96	22
	Barauni	114	86	28	24	84	79	94	29
	BEGUSARAI CIRCLE	406	323	82	20	306	287	94	25
	Rosera	85	74	11	13	68	61	90	21
	Hajipur	186	156	30	16	150	139	92	23
	Mahua	127	120	8	6	107	100	94	12
	Samastipur	169	145	25	15	134	118	88	25
	Dalsingsarai	96	87			80	72		

Sr. No	Directives								
				9	10			91	18
	SAMASTIPUR CIRCLE	664	581	82	12	539	491	91	20
	Total	5370	4248	1,122	20.9	3964	3613	91.1	27.9
5	Interest on Security Deposit of Consumers								
	<p>The Commission has noted that despite repeated instructions, Discoms are not passing on the accumulated interest on security deposit to LT consumers.</p> <p>The Commission directs the Discoms to expedite the process and arrange payment of interest on the deposited Security Deposit amount for the LT consumers without further delay. The status of compliance to be reported in the quarterly reports.</p>								
	Response of DISCOM:								
	<p>The Petitioner hereby submits that interest on security deposit of HT & LTIS category consumers are being passed on as per the norms specified by Commission. Amount of Security deposited by the LT consumers with interest thereon is being refunded to Smart Meter consumer in RAPDRP Area. DISCOM is in the process of development of similar activities in the billing software of Non-RAPDRAP area also. It is expected that the same shall be implemented from December-2023. Going forward an IT system-based module for streamlining the process of passing on the accumulated interest amount to LT consumers having conventional meters has been planned and same is under testing phase, the approach considers parameters like contracted load, date of release of supply, consumer tariff category etc. to arrive at the adhoc security deposit for the consumer.</p>								
6	Asset Register								
	<p>The Commission has noted that the Discoms have not yet started preparation of Asset Register despite repeated directives.</p> <p>The Commission directs the Discoms to expedite the action to prepare the Fixed Asset Register without further delay and submit the status on progress of preparation of Assets Register on quarterly basis. The Discoms are once again warned that if the Fixed Asset Register is not prepared by end of FY 2023-24, the Commission shall be constrained to impose penalty or restricts on fixed assets capitalization dependent costs, such as Depreciation, Interest on Loan, Return on Equity, R&M expenses etc. in the next Tariff Order onwards.</p>								
	Response of DISCOM:								
	<p>The Petitioner hereby submits it is going to implement ERP (Enterprise Resource Planning) which is mandatory under Revamped Distribution Sector Scheme (RDSS) of Government of India. It is endeavoring to create and maintain component wise fixed asset register and full details item wise assets to maintain voltage wise cost of supply will be provided after ERP implementation is done. ERP for all areas of both DISCOMs was floated by SBPDCL vide NIT NO: - 39/PR/NBPDCL/2023. Technical evaluation is under process and it is expected to finalize the tender process by the end of current financial year.</p>								
7	Voltage wise Cost of Supply								
	<p>The Commission has noted that the Discoms have not made any study to access technical losses of all 33 KV feeders, all 11 KV feeders and some selected LT lines under Distribution Transformers. Discoms are submitting voltage-wise cost of supply based on assumed technical losses.</p> <p>The Commission directs the Discoms to submit voltage-wise cost of supply in next tariff petition based on technical losses of various voltage levels arrived at by conducting a detailed study as directed above. The status of progress on the study shall be reported on quarterly basis.</p>								
	Response of DISCOM:								
	<p>The Petitioner hereby submits that the voltage-wise cost of supply has been submitted in this tariff petition based on technical losses at various voltage levels arrived at by conducting a sample study. Further, energy accounting is being done on some 33/11 kV feeders and defective meters are being replaced. Once ERP is implemented and fixed asset register is completed, voltage wise cost of supply would be submitted to the Hon'ble Commission in a detailed manner as directed by the Commission.</p>								
8	Regulatory Accounts								
	<p>The Commission has noted that the Discoms have not yet started preparation of Regulatory Accounts in accordance with BERC (Power Regulatory Accounting) Regulations, 2018.</p> <p>The Commission directs the Discoms to commence preparation of Regulatory Accounts forth with and submit Audited Regulatory Accounts along with true-up petition for FY 2022-23. Discoms should know that once Regulatory Accounts are maintained, the process of Truing up of ARR for the relevant year becomes simpler.</p>								

