segregation of network costs is a pre- requisite for arriving at the voltage-wise cost of supply.

7.5.2. The Commission has thus computed the voltage wise cost of supply following the methodology suggested by the APTEL.

7.6. Determination of Voltage-wise Technical losses

Petitioners' submission

7.6.1. The discoms have submitted that the Transmission and Distribution losses in a system comprises of two separate components – Technical Losses and Commercial Losses.

a. Technical losses occur naturally and consist mainly of power dissipation in electricity system components such as transmission and distribution lines, and transformers.

b. Commercial losses are caused by actions external to the power system and consist primarily of electricity theft, non-payment by customers, and errors in accounting and record-keeping. Since the rationale behind these two components is quite distinct, quantifying them separately is imperative for arriving at meaningful conclusions.

7.6.2. At each voltage level, the Technical losses consist of two major components: Transmission losses which refer to the losses in the current carrying wires; and Transformation losses which refer the losses incurred during the voltage transformation in the system. Aggregating the losses in these two elements at each voltage level would give the technical loss at that level. The losses which remain would be the commercial losses.

7.6.3. The Discoms further submitted that based on certain assumptions after observing the available sample feeder data available, technical losses at various voltage levels for FY 2021-22 are assumed considering the projected roadmap for reduction of AT&C loss submitted to Ministry of Power, Government of India (MoP, GoI) as shown in the Tables below.

7.6.4. NBPDCL have submitted that it has considered loss for 220 kV and 132 kV level as 3.66% while SBPDCL taken the same as 3.00%. however, both NBPDCL and SBPDCL have considered 220 kV and 132 kV loss as 3.00% in Table of their petition (Table no 109 for NBPDCL and Table no 110 for SBPDCL).

Table 301: Voltage-wise Technical Losses Considered by SBPDCL for FY 2021-22

Sr.No	Voltage Level (kV)	Technical Loss (%)	Cumulative Loss (%)
1.	220/132	3.00%	3.00%
2.	33	4.91%	7.76%

3.	11	5.98%	13.28%
4.	0.4	8.72%	22.00%

Table 302: Voltage-wise Technical Losses Considered by NBPDCL for FY 2021-22

Sr.No	Voltage Level (kV)	Technical Loss (%)	Cumulative Loss (%)
1.	220/132	3.00%	3.00%
2.	33	4.06%	4.06%
3.	11	6.21%	12.72%
4.	0.4	7.28%	20.00%

Commission's analysis:

Fixation of Voltage-wise Technical Loss:

7.6.5. The voltage-wise technical losses indicated by the Discoms were based on the limited field study / sample data only. However, the Discoms have computed the voltage wise cost of supply as per the projected roadmap for reduction of AT&C losses submitted to MoP, GoI for FY 2021-22.

7.6.6. The Commission sought details of the sampled feeder data used for calculation of technical losses and the above-mentioned roadmap submitted by the DISCOMs to MoP, GoI. The Discoms provided sampled data of technical losses for 33 kV, 11 kV and 0.4 kV for few feeders for some time periods of energy consumption in FY 2019-20. Additionally, letters written by the Discoms to the Secretary, MoP, GoI regarding compliance of Tranche-II of "Special Long-Term Transition Loan in exemption of UDAY Limit Policy" was submitted to the Commission. Annexures to these letters containing the extract of a report for the above-mentioned roadmap was submitted.

7.6.7. No detailed study has been made to estimate the technical losses based on the feeder wise load data, conductor size and length etc. APTEL in its guidelines has indicated that the T&D loss as approved by the Commission in its Tariff Order has to be considered while computing the voltage - wise cost of supply. Due to lack of data for segregation of technical and commercial losses, the Commission could not separately fix the technical and commercial loss level within the total distribution loss approved for FY 2021-22. It is considered appropriate to assume technical and commercial loss levels for realistic assessment of Cost of Supply within overall T&D loss level, i.e., Transmission Loss of 3.00% as approved for BSPTCL and Distribution Loss of 15% approved to the DISCOMs by the Commission for FY 2021-22.

7.6.8. The Commission has considered the following voltage-wise technical loss to DISCOMs for FY 2021-22 for computing voltage wise cost of supply:

Table 303: Voltage-wise Technical Losses Considered for SBPDCL & NBPDCL for FY 2021-22

Sr. No	Voltage Level (kV)	Technical Loss (%)	Cumulative Loss (%)
1.	State Transmission losses (220/132)	3.00%	3.00%
2.	33 kV	4.00%	6.88%
3.	11 kV	5.00%	11.54%
4.	0.4 kV	6.80%	17.55%

7.7. Computation of Voltage-wise Cost of Supply

Petitioners' submission:

7.7.1. The Discoms have submitted that the voltage wise sales have been arrived considering the projected energy sales for FY 2021-22, across various categories at the respective voltages as mentioned in the Table below:

Table 304: Classification of Categories based on Voltage of power supply

Sr. No	Voltage Level (kV)	Technical Loss (%)
1.	220/132	HTS-III, Railways, Nepal
2.	33 kV	HTS-II, HTSS
3.	11 kV	HTS-I
4.	0.4 kV	Domestic, Non-Domestic, Agriculture and Others

7.7.2. SBPDCL & NBPDCL have separately computed the voltage wise cost of supply for FY 2021-22 considering the energy sales projected by them and the T&D losses assumed at various voltages. Further, the projected costs, i.e., power purchase costs and network costs have been apportioned to each of the voltage categories of energy sale and based on the same the voltage wise cost of supply is computed. The voltage wise cost of supply computed for FY 2021-22 are as given in the Tables below:

Table 305: Cost of Supply at different Voltage Levels of SBPDCL for FY 2021-22

Sr.No	Voltage Level (kV)	Cost of power purchase (INR/kWh)	Network cost (INR/kWh)	Cost of supply (INR/kWh)
1.	220/132	4.99	1.91	6.91
2.	33 kV	5.24	2.01	7.24
3.	11 kV	5.55	2.13	7.67
4.	0.4 kV	6.13	2.35	8.48

Table 306: Cost of Supply at different Voltage Levels of NBPDCL for FY 2021-22

Sr.No	Voltage Level (kV)	Cost of power purchase (INR/kWh)	Network cost (INR/kWh)	Cost of supply (INR/kWh)

1.	220/132	4.89	2.10	6.98
2.	33 kV	5.09	2.18	7.27
3.	11 kV	5.41	2.32	7.73
4.	0.4 kV	5.88	2.52	8.40

Commission's analysis

7.7.3. The Commission has computed the voltage wise cost of supply based on the energy sales and T&D losses approved for FY 2021-22 in a combined manner for both the Discoms, as the common tariff rates have been approved for both Discoms for FY 2021-22.

7.8. Energy Sales approved for FY 2020-21

7.8.1. The Commission has considered the approved energy sales for FY 2020-21 for Discoms and segregated as per voltage-wise as given in the Table below:

Table 307: Voltage wise Energy Sales (MUs) approved for FY 2021-22

Sr.No	Voltage and Category	Sales approved for SBPDCL (MUs)	Sales approved for NBPDCL (MUs)	Total (MUs)
A	**220/132**			
	HT Industry (HTS-III)	236.51	59.77	296.76
	Nepal	-	151.61	151.61
	Sub – Total	**236.51**	**211.38**	**564.30**
B	**33 kV**			
	HTS-II	511.53	118.23	629.76
	HTSS	836.00	50.72	886.71
	Sub – Total	**1,347.53**	**168.95**	**1,516.47**
C	**11 kV**			
	HTS-I	721.24	416.00	1137.24
	Sub – Total	**721.24**	**416.00**	**1,137.24**
D	**0.4 kV**			
	Domestic, Non-Domestic, Agriculture and Others	11,122.80	10,748.24	21754.64
	Total (A+B+C+D)	**13,428.07**	**11,544.57**	**24,972.65**

7.9. Voltage-wise Technical Loss considered for FY 2020-21:

7.9.1. As per guidelines enumerated in APTEL Judgement, Distribution system technical losses have to be assessed by carrying out system studies based on available data. Since the DISCOMs have not provided such data, the Commission has assumed the technical losses at various voltage levels based on approved losses as shown in the Table above.

7.9.2. As stated in para 33 of APTEL Judgement dated 10 May, 2012, the voltage-wise commercial losses are to be arrived at by segregating the total commercial losses in proportion to grossed up sales (Actual consumption + technical loss) voltage-wise.

7.9.3. In para 34 of APTEL Judgement it is reiterated that the power purchase cost is to be segregated for different voltage levels taking into account the transmission and distribution losses, both commercial and technical, for relevant voltage level and upstream system. Thus the losses (technical) at 33 kV shall be the losses at that voltage and also at upstream 132 kV voltages, the losses (technical) at 11 kV shall be the losses at that voltage and also of upstream 33 kV voltage and 132 kV voltage level and similarly for LT voltage.

7.9.4. The technical Losses have been arrived on the basis of the formulae given in the following table:

Table 308: Formulae for arriving at the technical losses at various voltage levels

Voltage Level (kV)	Sales (MU)	Volt. Wise Tech. Loss (%)	Energy Input (MU)	Tech. Losses (MU)
1	**2**	**3**	**4**	**5**
220/132	A	**w**	=A/(1-w%)	=(4)-(2)
33 kV	B	**x**	=B/(1-x%)(1-w%)	=(4)-(2)
11 kV	C	**y**	=C/(1-y%)(1-x%)(1-w%)	=(4)-(2)
0.4 kV	D	**z**	=D/(1-z%)/(1-y%)(1-x%)(1-w%)	=(4)-(2)
Total	**(A+B+C+D)**			

7.9.5. The technical losses and commercial Losses are computed as given in the Tables below:

Table 309: Computation of Technical losses at various voltage levels

Sr. No.	Voltage Level (kV)	Voltage-wise Technical losses (%)	Cumulative loss (%)	Energy sale (MUs)	Energy input (MUs)	Technical loss (MUs)
1	**2**	**3**	**4**	**5 = (3+4)**	**6**	**7= (5+6)**
1	220/132	3.00%	3.00%	564.30	581.75	17.45
2	33 kV	4.00%	6.88%	1516.47	1628.52	112.04
3	11 kV	5.00%	11.54%	1137.24	1285.54	148.30
4	0.4 kV	6.80%	17.55%	21754.64	26385.75	4631.11
	Total			**24972.65**	**29881.55**	**4908.90**

Table 310: Computation of Commercial losses at various voltage levels

Sr. No.	Voltage Level (kV)	Energy sale (MUs)	Technical loss (MUs)	Sales + Tech. Loss (MUs)	Commercial loss (MUs)	Energy sales + tech +commercial loss (MUs)
1	**2**	**3**	**4**	**5**	**6**	**7= (6-5)**
1	220/132	564.30	17.45	581.75	8.46	590.21
2	33 kV	1,516.47	112.04	1,628.52	22.74	1651.25
3	11 kV	1,137.24	148.30	1,285.54	17.05	1302.59
4	0.4 kV	21,754.64	4,631.11	26,385.75	326.16	26711.91
	Total	**24,972.65**	**4,908.90**	**29,881.55**	**374.41**	**30255.96**

Note: 1. Commercial losses are obtained by reducing the sales + technical losses from the energy input at state periphery (30255.96-29881.35=374.41 MUs). The commercial losses so arrived are allocated in proportion to the sales and the technical losses to each voltage level.

2. Energy required at state transmission periphery is at 30255.96 MUs as worked out in Table 235, Energy requirement

7.10. Allocation of Power Purchase Cost for FY 2021-22

7.10.1. The power purchase cost (excluding PGCIL Losses) has been allocated for different voltage levels taking into account the State Transmission loss and Distribution loss, (both commercial and technical) for the relevant voltage level and upstream as per the methodology indicated in APTEL Judgement.

7.10.2. Out of the total power purchase of 30,699.66 MU approved for both the Discoms, on which CTU loss as approved in Energy Balance of FY 2020-21 . Therefore, the CTU loss works out to 443.70MUs.

7.10.3. The Commission, after deducting the regional transmission losses from the total power purchase computed the average power purchase cost per unit as detailed below:

Table 311: Average Power Purchase Cost(including Discom to Discom sales/adjustment)

Sr. No.	Particulars	SBPDCL	NBPDCL	Total
1	Gross Power Purchase (MU)	16,525.01	14,174.65	30,699.66
2	PGCIL Loss (MU)	238.68	205.01	443.70
3	Discoms to Discoms sales (MU)	-	-	-
4	**Net Power availability at transmission periphery (MU) (1-2+3)**	**16,286.32**	**13,969.64**	**30,255.96**
5	Total Power Purchase Cost (Rs. Crore) (including PGCIL charges)	6,044.65	7,314.59	13,359.24
6	Discom to Discom sales/adjustment (Rs. Crore)	-	-	-
7	Net Power Purchase cost (Rs. Crore) (5+6)	6,044.65	7,314.59	13,359.24
8	**Average Power Purchase Rate (Rs./kWh) (7/4)*10**	**3.71**	**5.24**	**4.42**

Table 312: Allocation of power purchase cost

Sr. No.	Voltage Level (kV)	Energy Sale (MUs)	Energy Sales+ Technical loss + Comml. loss (MUs)	Voltage-wise Power Purchase Cost (Rs. Crore)	Cost of Power per unit sale of Energy (Rs./kWh)
1	**2**	**3**	**4**	**5**	**6 = (5÷3)**
1	220/132	564.30	590.21	260.60	4.62
2	33 kV	1516.47	1651.25	729.10	4.81
3	11 kV	1137.24	1302.59	575.15	5.06
4	0.4 kV	21754.64	26711.91	11794.40	5.42
	Total	**24972.65**	**30255.96**	**13359.24**	**5.35**

7.11. Allocation of Network Cost for FY 2021-22

7.11.1. The network costs approved by the Commission for FY 2021-22 are as given in table below:

Table 313: Network cost approved for FY 2021-22 (Rs Crore)

Sr. No.	Particulars	SBPDCL	NBPDCL	Total
1	Employee expenses	602.42	382.08	984.50
2	R&M expenses	236.51	230.45	466.96
3	A&G expenses	141.85	163.42	305.27
4	Holding company expenses	25.22	23.99	49.21
5	Depreciation	257.54	215.30	472.85
6	Interest on loan	289.32	340.46	629.78
7	Other finance charges	69.77	42.44	112.21
8	Return on equity	250.95	264.87	515.82
9	Interest on SD	30.85	19.70	50.54
10	Interest on working capital	12.94	24.54	37.48
11	**Total (1 to 10)**	**1917.38**	**1707.25**	**3624.63**
12	BSPTCL Transmission cost			1130.68
13	SLDC Charges			10.40
14	BGCL Transmission Cost			452.62
	Total cost (11 to 14)			**5218.33**

7.11.2. The APTEL in its Judgement has indicated the method for allocation of network costs at different voltage levels as under:

"………… all other cost such as Return on Equity, interest on loan, interest on working capital and O&M costs can be pooled and apportioned equitably, on pro- rata basis to all the voltage level to determine the cost of supply".

7.11.3. In line with the methodology adopted in the previous Tariff Order, the Commission has apportioned the network cost of Rs. 5218.33 Crore arrived in the above table among the consumers of various voltage level i.e., 220/132 kV, 33 kV, 11 kV and LT levels, equitably on pro-rata basis as detailed below:

Table 314: Allocation of network cost

Sr. No.	Voltage Level (kV)	Energy Sale (MUs)	Energy Sales+ Technical loss + Comml. loss (MUs)	Voltage-wise Network Cost (Rs. Crore)	Network cost per unit sale of Energy (Rs./kWh)
1	**2**	**3**	**4**	**5**	**6 = (5+3)**
1	220/132	564.30	590.21	101.80	1.80
2	33 kV	1516.47	1651.25	284.80	1.88
3	11 kV	1137.24	1302.59	224.66	1.98
4	0.4 kV	21754.64	26711.91	4607.08	2.12
	Total	**24972.65**	**30256.00**	**5218.33**	**2.09**

7.12. Cost of supply at different voltage levels

7.12.1. Based on the power purchase cost and network cost as above, the cost of supply at different voltage levels is arrived at as table below:

Table 315: Cost of supply at different voltage levels approved for FY 2021-22 for Discoms

Sr. No.	Supply voltage	Cost of Power Purchase (Rs./unit)	Network cost (Rs./unit)	Cost of supply (Rs./unit)
1	**2**	**3**	**4**	**5=(3+4)**
1	220/132	4.62	1.80	6.42
2	33 kV	4.81	1.88	6.69
3	11 kV	5.06	1.98	7.03
4	0.4 kV	5.42	2.12	7.54
	Total	5.35	2.09	7.44

7.12.2. The Commission is of the view that in the absence of actual data of voltage-wise technical losses as well as voltage-wise network costs, the voltage- wise cost of supply worked out based on above methodology as suggested by the APTEL will not be a true reflection of actual voltage-wise cost of supply. There is a need to work out the voltage-wise cost of supply in a more scientific manner, considering the actual data of voltage-wise technical loss levels derived from field studies and in accordance with the methodology suggested by the Commission in the BERC (Multi Year Distribution Tariff) Regulations, 2018.

7.12.3. The Commission reiterates its earlier directive to the DISCOMs to undertake a detailed study to estimate the technical loss levels at each voltage level and compute the voltage-wise cost of supply for FY 2022-23 and include the same in next tariff petition, keeping in view the methodology suggested in BERC (Multi Year Distribution Tariff) Regulations, 2018.

8. Wheeling Charges and Open Access Charges

8.1. Introduction

8.1.1. The Commission has been computing the wheeling and open access charges for both the Discoms combinedly in its earlier Tariff Orders, since the Retail Tariffs are common/uniform to all the consumers across the State of Bihar. The Commission, accordingly, has determined the Wheeling and Open Access charges for both the Discoms combinedly for FY 2021-22 and in accordance with the BERC (Terms and Conditions of Intra-State Open Access) Regulation, 2018 dated 13 July, 2018.

8.2. Wheeling Charges

Petitioners' submission:

8.2.1. The Discoms have submitted that till date complete segregation of accounts between Wheeling and Retail Supply function has not yet taken place. Thus, ARR proposals for Wheeling and Retail Supply function is submitted on the basis of an allocation statement prepared by the Discoms based on their best judgement and in line with the approach followed by the Commission in its previous Tariff Orders. The Discoms have submitted that in the instant petition, they have considered the following allocation for calculating/segregating its wire and retail supply business and the total costs (net ARR) of both the Discoms are segregated into wire business and retail supply business.

Table 316: ARR segregation submitted by the Petitioner for FY 2021-22

Sl. No.	BIHAR	Total Fixed Cost	Assumption		33kV Wire cost		11kV	
			Wire Business	Retail Supply	Wire Business	Retail Supply	Wire Business	Retail Supply
1	Power purchase cost	16,336.08	0%	100%	-	8,168.04	-	8,168.04
	Treatment of Surplus Power	2,900.66	0%	100%	-	1,450.33	-	1,450.33
2	PGCIL & other Transmission charges	1,004.17	0%	100%	-	502.09	-	502.09
3	State Transmission charges	2,028.24	0%	100%	-	1,014.12	-	1,014.12
4	O&M Expenses	-			-	-	-	-
i)	Employee Cost	1,178.95	60%	40%	353.68	235.79	353.68	235.79
ii)	R&M expenses	429.93	90%	10%	193.47	21.50	193.47	21.50
iii)	A&G expenses	363.57	50%	50%	90.89	90.89	90.89	90.89
5	Share of Holding Company expenses	53.66	60%	40%	16.10	10.73	16.10	10.73
6	Depreciation	499.85	90%	10%	224.93	24.99	224.93	24.99
7	Interest and Finance charges	727.13	90%	10%	327.21	36.36	327.21	36.36

8	Interest on working capital	56.20	10%	90%	2.81	25.29	2.81	25.29
9	Return on equity	576.85	90%	10%	259.58	28.84	259.58	28.84
10	Income Tax	-	0%	100%	-	-	-	-
11	Interest on security deposit	50.54	0%	100%	-	25.27	-	25.27
12	Bad debts (if any)	-	0%	100%	-	-	-	-
13	Contingency reserves (if any)	-	0%	100%	-	-	-	-
14	Deposit for RPO Obligation	-			-	-	-	-
15	Total Revenue Requirement	20,404.52			1,468.68	8,733.58	1,468.68	8,733.58
16	Less: Non-tariff income	713.87	10%	90%	35.69	321.24	35.69	321.24
17	**Aggregate Revenue Requirement**	**19,690.65**			**1,432.98**	**8,412.34**	**1,432.98**	**8,412.34**

8.2.2. It is further submitted that the wheeling charges have been computed on the basis of total projected costs of their distribution wire business and the total energy expected to be wheeled through their distribution network. The average per unit wheeling charge for 33 KV level is calculated as shown in the table below:

Table 317: Wheeling charges for 33 kV voltage level proposed for FY 2021-22

Sl. No	Particulars	Unit	FY 2021-22
1	Energy Input into 33 kV System	MUs	31,608.29
2	Total Distribution Cost	Rs Crores	2,865.97
3	Distribution cost for 33 kV voltage levels (assuming 50% of item 2)	Rs Crores	1,432.98
4	Wheeling charges for 33 kV voltage level (item 3÷1)	Paisa/kWh	0.45

8.2.3. The wheeling charges calculated by the Discoms cost has been computed for 11 kV level as shown in the table as below:

Table 318: Wheeling charges for 11 kV voltage level proposed for FY 2021-22

Sl. No	Particulars	Unit	FY 2021-22
1	Energy Input into 33 kV System	MUs	31,608.29
2	Losses in 33 kV (5%)	%	1,516.47
3	Energy sales in 33 kV system as approved by the Commission	MU	71.46
4	Energy input into 11 kV system [1-(2+3)]	MU	30,020.36
5	Total Distribution Cost	Rs Crores	2,865.97

6	Distribution cost for 11 kV voltage levels (assuming 50% of item 5)	Rs Crores	1,432.98
7	Wheeling charges for 11 kV voltage level (item 6÷4)	Paisa/kWh	0.48

Commission's analysis:

8.2.4. The net distribution ARR for FY 2021-22 for both the Distribution licensees as approved in this Order is Rs.17,962.43 Crore (Rs. 9,562.85 Crore for SBPDCL and Rs. 8,399.58 Crore for NBPDCL). The segregation of cost components into wire and retail supply business has been done as per the approved allocation matrix in the previous Tariff Order dated 20 March, 2020. The distribution ARR approved is segregated into wires business and retail supply business as per the matrix as shown in Table below:

Table 319: Segregation of cost components into wire and retail supply businesses approved for FY 2021-22

Sl. No.	Particular	Total Cost (SB+NB)	Allocation Matrix		Segregation of Expense	
			Wire Business	Retail Supply	Wire Business	Retail Supply
1	Power purchase cost (including Transmission Charges and SLDC Charges)	14,952.94	0%	100%	-	14952.94
2	O&M Expenses					
3	Employee Cost	984.50	60%	40%	590.70	393.80
4	R&M expenses	466.96	90%	10%	420.27	46.70
5	A&G expenses	305.27	50%	50%	152.63	152.63
6	Share of Holding Company expenses	49.21	60%	40%	29.53	19.69
7	Depreciation	472.85	90%	10%	425.56	47.28
8	Interest on loan	629.78	90%	10%	566.80	62.98
9	Other Interest and Finance charges	112.21	10%	90%	11.22	100.99
10	Interest on working capital	37.48	10%	90%	3.75	33.74
11	Return on equity	515.82	90%	10%	464.24	51.58
12	Interest on security deposit	50.54	0%	100%	0.00	50.54
13	**Total Revenue Requirement**	**18,577.58**			**2,664.70**	**15,912.87**
14	Less: Non-tariff income	615.15	10%	90%	61.52	553.64
15	**Aggregate Revenue Requirement**	**17,962.43**			**2,603.19**	**15,359.24**

8.2.5. The wheeling charges have been computed on the basis of total approved costs for distribution wire business and the total energy expected to be wheeled through their distribution network. In the absence of segregated data on costs of operation of 33 kV and 11 kV network, it has been assumed that the two costs are equal. This methodology is being adopted as approved by the Commission in previous tariff Order dated 20 March, 20202. The wheeling charges worked out for 33 kV voltage level are given in the table below:

Table 320: Wheeling charges for 11 kV voltage level approved for FY 2021-22

Sl. No	Particulars	Unit	FY 2021-22
1	Energy Input into 33 kV System	MUs	29,201.22
2	Total Distribution Cost	Rs Crores	2603.19
3	Distribution cost for 33 kV voltage levels (assuming 50% of item 2)	Rs Crores	1301.59
4	Wheeling charges for 33 kV voltage level (item 3÷1)	Paisa/kWh	45

8.2.6. The wheeling charges determined for 11 kV voltage level are as given in table below:

Table 321: Wheeling charges for 11 kV voltage level approved for FY 2021-22

Sl. No	Particulars	Unit	FY 2021-22
1	Energy Input into 33 kV System	MUs	29,201.22
2	Losses in 33 kV (4%)	%	1,678.20
3	Energy sales in 33 kV system as approved by the Commission	MU	1,168.05
4	Energy input into 11 kV system [1-(2+3)]	MU	26,354.97
5	Total Distribution Cost	Rs Crores	2,603.19
6	Distribution cost for 33 kV voltage levels (assuming 50% of item 2)	Rs Crores	1,301.59
7	Wheeling charges for 33 kV voltage level (item 3÷1)	Paisa/kWh	49

8.2.7. The Commission approves wheeling charges at 45 paisa/kWh for 33 kV voltage level and at 49 paisa/kWh for 11 kV voltage level for the FY 2020-21.

