

**NAGALAND ELECTRICITY REGULATORY COMMISSION
(NERC)**



TARIFF ORDER

Dated: 27-03-2023.

**Performance Review for the FY 2022-23
and
Revised Aggregate Revenue Requirement (ARR)
&
Tariff Order for the FY 2023-24**

For -

**DEPARTMENT OF POWER,
GOVERNMENT OF NAGALAND**

*Near E-in-C Office, Department of Power,
AG Colony, Nagaland, Kohima-797001
E-mail: nerc_kohima@yahoo.com / Website: www.nerc.org.in*

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ABBREVIATIONS

Abbreviation	Description
ABT	Availability Based Tariff
A&G	Administration & General
APTEL	Appellate Tribunal For Electricity
ARR	Aggregate Revenue Requirement
CAGR	Compounded Annual Growth Rate
CD	Contract Demand
CERC	Central Electricity Regulatory Commission
CGS	Central Generating Stations
CoS	Cost of Supply
CPSU	Central Power Sector Undertakings
Cr	Cr
Crs	Cr
CT	Current Transformer
CWIP	Capital Work in Progress
DE	Debt Equity
DPN	Department of Power, Govt. of Nagaland
EHT	Extra High Tension
ER	Eastern Region
FAC	Fuel Adjustment Costs
FDR	Fixed Deposits Receipts
FPPCA	Fuel Power Purchase Cost Adjustment
FY	Financial Year
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
HP	Horse Power
HT	High Tension
KV	Kilovolt
KVA	Kilo volt Amps
KW	Kilo Watt
kWh	kilo Watt hour
LNG	Liquefied Natural Gas
LT	Low Tension
MU	Million Units
MVA	Million-volt Amps
MW	Mega Watt

Abbreviation	Description
MYT	Multi Year Tariff
NER	North Eastern Region
NERC	Nagaland Electricity Regulatory Commission
NTP	National Tariff Policy
O&M	Operation & Maintenance
PLF	Plant Load Factor
PLR	Prime Lending Rate
R&M	Repairs and Maintenance
RIMS	Regulatory Information and Management System
RoR	Rate of Return
Rs.	Rupees
S/s	Sub Station
SBI	State Bank of India
SERC	State Electricity Regulatory Commission
T&D	Transmission & Distribution
UI	Unscheduled Interchange
YoY	Year on Year

Before the,

Nagaland Electricity Regulatory Commission for the State of Nagaland

Case No.:06/2022-23.

In the matter of,

Determination of Performance Review for the FY 2022-23 and Aggregate Revenue Requirement (ARR) & Tariff for the FY 2023-24 filed by the Department of Power, Government of Nagaland, herein after referred to as **“DPN or The Petitioner.”**

Present: **Shri. Khose Sale**
Chairman-cum-Member
NERC, Kohima.

ORDER

1. The Department of Power, Government of Nagaland (herein after referred to as DPN) is a deemed licensee in terms of section 14 of the Electricity Act, 2003 (herein after referred to as Act), engaged in the business of Generation, Transmission and Distribution of electricity in the state of Nagaland.
2. As per the MYT Regulations, 2016, the DPN has filed the Petition for performance review for the FY 2022-23 and determination of Retail Tariff for the FY 2023-24 on 20/12/2022.
3. In exercise of the powers vested under section 62(1) read with section 62(3) and section 64 3(a) of the Electricity Act, 2003 and Regulation 5.2 of NERC MYT Regulations, 2016 (Notified on 21.04.2016) (herein after referred to as Tariff Regulations) and other enabling provisions in this behalf, the Commission issues this order for approval of the Revised ARR and determination of retail Tariff for the FY 2023-24 for supply of electricity in the state of Nagaland under NERC (MYT) Regulations, 2016.

4. Tariff Regulations specify that the distribution licensee shall file ARR and Tariff Petition in all aspects along with requisite fee as specified in Commission's Conduct of Business Regulations on or before 30th November of the preceding year. Accordingly, the DPN has filed the Performance Review for the FY 2022-23 and Revised ARR & Tariff Petition for the FY 2023-24.
5. Regulation 17 of the NERC MYT Regulations, 2016 provides for giving adequate opportunities to all stake holders and general public for making suggestions/objections on the Tariff Petition as mandated under section 64(3) of the Electricity Act 2003. Accordingly, the Commission directed DPN to publish the Tariff Petition for the FY 2023-24 in an abridged form as public notice in newspapers having wide circulation in the state inviting suggestions/objections on the Tariff Petition.
6. Accordingly, DPN has published the Tariff Petition in the abridged form as public notice in various newspapers on 19th & 21st January, 2023 and the Tariff petition was also placed on the website of NERC. The last date of submission of suggestions/objections was fixed on 30th January, 2023
7. The Commission, to ensure transparency in the process of Tariff determination and for providing proper opportunity to all stake holders and general public for making suggestions/objections on the Tariff petition and for convenience of the consumers and general public across the state, decided to hold the public hearing at Kohima on 09-03-2023.
8. The Commission took into consideration the facts presented by the Petitioner in its Petition and subsequent filings, suggestions/objections received from stakeholders, consumer organizations & general public and response of the Petitioner to those suggestions/objections.
9. The Commission taking into consideration all the facts which came up during the public hearing on the matter of Performance Review for the FY 2022-23 and the revised ARR & the Tariff for the FY 2023-24.
10. The Commission has reviewed the directives issued earlier in the Order for the FY 2022-23 and noted that some of the directives are compiled and some are partially attended. The Commission has dropped the directives compiled with and the remaining directives are consolidated and fresh directives are added.
11. This order is in ten chapters as detailed below:
 - (a) Chapter 1: Introduction.

- (b) Chapter 2: Summary of Revised ARR and Tariff petition for the FY 2023-24.
 - (c) Chapter 3: Power Sector in Nagaland - An overview.
 - (d) Chapter 4: Public hearing.
 - (e) Chapter 5: Performance Review for the FY 2022-23
 - (f) Chapter 6: Analysis of Revised ARR alongwith Tariff Petition for the FY 2023-24 and approval of the Commission.
 - (g) Chapter 7: Tariff principles and design.
 - (h) Chapter 8: Directives.
 - (i) Chapter 9: Wheeling Charges for the FY 2023-24.
 - (j) Chapter 10: Fuel and Power Purchase Cost Adjustment.
12. The DPN should ensure implementation of the Tariff Order from the effective date after issuance of a public notice in such a font size which is clearly visible in two daily newspapers having wide circulation in the state within a week, and compliance of the same shall be submitted to the Commission.
13. This Order shall be effective from 01st April, 2023 and shall remain in force till the next Tariff Order of the Commission.

Dated: **27th March, 2023.**

Place: Kohima.

Sd/-
KHOSE SALE
Chairman-cum-Member,
NERC, Kohima.

1. INTRODUCTION

1.1 Nagaland Electricity Regulatory Commission

- (a) In exercise of the powers conferred by the Electricity Act, 2003, the State Government of Nagaland constituted an Electricity Regulatory Commission to be known as “Nagaland Electricity Regulatory Commission” for the State of Nagaland, as notified on 21st February, 2008.
- (b) The Commission is a one-member body designated to function as an autonomous authority responsible for regulation of the power sector in the State of Nagaland. The powers and the functions of the Commission are as prescribed in the Electricity Act, 2003. The head office of the Commission is presently located at Kohima, capital city of the Nagaland State.
- (c) The Nagaland Electricity Regulatory Commission for the State of Nagaland started to function with effect from 4th March, 2008 with the objectives and purposes for which the Commission has been established.
- (d) The Department of Power, Government of Nagaland herein called DPN or the Petitioner, a deemed licensee under section 14 of the Electricity Act, 2003, is carrying on the business of distribution and retail supply of electricity in the state of Nagaland.

1.1.1. In accordance with the provisions of the Act, the Nagaland Commission discharges the following functions:

- (a) Determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State: Provided that where open access has been permitted to a category of consumers under Section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;
- (b) Regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;
- (c) Facilitate intra-State transmission and wheeling of electricity;
- (d) Issue licensees to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;

- (e) Promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;
- (f) Adjudicate upon the disputes between the licensees and generating companies; and to refer any dispute for arbitration;
- (g) Levy fee for the purposes of this Act;
- (h) Specify State Grid Code consistent with the Grid Code specified under Clause (h) of sub-section (1) of Section 79;
- (i) Specify or enforce standards with respect to quality, continuity and reliability of service by licensees;
- (j) Fix the trading margin in the intra-State trading of electricity, if considered, necessary;
- (k) Discharge such other functions as may be assigned to it under the Act.

1.1.2. Further, the Commission also advises the State Government on all or any of the following matters namely:

- a) Promotion of competition, efficiency and economy in activities of the electricity industry;
- b) Promotion of investment in electricity industry;
- c) Reorganization and restructuring of electricity industry in the State;
- d) Matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by that Government.

1.1.3. The State Commission ensures transparency while exercising its powers and discharging its functions.

1.1.4. In discharge of its functions, the State Commission is guided by the National Tariff Policy (NTP) as brought out by GOI in compliance to Section 3 of the Act. The objectives of the NTP are to:

- (a) Ensure availability of electricity to consumers at reasonable and competitive rates;

- (b) Ensure financial viability of the sector and attract investments;
- (c) Promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimize perceptions of regulatory risks;
- (d) Promote competition, efficiency in operations and improvement in quality of supply.

1.2 ARR and Tariff Petition

- (a) DPN, being an integrated utility, is responsible for generation, transmission, and distribution of electricity in the State of Nagaland.
- (b) As per the NERC MYT Regulations, 2016 the licensee was required to submit the Revised ARR and Tariff Petition for the FY 2023-24 and file the petition in the month of November, 2022 for fixing the Tariff for the FY 2023-24. Accordingly, the Petitioner has filed the Tariff Petition for the FY 2023-24 including Performance Review for the FY 2022-23. In the petition, the DPN had projected with an ARR of Rs. 765.54 Crs for the FY 2023-24 and projected a gap of Rs. 39.42 Crs at proposed tariff for the FY 2023-24.

1.3 Admission of the Petition and Public Hearing Process

The Commission directed the DPN to publish the summary of the ARR and Tariff proposal in the abridged form and manner as approved in accordance with section 64 of the Electricity Act, 2003 to ensure public participation.

The notification of the proposed ARR and the Tariff schedule for the FY 2023-24 was published by the Petitioner in the following newspapers.

Sl. No.	Name of the Newspaper	Language	Date of Publication
1.	Nagaland Post	English	19 th & 21 st Jan.,2023
2.	The Morung Express	English	19 th Jan.,2023

Through the public notice, the stakeholders/public were invited to file their objections and suggestions on the petition on or before 30-01-2023.

The DPN/Commission received 4 (four) written Objections/suggestions were by from Cellular Operators Association of India (COAI), Reliance Jio Infocomm Limited, Bharti Hexacom Limited (Airtel) and All ward Mokokchung Union (AWUM).

1.4 Notice for Public Hearing

A notification was published by the Commission in the following leading newspapers for giving due intimation to all stakeholders, general public, interested parties, and consumers about the public hearing to be held in the Office of the Commission, Kohima on 09th March, 2023.

Sl. No.	Name of the Newspaper	Language	Date of Publication
1	The Morung Express	English	01-03-2023
2	Eastern Mirror	English	01-03-2023
3	Nagaland Post	English	01-03-2023

1.5 Public Hearing

Public hearing was held as scheduled at Conference Hall of the Commission. During the public hearing only 3(three) participants were present to provide their views on the petition of DPN before the Commission. The details of the public hearing are given in Chapter-4.

1.6 State Advisory Committee

The 16th State Advisory Committee met on 15th March, 2023 at Hotel Japfu, Kohima and discussed the APR for FY 2022-23 and ARR & Tariff proposal for FY 2023-24. The Minutes of the Advisory Committee meeting are given in ANNEXURE - IV.

2. SUMMARY OF ARR AND TARIFF PETITION

2.1 Aggregate Revenue Requirement (ARR)

The DPN in its petition has projected the Aggregate Revenue Requirement for the FY 2023-24 and Tariff proposal for the FY 2023-24 for meeting its expenses and the projected revenue during the financial year with the existing tariff. The projected ARR for the FY 2023-24 are shown in Table below.

Table 2.1: Aggregate Revenue Requirement projected by DPN for FY 2023-24

(Rs. in Crs.)

Sl. No.	Particulars	Approved in T.O. dated 20.03.2020	Proposed for the FY 2023-24
1	Cost of Power Purchase	429.06	404.61
2	Cost of Generation	20.40	20.06
3	Operation & Maintenance Expenses	194.56	192.24
4	Transmission Charges	49.66	86.86
5	Interest & Finance Charges	-	-
6	Depreciation	153.36	77.09
7	Interest on Working Capital	12.58	-
8	Return on Equity	-	-
9	Total Revenue Requirement	859.62	780.87
10	Less: Non-Tariff Income	15.33	15.33
11	Net Revenue Requirement (9-10)	844.29	765.54

(Source: Table 29 of Tariff Petition)

2.2 Tariff

The DPN in its petition has submitted the proposed tariff for the FY 2023-24 as per the table below:

Table 2.2: Existing Tariffs v/s Proposed Tariffs for the FY 2023-24

Sl. No.	Category of Consumers	Existing Rate (In Rs./kWh)	Proposed Rate (In Rs./kWh)
1	Category 'A' Domestic		
a)	Up to 30 kwh	5.10	5.35
b)	31 to 100 kwh	5.60	5.90
c)	101 to 250 kwh	6.20	6.50
d)	Above 250 kwh	7.00	7.35

Sl. No.	Category of Consumers	Existing Rate (In Rs./kWh)	Proposed Rate (In Rs./kWh)
2	Category 'B' Industrial		
a)	Up to 500 kwh	6.20	6.50
b)	501 to 5000 kwh	6.70	7.00
c)	Above 5000 kwh	7.30	7.65
3	Category 'C' Bulk	6.80	7.10
4	Category 'D' Commercial		
a)	Up to 60 kwh	7.35	7.70
b)	61 to 240 kwh	8.50	8.90
c)	Above 240 kwh	8.90	9.30
5	Category 'E' PWW	7.25	7.60
6	Category 'F' Public Light	* To be recovered from the consumers	* To be recovered from the consumers
7	CATEGORY 'G' Interstate	6.00	6.30
8	Category 'H' Agriculture	3.20	3.35
9	Category 'I' Temporary Connection	DLF Rs.11.00 Others Rs.14.00	DLF Rs.11.00 Others Rs.14.00
10	Kuti Jyoti (Point)	Same as DLF	Same as DLF
11	Single Point Metered Rural	5.15	5.40
12	Single Point Metered Urban	5.40	5.65
*	Charges for public lighting have to be recovered from the consumers of Domestic, Commercial, Industrial and Bulk categories at the rates shown below:		
a)	Domestic	Rs. 10 per connection / month	Rs. 10 per connection / month
b)	Commercial	Rs. 15 per connection / month	Rs. 15 per connection / month
c)	Industrial	Rs. 20 per connection / month	Rs. 20 per connection / month
d)	Bulk Supply	Rs. 25 per connection / month	Rs. 25 per connection / month

2.3 Prayers of DPN

The DPN has prayed in its petition for the following:

- Examine the proposal submitted by the Petitioner for a favourable dispensation as detailed in the enclosed proposal;
- Consider the submissions and allow the revised estimate for FY 2022-23 and approve Aggregate Revenue Requirement and Retail Tariff for DPN for FY 2023-24;

- Approve the revenue gap and appropriate tariff increase as detailed in the enclosed proposal;
- Pass suitable orders for implementation of the tariff proposals for the FY 2023-24;
- Approve the terms and conditions of Tariff Schedules and various other matters as and the proposed changes therein;
- Condone any inadvertent delay/ omissions/ errors/ shortcomings and permit DPN to add/ change/ modify/ alter this filing and make further submissions as may be required at a future date petition;
- Pass such orders as the Commission may deem fit and proper, keeping in view the facts and circumstances of the case;

3. POWER SECTOR IN NAGALAND - AN OVERVIEW

3.1 Geographical Reality

The DPN is responsible for supply and distribution of electricity in the State of Nagaland which has a total area of 16,527 Sq.km. The total population of Nagaland State is around 19.81 lakhs as per 2011 census. The DPN serves 3,17,210 consumers of various categories with an annual energy consumption of about 705.97 MUs for the FY 2021-22.

3.2 Power Supply

3.2.1 Own Generation

DPN has its own hydel generation capacity of 28 MW at Likhimro Hydro Power Project and other MHEPs. Apart from this, the power supply requirements of the DPN are met from its share from Central Generating Stations (CGS) which is wheeled through the PGCIL network of NER and power purchases from electricity traders/other sources.

3.2.2 Power Purchase

The State is dependent on outside sources for meeting its energy requirement. The State has share from Central Sector Generating Stations and total firm share from the Central Sector Generating Stations of NEEPCO, NHPC, NTPC and OTPC including own Generation is 229.97 MW. The total allocation to Nagaland from the generating stations is depicted in the Table below:

Table 3.1: Power allocation from Central Generating Stations (CGS)

Sl. No.	Source	Capacity (In MWs)	Allocation	
			(In %)	(In MWs)
A	Central Generating Stations			
I	NTPC			
1	Farakka STPS	1600	0.43	6.88
2	Kahalgaon STPS	840	0.42	3.57
3	Talcher STPS	1000	0.42	4.25
4	Bongaigaon TPS	750	4.92	36.93
	NTPC-Total	4190		51.62
II	NHPC			
1	Loktak HEP	105	6.44	6.76
	NHPC-Total	105		6.76
III	NEEPCO			

Sl. No.	Source	Capacity (In MWs)	Allocation	
			(In %)	(In MWs)
1	Doyang HEP (Incl. Free)	75	17.81	13.35
2	AGBPP	291	5.81	16.89
3	AGTPP	135	5.74	7.74
4	Khandong HEP	50	6.65	3.33
5	Kopili HEP	200	6.15	12.29
6	Ranganadi HEP	405	5.34	21.61
7	Kopili - II HEP	25	5.74	1.43
8	PARE	110	5.40	5.94
9	KAMENG	600	1.50	9.00
	NEEPCO-Total	1891		91.59
IV	OTPC			
1	Palatana	726	7.16	52.00
	OTPC-Total	726		52.00
V	Own Generation	28	100.00	28.00
VI	Total	6940		229.97

3.3 Transmission and Distribution Network in the State

Nagaland being a hilly State with its population unevenly dispersed to the remote areas, the State of Nagaland is having large network of HT and LT lines as well as distribution transformers.

The details of transmission and distribution network, owned & operated by DPN as on 31.03.2021 are given in table below:

I. Length of voltage wise lines

Sl. No.	Description	Length (In ckt. km.)
1	132 kV	347.60
2	66KV	473.70
3	33kV	1,935.70
4	11kV	6,646.08
5	LT	11,252.10
6	Total	20,655.18

II. Voltage wise sub-stations

Sl. No.	Description	No. of Sub-Stations
1	132/66/33 kV	3
2	132/33 kV	4
3	66/33 kV	19
4	66/11 kV	3
5	33/11 kV	92
6	33/0.4 kV	189
7	11/0.4 kV	3,642
8	Total	3,952

III. Power Transformers

Sl. No.	Description	Quantity (No.)	Capacity (In MVA)	Total Capacity (In MVA)
1	100 MVA, 132/66 kV	1	100	100.00
2	25 MVA, 132/66 kV	2	25	50.00
3	10 MVA, 132/66 kV	3	10	30.00
4	100 MVA, 132/33 kV	1	100	100.00
5	12.5 MVA, 132/33 kV	2	12.5	25.00
6	8 MVA, 132/33 kV	6	8	48.00
7	5 MVA, 132/33 kV	2	5	10.00
8	20 MVA, 66/33 kV	1	20	20.00
9	10 MVA, 66/33 kV	5	10	50.00
10	7.5 MVA, 66/33 kV	4	7.5	30.00
11	5 MVA, 66/33 kV	6	5	30.00
12	2.5 MVA, 66/33 kV	3	2.5	7.50
13	20 MVA, 66/11 kV	2	20	40.00
14	10 MVA, 66/11 kV	2	10	20.00
15	10 MVA, 33/11 kV	10	10	100.00

Sl. No.	Description	Quantity (No.)	Capacity (In MVA)	Total Capacity (In MVA)
16	5 MVA, 33/11 kV	20	5	100.00
17	2.5 MVA, 33/11 kV	19	2.5	47.50
18	1.6 MVA, 33/11 kV	34	1.6	54.40
19	1.2 MVA, 33/11 kV	1	1.2	1.20
20	1 MVA, 33/11 kV	2	1	2.00
21	0.5 MVA, 33/11 kV	19	0.5	9.50
22	Total	145		875.10

IV. Distribution Transformers

Sl. No.	Capacity (In KVA)	Quantity (No.)	Capacity (In MVA)	Total Capacity (In MVA)
1	1000 33/0.4 kV	1	1	1.00
2	800 33/0.4 kV	1	0.8	0.80
3	750 33/0.4 kV	1	0.75	0.75
4	500 33/0.4 kV	4	0.5	2.00
5	315 33/0.4 kV	1	0.315	0.32
6	250 33/0.4 kV	24	0.25	6.00
7	100 33/0.4 kV	24	0.1	2.40
8	63 33/0.4 kV	44	0.063	2.77
9	50 33/0.4 kV	2	0.05	0.10
10	25 33/0.4 kV	87	0.025	2.18
11	1200 11/0.4 kV	6	1.2	7.20
12	1000 11/0.4 kV	2	0	-
13	800 11/0.4 kV	1	0.8	0.80
14	750 11/0.4 kV	9	0.75	6.75
15	500 11/0.4 kV	188	0.5	94.00
16	400 11/0.4 kV	3	0	-
17	315 11/0.4 kV	3	0.315	0.95
18	250 11/0.4 kV	526	0.25	131.50

Sl. No.	Capacity (In KVA)	Quantity (No.)	Capacity (In MVA)	Total Capacity (In MVA)	
19	200	11/0.4 kV	1	0.2	0.20
20	160	11/0.4 kV	2	0.16	0.32
21	125	11/0.4 kV	2	0.125	0.25
22	100	11/0.4 kV	532	0.1	53.20
23	63	11/0.4 kV	766	0.063	48.26
24	50	11/0.4 kV	23	0.05	1.15
25	25	11/0.4 kV	2238	0.025	55.95
26	16	11/0.4 kV	79	0.016	1.26
27	10	11/0.4 kV	0	0	-
28	Total		4570		420.10

3.4 Transmission and Distribution (T&D) Losses

The transmission and distribution losses of DPN system were projected as 20.00% for the FY 2023-24. The Technical and Commercial losses are not segregated.

3.5 Consumer Profile and Energy sales

The consumers profile and corresponding energy sales projected by DPN for the FY 2023-24, are given in the table below:

Table 3.2: Consumer Profile and Energy Sales for FY 2023-24

Sl. No.	Category	Projected Energy Sales (In MUs)	Consumer (In No.)
1	Domestic including BPL	424.56	3,00,043
2	Commercial	123.27	25,173
3	Industrial	46.71	4,750
4	Public Lighting	1.22	621
5	Public Water Works & Sewage	0.04	40
6	Irrigation & Agriculture	0.02	1
7	Bulk Supply	109.83	2,430
8	Outside State	172.83	
9	Total	878.49	3,33,057

3.6 Demand

The total connected load for the FY 2023-24 was projected 217.185 MW. The allocation (firm and infirm) from various central generating stations is 229.97 MW.

