

objections on the Tariff Petitions. Accordingly, the Commission directed the two Discoms (NBPDCCL & SBPDCL) to publish Public notices showing the contents of the ARR and Tariff Petitions in an abridged form in the leading newspapers having wide circulations in the State of Bihar and invite comments, suggestions and objections thereon. Accordingly, the two respective Discoms (NBPDCCL and SBPDCL) Discoms issued their respective Public notices of their Tariff Petitions in abridged versions in the various newspapers and the same were also uploaded on the websites of the Commission and the respective Discoms. The last date of submission of comments, suggestions and objections was fixed as 22 February, 2021.

The Commission, in order to ensure transparency in the Tariff determination process and for providing convenient opportunity to wide section of stakeholders and general Public for offering their comments, suggestions and objections on the Tariff Petitions conducted Public hearings at Gaya on 26 February, 2021, Muzaffarpur on 2 March, 2021 and in Commission's office at Patna on 4 March, 2021.

The proposals of the Discoms were also placed before the State Advisory Committee (SAC) in its meeting held on 24 February, 2021 wherein various aspects of the Petitions were discussed by the Committee. The Commission took the views, comments and suggestions of the SAC on the Tariff Petitions of the Discoms in the meeting of the Committee.

The Commission, after taking into consideration the facts presented by the Discoms in their Petitions and various subsequent filings, the comments, suggestions and objections received from across all section of stakeholders, consumer organizations, general Public, SAC and response of the Discoms to those comments, suggestions and objections, has Trued up the ARRs for FY 2019-20, reviewed the APRs for FY 2020-21, approved ARRs for FY 2021-22 and has also determined the common Tariff for retail sale of electricity for FY 2021-22 for the Discoms in their respective jurisdictions.

6. True up for FY 2019-20

The ARRs for FY 2019-20 as claimed by the two Discoms on the basis of the Audited Annual Accounts vide their Tariff Petitions and approved by the Commission in True up after careful examination of the claims in the light of laid down norms and exercising prudence check are as under:

Table 1: True-up for FY 2019-20, as approved by the Commission (Rs Crore)

Name of Discom	Claimed by the Discoms in True-up for FY 2019-20				Net ARR approved	Approved by the Commission in True-up for FY 2019-20		
	Net ARR	Past period trued up Gap with carrying cost	Revenue from sale of power	Net Gap claimed		Past period trued up Gap with carrying cost	Revenue from sale of power	Net Gap/ (Surplus) approved
1	2	3	4	5=(2+3-4)	6	7	8	9=(6+7-8)

Name of Discom	Claimed by the Discoms in True-up for FY 2019-20				Approved by the Commission in True-up for FY 2019-20			
	Net ARR	Past period trued up Gap with carrying cost	Revenue from sale of power	Net Gap claimed	Net ARR approved	Past period trued up Gap with carrying cost	Revenue from sale of power	Net Gap/ (Surplus) approved
NBPDC	7,567.68	-	7,237.48	330.20	7,226.15	(1,199.76)	7237.49	(1,211.09)
SBPDCL	8,985.38	-	8,208.94	776.44	8,681.98	1,137.82	8208.96	1,610.84
Total	16,553.07		15,446.42	1,106.65	15,908.14	(61.94)	15,446.45	399.75

The Commission after True up exercise of the ARR of FY 2019-20 of both Discoms has approved combined ARR of Rs. 15,908.14 Crore and gap of Rs. 399.75 Crore as against the claim of combined ARR of Rs. 16,553.07 Crore and combined revenue gap of Rs. 1,106.65 Crore. The revenue gap of FY 2019-20 along with carrying cost shall be carried forward to the ARR of FY 2021-22 as per the regulatory provisions.

7. Annual Performance Review (APR) for FY 2020-21

The two Discoms have projected a revised combined net ARR of Rs. 16480.96 crore with a revenue surplus of Rs 19.88 crore for FY 2020-21, whereas the Commission after examination and prudence check has revised the combined ARR of Rs 16,458.41 crore with total revenue surplus of Rs 167.22 crore after considering the revenue from sale of power of FY 2020-21 and past period trued up gap of FY 2018-19 as under:

Table 2: APR for FY 2020-21, as approved by the Commission (Rs Crore)

Name of Discom	Claimed by the Discoms in APR of FY 2020-21				Approved by the Commission in APR of FY 2020-21			
	Net ARR	Past period trued up Gap with carrying cost	Revenue from sale of power	Net Gap claimed	Net ARR approved	Past period trued up Gap with carrying cost	Revenue from sale of power	Net Gap/ (Surplus) approved
1	2	3	4	5=(2+3-4)	6	7	8	9=(6+7-8)
NBPDC	7,790.77	-	7,470.58	320.19	7755.04	30.95	7569.20	216.79
SBPDCL	8,690.19	-	9,030.26	(340.07)	8,703.37	112.49	9199.87	(384.01)
Total	16480.96	-	16,500.84	(19.88)	16,458.41	143.44	16,769.07	(167.22)

However, the Commission in accordance with the Regulation 14.1 (f) of BERC (Multi Year Distribution Tariff) Regulations 2018, has considered it appropriate not to carry forward this revenue surplus of Rs. 167.22 crore of FY 2020-21 in the proposed ARR of FY 2021-22 as the surplus arrived in review for FY 2020-21 is based on estimates submitted by the Petitioners and may vary with reference to audited accounts for FY 2020-21 while Truing up.

8. ARR for FY 2021-22

The Commission, taking into consideration the comments, objections and suggestions of the stakeholders, general Public as well as State Advisory Committee and after strict scrutiny and prudence check of the proposed revenue & expenses and other submissions of the Petitioners (Discoms), determined the net revenue requirements of the Petitioners (Discoms) NBPDCCL and SBPDCL as under:

Table 3: ARR for FY 2021-22, as approved by the Commission (Rs Crore)

Name of Discom	Claimed by the Discoms in ARR for FY 2021-22			Approved by the Commission in ARR for FY 2021-22			
	Net ARR	Trued up Gap of FY 2019-20 with carrying cost	Revenue from sale of power	Net ARR approved	Trued up Gap of FY 2019-20 with carrying cost	Revenue from sale of power	Net Gap/ (Surplus) approved
1	2	3	4	5	6	7	8=(5+6-7)
NBPDCCL	8,689.86	837.45	8,239.33	8399.58	(1,424.61)	8270.57	(1,295.60)
SBPDCL	9,863.09	777.96	9,994.93	9,562.85	1,894.83	10,046.73	1410.96
Total	18,552.95	1615.41	18,234.26	17,962.43	470.22	18,317.30	115.36

The NBPDCCL and SBPDCL had proposed net ARR of Rs. 8,689.86 crore and Rs 9,863.09 crore respectively for FY 2021-22 with a revenue gap of Rs 386.90 crore (including revenue gap with carrying cost of 2019-20) for the NBPDCCL and Rs. 777.96 crore for the SBPDCL. Thus they had proposed total net ARR of Rs 18,552.95 crore and total revenue gap of Rs 1615.41 crore for FY 2021-22. They had also proposed recovery of Revenue gap by increasing tariff in FY 2021-22.

The Commission, after thorough examination of their proposals and prudence check has approved the net ARR of 8399.58 Crore with revenue Surplus of Rs 1,295.60 Crore for NBPDCCL and net ARR of Rs 9562.85 Crore with Revenue gap of Rs 1410.96 crore for SBPDCL after considering the revenue from sale of power of 2021-22 and Trued up gap of FY 2019-20 including carrying cost. Thus the combined net ARR approved by the BEREC for both Discoms for FY 2021-22 is Rs 17,962.43 Crores and combined Gap is Rs 115.36 Crore.

9. Approved Retail Tariff for FY 2021-22

The Discoms on the basis of their projected revenue gap have proposed increase in the overall increase of 9.22% in the total tariff for FY 2021-22.

The Commission, based on the approved revenue surplus in Discoms and after taking all facts, views and circumstances into account, has decided to have an increased in total tariff by 0.63%.

The Commission has also taken the following decisions after due deliberations along with consultations during State Advisory Committee (SAC) meeting:-

1. The Commission the Commission accepts the proposal of merger of these slabs of DSI & DSII consumer category.

2. The Commission has approved the ToD slots as proposed by the Discoms

3. The Commission has approved a rebate of 2% on every amount recharged by the consumer opting for pre-paid smart meter. Further, the rebate for online payment of 1% would be applicable to these consumers over and above the rebate on prepayment..

10. Open access charges

The Commission has determined the wheeling charges for FY 2021-22 as given below:

1. Wheeling charges at 33 kV voltage level: 45 paisa/kWh

2. Wheeling charges at 11 kV voltage level: 49 paisa/kWh

To encourage the consumers to avail power under open access from other sources, the Commission in terms of the revised Tariff Policy 2016, has reduced the cross subsidy surcharge to 20% of average billing rate of the relevant HT category for FY 2021-22 as given below:

Sl no	HT Category	Rs/kWh
1	For 132 kV consumers	2.05
2	For 33 kV consumers (other than HTSS)	1.93
3	For 11 kV consumers (other than HTSS)	1.90
4	For HTSS consumers (33 kV & 11 kV)	0.52

11. Miscellaneous Charges

The Discoms have proposed changes under the head Miscellaneous and General charges on monthly meter rent for Kutir Jyoti, 11kV consumers, Smart/Prepaid programmable single phase and three phase meters. However, as stated earlier since the cost of meter rent is being recovered by Discoms through Capex, the Commission has not considered the proposal of Petitioner and abolished the meter rent altogether.

12. Power Purchase Cost and Average Cost of Supply

The Average Power Purchase cost for both Discoms for FY 2021-22 is arrived at Rs.4.42 /kWh while the Average Cost of Supply (ACoS) for both Discoms for FY 2021-22 is arrived at Rs.7.44/kWh for FY 2021-22.

13. Compliance of Directives

The Commission has reviewed the directives issued in its earlier Tariff Orders and noted that some of these directives have been complied and some are partially attended. Accordingly, the Commission has decided to issue directives that are fully or substantially complied with and has further directed the Discoms to comply the pending directives along with new ones added in the present Order. The Commission will monitor the compliance of the directives quarterly.

14. General

The Commission has been determining the Retail Tariff without considering the Government subsidy from FY 2017-18 onwards. Accordingly the Commission has approved the retail tariff for FY 2020-21 also without considering Government subsidy.

The Government of Bihar has been announcing direct subsidy to consumers. If the State Government announces any direct subsidy to any category of consumers after the pronouncement of retail tariff for FY 2020-21 by the Commission, the DISCOMs shall immediately bring the same to the notice of the Commission intimating the tariff rates at which the DISCOMs proposes to bill the energy charges for such category of consumers and also ensure adequate publicity of the same. Further, the details such as the energy charges as per the tariff rates, reduction of energy charges due to government subsidy and net energy charges to be paid by the consumers shall be clearly exhibited in the electricity bill to be served to the consumers.

The Discoms shall ensure implementation of the order from the effective date after issuance of a Public Notice, within a week in at least two daily newspapers having wide circulation in the various parts of State in such a font which is clearly visible and compliance of the same shall be submitted to the Commission by the Discoms.

This Order shall be effective from 1 April 2021 and shall remain in force till 31 March 2022 or till the next Tariff Order of the Commission.

This order will be placed on the website of the Commission and copies will be sent to BGCL, BSPHCL, BSPTCL, NBPDCCL, SBPDCL, Department of Energy of Government of Bihar, Central Electricity Regulatory Commission and Central Electricity Authority.

Pronounced in the open Court on the day of 26 March 2021.

**Sd/-
(Shri S.C. Chaurasia)
Member**

**Sd/-
(R.K. Choudhary)
Member**

**Sd/-
(Shishir Sinha)
Chairman**

1. Introduction

1.1. Bihar Electricity Regulatory Commission (BERC)

- 1.1.1. The Bihar Electricity Regulatory Commission (hereinafter referred to as “Commission” or “BERC”) was constituted by the Government of Bihar under Section 17 of the Electricity Regulatory Commission Act, 1998 vide Government of Bihar notification No.1284 dated 15th April 2002.
- 1.1.2. The Electricity Regulatory Commission Act, 1998 along with Indian Electricity Act, 1910 and Electricity (Supply) Act, 1948 was repealed by Section 185 (1) of the Electricity Act, 2003 (hereinafter referred to as the “Act”). The first proviso of Section 82(1) has ensured continuity of the Bihar Electricity Regulatory Commission by laying down that the State Electricity Regulatory Commission established by the State Government under Section 17 of Electricity Regulatory Commission Act, 1998 and functioning as such, immediately before the appointed date, shall be the State Electricity Regulatory Commission for the purpose of the Act.

Function of BERC:

- 1.1.3. As per Section 86 of the Electricity Act 2003, the State Commission shall discharge the following functions, namely:
- (i) Determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State. Provided that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;
 - (ii) Regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;
 - (iii) Facilitate intra-state transmission and wheeling of electricity;
 - (iv) Issue licenses to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;
 - (v) Promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;
 - (vi) Adjudicate upon the disputes between the licensees, and generating companies and

to refer any dispute for arbitration;

- (vii) Levy fee for the purposes of this Act;
- (viii) Specify State Grid Code consistent with the Indian Electricity Grid Code specified with regard to grid standards;
- (ix) Specify or enforce standards with respect to quality, continuity and reliability of service by licensees;
- (x) Fix the trading margin in the intra-state trading of electricity, if considered, necessary; and
- (xi) Discharge such other functions as may be assigned to it under this Act.

1.2. Brief history and Profile of DISCOMs

- 1.2.1. 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.
- 1.2.2. Under the new 'Bihar State Electricity Reforms Transfer Scheme 2012', the BSEB has been unbundled, with effect from 1 November, 2012. The Generation, Transmission and Distribution businesses of the Bihar State Electricity Board were transferred to five successor companies. The five successor companies are listed below:
 - (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 (NBPDC)The South Bihar Power Distribution Company Limited and North Bihar Power Distribution Company Limited (SBPDCL and NBPDC) are companies registered under the provision of Companies Act 1956 and are subsidiary companies of Bihar State Power Holding Company Limited (BSPHCL).
- 1.2.3. The Discoms/South Bihar Power Distribution Company Limited and North Bihar Power Distribution Company Limited (SBPDCL and NBPDC) are companies registered under the provision of Companies Act 1956 and are subsidiary companies of Bihar State Power Holding Company Limited (BSPHCL)
- 1.2.4. Discoms have the universal obligation to supply electricity to all the consumers of the State. The table below presents status of key data relating to power supply by the Discoms in Bihar as on 31 March, 2019.

Table 4: Existing distribution infrastructure as on 31.03.2020

Sl.no	Particulars	Unit	SBPDCL	NBPDCCL
1	No of electrified villages	No	18521	20552
2	No of Consumers	No	58 Lakhs	100.9 lakh
3	No. of capacity of 33/11 kV Substations	No/MVA	533/8769.30	573/8193
4	No. of capacity of 11/0.4 kV 3 phase Transformers	No/MVA	8822.195	154409/10272
5	Length of 33 kV line	CKM	7101.79	8794.4
6	Length of 11 kV line	CKM	52742.10	83955.3
7	Length of LT line	CKM	128808.725	190244.6

1.3. Admission of Current Petition and Public Hearing Process

- 1.3.1. The Discoms have filed the current petitions on XX December, 2020 for Truing-up for FY 2019-20, Annual Performance Review for FY 2020-21 and Annual Revenue Requirement (ARR) and determination of Tariff for Retail sale of Electricity for FY 2021-22 under Section 62 of Electricity Act 2003 read with Bihar Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2018. The Commission is issuing the combined order for ARR and Tariff (Case No. 33 of 2019 (NBPDCCL) and 34 of 2019 (SBPDCL)) for the FY 2021-22.
- 1.3.2. The Commission admitted the aforesaid Petitions filed by Discoms on 25 January, 2021. In accordance with Section 64 of EA 2003 and Regulation 11(10) of Bihar Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2018, the Commission directed the Discoms to publish the Tariff Petition in an abridged form in at least two daily newspapers, one in English and the other in Hindi, having wide circulation in the State of Bihar inviting objections and suggestions from the stakeholders on Tariff Petition. Discoms were also directed to publish the schedule for Public Hearing along with the Public notice inviting comments/suggestions/objections. The Public notice was issued in the following newspapers as given below:

Table 5: Details of publication of Public Notice

Sr no	Name of Utility	Name of newspaper	Language	Date of Publication
1	NBPDCCL	Dainik Jagran	Hindi	28 January 2021
2		Hindustan	Hind	2 February 2021
3		Times of India	English	28 January 2021 & 2 February 2021
1	SBPDCL	Prabhat Khabar	Hindi	28 January 2021
2		Times of India	English	01 February 2021

- 1.3.3. The Tariff Petitions were also placed on the website of the Discoms (SBPDCL and NBPDCCL) for inviting objections and suggestions on the petitions and copies of the

Petitions along with annexures were also made available for sale in the Office of the Chief Engineer (Commercial), SBPDCL, 2nd Floor, Vidyut Bhawan-I, Bailey Road, Patna and Chief Engineer (Commercial), NBPDC, 3rd Floor, Vidyut Bhawan-I, Bailey Road, Patna. The interested stakeholders were asked to file their comments/objections/suggestions on the Petition on or before 18 February, 2021.