8.3. Open Access Charges

8.3.1. The Commission opines that the HT consumers should be provided a facilitative open access framework for procurement of power from sources other than that available within the State. For Open access to become a feasible option for HT consumers open access charges should be rational so that the cost of delivered power (from sources other than within the State) is comparable to retail tariff.

8.3.2. Pursuant to Section 39, 40 and 42 and all other enabling provisions of the Electricity Act, 2003, the Commission notified the "Terms and Conditions for open access"

Regulations on 20th May, 2006 and through these regulations introduced open access in phases in Bihar consumers having a contract demand of 1 MW and above are made eligible for open access in transmission and distribution system. The Commission repealing the aforesaid regulations, has notified new regulations namely BERC (Terms and Conditions of Intra-State Open Access) Regulations, 2018.The consumer who seeks open access in accordance with these regulations will have to pay transmission charges, wheeling charges, cross subsidy surcharge, additional surcharge, reactive energy charges, standby charge and SLDC charges. The applicability of these charges to any open access consumer shall be as provided in the regulations for open access. However, no transmission charges are payable in case of open access transaction of renewable energy generated from solar and wind sources of energy.

8.4. Transmission Charges

8.4.1. The Commission has approved Rs.1583.30 Crore (Rs. 1130.68 Crore for BSPTCL and Rs. 452.62 Crore for BGCL) towards transmission charges for FY 2021-22 in respective Tariff Order dated 19 March, 2021.

a) Transmission Charges for Long/Medium Term Open Access

8.4.2. Monthly transmission charges leviable for Long/Medium Term open access customer as per BERC (Terms and conditions of intra state open access) Regulations 2018 shall be computed as per the following formula:

Monthly Transmission charges=ATC/SAC x 12
Where,
ATC = Annual Transmission Charges determined by the Commission for the State Transmission Systems in Rs. Crore
SAC = Sum of Contracted Capacities of Power to the State in MW

8.4.3. Regulation 19 (2) (a) of BERC (Terms and conditions of intra state open access) Regulations 2018 specify that open access customer using transmission system shall pay transmission charges on the basis of contracted capacity.

8.4.4. BSPTCL in its petition has submitted that total maximum projected load of NBPDCL and SBPDCL is 6766 MW and maximum load of Railways is considered at 100 MW based on their contracted capacity totalling to 6866 MW. Accordingly, the Commission has considered the same for determination of transmission charges applicable to Long/Medium term Open Access consumers as below:

Table 322: Monthly Transmission Charges applicable to Long/Medium term Open Access consumers as approved for FY 2021-22

Sl. No	Particulars	Unit	FY 2021-22
1	Total maximum load of the transmission system users for FY 2021-22	MW	6,866.00
2	Annual Transmission charges of BSPTCL	Rs. Crore	1,130.68

3	Annual Transmission charges of BGCL	Rs. Crore	452.62
4	Total Transmission charges (2+3)	Rs. Crore	1,583.30
5	Monthly Transmission Charges applicable to Long/Medium term Open Access consumers	Rs. /MW/Month	1,92,167

8.4.5. Thus, the Transmission Charges shall be Rs.1,92,167 /MW/Month for long/medium term open access consumers. In addition to above transmission charges, transmission losses of 3.00% shall be reduced in kind from the energy input into the state transmission system.

b) Transmission Charges for Short Term Open Access

8.4.6. According to the BERC (Terms and Conditions of Intra-State Open Access) Regulations 2018, the transmission charges payable for short term open access customers are determined in terms of Rs/MWh and the formula specified for computing this charge is provided as follows:

8.4.7. Transmission charges payable by Short Term open access customer shall be computed as per the following formula:

Transmission charges = ATC/(PLST x 8760) (in Rs./MWh)
Where,
ATC = Annual Transmission charges determined by the Commission for the State Transmission system for the year in Rs. Crore.
PLST = Peak load projected to be served by the State Transmission system

8.4.8. BSPTCL in its tariff petition for FY 2021-22submitted that the projected maximum peak load for FY 2021-22is 6016 MW which is considered for computation of transmission charges. However, in the calculation BSPTCL have considered peak load as 6866 MW. Maximum load of NBPDCL and SBPDCL is considered at 6766 MW and maximum load of Railways is considered at 100 MW based on contracted capacity.

8.4.9. Therefore, the Commission considers the peak load at 6866 MW for FY 2021-22for computation of short-term open access charges as below:

Table 323: Transmission Charges applicable to short term Open Access consumers as approved for FY 2021-22

Sl. No	Particulars	Unit	FY 2021-22
1	Total maximum load of the transmission system users for FY 2021-22	MW	6866
2	Annual Transmission charges of BSPTCL	Rs. Crore	1,130.68
3	Annual Transmission charges of BGCL	Rs. Crore	452.62
4	Total Transmission charges (2+3)	Rs. Crore	1,583.30
5	Transmission Charges applicable to Short	Rs. /MWh	263

	term Open Access consumers		

8.4.10. The Transmission charges for Short Term Open Access shall be payable on the basis of the energy actually scheduled for short term transactions.

8.5. Transmission and Wheeling Charges for Open Access Customers.

8.5.1. The Open access charges shall be paid as per the table given below if the injection and drawl points of the open access customer are at different voltage levels:

Table 324: Transmission Charges applicable to open access customer are at different voltage levels for FY 2021-22

Drawl/ Injection	Transmission (220/132 kV)	33kV	11kV
Transmission (220/132 kV)	Transmission Charges plus transmission losses3.00%shall be payable	Transmission charges plus wheeling charges of 33 kV shall be payable. Losses of both transmission and 33 kV network shall be payable (Cumulative loss @ 6.88%)	Transmission Charges plus wheeling charges of 33 and 11 kV network shall be payable. The losses of transmission, 33 and 11 kV network shall be payable (Cumulative loss @11.54%)
33kV	Transmission charges plus wheeling charges of 33 kV shall be payable. Losses of both transmission and 33 kV network shall be payable (Cumulative loss @ 6.88%)	Wheeling charges of 33 kV plus losses of 33 kV network (Loss @ 4.0%) shall be payable.	Wheeling Charges of 33 and 11 kV network shall be payable. Losses for 33 and 11 kV shall also be payable (Cumulative loss @8.80%)
11kV	Transmission Charges plus wheeling charges of 33 and 11 kV network shall be payable. The losses of transmission, 33 and 11 kV network shall be payable (Cumulative loss @11.54%)	Wheeling Charges of 33 and 11 kV network shall be payable. Losses for 33 and 11 kV shall also be payable (Cumulative loss @8.80%)	Wheeling Charges of 11 kV plus losses of 11 kV network (Loss @ 5.00%) shall be payable

8.6. SLDC Charges

8.6.1. Open access consumer shall pay all charges payable to the State Load Despatch Centre (SLDC), as determined by the Commission under section 32 of the Act and as per the Regulation 19 (1) of BERC (Terms and Conditions for Open Access) Regulations, 2018.

8.6.2. The Annual SLDC Operating charges for FY 2021-22 are determined as Rs. 10.13 Crore in the SLDC Tariff Order dated 19 March, 2021. Considering the energy delivered into transmission system as 30255.96 MUs, the SLDC charges works out to 0.34 Paise/kWh.

8.7. Cross Subsidy Charges

Petitioners' submission

8.7.1. The open access consumers are liable to pay cross subsidy surcharge to compensate the distribution utility for any loss of revenue due to shifting of its consumer to the open access system. The cross-subsidy surcharge for open access consumers for the 3rd Control Period is calculated as per the following recommended formula in the BERC (MYT Distribution Tariff Regulations), 2018.

"S= T – [C/ (1-L/100) + D+ R]
Where
S is the surcharge
T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation
C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation
D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level
L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level
R is the per unit cost of carrying regulatory assets."

8.7.2. The Discoms have stated that the revised Tariff Policy suggest that the cross subsidy shall not increase 20% of applicable tariff to the category of consumers seeking Open Access. The cross-subsidy surcharge for 132 kV, 33 kV, 11 kV and HTSS category of the consumers are approved by the Commission at 20% of applicable tariff of the respective category of consumers seeking Open Access. The cross-subsidy surcharge for FY 2020-21 computed by Discoms is as shown below:

Table 325: Cross-subsidy Charges proposed for FY 2021-22

Cross-Subsidy Surcharge (Rs)										
Sr. No	Voltage Level	Proposed Tariff	Wt. avg. Cost of PP	Intra-state Transmission Loss	Transmission Charge	33 kV	11 kV	Value	20% of applicable tariff	CSS
1	132 kV	8.76	4.53	3.00%	0.53	-	-	4.43	1.75	1.75
2	33 kV	10.08	4.53	3.00%	0.53	0.45	-	5.27	2.02	2.02
3	11 kV	10.29	4.53	3.00%	0.53	0.45	0.48	5.32	2.06	2.06
4	HTSS	6.63	4.53	3.00%	0.53	0.45	-	1.81	1.33	1.33

Commission's analysis:

8.7.3. The cross-subsidy surcharge determined as per the formula stipulated in tariff policy is worked out as follows. Weighted average cost of power purchase for both Discoms is determined as Rs.4.42 /kWh as shown in Table below:

Table 326: Weighted average cost of power purchase for both Discoms for FY 2021-22

Sl. No	Particulars	Unit	FY 2021-22
1	Gross Power Purchase of both DISCOMs	MUs	30,699.66
2	Less: PGGCIL Losses	MUs	443.70
3	Net Power Purchase	MUs	30,255.96
4	Power Purchase Cost including PGCIL charges	Rs. Crore	13,359.24
5	Average Power Purchase rate	Rs. /MWh	4.42

8.7.4. Cross Subsidy surcharge is Computed by the Commission as per following formula:

S = T–[C/(1-L/100)+D+R]
Where,
S is the Surcharge
T is the Tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation.
C is the per unit Weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation.
D is the Aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level.
L is the Aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level.
R is the Per unit cost of carrying regulatory asset.

8.7.5. Cross-subsidy charges for different voltages computed in Table below:

Table 327: Workout of Cross-subsidy Charges at different voltage for FY 2021-22

S. No.	(kV)	ABR (Rs./ kWh)	APPC (Rs./ kWh)	STU loss (%)	Trans-mission charges (Rs./ kWh)	33kv (Rs./ kWh)	11kV (Rs./ kWh)	CSS (Rs./ kWh)	20% of Tariff (Rs./ kWh)	CSS (Rs./ kWh)
		a	b	c	d	e	f	g= a-(b/(1-c))+d+e+f)	h= 20% of a	i= Min of g or h
1	220/132	10.24	4.42	3.00%	0.52			5.16	2.05	2.05
2	33	9.64	4.42	6.88%	0.52	0.45		3.93	1.93	1.93
3	11	9.50	4.42	11.54%	0.52	0.45	0.49	3.05	1.90	1.90
4	HTSS	6.84	4.42	17.55%	0.52	0.45		0.52	1.37	0.52

8.7.6. The revised Tariff Policy suggest that the cross subsidy shall not increase 20% of applicable tariff to the category of consumers seeking Open Access. The cross-subsidy surcharge for 132 kV, 33 kV, 11 kV and HTSS category of the consumers are approved by the Commission at 20% of applicable tariff of the respective category of consumers seeking Open Access.

8.7.7. To encourage the competition among Distribution Company, the Commission would like HT consumers to seek power purchase options from sources outside the State also. The Commission, in order to make the cost of delivered power comparable with the retail tariff, approves the following cross subsidy surcharge for FY 2020-21.

Table 328: Cross-subsidy Charges applicable to open access consumer at different voltage for FY 2021-22

S no.	Consumer Category	Cross Subsidy Surcharge (Rs. /kWh)
1	For 132 kV Consumers	1.69
2	For 33 kV consumers (other than HTSS)	1.78
3	For 11 kV consumers (other than HTSS)	1.80
4	For HTSS consumers (11kV & 33 kV)	0.25

8.8. Roadmap for reduction of cross subsidy surcharge

Petitioners' submission

8.8.1. Section 8.3 (2) of the Tariff Policy 2016 specifies that:

"For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the Appropriate Commission would notify a roadmap such that tariffs are brought within ±20% of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy".

8.8.2. The Tariff Policy provides that SERCs may notify a roadmap such that tariffs are in ±20% of ACoS. The First proviso to para 8.5.1 of Tariff Policy 2016 also specifies that Cross Subsidy Surcharge (CSS) should be capped at 20% of the tariff applicable to the category of the consumers. The Petitioner aims at gradual reduction of cross subsidy surcharge in line with National Tariff policy.

Commission's analysis:

8.8.3. The BERC (Fixation of Charges for Supply of Electricity by Distribution Licensee) Regulations 2018 reads as under:

"3.2 ......The Distribution licensee shall submit the road map in such a way that

the cross subsidy, from the present level is progressively reduced and charges recoverable from different consumer categories should reflect category wise cost of supply at the end of next control period i.e. FY 2021-22."

8.8.4. The Commission is of the view that when the DISCOMs achieves AT&C loss target as stipulated in the this Tariff Order, optimize power purchase cost and incur capital expenditure after carrying out cost benefit analysis, the average cost of supply shall reduce and the tariff rates will be within the permissible limits of +20% of average cost of supply.

8.8.5. The Discoms are directed to take necessary action accordingly and submit the roadmap for reduction of cross subsidy in next tariff petitions to be filed.

8.9. Additional surcharge

Petitioners' submission

8.9.1. In order to supply seamless power to the consumers as per the demand projection under the Power for All scheme, the Bihar DISCOMs tied up huge quantum of PPAs. However, the demand has not increased as per the projection as well as due to the movement of consumers from being a consumer to the DISCOM to shifting to Open Access, the DISCOMs are currently in a power surplus situation. This has led to unnecessary fixed cost burden on the DISOMs which is ultimately being passed on the consumer. In regard to recovering a part of the stranded costs of the DISCOMs has proposed the Additional surcharge to be recovered by Open Access consumers for FY 2021-22.

Table 329: Additional Surcharge Computation as submitted by the Petitioner for FY 2021-22

OA Quantum Bihar	FY 2020-21
Total	**148**
Total Stranded Power (MU)	1296
Total Surrendered Power (FY 19-20) (MU)	2984
Projected Surplus in FY 2021-22 (MU)	5750
Power attributed to OA (MU)	1296
Projected Fixed Cost (Rs/ MW) (FY 2021-22)	8.99
Total Stranded Fixed Cost (Rs. Crore)	133
Stranded Fixed Cost per unit	1.03
Transmission Charge (Rs./unit)	0.53
Additional Surcharge (Rs./unit)	0.50

Commission's Analysis

8.9.2. DISCOMs have to tie up considerable quantum of power considering the overall growth of the state and therefore tied up power for upcoming consumers. However, in case the open access users not availing power supply from DISCOMs the generation capacity tied up by DISCOMs remain idle. In such situation the DISCOMs have to pay fixed (capacity) charges to the Generators as per the terms and conditions of PPA irrespective of utilization of generation. Hence, Additional Surcharge is to be levied to compensate such unrecovered fixed of such DISCOMs arising out of its obligation to supply and its planned power supply has been stranded due to shifting/switching over of Consumers from Distribution Licensee to Open Access mode.

8.9.3. Further, Regulation 23 of BERC (Term and Conditions of Intra-State Open Access) Regulations 2018 has outline the principle regarding determination and Levey of Additional surcharge as below:

"23. Additional Surcharge

(1) An open access consumer, receiving supply of electricity from a person other than the distribution licensee of his area of supply, shall pay to the distribution licensee an additional surcharge, in addition to wheeling charges and cross-subsidy surcharge, to meet the fixed cost of such distribution licensee arising out of his obligation to supply as provided under sub-section (4) of section 42 of the Act. Such additional charge payable by open access consumer to the distribution licensee shall be as determined by the Commission in the distribution tariff order from time to time.

Provided that Additional surcharge shall be payable on monthly basis, by the open access consumers based on the actual energy drawn during the month through open access.

Provided also that such additional surcharges shall not be levied in case distribution access is provided to a person who has established a captive generation plant for carrying the electricity to the destination of his own use.

(2) ***The additional surcharge shall become applicable only if the obligation of the licensee in terms of power purchase commitments has been and continues to be stranded or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract****. {Emphasis added}*

(Note: The fixed cost related to network assets is recovered through wheeling charges.)

(3) The distribution licensee shall submit to the Commission along with its ARR, a detailed calculation statement of fixed cost which the licensee is incurring towards his obligation to supply, mentioning the hourly stranded data with its merit order dispatch."

8.9.4. As stipulated in the above regulation the additional surcharge shall be recovered form open access consumer only in case of the obligation of the licensee in terms of power purchase commitments constitutes to remain stranded due to shift in open access consumers. However, unrecovered power cost obligation due to lower demand growth of DISCOMs compared to the projected demand growth, cannot be the ground for leaving additional surcharge to open access consumers.

8.9.5. Thus, to signify above mentioned terms for additional surcharge, DISCOMs have to produce satisfactory justification for the stranded cost due to shift in open access consumers. As the Commission has to envisage the power surplus scenario of DISCOMs, it must indicate the quantum of such stranded cost and the period over which it would be stranded for determination of additional surcharge. Further, DISCOMs must demonstrate that the demand charges payable by open access consumers to DISCOMs does not compensate fully the fixed cost payable by DISCOMs to Generators.

8.9.6. In the absence of the above stated, the Commission is of the view that the additional charges shall be leviable only if it is conclusively demonstrated by Discoms that open access will lead to stranding of its fixed cost.

8.9.7. Accordingly, the Commission has evaluated the following methodology for computation of additional surcharges and would decide on the same in the subsequent proceedings:

Contracted Capacity of DISCOM= A (MW)

Availability of the Contracted Capacity during period= B (MW)

Scheduled Capacity during period = C (MW)

Open Access Allowed during period = D (MW)

Capacity Stranded due to Open Access = E (MW)

Total Fixed Charge paid for period= F (Rs. Crore)

Transmission charge paid during period = G (Rs. Crore)

Energy Scheduled during period = H (MUs)

Energy Consumed by OA consumer from DISCOM= N (MUs)

Demand Charge Recovered by DISCOM from OA consumer = P (Rs. Crore)

OA scheduled energy during the Period = S (MUs)

(DISCOM shall provide above requested data and substantiate its submission with Justification and Documentary Evidence)

Fixed Charge per MW of Available Capacity=	I=F/B (Rs. Crore)
Fixed Charge for the Stranded Capacity=	J=I*E (Rs. Crore)
Transmission Charge per kWh=	K=G/H*10 (Rs. /kWh)
Distribution Charges (as approved in Tariff Order) =	L (Rs. /kWh)

Total T&D Charges per kWh=	M= K+L (Rs. /kWh)
T&D charges payable by OA to DISCOMS=	O= M*N/10 (Rs. Crore)
Demand Charge to be adjusted=	Q=O-P (Rs. Crore)
Net Stranded Charges recovered=	R=J-Q
Additional Surcharge =	S/R*10

8.9.8. In addition to above DISCOM shall provide following additional information for the computation of additional surcharge:

a. Relevant details of amounts incurred towards obligations to pay capacity charges under power purchase agreements, cost of transmission payable to transmission licensees, other costs of distribution business apart from power purchase costs for the year.

b. Establishing contribution of Open Access to backing down /stranded capacity.

c. Contracted capacity of DISCOMs and projection for capacity addition over period.

d. Quantum and Capacity availed by the Open access consumers during period.

e. DISCOMs shall provide historical shift in open access consumer and also project the shift in Open Access consumers for future period.

8.9.9. The Commission further directs both the DISCOMs to file separate petition for the determination of additional charges within 3 months of the notification of this Order. Else the DISCOMs shall propose for additional surcharge in next tariff petition

8.10. Parallel Operating Charges

Petitioners' submission

8.10.1. DISCOMs submitted that the connectivity of CPP (Captive Power Plants) to Grid or State transmission system shall be governed by the connection conditions stipulated under the State Grid Code and Connectivity Regulations of Central Electricity Authority notified in accordance with sub-section (b) of Section 73 of the Act.

8.10.2. In view of this, the petitioner has proposed Parallel Operation Charges as a part of Other charges for Open access consumers to be applicable for parallel operation of the CPP with the grid separately.

Table 330: Parallel operation Charge computation as submitted by the Petitioner for FY 2021-22

Parameter	FY 2020-21
Total Connected Demand (kW)	21012203.21
Overall Demand Charges (Rs. Crore)	2,517.30

POC Charge (Rs Crore./month)	209.78
POC Charges (Rs./kW/month)	99.84

Commission's Analysis:

8.10.3. Petitioners have submitted that, 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. 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. 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.

8.10.4. The Commission has evaluated the submission of Petitioners for determination of parallel operation charges and observed that the detailed reasoning and the quantification of the benefits accruing to CPPs in financial terms is not provided by the DISCOMS in the present petition. The Commission further observed that the Parallel Operation Charges (POC) is recovered from the CPPs to provide parallel operation to the Grid under various mode as listed below:

(a) CPPs having surplus capacity over and above their own requirement, connected in parallel with the grid in order to sell power to the grid or bank such surplus energy, which is a general phenomenon in seasonal industries.

(b) CPPs having load of such nature that results in large momentary peaks, starting currents and runs the plant in parallel to avail the support of grid beyond the contract demand. Process industries with CPP's runs in parallel in order to avail continuous power supply, in the event of failure of CPP generating units.