The energy drawl projected by DPN during the FY 2023-24 as 968.07 MUs apart from own generation of 108.30 MUs.

3.7 Energy Audit

DPN is not conducting Energy Audit effectively, neither at the state level nor at the consumer end. At present, the DPN does the calculation of loss by taking the energy input at 132kV and energy sales at consumer end and the difference is shown as distribution loss, which cannot be termed as energy audit. As a matter of fact, energy audit should be conducted Voltage wise and computed with standard norms. Any high loss areas should be identified and analysed and effective measures to be taken to bring down the losses to the permissible limits. To achieve this all the line feeders, transformers and consumers should be provided with standard meters.

3.8 Energy Metering

DPN has not completed 100% consumers metering. Most of the meters are static type. Some are not tested for many years. Metering of 33KV, 11KV feeders and DTs are not completed.

4. PUBLIC HEARING

4.1 Public Response to the Petition

On admitting the ARR and Tariff Petition for the FY 2023-24 including Performance Review for the FY 2022-23, the Commission directed the DPN to make copies of the petition available to the general public, post the petition on their website and also publish the same in newspapers in abridged form and invite comments/objections from them.

4 (four) written Objections/suggestions were received from public during the time period fixed by the Commission.

4.2 Public Hearing

In order to ensure transparency in the process of determination of tariff as envisages in the Electricity Act, 2003, public hearing was held at Kohima on 09-03-2023 as scheduled.

4.3 Proceedings of Public Hearing

After admitting the Performance Review for the FY 2022-23 and Revised ARR & Tariff Petition for the FY 2023-24, the Commission directed the Department of Power, Government of Nagaland (DPN) to publish the Petition in newspapers in an abridged form duly inviting Comments/ Objections from public/ stakeholders.

In order to ensure transparency in the process of determination of tariff as envisaged in the Electricity Act, 2003, the DPN arranged publication of petition in abridged form in 2 leading Newspapers on 19th & 21st January 2023, calling for objections/ suggestions/ comments, if any to be filed on or before 30-01-2023. The DPN/Commission received four objections / comments from the public till the aforesaid returnable date.

The Commission arranged issuing of Public Notice by publishing in 3 leading Newspapers on 01-03-2023 calling for public hearing to be conducted on 09th March, 2023 in the Conference Hall of the Commission. Accordingly, the Public Hearing was conducted as scheduled.

Though the notice was duly published by the Commission calling the consumers to come forward and express their objection/suggestion, if any, to the tariff petition filed by the DPN, on the day of public hearing there were only 3 stakeholders present to offer their comments.

Minutes of the Hearing

In response to the Public Notice issued by the DPN, 4 (four) stakeholders namely Cellular Operators Association of India (COAI), Reliance Jio Infocomm Limited, Bharti Hexocom Limited (Airtel) and All Ward Union Mokokchung Town has filed their respective written objections. Therefore, in order to ensure transparency in the process of Determination of Tariff as envisaged in the Electricity Act, 2003, the Commission on 01/03/2023 published the Notice calling for Public Hearing in 3 (three) leading local newspapers, to be held on 09/03/2023 from 11:00am onwards at the Conference Hall of the Commission. The Public Hearing was conducted as scheduled. However, only 3 Stakeholders were present on the day of hearing.

1. Representations by telecom Services:

On the date of Hearing respective counsels from M/s. Reliance Jio Infocomm Limited, M/s. Bharti Hexocom Limited (Airtel) appeared in persons before the Commission. The 2 (two) Telecoms Service providers submitted before the Commission praying to redress their common grievances to consider and classify the Telecom Service Provider under the Industrial Category for the purposes of electricity Tariff rather than under the prevailing Commercial Tariff in order to facilitate affordability of telecom services and the roll out of 5G services. They further submitted by relying upon the Telecom Regulatory Authority of India (TRAI) report dated 29/11/2022 recommending telecom sites be provided electricity connection at Industrial/Utility Tariff. They also brought to the notice of the Commission that as part of the IT/ITES policy, the Maharashtra State Electricity Regulatory Commission and Tripura State Electricity Regulatory Commission has specifically categories Telecommunication Towers under the Industrial Tariff in furtherance of the IT/ITES policies framed by their respective State Governments.

On the other hand, the DPN officials present in the Hearing responded that the aforesaid telecom service providers cannot be classified under the category of Industrial consumers in the electricity tariff since they are only a service provider and not engaged in

manufacturing of any products, moreover, the Industrial Consumers are given lower tariff in order to encourage & Facilitate Social Economic Growth in the State.

Further, the Government of India and other Governmental Agencies may consider the telecom sector under Industry Category but such categorisation may not be relevant in general while determining the electricity tariff, except for limited specific purpose(s) to provide incentive to a specific area of operation considering the geographical location. The DPN Officials also submitted that the proposed average tariff is much lesser than the average cost of Supply.

Decision of the Commission:

The Commission heard both the parties at length and found that the aforesaid submission of the telecom service providers for classification under the industrial category are based on the Telecom Regulatory Authority of India (TRAI) recommendation dated 29/11/2022. The Commission has also perused the said recommendation of TRAI's Working group which was submitted to the FOIR alongwith the initiatives under taken by the State of Maharashtra categorising telecommunication towers in the Industry tariff vide its order dated 30.03.2020 passed in case no. 322 of 2019.

The Commission, on perusal of the aforesaid documents, found that the Government of Maharashtra has categorised the telecommunication tower in the industrial tariff as part of their IT/ITeS policy notified by the State Government. Whereas, the State of Nagaland is yet to notify such policy and hence, the case of the respondent seeking for classification of telecommunication tower under Industrial category cannot be considered till such time the State Government specifically notify such policy.

The Commission is also of the view that the classification of the consumer category does not come within the purview of Tariff Determination process, however, the respondent are

at liberty to file appropriate petition separately before the Commission for such classification as and when the aforesaid policy is notified by the State government.

2. Representation of AWUM.

The All Ward Union Mokokchung Town written representation dated 29/01/2023 was taken into consideration by the Commission during the Hearing. AWUM requested the Commission to fix the UEMB Single Point Meter Tariff for FY 2023-'24 @ Rs. 5.50/kWh at par with the proposed pre-paid Domestic Category.

The DPN Officials present in the hearing fairly submitted that UEMB consumers under Mokokchung Town covers Domestic, Commercial and Industrial category of consumers. Hence, DPN submitted before the Commission to take into consideration the aforesaid aspects at the time of final determination of the Tariff petition.

Decision of the Commission:

The Commission considered the representation submitted by AWUM as well as the submission of the DPN Officials present and finds it appropriate to rationalise the SPM (urban) Tariff as deem fit and proper.

Sd/-
Er. HEKAVI N AYEMI
Deputy Director,
NERC, Kohima.

The name of the officers of the DPN and others who attended the Public Hearing are also listed here below:

1. Shri. Khose Sale, Chairman (NERC),
2. Er. Wabangmeren Jamir, Addl. CE (Rev) Department of Power,
3. Er. Lobosang Jamir, SE (Rev), Department of Power,
4. Er. Neiteu Mero, SDO, Department of Power,
5. Er. Alemla Jamir, Junior Engineer, Department of Power,
6. Er. Washisongla, Junior Engineer, Department of Power,
7. Shri. Arvind Tewari, Consultant, Department of Power,
8. Shri. Byomkesh Mallick, Consultant, Department of Power,
9. Shri. Amrik Chatterjee, Consultant, Department of Power,
10. Shri. Tangu Rosu, Reliance Jio Infocomm Limited,
11. Shri. Guarav Thakur, Reliance Jio Infocomm Limited,
12. Shri. Hiten Sampat, Reliance Jio Infocomm Limited,
13. Shri. Manish Nath, Reliance Jio Infocomm Limited,
14. Shri. Alemwapang Ao, Reliance Jio Infocomm Limited,
15. Shri. Bendangmeren, Reliance Jio Infocomm Limited,
16. Shri. Paazu Poumal, Reliance Jio Infocomm Limited,
17. Shri. Surajit Bharti, Advocate, Bharti Hexacom Limited (Airtel),
18. Shri. Monodeep Sarkar, Bharti Hexacom Limited (Airtel),
19. Er. Hekavi N Ayemi, Deputy Director, NERC,
20. Shri. Limawapang, Legal Consultant, NERC,
21. Shri. Shivito Wotsa, Accounts Officer (NERC).

5. TRUING-UP

5.1 Nagaland Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2016 provides that the licensees shall file petition for Truing-Up of the actual expenses for previous years. The relevant regulations are provided below:

Regulation 5.3 of the NERC MYT Regulations, 2016 provides as below:

*“The Generating Company, Transmission Licensee, and **Distribution Licensee** for the Distribution Wires Business and Retail Supply Business, shall **file separate audited accounting statements with the application for determination of tariff and truing up** under Regulation 10”*

Regulation 10 of the NERC MYT Regulations, 2016 further provides as below:

*“10.1. Where the **Aggregate Revenue Requirement** and expected revenue from tariff and charges of a Generating Company or Transmission Licensee or Distribution Licensee is covered under a Multi-Year Tariff framework, then such Generating Company or Transmission Licensee or Distribution Licensee, as the case may be, **shall be subject to truing up of expenses and revenue** during the Control Period in accordance with these Regulations.*

*10.2. The Generating Company or Transmission Licensee or **Distribution Licensee shall file an Application for Truing up of the previous year** and determination of tariff for the ensuing year, within the time limit specified in these Regulations: Provided that the Generating Company or Transmission Licensee or Distribution Licensee, as the case may be, shall submit to the Commission information in such form as may be prescribed by the Commission, **together with the Audited Accounts, extracts of books of account** and such other details as the Commission may require to assess the reasons for and extent of any variation in financial performance from the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges:*

10.3. The scope of the truing up shall be a comparison of the performance of the Generating Company or Transmission Licensee or Distribution Licensee with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise of the following:

- (i) a comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year, subject to the prudence check including pass-through of impact of uncontrollable factors;*
- (ii) Review of compliance with directives issued by the Commission from time to time;*
- (iii) Other relevant details, if any.....”*

The above Regulation requires that the Distribution Licensee to file True-up Petition for every year of the control period based on the Audited Annual Accounts along with the

petition for annual determination of Tariff. However, the Department of Power, Government of Nagaland has not filed the petition for Truing-Up for previous years.

It is directed that the Department shall complete the audit of the Annual Accounts and file the True-Up petition along with the Tariff Petition for the next Financial Year i.e by 30th November, 2023. The Department shall submit the Audited Annual Accounts and the Fixed Asset Register along with the True-Up petition.

Further, the Department shall ensure that the Annual Accounts & Fixed Asset Register is updated annually, and True-up petition is mandatorily filed every year in respect of the actual expenses for the previous year.

6. REVIEW FOR THE FY 2022-23

6.1 Preamble

The Commission had approved the ARR and Tariffs for the FY 2022-23 in its order dated 2nd June, 2022 based on the projected data furnished by the DPN. Now, the DPN has submitted proposals for review of the FY 2022-23 duly furnishing data based on the revised estimates for the FY 2022-23.

6.2 Energy demand (Sales)

Vide its Tariff Order dated 2nd June, 2022, the Commission had approved energy sales of 713.42 MUs for the FY 2022-23. The DPN in its Review Petition for the FY 2022-23 has submitted the estimated sales considering actual for a certain period and estimate for the balance period.

Accordingly, comparative statements of category-wise energy sales approved by the Commission for the FY 2022-23, estimate by DPN and approved by the Commission are shown in table below.

Table 6.1: Energy Sales approved by Commission for FY 2022-23

(In MUs)

Sl. No.	Category	Approved in Tariff Order dated 02.06.2022	Review Estimate	Now approved by the Commission
1	Domestic including BPL	418.09	411.64	411.64
2	Commercial	108.15	116.42	116.42
3	Industrial	48.37	46.00	46.00
4	Public Lighting	16.95	1.13	1.13
5	Irrigation & Agriculture	0.02	0.02	0.02
6	Public Water Works	13.91	0.04	0.04
7	Bulk Supply	107.92	106.94	109.78
8	Total	713.42	682.19	685.03
9	Outside state	-	200.32	163.01
10	Grand Total	713.42	882.51	848.04

The Commission now approves energy sales for the FY 2022-23 at 848.04 MUs against 882.51 MUs estimated by DPN.

6.3 Transmission and Distribution Losses (T&D Losses)

The Commission in its order dated 02.06.2022, had fixed the target of T&D Losses at 20.25% for the FY 2022-23. The DPN submitted the same as T&D losses for the FY 2022-23.

The Commission had directed the Petitioner in pervious Tariff Orders to replace faulty meters, identify high losses area and identify technical and commercial losses separately by conducting feeder wise and transformer wise Energy Audit. Inspite of conducting energy audit, the DPN does the calculation of loss by taking the energy input at 132kV and energy sales at consumer end and the difference is shown as distribution loss.

Further, the Commission observed that high losses affected the state with the unexpected increase in demand and expenses towards power purchase.

In the view of the above, the Commission approves the T&D losses at 20.25% as same as approved in the order dated 02.06.2022 for the FY 2022-23.

The detailed discussion & calculation is provided in the Para no. 6.5.

Table 6.2: T&D Losses approved by Commission for FY 2022-23

Sl. No.	Particulars	Approved in Tariff Order dated 02.06.2022	Review Estimate	Now approved by the Commission
1	T&D Losses (In %)	20.25	20.25	20.25

Therefore, the Commission approves T&D Loss at 20.25% and Intra State Transmission Loss at 3% for the FY 2022-23.

6.4 Energy Availability

6.4.1 Own Generation

The Commission in its Tariff Order dated 02.06.2022 had approved Own Generation for DPN at 83.63 MUs for the FY 2022-23. Now, the DPN has estimated own generation of 108.30 MUs during the FY 2022-23, as detailed in the table below.

Table 6.3: Power Generation approved by Commission for the FY 2022-23

(In MUs)

Sl. No.	Particulars	Approved in Tariff Order dated 02.06.2022	Review Estimate	Now approved by the Commission
1	Own Generation	83.63	108.30	108.30
2	Total	83.63	108.30	108.30

The Commission now approves Own Generation of DPN during the FY 2022-23 at 108.30 MUs, as per details furnished by DPN.

6.4.2 Power Purchase

The Commission in its Tariff Order dated 02.06.2022 had approved the power purchase quantity of 862.62 MUs including free power quantity of 11.39 MUs. Now, the DPN has estimated for the FY 2022-23 at 1,001.71 MUs including free power of 15.17 MUs, as detailed in table below.

Table 6.4: Power Purchase approved by Commission for the FY 2022-23

(In MUs)

Sl. No.	Particulars	Approved in Tariff Order dated 02.06.2022	Review Estimate	Now approved by the Commission
	Central Sector			
1	FSTPP, NTPC	41.86	45.54	45.54
2	KHSTPP, NTPC	23.27	21.65	21.65
3	TSSTPP, NTPC	27.36	26.96	26.96
4	BGTPP, NTPC	218.73	210.34	210.34
5	LOKTAK HEP, NHPC	25.33	35.19	35.19
6	DOYANG HEP, NEEPCO	5.63	10.62	10.62
7	AGBPP, NEEPCO	98.57	86.81	86.81
8	AGTPP, NEEPCO	51.72	44.60	44.60
9	KHANDONG HEP, NEEPCO	17.76	-	-
10	KOPILI HEP, NEEPCO	-	-	-
11	RANGANADI HEP, NEEPCO	59.85	60.96	60.96
12	KOPILI - II HEP, NEEPCO	0.64	-	-
13	PARE HEP, NEEPCO	22.55	26.38	26.38
14	KAMENG HEP, NEEPCO	37.41	43.98	43.98
15	PALATANA, ONGCTPC	184.24	339.87	339.87
	OTHER			
16	GEPL			
17	PTC	30.44	0.01	-
18	UI / DEVIATION			
19	FREE POWER	11.39		15.17
20	Banking (Net)	5.89		-
21	TOTAL	862.62		968.06

The Commission approves power purchase of 968.06 MUs for the FY 2022-23 including free power of 15.17 MUs.

6.5 Energy Balance

The details of energy requirement and availability approved by the Commission in its Tariff Order dated 02.06.2022 for the FY 2022-23 and estimated by the DPN, and now approved by the Commission, are presented in table below:

Table 6.5: Energy Balance approved by Commission for the FY 2022-23

Sl. No.	Particulars	Approved in Tariff Order dated 02.06.2022	Review Estimate	Now approved by the Commission
A	Energy Requirement			
1	Energy Sales	713.42	682.19	685.03
2	Distribution loss %	20.25	20.25	20.25
3	Distribution loss	181.15	173.22	173.94
4	Energy Requirement	894.57	855.41	858.98
B	Energy Availability			
5	Own generation	83.63	108.30	108.30
6	Power from ER	92.49	94.15	94.15
7	ER Total losses %	2.26%	2.26%	2.26%
8	Regional Losses	2.09	2.13	2.13
9	Net Energy from ER (6-8)	90.40	92.02	92.02
10	Power from NER	733.81	873.91	873.92
11	Total power purchase (9+10)	824.20	965.94	965.94
12	NER Tr Loss %	2.66%	2.66%	2.66%
13	NER Tr Loss	21.92	25.69	25.69
14	Net power available (11-13)	802.28	940.24	940.25
15	UI/ Deviation	30.44	0.01	-
16	Outside State Sale	-	200.32	163.01
17	Banking (Net)	5.89	33.64	-
18	Total power available at state periphery (5+14+15-16+17)	922.23	881.87	885.54
19	Intra state Tr Loss @ 3%	27.67	26.46	26.57
20	Net power available for sale in Distribution (18-19)	894.57	855.41	858.98
21	Surplus (20-4)	0.00	-0.00	0.00

6.6 Fuel Cost

The details of fuel cost approved by the Commission in its Tariff Order dated 02.06.2022 for the FY 2022-23 and estimated by the DPN, and now approved by the Commission, are presented in table below:

Table 6.6: Fuel Cost approved by Commission for the FY 2022-23

(Rs. in Crs)

Sl. No.	Particulars	Approved in Tariff Order dated 02.06.2022	Review Estimate	Now approved by the Commission
1	Fuel Cost	15.00	19.98	19.98
2	Total	15.00	19.98	19.98

The Commission now approves the fuel cost of Rs. 19.98 Crs for the FY 2022-23, as per review estimated by DPN.

6.7 Power Purchase Cost

The details of power purchase cost approved by the Commission in its Tariff Order dated 02.06.2022 for the FY 2022-23, estimated by the DPN, and now approved by the Commission, are presented in table below:

Table 6.7: Power Purchase Cost approved by Commission for the FY 2022-23

(Rs. in Crs)

Sl. No.	Particulars	Approved in Tariff Order dated 02.06.2022	Review Estimate	Now approved by the Commission
1	NTPC			
	FSTPP	17.05	159.26	28.55
	KHSTPP	8.53		11.82
	TSTPP	7.30		8.95
	BGTPP	143.08		139.67
2	NHPC			
	LOKTAK HEP	8.35	11.50	12.74
3	NEEPCO			
	DOYANG HEP	4.05	127.07	7.32
	AGBPP	33.43		60.77
	AGTPP	18.30		29.61
	KHANDONG HEP	3.02		-
	KOPI LI HEP	-		-
	RANGANADI HEP	12.44		15.12
	KOPI LI - II HEP	0.17		-
	PARE HEP	11.84		13.19
	KAMENG HEP, NEEPCO	15.71		17.59
4	ONGCTPC			
	PALATANA	60.67	99.93	111.14
5	Other sources			

(Rs. in Crs)

Sl. No.	Particulars	Approved in Tariff Order dated 02.06.2022	Review Estimate	Now approved by the Commission
	GEPL	-		
	PTC	-	-	-
	UI/ Deviation	9.33		
6	Total Energy Purchase	353.26	397.77	456.47
7	Free Power	-	-	-
8	REC Purchase	6.14	-	5.89
9	Transmission Charges -	92.93	83.12	106.37
10	Transmission Charges -		2.28	1.65
11	NERLDC Charges -	0.63		0.77
12	Other Charges	-	0.04	-
13	Net Power Purchase	452.95	483.21	569.50

The Commission now approves the power purchase cost of Rs. 569.50 Crs for the FY 2022-23 against Rs. 483.21 Crs estimated by DPN.

6.8 Operation and Maintenance Expenses

Operation & Maintenance expenses comprise of the following heads of expenditure viz.

- Employee Expenses
- Administration & General Expenses
- Repair & Maintenance Expenses

Details of Employee Expenses, Administration & General Expenses and Repair & Maintenance Expenses are discussed in the subsequent paras.

6.8.1 Employee Cost

The Commission vide its Order dated 02.06.2022, had approved employee cost at Rs. 142.72 Crs for the FY 2022-23. The DPN has estimated at Rs. 146.59 Crs for the FY 2022-23 and the cost now approved by the Commission are given in the table below.

Table 6.8: Employee Cost approved by Commission for the 2022-23

(Rs. in Crs)

Sl. No.	Particulars	Approved in Tariff Order dated 02.06.2022	Review Estimate	Now approved by the Commission
1	Employee Cost	142.72	146.59	146.59
2	Total	142.72	146.59	146.59

The Commission now approves the employee cost of Rs. 146.59 Crs for the FY 2022-23 as per revise estimated by DPN.

6.8.2 Administrative and General Expenses

The Commission vide its Order dated 02.06.2022, had approved A&G expenses at Rs. 3.65 Crs for the FY 2022-23. The DPN has estimated at Rs. 3.09 Crs for the FY 2022-23 and the same now approved by the Commission are given in the table below.

Table 6.9: Administrative and General Expenses approved by Commission for the 2022-23
(Rs. in Crs)

Sl. No.	Particulars	Approved in Tariff Order dated 02.06.2022	Review Estimate	Now approved by the Commission
1	A&G Expenses	3.65	3.09	3.09
2	Total	3.65	3.09	3.09

The Commission now approves the A&G Expenses of Rs. 3.09 Crs for the FY 2022-23, as per review estimated by DPN.

6.8.3 Repair and Maintenance Expenses

The Commission vide its Order dated 02.06.2022, had approved Repair & Maintenance expenses at Rs. 31.38 Crs for the FY 2022-23. The DPN has estimated at Rs. 32.87 Crs for the FY 2022-23 and the cost now approved by the Commission are given in the table below.

Table 6.10: Repair and Maintenance Expenses approved by Commission for the 2022-23
(Rs. in Crs)

Sl. No.	Particulars	Approved in Tariff Order dated 02.06.2022	Review Estimate	Now approved by the Commission
1	R&M Expenses	31.38	32.87	32.87
2	Total	31.38	32.87	32.87

The Commission accordingly approves the Repair & Maintenance Expenses of Rs. 32.87 Crs for the FY 2022-23 as estimated by DPN to ensure the quality supply and consumer satisfaction in the region.

6.8.4 Summary of O&M Expenditure approved by the Commission

The summary O&M Expenditure approved by the Commission is tabulated below:

Table 6.11: O&M Expenses approved by Commission for the FY 2022-23

(Rs. in Crs)

Sl. No.	Particulars	Approved in Tariff Order dated 02.06.2022	Review Estimate	Now approved by the Commission
1	Employee Cost	142.72	146.59	146.59
2	A&G Expenses	3.65	3.09	3.09
3	R&M Expenses	31.38	32.87	32.87
4	Total	177.75	182.55	182.55

The Commission approves each component of O&M expenses as per Petitioner claim for the FY 2022-23, as the same is necessary for smooth functioning of the DPN.