Sr. No	Directives								
	Response of DISCOM:								
	The Petitioner hereby submits that currently nowhere in India similar kind of work is being done. Hence, we are not in a position to derive any insight on how to start with the process of regulatory accounting. Under such circumstances, appointing a consultancy firm to carry out such activity and with such experience seems remote. Hence it has become challenging for us to initiate the process of regulatory accounting. However, the DISCOM is endeavoring to prepare regulatory accounts under the guidance of Hon'ble Commission								
9	Outstanding Arrears								
	<i>The Commission has noted that there are huge amounts of outstanding arrears to be collected. The outstanding arrears include amounts to be recovered from the Govt. Departments, Semi-Govt., Departments and Local Bodies. The Commission directs the Discoms to bestow personnel supervision to pursue with defaulting departments and realize the outstanding dues. A report on the progress to submitted in the desired format on quarterly basis.</i>								
	Response of DISCOM:								
	<i>The Petitioner hereby submits the status of the outstanding arrears from the government and local bodies.</i>								
	Summary of outstanding dues of government department, semi-govt. departments and local bodies for the quarter ending on 30th June-2023								
	<table border="1"> <thead> <tr> <th>Outstanding arrears at the beginning of the quarter</th> <th>Revenue Billed during the quarter</th> <th>Revenue Collected during the quarter</th> <th>Balance outstanding arrears at the end of quarter</th> </tr> </thead> <tbody> <tr> <td>340.41</td> <td>105.61</td> <td>11.80</td> <td>434.22</td> </tr> </tbody> </table>	Outstanding arrears at the beginning of the quarter	Revenue Billed during the quarter	Revenue Collected during the quarter	Balance outstanding arrears at the end of quarter	340.41	105.61	11.80	434.22
Outstanding arrears at the beginning of the quarter	Revenue Billed during the quarter	Revenue Collected during the quarter	Balance outstanding arrears at the end of quarter						
340.41	105.61	11.80	434.22						
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Outstanding arrears at the beginning of the quarter	Revenue Billed during the quarter	Revenue Collected during the quarter	Balance outstanding arrears at the end of quarter						
434.22	121.67	46.95	508.93						
10	Consumer Grievance Redressal								
	<i>The Commission directs the Discoms to submit the quarterly report on consumers grievance redressal with following details:</i>								
	<ol style="list-style-type: none"> 1. Number of complaints pending at the beginning of the quarter 2. Number of complaints received during the quarter 3. Number of complaints resolved in the quarter 4. Number of complaints pending at the end of the quarter 								
	Response of DISCOM:								
	<i>The Petitioner hereby submits the status of the Consumer Grievance Redressal on quarterly basis.</i>								
	Summary of Consumer Grievance Redressal for the quarter ending on 30th June-2023								
	<table border="1"> <thead> <tr> <th>No. of Complaints at beginning of Quarter</th> <th>Number of complaints received during the quarter</th> <th>Number of complaints resolved in the quarter</th> <th>Number of complaints pending at the end of the quarter</th> </tr> </thead> <tbody> <tr> <td>7951</td> <td>77128</td> <td>79737</td> <td>5342</td> </tr> </tbody> </table>	No. of Complaints at beginning of Quarter	Number of complaints received during the quarter	Number of complaints resolved in the quarter	Number of complaints pending at the end of the quarter	7951	77128	79737	5342
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5342	99174	97893	6623						
11	Release of New Connections								