(c) Black start of CPP, where the start-up power is required to restart the units.

(d) In addition to above, Grid also provide the support through parallel operation like absorbing harmonics, absorbing negative phase current, reactive power support, etc.

8.10.5. Based on above the Commission is of the view that, if CPPs opt for parallel operation to seek safety, security and comfort of a larger system, the POC charges needs to be levied to CPPs for availing support from the grid the Grid. However, for the determination of Parallel operation charges DISCOMs need to carryout tech-economic study for CPPs for the assessment of benefits and services extended to CPP in financial terms for suggesting levy of parallel operation / grid support charges payable by CPPs.

8.10.6. Accordingly, the Commission directs DISCOMs to carryout above mentioned studies and approach the Commission for determination of Parallel Operation Charges (POC) in next tariff filing process.

8.11. Reactive Energy Charge

Petitioners' submission

8.11.1. The open access consumers should pay a reactive energy charge to Transmission and Distribution companies as the case may be for drawl/ injection of reactive energy. Accordingly, DISCOM has proposed the reactive charges of 06 Paisa/kVAR for the FY 2021-22.

Commission's Analysis:

8.11.2. The Petitioners have submitted that, the ERPC bills the Petitioners for drawal of reactive energy with Reactive Energy charges at 15 paisa/kVArh. In line to the same, the Petitioner has requested the Commission to increase the Reactive Energy charges for open access consumers from 4 paisa/kVAr to 6 paisa/kVAr.

8.11.3. The Commission has evaluated the petitioner submission has observed that the Reactive energy charges levied by ERLDC has increased over year as shown in Table below:

Table 331: Reactive energy charges levied by ERLDC over year

Year	Reactive energy charges
2019-20	14 paisa/unit
2018-19	14 paisa/unit
2017-18	13.5 paise/unit
2014-15	12 paise/unit

8.11.4. Base on above, the Commission observes that the Reactive Energy Charges have increased over time and accordingly approves the reactive energy charges of 6 Paisa /kVAR For FY 2021- 22.

8.12. Standby Charge

Petitioners' submission

8.12.1. As per BERC (Term and Conditions of Intra-State Open Access) Regulations 2018:

"20 A. Standby Power In case of outage of a power plant supplying power to an open access customer, the licensee will, on request, provide standby supply to meet the requirement of load catered through open access. Such standby supply will be provided

by the licensee at day ahead request from the open access customer. The open access customer will, for that supply, be liable to pay charges under tariff for temporary connection to that category of consumer."

8.12.2. Petitioners submitted that the Commission in its previous Order dated 20 March, 2019 has approved the stand-by charges for drawal of power by open access customer from distribution licensees in accordance with BERC (Term and Conditions of Intra-State Open Access) Regulations 2018. Petitioner further requested Commission to approve the same in line with the regulations

Commission's Analysis:

8.12.3. The Commission approves the stand-by charges same as approved in Tariff Order dated 20 March, 2020. Approved approves the stand-by charges are applicable for drawal of power by open access customer from distribution licensees in accordance with BERC(Term and Conditions of Intra-State Open Access) Regulations 2018.

8.13. Congestion Charge

Petitioners' submission

8.13.1. As per regulation 25 of the BERC open access regulations, 2018

> *"25. Other Charges*
>
> *In addition to the above charges, the regulatory charges, congestion charges and any other charges imposed by Central Commission and/or State Commission shall be payable by the open access customers."*

8.13.2. In view of the same petitioner has requested the Commission to determine and approve congestion charges for Open Access Consumers in order to mitigate the issues related to transmission and distribution of power.

Commission's Analysis:

8.13.3. As per Central Electricity Regulatory Commission (Measures to relieve congestion in real time operation) Regulations, 2009, congestion charge is defined as follows:

> *"Congestion charge" means the supplementary charge kicked in on one or more Regional entities in one or more Regions for transmission of power from one Region to another or from one State to another within a Region when the deviations from the schedule cause the net drawal of power in the inter-regional or intra-regional transmission links to go beyond the Total Transfer Capability limit;*

8.13.4. Further, CERC in its Order (1/2010), dated 17 March, 2010 has stated the rationale behind the proposed congestion charge was explained in the said order as under:

"*2. The rationale behind applying congestion charge is to ensure stability and security of the transmission system. Hence it is imperative that all possible grid conditions due to over drawl during system constraints at a frequency less than 50 Hz need to be curbed. As the Unscheduled Interchange charge at or just below 50 Hz. Is low, there is no commercial deterrent for the overdrawing State at this frequency to reduce over-drawal, though congestion may exist in the transmission corridor between importing and exporting areas/regions. In order to address the situation, the charge for energy drawn from the grid at normal frequency at or just below 50 Hz. Through a congested transmission corridor should be fixed high enough to discourage over drawl from the grid.*

3. Prima facie we are of the view that the rate of congestion charge should be kept a little higher than the difference between the maximum Unscheduled interchange (UI) charge (which also denotes the max. Energy charge on liquid fuel) and the UI price at 50.0 Hz, as specified in the Central Electricity Regulatory Commission (Unscheduled Interchange charges and related matters) Regulations, 2009. In this way the congestion charge plus the UI charge will be higher than the maximum energy charge of the liquid fuel based power plants, which will serve as deterrent for over drawl by the regional entities at a frequency below 50 Hz through a congested transmission corridor and will incentivize the utilization of all generation on liquid fuel in the over drawing Region/State, if any, thus relieving congestion. If the UI charge plus congestion charge is higher than the energy charge of the liquid fuel based generation, then the overdrawing regional entity would find it commercially advantageous in increasing liquid fuel generation in the State instead of overdrawing from the grid.

……..

5. It is important to note that at a frequency greater than 50 Hz, the congestion would not be caused by the overdrawing utility but by the utility injecting power into the congested transmission corridor and the congestion charge would instead be applied on the injecting utility. The detailed procedure for levy of congestion charge is given in the Congestion Charge Regulations. For the injecting utility, the remedy would be to reduce injection through reduction of generation in its control area."

8.13.5. From above the Commission is of the view that the Congestion charge as proposed by the petitioner is not relevant to Distribution network. Further, the Petitioner has not submitted any justification and rationale for proposal of Congestion charge. Accordingly, the Commission has not approved any congestion charges for FY 2021-22.

8.14. Application Fee

8.14.1. All applications for Open access i.e. Short Term, Medium Term and Long term Open Access shall be made in the prescribed form and submitted to the nodal Agency along with the application fee as stipulated in the BERC Open Access Regulations, 2018.

8.15. Other Charges

8.15.1. In addition to the charges mentioned in above paras, the regulatory charges and any other charges imposed by CERC and/or BERC shall be payable by the open access customers.

8.16. Information to be put on the website

8.16.1. The Commission directs the Discoms to put all information related to open access facilities/charges on its web site. The information should include open access regulations, procedure for obtaining open access and details of all charges payable by an open access consumer and list of existing open access customers.

9. Tariff Principles, Design and Tariff Schedule

9.1. Introduction

9.1.1. The Commission in determining the Annual Revenue Requirement (ARR) for FY 2020-21 and the retail supply tariff for FY 2021-22 has been guided by the provisions of the Electricity Act, 2003 (Act), National Electricity Policy 2005, revised Tariff Policy 2016 (TP), BERC (Multi Year Distribution Tariff) Regulations, 2018 and Regulations on Terms and Conditions for Determination of Tariff issued by the Central Electricity Regulatory Commission (CERC).

9.1.2. Section 61 of the Act lays down the broad principles, which shall guide determination of retail tariff. As per these principles, the tariff should progressively reflect cost of supply and also reduce cross subsidies. The Act also lays special emphasis on safeguarding consumer interests and also requires that the costs should be recovered in a reasonable manner. The Act mandates that tariff determination should be guided by the factors, which encourage competition, efficiency, economical use of resources, good performance and optimum investment.

9.1.3. The National Electricity Policy (NEP) aims at increased access to electricity, supply of reliable and quality power at reasonable rates, minimum lifeline consumption, financial turnaround and commercial viability of electricity sector and protection of consumers' interest.

9.1.4. The revised Tariff Policy (TP) dated 28 January, 2016 notified by the Government of India provides comprehensive guidelines for determination of tariff and revenue requirement of power utilities. The Tariff Policy mandates that tariff should be within ±20% of the average cost of supply. The Commission has endeavoured to follow these guidelines as far as possible.

9.1.5. The Commission has computed the average cost of supply on the basis of the annual revenue requirement and the energy sales approved by the Commission for FY 2021-22. The Commission has also determined the voltage-wise cost of supply, as per the guidelines provided by the APTEL. The Commission has also considered the suggestions during State Advisory Committee (SAC) meeting and comments of stakeholders at large while determining the tariffs.

9.2. Simplification of tariff structures for electricity consumers in Bihar

Petitioners' submission

9.2.1. The two Distribution Licensees in Bihar have taken initiatives in the past couple of years to undertake measures to simplify the tariff structure, under the guidance of the Commission. Key measures undertaken have now resulted in the following:

a. Simplification of the tariff structure,

b. Bringing in a progressive tariff structure that helps promote efficiency, and

c. Rationalization of electricity tariffs.

9.2.2. For this year as well, the power distribution companies of Bihar have kept the following objectives in mind while proposing the tariff structure for FY 2021-22.

a. Ensuring that an adequate balance is maintained between the interest of consumers and the distribution utility;
b. Enabling consumers to efficiently and effectively plan their expenditure on electricity;
c. Ensuring that tariffs progressively reflect the prudent cost of electricity supply to the consumers, and
d. Incentivizing the consumer for efficient utilization of electricity.

9.2.3. The Distribution Licensee have followed the given below key guiding principles for proposing the tariff structure and tariffs which would be applicable for the FY 2021-22.

a. Merging or elimination of category / sub-category has been done based on relevance, and whether the categorization is still valid in the current scenario;
b. Ensure that each major tariff category has a maximum of 3 energy slabs, to maintain simplicity of structure;
c. Introduction of two part tariff for all metered consumer categories;
d. Undertaking an action plan with target timelines for phasing out of unmetered consumers and therefore of the unmetered tariff sub-categories, through large targeted metering drives over the next twelve to eighteen months;
e. Preserving kVAh based billing for all consumer categories wherever feasible.

9.2.4. Based on the above principles, the following key changes have been proposed in the tariff structure and schedule for the ensuing year.

a. Simplification of Domestic Tariff structure
b. Incentivizing increased consumption through improving of load factor
c. Incentive to HT consumers at higher voltage levels
d. Revision of ToD Tariff structure
e. Revision in Load category of LTIS-II category consumers
f. Incentivizing uptake of Smart Meters.

Commission's Analysis

9.2.5. The Commission takes note of the proposals specified by the Discoms and specific issues have been dealt in the subsequent sections and in the Tariff Schedule.

9.3. Simplification of Tariff structure for Domestic consumers

Petitioners' submission

9.3.1. In order to simplify the tariff structure of Domestic category consumers and to rationalize tariff for consumers with higher consumption, the Petitioner hereby proposes to keep only three tariff slabs in the DS-I and DS-II category consumers. The highest slab in the current tariff structure is proposed to be merged with the preceding slab. The tariff structure of the preceding lower slab will not be affected due to the merging with the highest slab except for the uniform tariff increment proposed in the existing tariff structure. The intent is to gradually further simplify the tariff slabs and encourage increased electricity consumption.

Table 332: Proposal for simplified tariff structure for domestic consumers

Category/ Slab	Existing Tariff Structure		Revised tariff structure (without tariff hike)		Proposed tariff structure for FY 2021-22	
	Fixed Rs/kW/ month	Energy Rs/unit	Fixed Rs/ kW/ month	Energy Rs/unit	Fixed Rs/ kW/ month	Energy Rs/unit
DS-I						
0-50 units	20	6.05	20	6.05	22	6.61
51-100 units	20	6.30	20	6.30	22	6.88
101-200 units	20	6.60	20	6.60	22	7.21
Above 200 Units	20	6.95				
DS-II						
0-100 units	40	6.05	40	6.05	44	6.61
101-200 units	40	6.85	40	6.85	44	7.48
201-300 Units	40	7.70	40	7.70	44	8.41
Above 300 Units	40	8.50				

Commission's Analysis

9.3.2. The Commission takes note of the proposal of the discom to merge the highest slab of DSI & DSII to with their respective preceding slabs. It is highlighted that a simplified tariff structure with minimal slabs would not only be prudent but also enable the Discoms to plug the possibilities of revenue leakage on account of the consumers attempting to keep the units consumed lower than the next slab by tampering meters.

9.3.3. Further, this would also enable the consumers at large to have a simplified understanding of the billing category/slabs and allow them to plan their electricity consumption in advance including the bill amount. Therefore, with the philosophy adopted by the Discoms to simplify the tariffs to the maximum extent possible, the Commission accepts the proposal of merger of these slabs of DSI & DSII consumer category. However, the approved tariffs have been dealt with by the Commission based on the revenue gap arrived at in the ARR of FY 2021-22 and provided the tariff rates in the tariff schedule.

9.4. Incentivizing increased consumption through improving of load factor for HT consumers

Petitioners' submission

9.4.1. To promote efficiency in the system and incentivize electricity consumption, the Petitioner hereby proposes to introduce Load factor incentives for HT category consumers (excluding HTSS consumers) in the Retail tariff of FY 2021-22. With an increased utilization of the system vis-à-vis the existing connected load, the Petitioner envisages that the effective cost of supply would also gradually go down.

9.4.2. In the proposed incentive, the HT Consumers in FY 2021-22 would be incentivized for improved load factor utilization on a monthly basis, through a rebate on their energy charge.

9.4.3. Accordingly, the following incentive structure is proposed:

Table 333: Load Factor Incentive proposed by the SBPDCL and NBPDCL

Load Factor Range	Incentive
50%-70%	*20 paise per unit concession on energy charges for energy consumption over 50% and up to 70% load factor during the billing month*
Above 70%	*30 paise per unit on energy charges for energy consumption over and above 70% and up to 100% load factor during billing month*

9.4.4. At the same time, it may also be noted that consumers exceeding contract demand in any particular month, will not be eligible for Load Factor Incentive in that month.

9.4.5. Methodology for calculation of Load Factor:

$$\textit{Load Factor} = \frac{\textit{Consumption during the month, in MU (in kVAh)}}{\textit{Maximum Consumption possible during Month, in MU (in kVAh)}}$$

Maximum consumption possible = Contract Demand (kVA) x Total no. of hours *recorded in the meter during the month*

Commission's Analysis

9.4.6. The Commission takes note of the proposal for load factor incentive of the Discoms and opines that load factor incentive will only encourage increased consumption by the consumers. This will not only improve the utilisation of the assets but also provide additional revenue to the Discoms by the way of corresponding revenue from the incremental energy consumed. Further, this would have positive impact in the Distribution loss on account of higher quantum of HT sales. Therefore, the Commission approves the Load Factor incentive as proposed by the Discoms.

9.4.7. Further, there is a potential risk that consumers may avail this incentive by increasing the consumption by overshooting the contract demand. The penalty paid by consumers for exceeding the contract demand may not be commensurate to nullify the effect of load factor incentive received and may lead to benefit the consumers with savings in bill in such cases. Therefore, the load factor incentive eligibility should not be allowed whenever the consumers exceeds the contract demand. Hence, the proposal of the Discoms in this regard is accepted including the formulae for computing the Load Factor.

9.4.8. Further, the Discoms have not justified exclusion of HTSS category for the load factor incentive. The Commission is of the opinion that excluding HTSS will lead to discrimination within the HT consumer categories. Even though there is a limited potential of consumption increase from this category, incentivisation should be done uniformly for all HT categories. More so, the HTSS consumers has already been consuming significant electricity with high load factor and have not been availing any incentive on this account. The fixed charges of HTSS consumers are way higher compared to other HT consumers. The impact of revenue from HTSS category principally also would be lower as the energy charge from this category is way lower than the energy charge of other HT consumers. Therefore, the Commission decides to include the HTSS consumer category for the load factor incentive and approves uniform load factor incentive across all HT consumer categories.

9.5. Simplifying HT tariffs and incentivizing high-voltage power drawl

Petitioners' submission

9.5.1. In order to promote electricity consumption at higher voltage levels, the Petitioner is proposing to incentivize consumers connected at higher voltage levels for HT consumers. The proposed incentive is aimed towards decreasing the line losses of the DISCOMs as well as promoting HT consumers in the state. The revised tariff structure is proposed in the table below:

Table 334: Proposed simplified and incentivised HT Tariffs for higher voltage level

Category/	Existing Tariff	Revised tariff	Proposed tariff

Category	Structure		structure (without tariff hike)		structure for FY 2021-22	
	Fixed Rs/kVA/ month	Energy Rs/unit	Fixed Rs/kVA/ month	Energy Rs/unit	Fixed Rs/kVA/ month	Energy Rs/unit
HT-I (11 kV)	300	6.55	300	6.55	328	7.15
HT-II (33 kV)	300	6.50	300	6.40	328	6.99
HT – III (132 kV)	300	6.45	300	6.25	328	6.83
HT – IV (220 kV)	300	6.40	300	6.10	328	6.66

Commission's Analysis

9.5.2. The cost of supply for consumers at higher voltage level are always lower than the consumers at lower voltage level. This is also established from the voltage-wise cost of supply worked out by the Commission in the Table 315 in the earlier sections of this Order. Further, the existing approved Tariffs as per the Order dated 20 March, 2020 already have the incentive through lower tariffs for consumers at higher voltage levels compared to consumers of lower voltage levels. The Discoms have only proposed to increase the incentive for availing tariff at higher voltage level and the difference between tariffs of consumers at higher voltage level is proposed to be increased. This has been proposed to incentivise the consumers to avail higher voltage level tariff and lead to lower Distribution losses.

9.5.3. The Commission is convinced that the above philosophy will not only benefit the consumers by way of tariff savings but also benefit the Discoms to reduce the Distribution Losses. The Commission has accordingly approves the philosophy proposed by the Discoms. However, the tariff revisions as proposed by the Discoms has not been accepted as it is and the Commission has approved the Tariff with different tariff increase percentage while adopting the above philosophy.

9.6. Optimising time slabs for Time of Day tariff (ToD) tariff structure

Petitioners' submission

9.6.1. In order to optimize the power demand curve of the state, ensuring a match between demand and supply, and thereby rationalizing the power purchase quantum as well as the cost to the Petitioner by reducing dependency on short term power purchase, a revision in ToD tariff structure is proposed by the Petitioner.

9.6.2. Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand of consumers, for different periods of the day, i.e., normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter. At present, consumers under LTIS-I, LTIS-II and PWW and all HT consumers, are covered under TOD tariffs. Going forward, it is envisaged that more and more consumer categories would be covered in the upcoming years. The TOD proposal for FY 2021-22, for billing on maximum demand and recorded consumption, is given below.

Table 335: Time of Day (ToD) Slots proposed by SBPDCL and NBPDCL

Slab	Period	Energy Tariff Rate
Normal	23:00-11:00	Normal Tariff as per consumer category
Peak	17:00-23:00	120% of Normal Tariff
Off-Peak	11:00-17:00	85% of Normal Tariff

Commission's Analysis

9.6.3. The Commission sought the reason and daily load curve to justify the normal, peak and off-peak hours proposed in the Petition. In response, the Discoms submitted the load curve for each time block for FY 2019-20 and FY 2020-21 (till September) to justify the time periods in the ToD proposal.

9.6.4. The Commission has validated the above data and found to be in order. Accordingly, the Commission approves the ToD slots as proposed by the Discoms which is shown in the table below.

Table 336: Time of Day (ToD) Slots, as approved by the Commission

Slab	Period	Energy Tariff Rate
Normal	23:00-11:00	Normal Tariff as per consumer category
Peak	17:00-23:00	120% of Normal Tariff
Off-Peak	11:00-17:00	85% of Normal Tariff

9.7. Incentivizing LTIS-II consumers for moving to HT

Petitioners' submission

9.7.1. The current tariff structure allows LTIS category consumers to have a demand between 0 and 74 kW, and HT consumers are allowed to have a load specification which starts from 50 kVA.

9.7.2. It has been observed that due to this overlap in allowed contract demand criteria for LTIS and HT consumers, many LTIS-II consumers have not shifted to HT category even after having actual average usage of more than 74 kW due to comparatively higher tariff of HT category. Further, any penalty recovered by these consumers is being booked under the non-tariff income, and thereby prevents the existing tariff structure from correctly reflecting costs for the specified categories.

9.7.3. In order to ensure that there is no overlap going forward and resolve these challenges, the Petitioner is hereby proposing a revised demand specification for LTIS consumers. The Petitioner proposes that the demand criteria of LTIS consumers be limited to 0-49 kVA and any consumer with contract demand more than 49 kVA may be directed to shift to their respective HT category.

9.7.4. The Petitioners proposed that the existing LTIS-II consumers as on 31.03.2021 with contract demand over 49 kVA may be provided with a time period of 1 year, i.e., till 31 March, 2022 to shift to their respective HT category during which they will be charged at LTIS-II tariff only even after shifting to HT category. Post 31 March, 2022, even if the consumers have not formally shifted to their respective HT category, they will be deemed to have shifted to their respective HT category in the view of the petitioner and HT tariff will be made applicable to such consumers.

Commission's Analysis

9.7.5. The Regulation 3.4 of Bihar Electricity Supply Code, 2007 provides the supply voltage for respective contract demands as follows:

"3.4. The supply voltage for different contract demands shall be normally as follows:-

Supply Voltage	Minimum Contract Demand	Maximum Contract Demand
230 Volts		*Up to 7 KW*
400 Volts	*5 KW and above (3 phase)*	*70 KW*
11 KV	*50 KVA*	*1500 KVA*
33 KV	*500 KVA*	*15000 KVA*
132 KV	*7500 KVA*	
220 KV	*10.000 KVA*	

9.7.6. It is to be noted that the allowed contract demand criteria of various consumer categories including LTIS and HT consumers are designed in conformity with the aforementioned Regulation 3.4 of Bihar Electricity Supply Code, 2007 and its amendments thereof. The proposal of the Discoms to shift the LTIS consumers above 49 kW to HT category tantamount to amendment in the above contract demand criteria Regulations of Bihar Electricity Supply Code, 2007. Therefore, the Commission is not accepting Discoms proposal for the above changes in the current proceedings.

9.7.7. Further, the Regulation 1.2(7) (8) of Bihar Electricity Supply Code, 2007 provides that if any entity such as a Licensee, generating company, consumer, industry or any interested parties or business organization is finding difficulty in implementation and compliance of the existing provisions of the Bihar Electricity supply code, 2007, then such entity shall bring the difficulty to the notice of the review panel constituted by Commission on matters pertaining Bihar Electricity Supply Code, 2007. The review panel is mandated to discuss such issues in its meetings and provide their recommendation to the Commission on any amendments required in the Bihar Electricity Supply Code. The relevant Clause is provided below:

1.2 Mechanism for Review of Bihar Electricity Supply Code

"Any Licensee, generating company, consumer, industry or any interested parties or business organization may send their suggestion and requests for revision of Code to the Member–Secretary of the review panel, the

difficulties experienced in implementation of code may also be communicated to the review panel. All these representations shall be recorded and discussed in the review panel meetings. The Member-Secretary shall be the custodian of the entire correspondence relating to the review panel.