6.9 Capital Expenditure & Capitalization

Capital investment and capitalization during the FY 2022-23 has estimated by the DPN are shown in table below:

Table 6.12: Capital Works in Progress for the FY 2022-23

(Rs. in Crs)

Sl. No.	Particulars	Review Estimate
1	Opening balance of CWIP	914.02
2	Capital Investment during the year	100.00
3	Total (1+2)	1,014.02
4	Capitalisation during the year	100.00
5	Closing balance of CWIP (3-4)	914.02

The Petitioner has not submitted project wise details regarding CWIP and Capitalization for the FY 2022-23. In absence of details, the Commission has not carried out prudence check of the same. However, the Commission provisionally approves the capital expenditure of Rs. 100 Crs for the FY 2022-23 to ensure consumer satisfaction and reduction in T&D losses by improving the system.

Further, the Commission directs DPN to submit project wise details of capital expenditure incurred and projects Capitalized in True-up Petition for the respective year.

6.10 Gross Fixed Assets (GFA) and Depreciation

The DPN has claimed GFA addition for FY 2022-23, the details as per table below:

Table 6.13: Gross Fixed Assets for the FY 2022-23

(Rs. in Crs)

Sl. No.	Particulars	Review Estimate
1	Opening GFA	1,449.40
2	Additions during the year	100.00
3	Closing GFA (1+2)	1,549.40

Commissions Analysis:

In the absence of audited Fixed Asset Register, the Commission has not considered the information furnished by DPN. Further, the Commission has not carried out prudence check of the addition of capitalization for the FY 2022-23.

Therefore, the Commission directs DPN to submit project wise details of projects Capitalized and audited Fixed Assets Register with True-up Petition for the respective year.

The Commission vide its Order dated 02.06.2022, had not approved any depreciation for the FY 2022-23. However, the DPN has revised their claim of Rs. 72.93 Crs for the FY 2022-23 towards depreciation. Details of the claim and approval as below:

Table 6.14: Depreciation approved by Commission for the FY 2022-23

(Rs. in Crs)

Sl. No.	Particulars	Approved in Tariff Order dated 02.06.2022	Review Estimate	Now approved by the Commission
1	Depreciation	-	72.93	-
2	Total	-	72.93	-

In absence of audited Fixed Assets Register the Commission is not in position to take an appropriate view on this manner. Therefore, the Commission at this stage deems it fit to disallow the claim of Rs. 72.93 Crs towards depreciation.

However, the DPN may approach the Commission with audited Fixed Assets and depreciation Register in their True-up Petition for the respective year.

6.11 Interest and Finance Charges

The DPN vide their ARR & Tariff Petition for the FY 2023-24 has been submitted that the entire capital employed has been funded through infusion of funds by Government of Nagaland through budgetary support without any external borrowings on part of the DPN. Therefore, the DPN has not considered interest on loan for the FY 2022-23.

Table 6.15: Interest on Loan furnished by DPN for the FY 2022-23

(Rs. in Crs)

Sl. No.	Particulars	Approved in Tariff Order dated 02.06.2022	Review Estimate	Now approved by the Commission
1	Opening Normative Loan			
2	Add: Normative Loan during the year			
3	Less: Cumulative Repayments			
4	Less: Normative repayment			
5	Closing Normative Loan	-	-	-
6	Average Normative Loan			
7	Rate of Interest			
8	Interest on Loan			

Commission's Analysis:

Regulation 27 of the Nagaland Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2016 provides that the DPN has entitled for interest and finance charges.

Further, Regulation 22 of the NERC Multi Year Tariff Regulations, 2016 specify the normative debt equity ratio for calculation of interest on loan.

However, the DPN has stated that the entire capital employed has been funded through infusion of funds by Government of Nagaland through budgetary support without any external borrowings. As such, the Commission has not considered interest on loan for the FY 2022-23.

6.12 Interest on Working Capital

The Commission vide Tariff Order dated 02.06.2022 has not approved any amount for Interest on Working Capital for the FY 2022-23.

The DPN vide their ARR and Tariff Petition for the FY 2023-24 has been stated that the entire operating expenses of the Department is provided by the Government of Nagaland without any external borrowings toward working capital. Hence, The DPN does not have any working capital loan. Therefore, the DPN has not claimed interest on Working Capital for the FY 2022-23.

Commission's Analysis:

As per clause 29.4 of NERC MYT Regulations 2016 the working capital of a licensee shall consist of

- a. Operation and maintenance expenses for one month; plus
- b. Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus
- c. Receivables equivalent to one (1) month of the expected revenue from sale of electricity at the prevailing tariffs; minus
- d. Amount held as security deposits under clause (a) and clause (b) of sub-section (1) of Section 47 of the Act from consumers except the security deposits held in the form of Bank Guarantees;

and the rate of interest on working capital shall be equal to the SBI Advance rate on 1st April of the relevant year.

The Petitioner in their Review Petition for the FY 2022-23 has been submitted as follows.

"However, it is submitted that the entire operating expenses of the Department is provided by the Government of Nagaland without any external borrowings toward working capital. Hence, DPN does not have any working capital loan. As such, the DPN has not claimed interest on Working Capital for the FY 2022-23."

Table 6.16: Interest on Working Capital approved by Commission for the FY 2022-23

(Rs. in Crs)

Sl. No.	Particulars	Approved in Tariff Order dated 02.06.2022	Review Estimate	Now approved by the Commission
1	Receivables equivalent to 1 month of expected revenue from sale of electricity at prevailing rates			
2	Maintenance of spares at 1% of historical costs of fixed assets	-	-	-
3	O&M Expenses for one month			
4	Amount held as Security Deposit in Cash			
5	Total Working capital ((1+2+3)-4)			
6	Rate of Interest @ SBAR of relevant year			
7	Interest on Working Capital	-	-	-

In the view of the above submission, the Commission has not considered any Interest on Working Capital for the FY 2022-23.

6.13 Bad Debts

Regulation 89.8 of NERC MYT Regulations, 2016 provides as follows: "The Commission may allow bad debts written off as a pass through in the aggregate revenue requirement, subject to prudence check."

The DPN has submitted vide their ARR & Tariff Petition for the FY 2023-24 as follows.

"DPN proposes to claim the Bad debt after the Annual Accounts for the year are finalised and audited. Hence, the same shall be claimed at the time of True-up for the FY 2022-23. Hon'ble Commission may allow the same."

In view of the above the Commission has not considered any Bad Debts for the FY 2022-23.

6.14 Return on Equity

Regulation 26 of MYT Regulations 2016 provides for Return on Equity (RoE) as follows:

"Return on equity shall be computed on the paid-up equity capital determined in accordance with Regulation 22 relating to the Generating Company or Transmission Licensee or Distribution Licensee as the case may be and shall be allowed at the rate of 15.5% for Generating Companies, including hydro generation stations above 25 MW, Transmission Licensee, and Distribution Licensee"

However, The DPN has submitted that the entire capital employed has been funded through infusion of funds by Government of Nagaland through budgetary support. There is no paid-up equity capital nor DPN is paying any return on equity to the Government of Nagaland. Therefore, the DPN has not claimed Return on Equity for the FY 2022-23.

In absence of audited accounts, the Commission cannot allow any return on equity or capital base. In addition, since it is a State Government Department, the expenses are funded by the Government through budgetary support. Therefore, no separate return is to be allowed as return on equity.

6.15 Non-Tariff Income

The Commission vide its Order dated 02.06.2022, had approved Non-Tariff Income at Rs. 14.60 Crs for the FY 2022-23. The DPN has estimated the Non-Tariff Income for the FY 2022-23 at the same of Rs. 14.60 Crs and now approved by the Commission are given in the table below.

Table 6.17: Non-Tariff Income approved by Commission for the FY 2022-23

(Rs. in Crs)

Sl. No.	Particulars	Approved in Tariff Order dated 02.06.2022	Review Estimate	Now approved by the Commission
1	Non-Tariff Income	14.60		14.60
2	Total	14.60		14.60

The Commission approves the Non-Tariff Income of Rs. 14.60 Crs for the FY 2022-23, as per Petitioner Claim.

6.16 Revenue from Existing Tariff

The DPN has claimed of Rs. 534.15 Crs towards Revenue from existing Tariff for the FY 2022-23 and now approved by the Commission are furnished in the table below.

Table 6.18: Revenue from Sales approved by Commission for the FY 2022-23

(Rs. in Crs)

Sl. No.	Category	Review Estimate	Now approved by the Commission
1	Category 'A' Domestic	162.50	162.50
2	Category 'B' Industrial	30.34	30.34
3	Category 'C' Bulk	72.72	74.65
4	Category 'D' Commercial	88.06	88.06
5	Category 'E' PWW	0.03	0.03
6	Category 'F' Public Light	2.38	2.57
7	Category 'G' Agriculture	0.01	0.01
8	Single Point Metered Rural	52.51	52.51
9	Single Point Metered Urban	17.47	17.47
10	Total sales within State	426.02	428.14
11	Sales Outside State	108.13	67.11
12	Total Sales (13+14)	534.15	495.25

The Commission has approved Energy sales of 848.04 MUs for the FY 2022-23 as against the claim of 882.51 MUs in previous para. Further the Commission has considered approved Tariff rate while calculating Revenue from existing tariff.

In light of the above, the Commission accordingly approves of Rs. 495.25 Crs as Revenue from Existing Tariff including outside state sales of Rs. 67.11 Crs for the FY 2022-23.

6.17 Aggregate Revenue Requirement (ARR)

The Commission has approved ARR for the FY 2022-23 vide Tariff Order dated 02.06.2022. Now, the DPN has requested the Commission to approve their ARR based on their revised claim for the FY 2022-23. The summary of Revised Claim by DPN and approves by the Commission are as follows.

Table 6.19: Aggregate Revenue Requirement approved by Commission for the FY 2022-23
(Rs. in Crs)

Sl. No.	Category	Approved in Tariff Order dated 02.06.2022	Review Estimate	Now approved by the Commission
1	Fuel Cost	15.00	19.98	19.98
2	Power Purchase Cost	452.95	483.21	569.50
3	Employee Cost	142.72	146.59	146.59
4	A&G Expenses	3.65	3.09	3.09
5	R&M Expenses	31.38	32.87	32.87
6	Depreciation	-	72.93	-
7	Interest & Finance Charges	-	-	-
8	Interest on Working Capital	-	-	-
9	Provision for Bad Debts	-	-	-
10	Return on Equity	-	-	-
11	Total Revenue Requirement	645.71	758.66	772.03
12	Less: Non-Tariff Income	14.60	14.60	14.60
13	Net Revenue Requirement	631.11	744.06	757.43
14	Revenue from Sale of Power	432.62	534.15	495.25
15	Revenue Subsidy - Govt. of Nagaland	177.75	182.54	182.54
16	Surplus/(Gap) during the	-20.74	-27.37	-79.64
17	Govt. Subsidy/Support			79.64

The Commission approves Revenue Gap of Rs. 79.64 Crs as against Rs. 27.37 Crs estimated by the DPN.

As the utility is a Government Department fully covered under the budgetary support of the State Government, the gap, if any is funded through Revenue/Additional Subsidy from the Government of Nagaland. Therefore, the Commission has approved the Revenue GAP as NIL for the FY 2022-23

7. ANALYSIS OF AGGREGATE REVENUE REQUIREMENT FOR THE FY 2023-24

7.1 Energy Sales

Proper estimation of category wise energy sales is essential to determine the quantum of power purchase and the assessment of revenue. This section examines in detail the consumers category wise sales projected by the DPN in their petition for assessment of ARR.

7.2 Consumer Categories

DPN serves about 3.17 lakhs consumers at the end of 31st March, 2022 in their licensed area and the consumers are categorized as under.

Table 7.1: Category of Consumers

Sl. No.	Category
1	Category 'A' Domestic
2	Category 'B' Industrial
3	Category 'C' Bulk
4	Category 'D' Commercial
5	Category 'E' PWW
6	Category 'F' Public Light
7	Category 'G' Inter-state
8	Category 'H' Agriculture
9	Category 'I' Temporary Connection
10	Kuti Jyoti (Point)
11	Single Point Metered Rural
12	Single Point Metered Urban

DPN serves the consumers at different voltage levels at which the consumers avail supply. The Commission has considered the same categories are as existing categories.

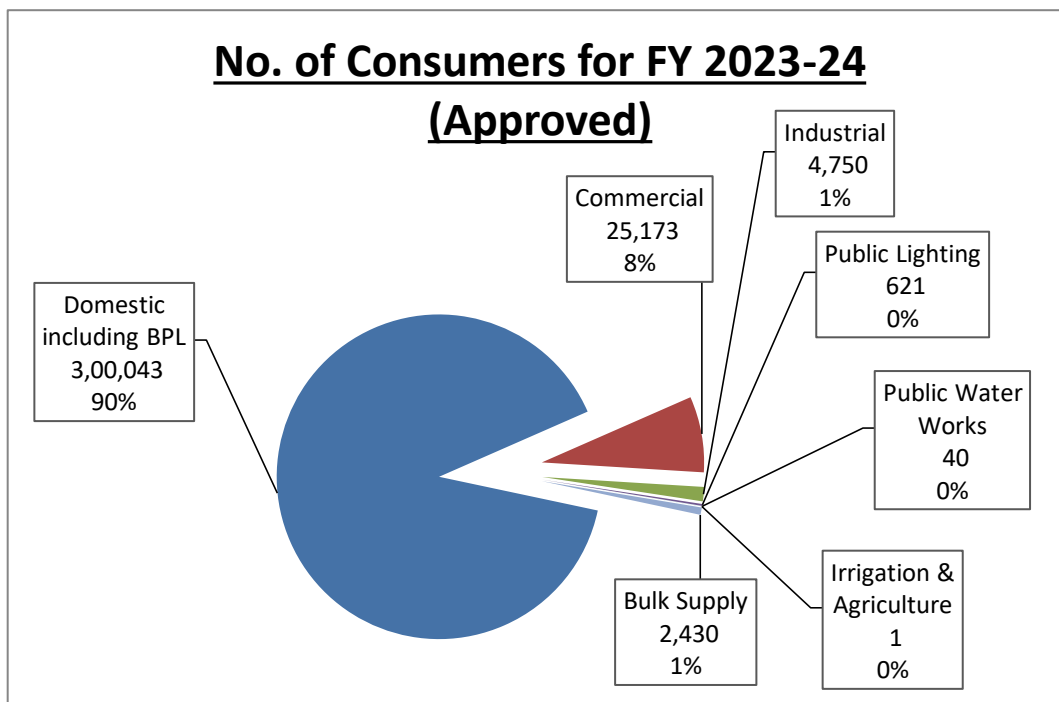
7.3 Growth of Consumers and Connected Load

The DPN serves nearly about 3.17 Lakh consumers at the end of 31st March, 2022. The Commission has analysed the data provided by the DPN and accordingly approves the No. of consumers for the FY 2023-24.

Table 7.2: Number of Consumers approved by Commission

(In No.)

Sl. No.	Category	FY 2023-24 (Approved)
1	Domestic including BPL	3,00,043
2	Commercial	25,173
3	Industrial	4,750
4	Public Lighting	621
5	Public Water Works	40
6	Irrigation & Agriculture	1
7	Bulk Supply	2,430
8	Outside State	-
9	Total	3,33,057



7.4 Category-wise Energy Sales

DPN has projected category wise energy sales for the FY 2023-24, as given in the table below:

Table 7.3: Projected Energy Sales

(In MUs)

Sl. No.	Category	2023-24 (Projected)
1	Domestic including BPL	424.56
2	Commercial	123.27
3	Industrial	46.71
4	Public Lighting	1.22
5	Public Water Works	0.04
6	Irrigation & Agriculture	0.02
7	Bulk Supply	109.83
8	Outside State sale	172.83
9	Total	878.49

7.4.1 Analysis of Energy Sales Projections by DPN and the Commission's decision

Based on the actual sales during the FY 2016-17 to FY 2021-22, the sales growth rate is worked out as detailed in the table below:

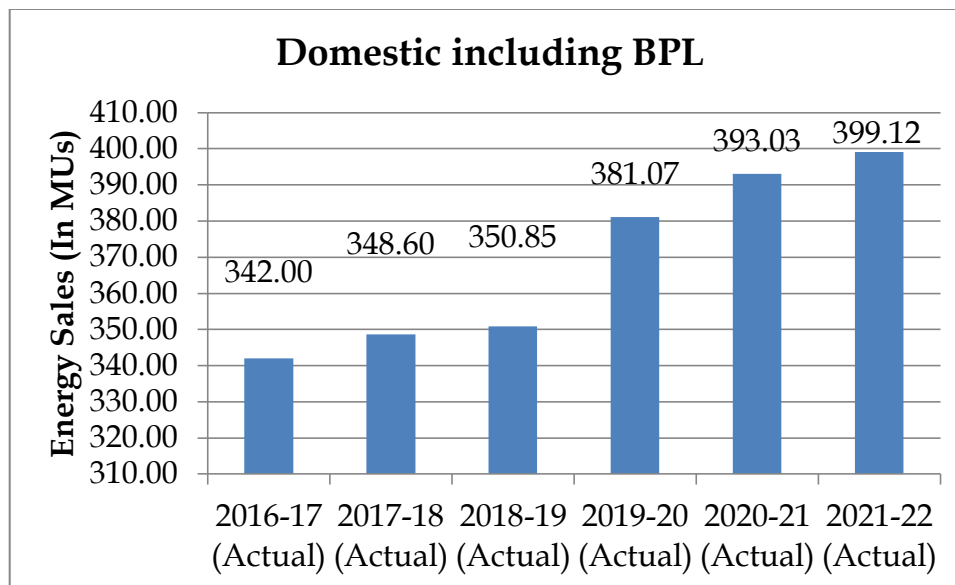
Table 7.4: Consumer Category-wise growth in Energy Sales

Sl. No.	Category	2016-17 (Actual)	2017-18 (Actual)	2018-19 (Actual)	2019-20 (Actual)	2020-21 (Actual)	2021-22 (Actual)	CAGR for 5 years from FY 2016-17 to FY 2021-22	CAGR for 3 years from FY 2018-19 to FY 2021-22	CAGR for 2 years from FY 2019-20 to FY 2021-22	CAGR for YOY from FY 2020-21 to FY 2021-22
		(In MUs)						(In %)			
1	Domestic including BPL	342.00	348.60	350.85	381.07	393.03	399.12	3.14	4.39	2.34	1.55
2	Commercial	82.58	84.88	82.56	96.17	100.15	109.94	5.89	10.02	6.92	9.78
3	Industrial	61.29	64.29	51.80	43.91	45.35	45.29	-5.87	-4.38	1.56	-0.13
4	Public Lighting	14.60	15.80	11.58	0.91	0.94	1.05	-40.89	-55.02	7.62	12.13
5	Public Water Works	9.24	10.56	9.50	0.40	0.41	0.04	-66.41	-83.92	-68.58	-90.37
6	Irrigation & Agriculture	0.02	0.02	0.02	0.02	0.02	0.00	-100.00	-100.00	0.00	-100.00
7	Bulk Supply	100.10	102.20	88.83	98.71	101.69	104.12	0.79	5.44	2.71	2.39
8	Total	609.83	626.35	595.14	621.19	641.59	659.57				

Considering the data submitted in the petition, the category-wise sales projected by the DPN and Commissions approvals are discussed below.

Domestic

The DPN has projected energy sales to domestic category at 424.56 MUs for the FY 2023-24, while the actual sales during FY 2021-22 is 399.12 MUs. The trend of the actual consumption in the category for the FY 2016-17 to FY 2021-22 is shown in the chart below:



The five year growth rate is 3.14%, three year growth rate is 4.39%, two year growth rate is 2.34% and YoY growth rate is 1.55%.

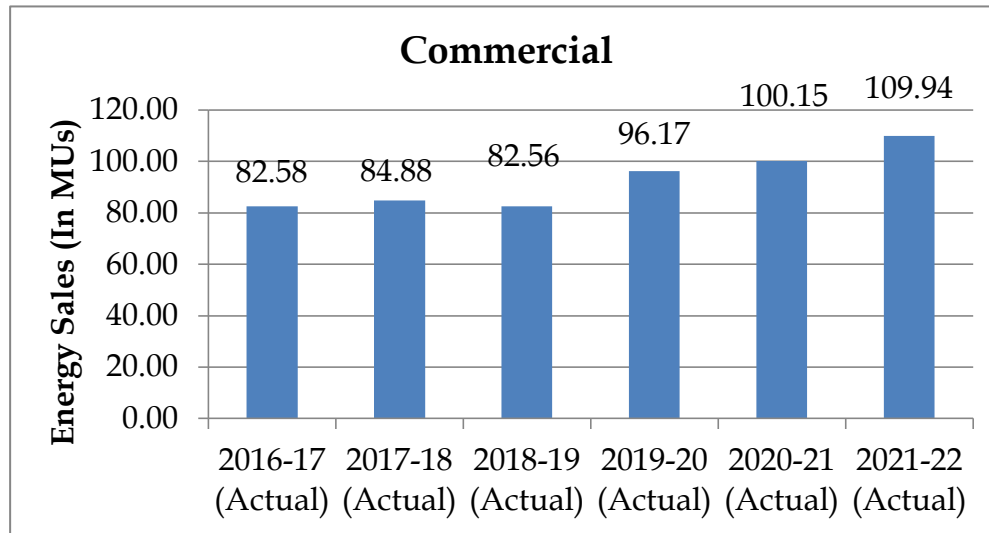
The Commission has analysed actual growth rate of energy sales and five year growth rate of 3.14% is considered reasonable. Projection of sales during the FY 2023-24 with five year growth rate works out to 424.56 MUs.

Accordingly, the Commission approves the sales at 424.56 MUs for the FY 2023-24 for Domestic including BPL category.

Commercial

The DPN has projected energy sales for this category at 123.27 MUs for the FY 2023-24, while the actual sales during FY 2021-22 is 109.94 MUs. The trend of the actual

consumption in the category for the FY 2016-17 to FY 2021-22 is shown in the chart below:



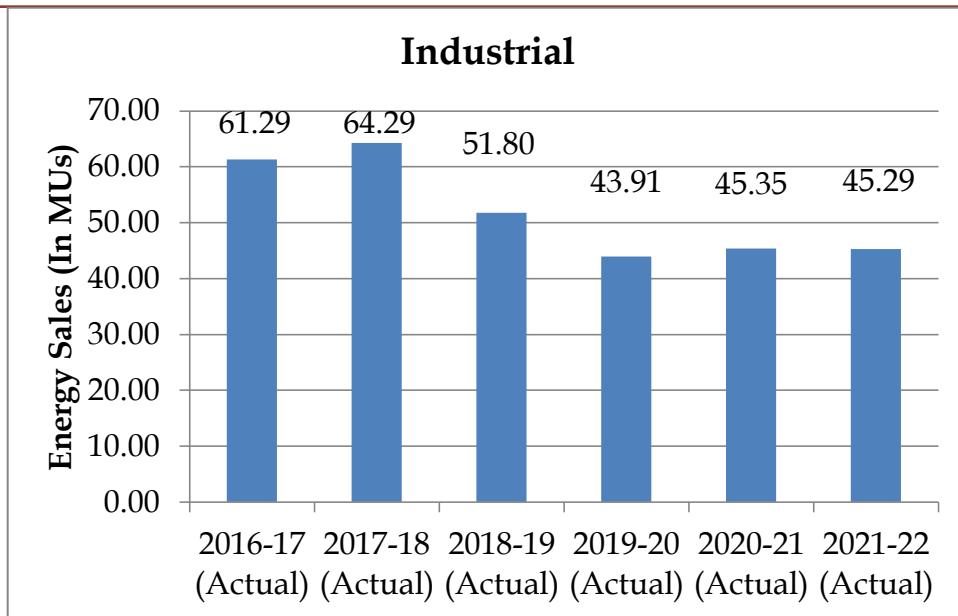
The five year growth rate is 5.89%, three year growth rate is 10.02%, two year growth rate is 6.92% and YoY growth rate is 9.78%.