- 1.3.4. On preliminary verification of the admitted Petition, the Commission The Commission vide Letter No. BERC-Case No.33\2020\70 dated 28 January, 2020 (NBPDC) and Letter BERC-Case No.34\2020\80 dated 29 January, 2021 (SBPDCL) directed the Petitioner to submit the additional information/clarification data on the Tariff Petition filed by them. NBPDC and SBPDCL submitted the replies vide Letter No. NB/COM/BERC/TP-22/2020/50 dated 5 February, 2021 and Letter No. SB/COM/BERC/TP-202022//34 dated 5 February, 2021 respectively.
- 1.3.5. The Commission, based on the information sought further clarification and also conducted Technical validation session with the representative of Discoms on 18 February, 2021 and 19 February, 2021. The Commission, issued the following letters to the Discoms subsequent to the first letter as mentioned in para above seeking additional information and clarifications:

NBPDC

- 1) Lr No BERC-Case No.33\2020\103 dated 4 February, 2021

SBPDCL

- 1) Lr No BERC-Case No.34\2020\102 dated 4 February, 2021

- 1.3.6. The Discoms were also directed to provide elaborate replies to the additional information sought by the Commission vide letters mentioned above. The Discoms submitted their replies vide letters as mentioned below:

NBPDC

- 1) Lr No. NB/COM/BERC/TP-22/2020/62 dated 12 February, 2021
2) Lr No. NB/COM/BERC/TP-22/2020/111 dated 4 March, 2021

SBPDCL

- 1) Lr no SB/COM/BERC/TP-202022//44 dated 12 February, 2021
2) Lr No. SB/COM/BERC/TP-202022//70 dated 4 March, 2021

- 1.3.7. Additionally, the Commission also received all together several written objections/suggestions from consumers and other stakeholders. The Commission directed the Discoms to submit the replies/responses to these suggestions/objections of the stakeholders with a copy to the Commission. The Discoms have submitted the replies/responses to the Commission as per the details mentioned below:

Table 6: Reply to Stakeholder's Comments/Suggestions/Objections

Name of Utility	BERC Letter No.	Letter No. and Date of submission of reply by Discoms
NBPDC	BERC-Case No.33\2020\2020\181 dated 23 February, 2021	NB/COM/BERC/TP-22/2020/111 dated 4 March, 2021
	BERC-Case No.33\2020\191 dated 25 February, 2021	NB/COM/BERC/TP-22/2020/123 dated 8 March, 2021
	BERC-Case No.33\2020\186 dated 25 February, 2021	NB/COM/BERC/TP-22/2020/125 dated 8 March, 2021
	BERC-Case No.33\2020\186 dated 5 March, 2021	NB/COM/BERC/TP-22/2020/135 dated 8 March, 2021
SBPDCL	BERC-Case No.34\2020\186 dated 24 February, 2021	SB/COM/BERC/TP-22/2020/78 dated 8 March, 2021
	BERC-Case No.34\2020\191 dated 25 March, 2021	SB/COM/BERC/TP-22/2020/78 dated 8 March, 2021
	BERC-Case No.34\2020\204 dated 1 March, 2021	SB/COM/BERC/TP-22/2020/78 dated 8 March, 2021
	BERC-Case No.34\2020\235 dated 5 March, 2021	SB/COM/BERC/TP-22/2020/81 dated 12 March, 2021

1.3.8. The proposal of Discoms was also placed before the State Advisory Committee Discoms (SAC) in its meeting held on 24 February, 2021 and various aspects of the petitions were discussed in the meeting. The Commission solicited the advice/comments/ suggestions of the State Advisory Committee on the petitions. The minutes of the meeting are given in **Annexure-I**.

1.3.9. As per notification given in the Public notice, the Commission conducted public hearing as scheduled in several locations across the State of Bihar as given in Table below:

Table 7: Public hearing details

Name of Utility	Place of Public hearing	Date of Public Hearing
SBPDCL	Gaya	26 February 2021
	Patna	4 March 2021
NBPDC	Muzaffarpur	2 March 2021
	Patna	4 March 2021

- 1.3.10. Based on the Petitions filed by Discoms, many participants of the Public hearing orally submitted their opinion, suggestions and objections to the proposal contained in the Tariff Petitions which were duly noted by Discoms and response on many of the issues especially consumer grievances aspect were given by the Discoms during the course of hearing itself.
- 1.3.11. The main issues raised by the stakeholders in written submissions and also during the Public hearing with respect to the Petitions, along with the response of the Discoms and the Commission's view on the response is detailed in Chapter-3 of this Order.

1.4. Approach of this Order

- 1.4.1. The Commission has examined the Petition and observed that certain additional data/information and clarifications are required for taking up detailed analysis of the Petition. The Commission directed the discoms to submit the additional data/information and clarifications vide its following letters.

NBDCL:

BERC-Case No.34\2020\70 dated 28 January, 2021

BERC-Case No.33\2020\103 dated 4 February, 2021

SBPDCL:

Letter BERC-Case No.34\2020\80 dated 29 January, 2021

Lr No BERC-Case No.34\2020\102 dated 4 February, 2021

- 1.4.2. The DISCOMS submitted additional information/data/clarifications vide its following letters:

NBDCL:

1) Lr No.NB/COM/BERC/TP-22/2020/50 dated 5 February, 2021

2) Lr No. NB/COM/BERC/TP-22/2020/62 dated 12 February, 2021

3) Lr No. NB/COM/BERC/TP-22/2020/111 dated 4 March, 2021

SBPDCL:

1) Lr no SB/COM/BERC/TP-202022/34 dated 5 February, 2021

2)Lr no SB/COM/BERC/TP-202022/44 dated 12 February, 2021

3) Lr No. SB/COM/BERC/TP-202022/70 dated 4 March, 2021

- 1.4.3. The Commission has provided an opportunity to the Discoms vide letter no. BERC-Case No. BERC-Case No.33& 34\2020\181 dated 24 February, 2021 for validation of

information and data. Accordingly, validation session was held on 18.02.2021 & 19.02.2021 with the representatives of the Discoms and the office of the Commission and compared the data and wherever necessary corrections were carried out.

- 1.4.4. The Petitioners' were directed to submit some data/ clarification on the comments, objections and suggestions vide following correspondences from the Commission as given below:

Table 8: Details of additional information sought by the Commission

Name of Utility	Letter No
NBPDC	BERC-Case No.33\2020\2020\181 dated 23 February, 2021
	BERC-Case No.33\2020\191 dated 25 February, 2021
	BERC-Case No.33\2020\186 dated 25 February, 2021
	BERC-Case No.33\2020\186 dated 5 March, 2021
SBPDCL	BERC-Case No.34\2020\186 dated 24 February, 2021
	BERC-Case No.34\2020\191 dated 25 March, 2021
	BERC-Case No.34\2020\204 dated 1 March, 2021
	BERC-Case No.34\2020\235 dated 5 March, 2021

- 1.4.5. In compliance of the above direction of the Commission, NBPDC and SBPDCL submitted their additional information vide letter numbers as given below:

Table 9: Details of replies by Discoms to the additional information sought by the Commission

Name of Utility	Letter No
NBPDC	NB/COM/BERC/TP-22/2020/111 dated 4 March, 2021
	NB/COM/BERC/TP-22/2020/123 dated 8 March, 2021
	NB/COM/BERC/TP-22/2020/125 dated 8 March, 2021
	NB/COM/BERC/TP-22/2020/135 dated 8 March, 2021
SBPDCL	SB/COM/BERC/TP-22/2020/78 dated 8 March, 2021
	SB/COM/BERC/TP-22/2020/78 dated 8 March, 2021
	SB/COM/BERC/TP-22/2020/78 dated 8 March, 2021
	SB/COM/BERC/TP-22/2020/81 dated 12 March, 2021

- 1.4.6. The Commission has undertaken Truing-up for FY 2019-20, Annual Performance Review (APR) for FY 2020-21, Annual Revenue Requirement (ARR) and determination of Tariff for Retail Sale of electricity for FY 2021-22 in accordance to the BERC (Multi Year Distribution Tariff) Regulations, 2018 based on the Tariff Petitions and additional information submitted by the Discoms.

1.5. Organisation of Order

1.5.1. The order is divided into Ten (10) chapters as detailed below:

- (i) The **First Chapter** provides introduction of Discoms.
- (ii) The **Second Chapter** contains a summary of Tariff Petition.
- (iii) The **Third Chapter** provides a brief account of the Public hearing process, objections raised by stakeholders, Petitioner's response and Commission's views on the same.
- (iv) The **Fourth Chapter** deals with the Truing-up for FY 2019-20.
- (v) The **Fifth Chapter** deals with the Annual Performance Review for FY 2020-21.
- (vi) The **Sixth Chapter** deals with the Annual Revenue Requirement for FY 2021-22.
- (vii) The **Seventh Chapter** deals with the Voltage wise cost of supply.
- (viii) The **Eighth Chapter** deals with the Transmission and Wheeling charges for Open Access customers.
- (ix) The **Ninth Chapter** deals with the Tariff Principles, Design and Tariff Schedule for FY 2021-22.
- (x) The **Tenth Chapter** deals with the Directives.

2. Summary of Petition filed for Truing up for FY 2019-20, APR for FY 2020-21 and ARR for FY 2021-22

2.1. Petitions filed by DISCOMs

2.1.1. The summary of Petitions filed by DISCOMs for truing up for FY 2019-20, Annual Performance Review for FY 2020-21 and Aggregate Revenue Requirement (ARR) for FY 2021-21 and Revenue Gap projected for FY 2021-22 are as given in Tables below:

Table 10: Summary of Tariff Petition filed by NBPDCCL (Rs. Crore)

Sl No	Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
		Approved in T. O dated 25.02. 2019	Now claimed in True up for FY 2019-20	Approved in Tariff Order dated 20.03. 2020	Revised Estimates for APR for FY 2020-21	Approved in MYT Order dated 25.02. 2019	Revised Projections for ARR for FY 2021-22
1	No. of consumers	10587861	10087527	10599500	10608069	12302861	11145211
2	Connected Load (KW)	14199603	8802013	8772998	9303074	12997174	10169887
3	Sales (MU)	13045	10636	12686.39	10589.92	16171	11544.57
4	Intra-state Transmission Loss (%)	3.92%	3.66%	3.00%	3.00%	3.92%	3.00%
5	Distribution loss (%)	15%	21.62%	15.00%	21.00%	15.00%	20.00%
6	Energy required at state Trans. periphery (MU)	15697.68	13845.04	15140.23	13777.99	19496.17	14,837.95
7	Capital Expenditure	2676.59	2994.19	970.50	1832.49	313.78	697.03
8	Capitalisation	3453.82	3889.53	1451.61	581.13	1199.16	1532.54
9	Power Purchase Cost	6012.76	6020.79	6448.61	5632.81	7846.04	6088.69
10	Inter-State and Intra-State transmission charges including POSOCO and SLDC charges	979.57	1057.3	1151.57	1108.12	1669.75	1408.99
11	REC Purchase	59.05	61.65	19.49	-	65.70	-
12	O&M expenses						

Sl No	Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
		Approved in T. O dated 25.02. 2019	Now claimed in True up for FY 2019-20	Approved in Tariff Order dated 20.03. 2020	Revised Estimates for APR for FY 2020-21	Approved in MYT Order dated 25.02. 2019	Revised Projections for ARR for FY 2021-22
i)	Employee Cost	327.10	414.08	366.71	455.16	500.52	503.80
ii)	R&M Expenses	202.85	145.82	195.40	210.13	296.84	219.09
iii)	A&G Expenses	133.57	184.82	151.06	196.54	165.20	208.96
13	Share of holding company expenses	11.29	21.62	18.66	23.78	11.36	26.16
14	Depreciation	185.06	225.01	180.77	234.76	322.61	261.24
15	Interest on loan & other finance charges	364.86	286.66	355.02	355.15	604.22	382.83
16	Interest on working capital	33.42	23.16	29.69	31.00	55.78	33.86
17	Return on Equity	332.37	203.55	221.90	261.47	571.26	293.61
18	Interest on security deposit	24.01	7.95	23.40	17.93	29.10	19.70
19	Contingency Reserve (if any)	65.55				98.62	
20	Provisioning of Bad Debts		126				
21	Total Revenue Requirement	8731.47	8778.42	9162.27	8,526.85	12237.01	9,446.93
22	Less: Non-tariff income	323.88	498.54	366.98	284.30	362.29	334.44
23	Aggregate Revenue Requirement	8407.59	8279.88	8795.29	8,242.55	11874.71	9,112.48
24	Less: Revenue including subsidy	8934.68	7237.48	8886.79	7,470.58		8,239.33
25	Capital Grant/subsidy		350		451.78		422.62
26	Add: Trued up revenue gap of	(1199.76)	0	30.95			

Sl No	Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
		Approved in T. O dated 25.02. 2019	Now claimed in True up for FY 2019-20	Approved in Tariff Order dated 20.03. 2020	Revised Estimates for APR for FY 2020-21	Approved in MYT Order dated 25.02. 2019	Revised Projections for ARR for FY 2021-22
	earlier year including carrying cost						
27	Revenue Gap/(Surplus)	(1726.85)	330.20	(60.55)	320.19		450.54
28	Add: Trued up revenue gap of FY 2019-20						330.2
29	Add: Carrying cost on revenue gap of FY 2018-19						56.7
30	Gap/(Surplus)	(1726.85)	330.20	(60.55)	320.19		837.45

Table 11: Summary of Tariff Petition filed by SBPDCL (Rs Crore)

Sl. No	Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
		Approved in T. O dated 25.02.2019	Now claimed in True up for FY 2019-20	Approved in Tariff Order dated 20.03.2020	Revised Estimates for APR for FY 2020-21	Approved in MYT Order dated 25.02.2019	Revised Projections for ARR for FY 2021-22
1	No. of consumers	6563577	5789783	6,335,454	6,052,472	7803229	6,378,856
2	Connected Load (KW)	11076313	9,372,980	10,115,928	10,038,173	14245926	10842316
3	Sales (MU)	14467	12037.96	13,812.98	12,123.43	18397	13428.07
4	Intra-state Transmission Loss (%)	3.92%	3.66%	3.00%	3.00%	3.92%	3.00%
5	Distribution loss (%)	15.00%	27.89%	15%	24%	15 %	22.00 %
6	Energy required at state Trans. periphery (MU)	17714.93	17267.41	16,753.16	16,445.23	22526.28	17,747.91
7	Capital Expenditure	2967.62	2806.77	178.61	2063.75	277.99	66.5
8	Capitalisation	3794.09	2234.92	1216.61	742.98	559.25	1413.38