(8) The Commission may amend the Electricity Supply Code suo-motu or on the recommendations of the review panel. However, before any amendment is made in the Code, comments on the proposed changes shall be obtained from all the Distribution Licensees, State Transmission Utility STU, Transmission Licensees and public"

9.7.8. Accordingly, the Commission opines that the Discoms shall bring the matter of overlapping of allowed contract demand of LTIS and HTS consumer category to the notice of review panel and propose the changes as requested through a separate procedure specified above. The Commission may make any decision on the aforementioned matter only after receiving the recommendation of the review panel on the same through a separate proceeding.

9.8. Incentivising uptake of smart metering by consumers

Petitioners' submission

9.8.1. A rebate of 3% is proposed for the consumers with prepaid smart meters. This rebate will be made effective for the smart prepaid consumers from 1 April, 2021 onwards in their monthly bill calculation.

9.8.2. Smart metering being an emerging technology, consumer engagement & creation of awareness about the same amongst consumers is crucial. The Commission is therefore requested to approve the rebate of 3% for the consumers with prepaid smart meters to incentivize & promote voluntary usage of smart prepaid meters by consumers across the state.

9.8.3. Further, monthly bills will be communicated to the smart prepaid consumers through mail/SMS/SUVIDHA app/ website of the petitioner. If a consumer requests for a hard copy printed bill, the same can be collected by the consumer from the nearest office of the Petitioner.

Commission's Analysis

9.8.4. The implementation of pre-paid smart meters benefits both the consumers and the Discoms by easing the metering-billing-collection (M-B-C) process. The cost and effort for the M-B-C activities is thus saved by the Discoms. The Discoms have additional benefits in terms of lower working capital requirement to the extent of bill recovered against consumption through pre-paid smart meters as the payments are done by the consumers before the electricity consumption.

9.8.5. Further, Ministry of Power, Government of India vide letters dated 16 January, 2020 to State Governments/UTs and 15 November, 2020 to CERC/FoR/SERCs/JERCs have emphasised importance of rebates/reduced tariff for the consumers making payment through pre-paid modes. The letter has also requested that necessary changes in relevant Regulations/Orders/Mechanism to reduce cost of power in case of advance payments/pre-payment by any entity or consumers should be implemented within six months of the issuance of the above letter dated 15 November, 2020.

9.8.6. Due to the above, incentives for consumers opting for pre-paid smart meters is necessary so that more and more consumers voluntarily opt for the same. The Commission opines that rebate on the billed amount of pre-paid smart meter consumers should be higher than the rebate provided to a normal consumer for timely payment, i.e., 1.5% of the billed amount. Therefore, the Commission approves a rebate of 2% on every amount recharged by the consumer opting for pre-paid smart meter. Further, the rebate for online or digital payment of 1% would be applicable to these consumers over and above the rebate on prepayment.

9.9. Other submissions of Discoms on Tariff

Petitioners' submission

9.9.1. The Discoms have made certain submissions with regard to the Tariff as provided below:-

a. No. of energy slabs – The Discoms have specified that they would endeavour to reduce the number of energy slabs within each consumer category/sub-category and plan to carry out a scientific study to substantiate the rationale behind setting various slabs.

b. Existence of special categories – The Discoms have proposed to undertake a study for assessing demand as well as consumption pattern of HTSS category consumers on sample basis. Based on this study, a roadmap for merger of HTSS consumer category with HTS consumer category would be evaluated. However, no revision in tariff structure us proposed for HTSS category in the present proceeding. Similarly, no tariff structure revision is proposed for the special consumer category Har Ghar Nal (HGN).

c. Levying of fixed charges – The Discoms have endeavoured to levy fixed charges on maximum demand for long term and contract demand for short term. However, for some specific unmetered consumer categories and sub-categories, the fixed charge is proposed to be levied on each connection. The DISCOMs are taking steps to reconcile the connected load of such consumers, so as to avoid any excessive burden due to inaccurate load records or limited energy usage.

d. Demand based Tariffs - The DISCOMs are planning to gradually move to demand based tariffs for all consumers, and most meters being currently installed, have the feature of recording the maximum demand.

e. Implementation of flat tariff: In order to simplify the tariff structure further, and also encourage energy efficiency for consumers especially with higher specific consumption, the DISCOMs have been exploring the concept of implementing a flat tariff for each energy slab. However, for the ensuing year, the existing structure has been considered wherein the benefit of lower tariffs would continue for consumption at lower energy slabs.

f. Classification of consumers under urban and rural sub-category for DS-I/DS-II and NDS-I/NDS-II: The extension of the electrical network of the DISCOMs has been done for many areas, and in several cases, electrical feeders initially emerging from urban areas, have now been extended to rural areas as well, based on financial viability. Therefore in order to avoid any ambiguity pertaining to a classification of a consumer as Urban / Rural, the categorization in the applicable sub-category within Domestic and Non-Domestic categories, would be done only based on the latest / prevalent notification issued by the relevant authority, denoting an area to be falling under Urban / Rural areas. No other methodology would be followed

g. Recovery of fixed charges – The Discoms have a skewed nature of tariff recovery with having to bear fixed costs with entire to recovery of the same through fixed charges and rather recovery more through the energy charges. Due to this, the DISCOMs have limited revenue assurance and therefore face uncertainty. In the tariff order dated 20 March, 2020, the Commission linked the recovery of fixed charges in full only if the supply of power duly recorded by a consumer meter (except street lights, Agriculture and all unmetered categories of consumers) is maintained for at least 21 hours / day during the billing month. In any month if the supply of power is less than 21 hours / day, then the demand charge for that month shall be levied on pro-rata basis. In view of the above, the Petitioner requested the Commission to link the recovery of fixed charges with supply hours with the proposed roadmap of smart meter installation in the state. The same may also be made applicable in current scenario as well wherein the linking of fixed charges with hours of supply should be applicable to those consumers who have smart meters installed in their premises.

h. General and miscellaneous charges - The DISCOMs have also proposed a meter testing fees for bidirectional meters along with open access charges such as Additional Surcharge, Parallel Operating charges, Congestion charges, etc.

Commission's Analysis

9.9.2. The Commission's views on each of the submissions is as follows: -

a. No. of energy slabs – The proposal of Discoms to merge some of the slabs in DSI and DSII have been accepted by the Commission in this Order. The Commission would await the results of the scientific study to be conducted by the Discoms and wherever possible the outputs of the study be presented to the Commission prior to the next Tariff proceedings.

b. Existence of special categories – The Commission opines that this would be critical study to decide on the merger of the HTSS consumer category with HTS consumer category. Therefore, not only the same should be properly deliberated but also the results of the study needs to be widely discussed with the stakeholders and public during the next Tariff proceedings. The Commission wherever possible would like to obtain brief on the outputs of the study and a detailed presentation be done before the Commission prior to the next Tariff proceedings. Further, on HGN consumer category the Discoms needs to provide its deliberations in the next Tariff petition.

c. Levying of fixed charges – The Commission takes note of the submissions made and has considered various submission with regard to the issue while approving the consumer category wise Tariffs.

d. Demand based Tariffs – This would be forwarding looking step to have a cost incidence linked tariff and also will have appropriate indicative data of the consumer demand in the system. Hence, the Commission would evaluate such proposals of the Discoms in light of the various benefits and the feasibility of tariff implementation in the relevant consumer categories.

e. Implementation of flat tariff: This Tariff philosophy of Discoms would have ramifications on the general consumers including Kutir Jyoti and Domestic (Rural and Urban) consumers. Therefore, implementation of flat tariff needs to be looked into from the perspective of reasonability of the consumers. The Commission would evaluate any such proposals as and when such proposals are made by the Discoms.

f. Classification of consumers under urban and rural sub-category for DS-I/DS-II and NDS-I/NDS-II: The Commission noted the submission and accepts the methodology proposed by the Discoms.

g. Recovery of fixed charges – The Commission highlights that the supply hours doesn't have any relation to the smart metering of consumers as the supply hours need to be maintained as per the requirement even if the consumers have normal meters. Therefore, the proposal of the Discoms is not acceptable and the Commission reiterates that in any month if the supply of power is less than 21 hours / day, then the demand charge for that month shall be levied on pro-rata basis.

h. General and miscellaneous charges – The Commission has dealt with these charges separately in the subsequent sections.

9.10. SLC Charges

Petitioners' submission

9.10.1. The following application fees will be charged for requesting a New connection / Tatkal connection / Reduction of load / Enhancement of load / Mutation of name / Permanent disconnection.

Table 337: Application Fee, as proposed by SBPDCL and NBPDCL

Sr. No.	Category / class	Rate (INR)
1	Kutir Jyoti	20.00

2	LT Single phase except Kutir Jyoti	75.00
3	LT Three phase	200.00
4	LT Industrial	300.00
5	HT Connection	750.00
6	For tatkal connection	Two (2) times the normal

Commission's Analysis

9.10.2. The Commission observes that no change has been proposed in the Application Fee approved in the previous Tariff Order dated 20 March, 2020 and is accordingly approving the Application Fee.

9.11. Testing / Inspection of consumer's installation:

Petitioners' submission

9.11.1. The following fees will be applicable for testing or inspection of customer's installation:

Table 338: Fee for Testing/Inspection of consumer's installation, as proposed by SBPDCL and NBPDCL

Sr. No.	Category / class	Rate (INR)
1	Initial Test / Inspection	Free of cost
2	Subsequent test and inspection necessitated by fault in installation or by not complying with terms and conditions of supply	Rs. 100 for single phase connection Rs. 200 for three phase LT connection Rs. 800 for HT connection

Commission's Analysis

9.11.2. The Commission observes that no change has been proposed in the Fee for Testing/Installation of consumer installation approved in the previous Tariff Order dated 20 March, 2020. Hence, the same is approved as proposed.

9.12. Meter Testing Fee:

Petitioners' submission

9.12.1. The meter testing fee at the following rates will be charged from the consumers opting to provide their own meters

Table 339: Meter Testing Fee for own installation, as proposed by SBPDCL and NBPDCL

Sr. No.	Category / class	Rate (INR)

1	Single Phase meter (L.T.)	100.00
2	Three Phase meter (L.T.)	200.00
3	Three Phase meter with CT	300.00
4	Tri-vector and special type meter	1,800.00
5	33 kV or 11 kV metering equipment	5,000.00
6	132 kV/220 kV metering equipment	8,000.00

Note:

a. *No meter testing fee shall be charged from the consumers if the meter has been provided by the licensee.*
b. *If the meter is tested at third party testing laboratory at the request of the consumer then the fees charged by the testing laboratory will be payable by the consumer.*

9.12.2. Consumer requiring hard copy of the MRI/RMR report of their Energy meter have to pay an upfront charge of INR 1000 per report. The Petitioner would like to emphasize that these proposed charges are nominal as compared to INR 5000 plus GST@18% charged by CPRI.

Commission's Analysis

9.12.3. The Commission observes that no change has been proposed in the Meter Testing Fee approved in the previous Tariff Order dated 20 March, 2020 and is accordingly approving the Meter Testing Fee.

9.12.4. The Discoms have proposed additional charges for providing hard copy of MRI/RMR report which doesn't look reasonable. The charges for undertaking the meter testing is already recovered by the Discoms and anything beyond that would not be reasonable. However, providing hard copies of the MRI/Report should be avoided as far as possible and effort should be made to convince the consumer to obtain soft copy/scanned copy of such reports to extent possible. In case the consumers insist for hard copies, nominal charges of Rs 100 per report is approved to be collected in lieu of the same.

9.13. Meter Testing fees for Bi-directional meters:

Petitioners' submission

9.13.1. The state government in order to encourage renewable energy generation has incentivized rooftop solar generation. As a result, many new consumers have begun installing Solar PV panels on their premises. Such consumers are needed to install bi-directional or net meter if they wish to sell power to the grid and at the same time draw power from the grid.

9.13.2. Bi-directional meters can be installed on the consumer premises by the licensee or the consumer can purchase the same and get it installed by the licensee at his/her premises. Before the installation of meter, it needs to be tested in a lab. The testing of the meter can be conducted either by licensee or the consumer can get it tested by a third party.

For getting the meter tested by the licensee, the consumer needs to pay the meter testing fee as per the following rates.

Table 340: Meter Testing Fee for Bi-directional meters, as proposed by SBPDCL and NBPDCL

Sr. No.	Category / class	Rate (INR)
1	Single Phase bi-directional meter	200
2	Three phase LT CT Operated Bidirectional meter	800
3	Three Phase meter (L.T.) Bidirectional meter	400
4	Three Phase meter with CT Bidirectional meter	600
5	Tri-vector and special type Bidirectional meter	2000
6	Three phase HT TOD Bidirectional	1,100

Note

a. *No meter testing fee shall be charged from the consumers if the meter has been provided by the licensee.*
b. *If the meter is tested at third party testing laboratory at the request of the consumer then the fees charged by the testing laboratory will be payable by the consumer*

9.13.3. Such testing charges shall be applicable only in case the consumer/ Generator requests the licensee for such services.

9.13.4. Consumer requiring hard copy of the MRI/RMR report of their Energy meter have to pay an upfront charge of INR 1000 per report. The Petitioner would like to emphasize that these proposed charges are nominal as compared to INR 5000 plus GST@18% charged by CPRI.

Commission's Analysis

9.13.5. The requirement of testing these meters are essential and the Commission accepts the fee proposal corresponding to the various types of Bi-directional meters.

9.13.6. The Discoms have proposed additional charges for providing hard copy of MRI/RMR report which doesn't look reasonable. The charges for undertaking the meter testing is already recovered by the Discoms and anything beyond that would not be reasonable. However, providing hard copies of the MRI/Report should be avoided as far as possible and effort should be made to convince the consumer to obtain soft copy/scanned copy of such reports to extent possible. In case the consumers insist for hard copies, nominal charges of Rs 100 per report is approved to be collected in lieu of the same.

9.14. Reconnection/ Disconnection Charge:

Petitioners' submission

9.14.1. The following reconnection/ disconnection charges will be charged from consumers:

Table 341: Reconnection charges, as proposed by SBPDCL and NBPDCL

Sr. No.	Category / class	Rate (INR)
1	Single Phase supply, LT	100.00
2	Three Phase supply other than LT industrial	200.00
3	Three Phase LT industrial supply	900.00
4	HT supply	3,000.00

Commission's Analysis

9.14.2. The Commission observes that the charges proposed by Discoms are as approved in the previous Tariff Order dated 20 March, 2020 and no changes has been proposed to the same. However, the Discoms have proposed to include the same charges as disconnection charges as well. The Commission opines that the disconnections are done mostly at Discoms requirement so that the consumers doesn't consumer power beyond the disconnection date. Further, the same consumers who are disconnected pay the reconnection charges while undertaking the reconnection procedure. Hence, the Commission approves only the reconnection charges as was approved in the previous Tariff Order dated 20 March, 2020.

9.14.3. Further, in case pre-paid smart meter reconnection, the reconnection charges would be applicable only if the consumer would have been permanently disconnected prior to the reconnection request.

9.15. Supervision, Labour and Establishment charge for service connection:

Petitioners' submission

9.15.1. The following supervision, labour and establishment fees will be charged from consumers for service connections:

Table 342: Supervision, labour and establishment charges for service connection, as proposed by SBPDCL and NBPDCL

Sr. No.	Category / class	Rate (INR)
1	Single Phase LT	400
2	Three Phase LT other than industrial	900
3	Three Phase industrial	1,500
4	HT	As per approved estimate
5	For tatkal connection	Two (2) times the normal rate

Commission's Analysis

9.15.2. The Commission observes that no change has been proposed in the Supervision, Labour and Establishment charge for service connection approved in the previous Tariff Order dated 20 March, 2020. Hence, the same is approved by the Commission.

9.16. Security Deposit

Petitioners' submission

9.16.1. The consumer (except Kutir Jyoti rural and Kutir Jyoti urban) shall pay initial security deposit equivalent to the estimated energy charges including fixed / demand charges for a period of two months or as per the provisions of Bihar Electricity Supply Code notified by the Commission.

9.16.2. All Central Government and State Government departments are exempted from payment of security deposit. However, all public sector undertakings and local bodies shall pay security deposit, as applicable.

9.16.3. The amount of security deposit obtained from the consumer is liable to be enhanced every year, in April-May of next year on the basis of consumption during previous years or as specified in clause 7.15 of Bihar Electricity Supply Code. In default of payment of additional security deposit, wherever payable after review, the service line may be disconnected on serving thirty days' notice and connection thereafter can be restored only if the deposit is made in full along with the prescribed reconnection charges and surcharge @1.5% per month or part thereof on the amount of outstanding.

Commission's Analysis

9.16.4. The details of Security Deposit from consumers including the related provisions have been well defined in the Bihar Electricity Supply Code, 2007 and same needs to be adopted by the Discoms.

9.17. Interest on Security Deposit

Petitioners' submission

9.17.1. Security deposit made by a consumer shall bear interest as specified in Bihar Electricity Supply Code, payable at Bank rate notified by RBI from time to time. The interest will be calculated for full calendar months only and fraction of a month in which the deposit is received or refunded, shall be ignored. The interest for the period ending 31st March shall be adjusted and allowed to the consumer in the energy bill for May issued in June and in subsequent month(s), if not adjusted completely against the bill for the month of May.

Commission's Analysis

9.17.2. The Interest rate applicable for payment of interest on the consumer security deposit is already specified in the Bihar Electricity Supply Code, 2007 and same needs to be adopted by the Discoms.

9.18. Terms and Conditions of Low Tension and High-Tension Tariff

Petitioners' submission

9.18.1. **Demand Based Tariff**

a. The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher (minimum demand shall be taken as 1kW except for NDS- II where separate 0.5kW cap is there and SS-unmetered). If in any month the recorded maximum demand exceeds 105% of contract demand, the enhanced demand in excess of the contract demand and the incremental energy corresponding to such enhanced demand measured in kWH or kVAh, as the case may be, shall be billed at twice the normal charges. The Petitioner further proposes that the provision of penalty on incremental energy and subsequent energy charges should not be applicable to Domestic category consumers.

b. Example: If an HT consumer having contract demand 100 kVA draws 125 kVA and 10000 kVAh in any month then his enhanced demand 25 kVA shall be charged at twice the normal rate of demand charge and the incremental energy (10000/125)*25=2000 kVAh shall also be charged at twice the normal rate of energy charge.

Commission's Analysis

9.18.2. The levy of penal charges on the incremental energy consumption against the exceeded demand had been approved by the Commission in the previous Tariff Order dated 20 March, 2020. The Discoms have not uniformly levied the same across all the consumer categories and have excluded Domestic consumers from such levies. This issue has been also brought before the Commission vide a Review Petition dated 30 June, 2020 in Case No.20/2020 and an decision on the same is pending.

9.18.3. However, the Commission is of the view that any such levy cannot be selectively implemented for some consumer category. It has come to the notice of the Commission that this levy has resulted into huge burden on the consumers and accordingly difficulties are being faced both by the consumers and the Discoms. Therefore, the Commission is restoring the provision with regard to excess demand against the contracted demand and incremental energy consumption as approved in the previous Tariff Order dated 20 February, 2019.

9.18.4. Accordingly, the Commission approves the following across all the LT and HT categories.

"The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher.
If in any month the recorded maximum demand exceeds 105% of contract demand, that portion of the demand in excess of the contract demand shall be billed at twice the normal charges."

Petitioners' submission

9.18.5. **Recovery of full Fixed / Demand Charge**

a. The demand charges would be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis. It is further proposed by the Petitioner to make this mandatory for such consumers who have smart meters installed in their premises. Since, all the meters currently installed in the state don't have the capability to record the number of hours of supply, the linking of fixed cost recovery with hours of supply may please be aligned with the roadmap of installation of smart meters in the state.

b. This shall not be applicable to Street light, Agriculture as well as un-metered tariff categories of consumers.

Commission's Analysis

9.18.6. This issue has already been dealt by the Commission in the earlier sections of this Order.

Petitioners' submission

9.18.7. **Fuel and Power Purchase Cost Adjustment (FPPCA):** In addition to the above tariff Fuel and Power Purchase Cost Adjustment (FPPCA) charges as applicable will be charged extra.

Commission's Analysis

9.18.8. The Commission notes the submission of the Discoms and directs that Discoms should file the petition for claiming the FPPCA both in the scenario of recovery as well as refund on a periodic basis as stipulated in the BERC (Multi-Year Distribution Tariff) Regulations, 2018.

Petitioners' submission

9.18.9. **Rebate for prompt payment**

a. The due date for making payment of energy bills or other charges shall be 15 days from the date of issue of the bill. To motivate consumers to make timely payment of their bills it is proposed to provide a rebate of 1.5% on the billed amount for timely payment of the bills for all the consumers served in LT and HT category.

b. In case a consumer makes full payment after due date but within 10 days after the due date, no DPS shall be levied for this period but rebate for prompt payment will not be admissible.

Commission's Analysis

9.18.10. The Commission observes that no change has been proposed in the rebate for prompt payment approved in the previous Tariff Order dated 20 March, 2020 and the same is continued in this Order.

Petitioners' submission

9.18.11. **Rebate for online payment**

a. To motivate the consumers to make online payment of the bills through online web portal of the Petitioner it is proposed to provide a rebate of 1% of the billed amount in addition to rebate @ 1.5% on the billed amount for timely payment of the bills for all the consumers served in LT and HT category. Payment made through all electronic modes of payment made directly in the DISCOM account will be considered as online payment. However, online payment rebate shall be applicable if the consumer makes the payment within due date in full.

b. In case a consumer makes full payment after due date but within 10 days after the due date, no DPS shall be levied for this period but rebate for prompt payment will not be admissible.

Commission's Analysis

9.18.12. The Commission observes that no change has been proposed in the rebate for online payment approved in the previous Tariff Order dated 20 March, 2020 and the same is continued in this Order. However, the Commission includes this rebate for all forms of digital payments apart from rebate for online payment.

Petitioners' submission

9.18.13. **Accounting of Partial Payment**

a. All payment made by consumers in full or part shall be adjusted in the following order of priority:

- Statutory taxes and duties on current consumption
- Arrear of Statutory taxes and duties
- Delayed payment surcharge
- Balance of arrears
- Balance of current bill

Commission's Analysis

9.18.14. The Commission observes that no change has been proposed in the Accounting for partial payment approved in the previous Tariff Order dated 20 March, 2020 and the same is continued in this Order.

Petitioners' submission

9.18.15. **Delayed Payment Surcharge (DPS)**

a. In case a consumer does not pay energy bills in full within 10 days grace period after due date specified in the bill, a delayed payment surcharge of one and half (1.5) percent per month or part thereof on the outstanding principal amount of bill will be levied from the due date for payment until the payment is made in full without prejudice to right of the licensee to disconnect the supply in accordance with Section 56 of the Electricity Act, 2003. The licensee shall clearly indicate in the bill itself the total amount, including DPS, payable for different dates after the due date after allowing for the grace period of 10 days. No DPS shall be charged on DPS arrear. The bill shall indicate the energy charges for the month, arrears of energy charges and DPS separately.

Commission's Analysis

9.18.16. It is highlighted that the present rebate on prompt payment of 1.5% on the total billed amount is higher than the present delayed payment surcharge of 1.25% of the total delayed bill amount. The Commission opines that the penal levies should not be lower than the rebate otherwise the consumers paying promptly within 10 days grace period would be discouraged. Therefore, the Commission accepts the proposal of the Discoms and approves DPS of 1.5% per month or part thereof.