The Commission analysed actual growth rate of commercial category and considered 5 year growth rate as reasonable. Projection of sales during the FY 2023-24 with 5 year growth rate works out to 123.27 MUs.

Accordingly, the Commission approves the sales at 123.27 MUs for the FY 2023-24 for Commercial category.

Industrial

The DPN has projected energy sales for this category at 46.71 MUs for the FY 2023-24, while the actual sales during FY 2021-22 is 45.29 MUs. The trend of the actual consumption in the category for the FY 2016-17 to FY 2021-22 is shown in the chart below:



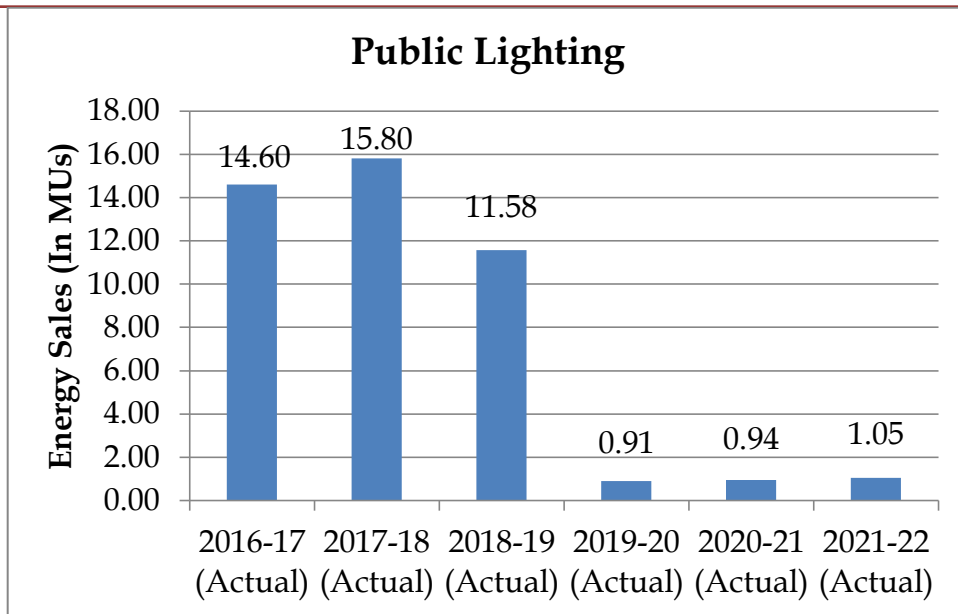
The five year growth rate is -5.87%, three year growth rate is -4.38%, two year growth rate is 1.56% and YoY growth rate is -0.13%.

The Commission analysed actual growth rate of Industrial category and considered two year growth rate of 1.56% as reasonable. Projection of sales during the FY 2023-24 with two year growth rate works out to 46.71 MUs.

Accordingly, the Commission approves the sales at 46.71 MUs for the FY 2023-24 for Industrial category.

Public Lighting

The DPN has projected energy sales for this category at 1.22 MUs for the FY 2023-24, while the actual sales during FY 2021-22 is 1.05 MUs. The trend of the actual consumption in the category for the FY 2016-17 to FY 2021-22 is shown in the chart below:



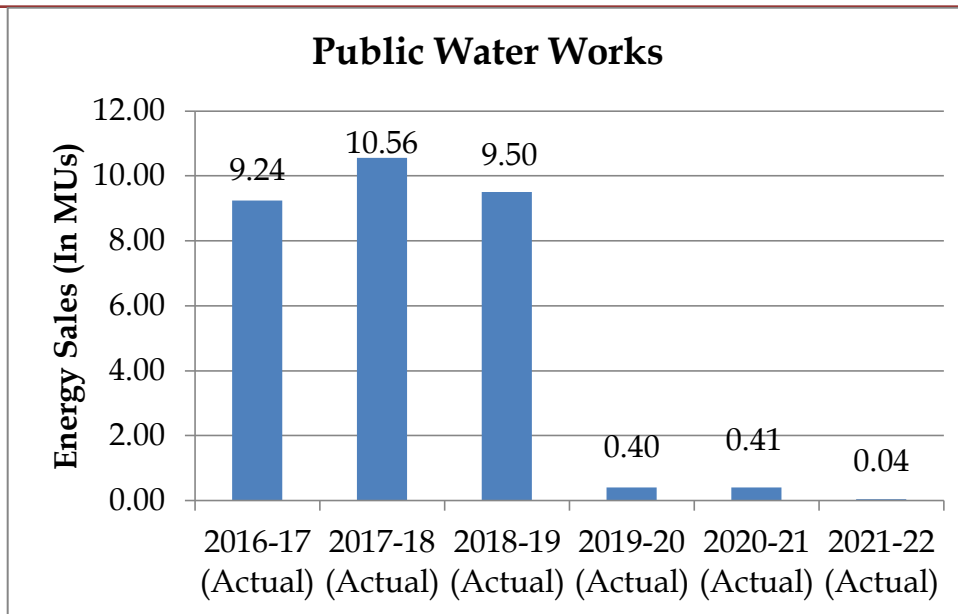
The five year growth rate is -40.89%, three year growth rate is -55.02%, two year growth rate is 7.62% and YoY growth rate is 12.13 %.

The Commission analysed actual growth rate of Public Lighting category and considered two year growth rate of 7.62% as reasonable. Projection of sales during the FY 2023-24 with two year growth rate works out to 1.22 MUs.

Accordingly, the Commission approves the sales at 1.22 MUs for the FY 2023-24 for Public Lighting category.

Public Water Works

The DPN has projected energy sales for this category at 0.04 MUs for the FY 2023-24, while the actual sales during FY 2021-22 is 0.04 MUs. The trend of the actual consumption in the category for the FY 2016-17 to FY 2021-22 is shown in the chart below:



The five year growth rate is -66.41%, three year growth rate is -83.92%, two year growth rate is -68.58% and YoY growth rate is -90.37%.

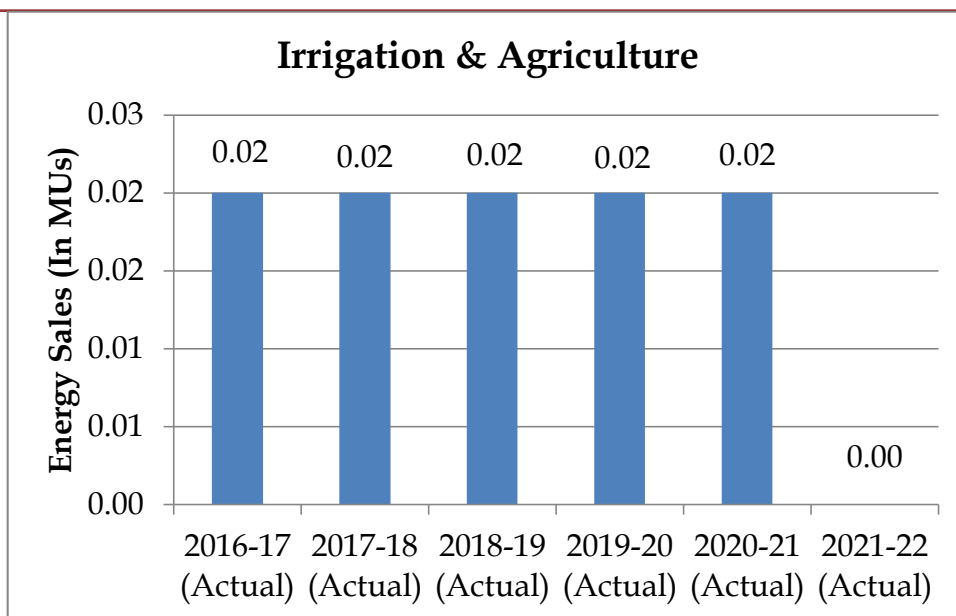
The Commission has analysed the past actual data of energy sales for this category. The growth rate of Public Water Works category is not showing any specific growth trend.

Therefore, the Commission approves the energy sales at 0.04 MUs as same as projected by DPN for the FY 2023-24.

Accordingly, the Commission approves the sales at 0.04 MUs for the FY 2023-24 for Public Water Works category. However, the DPN may approach the Commission with the actual data in True-up Petition in the respective year.

Irrigation and Agriculture

The DPN has projected energy sales for this category at 0.02 MUs for the FY 2023-24, while the actual sales during FY 2021-22 is 0.00 (Nil) MUs. The trend of the actual consumption in the category for the FY 2016-17 to FY 2021-22 is shown in the chart below:

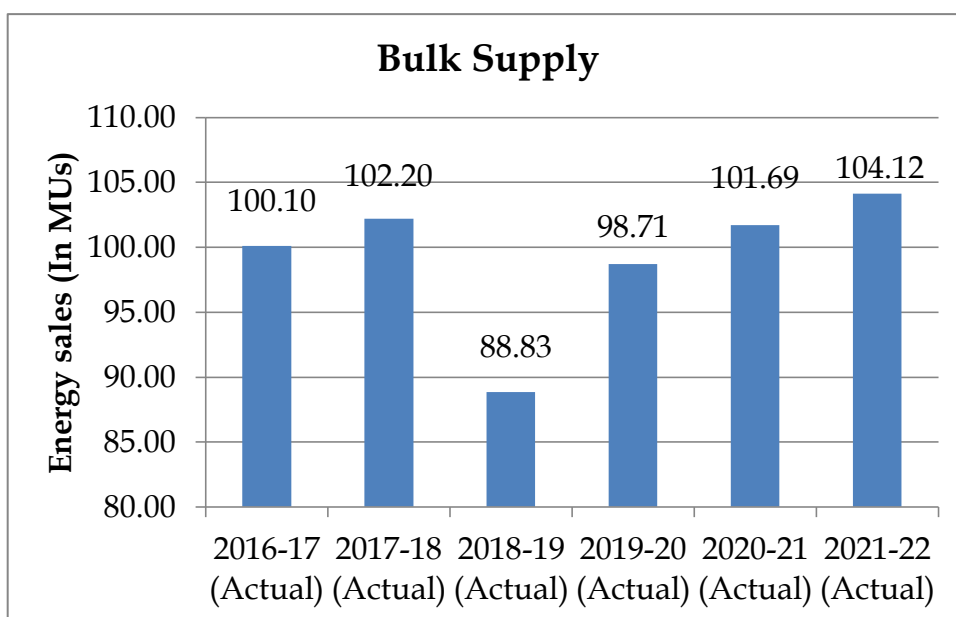


On the basis of the above data, the Commission has considered 0.02 MUs for the FY 2023-24 as proposed by the DPN.

Accordingly, the Commission approves the sales at 0.02 MUs for the FY 2023-24 for Irrigation and Agriculture category.

Bulk Supply

The DPN has projected energy sales for this category at 109.83 MUs for the FY 2023-24, while the actual sales during FY 2021-22 is 104.12 MUs. The trend of the actual consumption in the category for the FY 2016-17 to FY 2021-22 is shown in the chart below:



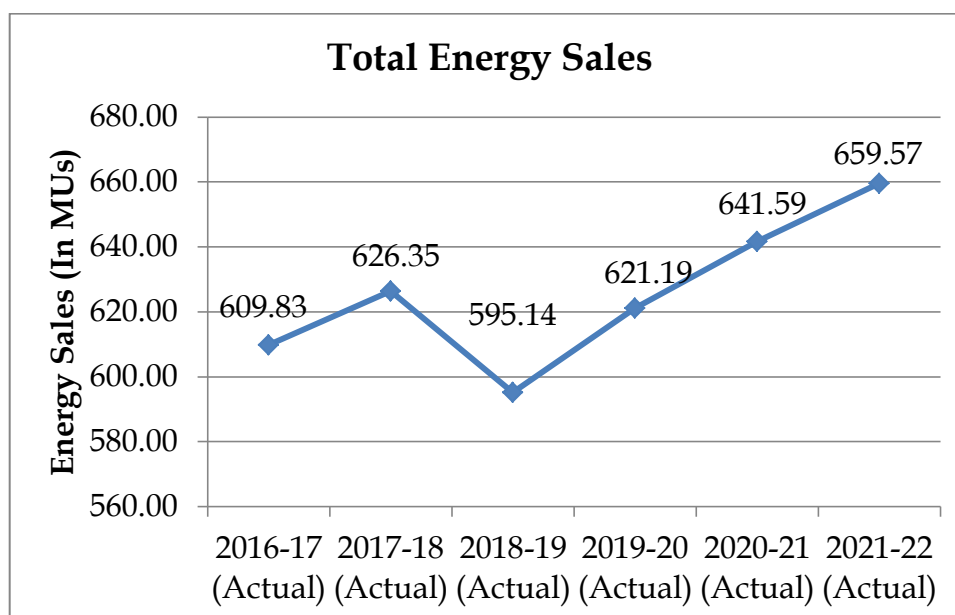
The five year growth rate is 0.79%, three year growth rate is 5.44%, two year growth rate is 2.71% and YoY growth rate is 2.39%.

The Commission analysed actual growth rate of Bulk Supply category and considered three year growth rate of 5.44% as reasonable. Projection of sales during the FY 2023-24 with three year growth rate works out to 115.75 MUs.

Accordingly, the Commission approves the sales at 115.75 MUs for the FY 2023-24 for Bulk Supply category.

Total sales

The trend of the total actual consumption within the state of Nagaland for the FY 2016-17 to FY 2021-22 is shown in the chart below:



7.5 Category-Wise Energy Sales

As discussed in para 7.4 supra category wise energy sales approved by the Commission for the FY 2023-24 are tabulated below:

Table 7.5: Category-wise energy sales approved by the Commission

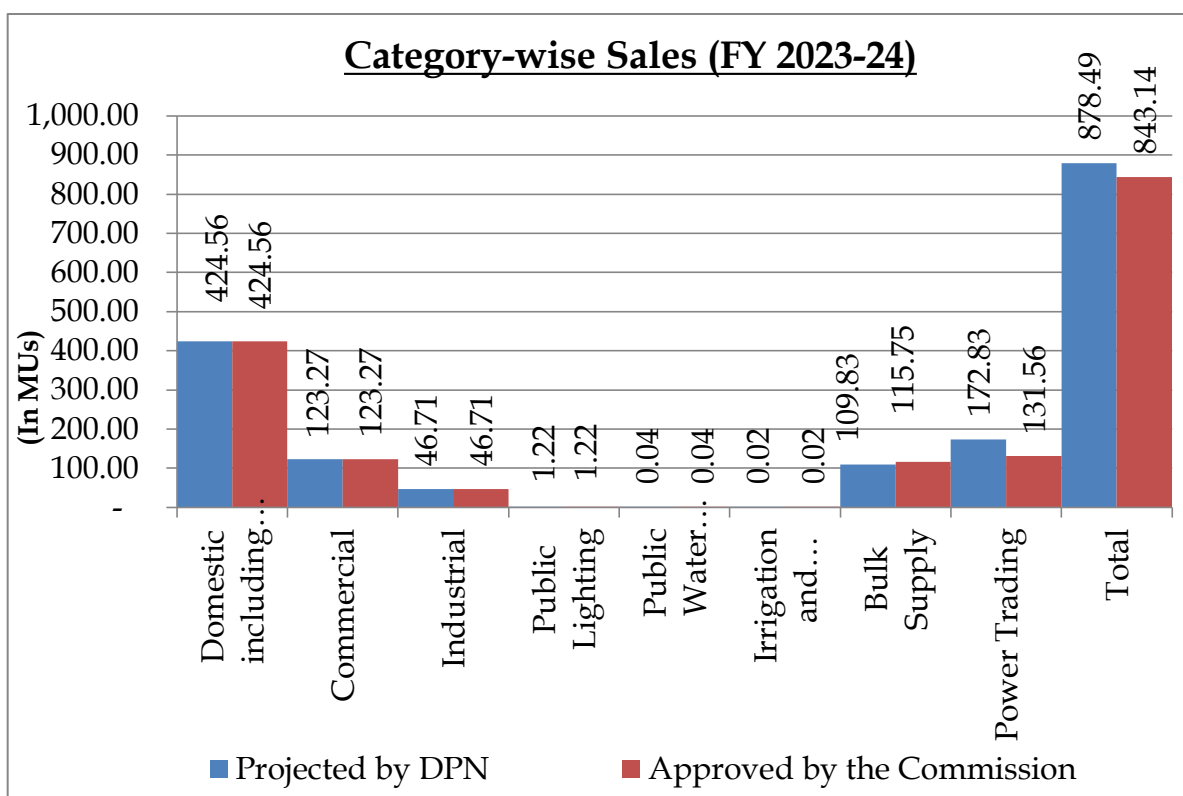
(In MUs)

Sl. No.	Category	Approved in Tariff Order dated 20.03.2020	Projected by DPN	Approved by the Commission
1	Domestic including BPL	456.25	424.56	424.56
2	Commercial	128.63	123.27	123.27
3	Industrial	83.42	46.71	46.71
4	Public Lighting	18.65	1.22	1.22

(In MUs)

Sl. No.	Category	Approved in Tariff Order dated 20.03.2020	Projected by DPN	Approved by the Commission
5	Public Water Works	15.30	0.04	0.04
6	Irrigation & Agriculture	0.02	0.02	0.02
7	Bulk Supply	121.58	109.83	115.75
8	Power Trading	-	172.83	131.56
9	Total	823.86	878.49	843.14

The below chart depicts the category-wise comparison of energy sales projected by DPN and approved by the Commission for the FY 2022-23:

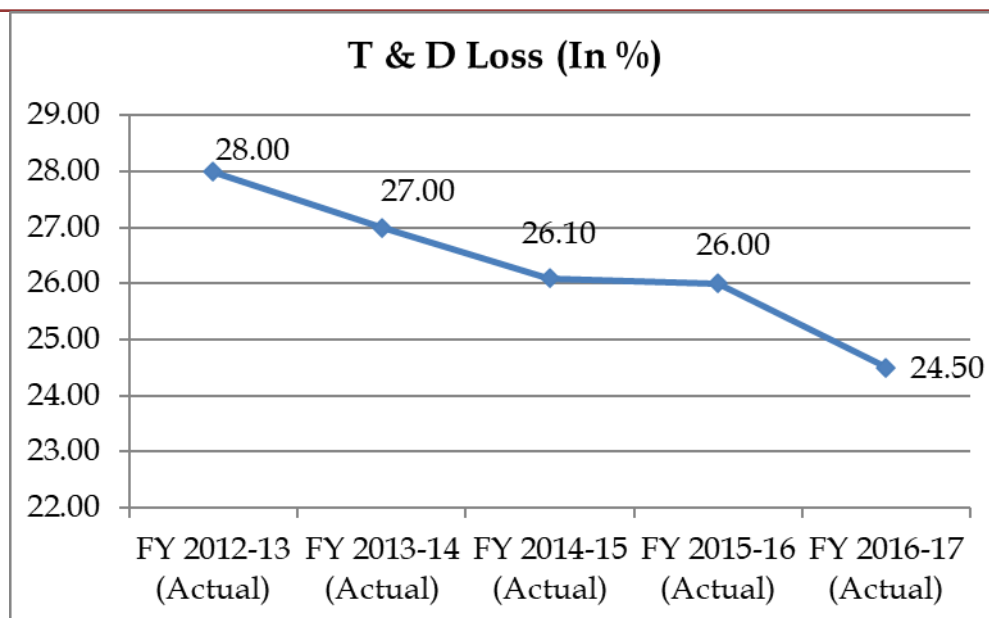


7.6 Transmission and Distribution Losses (T&D Losses)

DPN has projected the Distribution loss at 20.00% & Transmission loss at 3% and Total T&D losses at 23.00% for the FY 2023-24, as approved by the Commission in MYT Order dated 20th March, 2020.

Commission's Analysis:

The chart below depicts the trend of actual T&D Losses for the FY 2012-13 to FY 2016-17.



The DPN did not submitted the actual T&D Losses for the FY 2017-18 to FY 2021-22. Therefore, the commission has not made any prudent view on the DPN's claim.

Further, The DPN has also not complied the Commission's direction to identify the area of losses. Therefore, at this stage the Commission has retained the T &D losses as approved in the MYT Order dated 20.03.2020.

Accordingly, the Commission approves Transmission Losses of 3% and Distribution Losses at 20.00% for the FY 2023-24.

7.7 Energy Requirement

The energy requirement for DPN is estimated based on the retail sales projections grossed up by estimated loss levels. The energy requirement expected for the FY 2023-24 is as given below:

Table 7.6: Energy Requirement Projected by DPN

Particulars	(In MUs)
	2023-24 (Projected)
ENERGY REQUIREMENT	
Energy Sales within State	705.66
Distribution Losses %	20.00
Distribution Losses (MUs)	176.41
Total Energy Requirement	882.07

Commission's Analysis:

The Commission has worked out Energy Requirement based on approved sales within the state and approved distribution losses. The approved energy requirement for the FY 2023-24 is as detailed in table below:

Table 7.7: Energy Requirement approved by the Commission

Sl. No.	Particulars	Unit	FY 2022-23
1	Energy sales approved	MUs	711.58
2	Distribution Losses approved	%	20.00
3	Distribution Losses approved	MUs	177.90
4	Energy Requirement	MUs	889.48

7.8 Energy Availability**7.8.1 Own Generation**

The DPN is having hydro generation installed capacity of 28 MW. The Commission in its Tariff Order dated 20.03.2020 had approved Own Generation for the DPN at 91.00 MUs for the FY 2023-24. Now, the DPN has projected own generation was 108.30 MUs during the FY 2023-24, as detailed in the table below.

Table 7.8: Power Generation approved by Commission

(In MUs)

Sl. No.	Particulars	Approved in Tariff Order dated 20.03.2020	Projected by DPN	Approved by the Commission
1	Own Power Generation	91.00	108.30	108.30
2	Net Generation	91.00	108.30	108.30

Accordingly, the Commission approves own generation (Net) at 108.30 MUs for the FY 2023-24 from its own generating stations as projected by DPN.