Sl. No	Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
		Approved in T. O dated 25.02.2019	Now claimed in True up for FY 2019-20	Approved in Tariff Order dated 20.03.2020	Revised Estimates for APR for FY 2020-21	Approved in MYT Order dated 25.02.2019	Revised Projections for ARR for FY 2021-22
9	Power Purchase Cost	6745.25	7,546.17	7135.6	6,743.59	9054.42	7,316.12
10	Inter-State and Intra-State transmission charges including POSOCO and SLDC charges	1149.94	1325.46	1351.87	1300.83	1960.15	1,654.04
11	REC Purchase	58.26	70.34	24.72	-	71.80	-
12	O&M expenses						
i)	Employee Cost	462.22	542.82	475.25	598.86	603.41	675.24
ii)	R&M Expenses	212.62	148.73	209.16	196.90	301.70	210.83
iii)	A&G Expenses	136.7	136.70	136.71	144.99	160.87	154.69
13	Share of holding company expenses	10.75	22.73	20.16	25.00	10.82	27.50
14	Depreciation	236.05	211.77	204.77	222.75	287.62	238.61
15	Interest on loan & other finance charges	496.21	282.89	331.18	320.20	603.15	344.29
16	Interest on working capital	13.66	11.42	16.23	19.42	26.57	22.35
17	Return on Equity	470.59	220.44	238.25	255.93	597.24	283.24
18	Interest on security deposit	42.58	15.71	35	28.15	54.90	30.85
19	Contingency Reserve (if any)	54.89	0.00	0.00	0.00	81.73	0.00
20	Total Revenue Requirement	10089.72	10,535.18	10178.88	9,856.64	13814.37	10,957.77
21	Less: Non-tariff income	359.7	408.32	446.04	352.23	419.21	379.43
22	Aggregate Revenue	9730.02	10,126.86	9732.84	9,504.41	13395.17	10,578.34

Sl. No	Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
		Approved in T. O dated 25.02.2019	Now claimed in True up for FY 2019-20	Approved in Tariff Order dated 20.03.2020	Revised Estimates for APR for FY 2020-21	Approved in MYT Order dated 25.02.2019	Revised Projections for ARR for FY 2021-22
	Requirement						
23	Less: Revenue including subsidy	10719.13	8,208.94	9891.35	9,030.26		9,994.93
24	Capital Grant/subsidy		510.00		814.22		715.24
25	Add: Trued up revenue gap of earlier year including carrying cost	1137.82	-	112.49			
26	Revenue Gap/(Surplus)	148.71	776.44	(46.02)	(340.07)		(131.83)
27	Add: Trued up revenue gap of FY 2019-20						776.44
28	Add: Carrying cost on revenue gap of FY 19-20						133.36
29	Gap/(Surplus)	148.71	776.44		(340.07)		777.96

2.1.2. The Discoms have proposed the Tariffs for FY 2021-22 as shown in the Table below

Table 12: Tariff Rates Existing and Proposed for Retail Sales of Electricity for FY 2021-22 by NBDCL

Existing Category	BERC Approved Tariff- FY 2020-21				Proposed Tariff- FY 2021-22			
	Fixed charge	Units	Energy Charge	Units	Fixed charge	Units	Energy Charge	Units
Low Tension Supply								
Domestic								
Kutir Jyoti								
Metered 0-50	10	Connection/ Month	6.05	kWh	11	Connection/ Month	6.61	kWh
DS I Rural								
Unmetered (Now Metered)	-	-	-	-	-	-	-	-
Metered (Now Demand Based)								
First 50 Units	20	kW/ Month	6.05	kWh	22	kW/ Month	6.61	KWh
51-100 Units	20	kW/	6.30	kWh	22	kW/	6.88	KWh

Existing Category	BERC Approved Tariff- FY 2020-21				Proposed Tariff- FY 2021-22			
	Fixed charge	Units	Energy Charge	Units	Fixed charge	Units	Energy Charge	Units
		Month				Month		
101-200 Units	20	kW/ Month	6.60	kWh	22	kW/ Month	7.21	kWh
Above 200 Units	20	kW/ Month	6.95	kWh				
DS II Demand Based								
First 100 Units	40	kW/ Month	6.05	kWh	44	kW/ Month	6.61	kWh
101-200 Units	40	kW/ Month	6.85	kWh	44	kW/ Month	7.48	kWh
201-300 Units	40	kW/ Month	7.70	kWh	44	kW/ Month	8.41	kWh
Above 300 Units	40	kW/ Month	8.50	kWh				
DS III	40	kW/ Month	7.40	kWh	44	kW/ Month	8.08	kWh
Non_Domestic Service								
NDS I - Metered Now Demand Based								
First 100 Units	30	kW/ Month	6.30	kWh	33	kW/ Month	6.88	kWh
101-200 Units	30	kW/ Month	6.85	kWh	33	kW/ Month	7.48	kWh
Above 200 Units	30	kW/ Month	7.40	kWh	33	kW/ Month	8.08	kWh
NDS II - Demand Based								
Contract Demand <0.5 kW	100	Connection/ Month	6.30	kWh	109	Connection/ Month	6.88	kWh
Contract Demand >0.5 kW								
First 100 Units	180	kW/ Month	6.30	kWh	197	kW/ Month	6.88	kWh
101-200 Units	180	kW/ Month	6.85	kWh	197	kW/ Month	7.48	kWh
Above 200 Units	180	kW/ Month	7.40	kWh	197	kW/ Month	8.08	kWh
Street Light Services								
SS Metered	50	kW/ Month	7.40	kWh	55	kW/ Month	8.08	kWh
SS Unmetered	3,750	kW/ Month	-	kWh	4,096	kW/ Month	-	kWh
Irrigation & Allied Services								
IAS I								
Unmetered	800	HP/ Month	-	kWh	874	HP/ Month	-	kWh
Metered	30	HP/	5.50	kWh	33	HP/	6.01	kWh

Existing Category	BERC Approved Tariff- FY 2020-21				Proposed Tariff- FY 2021-22			
	Fixed charge	Units	Energy Charge	Units	Fixed charge	Units	Energy Charge	Units
		Month				Month		
IAS II								
Metered (Now Demand Based)	240	kVA/ Month	5.90	kVAh	262	kVA/ Month	6.44	kVAh
Public Service Connections								
Public Water Works	315	kVA/ Month	7.95	kVAh	344	kVA/ Month	8.68	kVAh
Har Ghar Nal	40	HP/ Month	6.65	kWh	44	HP/ Month	7.26	kWh
Low Tension Industrial Services								
LTIS I (0-19 kW)	144	kVA/ Month	6.40	kVAh	157	kVA/ Month	6.99	kVAh
LTIS II (>19 kW - 74 kW)	180	kVA/ Month	6.40	kVAh	197	kVA/ Month	6.99	kVAh
High Tension								
HTS I - 11 kV	300	kVA/ Month	6.55	kVAh	328	kVA/ Month	7.15	kVAh
HTS II - 33 kV	300	kVA/ Month	6.50	kVAh	328	kVA/ Month	6.99	kVAh
HTS III -132 kV	300	kVA/ Month	6.45	kVAh	328	kVA/ Month	6.83	kVAh
HTS IV - 220 kV	300	kVA/ Month	6.40	kVAh	328	kVA/ Month	6.66	kVAh
HTSS	700	kVA/ Month	4.05	kVAh	765	kVA/ Month	4.42	kVAh
Railway Traction Services								
RTS	280	kVA/ Month	6.80	kVAh	306	kVA/ Month	7.32	kVAh

Table 13: Tariff Rates Existing and Proposed for Retail Sales of Electricity for FY 2021-22 by SBPDCL

Existing Category	BERC Approved Tariff- FY 2020-21				Proposed Tariff- FY 2021-22			
	Fixed charge	Units	Energy Charge	Units	Fixed charge	Units	Energy Charge	Units
Low Tension Supply								
Domestic Kutir Jyoti								
Metered 0-50	10	Connection/ Month	6.05	kWh	11	Connection/ Month	6.61	kWh
DS I Rural Metered (Demand Based)								
First 50 Units	20	kW/	6.05	kWh	22	kW/	6.61	kWh

Existing Category	BERC Approved Tariff- FY 2020-21				Proposed Tariff- FY 2021-22			
	Fixed charge	Units	Energy Charge	Units	Fixed charge	Units	Energy Charge	Units
		Month				Month		
51-100 Units	20	kW/ Month	6.30	kWh	22	kW/ Month	6.88	kWh
101-200 Units	20	kW/ Month	6.60	kWh	22	kW/ Month	7.21 (for above 100 Units)	kWh
Above 200 Units	20	kW/ Month	6.95	kWh				
DS II Demand Based								
First 100 Units	40	kW/ Month	6.05	kWh	44	kW/ Month	6.61	kWh
101-200 Units	40	kW/ Month	6.85	kWh	44	kW/ Month	7.48	kWh
201-300 Units	40	kW/ Month	7.70	kWh	44	kW/ Month	8.41 (for above 200 Units)	kWh
Above 300 Units	40	kW/ Month	8.50	kWh				
DS III Demand Based (Optional)	40	kW/ Month	7.40	kWh	44	kW/Mon th	8.08	kWh
Non_Domestic Service								
NDS I - Metered Demand Based								
First 100 Units	30	kW/ Month	6.30	kWh	33	kW/ Month	6.88	kWh
101-200 Units	30	kW/ Month	6.85	kWh	33	kW/ Month	7.48	kWh
Above 200 Units	30	kW/ Month	7.40	kWh	33	kW/ Month	8.08	kWh
NDS II - Demand Based								
Contract Demand <0.5 kW	100	Connecti on/ Month	6.30	kWh	109	Connecti on/ Month	6.88	kWh
Contract Demand >0.5 kW								
First 100 Units	180	Kw /Month	6.30	kWh	197	kW/ Month	6.88	kWh
101-200 Units	180	kW/ Month	6.85	kWh	197	kW/ Month	7.48	kWh
Above 200 Units	180	kW/ Month	7.40	kWh	197	kW/ Month	8.08	kWh
Street Light Services								
SS Metered	50	kW/ Month	7.40	kWh	55	kW/ Month	8.08	kWh
SS Unmetered	3,750	kW/ Month	-	kWh	4,096	kW/ Month	-	kWh
Irrigation & Allied Services								
IAS I								
Unmetered	800	HP/ Month	-	kWh	874	HP/ Month	-	kWh
Metered	30	HP/ Month	5.50	kWh	33	HP/ Month	6.01	kWh

Existing Category	BERC Approved Tariff- FY 2020-21				Proposed Tariff- FY 2021-22			
	Fixed charge	Units	Energy Charge	Units	Fixed charge	Units	Energy Charge	Units
IAS II								
Metered	240	kVA/ Month	5.90	kVAh	262	kVA/ Month	6.44	kVAh
Public Service Connections								
Public Water Works (Demand based)	315	kVA/ Month	7.95	kVAh	344	kVA/ Month	8.68	kVAh
Har Ghar Nal (Connected load based)	40	HP/ Month	6.65	kWh	44	HP/ Month	7.26	kWh
Low Tension Industrial Services (Demand Based)								
LTIS I (0-19 kW)	144	kVA/ Month	6.40	kVAh	157	kVA/ Month	6.99	kVAh
LTIS II (>19 kW - 74 kW)	180	kVA/ Month	6.40	kVAh	197	kVA/ Month	6.99	kVAh
High Tension								
HTS I - 11 kV	300	kVA/ Month	6.55	kVAh	328	kVA/ Month	7.15	kVAh
HTS II - 33 kV	300	kVA/ Month	6.50	kVAh	328	kVA/ Month	6.99	kVAh
HTS III -132 kV	300	kVA/ Month	6.45	kVAh	328	kVA/ Month	6.83	kVAh
HTS IV - 220 kV	300	kVA/ Month	6.40	kVAh	328	kVA/ Month	6.66	kVAh
HTSS	700	kVA/ Month	4.05	kVAh	765	kVA/ Month	4.42	kVAh
Railway Traction Services								
RTS	280	kVA/ Month	6.80	kVAh	306	kVA/ Month	7.32	kVAh

3. Stakeholder's Objections/Suggestion, Petitioner's Response and Commission's Observation

3.1. Introduction

- 3.1.1. Under section 64 (2) and (3) of Electricity Act, 2003 Commission directed the petitioner to publish an abridged form of the petition in the newspapers and upload the tariff petition along with additional information for inviting comments /suggestions/ objections from general public and stakeholders. As scheduled public hearings were held on the following dates and places:-

Name of Utility	Place of Public hearing	Date of Public Hearing
SBPDCL	Gaya	26 February 2021
	Patna	4 March 2021
NBPDC	Muzaffarpur	2 March 2021
	Patna	4 March 2021

- 3.1.2. The following stakeholders and general public submitted their written comments/ suggestions and objections either before the scheduled date of public hearing or during the public hearing on tariff petitions of NBPDC and SBPDCL:-

SI.No	Name of the Objectors/Stakeholder
1.	M/s Indian Oil Corporation Limited (IOCL)
2.	M/s Bihar Chamber of Commerce and Industries (BCCI)
3.	M/s Parivahan Vibhag
4.	M/s Bijili Upbhokta Sangharsh Samiti
5.	M/s Bihar Industries Association (BIA)
6.	M/s North Western Bihar Chamber of Commerce & Industry
7.	Patna Dairy Project
8.	M/s Harinagar Sugar Mills Limited
9.	M/s IEX
10.	Patna Municipal Corporation
11.	Shri Nand Sharma
12.	M/s Patwari Forgings Pvt. Ltd.
13.	M/s Patwari Steels Pvt. Ltd.
14.	M/s Vaihali Upbhokta Sangh
15.	M/s Zilla Upbhokta Sangh
16.	Individual consumers
17.	M/s Mercados EMI Pvt. Ltd.

3.2. Transmission Loss:

Consumers' and stakeholders' submission

- 3.2.1. The Petitioner claimed transmission loss of 4.62% for FY 2018-19 as against the target of 3.92% approved by the Commission. The stakeholders suggested to consider as per the target approved by the Commission for the purpose of approving energy balance for FY 2018-19.

Petitioners' response:

- 3.2.2. Further, the transmission loss presented by the Petitioner is as conveyed by the BSPTCL to it and as approved by the Commission in its previous Tariff Orders. The Transmission system and losses are out of the operational purview of the Petitioner and it is an uncontrollable factor for the consumer.

Commission's view:

- 3.2.3. The Commission has noted the views of the stakeholders and reply of the Petitioner. The Commission clarifies that the Transmission losses are out of the purview of the Petitioner. The Commission has approved the Transmission losses for BSPTCL at 3.66% in Truing-up of FY 2019-20 vide its Order in Case No. 31 of 2020 and the same has been considered in this Order as detailed in corresponding portions of this Order.

3.3. Assets, Loan & Grants:

Consumers' and stakeholders' submission

- 3.3.1. The Commission is aware that the interest on loan, depreciation, RoE and repair & maintenance costs are being determined on the basis of the normative fixed assets which is not proper and justified. BERC has notified the BERC (Audit of compliance) Regulations, 2018, according to which audit of regulated entities for verifying their compliance with Act, rules and Regulations has to be conducted. Also, the Commission may cause an inspection of any regulated entity and its books of accounts, registers and other documents can, be examined to determine the factual position. However, the Commission is allowing cost on assets without the verification of "Asset Register" of the utilities. Also, any fully depreciated assets have to be excluded while calculating interest on loan, Depreciation and RoE. In its previous Tariff Order for FY 2020-21, the Commission has observed under Directive 7. The Commission may consider whether it would be appropriate and justified to allow the interest, Depreciation and RoE without documentary evidence of the Assets duly substantiated with the Fixed Asset Register.

Petitioners' response:

- 3.3.2. The Petitioner hereby submits that efforts have been taken in the past for preparation of fixed asset register. The petitioner would like to draw attention of the Commission to

the fact that for preparation of component wise FAR, individual assets would have to be located and valued which will be a time-consuming task. However, the petitioner affirms that depreciation on gross block has been charged as per the relevant CERC regulations which states that the salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the gross block of the asset. Further the petitioner wants to highlight the fact that details of the fixed assets as submitted in the tariff petition for FY 2021-22 is based on the annual audited accounts of the company. The accounts have been duly verified and audited by the statutory auditor of the company. Accordingly, the petitioner requests the Commission to place reliance on the annual audited accounts of the company and allow interest on loan, return on equity, depreciation and repair & maintenance as claimed by the petitioner.