Petitioners' submission

9.18.17. **Advance Payment:**

a. If a consumer makes advance payment against his future bills he shall be allowed for interest @ 4% (or bank rate, whichever is minimum) per annum. Such amount of interest shall be adjusted in subsequent monthly regular electricity bills on reducing balance, provided that the minimum amount of advance payment shall not be less than Rs.2000 (Rupees Two thousand).

Commission's Analysis

9.18.18. The Commission opines that the interest rates fluctuates periodically due to which a fixed interest rate is not approved in the present Order. The Commission approves an interest rate equivalent to Bank Rate of Reserve Bank of India prevalent from time to time.

Petitioners' submission

9.18.19. **Duties and Taxes**

a. Other statutory levies like electricity duty or any other taxes, duties etc., imposed by the State Government / Central Government or any other competent authority, shall be extra and shall not be part of the tariff as determined under this order.

Commission's Analysis

9.18.20. The Commission observes that no change has been proposed in the provision for Duties & Taxes approved in the previous Tariff Order dated 20 March, 2020 and the same is continued in this Order.

Petitioners' submission

9.18.21. Shunt Capacitor Installation and Rebate/surcharge for deviating from norm of Power Factor

a. Any LT consumer except Domestic category and categories having kVAh based billing in whose case, the meter installed has power factor recording feature and who fails to maintain monthly average power factor of 90% shall pay/avail a surcharge/rebate in addition to his normal tariff at the following rates

Power factor surcharge	
(i) For each fall of 0.01 in power factor up to 0.80	One percent on demand and energy charge (Actual Recorded)
(ii) For each fall of 0.01 in power factor below 0.80	1.5 (one and half) percent on demand and energy charge (Actual Recorded)

Commission's Analysis

9.18.22. The Commission observes that no change has been proposed in the provision for Power Factor Surcharge approved in the previous Tariff Order dated 20 March, 2020 and the same is continued in this Order.

Petitioners' submission

9.18.23. **Revision in Time of Day tariff (ToD) structure**

a. To revise the ToD tariff structure in a way to regulate the demand curve and rationalize power purchase cost of the DISCOMs & To plan and reduce dependency on short term power purchase, a revision in ToD tariff structure is proposed.

b. Consumers under LTIS-I, LTIS-II and PWW shall have the option to take TOD tariff instead of the normal tariff given in the Schedule.

c. Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of LTIS-I and PWW consumers for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter. The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer.

Slab	Period	Energy Tariff Rate
Normal	23:00-11:00	Normal Tariff as per consumer category

Peak	17:00-23:00	120% of Normal Tariff
Off-Peak	11:00-17:00	85% of Normal Tariff

Commission's Analysis

9.18.24. This issue has already been dealt by the Commission in the earlier sections of this Order.

Petitioners' submission

9.18.25. **Proposed changes in reference to smart prepaid metering:**

a. Smart pre-paid meter disconnection process

- The smart energy meters are being installed in prepaid mode and electricity charge calculation of consumers take place on a daily basis.
- Daily charge calculation/deduction shall be done in MDMS system or billing system based on the data collected from Head End System (HES) (daily profile, load profile and billing profile). The balance and consumption data shall be updated against each consumer, which can be readily viewed by the consumer via dedicated mobile app and web portal
- The moment, consumers balance falls below the 7-day average amount (i.e. seven times the last month's daily average), a recharge notification/alert (**Notification 1**) is sent to the consumer to avoid disconnection and same is also reflected in the consumer mobile app.
- Once the consumer's balance goes below zero amount, disconnection alert message (**Notification 2**) is sent to the consumer asking them to recharge and same is also reflected in the consumer mobile app.
- Within 24 hours of the disconnection alert message, consumers receive an imminent disconnection message (**Notification 3**) and failure to recharge within 24 hours of the imminent disconnection message leads to disconnection of the consumer connection and same may also be reflected in the consumer mobile app.
- Disconnection are scheduled only between 10 AM - 1 PM of any particular day, provided it is not a Govt. of Bihar notified holiday or a Sunday.
- Post disconnection, consumers are notified once in every 4 days about the same along with details of the negative balance amount till the consumer recharges their account to show a positive balance amount.
- The Commission is hereby requested to consider the above-mentioned process/timelines formulated by the Bihar DISCOMs for the temporary disconnection of consumers with smart prepaid energy meters & grant approval for the same. Also, the petitioner prays to the Hon'ble commission that notifications as highlighted above may be considered as formal intimation to the consumers for DISCOM to carry out temporary disconnection.

b. Smart pre-paid meter reconnection process

- Consumers can recharge online through Mobile app, web application and digital payment system such as E-wallet, V-wallet, or collection counter and web portal
- Post Disconnection, consumers must recharge their account to a positive balance amount for the reconnection process to be initiated.
- Once account shows positive balance, the automatic reconnection command is triggered from MDMS to HES (Head End System) and HES to meter.
- The consumer can get auto reconnected within few minutes of recharge of the meter. However, in case of any delay in reconnection, DISCOMs shall ensure that the following
- threshold for timelines is adhered to, at any cost:

Type of consumers	Recharge Time slot	Reconnection Time slot
Rural Consumers	Before 1 PM *(Day 0)*	Before end of *Day 1*
	After 1 PM *(Day 0)*	Before end of *Day 2*
Urban Consumers	Before 1 PM *(Day 0)*	8 hours from recharge time
	After 1 PM *(Day 0)*	Before 1 PM *(Day 1)*

- In case, consumers are temporarily disconnected on account of breach of conditions of supply or of his/ her agreement with the Licensee or of such provisions of the Act other than the reason of low or negative balance, a nominal charge as approved by the Hon'ble Commission may be recovered from the consumer as reconnection charges to ensure that the cause of disconnection has been removed & any associated compliance for ensuring safety is maintained at the consumer premise, before restoring supply of electricity. Such amount shall be deducted from the consumer's account & payment of any existing dues along with the reconnection charge is necessary for ensuring electricity supply restoration at such consumer premises.
- The Commission is therefore requested to consider the above-mentioned process & timelines formulated by the Bihar DISCOMs for reconnection of temporary disconnection consumers with smart prepaid energy meters & grant approval for the same. Also, the petitioner prays to the Hon'ble commission to approve the threshold timelines for reconnecting consumers, taking into consideration the topological challenges prevailing across the state. Additionally, Petitioner requests the Commission to approve the recovery of reconnection charges from consumers when reason for disconnection is anything other than low or negative account balance.

c. Rebate for prepaid smart meter consumers

- A rebate of 3% is proposed for the consumers with prepaid smart meters. This rebate will be made effective for the smart prepaid consumer from 01.04.2021 onwards in their monthly bill calculation.

- Smart metering being an emerging technology, consumer engagement & creation of awareness about the same amongst consumers is crucial. The Hon'ble commission is therefore requested to approve the rebate of 3% for the consumers with prepaid smart meters for incentivizing & promoting voluntary usage of smart prepaid meters by consumers across the state.
- The Commission is further requested to draft and publish the Smart Metering Regulations for the state of Bihar and establish provisions and regulations related to smart metering in the state including but not limited to the above mentioned provisions.

Commission's Analysis

9.18.26. The Commission opines that presently there is a void for the procedures for disconnection and reconnections for pre-paid smart meter consumers as the Bihar Electricity Supply Code, 2007 doesn't address the same. Hence, the Commission considering the present scenario that the Discoms already have a significant of existing consumers, is approving the proposed procedure provisionally till the same is deliberated and included through proceeding for an amendment in the Bihar Electricity Supply Code, 2007. The Discoms are directed to bring the above proposal before the Review Panel under the Bihar Electricity Supply Code for necessary consideration.

9.18.27. Further, reconnection charges for reasons of disconnection other than low balance or negative balance is approved same as reconnection charges for normal metered consumers. Additionally, the issue of rebate of 3% on pre-paid smart meters has been dealt by the Commission in the earlier sections of this Order.

Petitioners' submission

9.18.28. **Defective / Damaged / Burnt Meters Supply**

a. In case of meter being defective / damaged / burnt the licensee or the consumer as the case may be, shall replace it within the specified period prescribed in "Standards of Performance for Distribution Licensee", Regulations issued by the Commission.

b. Till defective / damaged / burnt meter is replaced, the consumption will be assessed and billed on an average consumption of last 12 months from the date of meter being out of order. Such consumption shall be treated as actual consumption for all practical purposes including calculation of electricity duty until the meter is replaced/ rectified.

c. In cases of newly installed meter of a consumer becoming defective/ damaged/ burnt after installation of the meter prior to completion of 12 months since its installation, the billing for the period for such defective/ damaged/ burnt meter, till it is not replaced, shall be done on the basis of average monthly consumption of the consumer or the MMC whichever is higher.

d. In case of the meter of a consumer becoming defective in the first month of installation itself, without taking any reading the consumer shall be provisionally billed on the basis of amount of security collected for one month. However, the provisional bill will be done for one month only and that will be finalized and adjusted on the basis of consumption of the second month.

Commission's Analysis

9.18.29. The procedure for defective/damaged/burnt meter supply will be dealt as per the BERC (Standards of Performance of Distribution Licence) Regulations, 2007.

Petitioners' submission

9.18.30. **Electric Vehicles (EVs) :**

a. Consumers may also charge Electric Vehicles (EVs) from their existing electric connection and the respective category tariff would be applicable for the electricity consumed for charging of the EVs.

b. Existing provision of demand-based tariff being optional for three phase LT consumer should be made compulsory. Tri-vector meters are installed in all the three phase consumers, Petitioner proposes to cover all three phase consumers under demand based tariff.

Commission's Analysis

9.18.31. The Commission takes note of the above proposal and has introduced a new tariff category for the Electric Vehicle Charging Station consumers in the Tariff Schedule. Further, the second part of the above submission doesn't relate to Electric Vehicle consumer Category proposal and hence is not being dealt in the present section.

Petitioners' submission

9.18.32. **Charges to Tatkal Connections (Optional)**

a. If any consumer (other than High Tension and Railway) opts for availing connection under Tatkal scheme, the licensee shall release the Tatkal connection to such consumer with the following conditions:

b. The Tatkal connections shall be released by licensee in half the time limit prescribed in the Supply code for that consumer category.

c. Two (2) times of the following charges approved under head miscellaneous and general charges will be taken from the consumers willing to avail Tatkal connection.

Commission's Analysis

9.18.33. The issue is to be dealt as per the Bihar Electricity Supply Code, 2007. Further, the tatkal connection charges have been dealt in the earlier sections of this Order.

Petitioners' submission

9.18.34. **Contract Demand for billing under Domestic Tariff**

a. For computation of the connected load of a domestic consumer either load of coolers/ fans or room heaters whichever is higher shall be considered. For the premises having Air conditioner (without heater) and that of geysers, the computation of connected load shall be as per the provision of Bihar Electricity Supply Code, 2007.

b. The contract demand of those consumers for the monthly billing purpose in the premises who have opted for demand-based tariff, the recorded demand or the contract demand, whichever is higher, shall be considered.

c. Subject to the minimum load of 1 kW, the fraction of the load below 500 W shall be rounded to its nearest lower level of whole number and 500 W and above shall be rounded to its nearest higher level of whole number, as specified in the Bihar Electricity Supply Code, 2007.

d. In case of demand-based tariff, verification of connected load is not required.

Commission's Analysis

9.18.35. The issue is to be dealt as per the Bihar Electricity Supply Code, 2007.

Petitioners' submission

9.18.36. **Other Terms and Conditions**

e. Existing provision of demand-based tariff being optional for three phase LT consumer should be made compulsory.

f. Tri-vector meters are installed in all the three phase consumers, Petitioner proposes to cover all three phase consumers under demand-based tariff.

g. All the other terms and conditions for the LT supply as has been decided by the Hon'ble Commission in its tariff order dated 21.03.2019 shall remain applicable for the FY 2021-22 also.

h. Other submissions made with respect to shift to KVaH based Tariff, Temporary Supply (LT and HT), security deposit, seasonal supply (LT and HT), etc have been made by the Discoms.

Commission's Analysis

9.18.37. All other terms and conditions would applicable as per the previous Tariff Order dated 20 March, 2020 and Bihar Electricity Supply Code, 2007

TARIFF SCHEDULE
FOR
RETAIL TARIFF RATES AND TERMS AND CONDITIONS OF SUPPLY FOR FY 2021-22
(Effective from 1st April, 2021)

PART - A: LOW TENSION SUPPLY

System of supply: Low Tension – Alternating Current, 50 cycles per second

Single Phase supply at 230 Volts

Three Phase supply at 400 Volts

The tariffs are applicable for supply of electricity to L.T consumers with a connected / contracted demand up to 70 kW for domestic, non-domestic and Street Light Category, up to 74 kW for industrial (LTIS) and for public water works (PWW) category and up to 100 HP for irrigation category under single or three phase supply as detailed below:

- Single Phase supply up to 7 kW
- Three Phase supply 5 kW and above.
- Consumers having load between 5 kW and 7 kW have the option to take single phase or three phase supply.
- LT Industrial and Agriculture load up to 5 kW have option to avail supply at single phase or three phase

Category of Service and TARIFF RATES

1. DOMESTIC

Service Applicability

This tariff is applicable for supply of electricity for domestic purposes such as lights, fans, televisions, heaters, air-conditioners, washing machines, air-coolers, geysers, refrigerators, ovens, mixers and other domestic appliances including motor pumps for lifting water for domestic purposes. This is also applicable to the common facilities in the multistoried, purely residential apartments, buildings. This Tariff also includes Kutir Jyoti connections in rural and urban areas.

1.1. Kutir Jyoti / BPL Connections (KJ/BPL) – Rural / Urban

This will be applicable to all dwelling houses of rural and urban families below the poverty line (BPL) as per the list/notification published by Rural Development Department, Government of Bihar from time to time.

(i) The total connected load of Kutir Jyoti connection in a rural and urban area should not exceed 250 watts and maximum consumption of 50 units per month shall be allowed under this category.

(ii) Use of LED / CFL both in rural areas and urban areas should be encouraged.

(iii) In case it is detected that the connected load exceeds the norms prescribed in para (i) above, the excess units consumed shall be billed at the tariff rates applicable to DS – I and DS- II category as the case may be.

1.2. Domestic Service – I (DS – I Rural)

This is applicable to domestic premises in rural areas (i.e. areas not covered by areas indicated under DS-II). If any portion of the premises is used for other than domestic purpose, a separate connection shall be taken for that portion and NDS-I tariff schedule shall be applicable for that service.

1.3. Domestic Service – II (DS – II Urban)

This is applicable for domestic premises in urban areas notified by Department of Urban Development, Government of Bihar from time to time. If any portion of the premises is used for other than domestic purposes, a separate connection shall be taken for that portion and NDS-II tariff schedule shall be applicable for that service.

1.4. Domestic Service – III (DS-III Group Connection) (Optional)

This is applicable for group residential consumers willing to avail supply at single point for the purpose of use of electricity in residential townships, registered societies, multi-storied residential complex (including lifts, water pumps and common lighting within the premises). The maximum allowable contract demand shall be 74KW. If any portion of the premises is used for other than domestic purposes, a separate connection shall be taken for that portion and NDS-II tariff schedule shall be applicable for that service.

TARIFF RATES

1. DOMESTIC

1.1. Kutir Jyoti - BPL Consumers (Connected load based)

Sl. No	Category of consumer	Fixed charge (Rs.)	Energy charge (Paisa/ Unit.)
(i)	K.J. - (Consumption up to 50 units per month)		
1	Metered	Rs.10 / connection / per month	First 50 units at 610Ps/ unit Remaining units, rate as per DS-I (Metered) or DS-II as applicable.
The Demand Charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any			

month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.

1.2. DS – I: (Demand based)

<table>
<tr><th>Sl. No</th><th>Category of consumer</th><th>Fixed charge (Rs.)</th><th colspan="2">Energy charge (Paisa/ Unit.)</th></tr>
<tr><td rowspan="3">1</td><td rowspan="3">Metered</td><td rowspan="3">Rs.20 / kW or part thereof per month</td><td>First 50 units</td><td>610</td></tr>
<tr><td>51-100 units</td><td>640</td></tr>
<tr><td>Above 100</td><td>670</td></tr>
<tr><td colspan="5">The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher.

If in any month the recorded maximum demand exceeds 105% of contract demand, that portion of the demand in excess of the contract demand shall be billed at twice the normal charges.

The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.</td></tr>
</table>

1.3. DS – II: (Demand based)

<table>
<tr><th rowspan="2">Sl. No</th><th rowspan="2">Category of consumer</th><th rowspan="2">Fixed charge (Rs.)</th><th colspan="2">Energy charges</th></tr>
<tr><th>Consumption in a month (Units)</th><th>Rate (Paisa/unit)</th></tr>
<tr><td rowspan="3">1</td><td rowspan="3">Metered (Contract demand up to 70 kW)</td><td rowspan="3">Rs.40 / kW or part thereof per month</td><td>1-100 units</td><td>610</td></tr>
<tr><td>101-200 units</td><td>695</td></tr>
<tr><td>Above 300 units</td><td>805</td></tr>
<tr><td colspan="5">The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher.

If in any month the recorded maximum demand exceeds 105% of contract demand, that portion of the demand in excess of the contract demand shall be billed at twice the normal charges.

The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.</td></tr>
</table>

1.4. DS – III: (Demand based) (Optional)

Sl. No	Category of consumer	Fixed charge (Rs.)	Energy charges	
			Consumption in a month (Units)	Rate (Paisa/unit)
1	Metered (Contract demand up to 74 kW)	Rs.40 / kW or part thereof per month	All units	740

The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher.

If in any month the recorded maximum demand exceeds 105% of contract demand, that portion of the demand in excess of the contract demand shall be billed at twice the normal charges.

The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.

2.0. NON-DOMESTIC SERVICE (NDS)

Applicability

This is applicable for supply of electrical energy for non-domestic consumers having sanctioned/contracted load up to 70 kW, using electrical energy for light, fan and power loads for non-domestic purposes like shops, hospitals, nursing homes, clinics, dispensaries, restaurants, hotels, clubs, guest houses, marriage houses, public halls, show rooms, centrally air-conditioning units, offices, commercial establishments, cinemas, X-ray plants, non-government schools, colleges, libraries and research institutes, boarding/lodging houses, libraries, railway stations, fuel/oil stations, service stations, All India Radio/T.V. installations, printing presses, commercial trusts, societies, banks, theatres, circus, coaching institutes, common facilities in multistoried commercial office/buildings, Government and semi–government offices, public museums, Government educational institutions, their hostels and libraries, Government hospitals and government research institutions and non–profitable government aided educational institutions their hostels and libraries, nonprofitable recognized charitable cum public institutions, places of worship like temples, mosques, gurudwaras, churches etc. and burial/crematorium grounds, glow signboards, banners and hoardings for advertisement and other installations not covered under any other tariff schedule

2.1. Non-Domestic Service (NDS – I) Rural (Demand based)

Applicable to non-domestic premises in rural areas i.e. areas not covered by areas indicated under NDS-II

<table>
<tr><th rowspan="2">Sl. No</th><th rowspan="2">Category of consumer</th><th rowspan="2">Fixed charge (Rs.)</th><th colspan="2">Energy charge (Paisa/ Unit.)</th></tr>
<tr></tr>
<tr><td rowspan="3">1</td><td rowspan="3">Metered</td><td rowspan="3">Rs.30 /kW or part thereof per month</td><td>1-100 units</td><td>640</td></tr>
<tr><td>101-200 units</td><td>700</td></tr>
<tr><td>Above 200 units</td><td>755</td></tr>
<tr><td colspan="5">The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher.

If in any month the recorded maximum demand exceeds 105% of contract demand, that portion of the demand in excess of the contract demand shall be billed at twice the normal charges.

The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.</td></tr>
</table>

2.2. Non - Domestic Service – NDS – II (Demand based)

Applicable to contracted load up to 70 kW in urban areas notified by Department of Urban Development, Government of Bihar from time to time. This tariff shall also be applicable to places of worship like temples, mosques, gurudwaras, churches etc. burial/crematorium grounds, hoardings/glow sign boards/advertising boards.

<table>
<tr><th rowspan="2">Sl. No.</th><th rowspan="2">Category of Consumer</th><th rowspan="2">Fixed charge (Rs.)</th><th colspan="2">Energy charges</th></tr>
<tr><th>Consumption in a month (Units)</th><th>Rate Ps/unit</th></tr>
<tr><td>1.</td><td>Metered Contract load up to 0.5 kW</td><td>Rs.100/ month/connection</td><td>All Units</td><td>635</td></tr>
<tr><td>2</td><td>Metered
Contract demand above 0.5 kW and up to 70 kW</td><td>Rs. 180/kW or part thereof per month</td><td>1-100 Units
101-200 units
Above 200 Units</td><td>635
685
740</td></tr>
<tr><td colspan="5">The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher.

If in any month the recorded maximum demand exceeds 105% of contract demand, that portion of the demand in excess of the contract demand shall be billed at twice the normal charges.

The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.</td></tr>
</table>

3.0.IRRIGATION and AGRICULTURE SERVICE (IAS)

This is applicable for supply of electrical energy for bonafide use for agricultural purposes including processing of Agricultural Produce, confined to chaff-cutter, thrasher, cane crusher and rice Huller when operated by the agriculturist in the field or farm. This is also applicable to hatcheries, poultries (with more than 1000 birds) and fisheries (fish ponds).

3.1. IAS – I (Connected load based)

This is applicable for all purposes indicated above including private tube wells of load up to 100 HP

Sl. No	Category of consumer	Fixed charge (Rs.)	Energy charge (Paisa/ Unit.)	
1	**Unmetered**	Rs.800 / HP or part thereof / month	X	
2	**Metered**	Rs.30 / HP or part thereof / month	All units	555

***Note: There will be no un-metered connections for Hatcheries, poultries and fisheries. They will necessarily have to be metered connections*.**

3.2. IAS – II (Demand based)

This is applicable to state tube wells/ state lift irrigation pumps / state irrigation pumps up to 74 kW 100 HP.

<table>
<tr><th>Sl. No</th><th>Category of consumer</th><th>Fixed charge (Rs./kVA)</th><th colspan="2">Energy charge (Paisa/ kVAh.)</th></tr>
<tr><td>1</td><td>Metered</td><td>Rs.240 / kVA or part thereof / month</td><td>All units (kVAh)</td><td>590</td></tr>
<tr><td colspan="5">The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher.

If in any month the recorded maximum demand exceeds 105% of contract demand, that portion of the demand in excess of the contract demand shall be billed at twice the normal charges.

The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.</td></tr>
</table>

4.0.LOW TENSION INDUSTRIAL SERVICE (LTIS).

This is applicable for supply of electricity to low tension industrial consumers with connected load /contract demand up to 99 HP or 74 kW, which includes incidental lighting for industrial processing or agro – industries purposes, arc welding sets, flour mills, oil mills, rice mills, dal mills, atta chakki, Huller, expellers etc.

4.1. LTIS – I (Demand based)

All those consumers opting for LTIS-I category with contract demand up to 19 KW shall be required to pay at the rates indicated below:

<table>
<tr><th>Sl. No</th><th>Category of consumer</th><th>Demand charge (Rs./kVA)</th><th colspan="2">Energy charges Paise / kVAh</th></tr>
<tr><td>1</td><td>Metered
Contract demand up to 19 KW</td><td>Rs. 144/kVA or part thereof per month.</td><td>All units (kVAh)</td><td>640</td></tr>
<tr><td colspan="5">The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher.

If in any month the recorded maximum demand exceeds 105% of contract demand, that portion of the demand in excess of the contract demand shall be billed at twice the normal charges.