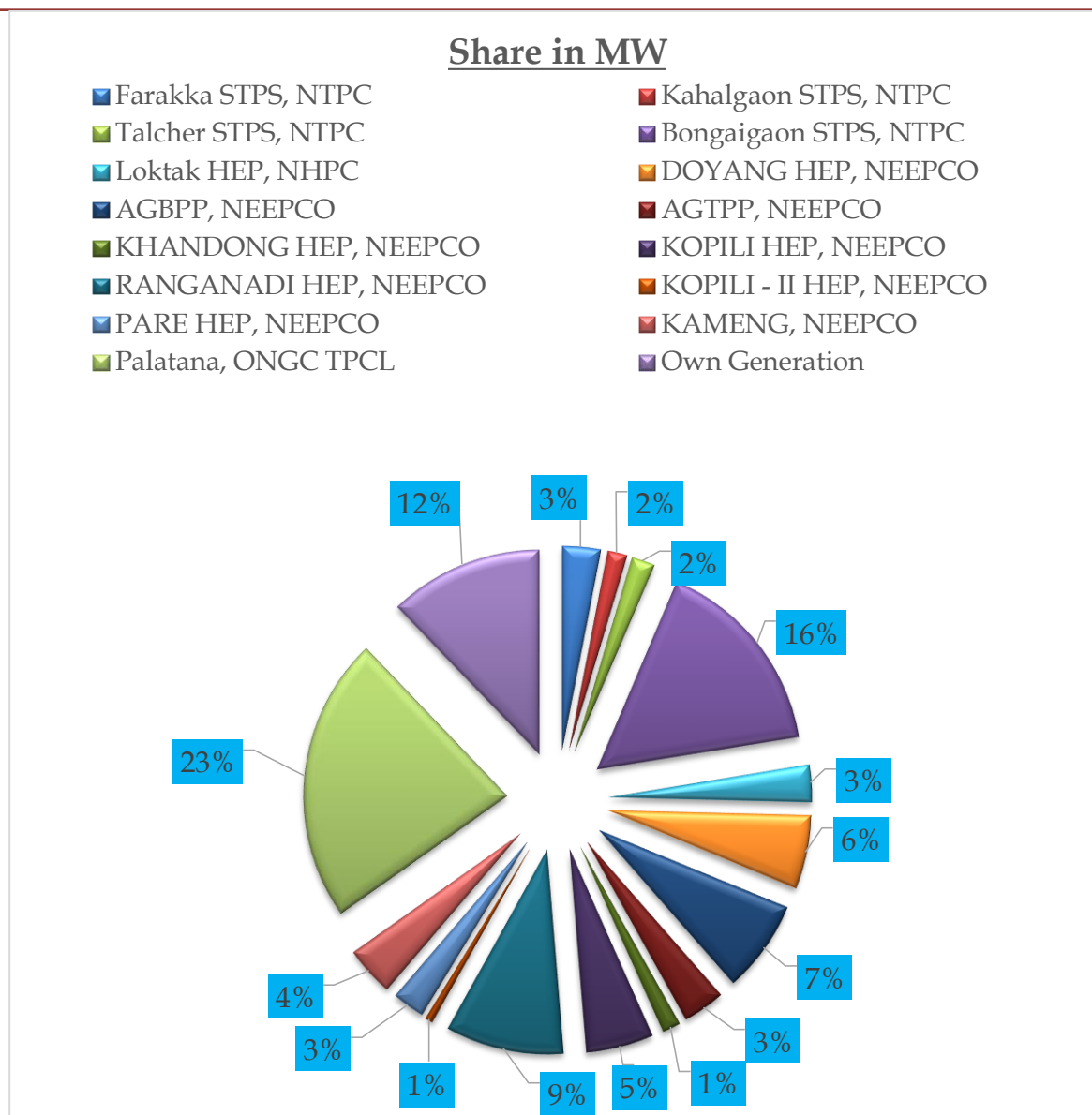
7.8.2 Power Purchase

DPN has allocation of power from various central generating stations in north eastern region of NTPC, NEEPCO, NHPC & OTPC, eastern region of NTPC and from Own generating stations as given below:

Table 7.9: Power Allocation from Central Sector and Other Generating Stations

Sl. No.	Source	Plant Capacity (MW)	Share in %	Share in MW
A	Central Generating Stations			
I	NTPC			
1	Farakka STPS	1600	0.43	6.88
2	Kahalgaon STPS	840	0.42	3.57
3	Talcher STPS	1000	0.42	4.25
4	Bongaigaon TPS	750	4.92	36.93
	NTPC-Total	4190		51.62
II	NHPC			
1	Loktak HEP	105	6.44	6.76
	NHPC-Total	105		6.76
III	NEEPCO			
1	Doyang HEP (Incl. Free)	75	17.81	13.35
2	AGBPP	291	5.81	16.89
3	AGTPP	135	5.74	7.74
4	Khandong HEP	50	6.65	3.33
5	Kopili HEP	200	6.15	12.29
6	Ranganadi HEP	405	5.34	21.61
7	Kopili - II HEP	25	5.74	1.43
8	PARE HEP	110	5.40	5.94
9	KAMENG HEP	600	1.50	9.00
	NEEPCO-Total	1891		91.59
IV	OTPC			
1	Palatana	726	7.16	52.00
	OTPC-Total	726		52.00
B	Own Generation	28	100.00	28.00
VI	Total	6940		229.97

The chart below depicts the projected volume of allocation of power & % of total power procured by DPN from various sources:



7.8.3 Assumption of Power Purchase Projection

The merit order dispatch principles are to be adopted when determining the power purchases from various generating stations. However, in a power deficit scenario, these principles do not play a significant role as the utilities will try and purchase all the power that is available at its disposal. Accordingly, DPN has considered purchase of the entire power available from all the possible sources during the period to meet the demand to the extent possible.

7.8.4 Energy Drawls from CGS and Other Sources

The DPN projected energy drawl of about 1,001.17 MUs in the FY 2023-24, as detailed in table below:

Table 7.10: Summary of Power Purchase projected by DPN

(In MUs)

Sl. No.	Source	Approved in Tariff Order dated 20.03.2020	Projected
A	Central Generating Stations		
I	NTPC		
1	FSTPS	40.79	45.54
2	KHTPS	23.52	21.65
3	TSTPS	29.19	26.96
4	BGTPP	69.64	210.34
	NTPC-Total	163.14	304.49
II	NHPC		
1	LOKTAK HEP	55.04	35.19
	NHPC-Total	55.04	35.19
III	NEEPCO		
1	DOYANG HEP	15.48	10.62
2	AGBPP	79.62	86.81
3	AGTPP	34.22	44.60
4	KHANDONG HEP	16.75	-
5	KOPI LI HEP	63.34	-
6	RANGANADI HEP	73.94	60.96
7	KOPI LI - II HEP	6.31	-
8	PARE HEP	41.63	26.38
9	KAMENG HEP	-	43.98
	NEEPCO - Total	331.29	273.35
IV	OTPC		
1	Palatana	131.09	339.87
	OTPC-Total	131.09	339.87
V	Other Stations/IPPs		
1	GEPL	-	-
2	PTC	-	-
	Others-Total	-	-
B	UI/ DEVIATION	279.90	33.64
C	Free Power	31.19	15.17
	Grand Total	991.65	1,001.71

Commission's Analysis:

The DPN had projected the power purchase including free energy at 15.17 MUs. Now, the approved power quantity for the FY 2023-24 is provided in the table below.

Table 7.11: Power Purchase approved by the Commission

(In MUs)

Sl. No.	Source	FY 2023-24
	Central Sector	
1	FSTPP, NTPC	45.54
2	KHSTPP, NTPC	21.65
3	TSTPP, NTPC	26.96
4	BGTPP, NTPC	210.34
5	LOKTAK HEP, NHPC	35.19
6	DOYANG HEP, NEEPCO	10.62
7	AGBPP, NEEPCO	86.81
8	AGTPP, NEEPCO	44.60
9	KHANDONG HEP, NEEPCO	0.00
10	KOPI LI HEP, NEEPCO	0.00
11	RANGANADI HEP, NEEPCO	60.96
12	KOPI LI - II HEP, NEEPCO	0.00
13	PARE HEP, NEEPCO	26.38
14	KAMENG HEP, NEEPCO	43.98
15	PALATANA, ONGCTPC	339.87
	OTHER	
16	GEPL	0.00
17	PTC	0.00
18	UI / DEVIATION	0.00
19	FREE POWER	15.17
20	Banking (Net)	0.00
21	TOTAL	968.07

The Commission now approves power purchase of 968.07 MUs for the FY 2023-24 including 15.17 MUs free power.

7.9 Energy Balance

The DPN has procured power from Eastern Region (ER) and North Eastern Region (NER). The power purchase from ER will be influenced by both ER and NER transmission losses while power purchased from NER will be influenced by only NER transmission losses. Since, intra-state transmission losses have not been segregated by DPN. So, the intra state transmission losses is considered at 3% for the FY 2023-24.

Considering the above factors, the energy balance projected by the DPN & approved by the Commission are shown as detailed in Table below:

Table 7.12: Energy Balance approved by the Commission

(In MUs)

Sl. No.	Particulars	Approved in Tariff Order dated 20.03.2020	Projected by DPN	Approved by the Commission
A	Energy Requirement			
1	Energy Sales	823.86	705.66	711.58
2	Distribution loss %	20.00	20.00	20.00
3	Distribution loss	205.96	176.41	177.90
4	Energy Requirement	1,029.82	882.07	889.48
B	Energy Availability			
5	Own generation	91.00	108.30	108.30
6	Power from ER	93.50	94.15	94.15
7	ER Total losses %	2.26%	2.26%	2.26%
8	Regional Losses	2.11	2.13	2.13
9	Net Energy from ER (6-8)	91.39	92.02	92.02
10	Power from NER	618.25	873.91	873.92
11	Total power purchase (9+10)	709.63	965.94	965.94
12	NER Tr Loss %	2.66%	2.66%	2.66%
13	NER Tr Loss	18.88	25.69	25.69
14	Net power available (11-13)	690.76	940.24	940.25
15	UI/ Deviation	279.90	-	-
16	Outside State Sale	-	172.83	131.56
17	Banking (Net)	-	33.64	-
18	Total power available at state periphery (5+14+15-16+17)	1,061.66	909.34	916.99
19	Intra state Tr Loss @ 3%	31.85	27.28	27.51
20	Net power available for sale in Distribution (18-19)	1,029.82	882.06	889.48
21	Surplus (20-4)	-	-	-

7.10 Aggregate Revenue Requirement

The components for calculation of revenue requirement (Total expenses) for the FY 2022-23 are as follows:

- Cost of Power Purchase
- Cost of Generation
- Cost of Fuel
- Operation and Maintenance Expenses
- Transmission charges
- SLDC Fees & Charges

- Intra-state Transmission Charges
- Interest & Finance Charges
- Depreciation
- Interest on working capital
- Return on Equity
- Prior Period Expenses
- Provision for bad debts

7.11 Projected expenses by DPN and decisions of the Commission

The Projected expenses by DPN under each head with analysis and decisions of the Commission are discussed below.

7.12 Cost of Generation

DPN has submitted that it is an integrated utility whereby, function wise cost details w.r.t. all the parameters of ARR are not readily available. The consolidated ARR of DPN is inclusive of the ARR of the Generation function. DPN has also submitted the O&M expenses incurred towards Likimro HEP, the cost furnished by DPN for the FY 2023-24 is provided in Table below.

Table 7.13: Cost of Generation projected by DPN

(Rs. in Crs)

Particulars	Approved in Tariff Order dated 20.03.2020	Projected	Approved by the Commission
Cost of Generation	20.40	20.06	20.06

Commission's Analysis:

The Generation system is being operated & maintained by DPN, cost towards generation has not been separately calculated in the petition. The cost of generation furnished by DPN is only the O&M charges paid for Likimro HEP. Other components of ARR has not been furnished. Further, function wise segregated accounts have also not been furnished. Therefore, cost of generation has not been approved separately. The same shall be approved separately after DPN segregates the accounts on the basis of function viz. Distribution, Transmission & Generation.

In the view of the above the Commission approves Cost of Generation at Rs.20.06 Crs for the FY 2023-24 as projected by DPN.

7.13 Power Purchase Cost

Petitioner's Submission:

DPN has projected power purchase cost at Rs. 404.61 Crs for the FY 2023-24.

The assumptions for power purchase costs are as detailed below:

Power Purchase cost is a function of the energy requirement and price of available power from the different sources for meeting the energy requirement. The energy requirement of DPN for the FY 2023-24 is proposed to be met from own generation & power purchase from available sources. The DPN had projected of Rs. 404.61 Crs Further, the Commission directs DPN to project the revised Cost as per the actual data/documents available in the time of Review & True-up.

Station-wise power purchase cost projected & approved in the MYT Order dated 20.03.2020 for the FY 2023-24 are furnished in table below.

Table 7.14: Power Purchase Cost projected by DPN

(Rs. in Crs)			
Sl. No.	Source	Approved in Tariff Order dated 20.03.2020	Projected
1	NTPC		
	FSTPP	21.17	161.99
	KHSTPP	11.04	
	TSTPP	9.79	
	BGTPP	73.22	
2	NHPC		
	LOKTAK HEP	21.32	11.70
3	NEEPCO		
	DOYANG HEP	9.75	129.24
	AGBPP	45.68	
	AGTPP	23.21	
	KHANDONG HEP	4.72	
	KOPILI HEP	8.39	
	RANGANADI HEP	29.48	
	KOPILI - II HEP	1.81	
	Pare HEP	24.90	
4	ONGCTPC		
	PALATANA	53.80	101.64
5	Other sources		
	GEPL		0.00
	PTC		
	UI Purchase	82.56	

6	Total Energy Purchase	420.83	404.57
7	Free Power	-	-
8	REC Purchase	8.23	-
9	Other Charges	-	0.04
10	Net Power Purchase Expenses	429.06	404.61

Commission Analysis:

As seen from the above, the DPN has claimed the power purchase cost at Rs. 404.61 Crs for the FY 2023-24. The Commission has considered the actual station-wise average power purchase cost for the month of April, 2022 to December, 2022 escalated by 5% to compute the power purchase cost for the FY 2023-24. Accordingly, the power purchase cost for the FY 2023-24 is worked out, as detailed in table below. Further, requirement towards RPO has also been recalculated as per the NERC RPO Regulations.

The allocation of power from CGSs is provided in table below.

Table 7.15: Allocation of power from CGS

Sl. No.	Source	Capacity (In MWs)	Allocation	
			(In %)	(In MWs)
Central Sector				
1	FSTPP, NTPC	1,600.00	0.43	6.88
2	KHSTPP, NTPC	840.00	0.42	3.57
3	TSTPP, NTPC	1,000.00	0.42	4.25
4	BGTPP, NTPC	750.00	4.92	36.93
5	LOKTAK HEP, NHPC	105.00	6.44	6.76
6	DOYANG HEP, NEEPCO	75.00	17.81	13.35
7	AGBPP, NEEPCO	291.00	5.81	16.89
8	AGTPP, NEEPCO	135.00	5.74	7.74
9	KHANDONG HEP, NEEPCO	50.00	6.65	3.33
10	KOPILI HEP, NEEPCO	200.00	6.15	12.29
11	RANGANADI HEP, NEEPCO	405.00	5.34	21.61
12	KOPILI - II HEP, NEEPCO	25.00	5.74	1.43
13	PARE HEP, NEEPCO	110.00	5.40	5.94
14	KAMENG HEP, NEEPCO	600.00	1.50	9.00
15	PALATANA, ONGCTPC	726.00	7.16	52.00
16	OWN GENERATION	28.00	100.00	28.00
16	TOTAL	6,940.00		229.97

Based on the above the approved power purchase cost is provided below:

Table 7.16: Power Purchase Cost approved by the Commission for FY 2023-24

Sl. No.	Source	Energy Received (MUs)	Unit Cost (Rs./ Kwh)	Total Cost (Rs. in Crs)
1	NTPC			
	FSTPP	45.54	6.58	29.98
	KHSTPP	21.65	5.73	12.41
	TSTPP	26.96	3.49	9.40
	BGTPP	210.34	6.97	146.65
2	NHPC			
	LOKTAK HEP	35.19	3.80	13.38
3	NEEPCO			
	DOYANG HEP	10.62	7.23	7.68
	AGBPP	86.81	7.35	63.81
	AGTPP	44.60	6.97	31.10
	KHANDONG HEP	0.00	0.00	0.00
	KOPILI HEP	0.00	0.00	0.00
	RANGANADI HEP	60.96	2.60	15.87
	KOPILI - II HEP	0.00	0.00	0.00
	PARE HEP, NEEPCO	26.38	5.25	13.85
	KAMENG HEP, NEEPCO	43.98	4.20	18.47
4	ONGCTPC			
	PALATANA	339.87	3.43	116.69
5	Other sources			
	GEPL			
	PTC			
	UI/ Deviation	0.00	0.00	0.00
6	Total Energy Purchase	952.90		479.29
7	Free Power	15.17		-
8	REC Purchase			6.12
9	Banking (Net)	-		-
10	Net Power Purchase Expenses	968.07		485.41

The Commission approves the power purchase cost at Rs. 485.41 Crs including REC Purchase cost of Rs. 6.12 Crs for the FY 2023-24.

7.14 Transmission and Other Charges

The Transmission charges payable to CTUIL & PGCIL including SLDC Fees & Charges are estimated based on the quantum of power proposed for wheeling for the FY 2023-24. The same is proposed at Rs. 86.86 Crs

The Transmission & Other Charges furnished by DPN for the FY 2023-24 and approved by the Commission are provided in the Table below.

Table 7.17: Transmission and Other Charges projected by DPN

(Rs. in Crs)

Sl. No.	Source	Approved in Tariff Order dated 20.03.2020	Projected	Approved by the Commission
1	Transmission Charges	49.05	84.54	111.69
2	SLDC Fees and Charges	0.61	2.32	2.55
3	Total	49.66	86.86	114.24

Commission's Analysis:

The intra-state transmission system is being operated & maintained by DPN, transmission charges has not been separately calculated in the petition. Further, function wise segregated accounts have also not been furnished. Therefore, the Commission has considered transmission charges as approved in Review Order for the FY 2022-23 and escalated by 5% to compute Transmission Charges for the FY 2023-24.

Accordingly, the Commission approves Transmission and Other Charges at Rs. 114.24 Crs for the FY 2023-24.

7.15 Operation and Maintenance Expenses

Operation & Maintenance expenses comprise of the following heads of expenditure viz.

- Employee Expenses
- Administration & General Expenses
- Repair & Maintenance Expenses

DPN has submitted that it is now gearing up for meeting the operational requirement of servicing for existing and additional new consumers in line with the Standards of Performance which the licensees have to adhere to. Hence, there would be an increase in O&M expenditure to support full-fledged distribution business operations.

The operation & maintenance expenses have been arrived in accordance with the Regulation 89.6 of The NERC (Multi Year Tariff) Regulations, 2016. Details of Employee Expenses, Administration & General Expenses and Repair & Maintenance Expenses are discussed in the subsequent paras.

7.15.1 Employee Cost

The expense head of employee cost consists of salary and allowance, bonus, Leave Travel Concession (LTC) & Honorarium etc. The DPN has projected the employee cost in accordance with the Regulation 89.6 of The NERC (Multi Year Tariff) Regulations, 2016 at Rs. 154.38 Crs for the FY 2023-24. The employee expenses as projected by DPN and approved by the Commission are provided in the table below.

Table 7.18: Employee Cost projected by DPN

(Rs. in Crs)

Particulars	Approved in Tariff Order dated 20.03.2020	Projected	Now approved by the Commission
Employee Expenses	150.56	154.38	154.38

Commission's Analysis and Approval:

The Petitioner furnished the employee expenses at Rs. 154.38 Crs for the FY 2023-24. Further, the Commission directs DPN to furnish the details of Employee Cost at the time of Review & True-up.

Now, The Commission provisionally approves Employee Expenses at Rs. 154.38 Crs as projected by DPN for the FY 2023-24.

7.15.2 Administrative and General Expenses

A&G expenses comprise of the following broad subheads of expenditure, viz.

- Domestic Travelling Expenses
- Office Expenses
- Legal, Regulatory & Consultancy Fees
- Insurance etc.

The DPN has projected the A&G expenses in accordance with the Regulation 89.6 of The NERC (Multi Year Tariff) Regulations, 2016 at Rs. 3.25 Crs for the FY 2023-24. The A&G expenses as projected by DPN and approved by the Commission are provided in the table below.

Table 7.19: Administrative and General Expenses projected by DPN

(Rs. in Crs)

Particulars	Approved in Tariff Order dated 20.03.2020	Projected	Now approved by the Commission
A & G Expenses	4.33	3.25	3.25

Commission's Analysis:

The Petitioner furnished A&G Expenses at Rs. 3.25 Crs for the FY 2023-24. Further, the Commission directs DPN to furnish the details of A&G Expenses at the time of Review & True-up.

Accordingly, the Commission approves A&G Expenses at Rs. 3.25 Crs for the FY 2023-24 as projected by DPN.

7.15.3 Repair and Maintenance Expenses

DPN has been undertaking various Repair and Maintenance activities as a step towards improvement of systems, reduction in breakdowns, reduction in response time and increasing preventive maintenance.

The DPN has projected the R&M expenses in accordance with the Regulation 89.6 of The NERC (Multi Year Tariff) Regulations, 2016 at Rs. 34.61 Crs for the FY 2023-24. The R&M expenses as projected by DPN and approved by the Commission are provided in the table below.

Table 7.20: Repair and Maintenance Expenses projected by DPN

(Rs. in Crs)

Particulars	Approved in Tariff Order dated 20.03.2020	Projected	Now approved by the Commission
R & M Expenses	39.67	34.61	34.61

Commission's Analysis:

The Petitioner furnished the Repair & Maintenance Expenses at Rs. 34.61 Crs for the FY 2023-24. Further, the Commission directs DPN to furnish the details of R&M Expenses at the time of Review & True-up.

Accordingly, the Commission approves Repair & Maintenance Expenses at Rs. 34.61 Crs as projected by DPN for the FY 2023-24.

7.15.4 Summary of O&M Expenditure approved by the Commission

The summary of O&M Expenditure approved by the Commission in the MYT Order dated 20.03.2020, projected by the DPN and now approved by the Commission for the FY 2023-24 are tabulated below:

Table 7.21: Operation & Maintenance Expenditure approved by Commission

(Rs. in Crs)

Sl. No.	Particulars	Approved in Tariff Order dated 20.03.2020	Projected	Now approved by the Commission
1	Employee Expenses	150.56	154.38	154.38
2	Administrative & General Expenses	4.33	3.25	3.25
3	Repair & Maintenance Expenses	39.67	34.61	34.61
4	Total	194.56	192.24	192.24

7.16 Capital Expenditure & Capitalization

DPN has undertaken significant capital expenditure during the FY 2023-24 and has plans to implement schemes for development of infrastructure during the FY 2023-24. The DPN has stated that the infrastructure is insufficient to cater to the present load and hence to meet the increasing demand, capital expenditure proposed are absolutely necessary.

The objective of incurring the capital expenditure is to continue the up-gradation and strengthening of the distribution network to meet the desirable standards of performance and provide better network reliability and sustainable performance to the consumers of DPN.

The capital expenditure plan envisaged will also assist in reducing system losses. The DPN has projected capital expenditure during the FY 2023-24 of Rs. 100.00 Crs

The Commission directs DPN to project the revised Cost as per the actual data/documents available in the time of Review & True-up. The details of the capital expenditure & capital work in progress for the FY 2023-24 are outlined in the table below:

Table 7.22: Capital Works in Progress

(Rs. in Crs)

Sl. No.	Particulars	FY 2023-24
A	Opening Balance of CWIP	914.02
B	Fresh Investment during the year	100.00
C	Investment capitalised out of opening CWIP	-
D	Investment capitalised out of fresh investment	100.00
E	Total Capitalisation during the year (C+D)	100.00
F	Closing Balance of CWIP (A + B - C - D)	914.02

Commission's Analysis:

As seen from the above table the progress on completion of works is very slow, unless and until the assets are put to use the very purpose of huge capital investment cannot be achieved.

As such the DPN is directed to review the progress and see that the works are completed within the targeted date.

With this observation the capitalization of Rs. 100.00 Crs during the FY 2023-24 is approved.

7.17 Gross Fixed Assets (GFA) and Depreciation

DPN has projected the Gross Fixed Asset in accordance with the Regulation 23 of The NERC (Multi Year Tariff) Regulations, 2016.