Commission's view:

- 3.3.3. The Commission has dealt with the issue of Gross fixed assets in the relevant portion of the Order based on the submissions made by Petitioners. However, the Commission has taken note of the inordinate delays in implementation of Fixed assets registers and the Petitioners are mandated to fulfil this requirement and accordingly, the Commission has issued directive to the Petitioners in this Order.

3.4. Depreciation:

Consumers' and stakeholders' submission

- 3.4.1. The Petitioner has considered the wrong Opening balances of GFA and Grants. It is requested to the Commission that while allowing the Depreciation for the True up of FY 2019-20 has derived the weighted average rate of depreciation for all assets (incl. assets funded out of grants) based upon the actual GFA balances (Balance sheet). Accordingly, the Commission is requested to allow the Depreciation based on the weighted average rate of depreciation on actual GFA balance. Further, the GFA and Depreciation of APR and ARR is also requested to be computed based on the actual closing GFA computed in True-up of FY 2019-20 and thereof.

Petitioners' response:

- 3.4.2. The Petitioner submitted that depreciation on gross block has been charged as per the relevant CERC Regulations which states that the salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the gross block of the asset. The Petitioners also clarified that while charging depreciation, depreciation amount is restricted to the extent of 90% of the gross block of the assets. The Petitioner further stated that the rate of depreciation on grant is calculated as follows:

$$\text{Rate of depreciation on grant} = \text{Depreciation for GFA on Grants} / \text{Average Grants}$$

- 3.4.3. The Petitioner hereby submits that due to the absence of fixed asset register it is difficult to submit individually the details of fully depreciated asset along with year of commissioning and year of attaining 90% depreciation. However, the Petitioner affirmed that depreciation on gross block has been charged as per the relevant CERC Regulations which states that the salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the gross block of the asset.
- 3.4.4. Accordingly, the Petitioner requested the Commission to allow the Depreciation as claimed by the Petitioner.

Commission's view:

- 3.4.5. The Commission has taken note of the submissions by Petitioners regarding reconciliation of GFA and the corresponding computation of Depreciation. The Commission has dealt with the issues of GFA and Depreciation and provided its ruling in this Order.

3.5. Return on Equity:

Consumers' and stakeholders' submission

- 3.5.1. In view of the allowable capitalization for the FY 2019-20, FY 2020-21 and FY 2021-22, the Commission is requested to allow normative equity as per BERC (Multi Year Distribution Tariff) Regulations, 2018.

Petitioners' response:

- 3.5.2. The Petitioner submitted that for the purpose of True up, APR and ARR, ROE expenses is computed based on Regulation 27 of the BERC (Multi Year Distribution Tariff) Regulations, 2018 the details of which have been submitted to the Commission for prudence check. As per the said Regulation, 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. The Petitioner has also submitted additional information and clarifications as required by the Commission from time to time. In view of the same, the Commission is requested to allow the Return on Equity as claimed by the Petitioner.

Commission's view:

- 3.5.3. The Commission has approved addition to GFA and capitalization based on prudence check of the submissions made by Discoms. Subsequently, the RoE has been allowed based in accordance to the Regulations of the Commission.

3.6. Interest on Loan:

Consumers' and stakeholders' submission

- 3.6.1. The Petitioner in the instant True-Up Petition for FY 2019-20, has considered the normative loan addition and repayment the FY 2019-20 considering the Rate of Interest as 10.33%.
- 3.6.2. As per the submissions made in the above paras, it is respectfully submitted that the normative loan addition and normative repayment as per the correct computation of GFA and depreciation.
- 3.6.3. The Petitioner has computed the weighted average rate of interest on the basis of actual long term loan portfolio. However, it observed that the rate of interest pertaining to the loans has changed compared to the rates approved during the True up for FY 2018-19.
- 3.6.4. The Commission is requested to direct the Petitioner to furnish actual loan statements clearly depicting the rate of interest charged for PFC (Counter Part), REC (IPDS)- and REC (DDUGJY) loans during FY 2019-20.

Petitioners' response:

- 3.6.5. The Petitioner submitted that the Interest on Loan has been claimed in accordance with Regulation 25 of the BERC (Multi Year Distribution Tariff) Regulations 2018, the details of which have been submitted to the Commission for prudence check. The Petitioner has also submitted additional information and clarifications as required by the Commission from time to time. In view of the same, Petitioner requested the Commission to allow the Interest on loan as claimed by the Petitioner.

Commission's view:

- 3.6.6. The Commission has evaluated loan portfolio of the Discoms and accordingly allowed the Interest on Loan in accordance with Regulations of the Commission. The detailed analysis and ruling are provided in following chapters of this Order.

3.7. Distribution Losses

Consumers' and stakeholders' submission

- 3.7.1. Distribution losses claimed by the Petitioner is around 28% which is very high when compared with the approved normative T&D loss of 15%. Also, the DISCOM has invested thousands of Crores on infrastructure development and the costs over these investments such as depreciation, interest and RoE are being passed on to the consumers.
- 3.7.2. Hence if the DISCOMs are unable to reduce the T&D losses to the target level, the Commission shall not allow DISCOMs to penalize its consumers on account of higher losses. Therefore, only 15% T&D losses should be allowed and it should be reduced to 10% in subsequent years. Stakeholders suggested the Commission to monitor the circle-

wise monthly AT&C losses of DISCOMS on quarterly basis and to take special attention to the divisions with higher losses. Also suggested to impose penalties on the personal and concerned field officers.

- 3.7.3. The Tariff is proposed to increase for all consumers at about 10% which seems to be only because of extra T&D loss as expenditure on all heads have gone down. Therefore, Tariff should be reduced by at least 10% by considering the approved T&D losses by the Commission.
- 3.7.4. It is also requested to the Commission to cap the distribution losses at 15% for both the Discoms as was approved in MYT Order and correspondingly disallow the power purchase cost owing to distribution losses over and above the 15% benchmark.

Petitioners' response:

- 3.7.5. The Petitioner submitted the DISCOM is dedicated towards reduction of Distribution loss in the State and despite having a highly skewed LT:HT ratio with huge increase in LT consumer base in the past few years, it has continuously decreased its distribution loss in the last 3-4 years.
- 3.7.6. Further, the Petitioner submitted that reduction of AT&C loss is the major focus point of the Petitioner in the state. It is in continuous endeavours to reduce its AT&C loss and has submitted a revised trajectory to REC stating that it would achieve the AT&C loss of 15% by FY 2024-25.

Commission's view:

- 3.7.7. The Commission evaluated Petitioners submissions and allowed Distribution loss in accordance to the Commission's projection in the MYT Order. The High AT&C losses are a matter of concern as the same affects the operational and financial viability of the Discoms. Therefore, the Commission has issued directives to the Petitioners in this Order for planning on reduction of A&C losses.

3.8. Power Purchase from Market:

Consumers' and stakeholders' submission

- 3.8.1. The Commission may consider formalizing the optimization through market by evolving appropriate procedure for considering short term market rates while finalizing the merit order of DISCOM. UPERC has issued MOD and Power Purchase Optimization Regulation, 2021. The Commission may consider evolving appropriate Framework for by which power exchange rate can be considered as a part of the merit order of DISCOM. This proposal will not cause any loss to the DISCOM in any circumstances since the bids are cleared on the power exchange only when the prices are less.
- 3.8.2. DISCOM should consider the option of GTAM to fulfil their existing RPO obligations

as well as their targets in forthcoming years by procuring RE power through the GTAM market also.

Petitioners' response:

- 3.8.3. The Petitioner submitted that the DISCOM is proactively involved in the process of optimizing its power purchase cost and dutifully monitors the short-term market in the chance of getting low cost power as compared to its long term PPAs.
- 3.8.4. The Petitioner further clarifies that it religiously follows the Merit-Order/Least cost methodology as laid down by the Hon'ble Commission in the BERC (Power Purchase and Procurement Process of Licensee) Regulations, 2018 to schedule power for every 15-minute block in a day throughout the year based on the demand assessment of the Petitioner.
- 3.8.5. However, if the Commission deems fit to evolve appropriate framework to consider STOA/Power exchange as a part of the Merit Order for the DISCOMs, the Petitioner would accept the direction of the Commission. However, the Petitioner would like to state the fact that short term market is very dynamic in nature wherein the power purchase cost varies at every 15-min block and the Commission is therefore requested to evolve the framework in such a way which is practically feasible for the Petitioner. The Petitioner further reiterates that it follows the least cost/MOD principle for scheduling power in the state which considers the power availability cost from short term market as well.
- 3.8.6. The Petitioner hereby submits that it is actively participating in the GTAM bidding for purchase of green power through short term.

Commission's view:

- 3.8.7. The Commission has noted the reply of Petitioners. The Commission opines that the Discoms should implement an online tool which given power purchase based on MoD principle for every 15 minutes and the power purchase cost may be optimized automatically with involving any manual intervention. It is also reiterated that the Discoms should continue to follow the least cost/MOD principle for scheduling power in the state which considers the power availability cost from short term market as well.

3.9. Power Purchase Cost:

Consumers' and stakeholders' submission

- 3.9.1. The DISCOMs have claimed higher distribution losses than the distribution loss target approved by the Commission in their respective Tariff Orders. It was suggested to consider Distribution losses as per the targets approved by the Commission for the purpose of energy balance and energy requirement and power purchase cost thereof.
- 3.9.2. Further, Discoms have additionally received OFR funding from Government of Bihar

towards meeting shortfall in AT&C loss targets. It is clear that in spite of receiving funds from Govt. of Bihar, the additional claim made by the Discoms in terms of relaxation in Distribution loss targets would lead to double counting of the claim put forth by the Petitioner. It is submitted that the shortfall in meeting AT&C losses is the shortcoming of the Utility and burdening the consumers on such front is not in the best interests of the consumers.

- 3.9.3. The losses in DF area are higher than the normative losses and suggested to consider actual energy sales for DF area for computing total energy sales.

Petitioners' response:

- 3.9.4. The Petitioner submitted that it has already submitted the Power purchase bills pertaining to FY 2019-20 to the Commission for perusal purposes. The Petitioner has considered the actual power purchase cost (per unit) incurred by the Petitioner from April 2020 to September 2020 to project the power purchase cost for FY 2021-22 including the network losses in the system. The surplus power projected by the Petitioner for FY 2021-22 has been treated at the APPC in order to not have any impact on the ARR of the Petitioner. The same can be verified from the Table 103 of the Petition of SBPDCL and Table 102 of the Petition of NBPDC.
- 3.9.5. Further, the new plants for which cost details are not available, the cost break-up of similar capacity plants has been considered for projection.
- 3.9.6. Further, the petitioner also submits that the state of Bihar does not have any state-owned Thermal Generating Station and it is completely dependent on other intra and interstate Generating Stations for purchase of power. Due to the geographical structure of the state, the state is bound to purchase comparatively costlier power as compared to other States which have access to rich resources in terms of Power Generating Units. Therefore, it is not rationale to compare the state of Bihar with any other State in terms of power purchase cost.

Commission's view:

- 3.9.7. The Commission has noted Discoms' reply and has evaluated power purchase bills submitted by Petitioners to evaluate the Power purchase cost, APPC, etc. Accordingly, the Commission has provided its analysis and rulings in the subsequent chapters of this Order.

3.10. Surplus Power of DISCOMs.

Consumers' and stakeholders' submission

- 3.10.1. As per Table 85 of the Tariff Petition, the DISCOM projected the energy availability as 38,780.02 MU whereas, the energy sales projected is 24,972.45 MUs. The DISCOM is surrendering the surplus power by paying Capacity charges (Fixed Cost) to the

Generating companies. In view of the above, the DISCOM must plan its power procurement taking into cognizance of their energy requirement and the upcoming Power Stations such as BTPS, Nabinagar Power Station, NPTC's Power Plant at Buxar and Pirapanti.

- 3.10.2. As per Regulation 19.1 of the BERC (Multi Year Distribution Tariff) Regulations, 2018 the DISCOMs must take approval of its Power Procurement Plan in accordance with the BERC (Power Purchase & Procurement Process of Licensee) Regulations, 2018.

Petitioners' response:

- 3.10.3. The Petitioners response on this issue was not received.

Commission's view:

- 3.10.4. The Commission notes the views of the stakeholders and has dealt the issue of additional cost incurred by the DISCOM. The surplus power has been dealt by the Commission in the corresponding chapter of this Order.

3.11. RPO Compliance:

Consumers' and stakeholders' submission

- 3.11.1. While computing RPO quantum for FY 2022, the petitioner has multiplied the RPO percentage with the difference of sale of power within state and power purchase from hydro, thereby not considered the losses within the distribution area. The consumption within the area of distribution licensee with the network losses may be considered in line with the principles of Tariff Policy, 2016 which prescribes for computation of RPO quantum as a percentage of Total energy mix of consumption excluding hydropower in the area of DISCOM (which will include the network losses as well).
- 3.11.2. The Petitioner has claimed incurring Rs. 2.56 / unit of REC purchase for FY 2019-20. It is pertinent to state that incurring such huge costs to fulfil REC obligation is not fruitful as the consumers are loaded without actually receiving any real power. The Petitioner should justify such planning to not procure RE power and purchase RECs.
- 3.11.3. Notwithstanding the same, it is mentioned that the average clearing price of the Solar REC and Non solar REC is Rs. 2.172/unit and Rs. 1.639 / unit respectively as per the data available on IEX website. In view thereof, the additional cost pertaining to the purchase of RECs should be disallowed.

Petitioners' response:

- 3.11.4. The Petitioner has considered the projected network losses while calculating the sales from Hydro plants while calculating RPO for FY 2021-22. The same may be verified from Table 84 of the Petition filed by the Petitioner.

Commission's view:

3.11.5. The Commission has taken note of the issue raised regarding RPO compliance and has provided analysis and rulings on the same in the Power purchase section of True-up, APR and ARR chapters of this Order.

3.12. Average Cost of Supply:

Consumers' and stakeholders' submission

3.12.1. It appears to have increasing trend YOY basis. The DISCOM should make serious efforts to sell extra power which can lower the ACOS. Extensive study should be done to find the ways and means to minimize the power purchase cost. BSHPCCL should have pointed out and object before CERC/APTEL regarding fixation of higher rate for power and transmission charges. DISCOMS must take measures to reduce distribution losses by achieving 100% billing & collection efficiency and monitoring theft of energy.

Petitioners' response:

3.12.2. The revenue shown for FY 2019-20 in the True-Up Petition is as per the Revenue assessment by the Petitioner and not as per actual revenue collection. Accordingly, the Average Cost of Supply has been calculated by the Petitioner.

3.12.3. Further, the Petitioner is proactively involved in the process of optimizing its power purchase cost and dutifully monitors the available options in the chance of getting low cost power as compared to its higher cost long term PPAs.

3.12.4. Further, it agrees to the fact that the intervention of the Govt. is required for renegotiating the terms of the PPA or transfer/share power from costlier plants.

3.12.5. The Petitioner hereby submits it is taking every single step to optimize its power purchase and endeavours to do so in future as well.

Commission's view:

3.12.6. The Commission has noted Petitioners response stating that their revenue recognition is on accrual basis and the steps taken by Discoms to optimize the power purchase cost. The Commission has also issued necessary Directions in this Order that pertains metering and billing as this forms a major area of improvement for the Discoms.

3.13. Transmission Charges:

Consumers' and stakeholders' submission

3.13.1. The power purchase cost of surplus power should be disallowed by following the Merit Order Dispatch (MOD) principle.

3.13.2. Further, since the Power purchase cost has come down substantially, the benefit of it should be passed on to the consumers.

Petitioners' response:

3.13.3. The methodology behind projection of Transmission charges have already been submitted to the Commission and the Commission is requested to approve the same.

Commission's view:

3.13.4. The Commission has evaluated the Power purchase projection provided for APR of FY 2020-21 and ARR of FY 2021-22. The Commission provided the analysis and rulings on the same in the corresponding chapters.