The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.</td></tr>
</table>

4.2. LTIS –II (Demand based)

All those consumers under LTS-II category with 3 phase supply and with contract demand above 19kW and up to 74kW shall be required to pay at the rates indicated below:

<table>
<tr><th>Sl. No</th><th>Category of consumer</th><th>Demand charge (Rs./kVA)</th><th colspan="2">Energy charges Paise / kVAh</th></tr>
<tr><td>1</td><td>Metered
Contract demand above 19 kW and up to 74KW</td><td>Rs. 180/kVA or part thereof per month.</td><td>All units (kVAh)</td><td>640</td></tr>
<tr><td colspan="5">The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher.

If in any month the recorded maximum demand exceeds 105% of contract demand, that portion of the demand in excess of the contract demand shall be billed at twice the normal charges.

The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.</td></tr>
</table>

5.0. PUBLIC WATER WORKS

Applicability

This is applicable to public water works, sewerage treatment plant and sewerage pumping stations functioning under state government and state government undertakings and local bodies**.**

5.1. PWW (Demand Based)

Sl. No	Category of consumer	Demand charge (Rs./kVA)	Energy charges Paise / kVAh	
1	**Metered** Contract demand up to 74 kW	Rs. 315/kVA or part thereof per month.	All units (kVAh)	795
The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher. If in any month the recorded maximum demand exceeds 105% of contract demand, that portion of the demand in excess of the contract demand shall be billed at twice the normal charges. The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.				

5.2. Har Ghar Nal (Connected Load based)

Sl. No	Category of consumer	Fixed charge (Rs.)	Energy charge (Paisa/ Unit.)	
1	**Metered**	Rs.40 / HP or part thereof / month	All units	670
The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.				

6.0.STREET LIGHT SERVICES (SS).

This is applicable for supply of electricity for street light system including signal system. Also applicable for Traffic Lights, Mast lights/Blinkers etc.

6.1. SS Metered Supply (Connected load based)

Sl. No	Category of consumer	Fixed charge (Rs.)	Energy charge (Paisa/ Unit.)	
1	**Metered**	Rs. 50/kW or part thereof / month	All units	740

6.2. SS Unmetered Supply

Sl. No	Category of consumer	Fixed charge (Rs.)	Energy charge (Paisa/ Unit.)
1	**Unmetered**	Rs.375 /100W or part thereof / month	-

6.3. LT Electric Vehicle Charging Stations.

This Tariff category is applicable for Electric Vehicle Charging Station including battery swapping station for electric vehicle. In case the consumer uses the electricity supply for charging his own electric vehicle at his premises, the tariff applicable shall be as per the category of such premises. Electricity consumption for other facilities and purposes at Charging Station such as office, restaurant, rest rooms, convenience stores, public amenities, etc., shall be charged at tariff applicable to Non-Domestic Category.

Sl. No	Category of consumer	Energy charge (Paisa/ Unit.)
1	**Metered**	715

TERMS AND CONDITIONS OF LOW TENSION TARIFF

The above tariffs are subject to the following conditions:

1. Demand based Tariff

The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher.

If in any month the recorded maximum demand exceeds 105% of contract demand, that portion of the demand in excess of the contract demand shall be billed at twice the normal charges.

2. Recovery of full Fixed / Demand Charge

The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis

This shall not be applicable to Street light, Agriculture as well as un-metered tariff categories of consumers.

3. Fuel and Power Purchase Cost Adjustment (FPPCA)

In addition to the above tariff Fuel and Power Purchase Cost Adjustment (FPPCA) charges as applicable will be charged extra.

4. Rebate for prompt payment.

The due date for making payment of energy bills or other charges shall be 15 days from the date of issue of the bill. Rebate of 1.5% on the billed amount for timely payment of the bills for all the consumers served in LT category shall be allowed.

In case a consumer makes full payment after due date but within 10 days after the due date, no DPS shall be levied for this period and rebate for prompt payment will not be admissible.

5. Rebate for online payment

For encouraging the consumers to make online payment of the bills through online web portal, a rebate of 1% of the billed amount in addition to rebate @ 1.5% shall be allowed. However, online payment rebate shall be applicable if the consumer makes full payment of the bill within due date.

6. Rebate for pre-paid Smart meter

For encouraging the consumers to avail pre-paid smart meter connection, a rebate of 2% on the recharged amount in addition to rebate for online or digital payment of 1% shall be allowed. However, rebate for online or digital payment shall not be applicable if the consumer purchases recharge coupons.

7. Accounting of Partial Payment

All payment made by consumers in full or part shall be adjusted in the following order of priority:

a. Statutory taxes and duties on current consumption
b. Arrear of Statutory taxes and duties
c. Delayed payment surcharge
d. Balance of arrears
e. Balance of current bill

8. Delayed Payment Surcharge (DPS)

In case a consumer does not pay energy bills in full within 10 days grace period after due date specified in the bill, a delayed payment surcharge of one and one-forth half(1.5) percent per month or part thereof on the outstanding principal amount of bill will be levied from the due date for payment until the payment is made in full without prejudice to right of the Licensee to disconnect the supply in accordance with Section 56 of the Electricity Act, 2003. The licensee shall clearly indicate in the bill itself the total amount, including DPS, payable for different dates after the due date after allowing for the grace period of 10 days. No DPS shall be charged on DPS arrear. The bill shall indicate the energy charges for the month, arrears of energy charges and DPS separately.

9. Duties and Taxes

Other statutory levies like electricity duty or any other taxes, duties etc., imposed by the State Government / Central Government or any other competent authority, shall be extra and shall not be part of the tariff as determined under this Order.

10. Shunt Capacitor Installation and Rebate/surcharge for deviating from norm of Power factor

Any LT consumer except Domestic category and categories having kVAh based billing in whose case, the meter installed has power factor recording feature and who fails to maintain monthly average power factor of 90% shall pay/avail a surcharge/rebate in addition to his normal tariff at the following rates.

11. Power factor surcharge

(i) For each fall of 0.01 in power factor up to 0.80	One percent on demand and energy charge (Actual Recorded)
(ii) For each fall of 0.01 in power factor below 0.80	1.5 (one and half) percent on demand and energy charge (Actual Recorded)

12. Power factor Rebate

(i) For each increase of 0.01 in power factor above 0.90 up to 0.95	0.5 (half) percent on demand and energy charge (Actual Recorded)
(ii) For each increase of 0.01 in power factor above 0.95	1.0 (one) percent on demand and energy charges. (Actual Recorded)

13. Advance Payment

If a consumer makes advance payment against his future bills he shall be allowed for interest equivalent to the Bank Rate of RBI. Such amount of interest shall be adjusted in subsequent monthly regular electricity bills on reducing balance, provided that the minimum amount of advance payment shall not be less than Rs.2000 (Rupees Two thousand).

14. Time of Day tariff (ToD) (Optional)

Consumers under LTIS-I, LTIS-II and PWW shall have the option to take TOD tariff instead of the normal tariff given in the Schedule.

Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of LTIS-I and PWW consumers for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter. The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer.

Time of Use	Demand Charges	Energy Charges
(i) Normal period (11:00 p.m. to 11.00 a.m.)	Normal Rate	Normal rate of energy charges
(ii) Evening peak load period (5.00 p.m. to 11.00 p.m.)	Normal Rate	120% of normal rate of energy charges
(iii) off peak load period (11.00 a.m. to 5.00 p.m.)	Normal Rate	85% normal rate of energy charges

PART – B: HIGH TENSION SUPPLY

7.1. HTS – I (11 kV)

Applicable for supply of electricity for use in installations with a minimum contract demand of 50 kVA and maximum contract demand of 1500 kVA.

Character of service: AC, 50 cycles, 3 phase at 11 kV.

Demand charge Rs./ kVA / Month of billing demand	Energy charges (Paise / kVAh)
300	All units - 655
The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher. If in any month the recorded maximum demand exceeds 105% of contract demand, that portion of the demand in excess of the contract demand shall be billed at twice the normal charges. The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.	

7.2. HTS – II (33 kV)

This is applicable for use in installations with a minimum contract demand of 500 kVA and maximum contract demand of 15,000 kVA.

Character of service: AC, 50 cycles, 3 phase at 33 kV

Demand charge Rs./ kVA / Month of billing demand	Energy charges (Paise / kVAh)
300	All units – 650
The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher. If in any month the recorded maximum demand exceeds 105% of contract demand, that portion of the demand in excess of the contract demand shall be billed at twice the normal charges. The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.	

7.3. HTS – III (132 kV)

This is applicable for installations with a minimum contract demand of 7.5MVA. Character of service: AC, 50 cycles, 3-phase at 132 kV.

Demand charge Rs./ kVA / Month of billing demand	Energy charges (Paise / kVAh)
300	All units – 645
The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher. If in any month the recorded maximum demand exceeds 105% of contract demand, that portion of the demand in excess of the contract demand shall be billed at twice the normal charges. The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.	

7.4. HTS-IV (220 kV)

This is applicable for installation with a minimum contract demand of 10MVA.

Character of service: AC, 50 cycles, 3 phase at 220 kV

Demand charge Rs./ kVA / Month of billing demand	Energy charges (Paise / kVAh)
300	All units – 640
The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher. If in any month the recorded maximum demand exceeds 105% of contract demand, that portion of the demand in excess of the contract demand shall be billed at twice the normal charges. The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.	

7.5. HTSS – (33 kV/11 kV)

This is applicable for supply of electricity to all consumers who have contract demand of 300 kVA and more for induction furnace including Ferro Alloy loads. This tariff will not apply to casting units having induction furnace of melting capacity of 500 Kg and below. The capacity of induction furnace shall be 600 kVA per metric ton as existing for determining the contract demand of induction furnace in the existing HTSS service connections. However, for new connection and if the furnace is replaced with a new one for the existing connections, the contract demand shall be based on total capacity of the furnace and equipment as per manufacturer technical specifications, and in case of difference of opinion, the provisions of Clause Nos. 6.39 and 6.4 0 of the Bihar Electricity Supply Code shall apply.

Those consumers who are having rolling/re-rolling mill in the same premises will take additional contract demand for the rolling/re-rolling mill over and above the contract demand required for induction furnace. The consumer will have the option to segregate the rolling/re-rolling mill and take separate new connection following all prescribed formalities with a separate transformer. This new connection, if taken by the consumer will be allowed to be billed in appropriate tariff schedule. Such rolling/re-rolling mill will be allowed to avail power at 33 kV.

Character of service: AC, 50 cycles, 3-phase at 33 kV or 11kV.

<table>
<tr><th>Demand charge
Rs./ kVA / Month of billing demand</th><th>Energy charges
(Paise / kVAh)</th></tr>
<tr><td>700</td><td>All units – 410</td></tr>
<tr><td colspan="2">The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher.

If in any month the recorded maximum demand exceeds 105% of contract demand, that portion of the demand in excess of the contract demand shall be billed at twice the normal charges.

The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.

If the power is availed at 11 kV a surcharge of five (5) % will be charged extra on demand and energy charges.</td></tr>
</table>

7.6. RTS (Railway Traction)

Applicable to Railway Traction loads only

<table>
<tr><th>Demand charge
Rs. / kVA / Month of billing demand</th><th>Energy charges
(Paise / kVAh)</th></tr>
<tr><td>280</td><td>All units – 670</td></tr>
<tr><td colspan="2">i. 13 Ps/kVAh of rebate shall be provided for availing supply at voltages higher than 132 kV.
ii. 13 Ps/kVAh of surcharge shall be billed for availing supply at lower voltages than 132 kV.
iii. The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher.</td></tr>
</table>

7.7. HT Electric Vehicle Charging Stations

This Tariff category is applicable for Electric Vehicle Charging Station including battery swapping station for electric vehicle. In case the consumer uses the electricity supply for charging his own electric vehicle at his premises, the tariff applicable shall be as per the category of such premises. Electricity consumption for other facilities and purposes at Charging Station such as office, restaurant, rest rooms, convenience stores, public amenities, etc., shall be charged at tariff applicable to Non-Domestic Category.

Sl. No	Category of consumer	Energy charge (Paisa/ kVAh.)
1	**Metered**	645

TERMS AND CONDITIONS OF HT TARIFF

The above tariffs are subject to the following conditions:

1. **Demand based Tariff**

   The billing demand shall be the maximum demand recorded during the month or 75% of the contract demand whichever is higher.

   If in any month the recorded maximum demand exceeds 105% of contract demand, that portion of the demand in excess of the contract demand shall be billed at twice the normal charges.

2. **Recovery of full Fixed/Demand Charge**

   The demand charges shall be recovered in full only if supply of power duly recorded by the consumer meter is maintained for at least 21 hours/day during the billing month. In any month if the supply of power is less than 21 hours/day, then the demand charge for that month shall be levied on pro-rata basis.

3. **Fuel and Power Purchase Cost Adjustment (FPPCA)**

   In addition to the above tariff Fuel and Power Purchase Cost Adjustment (FPPCA) charges as applicable will be charged extra.

4. **Rebate for prompt payment**

   The due date for making payment of energy bills or other charges shall be 15 days from the date of issue of the bill. Rebate of 1.5% on the billed amount for timely payment of the bills for all the consumers served in LT category shall be allowed.

   In case a consumer makes full payment after due date but within 10 days after the due date, no DPS shall be levied for this period and rebate for prompt payment will not be admissible.

5. **Rebate for online payment**

   To motivate the consumers to make online payment of the bills through online web portal a rebate of 1% of the billed amount in addition to rebate @ 1.5% shall be allowed. However, online payment rebate shall be applicable if the consumer makes full payment of the bill within due date.

6. **Rebate for pre-paid Smart meter**

   For encouraging the consumers to avail pre-paid smart meter connection, a rebate of 2% on the recharged amount in addition to rebate for online or digital payment of 1% shall be allowed. However, rebate for online or digital payment shall not be applicable if the consumer purchases recharge coupons.

7. Load Factor Incentive

To promote efficiency in the system and incentivize electricity consumption Load factor incentive will be allowed for all HT category consumers (including HTSS) as follows:

Load Factor Range	Incentive
50%-70%	*20 paise per unit concession on energy charges for energy consumption over 50% and up to 70% load factor during the billing month*
Above 70%	*30 paise per unit on energy charges for energy consumption over and above 70% and up to 100% load factor during billing month*

8. Accounting of Partial payment

All payment made by consumers in full or part shall be adjusted in the following order of priority:

a) Statutory taxes and duties on current consumption

b) Arrear of Statutory taxes and duties

c) Delayed payment surcharge

d) Balance of arrears

e) Balance of current bill

9. Delayed Payment Surcharge (DPS)

In case, consumer does not pay energy bills in full within 10 days grace period after due date specified in the bill, a delayed payment surcharge of one and one-fourth half (1.5) percent per month or part thereof on the outstanding principal amount of bill will be levied form the original due date for payment until the payment is made in full without prejudice to right of the licensee to disconnect the supply in accordance with Section 56 of the Electricity Act, 2003. The licensee shall clearly indicate in the bill itself the total amount, including DPS, payable for different dates after the due date after allowing for the grace period of 10 days. No DPS shall be charged on DPS arrear. The bill shall indicate the energy charges for the month, arrears of energy charges and DPS separately.

10. Duties and Taxes

Statutory levies like electricity duty or any other taxes, duties etc., imposed by the State Government / Central Government or any other competitive authority, shall be extra and shall not form part of the tariff as determined under this Order.

11. Contract Demand for Induction Furnaces

The prevailing practice will continue for determining the contract demand of induction furnaces in the existing services connections. However, for new connections and where the furnaces are replaced in existing connections, contract demand shall be based on the total capacity of the furnace and equipment as per manufacturer technical specifications and in case of difference of opinion, the provisions of clause No.6.39 and 6.40 of Bihar Electricity Supply Code shall apply.

12. Advance Payment:

If a consumer makes advance payment against his future bills he shall be allowed for interest equivalent to the Bank Rate of RBI. Such amount of interest shall be adjusted in subsequent monthly regular electricity bills on reducing balance, provided that the minimum amount of advance payment shall not be less than Rs.2000 (Rupees Two thousand).

13. Time of Day tariff (ToD)

ToD tariff shall be mandatory for all HT consumers. Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of HT consumers for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter. The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer.

Time of Use	Demand Charges	Energy Charges
(i) Normal period (11:00 p.m. to 11.00 a.m.)	Normal Rate	Normal rate of energy charges
(ii) Evening peak load period (5.00 p.m. to 11.00 p.m.)	Normal Rate	120% of normal rate of energy charges
(iii) off peak load period (11.00 a.m. to 5.00 p.m.)	Normal Rate	85% normal rate of energy charges

TERMS AND CONDITIONS OF TEMPORARY SUPPLY (LT and HT)

1. Applicability

This tariff is for connection of temporary in nature for period of less than one year. The applicability shall be as given in the respective category tariff rate schedule. Temporary supply cannot be claimed by a prospective consumer as a matter of right but will normally be arranged by the Licensee when a requisition is made giving due notice subject to technical feasibility and in accordance with electricity supply code issued by the Commission.

2. Tariff

Fixed charge and energy charge shall be chargeable at one and one-fourth (1/4) times the normal tariff as applicable to the corresponding appropriate tariff category.

3. Terms of Supply

a) Temporary supply under any category of service may be given for a period not exceeding 30 days in the first instance, the duration of which, however may be extended on month-to-month basis subject to maximum of one year.

b) In addition to the charges mentioned above, the consumer shall have to deposit the following charges before commencement of the temporary supply

   i. Estimated cost of erection of temporary service line and dismantling.
   ii. Cost of irretrievable materials which cannot be taken back to service.
   iii. Miscellaneous and General charges as per appropriate tariff schedule.
   iv. Rental on the cost of materials as per estimate framed but not payable by the consumer shall be payable at the rate of Rs.15/- per month on every Rs.100/- or part thereof.
   v. Ten per cent on the total cost of the estimate for the temporary service connection to cover as security for loss of materials and contingencies. In case such loss is not noticed, the amount will be refunded.

c) The applicants for temporary supply shall be required to make a deposit in advance of the cost as detailed above including the energy consumption charges estimated for full period on the basis of connected load. This will however, be adjusted against the final bill that will be rendered on disconnection of supply month to month basis.

d) If the consumer intends to extend the temporary supply beyond the period originally applied for, he will have to deposit in advance all charges as detailed above including the estimated electricity consumption charges, for the period to be extended and final bill for the previous period, as well.

e) The temporary supply shall continue as such and be governed by the terms and conditions specified above until the supply is terminated or converted into permanent supply at the written request of the consumer. The supply will be governed by the terms and conditions of permanent supply only after the consumer has duly completed all the formalities like execution of agreement, deposit of security money, cost of service connection and full settlement of the account in respect of the temporary supply etc.

TERMS AND CONDITIONS OF SEASONAL SUPPLY (LT and HT)

1. Seasonal supply shall be given to any consumer on written request to the Licensee subject to the following conditions.

Period of Supply	Tariff Rate
Upton 3 consecutive months in a year	Appropriate tariff plus 30 percent
More than 3 consecutive months and up to 6 consecutive months in a year	Appropriate tariff plus 20 percent
More than 6 consecutive months and up to 9 consecutive months in a year	Appropriate tariff plus 15 percent
More than 9 consecutive months but less than one year	Appropriate tariff plus 5 percent.

2. Miscellaneous and General charges as provided in the appropriate tariff are applicable to seasonal loads and would be charged extra for the entire period of supply.
3. The supply would be disconnected after the end of the period unless the consumer wants the supply to be continued. Any reconnection charges have to be borne by the consumer.
4. Consumer proposing to avail seasonal supply shall sign an agreement with the Licensee to avail power supply for a minimum period as specified in Bihar Electricity Supply Code, 2007 amended from time to time.
5. The consumers must avail supply in terms of whole calendar month continuously.
6. The consumer is required to apply for seasonal supply and pay initial cost and security deposit as an applicant for normal electricity supply.
7. The consumer shall ensure payment of monthly energy bills within 7 days of its receipt. The supply will be disconnected if payment is not made on due date.

PART – C: MISCELLANEOUS AND GENERAL CHARGES

1 Miscellaneous and General Charges

The Miscellaneous and General charges approved by the Commission are as below:

1.1 Application fee for new connection / reduction of load / enhancement of load / request for permanent disconnection / request for tatkal connection:

Sl. No.	Category / class	Rate
(i)	Kutir Jyoti	Rs.20.00
(ii)	LT Single phase except Kutir Jyoti	Rs. 75.00
(iii)	LT Three phase	Rs. 200.00
(iv)	LT Industrial	Rs. 300.00
(v)	HT Connection	Rs. 750.00
(vi)	For tatkal connection	Two (2) times the normal rate

1.2 Testing / Inspection of consumer's Installation:

Sl. No.	Category / class	Rate
(i)	Initial Test / Inspection	Free of cost
(ii)	Subsequent test and inspection necessitated by fault in installation or by not complying with terms and conditions of supply	Rs. 100.00 for single phase connection Rs. 200.00 for three phase LT connection Rs.800.00 for HT connection.

1.3 Meter Testing Fee:

The meter testing fee at the following rates shall be charged from the consumers opting to provide their own meters

Sl. No.	Category /Class	Rate
(i)	Single Phase meter (L.T.)	Rs. 100.00
(ii)	Three Phase meter (L.T.)	Rs. 200.00
(iii)	Three Phase meter with CT	Rs. 300.00
(iv)	Tri-vector and special type meter	Rs. 1800.00
(v)	33 kV or 11 kV metering equipment	Rs. 5000.00
(vi)	132 kV/220 kV metering equipment	Rs. 8000.00

Note:

1) No meter testing fee shall be charged from the consumers if the meter has been provided by the licensee.
2) If the meter is tested at third party testing laboratory at the request of the consumer then the fees charged by the testing laboratory shall be payable by the consumer.

1.4 Meter Testing Fees for Bi-directional Meters

The meter testing fees for bi-directional meters at the following rates shall be charged from the consumers opting to provide their own meters

Sr. No.	Category / class	Rate
1	Single Phase bi-directional meter	Rs. 200.00
2	Three phase LT CT Operated Bidirectional meter	Rs. 800.00
3	Three Phase meter (L.T.) Bidirectional meter	Rs. 400.00
4	Three Phase meter with CT Bidirectional meter	Rs. 600.00
5	Tri-vector and special type Bidirectional meter	Rs. 2000.00
6	Three phase HT TOD Bidirectional	Rs. 1,100.00

Note:

1) No meter testing fee shall be charged from the consumers if the meter has been provided by the licensee.
2) If the meter is tested at third party testing laboratory at the request of the consumer then the fees charged by the testing laboratory shall be payable by the consumer.

1.5 Removing / Re-fixing / Changing of Meter / Meter Licensee at consumer's request:

Sl. No.	Category / class	Rate	
(i)	Single Phase meter	Rs. 200.00	Cost of material, as required, will be borne by the consumer
(ii)	Three Phase meter	Rs. 400.00	
(iii)	Three Phase meter with CT	Rs. 500.00	
(iv)	Tri-vector and special type meter	Rs. 600.00	
(v)	High tension metering equipment	Rs. 1200.00	

1.6 Reconnection charge:

Sl. No.	Category/class	Rate
(i)	Single Phase supply, LT	Rs. 100.00
(ii)	Three Phase supply other than LT industrial	Rs. 200.00
(iii)	Three Phase LT industrial supply	Rs. 900.00
(iv)	HT supply	Rs. 3000.00

Note: In case pre-paid smart meter reconnection, the reconnection charges would be applicable only if the consumer would have been permanently disconnected prior to the reconnection request.