DPN had not submitted the updated Fixed Asset Register. The DPN has submitted that the assets of the utility have been segregated on the basis of their functions i.e, Generation, Transmission & Distribution. The assets and corresponding depreciation as projected by DPN is detailed in table below:

Table 7.23: Depreciation projected by DPN

(Rs. in Crs)		
Sl. No.	Particulars	FY 2023-24 (Projected)
A	Opening GFA	1,805.46
B	Additions during the year	100.00
C	Closing GFA	1,905.46
D	Total Depreciation	77.09

Commissions Analysis:

The DPN had not submitted the updated Fixed Asset Register. The DPN has projected depreciation for the FY 2023-24 at Rs. 77.09 Crs

In the view of the above, the Commission deems it fit to disallow the Depreciation claimed by the DPN for the FY 2023-24. Further, the Commission directs DPN to furnish the audited Fixed Asset Register as on 31.03.2023 along with next filing of petition.

7.18 Interest and Finance Charges

Regulation 27 of The NERC (Multi Year Tariff) Regulations, 2016 provides the methodology for calculation of the Interest & Finance Charges. It provides that 30% of the capital employed shall be considered as equity and balance 70% is to be considered as loan. Repayment of the normative loan during the FY 2023-24 has been considered equivalent to the depreciation in line with the MYT Regulations.

The DPN has been submitted that the entire capital employed has been funded through infusion of funds by Government of Nagaland through budgetary support without any

external borrowings on part of the DPN. Therefore, the DPN has not considered interest on loan for the FY 2023-24.

The detailed are furnished by DPN is provided in the table below.

Table 7.24: Interest on Loan furnished by DPN

				(Rs. in Cr)
Sl. No.	Particulars	Approved in Tariff Order dated 20.03.2020	Projected	Now approved by the Commission
1	Opening Normative Loan	-	-	-
2	Add: Normative Loan during the year			
3	Less: Normative repayment			
4	Closing Normative Loan			
5	Average Normative Loan			
6	Rate of Interest			
7	Interest on Loan			

Commission's Analysis:

The DPN has stated that the entire capital employed has been funded through infusion of funds by Government of Nagaland through budgetary support without any external borrowings. As such, the Commission has not considered interest on loan for the FY 2023-24.

7.19 Interest on Working Capital

The Commission vide Tariff Order dated 20.03.2020 has approved Interest on Working Capital of Rs. 12.55 Crs for the FY 2023-24.

The DPN has been submitted that the entire operating expenses of the Department is provided by the Government of Nagaland without any external borrowings toward working capital. Hence, the DPN does not have any working capital loan. Therefore, the DPN has not claimed interest on Working Capital for the FY 2023-24.

The Interest on working capital projected by the DPN and approved in the MYT Order dated 20.03.2020 are provided in table below:

Table 7.25: Interest on Working Capital projected by DPN

				(Rs. in Crs)
Sl. No.	Particulars	Approved in Tariff Order dated 20.03.2020	Projected	Now approved by the Commission
A	Interest on Working Capital	12.55	-	-

Commission's Analysis:

As per the Regulations, for the purpose of computation of normative working capital and Interest on working capital, the components of working capital are as follows:

- a) Operation and maintenance expenses for one month; plus
- b) Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus
- c) Receivables equivalent to one (1) month of the expected revenue from sale of electricity at the prevailing tariffs; minus
- d) Amount held as security deposits under clause (a) and clause (b) of sub-section (1) of Section 47 of the Act from consumers except the security deposits held in the form of Bank Guarantees;

Interest is required to be calculated at a rate equal to the State Bank Advance Rate (SBAR) as on 1st April of the financial year in which the Petition is filed.

Interest on working capital has been calculated accordingly as detailed in the table below:

The DPN has been submitted that the entire operating expenses of the Department is provided by the Government of Nagaland without any external borrowings toward working capital. Hence, The DPN does not have any working capital loan.

Therefore, the Commission has not considered any Interest on Working Capital for the FY 2023-24.

7.20 Bad Debts

Regulation 89.8 of The NERC (Multi Year Tariff) Regulations, 2016 provides that bad debts written off may be allowed as a pass through in the ARR.

The DPN submitted in their Tariff Petition for the FY 2023-24 as follows:

"DPN proposes to claim the Bad debt after the Annual Accounts for the year are finalised and audited. Hence, the same shall be claimed at the time of True-up for the FY 2023-24. Hon'ble Commission may allow the same."

In view of the above the Commission has not allowed Bad Debts for the FY 2023-24.

7.21 Return on Equity

Regulation 26 of The NERC (Multi Year Tariff) Regulations, 2016 read with Regulation 22 provides the methodology for calculation of the Return on Equity. It provides that 30% of the capital employed shall be considered as equity and balance 70% is to be considered as loan.

The DPN has submitted that being a Government Department, the entire capital employed till date has been funded through fund infusion by the Government in form of budgetary support which are generally in the nature of grants and aids through financial institutions under various schemes like APDRP, RGGVY etc.

Therefore, the Commission has not considered any return on equity for the FY 2023-24.

7.22 Non-Tariff Income

Regulation 90 of The NERC (Multi Year Tariff) Regulations, 2016 provides that the Non-Tariff Income shall be deducted from the ARR in calculating the Tariff. The Non-Tariff income includes revenue from Meter Rent, Meter Testing Charge, Disconnection/Reconnection Charge and Other Departmental Charges.

The Non-Tariff income for the FY 2023-24 has been projected at Rs. 15.33 Crs as approved by the Commission in the MYT Order dated 20th March, 2020. The Non-Tariff Income projected by the department and approved by the Commission for the FY 2023-24 are provided in table below:

Table 7.27: Non-Tariff Income projected by DPN

(Rs. in Crs)				
Sl. No.	Particulars	Approved in Tariff Order dated 20.03.2020	Projected	Now approved by the Commission
A	Non-Tariff Income	15.33	15.33	15.33

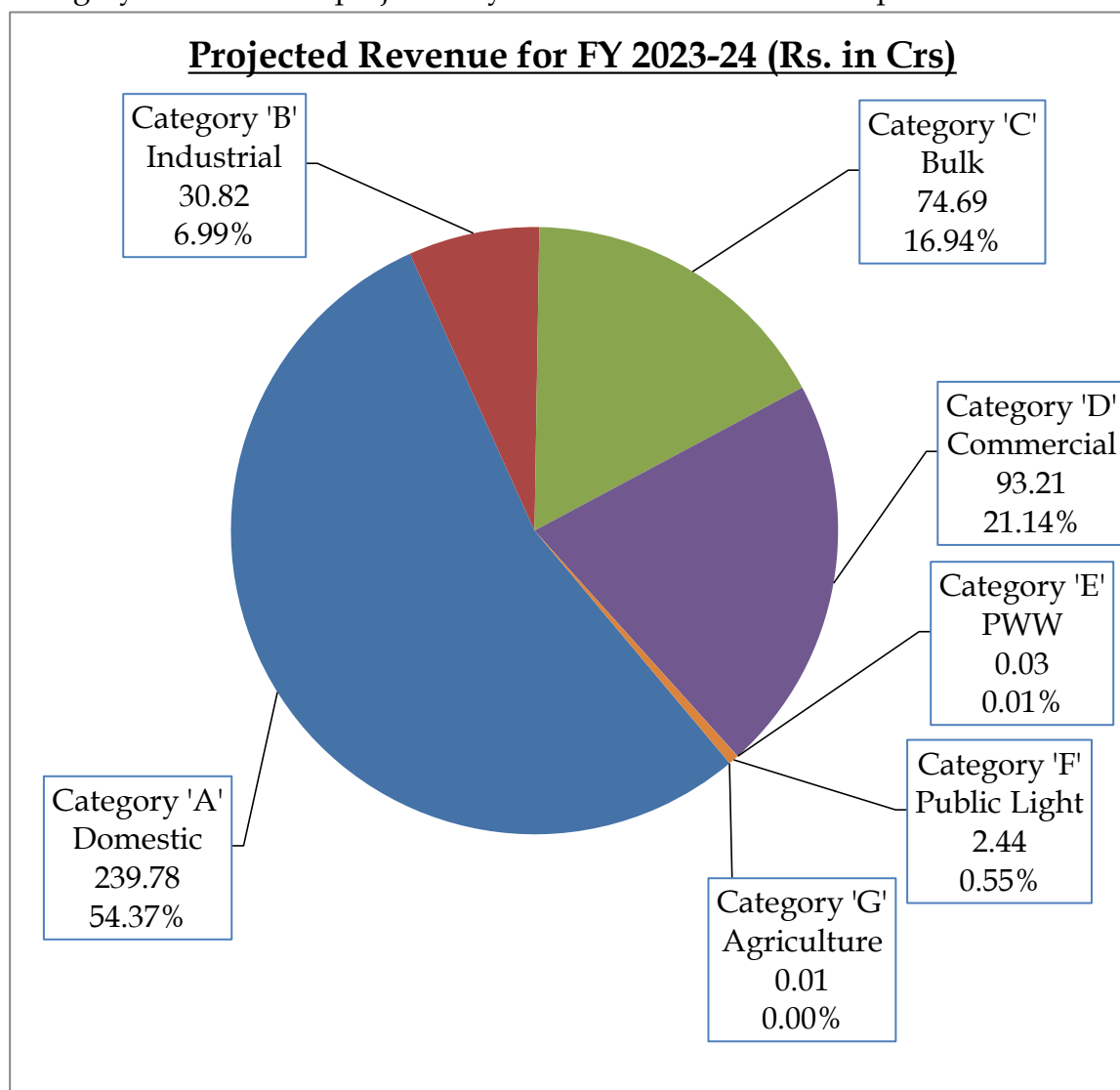
Accordingly, the Commission approves the Non-Tariff Income at Rs. 15.33 Crs for the FY 2023-24 as projected by DPN.

7.23 Revenue from Existing Tariff

The DPN has projected revenue from sale of energy with existing tariff at Rs. 533.88 Crs Including outside state sale of Rs. 92.91 Crs for the FY 2023-24.

Commissions Analysis:

Category wise revenue projected by DPN for the FY 2023-24 is provided in the chart below:



It is observed that the revenue from domestic category contributes about 54.37%, Hence, impact of change in tariff on the revenue is mostly dependent on these categories. However, Commercial, Industrial & Bulk category also has significant consumption. With the approved sales of 711.58 MUs within the state for the FY 2023-24, the revenue approved at the existing Tariff is detailed in table below:

Table 7.28: Revenue from Existing Tariff approved by the Commission for FY 2023-24

Sl. No.	Particulars	Energy Sales (In MUs)	Average Rate (Rs./kWh)	Amount (Rs. in Crs)
1	Category 'A' Domestic	286.04	5.86	167.61
2	Category 'B' Industrial	46.71	6.60	30.82
3	Category 'C' Bulk	115.75	6.80	78.71
4	Category 'D' Commercial	123.27	7.56	93.21

Sl. No.	Particulars	Energy Sales (In MUs)	Average Rate (Rs./kWh)	Amount (Rs. in Crs)
5	Category 'E' PWW	0.04	7.25	0.03
6	Category 'F' Public Light	1.22	0.00	2.44
7	Category 'G' Agriculture	0.02	3.20	0.01
8	Category 'H' Temporary Connection	0.00	0.00	0.00
9	Category 'I' Inter-state	0.00	0.00	0.00
10	Kuti Jyoti (Point)	0.00	0.00	0.00
11	Single Point Metered Rural	105.15	5.15	54.15
12	Single Point Metered Urban	33.37	5.40	18.02
13	Total sales within State	711.58	6.25	445.00
14	Sales Outside State	131.56	4.12	54.16
15	Total Sales (13+14)	843.14	5.92	499.16

Accordingly, the Commission approves the revenue from the existing tariff at Rs. 445.00 Crs from sale of 711.58 MUs within the State at an average rate of Rs. 6.25/kWh.

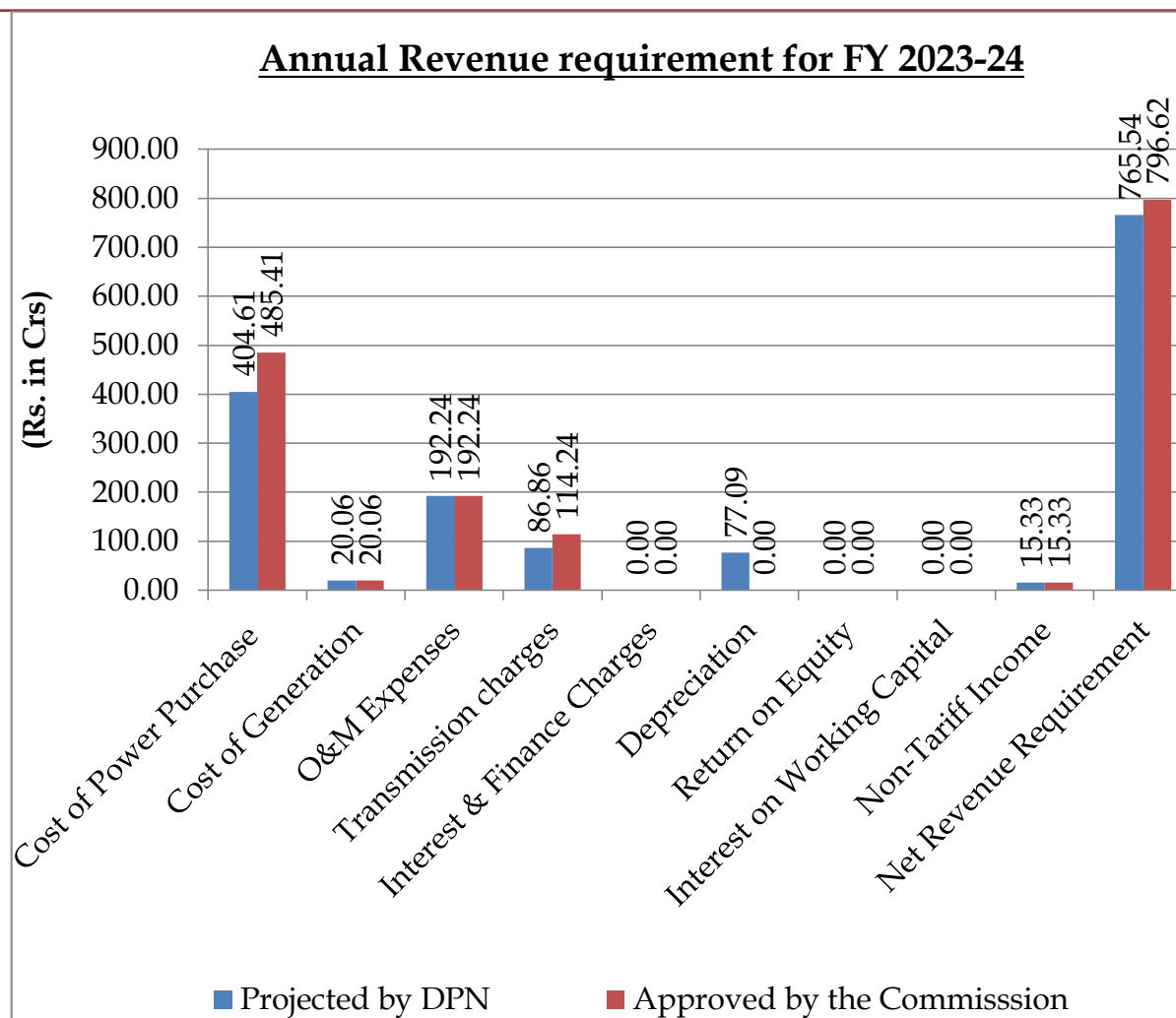
7.24 Aggregate Revenue Requirement (ARR)

Commission has analyzed various items of expenditure as discussed earlier and approves the expenses and net ARR as shown in the table below.

Table 7.29: Aggregate Revenue Requirement approved by the Commission

(Rs. in Crs)

Sl. No.	Particulars	Approved in Tariff Order dated 20.03.2020	Projected	Now approved by the Commission
1	Cost of Power Purchase	429.06	404.61	485.41
2	Cost of Generation	20.40	20.06	20.06
3	Cost of Fuel	-	-	-
4	Operation & Maintenance Expenses	194.56	192.24	192.24
5	Transmission charges	49.66	86.86	114.24
6	SLDC fees and charges	-	-	-
7	Intra- state Transmission Charges	-	-	-
8	Interest & Finance Charges	-	-	-
9	Depreciation	153.36	77.09	-
10	Interest on Working Capital	12.58	-	-
11	Return on Equity	-	-	-
12	Prior period expenses	-	-	-
13	Provision for Bad Debt	-	-	-
14	Total Revenue Requirement	859.62	780.87	811.95
15	Less: Non-Tariff Income	15.33	15.33	15.33
16	Net Revenue Requirement (14-15)	844.29	765.54	796.62



The Commission approves the Net Revenue Requirement of Rs. 796.62 Crs for the FY 2023-24.

7.25 Revenue Gap

DPN submitted that the Government of Nagaland provides revenue grant towards Employee expenses, Repair & Maintenance (R&M) and Administrative & General Expenses (A&G). The above revenue grant may be considered as revenue and include for calculation of Net Gap for the year.

The Commission has analysed the submission of the DPN and is of the view that the National tariff Policy emphasis on reduction of the Cross Subsidy. Further, reduction of Gap between ACS & ARR has also been mandated. The non-consideration of revenue grant as part of revenue shall result in inflated revenue gap. Further, the revenue grant provided by the Government of Nagaland should be passed on to the consumers. Accordingly, the estimated revenue grant of Rs. 192.24 Crs for the FY 2023-24 has been considered as a part of revenue.

Based on the approved Aggregate Revenue Requirement and revenue from existing tariffs at approved sales for the FY 2023-24, the resultant GAP is as shown in the table below.

Table 7.30: Revenue at Existing Tariff and Gap

(Rs. in Crs)

Sl. No.	Particulars	FY 2023-24
1	Net Revenue Requirement	796.62
2	Revenue from Retail Sales at Existing Tariff	445.00
3	Revenue from Sale of Power-Exchange	54.16
4	Revenue Subsidy - Govt. of Nagaland	192.24
5	Net Gap (1-2-3-4)	105.22
6	Energy Sales within the state (In MUs)	711.58
7	Average cost (In Rs./kWh)	10.43
8	Average revenue realisation (In Rs./kWh)	6.25

7.26 Recovery of Revenue Gap for the FY 2023-24

As seen from para 7.25 above there is a revenue gap of Rs. 105.22 Crs which is about 13.21% of net ARR for the FY 2023-24.

In this Petition the DPN has submitted as below:

“There is substantial gap between cost of supply and average revenue. DPN does not propose to recover the entire Gap in cost of supply & average revenue as these may result in huge burden on the consumers. Tariff is a sensitive subject having substantial impact on social, economic and financial well-being of the public at large as well as the viability and growth of power sector. Recovery of entire Gap through tariff increase is not practicable as this would make power unaffordable to the general consumers. DPN being a Government Department funded by budgetary support from State Government, it proposes to absorb the unrecovered gap.

In view of the above, the tariff proposal for FY 2023-24 for individual categories is given below along with the comparison of existing and proposed energy charges. The table below presents the existing and proposed tariff for various categories.”

However, DPN proposed an average increase in tariff by 2.91% to bridge the gap partially.

The Commission considers it appropriate to revise the tariffs at an average of 2.51%, without giving much tariff shock to consumers to bridge the gap partially. Owing to revision of tariffs, the DPN is expected to get additional revenue of Rs. 11.17 Crs as detailed in table below:

Table 7.31: Revenue from revised Tariff for FY 2023-24 approved by the Commission

Sl. No.	Particulars	Energy Sales (In MUs)	Average Rate (Rs./kWh)	Amount (Rs. in Crs)
1	Category 'A' Domestic	286.04	6.06	173.41
2	Category 'B' Industrial	46.71	6.88	32.15
3	Category 'C' Bulk	115.75	6.90	79.87
4	Category 'D' Commercial	123.27	7.64	94.19
5	Category 'E' PWV	0.04	7.45	0.03
6	Category 'F' Public Light	1.22	0.00	2.44
7	Category 'G' Agriculture	0.02	3.35	0.01
8	Category 'H' Temporary Connection	0.00	0.00	0.00
9	Category 'I' Inter-state	0.00	0.00	0.00
10	Kuti Jyoti (Point)	0.00	0.00	0.00
11	Single Point Metered Rural	105.15	5.30	55.73
12	Single Point Metered Urban	33.37	5.50	18.35
13	Total sales within State	711.58	6.41	456.17
14	Sales Outside State	131.56	4.12	54.16
15	Total Sales (13+14)	843.14	6.05	510.33

With the revision of tariff, the DPN will generate additional revenue of Rs. 11.17 Crs. Thereby, the revenue gap is revised to Rs. 94.05 Crs (i.e. Rs. 105.22 Crs - Rs. 11.17 Crs), which the DPN shall meet from the Additional Revenue Subsidy from the Government and by improving internal efficiency.

The Commission, accordingly, approves revenue from revised tariffs at Rs. 456.17 Crs with the energy sales of 711.58 MUs. In view of the approved tariff hike and consideration of additional revenue subsidy from the Government, the revenue gap is approved as NIL for the FY 2023-24.

7.27 Government Subsidy

As seen from the above it is clear that the revenue from sale of power & revenue subsidy is not sufficient to meet the expenditure of DPN. As a result of this the DPN shall continue to depend upon the additional subsidy from Government of Nagaland. Accordingly, Rs. 94.05 Crs shall be met from additional Government subsidy.

The Licensee, in their submitted Tariff Petition, had proposed a tariff hike of 2.91% over the prevailing tariffs of FY 2022-23 resulting in a revenue gap amounting to Rs. 18.26 Crs which needs to be funded through additional revenue subsidy from the Government of Nagaland.

Further, any additional gap on account of difference in the Full Cost Tariff & Approved/Subsidised Tariff is also required to be funded through revenue subsidy by the Government. In order to achieve the objective of year-on-year tariffs progressively to reflect the cost of electricity supply, the grant of subsidy shall have to be reduced every year in decrementing fashion and ultimately make the power utility to manage without Government subsidy support.

The Section 65 of the Electricity Act, 2003 mandates that the State Government shall release subsidy amount due to the Licensee in advance so as to enable the licensee to implement the subsidized tariffs to their consumers as per subsidised Tariff rates (Detailed Revenue calculation of subsidised Tariff is given at Annexure-I). The State Government should release the above stated subsidy amount in Twelve (12) equal monthly instalments amounting to Rs. 7.84 Crs (Rupees Seven Crores & Eighty Four Lacs only) every month in advance as enshrined in Section 65 of Electricity Act, 2003. However, in the event of delay or non-receipt of subsidy in advance in any month from the Government, the licensee shall adopt the applicable full cost tariff (FCT) rates indicated below while issuing the monthly energy bill for that relevant month/months. Detailed calculation of FCT is placed at Annexure-II for reference. A brief summary is tabulated below for reference.

Table 7.32: Full Cost Tariff based Expected Revenue for FY 2023-24

Sl. No.	Particulars	Energy Sales (In MUs)	Average Rate (Rs./kWh)	Amount (Rs. in Crs)
1	Category 'A' Domestic	286.04	10.43	298.45
2	Category 'B' Industrial	46.71	10.43	48.74
3	Category 'C' Bulk	115.75	10.43	120.78
4	Category 'D' Commercial	123.27	10.43	128.63
5	Category 'E' PWW	0.04	10.43	0.04
6	Category 'F' Public Light	1.22	10.43	1.27
7	Category 'G' Agriculture	0.02	10.43	0.02
8	Category 'H' Temporary Connection	0.00	0.00	0.00
9	Category 'I' Inter-state	0.00	0.00	0.00
10	Kuti Jyoti (Point)	0.00	0.00	0.00
11	Single Point Metered Rural	105.15	10.43	109.72
12	Single Point Metered Urban	33.37	10.43	34.82
13	Total sales within State	711.58	10.43	742.47

There could be a situation, where the outstanding monthly subsidy pending was released by the Government after passage of much time elapse and thereby consumers were to be billed at full cost tariffs in those relevant month or months when subsidy was not paid in advance. Given the situation, the entire excess amount so charged to all consumers on account of full cost tariff adoption shall have to be refunded as deduction by treating such

excess amount laying with Licensee as an advance payment to the licensee to be settled at one time in the immediate monthly billing cycle where bills are being issued to respective consumers soon after receipt of such pending subsidy relating to the past month/months. If in case, the excess amount so refundable is exceeding the monthly billing amount to be so adjusted in case of any consumer/consumers, then such excess amount unrefunded may be carried forward and be adjusted in the immediately following monthly bill/bills to be issued to such consumer/consumers until full settlement is done in toto.