Sr. No	Directives																
	<p>The Commission has noted that Pending applications are increasing at the end of the quarter. Discoms should put-forth more efforts to speed up releasing of new service connections and to reduce pending applications.</p> <p>The Commission directs, the Discoms to submit the following details in report format on release of new connections on quarterly basis:</p> <ul style="list-style-type: none"> ➤ Number of applications pending at the beginning of the quarter ➤ Number of applications received during the quarter ➤ Number of connections released during the quarter ➤ Number of applications pending the end of quarter 																
	<p>Response of DISCOM:</p>																
	<p>The Petitioner hereby submits the status of the Release of New Connections.</p> <p>States of Release of New Connection for the quarter ending on 30th June-2023</p> <table border="1"> <thead> <tr> <th>Number of applications pending at the beginning of the quarter</th> <th>Number of applications received during the quarter</th> <th>Number of connections released during the quarter</th> <th>Number of applications pending the end of quarter</th> </tr> </thead> <tbody> <tr> <td>348003</td> <td>177960</td> <td>177222</td> <td>348741</td> </tr> </tbody> </table> <p>States of Release of New Connection for the quarter ending on 30th September-2023</p> <table border="1"> <thead> <tr> <th>Number of applications pending at the beginning of the quarter</th> <th>Number of applications received during the quarter</th> <th>Number of connections released during the quarter</th> <th>Number of applications pending the end of quarter</th> </tr> </thead> <tbody> <tr> <td>348741</td> <td>175186</td> <td>125132</td> <td>398795</td> </tr> </tbody> </table>	Number of applications pending at the beginning of the quarter	Number of applications received during the quarter	Number of connections released during the quarter	Number of applications pending the end of quarter	348003	177960	177222	348741	Number of applications pending at the beginning of the quarter	Number of applications received during the quarter	Number of connections released during the quarter	Number of applications pending the end of quarter	348741	175186	125132	398795
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12	<p>Power Procurement</p>																
	<p>The Discoms are directed to submit the following details of power purchase from each source month-wise in the quarterly report.</p> <ol style="list-style-type: none"> 1) Source of purchase 2) Available Capacity (MW) 3) Energy Purchased (MU) 4) Fixed Charges Paid (Rs. Crore) 5) Energy Rate (Rs/kWh) 6) Energy Charges Paid (Rs. Crore) 7) Any other Charges Paid (Rs. Crore) <ul style="list-style-type: none"> (i) Open Access Charges (ii) Any Other Charges 8) Total Cost Paid (Rs. Crore) 																
	<p>Response of DISCOM:</p>																
	<p>The Petitioner hereby submits the component wise details of Power Procurement as Annexure-1.</p>																
13	<p>Prior Approval of Capex</p>																
	<p>The Commission had directed the Discoms to formulate plans of capex and capitalization such that the Consumer is not subjected to any excess burden owing to cost and time over run of capital project undertaken by the Discom. Further, the Discoms were directed to strictly adhere to Regulation 6.6 of the BERC (procedure for filing Capital investment and capitalization plan), 2018 and obtain approval for capital investment. The Commission also directs Discoms to get post facto approval from the Commission under Regulation 6.6 of BERC (procedure for filing Capital investment and capitalization plan), 2018 for the capital investment undertaken without Commission's approval during previous years.</p>																
	<p>Response of DISCOM:</p>																
	<p>The petitioner hereby submits that process for prior approval from the Commission has been started since FY 2022-23.</p>																
14	<p>Refund of Security Deposit to Smart Pre-paid Metered Consumers</p>																
	<p>The Commission has noted that the Discoms have not yet refunded the security deposit with interest to those consumers who have opted for installation of smart prepaid meters. The Commission directs the Discoms to expedite refund of security deposit with interest to the pre-paid meter consumer and submit compliance in the quarterly report.</p>																
	<p>Response of DISCOM:</p>																

Sr. No	Directives	
	With regard to credit/adjustment of Security deposit of Consumers having Smart Prepaid meters, it has been decided to adjust Security deposit of Consumers having Smart Prepaid meters in their electricity account as credit in the form of recharge or adjust against their dues (if any), instead of refunding security deposit. Amount of Security deposited by consumer with interest thereon is being refunded to Smart Meter consumer in RAPDRP Area. Aforesaid software is also developed for Smart Prepaid Meter consumer in Non-RAPDRP area, this will be implemented from Dec-23. Necessary IT arrangements are being made in order facilitate refund of security deposit.	
15	Category wise Tariff Subsidy Provided	
	<i>The Commission directs the Discoms to submit details of category-wise tariff subsidy claimed and provided by Govt. of Bihar, month-wise on quarterly basis in desired format.</i>	
	Response of DISCOM:	
	<i>The Petitioner hereby submits the component wise details of category-wise tariff subsidy claimed and provided by the Government of Bihar</i>	
	Summary of subsidy claimed and received for the quarter ending on 30th June-2023	
	Consumer categories	Details of category-wise tariff subsidy claimed (Rs Cr)
Domestic	951.56	1139.69
Commercial (NDS)	121.24	136.29
Irrigation & Allied Services	281.19	118.02
Street Light Services	0.00	0.00
Public Service Connections	70.90	56.51
LT Industrial services	16.36	31.18
LT EV Charging Station	0.52	0.00
HT General	26.76	43.56
HT Industrial Services	0.00	0.00
Railway Traction Services	0.00	0.00
HT EV Charging Station	0.00	0.02
Total	1468.53	1525.26
	Summary of subsidy claimed and received for the quarter ending on 30th September-2023	
	Consumer categories	Details of category-wise tariff subsidy provided by the Govt (Rs)
Domestic	1299.78	1139.69
Commercial (NDS)	167.25	136.29
Irrigation & Allied Services	453.74	118.02
Street Light Services	0.00	0.00
Public Service Connections	92.92	56.51
LT Industrial services	18.96	31.18
LT EV Charging Station	0.18	0.00
HT General	40.20	42.48
HT Industrial Services	1.43	1.08
Railway Traction Services	0.00	0.00
HT EV Charging Station	0.00	0.02