1.7 Supervision, Labour and Establishment charge for service connection:

Sl. No.	Category/class	Rate
(i)	Single Phase LT	Rs. 400.00
(ii)	Three Phase LT other than industrial	Rs. 900.00
(iii)	Three Phase industrial	Rs. 1500.00

(iv)	HT	As per approved estimate
(v)	For tatkal connection	Two (2) times the normal rate

1.8 Duties and Taxes

Statutory levies like GST or any other taxes, duties etc., imposed by the State Government / Central Government or any other competent authority, shall be extra and shall not be part of the tariff as determined under this Order.

1.9 Initial Security Deposit

All Consumers except BPL (Kutir Jyoti) and Central / State Government departments shall pay initial security in accordance with provisions under Bihar Electricity supply Code, 2007 as amended from time.

1.10Other Terms and Conditions:

The other terms and conditions of supply of electricity not specially provided in this tariff order shall continue to be regulated by the provisions specified in the Bihar Electricity Supply Code, 2007 as amended time to time.

10.Directives

10.1.1. The Commission in its previous Tariff Orders including the Tariff Order dated 20 March, 2020 had issued several directives to the Petitioners viz., SBPDCL and NBDPCL to improve the operational performance, financial performance and also to improve the service to the consumers. The Commission had been monitoring the compliance of these directives year after year at the time of annual Tariff determination.

10.1.2. The Commission has reviewed the compliance to directives issued earlier based on submissions made and issued some new directives of the current Tariff Order as detailed in the following paragraphs of this chapter.

10.1.3. The Discoms were directed to submit the compliance reports on quarterly basis in the Formats already communicated in the Tariff Order dated 21 March, 2018

10.1 Compliance to the Directives

Directive 1: Performance of Discoms

The Commission observes that the billing efficiency and collection efficiency in both the Discoms are not as per the requirement and accordingly directs the Discoms to:-

1) Ensure 100% accurate bill generation and service to the consumers

2) Expedite the process of release of new connections such that the pendency is reduced to the minimum,

3) Inspections be done at targeted consumers based on prior study of their consumption profile and tamper events.

4) Pay more attention to resolve the consumer grievances through in house mechanism and CGRF to dispose the same within the stipulated time. Also, segregate grievances on their type. Also, quantify them on financial redressal basis

5) Expedite separation of Agricultural feeder connecting all the new and existing Agricultural consumers on this feeder so as to achieve the benefit of such separation of Agricultural feeders.

Reiterating the above directives, the Commission directs the Discoms to submit the quarterly reports on time, duly furnishing the information/data in the prescribed formats in the tariff order dated 21.03.2018.

Discoms' Response

In response to the above mentioned Directive, Discoms have submitted the following reply to the Commission**.**

SBPDCL

Directive 1: Format 3(a) Performance of DISCOMs- Revenue Billing and Collection Efficiency for (Q2) (FY 2020-21)					
Category & Sub-Category	No of Consum	Energy Sold	Revenue Billed for Sale of Energy	Revenue Collected (Rs	Revenue Collected

	ers	(MUs)	(Rs Crores)	Crores)	(%)
Grand Total	5969734	2574.50	1566.36	1032.40	66%

Directive 1: Format 6 Performance of DISCOMs- Release of new connections for Quarter ending September (Q2) (FY 2020-21)					
Circle	New connection pending from previous period	New Connection Applied in current period	Total New connection pending for release	Total connection released in current period	Connection yet to be released
Grand Total	5070	18672	23742	15614	8128

Directive 1: Format 8 Performance of DISCOMs-Pilferage of Electricity for Quarter ending Sept 20 (Q2) (FY 2020-21)							
SN	Name of Division	Inspections carried at the beginning of Qtr	Inspections carried during the Quarter	Pilferage cases during the Quarter	No of FIRs during the quarter	Amount assessed during the Qtr (Rs Cr)	Amount collected during the Qtr (Rs Cr)
1	Total	2,531	1,232	489	407	3.5835109	2.7709119

Directive 1: Format 9 Performance of DISCOMs-Consumer Grievances Redressal for Quarter ending Sep 20 (FY 2020-21)

Sr. No	Name of Division	Complaints pending at the beginning of QTR	No of complaints received during the Quarter	No of complaints resolved during the Qtr	No of complaints pending at the end of quarter
1	GRAND TOTAL	81	48142	48152	71

NBPDCL

NBPDCL submitted the following details, in response to the directive:

Particulars	Values
Revenue Billed (INR Cr)	1592.38
Revenue Collected (INR Cr)	1166.76
Billing Efficiency	70.40%

Collection Efficiency	73.27%
Timely Delivery of Bills	
No. of Consumers	10,316,316
Bills generated during month(Mar' 20)	7553074
Percentage of bills generated	73.21%
Bills served to consumers	7553074
Percentage of bills served vs bills generated	73.21%
Release of New Connection	
No. of applications pending at the beginning of the quarter	78,864
No. of applications received during the quarter	1,52,438
No. of connections released during the quarter	71,309
No. of applications pending at the end of quarter	2,84,699
Pilferage of Electricity	
No. of inspections done at the beginning of the quarter	1423
No. of services inspected during the quarter	1171
No. of cases registered	64
Assessed Amount (Rs. Cr)	0.4507
Amount Collected during the quarter (Rs. Cr)	0.3903
Consumer Grievances Redressal	
No. of complaints pending at the beginning of quarter	Attached as annexure
No. of complaints received during the quarter	
No. of complaints resolved during the quarter	
No. of complaints pending at the end of the quarter	
Separation of Agriculture Feeders	
No. of Rural existing feeders	
Nos programmed for separation	826
Nos so far separated	6

Commission's Analysis:

The Commission has noted the reply of the Discoms, however as the target of achieving the 100% billing and collection efficiency is still far off for the Discoms, the Commission reiterates the following directions to Consumers:-

1) Ensure 100% accurate bill generation and service to the consumers

2) Expedite the process of release of new connections so that the pendency is reduced to the minimum,

3) Inspections be done at targeted consumers based on prior study of their consumption profile and tamper events.

4) Pay more attention to resolve the consumer grievances through in house mechanism and CGRF to dispose the same within the stipulated time.

5) Expedite separation of Agricultural feeder connecting all the new and existing Agricultural consumers on this feeder so as to achieve the benefit of such separation of Agricultural feeders.

Directive 2: Cent Percent Consumer Metering

The Commission while noting the compliance submitted by the Discoms with regard to providing meters to unmetered consumers, observes that they (DISCOMs) have not adhered to their written assurance filed on Oath to the Commission in Suo-moto proceedings in SMP case 22/2017. The Commission based on their affidavit has abolished un-metered tariff category of Kutir Jyoti and Domestic Rural (DS-I). Therefore, they are directed to immediately provide meters to KJ and DS-I consumers and to the remaining consumers under ISA-I and SS (un-metered) within Financial Year 2020-21.

Discoms' Response

The reply of SBPDCL & NBPDCL is given following Table:

SBPDCL

Sr. No	Category	No of Active Consumers	No of meters installed at the beginning	No of meters installed during the Qtr	No of meters installed at the end of qtr	% of meters installed
1	KJ	1,499,953	1,379,365	2,402	1,381,767	0.16%
2	DS1	2,254,404	1,940,130	33,367	1,973,497	1.48%
3	DS2D	1,313,027	1,307,656	11,959	1,319,615	0.91%
4	DS3D	171	5	4	9	2.34%
5	NDS1D	114,496	86,597	6,750	93,347	5.90%
6	NDS2D	311,959	309,063	2,784	311,847	0.89%
7	IAS1	238,585	73,980	4,398	78,378	1.84%
8	IAS2D	5,034	3,565	164	3,729	3.26%
9	LTIS1D	49,379	58,846	2,099	60,945	4.25%
10	LTIS2D	3,742	4,359	17	4,376	0.45%
11	PWWD	2,752	2,470	48	2,518	1.74%
12	SS1D	741	769	2	771	0.27%
13	SS2	659	0	0	0	0.00%
14	HTS I	1,673	1,778	0	1,778	0.00%
15	HTS II	128	117	0	117	0.00%
16	HTS III	5	4	0	4	0.00%
17	HTSS	13	14	0	14	0.00%
18	RTS	1	1	0	1	0.00%
19	HGN	9,364	2,172	0	2,172	0.00%
Total		5,806,086	5,170,891	63,994	5,234,885	1.10%

NBPDCL

Sr. No	Category	No of Consumers	No of meters installed at the beginning of the quarter	No of meters installed during the Quarter	No of meters installed at the end of Quarter	% of meters installed
1	**DS I**	4410568	3936674	106404	4043078	**91.67**
2	**DS II**	1214874	1237774	0	1214874	**100.00**
3	**IAS1**	89239	78083	6492	84575	**94.77**
4	**IAS2**	6033	6055	0	6033	**100.00**
5	**KJ**	4106773	3985026	62666	4047692	**98.56**
6	**LTIS1**	45321	41301	4020	45321	**100.00**
7	**LTIS-II**	1102	1026	76	1102	**100.00**
8	**NDS1**	237205	209638	27567	237205	**100.00**
9	**NDS2**	329966	325224	4742	329966	**100.00**
10	**PWW**	1549	1514	0	1549	**100.00**
12	**SS**	1156	306	4	310	**26.82**
13	**HTIS -I**	1061	1049	12	1061	**100.00**
14	**HTIS -II**	42	41	1	42	**100.00**
15	**HTIS -III**	2	2	0	2	**100.00**
16	**HTIS -IV**	0	0	0	0	**-**
17	**HTSS**	4	2	0	4	**100.00**
18	**RTS132 KV**	3	3	0	3	**100.00**
	HGN	19961	13122	6839	19961	**100.00**
TOTAL		**10464859**	**9836840**	**218823**	**10032778**	**95.87**

Commission's Analysis:

The Commission while noting the compliance submitted by the Discoms has noticed that the data submitted in the column of percentage of meters installed is erroneous in the case of SBPDCL. The Commission directs the Discoms to rectify such errors so that the Commission can accordingly asses the progress achieved in metering. The Commission also directs the Discoms to continue the practise of submitting quarterly reports on the status of metering with respect to their area of operation.

Directive 3: Energy Accounting/Audit

The Commission notes with pain that despite repeated directions in the earlier Tariff orders and through ongoing Suo-moto proceedings SMP 25/2017 to install system metering at 11kV level and replacing defective meters for proper accounting/audit, the DISCOMs have been unable to complete 100% feeder metering. They are therefore again directed to complete the work expeditiously and to provide the information as on 31.03.2020 in the prescribed Format by 30.04.2020. The Commission through its Suo-motto proceedings will continuously monitor the progress and the Discoms are directed to send quarterly compliance reports regularly.

NBPDCLs' Response

The Petitioner hereby submits the following details which show the current number of 11kV and 33 kV feeders, meters in working condition and the meters to be provided for replacement.

Name of the circle	Number of 11 kV feeders		Meters in working condition		Meters to be provided for replacement	
	Urban	Rural	Urban	Rural	Urban	Rural
Muzaffarpur	52	172	52	166	0	6
Motihari	47	248	47	241	0	7
Darbhanga	44	307	44	303	0	4
Samastipur	45	211	45	205	0	6
Begusarai	26	111	26	102	0	9
Chapra	56	311	56	309	0	2
Saharsa	43	205	43	198	0	7
Purnea	53	151	53	147	0	4
Kishanganj	27	143	27	137	0	6
Total	393	1859	393	1808	0	51

Name of the circle	Number of 33 kV feeders		Meters in working condition		Meters to be provided for replacement	
	Urban	Rural	Urban	Rural	Urban	Rural
Muzaffarpur	11	61	11	57	0	4
Motihari	18	63	18	61	0	2
Darbhanga	14	97	14	89	0	8
Samastipur	8	71	8	66	0	5
Begusarai	7	42	7	38	0	4
Chapra	15	86	15	81	0	5
Saharsa	12	73	12	64	0	9
Purnea	13	46	13	40	0	6
Kishanganj	5	42	5	38	0	4
Total	103	581	103	534	0	47

Name of	Number of 11 kV feeders	Meters in working	Meters to be provided for replacement

the circle			condition			
	Urban	Rural	Urban	Rural	Urban	Rural
Muzaffarpur	52	198	52	191	0	7
Motihari	47	273	47	266	0	7
Darbhanga	44	346	44	342	0	4
Samastipur	45	231	45	225	0	6
Begusarai	26	127	26	118	0	9
Chapra	56	337	56	335	0	2
Saharsa	43	229	43	218	0	11
Purnea	53	171	53	163	0	8
Kishanganj	27	158	27	151	0	7
Total	393	2070	393	2009	0	61

Name of the circle	Number of 33 kV feeders		Meters in working condition		Meters to be provided for replacement	
	Urban	Rural	Urban	Rural	Urban	Rural
Muzaffarpur	11	61	11	58	0	3
Motihari	18	63	18	58	0	5
Darbhanga	14	97	14	90	0	7
Samastipur	8	71	8	67	0	4
Begusarai	7	42	7	36	0	6
Chapra	15	86	15	82	0	4
Saharsa	12	73	12	66	0	7
Purnea	13	46	13	40	0	6
Kishanganj	5	42	5	38	0	4
Total	103	581	103	535	0	46

SBPDCLs' Response

Methodology: Regularly checking the feeder energy metering system and evaluate their status.

Preventive and corrective maintenance of feeder metering system for identification of defects leading to performance issues:

(a) Preventive maintenance; Random checks of the energy meters for the predefined sample size across the DISCOM by MRT.

(b) Corrective maintenance; based on meter data of energy meter issues impacting its performance along with identification of abnormal energy accounting parameters.

(c) Module for healthy upkeep of system metering:

- Agency appointed for metering of unmetered , defective feeder metering points
- Replacement of non-RMR compatible meters
- Installation of modems for AMR
- All system meters (Existing + New) are to be maintained under Annual Maintenance Contract (AMC)
- Buffers stock of meters and metering units are maintained
- Engineer In-charge re-inspects the works performed by the agency, as & when required
- Agency does GPS based survey of metering points & the same is shared with the DISCOM
- Timelines for defective meter replacement are within 5 working days from the date of reporting
- The meters are procured with 5 years of warranty period, with an intent of longer meter lifecycle
- Enhanced system reliability by tie up with service providers
- Provision for system meter reading via Meter Reading Instrument (MRI) in case of communication failure
- Checking/rectification of connection of existing system meters (example laying of control cables from VCB panel to tri-vector meter installed in metering panel, laying of communication cables between existing meter to DCU/modem, etc.)
- Proper earthing while installation of metering system for feeder & DT
- Software Development for automatic reporting:-
- Both the agencies have deployed MDAS system for automatic reading & onward reporting of feeder & DT(town) as per prescribed format by BERC
- Data validation under progress, all systems to be in place by Nov'19
- App based monitoring of feeder & DT to be in place by Nov'19

Presently all the report the prescribed format has been submitted by the DISCOM as per scheduled date.

Further we are going to check all the data at field level to get the pin pointed fault location.

Commission's Analysis:

The Commission noted the reply submitted by Discoms, however it is to be noted that response submitted by SBPDCL pertaining to Data Validation and App based monitoring is same as that of November, 2019. The Discoms are directed to submit the updated status and also be mindful that future submissions made should be based on current status and not the repeated submission made in previous year Petitions. The Commission directs the Discoms to update their response for the above mentioned issue and communicate to the office of the Commission on quarterly basis.

Directive 4: Customer data base

While examining the compliance submitted by the Discoms it is observed that slab-wise number of consumers and connected load have not been furnished. The Commission directs the Discoms to submit the month-wise complete consumer data base as on 31.03.2020 for the FY 2019-20 along with 1st quarter details of FY 2020-21 on or before 30.06.2020 for review by the Commission.

Discoms' Reply

NBPDCL

Category of Consumption	No. of Effective Consumers as on 30.09.2020	Connected load in KW as on 30.09.2020	Energy sales 01.07.2020 to 30.09.2020 (in Kwh)	Electricity Charges billed (in Rs. in Lakh) 01.07.2020 to 30.09.2020	Fixed charges	Revenue Billed for sale of Energy (Rs. Lakh)
Domestic						
Kutir Jyoti						
KJ (Unmetered)	**602057.70**	**15630.00**		0.00	0.00	**0.00**
KJ (Metered)				0.00	1321.00	
First 50 Units	4047692.00	604032.00	425248624.21	25674.32	0.00	
51-100 Units			60288814.72	3776.87	0.00	
101-200 Units			97737674.96	6436.89	0.00	
Above 50 Units			58510745.87	3999.61	0.00	
Subtotal	**4047692.00**	**604032.00**	**641785859.76**	**39887.70**	**1321.00**	**41208.70**
DS-I				0.00	0.00	0.00
Unmetered	**961075.80**	**966770.80**		0.00	0.00	**0.00**
Metered				0.00	4519.42	
First 50 Units	4043078.00	4237855.00	571880905.71	34577.37	0.00	
51-100 Units			139088496.43	8743.66	0.00	
101-200 Units			90833661.90	5994.02	0.00	
Above 200 Units			191767377.67	13350.99	0.00	
Subtotal	**4043078.00**	**4237855.00**	**993570441.71**	**62666.03**	4519.42	**67185.45**

Category of Consumption	No. of Effective Consumers as on 30.09.2020	Connected load in KW as on 30.09.2020	Energy sales 01.07.2020 to 30.09.2020 (in Kwh)	Electricity Charges billed (in Rs. in Lakh) 01.07.2020 to 30.09.2020	Fixed charges	Revenue Billed for sale of Energy (Rs. Lakh)
DS-II (Demand Based)				0.00	1869.17	
1-100 U/month	1214810.00	1496159.00	259978872.60	15706.83	0.00	
101-200 U/month			107522923.35	7360.09	0.00	
201-300 U/month			52617095.78	4048.29	0.00	
Above 300 Units			69905995.00	5942.01	0.00	
Subtotal	**1214810.00**	**1496159.00**	**490024886.73**	**33057.22**	**1869.17**	**34926.39**
DS-III (Demand Based)	**64.00**	**117.00**	18968.00	1.40	0.00	1.40
Non-Domestic Services						0.00
NDS-I				0.00		0.00
Unmetered				0.00	0.00	0.00
Metered				0.00	355.33	
1-100 U/month	237205.00	258321.50	37826183.03	2375.22	0.00	
101-200 U/month			6676236.18	456.08	0.00	
Above 200 U/month			16040223.75	1184.01	0.00	
Subtotal	**237205.00**	**258321.50**	**60542642.96**	**4015.30**	**355.33**	**4370.63**
NDS-II – (Demand Based)						0.00
UPTO 0.5 KW	**1235.00**	**760.00**	**147420.00**	15.42	8.56	**23.98**
All units						0.00
Above 0.5 KW				0.00	4348.39	
1-100 U/month			51227575.53	3242.82	0.00	

Category of Consumption	No. of Effective Consumers as on 30.09.2020	Connected load in KW as on 30.09.2020	Energy sales 01.07.2020 to 30.09.2020 (in Kwh)	Electricity Charges billed (in Rs. in Lakh) 01.07.2020 to 30.09.2020	Fixed charges	Revenue Billed for sale of Energy (Rs. Lakh)
101-200 U/month	328731.00	761594.70	21230592.63	1455.90	0.00	
Above 200 U/month			309187620.03	22888.48	0.00	
Subtotal	**328731.00**	**762354.70**	**381645788.19**	**27587.20**	**4356.95**	**31944.15**
Street Light Services				0.00		0.00
SS-I Metered	310.00	2623.00	1031594.00	76.36	1.49	77.85
SS-II (Unmetered)	846.00	17666.56			1137.04	1137.04
Subtotal	**1156.00**	**20289.56**	**1031594.00**	**76.36**	**1138.53**	**1214.89**
IAS				0.00		0.00
IAS-I Unmetered	4664.00	16861.54	7149958.00	2.89	599.17	602.06
IAS-I Metered	84575.00	189567.80	25437019.00	1424.47	307.55	1732.02
IAS-II Metered	6033.00	51797.61	444667.00	26.24	45.72	71.96
Subtotal	**95272.00**	**258226.95**	**33031644.00**	**1453.60**	**952.44**	**2406.04**
PWW (Demand Based)				0.00		0.00
PWW	1549.00	20714.59	5515375.00	439.14	126.70	565.84
Har Ghar Nal (Demand Base)	19961.00	45259.89	38444990.00	2559.30	71.84	2631.14
Subtotal	**21510.00**	**65974.48**	**43960365.00**	**2998.44**	**198.54**	**3196.98**
Low tension industrial						0.00
LTIS-I (Demand Based)	45321.00	385664.50	72430494.00	4635.7	867.18	5502.96
LTIS-II (Demand Based)	1102.00	53316.00	16194812.00	1036.7	287.91	1324.70
Subtotal	**46423.00**	**438980.50**	**88625306.00**	**5672.5**	**1155.09**	**6827.65**

Category of Consumption	No. of Effective Consumers as on 30.09.2020	Connected load in KW as on 30.09.2020	Energy sales 01.07.2020 to 30.09.2020 (in Kwh)	Electricity Charges billed (in Rs. in Lakh) 01.07.2020 to 30.09.2020	Fixed charges	Revenue Billed for sale of Energy (Rs. Lakh)
High tension supply						0.00
HTS-I	1061.00	219896.50	112855048.00	7392.0	2447.51	9839.52
HTS-II	42.00	66548.00	39755182.40	2584.09	665.89	3249.98
HTS-III	2.00	41670.00	8676920.00	559.6	351.51	911.17
HTS-IV						0.00
HTSS	4.00	11800.00	14026280.00	568.0	366.97	935.03
Subtotal	**1109.00**	**339914.50**	**175313430.40**	**11103.8**	**3831.88**	**14935.70**
Railways				0.0	0.00	0.00
RTS (25 KV)				0.0	0.00	0.00
RTS (132 KV)	3.00	22500.00	7767200.00	520.4	154.41	674.81
Subtotal	3.00	**22500.00**	7767200.00	520.4	154.41	**674.81**
Nepal			16562222.00	1101.5	0.00	1101.53
Other bilateral sales (Please specify)				0.0	0.00	0.00
Grand Total	**11601421.50**	**9487885.99**	**2934027768.7**	**190157.0**	**19861.32**	**210018.32**

SBPDCL

Only partial data was downloaded from MIS while slab wise units and amount billed detailed were not available, hence, the petitioner has estimated these details based on calculations done in tariff order**.**

Commission's Analysis

The Commission has noted that SBPDCL has again failed to provide slab wise consumer base data through MIS. In view of the same, the Commission direct SBPDCL to provide the relevant data to the Commission on priority basis and additionally submit to the Commission the reason for delay despite repeated directions from the Commission by 30.04.2021. Further, Commission has abolished unmetered category from KJ and DS-I in Tariff Order dated 25.03.2020, in spite of that NBPDCL is showing unmetered consumer in those categories. Sales shown by NBPDCL for those categories are also Nil and Revenue is also nil. Commission directs NBPDCL to clarify by 30.04.2021.

Directive 5: AT&C Loss Reduction

The Commission directed Discoms to take effective steps to improve the billing efficiency, collection efficiency and AT&C loss to the level of stipulated target given in MOU of UDAY i.e., 15% by end of March, 2020. Commission is separately monitoring the progress of the directives through its BERC Case no SMP 25/2017. The monitoring of directives will continue and DISOCMs are directed to send quarterly reports regularly.