3.14. Revenue:

Consumers' and stakeholders' submission

3.14.1. The DISCOMs have taken revenue on accrual basis which should be disallowed and the revenue of both the DISCOMs have to be taken only on normative basis, as per the approach adopted by the Commission in its earlier Tariff Orders

Petitioners' response:

3.14.2. The Revenue recognition is done on accrual basis as per principles of accounting and Regulation of the Commission.

Commission's view:

3.14.3. The Commission has evaluated the revenue recognized by the Discoms by evaluating the Audited accounts and sale of Power in accordance to the Regulations of the Commission.

3.15. Revenue surplus:

Consumers' and stakeholders' submission

3.15.1. In public notices of the DISCOMS, it was mentioned that for True-up of FY 2017-18, NBPDCCL has not considered Revenue surplus of Rs. 1,199.76 Crores and SBPDCL has not considered Revenue surplus of Rs. 1,137.82 Crore as the matter is sub-judice in APTEL. Prima facia, this amount is on account of T&D losses disallowed by the Commission. As these losses were due to the failure of DISCOMs, they should not be allowed to be passed on in the Tariff.

Petitioners' response:

3.15.2. The Petitioners submitted that it has filed a Petition in APTEL as per relevant Regulations & Provisions and the matter is sub-judice before the APTEL.

Commission's view:

3.15.3. The Commission clarifies that as the matter is sub-judice before the APTEL, the Commission has considered the Revenue Surplus approved in its earlier Tariff Orders and the same is explained in corresponding portion of this Order.

3.16. ARR and Tariff Hike:

Consumers' and stakeholders' submission

3.16.1. As the sales have fallen by about 30% from earlier projections, proportionate reduction should be done in all other heads such as employee cost, R&M, depreciation, RoE, interest, etc. 10% hike in proposed Tariff is due to considering high T&D loss. The ARR needs to be revised considering the above into account.

Petitioners' response:

3.16.2. The proposed ARR is based on the expenses projected by it in line with the BERC (Multi Year Distribution Tariff) Regulations, 2018 as well as the sales projected by it, the rationale of which has already been submitted to the Commission. Further, the Tariff hike proposed by the Petitioner is a result of the overall revenue gap arising out of the carried forwarded revenue gap of FY 2019-20 along with applicable carrying cost in addition to the projected revenue gap in FY 2021-22 due to the existing Tariff structure based on sales projection of the Petitioner. The Petitioner has also submitted the additional details required by the Commission from time to time in support of its claims and proposals. The Commission is therefore requested to approve the proposals of the Petitioner.

Commission's view:

3.16.3. The Commission has done prudence check of Petitions, audited accounts and the subsequent submissions made by the Discoms providing replies to Additional information sought by the Commission. Accordingly, the Commission the computed Revenue Gap/(surplus) and determined tariff for all Consumer categories.

3.17. Pre-Paid Meter:

Consumers and stakeholders submission

3.17.1. Cost Analysis of installation of prepaid meter and the use of removed meter should be carried by BERC and accordingly the ARR has to be reduced. It should also be considered that the cost of meter installed under UDAY, IPDS and DDUGJY should be removed from the GFA. Consumers must have option to adopt for the installation of pre-paid meters but not to be forced to replace their existing meters with prepaid meters.

3.17.2. Regarding Smart prepaid meters, the Petition filed by the DISCOM under Case No. 5 of 2020 is still pending before the Commission and several stake holders have submitted

objections/suggestions in the same therefore, the DISCOM should be directed to stop installing prepaid meters till the final Order is passed by the Commission.

3.17.3. Whereas other stakeholder has suggested for installation of prepaid meters to all the consumers.

3.17.4. Further, some stakeholder suggested that installation of smart prepaid meters should be optional.

Petitioners' response:

3.17.5. The benefits of installing Smart Meters in the state will automatically reflect in the ARR of the Petitioner once all the existing meters in the state are replaced by Smart Prepaid Meters. The Petitioner also submits that it follows all the required guidelines and mandatory directions before installing any metering equipment to a consumer's premise. Petitioner also submitted that it has already submitted its cost benefit analysis and roadmap for installation of smart meters to the Commission in Case No. 5 of 2020. The Petitioner clarified that the additional cost pertaining to smart meters will be accounted by the Petitioner in its ARR as per the treatment/ methodology suggested by the Commission in its Order in Case No. 5 of 2020.

Commission's view:

3.17.6. The Commission notes the views of the stakeholders and reply of the Petitioner. Further, the Commission would examine the issues associated with the cost of installation of prepaid meters including cost benefit analysis and will accordingly decide on this issue in Case No. 5 of 2020 in the due course. As this matter is in sub-judice, the Commission is not inclined to provide its decision in the current Tariff Proceeding.

3.18. Surcharge on Exceeding Contract Demand:

Consumers' and stakeholders' submission

3.18.1. In the Tariff Order dated 20 March, 2020, double penalty for exceeding contract demand was introduced for all consumers and the DISCOMs have already filed a Petitioner for removal of the same with effective from 1 April, 2020 for the Domestic consumers. Therefore, the Commission was requested that there should not be any penal charges for units consumed for exceeding contract demand for all consumer.

Petitioners' response:

3.18.2. The billing of the consumers as well as applying penalty on the consumers is based on the directions of the Commission in the Tariff Order dated 20 March, 2020 for DISCOMs. The Petitioner further clarified that the penalty on energy charges on exceeding contract demand is not applicable to Domestic consumers.

Commission's view:

3.18.3. The Commission has evaluated the request made in the Petition regarding penalty for exceeding contract demand and accordingly, provided its analysis and rulings in the corresponding portion of the Order. It is also pertinent to mention here that petitioner in their review petition has requested to remove the said penalty provision only from domestic category, which seems skewed in nature

3.19. Interest on Security Deposit:

Consumers' and stakeholders' submission

3.19.1. The initial security deposit should be calculated at 30% load factor for all category. There is no need to increase initial security deposit as additional security deposit is collected if consumption of consumer is higher. The interest as per the RBI rates, should be given on security deposit by the DISCOM to all the consumers.

Petitioners' response:

3.19.2. As per the tariff order dated 20 March, 2020, the consumers are liable to get interest on security deposit as per the prevailing bank rates. The same is also being provided to existing HT consumers on a regular basis. The Petitioner endeavours to extend the same to LT consumers as well in near future.

Commission's view:

3.19.3. The Commission has noted Petitioners' response and provided analysis and ruling in the corresponding portion of this Order and also issued directive for the same to petitioners.

3.20. Delayed Payment Surcharge:

Consumers' and stakeholders' submission

3.20.1. GOI has directed CERC/SERC/DISCOMs to allow reduced Tariff vide letter dated 15 November, 2019 and 16 January, 2020.

3.20.2. Delayed payment surcharge is proposed to be increased to 1.5% per month from present 1.25% per month by the Petitioners. Keeping in view falling interest rate in the market it was suggested that the DPS and the advance payment should be 1% per month. It was also suggested to change DPS on pro-rata basis.

3.20.3. All businesses and industries have suffered heavy losses in the Covid-19 lockdown in such a situation, DISCOMs levied late payment surcharges on the outstanding electricity bills. It has been suggested that the DISCOMs must implement a lump sum redressal scheme for settlement of such bills wherein, the DPS should be completely waved-off.

Petitioners' response:

- 3.20.4. A reduced DPS of 0.75% was applicable to the consumers for the months of April 2020 to June 2020 as per the directions of the Commission. Further, the average bills provided to the consumers in the month of May was reconciled in the month of June. Therefore, there is no case of inflated bills for any of the consumers.
- 3.20.5. Further, if a consumer still believes that there is an issue with his/her bill, a complaint should be raised through the provided channels and accordingly the issue of the consumer would be resolved by the Petitioner. However, the consumers are also requested to pay their dues amount in order to further avoid paying additional amount in terms of DPS. Further, any relaxation on the bills is the prerogative of govt. of Bihar and the Petitioner has no say in it.
- 3.20.6. The Petitioners provide a rebate of 1.5% to its consumers for prompt payment of their energy bills. Further, the DISCOMs are required to pay the Late Payment Surcharge (LPSC) of 1.5% to the generators in case of payment default within the stipulated period. Therefore, it is prudent to charge DPS at the similar ratio from other consumers in case of payment default within the due date.
- 3.20.7. Suggestions of pro-rate DPS and calculation of DPS after end of grace period shall be discussed internally by the DISCOMs.

Commission's view:

- 3.20.8. The Commission noted the submission of the stakeholders and reply of the Petitioner. The Commission has taken in to consideration of rates of applicable surcharge/penalty currently applicable with respected to generating licensees, Discoms, distribution consumer, etc. and after due analysis dealt with the issue in corresponding portions in this Order.

3.21. Cross Subsidy Surcharge:

Consumers' and stakeholders' submission

- 3.21.1. The petitioner has not considered the wheeling loss in computation of CSS. There also seems to be few inadvertent errors in the computations of CSS.

Petitioners' response:

- 3.21.2. The state of Bihar has a skewed LT:HT Ratio wherein sales are in proportion to 92.4:7.6 and consumer ratio in proportion to 99.97:0.03 respectively for SBPDCL whereas for NBPDCCL, the sales are in proportion to 92.29:7.71 and consumer ratio in proportion to 99.99:0.01 respectively. The overall low HT:LT consumer ratio has limited the sales volumes to high value consumers, which have a higher per capita consumption and higher tariffs. Higher volume of sales to LT consumers has led to low energy consumption and revenues per consumer at a similar cost of service, thereby impacting overall losses. As a matter of fact, it may be noted that most consumers added recently

to the network under the Saubhagya scheme are LT consumers. In addition, the shift of consumers of the Petitioner to OA in the state has also hit the Petitioner financially. The Petitioner however assures to gradually reduce the cross-subsidy in coming FYs and try to bring it down to +/-20% of average cost of supply.

3.21.3. The Petitioner hereby submits that it has calculated the cross-subsidy surcharge as per the methodology adopted and approved by the Commission in previous Tariff Orders which is in line with the National Tariff Policy, 2016.

3.21.4. The Petitioner further clarifies that it has submitted a revised calculation of CSS to the Commission in its submission dated 5 February, 2021 in response to the clarification sought by the Commission.

Commission's view:

3.21.5. The Commission has evaluated the cross subsidy surcharge in accordance to the methodology adopted by the Commission in previous Tariff Orders and in accordance to the National Tariff Policy, 2016. The analysis and ruling on the same has been provided by the Commission in the corresponding chapter detailed in this Order.

3.22. Additional Surcharge:

Consumers' and stakeholders' submission

3.22.1. The Licensee has submitted the computation of additional surcharge; however, it does not conclusively demonstrate that open access is attributable to stranded power of the licensee. While determining additional surcharge, the Commission may consider that the fact that there is negligible open access in the state of Bihar. Therefore, the question of stranded capacity on account of open access made not arise.

Petitioners' response:

3.22.2. The Additional Surcharge as per the Regulation 23 of the BERC Intrastate Open Access Regulation. The Petitioner also submits that it has done PPAs with power generating stations considering the consumers which have gone into Open Access in the past 2-3 years, as a result of which, the Petitioner's power demand has reduced and it needs to surrender power or RSD generating units while scheduling power which in turn increases the fixed cost liability of the Petitioner to a huge extent without scheduling and drawing actual power. The Petitioner has already submitted the block wise details of power surrendered in FY 2019-20 as well as 1st half of FY 2020-21. Further, it has also submitted the details of plants which has been put under RSD in FY 2019-20 and 1st half of FY 2020-21 to the Commission. One of the major reasons as being highlighted by the Petitioner is the movement of consumers with higher contracted demand to Open Access.

3.22.3. The Regulations highlighted above also clarify that Additional Surcharge may be

approved by the Commission if the Petitioner has stranded power and there is unavoidable obligation of fixed cost on the Petitioner.

Commission's view:

3.22.4. The Commission has evaluated the submissions made by Petitioners on additional surcharge and has dealt with the issue in accordance to the Regulations of the Commission in the corresponding portions of this Order.

3.23. Open access charges:

Consumers' and stakeholders' submission

3.23.1. Open access charges proposed to be increased, which are already very high and no consumer is able to opt for open access and are forced to pay higher energy charges and this should be reduced so that industrial consumers may opt for open access and survive in competition. Also, presently DISCOMs need to increase unit consumption and this measure will lead to the opposite.

Petitioners' response:

3.23.2. The Petitioner has made separate submissions with respect to components of open access charges such as additional surcharge, reactive energy charges, etc.

Commission's view:

3.23.3. The Commission has dealt claim of each component of the Open access charges separately in accordance to the Regulations of the Commissions, methodology of previous Orders in the concerned chapter of this Order.

3.24. Removal of Fixed Charges for HTSS category for open access:

Consumers' and stakeholders' submission

3.24.1. Fixed charges should be abolished and single part tariff be introduced for Open Access Facility. If it is not possible create a new category for industries who opt for Open Access Facility. Wherein the DISCOMs shall charge for the electrical units consumed. Wheeling and other charges should be reasonable.

Petitioners' response:

3.24.2. The Petitioner states that fixed charge is payable based on the contracted capacity. The fixed charges are recovered in accordance with the BERC Regulations and Tariffs as approved in the Tariff Orders year on year by the Commission.

Commission's view:

3.24.3. The Commission has noted the submission made by the Discoms and its open access

charges have been evaluated based on the submissions made by Discoms in accordance to the prevalent regulations of the Commission.

3.25. Parallel Operation Charges:

Consumers and stakeholders submission

3.25.1. Imposition of parallel operation charges should not be allowed as it would discourage the open access system.

Petitioners' response:

3.25.2. The Regulation 25 of the BERC Intrastate Open Access Regulation states the following:

"25. Other Charges

In addition to the above charges.....any other charges imposed by Central Commission and/or State Commission shall be payable by the open access customers."

Further, the Petitioners has referred to CSERC order dated 13.10.2009 in order to define parallel operation. The relevant excerpt of the said order is provided below for reference.

"The parallel operation is any activity where one electrical system operates with the connectivity to another system in similar operating conditions. The Captive Power Plants (CPPs) opt for parallel operation to seek safety, security and reliability of operation with the support of a much larger and stable system as afforded by the grid."

3.25.3. Further, in case of CPPs operating parallel to the grid, load fluctuations of captive consumer are passed on to the utility's system thereby the efficiency of utility's system may be affected, which may also impact on utility's other consumers. The utility thus has to sustain the impact of highly fluctuating peak loads for which it does not get any return on the capital invested to create system reserve.

3.25.4. Further, the variation in reactive power requirement increases the system losses and lowering of the voltage profile. Utility will be required to bear the cost of such effects. Also, Non-recording of high fluctuating / sudden active and reactive demand by the meter results in financial losses.

3.25.5. Additionally, in case of an ungrounded (or grounded through resistance) system supply, fault on interconnecting line (consumer's side) results in interruption of system. For single phase to ground fault which are 80 to 85% of the short circuit fault level, the grounding of the system is achieved through the neutral or stepdown transformer of the utility, when the generator runs in parallel with the utility's grid. This supply is likely to cause damage to the terminal equipment at utility's sub-stations and line insulators, as voltage on the other two healthy phases rise beyond the limit, under such conditions.

Commission's view:

3.25.6. The Commission's noted Discoms submission regarding parallel operation charges.

According, the Commission sought detailed technical justification and computation from the Discoms regarding the value arrived at for parallel operation charges. Based on the reply received from the Discoms, the Commission has provided its ruling in this Order.

3.26. Load Factor Rebate:

Consumers' and stakeholders' submission

3.26.1. Load factor rebate being proposed is not practical as the current load factor for DISCOMS is merely 15% and for HT Consumers, it is only 20% while the rebate of load factor is being proposed if load factor is above 50%. Therefore, this proposal is not practical or workable or effective. The load factor rebate provided by Jharkhand State Electricity Board was referred and suggested to provide Load factor rebate on the total energy charges be given on load factor beyond 40% to all HT consumers (incl. HTSS), subject to Max rebate of 20%.