Lastly, the brief summary of the Commission's calculations in support of subsidy amount deduced, the average of supply and the average revenue realisation details are tabulated in the following table.

Table 7.33: Average Cost of Electricity Supply within Nagaland for FY 2023-24

(Rs. in Crs)

Sl. No.	Particulars	Proposed by DPN	Approved by Commission
1	Net Revenue Requirement	765.54	796.62
2	Revenue from Retail Sales at proposed Tariff	462.13	456.17
3	Revenue from Sale of Power-Exchange	92.91	54.16
4	Revenue Subsidy - Govt. of Nagaland	192.24	192.24
5	Net Gap (1-2-3-4)	18.26	94.05
6	Govt. Subsidy/Support	18.26	94.05
7	Energy Sales within the state (In MUs)	705.66	711.58
8	Average cost (In Rs./kWh)	9.53	10.43
9	Average revenue realisation (In Rs./kWh)	6.55	6.41
10	Average rate of subsidy (In Rs./kWh)	2.98	4.02

22. TARIFF PRINCIPLES AND DESIGN

8.1 Background

- (a) The Commission in determining the revenue requirement of DPN for the FY 2023-24 and the retail tariff for the FY 2023-24 has been guided by the provisions of the Electricity Act, 2003, the National Tariff Policy (NTP), Regulations on Terms and Conditions of Tariff issued by the Central Electricity Regulatory Commission (CERC) and Regulations on Terms and Conditions of Tariff notified by the NERC. 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 “within the period to be specified by the Commission”. The Act 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.

The NTP notified by Government of India provides comprehensive guidelines for determination of tariff as also working out the revenue requirement of power utilities. The Commission has endeavored to follow these guidelines as far as possible.

- (b) The mandate of the NTP on cross subsidy is that tariff should be within plus / minus 20% of the average cost of supply. This could not be achieved due to high cost of power, low paying capacity of the consumers and lack of industrialization. The DPN has not furnished the voltage-wise cost of supply. A directive has been issued in this order to build up data to arrive at cost of supply at various voltage levels etc. Hence, in working out the cost of supply, the Commission has gone on the basis of average cost of supply in the absence of relevant data for working out consumer category wise cost of supply. However, in this tariff order an element of performance target has been indicated by maintaining the set target for T&D loss reduction. This guides the DPN for better performance by reduction of loss level, which will result in substantial reduction in average cost of supply.
- (c) Section 8.3 of National Tariff Policy lays down the following principles for tariff design:
- (i) In accordance with the National Electricity Policy, consumers below poverty line who consume below a specified level, say 30 units per Month, may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply. This provision will be re-examined after five years.

- (ii) For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the SERC would notify the roadmap, with a target that tariffs are within $\pm 20\%$ of the average cost of supply. The road map would have intermediate milestones, based on the approach of a gradual reduction in cross subsidy.
- (iii) For example, if the average cost of service is Rs. 3.00 per unit, at the end of year 2010-11 the tariff for the cross subsidized categories excluding those referred to in para-1 above should not be lower than Rs. 2.40 per unit and that for any of the cross subsidizing categories should not go beyond Rs. 3.60 per unit.
- (iv) While fixing tariff for agricultural use, the imperatives of the need of using ground water resources in a sustainable manner would also need to be kept in mind in addition to the average cost of supply. The tariff for agricultural use may be set at different levels for different parts of the State depending on the condition of the ground water table to prevent excessive depletion of ground water.”
- (v) NERC MYT Regulations, 2016 specifies that
 - a. The cross subsidy for a consumer category means the difference between the average per unit rate based on tariff schedule of the Commission for that Category and the combine average cost of supply per unit expressed in percentage terms as a portion of the combined average cost of supply.
 - b. In the first phase, the Commission shall determine the tariff, so that it progressively reflects the combined average cost of supply of electricity and also reduce cross-subsidies within a reasonable period. In the second phase, the Commission shall consider moving towards category wise cost of supply as a basis for determination of tariff.
- (d) NEP aims at increased access to electricity, supply of reliable and quality power at reasonable rates, minimum lifeline consumption, financial turnaround of consumer interest. The Commission has considered factors as far as possible which aim at achieving the objectives of NEP while determining the revenue requirement of the DPN and designing the retail tariff for its consumers. It has also aimed to raise the per capita consumption of the State from the existing level. The Commission endeavors that the tariff progressively reflects cost of supply in a shortest period and the government subsidy is reduced gradually. The Tariff has been rationalized with regards to inflation, paying capacity and avoid Tariff shock.

8.2 Tariff Proposed by the DPN and approved by the Commission

8.2.1 Tariff Categories

In the ARR and Tariff Petition of DPN for the FY 2023-24 has not proposed any changes in the existing categories of consumers and tariff structure.

The Commission considers retaining the existing categories as stated below:

- 1 Category 'A' Domestic
- 2 Category 'B' Industrial
- 3 Category 'C' Bulk
- 4 Category 'D' Commercial
- 5 Category 'E' PWW
- 6 Category 'F' Public Light
- 7 Category 'G' Agriculture
- 8 Category 'H' Temporary Connection
- 9 Category 'I' Inter-state
- 10 Kuti Jyoti (Point)
- 11 Single Point Metered Rural
- 12 Single Point Metered Urban

8.2.2 Existing & Proposed Tariff

DPN in its tariff petition for the FY 2023-24 has proposed for revision of the existing retail tariffs to various categories of consumers to earn additional revenue of Rs. 21.16 Crs to meet the gap partially as shown below:

The DPN has proposed tariff revision with an average increase of 2.91% from the existing tariff. in this Tariff proposal only partial recovery of cost is proposed. The summary of the tariff proposal by DPN for the FY 2023-24 is tabulated below:

Table 8.1: Existing Tariff v/s Proposed Tariff for FY 2023-24

Sl. No.	Category of Consumers	Existing Rate (In Rs./kWh)	Proposed Rate (In Rs./kWh)
1	Category 'A' Domestic		
a)	Up to 30 kwh		5.35
b)	31 to 100 kwh		5.90
c)	101 to 250 kwh		6.50
d)	Above 250 kwh		7.35
2	Category 'B' Industrial		
a)	Up to 500 kwh		6.50
b)	501 to 5000 kwh		7.00
c)	Above 5000 kwh		7.65
3	Category 'C' Bulk		7.10
4	Category 'D' Commercial		
a)	Up to 60 kwh		7.70
b)	61 to 240 kwh		8.90
c)	Above 240 kwh		9.30
5	Category 'E' PWW		7.60
6	Category 'F' Public Light	* To be recovered from the consumers	* To be recovered from the consumers
7	CATEGORY 'G' Interstate		6.30
8	Category 'H' Agriculture		3.35
9	Category 'I' Temporary Connection	DLF Rs.11.00 Others Rs.14.00	DLF Rs.11.00 Others Rs.14.00
10	Kuti Jyoti (Point)	Same as DLF	Same as DLF
11	Single Point Metered Rural		5.40
12	Single Point Metered Urban		5.65
*	Charges for public lighting have to be recovered from the consumers of Domestic, Commercial, Industrial and Bulk categories at the rates shown below:		
a)	Domestic	Rs. 10 per connection / month	Rs. 10 per connection / month
b)	Commercial	Rs. 15 per connection / month	Rs. 15 per connection / month
c)	Industrial	Rs. 20 per connection / month	Rs. 20 per connection / month
d)	Bulk Supply	Rs. 25 per connection / month	Rs. 25 per connection / month

Table 8.2: Other Charges proposed by DPN for FY 2023-24

Sl. No.	CATEGORY	Proposed Rate Rs./kwh
OTHER CHARGES		
(A)	DISCONNECTION CHARGES	Rs.
	i. Single phase L.T.	150/connection
	ii. Three phase L.T.	250/connection
	iii. H.T. consumers (11KV above)	1500/connection
(B)	RECONNECTION CHARGES	
	i. Single phase L.T.	150/connection
	ii. Three phase L.T.	250/connection
	iii. H.T. consumers (11KV above)	1500/connection
(C)	METER RENT	Rs. per meter/month
i.	Single phase L.T.	20.00
ii.	Three phase L.T. (whole current)	50.00
iii.	Three phase L.T. (CT operated)	100.00
iv.	11 kv H.T.	500.00
v.	33 kv H.T.	750.00
vi.	66 kv EHV	900.00
vii.	132 kv EHV	1000.00
(D)	METER TESTING CHARGES	Rs. per meter per test
i.	Single phase L.T.	100.00
ii.	Three phase L.T.	300.00
iii.	Three phase L.T. (11 KV above)	1,000.00
(E)	SECURITY DEPOSIT	Rs. per connection
i.	Single phase L.T.	250.00
ii.	Three phase L.T.	750.00
iii.	Three phase L.T. (11 KV above)	3,000.00
(F)	SURCHARGES (DELAYED PAYMENT)	Re.0.10/kwh pm or part thereof
(G)	BILLING PERIODICALLY	Monthly
(H)	CHARGES OF POLES USAGE FOR ADVERTISEMENT	Rupees
i.	Charges for application and agreement forms	100.00
ii.	Charges towards dismantling of hoardings/banners	300.00
(I)	The pole rental charges for advertisements: -	Rs./per month
i.	a. Category I-Commercial area (Max size 3'x2')	100.00
ii.	b. Category II-Residential area (Max size 3'x2')	60.00
iii.	c. Category III-National Highway (Max size 3'x2') (Outside the city/town limit)	40.00

Commissions analysis:

The Commission after detailed analysis and prudent scrutiny of the aggregate revenue requirement filed by the DPN, has arrived at a more realistic revenue requirement.

8.2.3 Tariff approved by the Commission**(a) Subsidized Tariff approved for FY 2023-24**

Having considered the petition of DPN for approval of Annual Revenue Requirement (ARR) and determination of Retail Tariff for supply of energy and having approved the Annual Revenue Requirement (ARR) with a gap of Rs. 94.05 Crs, the Commission considers to revise the tariff under Telescopic billing with an average increase of 2.51% as detailed below:

Table 8.3: Tariff approved by the Commission for FY 2023-24

Sl. No.	Category of Consumers	Approved Rate (In Rs./kWh)
1	Category 'A' Domestic	
a)	Up to 30 kwh	5.35
b)	31 to 100 kwh	5.80
c)	101 to 250 kwh	6.50
d)	Above 250 kwh	7.10
2	Category 'B' Industrial	
a)	Up to 500 kwh	6.50
b)	501 to 5000 kwh	7.00
c)	Above 5000 kwh	7.50
3	Category 'C' Bulk	6.90
4	Category 'D' Commercial	
a)	Up to 60 kwh	7.40
b)	61 to 240 kwh	8.60
c)	Above 240 kwh	9.00
5	Category 'E' PWW	7.45
6	Category 'F' Public Light	* To be recovered from the consumers
7	CATEGORY 'G' Interstate	6.30
8	Category 'H' Agriculture	3.35
9	Category 'I' Temporary Connection	DLF Rs.11.00 Others Rs.14.00
10	Kuti Jyoti (Point)	Same as DLF
11	Single Point Metered Rural	5.30
12	Single Point Metered Urban	5.50

Sl. No.	Category of Consumers	Approved Rate (In Rs./kWh)
*	Charges for public lighting have to be recovered from the consumers of Domestic, Commercial, Industrial and Bulk categories at the rates shown below:	
a)	Domestic	Rs. 10 per connection / month
b)	Commercial	Rs. 15 per connection / month
c)	Industrial	Rs. 20 per connection / month
d)	Bulk Supply	Rs. 25 per connection / month

The above table depicts fixed and energy charge only. However, Tariff Charges with detailed description are given in the Tariff Schedule chapter of this Order.

(b) Full Cost Tariff (FCT) approved for FY 2023-24

With the approved ARR for FY 2023-24, the Commission has worked out the average cost of supply at the rate of Rs. 10.43/kWh. In the event of non-receipt of subsidy in advance in any respective month from the State Government, the Commission considers to indicate the Full Cost Tariff (FCT) for charging the consumer during such month/months as tabulated below:

Table 8.4: Full Cost Tariff approved by the Commission for FY 2023-24

Sl. No.	Category of Consumers	Approved Rate (In Rs./kWh)
1	Category 'A' Domestic	
a)	Up to 30 kwh	8.00
b)	31 to 100 kwh	10.80
c)	101 to 250 kwh	11.00
d)	Above 250 kwh	11.30
2	Category 'B' Industrial	
a)	Up to 500 kwh	10.00
b)	501 to 5000 kwh	10.59
c)	Above 5000 kwh	11.00
3	Category 'C' Bulk	10.43
4	Category 'D' Commercial	
a)	Up to 60 kwh	10.31
b)	61 to 240 kwh	11.00
c)	Above 240 kwh	11.50
5	Category 'E' PWW	10.43
6	Category 'F' Public Light	10.43
7	CATEGORY 'G' Interstate	10.43

Sl. No.	Category of Consumers	Approved Rate (In Rs./kWh)
8	Category 'H' Agriculture	10.43
9	Category 'T' Temporary Connection	DLF Rs. 10.43 Others Rs. 10.43
10	Kuti Jyoti (Point)	Same as DLF
11	Single Point Metered Rural	10.43
12	Single Point Metered Urban	10.43

The above table depicts fixed and energy charge only. However, Tariff Charges with detailed description are given in the Tariff Schedule chapter of this Order.

Table 8.5: Other Charges approved by the Commission for FY 2023-24

Sl. No.	CATEGORY	Proposed Rate Rs./kwh
OTHER CHARGES		
	Disconnection charges	Rs.
(a)	i. Single phase L.T.	150/connection
	ii. Three phase L.T.	250/connection
	iii. H.T. consumers (11KV above)	1500/connection
	Reconnection charges	
(b)	i. Single phase L.T.	150/connection
	ii. Three phase L.T.	250/connection
	iii. H.T. consumers (11KV above)	1500/connection
(C)	METER RENT	Rs. per meter/month
i.	Single phase L.T.	20.00
ii.	Three phase L.T. (whole current)	50.00
iii.	Three phase L.T. (CT operated)	100.00
iv.	11 kv H.T.	500.00
v.	33 kv H.T.	750.00
vi.	66 kv EHV	900.00
vii.	132 kv EHV	1000.00
(D)	METER TESTING CHARGES	Rs. per meter per test
i.	Single phase L.T.	100.00
ii.	Three phase L.T.	300.00
iii.	Three phase L.T. (11 KV above)	1,000.00
(E)	SECURITY DEPOSIT	Rs. per connection

Sl. No.	CATEGORY	Proposed Rate Rs./kwh
i.	Single phase L.T.	250.00
ii.	Three phase L.T.	750.00
iii.	Three phase L.T. (11 KV above)	3,000.00
(F)	SURCHARGES (DELAYED PAYMENT)	Re.0.10/kwh pm or part thereof
(G)	BILLING PERIODICALLY	Monthly
(H)	CHARGES OF POLES USAGE FOR ADVIRTEISEMENT	Rupees
i.	Charges for application and agreement forms	100.00
ii.	Charges towards dismantling of hoardings/banners	300.00
(I)	The pole rental charges for advertisements: -	Rs./per month
i.	a. Category I-Commercial area (Max size 3'x2')	100.00
ii.	b. Category II-Residential area (Max size 3'x2')	60.00
iii.	c. Category III-National Highway (Max size 3'x2') (Outside the city/town limit)	40.00

Details are given in tariff schedule in the Appendix.

8.2.4 Tariff for prepaid metered consumers approved by the Commission

The DPN has introducing prepaid metering as pilot scheme for selected sub-divisions. The scheme has improved the billing & collection efficiency of the billing function. In order encourage consumers to opt for the prepaid metering system, department proposes separate Tariff Schedule for the prepaid metered consumers. Under prepaid category, Consumers also pay 100% upfront in advance. The tariff for prepaid is therefore proposed at a simple fixed rate for a particular Category as an incentive. Accordingly, an in principle separate Tariff Schedule is proposed for the prepaid metered consumers by DPN for the FY 2023-24. The Tariff proposal for prepaid metered consumers by DPN and approves by the Commission for the FY 2023-24, as detailed below:

(a) Subsidized Tariff approved for FY 2023-24

Table 8.6: Tariff for Prepaid Metered Consumers for FY 2023-24

Sl. No.	Category of Consumers	Proposed Rate (In Rs. /kWh)	Approved Rate (In Rs. /kWh)
1	Category 'A' Domestic		
	All Consumers	5.50	5.45
2	Category 'B' Industrial		
	All Consumers	6.60	6.40
3	Category 'C' Bulk		
	All Consumers	6.90	6.70

Sl. No.	Category of Consumers	Proposed Rate (In Rs. /kWh)	Approved Rate (In Rs. /kWh)
4	Category 'D' Commercial		
	All Consumers	8.30	8.20
5	Category 'H' Agriculture		
	All Consumers	3.15	3.15

(b) Full Cost Tariff (FCT) approved for FY 2023-24

Sl. No.	Category of Consumers	Approved Rate (In Rs./kWh)
1	Category 'A' Domestic	
	All Consumers	10.43
2	Category 'B' Industrial	
	All Consumers	10.43
3	Category 'C' Bulk	
	All Consumers	10.43
4	Category 'D' Commercial	
	All Consumers	10.43
5	Category 'H' Agriculture	
	All Consumers	10.43

Details are given in tariff schedule in the Appendix.

8.2.5 Common Items

DPN has not proposed any changes in rates and general conditions of supply of electricity to consumers. The Commission has approved it as given in Tariff Schedule in Appendix.

8.2.6 Miscellaneous Charges

DPN has not proposed any changes in the miscellaneous items. The Commission has approved the same rates for all miscellaneous items of services as given in the Tariff Schedule in Appendix.

This order shall come into force from 01.04.2023 and shall remain effective till revised/amended by the Commission. The Order shall be given wide publicity by the petitioner for information of the general public.

By Order of the Commission.

Place: **Kohima.**

Dated: **27th March, 2023.**

Sd/-
KHOSE SALE
Chairman, NERC, Kohima

9. DIRECTIVES

Background

While examining the information and data contained in the proposed Tariff petition for the FY 2023-24, it is observed that there are data gaps and many vital information were based on certain assumptions; and as a result, there has been difficulties in finalization of Revised ARR and determination of Tariff. Most of the areas of the operational and financial performance of DPN require substantial improvement.

Directives were issued in the previous orders for reducing costs and improving efficiency in the operation of the department. The Commission expected that DPN would take prompt action on the directives and monitor their implementation. DPN is yet to take action on most of the directives. In some cases, action has been initiated but monitoring of the implementation is essential to achieve the objectives of the directives.

In the above background the Commission is constrained to reiterate most of the directives which were issued in the earlier tariff orders and which have not been fully complied with and also hereby issue specific new directives.

Directive 1: Maintenance of Asset Registers and Audited Annual Accounts

Maintenance of function wise, asset wise data is up-dated, correct asset value is essential for ascertaining the value of assets & depreciation thereon. The DPN is directed to get the asset registers built up, and submit updated assets & depreciation registers.

Accounts are to be maintained for construction and operation activities of the Power Department. Audited Annual Accounts should be submitted. In the event of delay in getting Accounts audited by the Accountant General, the DPN can get the same audited by CAG empanelled auditors and submit the same with the future filing. The Commission has issued this directive previously however, compliance of the same is still not done. The Commission again reiterates the directive.

The DPN is directed to start the process immediately and complete before submission of next Tariff Petition and report compliance.

Directive 2: Management Information System (MIS)

The DPN has not maintained proper data in respect of sales (slab and sub slab wise), revenue and revenue expenses as also the category wise / slab wise number of consumers, connected load / demand etc. for proper analysis of the past data, based on actuals and

estimation of proper projections in consideration of the ARR and Tariff Petition.

The DPN is directed to take steps to build credible and accurate data base and management information system (MIS) to meet the requirements for filing ARR & Tariff Petition as per regulatory requirement and also to suit the Multi Year Tariff principles. The formats, software and hardware may be synchronized with the Regulatory Information and Management System (RIMS) circulated by Central Electricity Regulatory Commission (CERC).

The Commission has issued this directive previously however, compliance of the same is still not done. The Commission again reiterates the directive.

The DPN is directed to start the process immediately and complete before submission of next Tariff Petition and report compliance.

Directive 3: Pilferage of Energy

The Department has not segregated the losses into technical losses, commercial losses. Voltage wise losses are not available. It is possible that the losses projected may include commercial losses on account of pilferage and malpractices.

Pilferage of energy may be by illegal tapings/hooking from electrical lines, tampering of meters etc. The Commission feels that there is need to launch an extensive drive to remove illegal connections, if any, check meter tampering, replace the defective meters, maintain proper account of un-metered services and keep constant vigil so that corrective measures could be taken to reduce the AT & C losses. Requisite action may be taken as per the provisions under sections 135 and 138 of Electricity Act, 2003.

The Commission has issued this directive previously however, compliance of the same is still not done. The Commission again reiterates the directive.

The DPN is directed to start the process immediately and complete before submission of next Tariff Petition and report compliance.

Directive 4: Replacement of Non-Functional / Defective Meters

It is reported that substantial number of connections are with defective meters. Information on non-functional meters may be obtained from field officers and ensure that data is maintained correctly. Replacement is to be planned and pursued. Progress may be reported to the Commission once in a quarter.

The Commission has issued this directive previously however, compliance of the same is still not done. The Commission again reiterates the directive.

The DPN is directed to start the process immediately and complete before submission of next Tariff Petition and report compliance.

Directive 5: Energy Audit

The DPN is directed to chalk out a programme to provide meters to all the feeders (132 kV, 66 kV, 33 kV and 11 kV) and distribution transformers to identify the high loss areas and take appropriate measures to reduce both technical and commercial losses to the level fixed by the Commission. The DPN shall also comply with loss reduction trajectory for T&D losses for the next three years.

The investment required to reduce the losses shall be included in the investment plan for augmentation of T&D system to be submitted to the Commission. Effective technical and administrative measures shall be taken to reduce the commercial losses.

The Commission has issued this directive previously however, compliance of the same is still not done. The Commission again reiterates the directive.

The DPN is directed to start the process immediately and complete before submission of next Tariff Petition and report compliance.

Directive 6: Approval of Commission for Investment Plan

Annual Investment Plan shall be submitted to the Commission and approval of Commission for all major capital works costing Rs. 5.00 Cr and above before execution of the works.

The Commission has issued this directive previously however, compliance of the same is still not done. The Commission again reiterates the directive.

The DPN is directed to take approval of the Commission for all major capital works costing Rs. 5.00 Cr and above before execution of the works.

Directives 7: Interest on Security Deposit

DPN did not indicate the amount of security deposit collected from the consumers. DPN is directed to maintain consumer-wise security deposit collected. **Such data shall be furnished with the next filing.**

The Commission has issued this directive previously however, compliance of the same is still not done. The Commission again reiterates the directive.