Discoms' Reply

SBPDCL

As per UDAY MoU, SBPDCL's target for AT&C loss reduction is 15% by March 2020. Despite rigorous efforts across meter reading billing and collection a major chunk of units are lost due to high technical losses in LT consumers. Most of the consumers added recently to the network under the Saubhagya scheme are LT consumers, the LT network length has further increased. The impact of the extended LT networks, especially in rural areas, leads to increase in technical losses on the low voltage network. Despite continuous multiple efforts, with the addition of such large number of consumers over the past two years, has led to a decreasing HT:LT.

NBPDCL

Reduction of AT&C losses – Reported status of NBPDCL for the Quarter ending Sept'2020

Name of Division	Input Units (In MU)	Unit Billed (In MU)	Total Assessment (Rs. in Lakh)	Total Credit (Rs. in Lakh)	Billing Efficiency (in %)	Collection Efficiency (in %)	AT&C Loss (in %)
Chapra (E)	134.49	74.95	5299.14	4573.93	55.73	86.31	51.90
Chapra (W)	164.29	97.09	6395.64	5482.58	59.10	85.72	49.34
Siwan	256.54	130.98	8705.09	7218.50	51.06	82.92	57.66
Gopalganj	198.38	119.90	7768.39	6858.79	60.44	88.29	46.64
Chapra Circle	753.70	422.93	28168.26	24133.80	56.11	85.68	51.92
Darbhanga (U)	70.31	51.64	3962.76	3730.85	73.45	94.15	30.85
Darbhanga (R)	188.07	125.47	8253.19	7330.24	66.71	88.82	40.75
Jhanjharpur	75.66	45.10	2937.23	2536.63	59.61	86.36	48.52
Madhubani	138.78	101.04	6834.34	6300.74	72.80	92.19	32.88
Darbhanga	472.82	323.25	21987.53	19898.46	68.37	90.50	38.13
Motihari	178.53	90.50	6116.42	5075.81	50.69	82.99	57.93
Bettiah	155.99	96.37	6436.16	4905.43	61.78	76.22	52.92

Bagaha	58.63	60.01	3801.68	3064.88	100.00	80.62	19.38
Raxaul	126.83	80.79	5759.31	4467.74	63.70	77.57	50.59
Motihari Circle	519.98	327.66	22113.57	17513.86	63.01	79.20	50.09
Muzaffarpur (E)	89.02	59.39	3818.72	3052.92	66.71	79.95	46.67
Muzaffarpur	137.21	283.87	20418.89	14739.17	100.00	72.18	27.82
Muzaffarpur	47.58	43.77	3189.14	3446.32	92.00	100.00	8.00
Muzaffarpur	111.13	85.89	6057.76	5771.22	77.29	95.27	26.37
Sitamarhi	168.87	97.22	6592.73	5293.65	57.57	80.30	53.78
Sheohar	32.24	17.95	1144.83	834.84	55.67	72.92	59.40
Muzaffarpur	586.05	588.09	41222.07	33138.12	100.00	80.39	19.61
Purnea(E)	91.40	73.05	5091.55	4707.60	79.93	92.46	26.10
Purnea(W)	108.50	79.02	5465.46	4915.14	72.83	89.93	34.51
Katihar	153.34	101.35	6978.36	6705.06	66.10	96.08	36.49
Purnea Circle	353.24	253.42	17535.36	16327.80	71.74	93.11	33.20
Saharsa	140.77	90.69	6021.45	4876.05	64.42	80.98	47.83
Madhepura	109.39	60.42	3911.56	3577.94	55.23	91.47	49.48
Supaul	133.14	79.22	5160.96	4648.24	59.50	90.07	46.41
Saharsa Circle	383.30	230.32	15093.97	13102.24	60.09	86.80	47.84
Khagaria	77.51	51.61	3452.06	3000.21	66.59	86.91	42.13
Begusarai	139.08	79.35	5783.07	4283.82	57.05	74.08	57.74
Barauni	83.80	87.93	12361.47	4602.43	100.00	37.23	62.77
Begusarai Circle	300.39	218.90	21596.59	11886.47	72.87	55.04	59.89
Samastipur	95.72	82.56	7322.76	6513.14	86.25	88.94	23.28
Hajipur	134.83	110.44	7793.76	7223.32	81.91	92.68	24.09
Mahua	123.87	102.59	7786.40	6091.30	82.82	78.23	35.21
Rosera	58.87	44.15	2966.55	2936.93	74.99	99.00	25.76
Dalsingsarai	73.77	58.50	3872.37	3775.95	79.31	97.51	22.67
Samastipur	487.06	398.24	29741.84	26540.65	81.76	89.24	27.04
Forbesganj	73.46	48.11	4460.81	4104.75	65.49	92.02	39.73
Kishanganj	149.89	106.54	6996.78	6045.13	71.08	86.40	38.59
KISHANGANJ	223.35	154.66	11457.60	10149.88	69.24	88.59	38.66
Total	4079.89	2917.47	208916.79	172691.27	71.51	82.66	40.89

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Commission's Analysis

The Commission has noted the submissions made by Discoms and as per the reply the Commission observes that the Discoms are still far off from meeting the target AT&C of 15%. The Commission opines that the Discoms have still not charted out a particular roadmap and plan for themselves to achieve the required target of AT&C losses. The Commission directs the Discoms to prepare and submit by 30 July, 2021, a definitive plan and road map of reducing the AT&C losses to 15%. Further, the Commission has also taken in to cognizance that the Discoms are scheduled to submit their capital investment plan for approval to the Commission in August 2021. The capital investment plan is envisaged for augmentation and strengthening of their distribution network such that operational efficiency of the Discom along with quality and relaibity of service to the Consumer is improved upon. Accordingly, the Commission directs the Discoms that their submissions for approval of Capital investment plan shall also include a chapter on the road map of reduction of AT&C losses and specify how the capital investment proposed in the prospective petition for approval of Capital investment will contribute to reduction of At&C losses as targeted in the roadmap plan for meeting At&C loss of 15 %.

Directive 6: Interest on Security Deposit of LT Consumers

The Commission notes that while the NBPDCL has complied with the directive to some extent and passed on the interest on security deposit to 314481 number of NDS-II consumers; the reply of the SBPDCL is not satisfactory. The explanation submitted by the Discoms for delay in adjusting interest amount of security deposit to all LT consumers is not convincing and Discoms are again directed to comply with the long pending important directive on priority basis failing which the Commission shall be constrained to impose penalty on the ailing Discoms. Status report of the progress be submitted to the Commission on quarterly basis.

Discoms' Reply

The Petitioners submitted that interest on security deposit of HT & LTIS category consumers are being passed on as per the norms specified by BERC. For LT consumers, Discoms are in the process of finalizing the methodology developed for reconciliation of the deposited SD amount with the DISCOM. Going forward an IT system-based module for streamlining the process of passing on the accumulated interest amount to LT consumers has been planned and same is under testing phase, the approach considers parameters like contracted load, date of release of supply, consumer tariff category etc. to arrive at the adhoc security deposit for the consumer. Further testing and institutionalization of this IT based module has been impacted due to the prevailing covid situation and presence of limited workforce in offices to test, institutionalize and implement this module. Same is being re-strategized and Discoms shall once again re-initiate passing on the interest on the deposited SD amount for the LT consumers in a phased manner.

Commission's Analysis

The Commission notes that while the NBPDCL has complied with the directive to very little extent and passed on the interest on security deposit onto 2156 number of LT consumers. SBPDCL have not provided any quantitative details again as they had replied in previous Tariff Petition for FY 2020-21. The explanation submitted by the Discoms for delay in implementing IT based module as mechanism for passing the interest amount of security deposit to all LT consumers due to Covid situation. The Discoms are again directed to comply with the long pending important directive on priority basis to passing on interest on security deposit to all LT consumers and its adjustment at the time of mutation or permanent disconnection from the dues accrued by the old consumer, failing which the Commission shall be constrained to impose penalty as deemed fit. Discoms shall provide the status report incorporating category wise interest on security deposit passed on to LT consumers, its adjustment at the time of mutation or permanent disconnection from the dues accrued by the old consumer and shall submit to the Commission on quarterly basis.

Directive 7: Asset Register

The Commission has noted that the Discoms have not even started the preparation of Fixed Asset register despite repeated directives of the Commission. It is pertinent to mention here that Discoms have already reaped the benefit of UDAY and have not prepared component wise asset register as enumerated by them in their submission for compliance of UDAY. The Commission opines that Discoms are not inclined to fulfil the long pending directive, which is very vital in approving Net Fixed Assets year on year. Commission directs Discoms to submit the report before filing of next tariff petition failing which Commission shall be constrained to impose penalty or restriction on fixed assets/capitalisation dependant costs such as Depreciation, Interest on Loan, Return on Equity, Repair & Maintenance, etc. in the next year onwards Truing up.

Discoms' Reply

The Petitioner hereby submits it is going to implement ERP (Enterprise Resource Planning) which is mandatory under UDAY scheme of Government of India. It is endeavouring to create and maintain component wise fixed asset register and full details item wise assets to maintain voltage wise cost of supply will be provided after ERP implementation is done. ERP for all areas of both DISCOMs has been floated by SBPDCL vide NIT NO- 29/PR/SBPDCL/2020. The Techno commercial was opened on 09/09/2020. The technical evaluation is under progress.

Commission's Analysis

The Commission has noted that the Discoms have not even started the preparation of Fixed Asset register despite repeated directives of the Commission. It is pertinent to mention here that Discoms have already reaped the benefit of UDAY and have not prepared component wise asset register as enumerated by them in their submission for compliance of UDAY. The Commission opines that Discoms are not inclined to fulfil the long pending directive, which is very vital in approving Net Fixed Assets year on year. Commission directs Discoms to submit the report before filing of next tariff petition failing which Commission shall be constrained to impose penalty or restriction on fixed assets/capitalisation dependant costs such as Depreciation, Interest on Loan, Return on Equity, Repair & Maintenance, etc. in the next year onwards Truing up

Directive 8: Voltage wise cost of supply

Since the previous directive has not been complied with, the Commission reiterates the directive and directs the Discoms to pay more attention to the subject and voltage-wise cost of supply based on technical loss and network costs of various voltage levels arrived at by conducting a study shall be submitted with next tariff Petition for FY 2021-22.

Discoms' Reply

The Petitioner hereby submits energy accounting is being done on some 33/11 kV feeders and defective meters are being replaced. Once ERP is implemented and fixed asset register is complete, voltage wise cost of supply would be submitted to the Commission.

Commission's Analysis

The Commission directs Discoms to submit detailed reason justifying non-compliance of above mentioned directive due to pendency of Asset register and ERP implementation. The Commission expresses its displeasure over such non-compliance of directives due to reason that does not merit reasonability prima facie. The Commission reiterates the directive and directs the DISCOMs to pay attention to the subject and voltage wise cost of supply based on technical loss of various voltage levels arrived at the study shall be submitted in next tariff Petition.

Directive 9: Regulatory Accounting

The Commission has observed that the Discoms have not yet commenced the implementation of the directive and therefore once again directs the Discoms to comply with the BERC (Power Regulatory Accounting) Regulation, 2018 forth with and submit audited accounts along with the True up of FY 2019-20 to be filed in next Tariff Petition for FY 2021-22 without fail. Once the Regulatory Accounts are maintained by the Discoms, the process of True up of ARR for the relevant year becomes simple and realistic

Discoms' Reply

The Petitioner hereby submits that currently nowhere in India similar kind of work is being done. Hence, we are not in a position to derive any insight on how to start with the process of regulatory accounting. Under such circumstances, appointing a consultancy firm to carry out such activity and with such experience seems remote. Hence it has become challenging for us to initiate the process of regulatory accounting. Further, guidance from the Commission is also required in arriving at the methodology along with formats for preparing the Regulatory accounts.

Commission's Analysis

The Commission has observed that the Discoms have not yet commenced the implementation of the directive and therefore once again directs the Discoms to comply with the BERC (Power Regulatory Accounting) Regulation, 2018 forth with and submit audited accounts along with the True up of FY 2019-20 to be filed in next Tariff Petition for FY 2021-22 without fail. Once the Regulatory Accounts are maintained by the Discoms, the process of True up of ARR for the relevant year becomes simple and realistic.

Directive 10: Outstanding Arrears

The Commission notes with concern that huge unrealised amount of arrears are pending in the government departments, local bodies etc. Discoms are directed to pursue with defaulting Departments and realise the outstanding dues with all sincerity. A report to this effect be submitted to the Commission by 30.04.2020.

Discoms' Reply

The reply of Discoms are states a follows:

SBPDCL

The efforts are regularly being made to recover all the dues from government department on Monthly basis. Further, departments have been requested to make adequate provision in their budget allocations so that all the arears are cleared by the end of FY 2019-20. Further the petitioner would like to bring this to the notice of the Commission that due to the Covid-19 outbreak, the arrear collection has been severely hampered. However, the DISCOM is making best efforts to recover the outstanding arrears from the government departments. The DISCOMs have provided a consolidated URL Id to respective government department to enable them to get information regarding their latest payment details and outstanding dues.

NBPDCL Q3

The Petitioner hereby submits the status of the outstanding arrears from the government and local bodies

Outstanding Dues as on 31.03.2020	Amount billed during the quarter	Total demand during the quarter	Amount Received during the quarter	Balance Arrears
591.09	64.63	655.73	4.01	651.62

Status of Disposal of Certificate cases

Certificate cases pending at the beginning of the year (1st April'20)	New Certificate cases filed	Total Certificate cases at the end of the quarter (30th June)	Certificate cases disposed off during the quarter (Apr to June)	Amount released (Rs. crore)
13061	361	11217	80	0.71

Q4

Outstanding Dues as on 30.06.2020	Amount billed during the quarter	Total demand during the quarter	Amount Received during the quarter	Balance Arrears
651.62	54.76	706.38	5.75	697.03

Status of Disposal of Certificate cases:

Certificate cases pending at the beginning of the year (1st June'20)	New Certificate cases filed	Total Certificate cases at the end of the quarter (30th June)	Certificate cases disposed off during the quarter (July to Sept)	Amount released (Rs. crore)
13353	366	10558	7	0.26

Commission's Analysis

The Commission notes that NBPDCL have provided the quantitative details while SBPDCL have not provided the same. Commission concerns that huge unrealised amount of arrears are still pending in the government departments, local bodies etc. Discoms are directed to pursue with defaulting Departments and realise the outstanding dues with all sincerity. A report to this effect be submitted to the Commission by 30.04.2021.

Directive 11: O&M Norm

The Commission observes that the DISCOMs are not paying attention to this vital direction of the Commission to include quantitative details of number of personnel, number of sub-stations, distribution line length in CKT KMs and connected load (category wise) in their audited accounts which shall be required for truing up of ARR for FY 2019-20 next year. Hence, the Commission reiterates this directive and further directs the Discoms to include the actual of the same in their audited accounts of FY 2019-20 onwards without fail. If no progress is shown in the compliance of this directive, the Commission may consider its consequential effect in favour of consumers while doing true-up exercise.

Discoms' Reply

NBPDCL have submitted that they have started following the directive related to the O&M Norms and the details are provided in format-8 "Employee Productivity Parameters" in the tariff petition filed for FY201-22.

SBPDCL have submitted that quantitative details of No. of Personnel, No. of Personnel per 1000 consumers, No. of sub-stations and No. of Personnel per sub-station will be submitted along with Tariff petition.

Commission's Analysis

The Commission has the submissions made with respect to O&M norms in Tariff Petition and has dealt the same in the relevant portions of this Order.

Directive 12: Consumer Grievance Redressal Mechanism

It has been found by the Commission that despite provision of compensation for non-redressal of grievance within approved time limit as per the SOP Regulations, Discoms are not passing on such compensation to the affected consumers. The Commission therefore directs the Discoms to submit the quarterly report containing details of consumers grievances resolved in the Format-9 which has been already provided showing details of amount of compensations passed on to the affected consumers.

Discoms' Reply

SBPDCL

a. The petitioner has set up 1912 call center for effectively handling consumer grievances. The call center has resolved 80896 complaints during Quarter 1 and Quarter 2 of SBPDCL. Details of SBPDCL's performance on consumer complaints handling is shared in Annexure 6 to Petition.

b. 1912 platform has a hierarchal escalation process as per SOP defined by BERC. Also, all the officers have been sensitized to address consumer complaints without delay.

c. Further, SBPDCL, came up with a bridging perform SUVIDHA-a paperless consumer helpdesk, which uses the 1912 complaint management system as well as assists the consumer by listening to their queries and registering the grievances under the appropriate heads, and providing the consumer with a status tracking mechanism.

NBPDCL

The Petitioner hereby submits that there exists a 24X7 complaint redressal system (phone 1912). Consumers can register complaint related to billing defective meter, power supply and other miscellaneous issues. Consumer may register their complaint by calling 1912(Toll Free) helpline number. After registering complaint, SMS is sent to the consumer that include complaint no. etc

Commission's Analysis

The Commission has noted the submissions made with respect to CGRF. Further the Commission directs the Discoms to submit the status report on grievance redressal detailing the points as given below:

Number of Complaints Registered:

Complaints Resolved:

Total Amount paid/adjusted in settlement:

Complaints Pending:

Directive 13: Strengthening of billing & collection system

The Feedback received from the consumers during the public hearings of the Commission, indicate need to :

(i) Increase the number of billing and collection points especially in rural areas and expand spot billing system.

(ii) Provide basic facilities at Billing/Collection centers like chairs/bench to sit, drinking water and shelter for rains/heat to the waiting consumers;

(iii) Keep open the billing collection center on Sundays.

DISCOMs are directed to send quarterly report to the Commission about the steps taken on above. DISCOMs are also directed to submit the details of category wise/sub-category wise/slab wise details of energy sales, Revenue billed (showing fixed charge and energy charges separately) and Revenue collected during the month by 20th of succeeding month.

Discoms' Reply

The Petitioner hereby submits following steps are already in place to address the above concerns:

- Various avenues for billing & collection have been introduced to ensure efficient spot billing & revenue collection from consumers.
    - Billing: Smart meters are being introduced on a pilot-basis, thereby leading to eradication of the concept of billing on assessed units.
    - Collection:
    - Setting up of Periodic Revenue collection camps (Done in RAPDRP and RRF area every month)
    - Increased follow-up by means of calling & reminders to defaulting consumers
    - Assistance of the public representatives (Local MLAs, Sarpanch) across villages for convincing people for monthly energy bill payment.
    - Basic facilities, like drinking water pots at field offices, toilets constructed via Mission 45, benches/chairs for seating, fans & sheds for consumers waiting in-queue, are being provided at every DISCOM office.
    - Billing collection centers are open on Sundays with employees working on shifts & consumers being notified regarding the same through text messages via their registered mobile nos.

Commission's Analysis

The Commission has noted reply submitted by Discoms and reiterates its direction to submit the details of category wise/sub-category wise/slab wise details of energy sales, Revenue billed (showing fixed charge and energy charges separately) and Revenue collected during the month by 20th day of succeeding month.

Directive 14: Strengthening of vigilance machinery

The Commission opines that the Discoms have mis-understood the instant directive. The vigilance issues are different than theft of electricity by the consumers. Vigilance issues arise where malpractices are done with connivance of Discom's personnel. Action against the field functionaries against whom allegations of such malpractices are reported needs to be taken so that innocent consumers are not harassed unnecessarily or Discoms are not put into loss. The Commission directs the Discoms to submit details such as number of complaints (corruption) received, resolved and pending complaints along with action taken report on the guilty functionaries to the Commission, quarterly.

Discoms' Reply

Presently under Discoms, special Task Force (STF) cell is doing work of monitoring and execution for the disposal of different complaint received against electricity theft in urban as well as rural arears. In addition to this, STF cell has also conducted surprise visit/ inspection against the different complaints received related to the collection or malpractices cases. The complaints received within the purview of SOP and supply code is being dealt with at the DISCOM level. Further strict action is taken against any officer found guilty of the aforesaid malpractices. The DISCOMs further clarifies that, the State Vigilance Cell functions independently for any criminal complaint received directly from consumers related to corruption that fall within the purview of IPC and CRPC.

Commission's Analysis

The Commission has noted the submissions made with respect to Strengthening of vigilance machinery and reiterates the Discoms to submit details such as number of complaints (corruption) received, resolved and pending complaints along with action taken report on the guilty functionaries to the Commission, quarterly.

Directive 15: Power Procurement

The Commission had directed the Discoms to submit the following details of power purchase from each source during the month by 20th day of succeeding month.

1) Source of purchase

2) Available Capacity (MW)

3) Energy Purchased (MU)

4) Fixed Charges Paid (Rs. Crore)

5) Energy Charge Rate (Rs/Kwh)

6) Total Energy Charges Paid (Rs. Crore)

7) Any other Charges Paid (Rs. Crore)

(i) Open Access Charges

(ii) Any Other Charges

8) Total Cost Paid (Rs. Crore)

9) Day wise details of UI drawls and amount payable/receivable

The Discoms have later submitted the details of month-wise, source-wise power purchase quantum (MUs) and power purchase cost details after repeated instructions. The Discoms are directed to submit the details of power purchase as mentioned in the directive from each source during the month by 20th day of succeeding month from April 2020 onwards.

Discoms' Reply

The Petitioner hereby states the details will be provided separately in the Petitions.

Commission's Analysis

The Discoms are directed to continue the practise of submitting the details of power purchase as during the month by 20th day of succeeding month.

Directive 16: Contingency Reserve

The Commission had directed the Discoms to make proper contribution towards contingency reserve in terms of Regulation 24 of BERC (Multi Year Distribution Tariff) Regulations, 2018.

In response, both the Discoms have submitted that as per MYT Regulations, 2018 a sum not less than 0.25% and not more than 0.50% of the original cost of fixed assets shall be allowed annually towards such appropriation in the calculation of ARR.

Discoms' Reply

Petitioner has submitted that as per MYT Regulations, 2018, a sum not less than 0.25 percent and not more than 0.5 percent of the original cost of fixed assets shall be allowed annually towards such appropriation in the calculation of ARR. Accordingly, the Commission allowed certain sum to be contributed under the said reserve. As per Clause 24.2 of the said Regulation:

The Contingency Reserve shall not be drawn upon during the term of the license except to meet such charges as may be approved by the Commission, such as following:

(a) Expenses or loss of profits arising out of accidents, strikes or circumstances which the management could not have prevented;

(b) Expenses on replacement or removal of plant or works other than expenses required for normal maintenance or renewal;

(c) Compensation payable under any law for the time being in force and for which no other provision is made: Provided that such drawal from contingency reserve shall be computed after making due adjustment for any other compensation that may have been received by the Licensee as part of an insurance cover.

Further, Petitioner has submitted that both the DISCOMs are under financial loss and the company financial health is not sufficient to contribute towards contingency reserve.

Commission's Analysis

The Commission has noted the reply of the petitioner. The Commission, accordingly, will provide appropriate direction in due course of Time.

Directive 17: Optimization of Power Purchase Cost

As per discussions in the meeting of the State Advisory Committee, held on 06.02.2020, the Commission had directed the Discoms to make continuous endeavor to optimise the Power Purchase cost by adopting various options such as Merit Order Dispatch Principle, Security Constraints Economic Dispatch (SCED), Banking, Buying power through exchange without involving any intermediary, URS by generator, exploring existing costlier PPA at first opportunity etc. The Commission further directed that