Petitioners' response:

3.26.2. The Petitioner has done due study on Load Factor and then proposed the Load Factor Incentive to be applicable in the state of Bihar for the kind approval of the Commission. The Petitioner has also submitted the calculation methodology to arrive at the proposed rates of Load Factor Incentive before the Commission.

Commission's view:

3.26.3. The Commission has noted the views of the stakeholders and the reply of the Petitioner. Accordingly, the Commission has dealt with the Load Factor incentives in the corresponding portion of this Order.

3.27. Electricity Duty:

Consumers' and stakeholders' submission

3.27.1. Electricity duty (6%) is maximum in Bihar compared to other states and suggested to abolished it or reduced it to the level that is being charged in the neighbouring states.

Petitioners' response:

3.27.2. The Electricity Duty is levied as per the Electricity Duty Act of the State Government.

Commission's view:

3.27.3. The Commission has noted the views of the stakeholders and Petitioner's response. The Electricity Duty is levied by the State Government and hence, this issue is beyond the scope of this Tariff Order.

3.28. ToD Tariff:

Consumers' and stakeholders' submission

- 3.28.1. Suggested that 80% of normal Tariff should be applicable for off-peak hours and no additional Tariff during peak hours as the DISCOMS are trying to incentivize consumption.
- 3.28.2. Whereas other stakeholder has suggested the tariff for peak hours as 115% of normal Tariff.

Petitioners' response:

- 3.28.3. The Petitioner submitted that in order to manage the demand fluctuation of the system helps the Petitioner to maintain the security and safety of the Grid. In view of the same and after carefully studying the load curve for the state of Bihar in FY 2019-20, the Petitioner has submitted a revised structure of TOD for the approval to the Commission for FY 2021-22. Further, the Petitioner also submits that the TOD tariff has been decided based on the guidelines of the BERC MYDT regulations, 2018

Commission's view:

- 3.28.4. The Commission clarifies that the purpose of introduction of ToD Tariff is to shift the demand from peak hours to off-peak hours and hence the Tariff during peak hours should be higher than the normal Tariff. Accordingly, the Commission has provided the ToD Tariff structure in the "Tariff Principles, Design and Tariff Schedule" Chapter of this Order.

3.29. Consumer Categories:

Consumers' and stakeholders' submission

- 3.29.1. Appreciated for reduction in number of slabs for DS-I and DS-II categories however, its was proposed that the rates should be applicable in next lower slab, so that for category above 200 units the rates should be as in the category of above 100 units.
- 3.29.2. Also suggested for merger of all four HT categories and introduction of voltage rebate for all HT consumers (incl. HTSS) as provided in Jharkhand.
- 3.29.3. Currently consumers have an option to take power as LTIS-II or HTS-I if their load is between 50 KW and 75 KW. This option is proposed to be withdrawn without any adequate reason or justification and, the same should not be allowed by the Commission.

Petitioners' response:

- 3.29.4. The Petitioner submitted that it has proposed to merge the highest slabs (>200 units in DS-I and >300 units in DS-II) of DS-I and DS-II category in the existing tariff structure with their respective penultimate slabs (101-200 units in DS-I and 201-300 units in DS-II) with the tariff being applicable of the penultimate slab. This would address the concern of the stakeholder in terms of difference in percentage

Commission's view:

- 3.29.5. The Commission has noted the views of the stakeholders and Petitioner's response and has dealt this issue in the "Tariff Principles, Design and Tariff Schedule" Chapter of this Order.

3.30. Tariff for Electric Vehicles

Consumers' and stakeholders' submission

- 3.30.1. Stakeholder submitted that the Government is encouraging the EVs for protection of environment. Currently large number of Electric Vehicles (EVs) (i.e., e-rikshaws, cars, etc.) are operating in the State and it is expected that EVs would significantly increase in the near future which will also help in reduction of pollution. In view of the above, the stakeholder requested the Commission to provide Tariff for the EV charging stations at reasonable rates.

Petitioners' response:

- 3.30.2. The Petitioner submitted that currently there is no separate Tariff for EVs in the state. The rates are charged from consumers according to the category in which the consumer falls. Further, the power to determine Tariff for electric vehicles rests with the Commission. However, it is worth mentioning that several steps have also been taken in the past to promote electric vehicles in the state. Necessary plans are being taken to set up adequate number of charging station for electric vehicles in different towns of Bihar.

Commission's view:

- 3.30.3. The Commission has noted the views of the stakeholders and Petitioner's response. The Commission is aware about initiatives taken by the State Government and Central Government for promoting the use of the electric vehicles. Also, the Government of Bihar has issued "Draft Bihar Electric Vehicle Policy, 2019" (Source: www.investbihar.co.in/Download/Draft_for_e_vechile) for promotion of EVs wherein it proposes for providing subsidies to the EVs. Hence, the Commission is of the view that there is need to provide Tariff for charging stations of EVs. Further, the Ministry of Power vide its letter dated 13 April, 2018 has provided clarification regarding charging of EVs stating that as per Electricity Act, 2003 the charging of batteries of electric vehicles through charging station does not require License. In view of the above, the Commission has decided to create a sperate Tariff category for EV Charging

Stations and determined the Tariff for the electric vehicles as detailed in the Chapter “Tariff Principles, Design and Tariff Schedule” of this Order.

4. Truing-up for FY 2019-20

4.1. Introduction

- 4.1.1. The Commission vide its Order dated 25 February, 2019 had approved Multi Year Aggregate Revenue Requirement (ARR) for the control period of FY 2019-20 to FY 2021-22 for Bihar Power Distribution Companies viz., South Bihar Power Distribution Company Limited (SBPDCL) and North Bihar Power Distribution Company Limited (NBPDC). The Petitioners, i.e., SBPDCL and NBPDC has now filed the present Petitions dated for True-up of FY 2019-20, Annual Performance Review petition for FY 2020-21 and revised Annual Revenue Requirement petition for FY 2021-22.
- 4.1.2. This Chapter deals with the Truing-up of FY 2019-20 for both the Discoms in line with the Regulation 14 of the BERC (Multi Year Distribution Tariff) Regulations, 2018 stipulating as following:

“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 Transmission Licensee or SLDC, as the case may be, for the year, and after prudence check of data by the Commission.*
- c) Where audited books of account are not available at the time of true-up, provisional books of annual (regulatory) accounts duly approved by the Board of Directors of the applicant company shall be used for the provisional True-up process.*
- d) The Commission shall undertake review of estimates of expenses for the current year as a part of the tariff order on the basis of the actual expenses incurred during the period April – September of the current year and corresponding figures in the order for Annual Revenue Requirement (ARR) of the current year approved by the Commission.*
- e) Estimates of expenses for the ensuing year shall be on the basis of corresponding figures in the order for True-up of expenses of the previous year and Annual Performance Review or Tariff Order of the current year, as the Commission may consider reasonable and deem fit.*

Notwithstanding anything contained in regulation 4 of these Regulations, the Revenue gap/surplus arising out of Truing up shall be considered by the Commission while determining the ARR of ensuing year(s). While approving adjustments towards revenue/expenses in future years, arising out of Truing up exercises, the Commission may allow the carrying costs as determined by the

Commission of such expenses/revenues. However, the revised estimated gap/surplus as a result of APR may or may not be passed in the ARR of ensuing year.”

- 4.1.3. The Commission in accordance with above referred Regulations has undertaken the "Truing-up" exercise for NBPDCCL and SBPDCL for FY 2019-20 on the basis of Audited Annual Accounts and relevant provisions of the BERC (Multi Year Distribution Tariff) Regulations, 2018. However, wherever deemed necessary, the Commission has considered expenses based on prudence check.
- 4.1.4. The Commission has analysed the components of the actual performance parameters, expenses, revenue and computed gains/ (losses) in the process of Truing-up for FY 2019-20. The Commission's analysis underlined during the approval for Truing-up of FY 2019-20 is set out in following sections.

4.2. Energy Sales

NBPDCCL's Submission

- 4.2.1. NBPDCCL submitted the category wise number of consumers, connected load and sales for FY 2019-20 as shown in the tables:

Table 14: Number of Consumers, Connected Load (KW) and Sales (MU) claimed by NBPDCCL for FY 2019-20

Category	Number of Consumer	Connected Load (KW)	Sales (MUs)
Domestic	94,65,335	69,21,189	7,515.56
Kutir Jyoti	40,15,781	5,95,038	2,538.60
Domestic Rural (DS-I)	42,58,986	43,19,966	3,420.72
Domestic Urban (DS II)	11,90,527	20,06,097	1,556.22
DS III	41	88	0.02
Non-Domestic Service	4,87,545	8,59,183	1,036.91
Non-Domestic (NDS I)	1,95,954	2,20,760	149.37
Non-Domestic (NDS II)	2,91,591	6,38,424	887.54
Contract Demand <0.5 kW	1,942	1,150	1.74
Contract Demand >0.5 kW	2,89,649	6,37,274	885.81
Street Light Services	1,044	12,969	34.67
Streetlight I	301	2,839	5.78
Streetlight II	743	10,130	28.89
Irrigation & Allied Services	79,818	2,32,774	118.35
IAS I	74,706	1,80,784	79.59
IAS II	5,112	51,991	38.76
Public Service Connections	11,453	43,731	51.62
Public Water Works	1,586	21,397	21.19

Category	Number of Consumer	Connected Load (KW)	Sales (MUs)
Har Ghar Nal	9,867	22,334	30.43
Low Tension Industrial Services	41,216	3,85,075	227.05
LTIS I (0-19 kW)	40,314	3,33,145	200.92
LTIS II (>19 kW - 74 kW)	902	51,930	26.13
High Tension	1,111	3,10,491	604.09
HTS I - 11 kV	1,058	2,13,868	383.27
HTS II - 33 kV	46	62,323	118.48
HTS III -132 kV	3	22,500	53.11
HTS IV - 220 kV	-	-	-
HTS IV - 33/11 Kv	4	11,800	49.23
Railway Traction Services	4	36,600	146.30
Sub – Total	10,087,526	88,02,013	9,734.55
Nepal	1	-	708.02
Sales to Other State	-	-	130.18
Sales to Sugar Mills	-	-	13.67
SLDC Deviation	-	-	49.58
Total	10,087,527	88,02,013	10,636.00

- 4.2.2. NBPDC submitted that the increase in number of consumers has although not as planned by the Petitioner during the MYT Tariff proceedings, i.e., (as per T.O. dated 25 February 2019). However, there has still been a significant addition in number of consumers during the year. NBPDC submitted that the actual number of consumers is in fact higher by almost 10% over the previous year (FY 2018-19). Major Increase can be observed in certain categories like Public service connections (924%), IAS (104%), NDS-I (52%), LTIS (27%) and DS-I (16%) over the previous year.

SBPDCL's Submission

- 4.2.3. SBPDCL submitted the category wise number of consumers, connected load and sales for FY 2019-20 as shown in the Tables below:

Table 15: Number of Consumers, Connected Load (KW) and Sales (MU) claimed by SBPDCL for FY 2019-20

Category	Number of Consumer	Connected Load (KW)	Sales (MUs)
Domestic	50,75,789	62,39,565	7,141.73
Kutir Jyoti	14,83,858	1,88,886	1,159.78
Domestic Rural (DS-I)	22,74,063	23,35,509	2,973.50
Domestic Urban (DS II)	13,17,764	37,15,007	3,008.40
DS III	104	163	0.04
Non-Domestic Service	4,06,025	11,32,865	1,089.62

Category	Number of Consumer	Connected Load (KW)	Sales (MUs)
Non-Domestic (NDS I)	94,531	1,16,050	243.26
Non-Domestic (NDS II)	3,11,494	10,16,815	846.36
Contract Demand <0.5 kW	9,112	5,655	5.49
Contract Demand >0.5 kW	3,02,382	10,11,160	840.87
Street Light Services	1,376	19,001	71.55
Streetlight I	752	5,350	12.37
Streetlight II	624	13,651	59.19
Irrigation & Allied Services	2,34,788	5,01,513	814.58
IAS I	2,31,154	4,66,356	735.80
IAS II	3,634	35,157	78.79
Public Service Connections	5,849	47,949	94.42
Public Water Works	2,626	38,878	79.37
Har Ghar Nal	3,223	9,071	15.05
Low Tension Industrial Services	64,026	7,21,979	427.04
LTIS I (0-19 kW)	59,574	4,88,746	295.82
LTIS II (>19 kW - 74 kW)	4,452	2,33,233	131.22
High Tension	1,929	7,01,108	2,085.96
HTS I - 11 kV	1,792	3,33,635	679.72
HTS II - 33 kV	119	2,05,944	425.71
HTS III -132 kV	4	46,350	171.72
HTS IV - 220 kV	-	-	-
HTS IV - 33/11 Kv	14	1,15,179	808.81
Railway Traction Services	1	9,000	102.03
Sub – Total	57,89,783	93,72,980	11,826.93
Sales to Other State	-	-	152.82
SLDC Deviation	-	-	58.21
Total	57,89,783	93,72,980	12,037.96

4.2.4. Regarding increase in Number of Consumer, SBPDCL submits 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 7% over the previous year. Increase can be observed in certain major categories like NDS-I (50%), IAS (19%), DS-I (11%) and LTIS-I (10%) over the previous year.

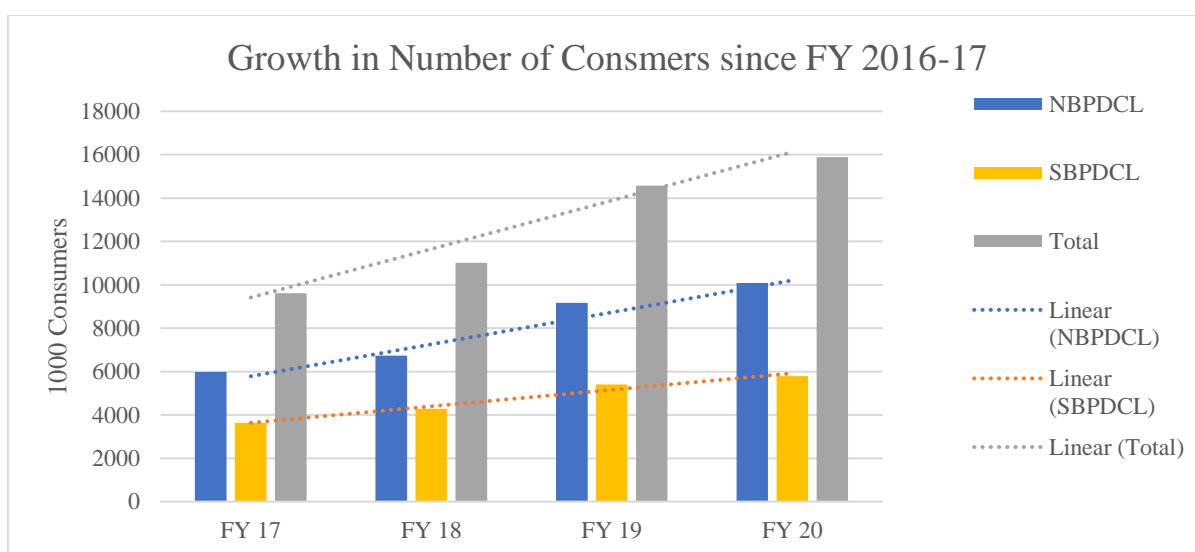
Commission's Analysis:

Number of Consumer

4.2.5. For Turing-up of FY 2019-20, the Commission has reviewed the actual number of

consumers submitted by the Discoms in their Petitions. The Commission observes that there is deviation in actual numbers of consumers as compared to MYT approved figures as well as with figures as considered in APR of FY 2019-20.