Sr. No	Directives		
	Total	2074.47	1525.26
16	State Transmission Loss		
	<p>BSPTCL and Discoms are providing different figures of energy sent into Distribution System from State Transmission System as a result the State Transmission losses computed by BSPTCL and DISCOMs are in variance. Therefore, the DISCOMs are directed to record the meter readings in accordance with CEA (Installation and Operation of Meters) Regulations 2006 and its subsequent amendments jointly with BSPTCL officials at all interface points from where power is sent into Distribution system, so that at the end of every month the number of units sent out by BSPTCL to Discoms furnished by BSPTCL and DISCOMs are one and same. The DISCOMs are also directed that the metering arrangement at the interface points of BSPTCL and DISCOMs shall be made as per the CEA installation and operation of meters regulations 2006 and its amendments thereof.</p>		
	Response of DISCOM:		
	The Petitioner hereby submits the details as Annexure-4 .		
17	Surplus Power		
	<p>The Commission has observed that the Discoms have tied-up huge quantum of PPAs as per the demand projection under power for all schemes. It is reported that Bihar has an allocation of around 11930 MW of Power during FY 2023-24 from Central Generating Station, Independent Power Producers and Renewable Energy Power Stations from Intra / Inter-state generating stations. However, the demand has not increased as per the estimated projections as well as due to the movement of consumers to Open Access. As a result, the Discoms are currently in power surplus situation. Discoms are directed to submit the following month-wise particulars along with their respective costs:</p> <ul style="list-style-type: none"> ➤ Contracted capacity of Discom (MW & MU) ➤ Available capacity during the month (MW & MU) ➤ Scheduled capacity during the month (MW & MU) ➤ Open Access allowed during the month (MW & MU) ➤ Capacity stranded during the month (MW & MU) <p>The Commission directs the Discoms to take urgent action to review the power purchase allocation / arrangement from various sources and reduce allocation to of costly power wherever possible at the earliest.</p>		
	Response of DISCOM:		
	The Petitioner hereby submits the details as Annexure-2 .		
18	Sale of Surplus Power		
	<p>The Commission has noted that the sale of surplus power per unit is lesser than the average rate at which the power is being procured. The Commission directs the Discoms to explore opportunity of bidding / trading of the surplus power in consonance with the parent company BSP(H)CL such that the revenue accrued from sale of surplus power are optimized and in line with Commission's previous directives.</p>		
	Response of DISCOM:		
	<p>Based on the continuous monitoring of the power portfolio (viz power available viz-a-viz power demand) of the Discom's on the RTC basis, the surplus power wherever is available managed judiciously on best effort basis through power surrender (As per the IEGC grid code) and/or Sale of power mainly in spot market. The surplus power whenever available is managed with an overall objective of optimizing the power purchase cost of Discom's as envisaged in BERC Power Purchase and Procurement Process of Licensee Regulation without adversely affecting the power supply position to the consumers. It may please be noted that the proceeds of the power surplus so sold would have effect of reducing the power purchase cost thus help in optimizing the overall power purchase cost.</p>		
19	ToD Tariff for LT Industries		
	<p>At present ToD tariff is optional for LT Industries and Public Water Works. Discoms have reported that the existing meters for LTIS-II category of consumers are ToD compatible. The Commission directs the Discoms to provide ToD compatible meters to all LT Industrial consumers on or before 31.03.2024, so that ToD tariff can be made mandatory to all LT industries with effect from 01.04.2024 to control the peak hours demand.</p>		
	Response of DISCOM:		
	<p>The existing meters for LTIS-II category of consumers are TOD compatible for the existing TOD as approved by the Commission. DISCOM is working to ensure all meters of LT Industrial consumers is ToD compatible.</p>		

12Annexures

Annexure 1: CTL STL Losses FY 21-22

Annexure 2: Ministry of Power Letter for adoption of AT&C loss

Annexure 3: Additional Surcharge Calculation for FY 24-25

Annexure 4: Response to Directive No.12

Annexure 5: Meter reading for calculation of State Transmission Losses

Annexure 6: Response to Directive No.17

The said data is voluminous & exhaustive in nature and has been provided in soft copy submitted along with the Petition.