- 4.2.6. For NBPDCCL, the Commission in its MYT Order dated 25 February, 2019 had approved the total number of consumers as 1,05,87,861 which subsequently revised at 1,00,26,613 during the previous Tariff Order dated 20 March 2020 in review of FY 2019-20 based on the Petitioner submission. As against this the actual number of consumers reported by NBPDCCL for FY 2019-20 stands at 1,00,87,527; thus, showing a deviation of (4.73%) as compared to MYT approved figures and a deviation of +0.60% when compared to figures considered in review of FY 2019-20.
- 4.2.7. Similarly, for SBPDCL the Commission in its MYT Order dated 25 February, 2019 had approved the total number of consumers as 65,63,577 which subsequently revised at 61,49,016 during the previous Tariff Order dated 20 March 2020 in review of FY 2019-20 based on the Petitioner submission. As against this the actual number of consumers reported by SBPDCL for FY 2019-20 stands at 57,89,783; thus, showing a deviation of (11.79%) as compared to MYT approved figures and a deviation of (5.84%) when compared to figures considered in review of FY 2019-20.
- 4.2.8. The deviations in actual vis-à-vis approved numbers are mainly due to fact that in MYT Order the number of consumers were approved based on the estimations and that of in the Review Order, the same were based on the six months actual & six months provisional data. However, as against this the actual numbers of consumers reported during the FY 2019-20 have been claimed by the Discoms in Truing-up of FY 2019-20. Further, Discoms have stated that though the increase in number of consumers has not as planned during the MYT Tariff proceedings, there has still been a significant addition in number of consumers as compared to last year. In this regard the Commission has analysed the historical trend for number of consumers as shown in the Figure given below:



4.2.9. From the above figure, it can be seen that both the Discoms have witnessed positive trend with number of consumers showing a 3-year CAGR of around 19% for NBPDCCL and around 17% for SBPDCL.

4.2.10. Further, for FY 2019-20 the Commission has verified the actual number consumers from the Audited Account of each Discom and found them to be in order. Accordingly, the Commission has considered the actual number consumers in Truing-up FY 2019-20 as submitted by the Discoms as shown in the Table below:

Table 16: Number of Consumers approved in True-up for FY 2019-20

Category	NBPDCCL	SBPDCL	Total Number of Consumer
	Number of Consumer	Number of Consumer	
Domestic	94,65,335	50,75,789	145,41,124
Kutir Jyoti	40,15,781	14,83,858	54,99,639
Domestic Rural (DS-I)	42,58,986	22,74,063	65,33,049
Domestic Urban (DS II)	11,90,527	13,17,764	25,08,291
DS III	41	104	145
Non-Domestic Service	4,87,545	4,06,025	8,93,570
Non-Domestic (NDS I)	1,95,954	94,531	2,90,485
Non-Domestic (NDS II)	2,91,591	3,11,494	6,03,085
Contract Demand <0.5 kW	1,942	9,112	11,054
Contract Demand >0.5 kW	2,89,649	3,02,382	5,92,031
Street Light Services	1,044	1,376	2,420
Streetlight I	301	752	1,053
Streetlight II	743	624	1,367
Irrigation & Allied Services	79,818	2,34,788	3,14,606
IAS I	74,706	2,31,154	3,05,860
IAS II	5,112	3,634	8,746
Public Service Connections	11,453	5,849	17,302
Public Water Works	1,586	2,626	4,212
Har Ghar Nal	9,867	3,223	13,090
Low Tension Industrial Services	41,216	64,026	1,05,242
LTIS I (0-19 kW)	40,314	59,574	99,888
LTIS II (>19 kW - 74 kW)	902	4,452	5,354
High Tension	1,111	1,929	3,040
HTS I - 11 kV	1,058	1,792	2,850
HTS II - 33 kV	46	119	165
HTS III -132 kV	3	4	7
HTS IV - 220 kV	-	-	-
HTS IV - 33/11 Kv	4	14	18
Railway Traction Services	4	1	5

Category	NBPDC	SBPDCL	Total Number of Consumer
	Number of Consumer	Number of Consumer	
Sub – Total	10,087,526	57,89,783	158,77,309
Nepal	1	-	1
Sales to Other State	-	-	-
Sales to Sugar Mills	-	-	-
SLDC Deviation	-	-	-
Total	10,087,527	57,89,783	158,77,310

4.2.11. Accordingly, the Commission has approved the number of consumers as 10,087,527 and 57,89,783 for NBPDC and SBPDCL, respectively in True-up of FY 2019-20.

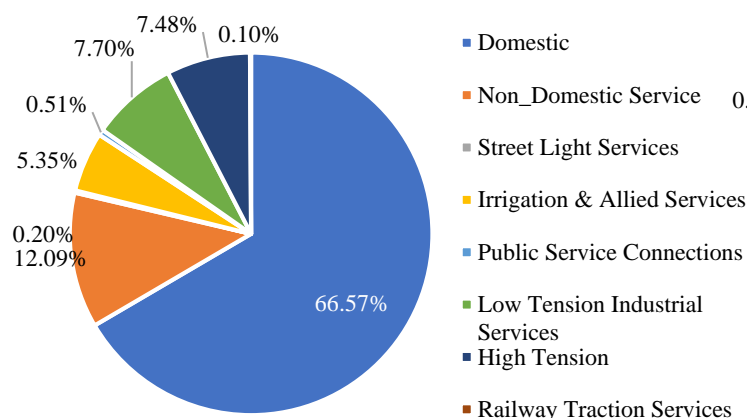
Connected load

4.2.12. As regard to the connected load, the Commission notes that in previous Tariff Order dated 20 March 2020, the Commission had directed the Discoms to get the category-wise connected load audited by 3rd Party and exhibit the same in the Audited Annual Accounts in future.

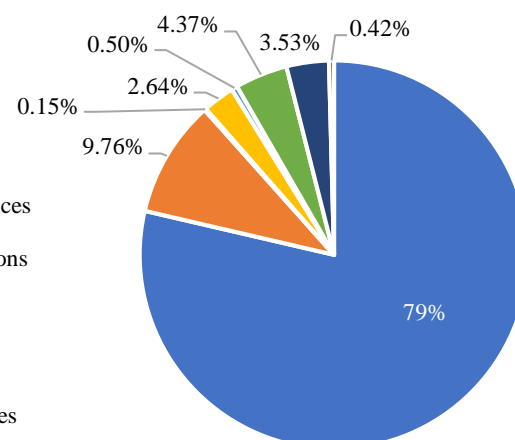
4.2.13. Accordingly, the Commission in present Tariff proceedings vide its data gap has asked the Discoms to provide the 3rd Party audited report. The Discoms in their reply (Letter No. 70 dated 28 January, 2021 from NBPDC & Letter No. 80 dated 29 January, 2021 from SBPDCL) stated that the category wise number of consumers and energy sales during FY 2019-20 has been verified and audited by the statutory auditor of the company. Discoms further stated that the connected load will be included in the Audited Annual Accounts of FY 2020-21. The Commission has noted the submission of the Discoms however, expresses its dissatisfaction over the non-compliance of aforesaid directive for FY 2019-20. The Commission hereby reiterates its direction that the Discoms shall get the category-wise connected load also audited by 3rd Party and exhibit the same in the Audited Annual Accounts from FY 2020-21 onwards.

4.2.14. The Commission notes that NBPDC and SBPDCL has claimed total connected load of 88,02,013 kW and 93,72,980 kW, respectively, for FY 2019-20. The Commission has analysed the category wise connected load for each of the Discoms as represent in the Figure given below:

Category Wise Connected Load of SBPDCL for FY 2019-20



Category Wise Connected Load of NBPDCCL for FY 2019-20



4.2.15. From the above figures, it is noted that out of the total connected load, the domestic category consumers contribute majority of share which is around 79% and 67% of total connected load for NBPDCCL and SBPDCL, respectively. The share of LT and HT category consumers stands at around 4% for NBPDCCL whereas for SBPDCL the share of LT and HT category consumers is around 8% and 7%, respectively.

4.2.16. For the purpose of True-up of FY 2019-20, the Commission approves connected load as submitted by the Petitioners as detailed in the Table Below:

Table 17: Connected Load (KW) approved in True-up for FY 2019-20

Category	NBPDCCL	SBPDCL	Total Connected Load (kW)
	Connected Load (KW)	Connected Load (KW)	
Domestic	69,21,189	62,39,565	131,60,754
Kutir Jyoti	5,95,038	1,88,886	7,83,924
Domestic Rural (DS-I)	43,19,966	23,35,509	66,55,475
Domestic Urban (DS II)	20,06,097	37,15,007	57,21,104
DS III	88	163	251
Non-Domestic Service	8,59,183	11,32,865	19,92,048
Non-Domestic (NDS I)	2,20,760	1,16,050	3,36,810
Non-Domestic (NDS II)	6,38,424	10,16,815	16,55,239
Contract Demand <0.5 kW	1,150	5,655	6,805
Contract Demand >0.5 kW	6,37,274	10,11,160	16,48,434
Street Light Services	12,969	19,001	31,970
Streetlight I	2,839	5,350	8,189
Streetlight II	10,130	13,651	23,781
Irrigation & Allied Services	2,32,774	5,01,513	7,34,287
IAS I	1,80,784	4,66,356	6,47,140

Category	NBPDCCL	SBPDCL	Total Connected Load (kW)
	Connected Load (KW)	Connected Load (KW)	
IAS II	51,991	35,157	87,148
Public Service Connections	43,731	47,949	91,680
Public Water Works	21,397	38,878	60,275
Har Ghar Nal	22,334	9,071	31,405
Low Tension Industrial Services	3,85,075	7,21,979	11,07,054
LTIS I (0-19 kW)	3,33,145	4,88,746	8,21,891
LTIS II (>19 kW - 74 kW)	51,930	2,33,233	2,85,163
High Tension	3,10,491	7,01,108	10,11,599
HTS I - 11 kV	2,13,868	3,33,635	5,47,503
HTS II - 33 kV	62,323	2,05,944	2,68,267
HTS III -132 kV	22,500	46,350	68,850
HTS IV - 220 kV	-	-	-
HTS IV - 33/11 Kv	11,800	1,15,179	1,26,979
Railway Traction Services	36,600	9,000	45,600
Sub – Total	88,02,013	93,72,980	181,74,993
Nepal	-	-	-
Sales to Other State	-	-	-
Sales to Sugar Mills	-	-	-
SLDC Deviation	-	-	-
Total	88,02,013	93,72,980	181,74,993

4.2.17. The Commission has approved the connected load for NBPDCCL and SBPDCL in Ture-up of FY 2019-20 as shown in the Table above.

Energy Sales

4.2.18. The Commission has analysed the submission made by the Discoms and observed a significant deviation in actual sales as compared to sales approved in MYT Order. Upon clarification sought, Discoms vide their data gap reply stated that the sales approved in MYT Order for FY 2019-20 were based on the projection of the Petitioners which in turn were based on the then existing trends and on-ground conditions expected to drive the demand of the consumers. However, the sales submitted for approval in present Petitions for FY 2019-20 is based on the actual consumption of the consumers of the Petitioners in FY 2019-20.

4.2.19. NBPDCCL submitted that the sales for FY 2019-20 were projected for a consumer base of 1.06 Crore in the MYT Order, whereas the actual sales of FY 2019-20 have been a result of the total consumer base of 1.01 Crore. Similarly, SBPDCL stated that the sales for FY 2019-20 were projected for a consumer base of 65.63 lakh in the MYT Order, whereas the actual sales of FY 2019-20 have been a result of the total consumer base of 57.89 lakh.

4.2.20. The Commission further observed significant reduction in sales of IAS -II & RTS category during FY 2019-20 as compared to sales in FY 2018-19. Upon clarification sought, Discoms stated that the number of consumers in the RTS category has reduced in FY 2019-20 as compared to FY 2018-19. The reduction is mainly because the RTS consumers are shifting to open access which has impacted their sales when compared to the previous years. Discoms further submitted that this migration has overall lead to decrease in HT sales and increase in cross subsidization. Discoms also clarified that the increase in number of IAS-I consumers as well as favourable weather for agricultural activities might have impacted the sales of IAS-II category consumers. Further, both the Discoms submitted that the sales to consumers is an uncontrollable parameter in line with the Regulation 9.1 of the MYT Distribution Regulation, 2018; as it is a factor of demand of the consumer. The relevant extract of the said Regulation is as reproduced below:

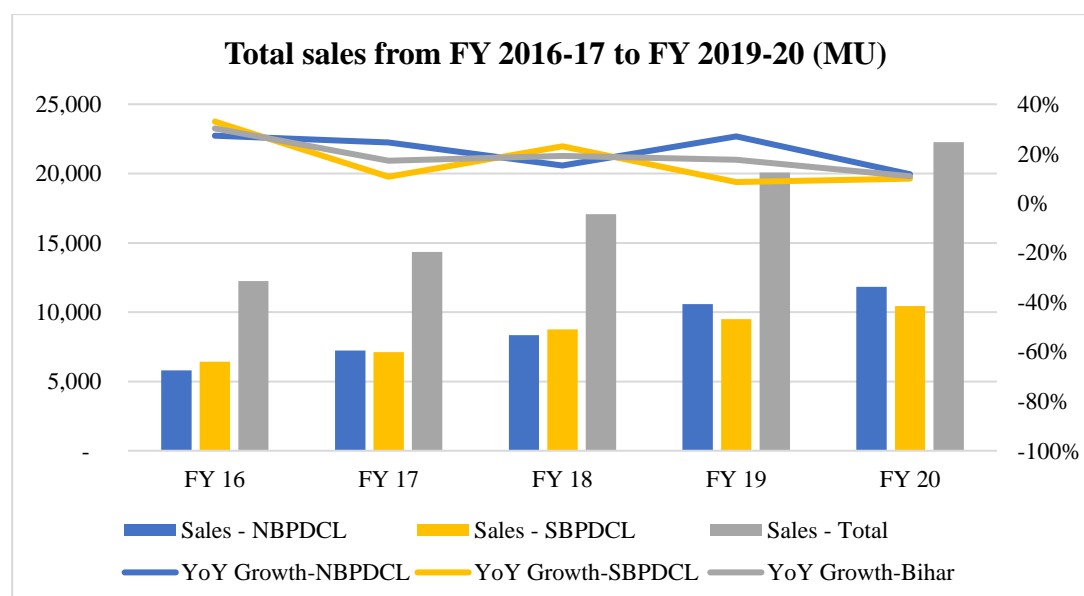
"9.1 The "uncontrollable factors" shall comprise but not limited to.....

(d) Variation in metered sales; if the Distribution Licensee has adequate power availability"

4.2.21. The Commission has verified the category-wise sales submitted by NBPDCCL and SBPDCL from their Audited Accounts for FY 2019-20 and found the them to be in order.

4.2.22. The Commission has analysed trend of the energy sales for NBPDCCL and SBPDCL since FY 2015-16 till 2019-20 as shown the figure below:

Figure 1: Growth in sales from FY 2016-17 to FY 2019-20

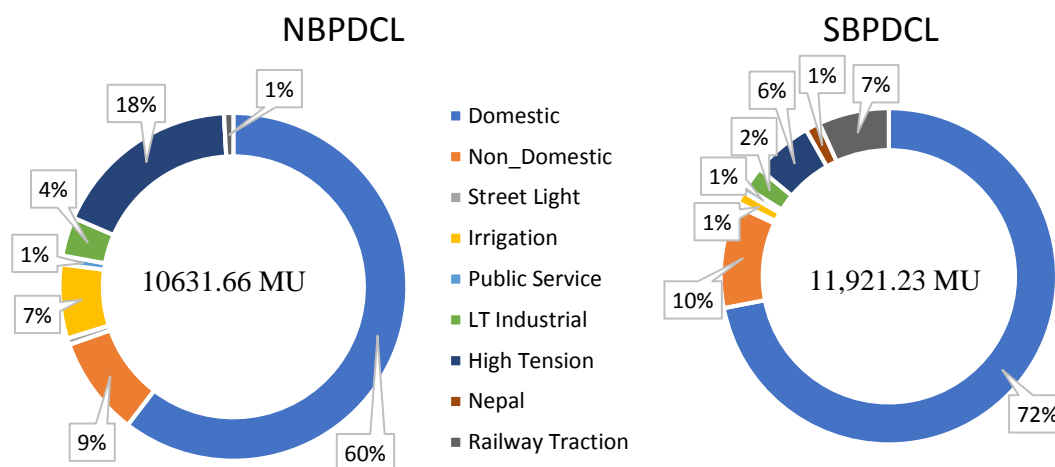


4.2.23. The sales for SBPDCL has increased from 5,807 MU in FY 2015-16 to 11,921.23 MU in FY 2019-20, resulting in 4-year CAGR of 19%. Similarly, the sales for NBPDCCL

have increased from 6,426 MU in FY 2015-16 to 10,631.66 MU in FY 2019-20, with a 4-year CAGR of 13%. Accordingly, overall 4-year CAGR for sales in Bihar is observed to be 16%. Further, the Commission observed that the energy sales for FY 2019-20 has increased by 12% and 10% for NBPDC and SBPDCL, respectively over previous year energy sales.

4.2.24. The category-wise sales mix for SBPDCL (11921.23 MU) and NBPDC (10631.66 MU) is as shown in the figure below:

Figure 2: Category wise sales mix of NBPDC and SBPDCL for FY 2019-20

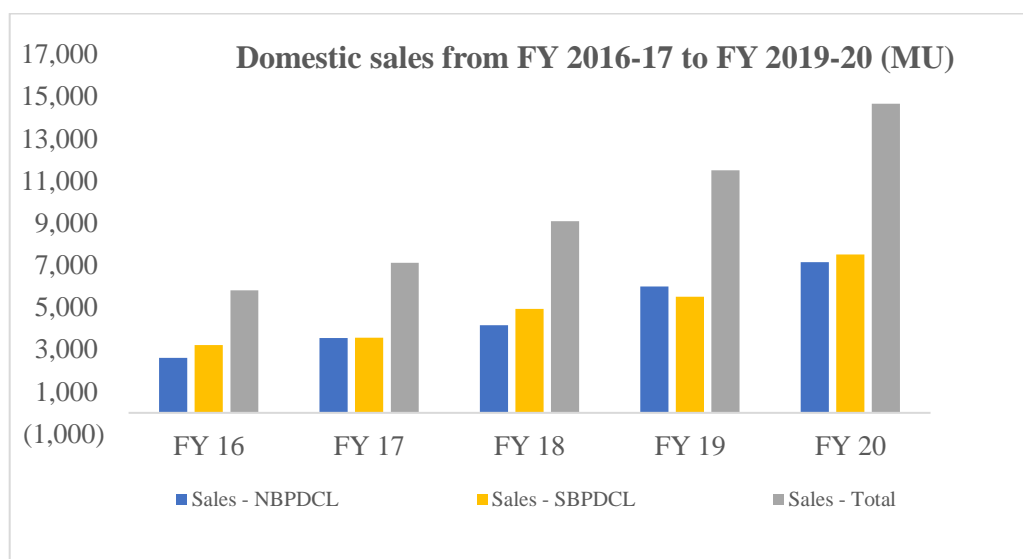


4.2.25. As seen from the figure above, the maximum energy consumption for both Petitioners pertains to domestic consumers which is around 60% for NBPDC and 72% for SBPDCL. HT consumption being a major cross-subsiding consumer category, contributes around 18% in the energy consumption of NBPDC and is contributing far lower of only 7% in the energy consumption of SBPDCL.

4.2.26. Further, the Commission has undertaken trend analysis for sales from FY 2015-16 to FY 2019-20 for major consumer categories as detailed in the subsequent paragraphs.

4.2.27. The Commission observed that energy sales in LT categories has significantly grown with y-o-y increase of 26% and 6% in FY 2019-20 for NBPDC and SBPDCL, respectively. Higher LT sales growth in NBPDC is mainly on account of y-o-y sales growth of 26% in domestic category. Similarly, higher LT growth in SBPDCL is mainly on account of y-o-y energy sales growth of 19%, 42% and 26% in domestic, IAS and LT-industrial categories, respectively.

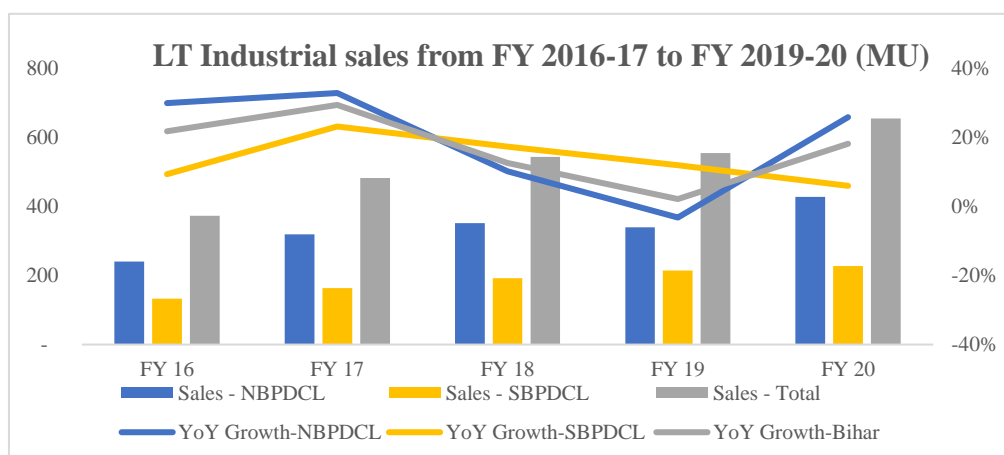
4.2.28. 5-year trend of energy sales for LT Domestic category for NBPDC and SBPDCL is shown in Figure below:



4.2.29. The LT Domestic category sales for NBPDC has increased from 2,607 MU in FY 2015-16 to 7,142 MU in FY 2019-20, resulting in 4 -year CAGR of 29%. Similarly, the LT Domestic sales for SBPDCL have increased from 3,209 MU in FY 2015-16 to 7,516 MU in FY 2019-20, with a 4-year CAGR of 24%. Accordingly, overall 4-year CAGR for LT Domestic sales in Bihar is observed to be 26%. The increase in domestic category sales is due to rural electrification, household electrification, Saubhagya schemes etc., and various initiatives taken by MoP and Discoms.

4.2.30. 5-year trend of sales for LT Industrial category for NBPDC and SBPDCL is shown in Figure below:

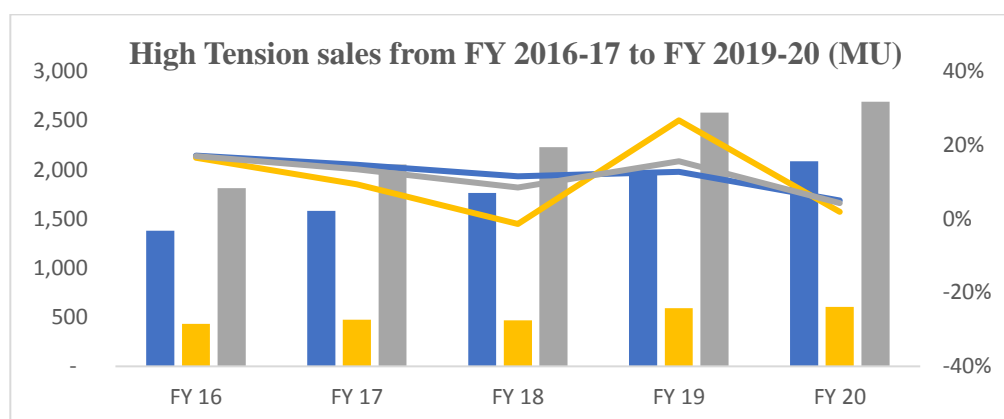
Figure 3:LT Industrial sales from FY 2016-17 to FY 2019-20



4.2.31. LT Industrial category sales NBPDC has increased from 240 MU in FY 2015-16 to 427 MU in FY 2019-20, resulting in a 5 -year CAGR of 18%. Similarly, the sales of SBPDCL have increased from 133 MU in FY 2015-16 to 227 MU in FY 2019-20, with a 5-year CAGR of 13%. Accordingly, overall 5-year CAGR for LT Industrial sales in Bihar is observed to be 16%.

4.2.32. 5-year trend for sales for HT Consumer category for NBPDCCL and SBPDCL is shown in Figure below:

Figure 4: HT sales from FY 2016-17 to FY 2019-20



4.2.33. High Tension category sales for NBPDCCL has increased from 1378 MU in FY 2015-16 to 2086 MU in FY 2019-20, resulting in a 4 -year CAGR of 11%. Similarly, the High-Tension category sales of SBPDCL have increased from 433 MU in FY 2015-16 to 604 MU in FY 2019-20, with a 4-year CAGR of 13%.

4.2.34. As per the Commission's Order dated 25 February 2019, kVAh billing was to be adopted for LTIS, PWV, HTS HTSS and RTS categories. SBPDCL in its data gap reply has clarified that the sales shown in Audited Account for FY 2010-20 under these categories are in kVAh. However, petitioner claimed sales in above category in kWh in its petition. Accordingly, SBPDCL in its data gap reply has submitted the revised sales, with actual sales in kWh for all categories.

4.2.35. The Commission notes that NBPDCCL has submitted the Energy Sales of LTIS, PWV, HTS HTSS and RTS categories in kVAh.

4.2.36. The Commission has verified Consumer category wise energy sales submitted by the by the DISCOMs and found the same in accordance with the Audited Annual account for FY 2019-20.

4.2.37. The Commission has observed that Petitioner has included sales of 49.58 MUs and 58.21 MUs for NBPDCCL and SBPDCL, respectively under head of SLDC deviation. In response to query sought by the Commission regarding nature of SLDC deviation, petitioners responded that SLDC deviation is the adjustment done by BSPTCL with the DISCOMs on account of UI deviation for the Railway Traction Services. It also includes the settlement undertaken by BSPTCL on account of Security Constrained Economic Dispatch. Petitioner has further submitted the document regarding claimed SLDC deviation.

4.2.38. On further analysis of Petitioner's submission, the Commission observed that adjustment done by the BSPTCL is on account of SCED (Security Constrained

Economic Dispatch) benefit received by NLDC as per CERC Order dated 11 September, 2019 under pilot on SCED (effective from 01.04.2019 to 31.03.2020) of Inter-State Generating Stations over pan India.

- 4.2.39. UI charges under SLDC deviation is on account of UI charges received from ERC (Bill raised by SLDC to ERC for 50 MW LTOA power from BRBCL) as per CERC DSM Regulation, 2014.
- 4.2.40. Further, sales to other states includes energy supplied to RUVNL under banking arrangement. The Commission has provided post facto approval for banking of Power with RUVNL in its Order dated 10 December 2019 in Case No. 29 of 2019.
- 4.2.41. The Commission, accordingly, approves the energy sales for the Petitioners in True-up for FY 2019-20 as detailed in the Table Below:

Table 18: Energy Sales approved in True-up for FY 2019-20, by the Commission

Category	NBPDC	SBPDCL	Total MkWh (MUs)
	Sales (MkWh)	Sales (MkWh)	
Domestic	7,515.56	7,141.73	14657.29
Kutir Jyoti	2,538.60	1,159.78	3698.384
Domestic Rural (DS-I)	3,420.72	2,973.50	6394.22
Domestic Urban (DS II)	1,556.22	3,008.40	4564.61
DS III	0.02	0.04	0.064
Non-Domestic Service	1,036.91	1,089.62	2126.53
Non-Domestic (NDS I)	149.37	243.26	392.62
Non-Domestic (NDS II)	887.54	846.36	1733.90
Contract Demand <0.5 kW	1.74	5.49	7.23
Contract Demand >0.5 kW	885.81	840.87	1726.67
Street Light Services	34.67	71.55	105.76
Streetlight I	5.78	12.37	18.14
Streetlight II	28.43	59.19	87.62
Irrigation & Allied Services	114	814.58	929.05
IAS I	80	735.80	815.39
IAS II	34.88	78.79	113.66
Public Service Connections	51.62	86.48	138.10
Public Water Works	21.19	71.43	92.62
Har Ghar Nal	30.43	15.05	45.48
Low Tension Industrial Services	227.05	384.34	611.38
LTIS I (0-19 kW)	200.92	266.24	467.15
LTIS II (>19 kW - 74 kW)	26.13	118.10	144.22
High Tension	604.09	2,020.88	2624.97
HTS I - 11 kV	383.27	645.73	1029.00
HTS II - 33 kV	118.48	404.42	522.90
HTS III -132 kV	53.11	170.01	223.12

Category	NBPDCCL	SBPDCL	Total MkWh (MUs)
	Sales (MkWh)	Sales (MkWh)	
HTS IV - 220 kV	-	-	0
HTS IV - 33/11 kV	49.23	800.72	849.95
Railway Traction Services	146.30	101.01	247.31
Sub – Total	9730	11,710.20	21440.2
Nepal	708.02	-	708.02
Sales to Other State	130.18	152.82	283
Sales to Sugar Mills	13.67	-	13.67
SLDC Deviation	49.58	58.21	107.79
Total	10,631.66	11,921.23	22552.89

4.2.42. Accordingly, the Commission has approved Energy Sale of 10,631.66 MUs and 11,921.23 MUs for NBPDCCL and SBPDCL in Ture-up of FY 2019-20.

4.3. Distribution losses

NBPDCCL & SBPDCL Submission:

- 4.3.1. The Commission in its MYT Order dated 25th February 2019 had set AT&C loss target of 15% for FY 2019-20 to FY 2021-22 based on agreed losses under UDAY.
- 4.3.2. NBPDCCL submitted that it had been able to bring down the AT&C losses by 12.73% in a span of 3 years (FY 2016-17 to FY 2018-19). Similarly, SBPDCL has brought down the AT&C losses by 14.36% in a span of 3 years (FY 2016-17 to FY 2018-19). 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. However, due to the impact of COVID-19 in the last quarter of FY 2019-20, the AT&C loss has seen a significant increase in FY 2019-20. Further, 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 & SBPDCL serves more than 100.9 lakh and 58 lakh of consumers, respectively of which ~90% belong to domestic category. The impact of the extended LT networks, especially in rural areas, directly leads to increase in losses on the low voltage network.
- 4.3.3. Petitioners further submits that it has submitted a revised roadmap to Ministry of Power, Govt. of India in regard to reduction in AT&C from FY 2020-21 onwards in the state considering the actual as-is situation.

Distribution Losses:

- 4.3.4. The Commission has approved the distribution loss of 15% in its MYT Order dated 25 February 2019 for FY 2019-20 and APR Order dated 20 March 2020 for FY 2019-20, in line with the Distribution loss trajectory under UDAY scheme. However, the actual

distribution losses for the Petitioners is higher than the approved loss trajectory as shown in Table below:

Table 19: Distribution Loss for FY 2019-20, as claimed by NBPDCCL & SBPDCL

Distribution Company	Approved in MYT Order for FY 2019-20	Approved in APR Order for FY 2019-20	Actual Claimed for FY 2019-20	As per UDAY MoU
NBPDCCL	15%	15%	21.62%	15%
SBPDCL	15%	15%	27.89%	15%

- 4.3.5. The Petitioners submitted that difference in the loss target and the actual loss levels is practically impossible to achieve in the given period, and therefore this shall add on to the burden of the DISCOM.
- 4.3.6. Petitioners requested the Commission to 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 2019-20.
- 4.3.7. Petitioners also submitted that the distribution losses arrived for FY 2019-20 as shown in the above Table is based on the circle wise losses.

Collection Efficiency:

- 4.3.8. Based on the circle wise collection efficiency, the Petitioners have computed the collection efficiency for FY 2019-20 as shown in Table Below:

Table 20: Collection Efficiency for FY 2019-20, as claimed by NBPDCCL & SBPDCL

Distribution Company	Approved in MYT Order for FY 2019-20	Actual Claimed for FY 2019-20
NBPDCCL	100%	93.50%
SBPDCL	100%	79.24%

- 4.3.9. Petitioners submitted that due to the imposition of Lockdown at the end of the last quarter in FY 2019-20, the revenue collection from government debtors was hugely impacted leading to reduction in collection efficiency.
- 4.3.10. Based on the above figures, the Petitioners have calculated the following AT&C loss for the year FY 2019-20:

Table 21: AT&C losses for FY 2019-20, as claimed by NBPDCCL & SBPDCL

Distribution Company	Approved in MYT Order for FY 2019-20	Actual Claimed for FY 2019-20
NBPDCCL	15%	26.71%