The DPN is directed to take initiative in this regard and complete before submission of next Tariff Petition and report compliance.

Directives 8: Revenue Realization

Revenue realization is foremost task of the DPN to sustain financially. Top priority may be given to realize the dues. DPN was directed to sort out an action plan to improve collections by conducting special drive and disconnecting supply to all defaulting consumers effectively.

The DPN has neither submitted progress on collection of arrears due from consumers nor the arrears.

The Commission has issued this directive previously however, compliance of the same is still not done. The Commission again reiterates the directive.

The DPN is directed to take initiative in this regard and submit Quarterly progress report on realization of dues to the Commission starting from 01.04.2023.

Directives 9: Transformer failures

It is reported that there are substantial instances of transformer failures. However, statistical details of the same was not submitted. To minimize transformer failures, the LT network and DTR structures shall be maintained properly by rectification of defects. Field officers in charged of O&M of distribution system shall be entrusted with the responsibility and Progress is to be watched. Field units where DTR failures are more, shall pay more attention.

The Commission has issued this directive previously however, compliance of the same is still not done. The Commission again reiterates the directive.

A detailed plan of action should be submitted to the Commission along with the next petition.

Directives 10: Review petition

The Commission has to undertake review, true up of earlier orders. True-up activity cannot be done in absence of audited accounts. DPN is directed to submit review/true-up petitions along with the audited accounts.

The Commission has issued this directive previously however, compliance of the same is still not done. The Commission again reiterates the directive.

The DPN is directed to complete the audit of Accounts and file True-up petition for the previous years.

Directives 11: Progress on Completion of Capital Works

There is balance of Capital Works in Progress. Work wise details of the same is required to be maintained. Further, it is to be ensured that the capitalisation of assets is routed through CWIP. DPN is directed to update the Asset & Depreciation Register and reconcile the same with CWIP. The updated Asset & Depreciation Register along with reconciliation shall be submitted along with the next petition.

The Commission has issued this directive previously however, compliance of the same is still not done. The Commission again reiterates the directive.

The DPN is directed to report the compliance of the directive along with the next Tariff Petition.

Directives 12: Specific Tariff to Public Lighting

Hitherto to charges towards Public Lighting are being collected from other categories of consumers. Now, the Commission is of the view to fix a specific tariff to public lighting as in the case of other categories to be paid by the concerned local bodies being custodians of public lighting. As such the DPN is directed to provide meters to all public lighting connections and take inventory of the connected load and measure the monthly consumption of each public lighting connection and propose specific tariff to public lighting as is prevailing in other electricity utilities in the country from the next tariff filing invariably.

The Commission has issued this directive previously however, compliance of the same is still not done. The Commission again reiterates the directive.

The DPN is directed to report the compliance of the directive along with the next Tariff Petition.

Directive 13: Details of Single Point Consumers

Number of Single Point Connections released (Urban & Rural separately) and actual consumption and amount billed during the previous year and estimated for current year and projected for ensuring year shall be filed along with next tariff filing. Further, point wise number of consumers existing as on the date should also be furnished.

The Commission has issued this directive previously however, compliance of the same is still not done. The Commission again reiterates the directive.

The DPN is directed to report the compliance of the directive along with the next Tariff Petition.

Directive 14: Physical verification of Consumer connections

Physical verification of all consumer connections be done to verify the number of no meter connections, defective meters, wrong classification of categories, unauthorized connections, unauthorized additional load, tempered seal of the meter etc.

For this purposed an action plan should be chalked out making each sub-division as a unit and deploying all staff in the sub-division for one day in a week to check all connections in a nominated section on that day. Thus, in a month, four sections will be covered.

To execute this operation, the staff should be divided into batches making Junior Engineer as team leader who will record consumer wise data of all connections checked. This will hardly take two to three months to complete 100% physical verification of connections.

A brief outcome of the operation may also be reported to the Commission along with action proposed on the reports.

The Commission has issued this directive previously however, compliance of the same is still not done. The Commission again reiterates the directive.

The DPN is directed to report the compliance of the directive along with the next Tariff Petition.

Directive 15: Physical verification & assessment of stock

Material stock has a huge impact on the cost of the capital works. DPN is directed to take an annual physical verification exercise of the stock and compile a stock register. The stock register shall provide the details of movement of stock along with the value. DPN shall submit the progress report on the same along with the next petition.

The Commission has issued this directive previously however, compliance of the same is still not done. The Commission again reiterates the directive.

The DPN is directed to report the compliance of the directive along with the next Tariff Petition.

Directive 16: Consumer Awareness/ Sensitisation

The DPN is directed to carry out “Consumer Awareness / Sensitisation” campaigns so as to educate the consumers and the general public on the various initiatives and subsidies

announcement by the government and manner of obtaining these benefits.

The DPN is also directed to create awareness and sensitise its employees on the need to be fully aware of various acts, rules & regulations, safety practices etc., DPN may consider imparting trainings, arrangement workshops etc. for its employees.

The Commission has issued this directive previously however, compliance of the same is still not done. The Commission again reiterates the directive.

The DPN is directed to report the compliance of the directive along with the next Tariff Petition.

Directive 17: Renewable Energy Projects

As the Government of India is keen on building up its Renewable Energy capacity, the State could also look at the option of taking up Renewable Energy projects to increase its overall generation capacity.

DPN to explore the possibilities of building up its Renewable Energy capacity.

The DPN is directed to report the initiative taken in this regard along with the next Tariff Petition.

10. WHEELING CHARGES

10.1 Wheeling Charges

The net ARR has been approved in chapter 7 is Rs. 796.62 Crs for the FY 2023-24. The ARR approved is segregated into wire business and retail supply business in accordance with the matrix prescribed in Regulation 72. The allocation matrix is provided in table below:

Table 10.1: Allocation Matrix

(In %)

Sl. No.	Particulars	Wire Business	Retail Supply Business
1	Power Purchase Expenses	0	100
2	Standby Charges	0	100
3	Employee Expenses	60	40
4	Administration & General Expenses	50	50
5	Repair & Maintenance Expenses	90	10
6	Depreciation	90	10
7	Interest on Long-term Loan Capital	90	10
8	Interest on Working Capital and on consumer security deposits	10	90
9	Bad Debts Written off 0% - 100% Income Tax	90	10
10	Transmission Charges intra-State	0	100
11	Contribution to contingency reserves, if any	100	0
12	Return on Equity	90	10
13	Non-Tariff Income	10	90

10.2 Segregation of Cost

The total fixed cost excluding power purchase/generation costs and transmission charges are segregated into wire business and retail supply business as per the above matrix as detailed in table below:

Table 10.2: Segregation of Wire and Retail Supply Costs for FY 2023-24

(Rs. in Crs)

Sl. No.	Particulars	Approved Total Cost	Wire Business	Retail Supply Business
1	Cost of Power Purchase	485.41	-	485.41
2	Cost of Generation	20.06	-	20.06
3	Employee Cost	154.38	92.63	61.75
4	Administration & General Expenses	3.25	1.63	1.63
5	Repair & Maintenance Expenses	34.61	31.15	3.46
6	Transmission charges	114.24	-	114.24
7	Depreciation	-	-	-
8	Interest on Working Capital	-	-	-
9	Total Revenue Requirement	811.95	125.40	686.55
10	Less: Non-Tariff Income	15.33	1.53	13.80
11	Net Revenue Requirement (9- 10)	796.62	123.87	672.75

10.3 Wheeling Tariff

The wheeling charges have been computed on the basis of approved costs of DPN for wire business and the total energy expected to be wheeled through its network. In the absence of segregated data on costs of operation of 33kV and 11kV networks and sales, wheeling charges are not segregated voltage wise. Combined wheeling charges determined are given in table below:

Table 10.3: Wheeling Tariff approved by the Commission

Sl. No.	Particulars	FY 2023-24
1	ARR for wheeling function approved by the Commission (Rs. in Crs)	123.87
2	Total sales within State - approved (In MUs)	711.58
3	Wheeling Tariff (Rs./kWh)	1.74

The Commission approves wheeling Tariff at Rs. 1.74/kWh for the FY 2023-24.

11. FUEL AND POWER PURCHASE COST ADJUSTMENT

11.1 Background

Section 62 sub-section 4 of the Electricity Act, 2003 provides that no tariff or part of any tariff may ordinarily be amended, more frequently than once in every financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified. This provision of the Act requires the Commission to specify the formula for fuel surcharge.

Accordingly, the Commission has specified the formula for working out the Fuel and Power Purchase Cost Adjustment (FPPCA) charges and other terms and conditions of FPPCA allowed the distribution licensee to recover the FPPCA charges from the consumers vide Regulation 98 (13) of NERC (Terms and Conditions for determination of Tariff) Regulations, 2010.

Accordingly, the amount of Fuel and Power Purchase Cost Adjustment (FPPCA) charges shall be computed as under:

$$\text{FPPCA (Ps./kWh)} = \frac{Q_c(RC_2 - RC_1) + Q_0(RO_2 - RO_1) + Q_{pp}(R_{pp2} - R_{pp1}) + V_z + A}{(Q_{Pg1} + Q_{pp1} + Q_{pp2})} \times \left[1 - \frac{L}{100} \right] \times 100$$

Where,

Q_c = Quantity of coal consumed during the adjustment period in Metric Tons (MT).

= $(SHR \times Q_{pg}) (1 + TSL) \times 1000 / GCV$, or actual whichever is less.

R_{c1} = Weighted average base rate of coal supplied ex-power station coal yard as approved by the Commission for the adjustment period in Rs./MT

- R_{c2} = Weighted average base rate of coal supplied ex-power station coal yard for the adjustment period in Rs./MT
- Q_o = Actual Quantity of oil (in KL) consumed during the adjustment period or normative oil consumption as per Tariff order whichever is less.
- R_{o1} = Weighted average base rate of oil ex-power station (Rs./KL) approved by the Commission for the adjustment period.
- R_{o2} = Weighted average actual rate of oil ex-power station supplied (Rs./KL) during the adjustment period.
- Q_{pp} = Total power purchased from different sources(kWh)= $Q_{pp2}+Q_{pp3}$
- Q_{pp1} = $Q_{pp3} \left[1 - \frac{TL}{100} \right]$ in kWh
- TL = Transmission loss (CTU) (in percentage terms).
- Q_{pp2} = Power Purchase from sources with delivery point within the state transmission or distribution system (in kWh)
- Q_{pp3} = Power Purchase from sources on which CTU transmission loss is applicable (in kWh)
- R_{pp1} = Average rate of Power Purchase as approved by the Commission (Rs./kWh)
- R_{pp2} = Average rate of Power Purchase as approved by the Commission (Rs./kWh)
- Q_{pg} = Own power generation (kWh)

- Q_{pg1} = Own Power generation (kWh) at generator terminal – approved auxiliary consumption
- L = Percentage T&D loss as approved by the Commission or actual, whichever is lower.
- SHR = Station Heat Rate as approved by the Commission (Kcal / kWh)
- TSL = Percentage Coal Transit and Stacking Loss as approved by the Commission
- GCV = Weighted average gross calorific value of coal as fired basis during the adjustment period (Kcal / Kg)
- V_z = Amount of variable charges on account of change of cost of unknown factors like water charges, taxes or any other unpredictable and unknown factors not envisaged at the time of Tariff fixation subject to prior approval of the Commission (Rs.)
- A = Adjustment, if any, to be made in the current period to account for any excess / shortfall in recovery of fuel of Power Purchase cost in the past adjustment period, subject to the approval of the Commission (Rs.)

If there are more than one power stations owned by the Licensee Q_c , R_{c1} , R_{c2} , Q_o , R_{o1} , R_{o2} , Q_{pg} and Q_{pg1} will be computed separately for each power station and sum of the increase/decrease of cost of all power stations shall be taken into consideration.

The Generating Company can levy FPPCA charges with the prior approval of the Commission.

Terms and conditions for application of the FPPCA formula

- 1) The basic nature of FPPCA is 'adjustment' i.e. passing on the increase or decrease in the fuel costs and power purchase cost, as the case may be, compared to the approved fuel costs and power purchase costs in this Tariff Order.
- 2) The operational parameters / norms fixed by the Commission in the Tariff Regulations / Tariff Order shall be the basis of calculating FPPCA charges.
- 3) The FPPCA will be recovered every month in the form of an incremental energy charge (Rs./kwh) in proportion to the energy consumption and shall not exceed 10% of the

approved avg. cost of supply in the Tariff order and balance amount, if any, in the FPPCA over and above this ceiling shall be carried forward to be billed in subsequent month.

- 4) Incremental cost of power purchase due to deviation in respect of generation mix or power purchase at higher rate shall be allowed only if it is justified to the satisfaction of the Commission.
- 5) Any cost increase by the licensee by way of penalty, interest due to delayed payments, etc. and due to operational inefficiencies shall not be allowed.
- 6) FPPCA charges shall be levied on all categories of consumers.
- 7) Distribution licensee shall file detailed computation of actual fuel cost in Rs./kWh for each month for each of power stations of the state generators as well as cost of power purchase (Fixed and Variable) from each source/station and a separate set of calculations with reference to permitted level of these costs.
- 8) The data in support of the FPPCA claims shall be duly authenticated by an officer of the licensee, not below the rank of Chief Engineer on an affidavit supported with the certified copy of energy bills of power purchase, transmission and RLDC charges, bill for coal purchase and its transportation cost, oil purchase bill and the quantity of coal and oil consumed during the month.
- 9) Levy of FPPCA charge will be allowed only when it is ten (10) paise or more per unit. If it is less than 10 (ten) paise/unit, the same may be carried forward for adjustment in the next month.
- 10) The incremental cost per kWh due to this FPPCA arrived for a month shall be recovered in the energy bill of the month subsequent to the order of the Commission approving FPPCA with full details of rate and unit(s) on which FPPCA charges have been billed. The Generating Company and the Distribution Companies shall provide along with the proposal of FPPCA (as applicable to them) for a month, a compliance report of the previous order of the commission in respect of FPPCA.

ANNEXURE - IREVENUE FROM APPROVED/REVISED TARIFF FOR THE FY 2023-24

Sl. No.	Category	No. of Consumers	Energy Sales (In MUs)	Energy Charges (Rs./kWh)	Revenue (Rs. in Crs)	Average Revenue (Rs./kWh)
<i>Calculation of Revenue from Postpaid Connection</i>						
1	Category 'A' Domestic					
a)	Up to 30 kwh		49.17	5.35	26.30	
b)	31 to 100 kwh		132.31	5.80	76.74	
c)	101-250 kwh		41.84	6.50	27.19	
d)	Above 250 kwh		54.45	7.10	38.66	
	Total	1,58,881	277.77		168.90	6.08
2	Category 'B' Industrial					
a)	Up to 500 kwh		16.43	6.50	10.68	
b)	501 to 5000 kwh		23.61	7.00	16.53	
c)	Above 5000 kwh		6.08	7.50	4.56	
	Total	4,265	46.11		31.76	6.89
3	Category 'C' Bulk	2,428	115.74	6.90	79.86	6.90
4	Category 'D' Commercial					
a)	Up to 60 kwh		97.35	7.40	72.04	
b)	61 to 240 kwh		6.43	8.60	5.53	
c)	Above 240 kwh		7.94	9.00	7.15	
	Total	19,873	111.72		84.72	7.58
5	Category 'E' PWW	40	0.04	7.45	0.03	7.45
6	Category 'F' Public Light	621	1.22		2.44	
7	Category 'G' Agriculture	1	0.02	3.35	0.01	3.35
8	Category 'H' Temporary Connection					

9	Category 'I' Inter-state					
10	Kuti Jyoti (Point)					
11	Single Point Metered Rural	1,16,606	105.15	5.30	55.73	5.30
12	Single Point Metered Urban	11,447	33.37	5.50	18.35	5.50
13	Grand Total	3,14,161	691.15		441.80	6.39

Calculation of Revenue from Public Light

a)	Domestic	158881 X 10 X12	1.91	
b)	Commercial	25173 X 15 X 12	0.36	
c)	Industrial	4750 X 20 X 12	0.10	
d)	Bulk Supply	2430 X 25 X 12	0.07	
	Total		2.44	

Calculation of Revenue from Prepaid Connection

Sl. No	Category	No. of Consumers	Energy Sales (In MUs)	Energy Charges (Rs./kWh)	Revenue (Rs. in Crs)	Average Revenue (Rs./kWh)
1	Category 'A' Domestic	13,109	8.27	5.45	4.50	
2	Category 'B' Industrial	485	0.60	6.40	0.38	
3	Category 'C' Bulk	2	0.02	6.70	0.01	
4	Category 'D' Commercial	5,300	11.55	8.20	9.47	
	Total	18,896	20.43		14.37	7.03

ANNEXURE - II**FULL COST TARIFF BASED REVENUE FOR THE FY 2023-24**

Sl. No.	Category	No. of Consumers	Energy Sales (In MUs)	Energy Charges (Rs./kWh)	Revenue (Rs. in Crs)	Average Revenue (Rs./kWh)
<i>Calculation of Revenue from Postpaid Connection</i>						
1	Category 'A' Domestic					
a)	Up to 30 kwh		49.17	8.00	39.33	
b)	31 to 100 kwh		132.31	10.80	142.94	
c)	101-250 kwh		41.84	11.00	46.02	
d)	Above 250 kwh		54.45	11.30	61.53	
	Total	1,58,881	277.77		289.82	10.43
2	Category 'B' Industrial					
a)	Up to 500 kwh		16.43	10.00	16.43	
b)	501 to 5000 kwh		23.61	10.59	25.00	
c)	Above 5000 kwh		6.08	11.00	6.68	
	Total	4,265	46.11		48.11	10.43
3	Category 'C' Bulk	2,428	115.74	10.43	120.76	10.43
4	Category 'D' Commercial					
a)	Up to 60 kwh		97.35	10.31	100.36	
b)	61 to 240 kwh		6.43	11.00	7.08	
c)	Above 240 kwh		7.94	11.50	9.14	
	Total	19,873	111.72		116.58	10.43
5	Category 'E' PWW	40	0.04	10.43	0.04	10.43
6	Category 'F' Public Light	621	1.22		1.27	
7	Category 'G' Agriculture	1	0.02	10.43	0.02	10.43

8	Category 'H' Temporary Connection					
9	Category 'T' Inter-state					
10	Kuti Jyoti (Point)					
11	Single Point Metered Rural	1,16,606	105.15	10.43	109.72	10.43
12	Single Point Metered Urban	11,447	33.37	10.43	34.82	10.44
13	Grand Total	3,14,161	691.15		721.14	10.43

Calculation of Revenue from Prepaid Connection

Sl. No.	Category	No. of Consumers	Energy Sales (In MUs)	Energy Charges (Rs./kWh)	Revenue (Rs. in Crs)	Average Revenue (Rs./kWh)
1	Category 'A' Domestic	13,109	8.27	10.43	8.63	
2	Category 'B' Industrial	485	0.60	10.43	0.63	
3	Category 'C' Bulk	2	0.02	10.43	0.02	
4	Category 'D' Commercial	5,300	11.55	10.43	12.05	
	Total	18,896	20.43		21.32	10.43

ANNEXURE - III

I. Full Cost Tariff, Subsidy & Subsidised Proposed Tariff for the FY 2023-24 (Post-Paid)										
Sl. No.	Category	Full Cost Tariff			Subsidy			Approved Tariff		
		Full Cost Tariff (Rs./kWh)	Units (In MUs)	Revenue (Rs. In Crs.)	Subsidy (Rs./kWh)	Units (In MUs)	Revenue (Rs. In Crs.)	Approved Tariff (Rs./kWh)	Units (In MUs)	Revenue (Rs. In Crs.)
1	DOMESTIC									
	(a) 0 to 30 kwh	8.00	49.17	39.33	2.65	49.17	13.03	5.35	49.17	26.30
	(b) 31 to 100 kwh	10.80	132.31	142.94	5.00	132.31	66.19	5.80	132.31	76.74
	(c) 101 to 250 kwh	11.00	41.84	46.02	4.50	41.84	18.83	6.50	41.84	27.19
	(d) > 250 kwh	11.30	54.45	61.53	4.20	54.45	22.87	7.10	54.45	38.66
2	INDUSTRIAL									
	(a) < 500 kwh	10.00	16.43	16.43	3.50	16.43	5.75	6.50	16.43	10.68
	(b) 501 to 5000 kwh	10.59	23.61	25.00	3.59	23.61	8.47	7.00	23.61	16.53
	(c) > 5000 kwh	11.00	6.08	6.68	3.50	6.08	2.13	7.50	6.08	4.56
3	BULK	10.43	115.74	120.76	3.53	115.74	40.90	6.90	115.74	79.86
4	COMMERCIAL									
	(a) < 60 kwh	10.31	97.35	100.36	2.91	97.35	28.32	7.40	97.35	72.04
	(b) 61 to 240 kwh	11.00	6.43	7.08	2.40	6.43	1.54	8.60	6.43	5.53
	(c) > 240 kwh	11.50	7.94	9.14	2.50	7.94	1.99	9.00	7.94	7.15
5	P.W.W.	10.43	0.04	0.04	2.98	0.04	0.01	7.45	0.04	0.03
6	INTERSTATE	10.43			4.13			6.30		
7	AGRICULTURE	10.43	0.02	0.02	7.08	0.02	0.01	3.35	0.02	0.01
8	TEMPORARY CONNECTION									
	DLF	10.43						11.00		
	Others	10.43						14.00		
9	PUBLIC LIGHTING	10.43	1.22	1.27	-9.56	1.22	-1.17	19.99	1.22	2.44
10	SINGLE POINT METERED RURAL	10.43	105.15	109.72	5.13	105.15	53.98	5.30	105.15	55.73
11	SINGLE POINT METERED URBAN	10.43	33.37	34.82	4.93	33.37	16.46	5.50	33.37	18.35
12	Total Postpaid within the State (1 to 11)		691.15	721.14		691.15	279.34		691.15	441.80
II. Full Cost Tariff, Subsidy & Subsidised Proposed Tariff for the FY 2023-24 (Prepaid)										
Sl. No.	Category	Full Cost Tariff			Subsidy			Proposed Tariff		
		Full Cost Tariff (Rs./kWh)	Units (In MUs)	Revenue (Rs. In Crs.)	Subsidy (Rs./kWh)	Units (In MUs)	Revenue (Rs. In Crs.)	Approved Tariff (Rs./kWh)	Units (In MUs)	Revenue (Rs. In Crs.)
1	DOMESTIC									
	All Units	10.43	8.27	8.63	4.98	8.27	4.12	5.45	8.27	4.50
2	INDUSTRIAL									
	All Units	10.43	0.60	0.63	4.03	0.60	0.24	6.40	0.60	0.38
3	BULK									
	All Units	10.43	0.02	0.02	3.73	0.02	0.01	6.70	0.02	0.01
4	COMMERCIAL									
	All Units	10.43	11.55	12.05	2.23	11.55	2.58	8.20	11.55	9.47
5	AGRICULTURE									
	All Units	10.43			7.28			3.15		
6	Total Prepaid within the State (1 to 5)		20.43	21.32		20.43	6.95		20.43	14.37
7	Total Postpaid & Prepaid within the State		711.58	742.46		711.58	286.29		711.58	456.17

Minutes of the 16th Meeting of the State Advisory Committee (SAC)

Date: 15th March 2023

Time: 11:00 am

Venue: Hotel Japfu, Kohima

The meeting was chaired by Er. Khose Sale, Chairman, Nagaland Electricity Regulatory Commission (NERC). He welcomed the SAC Members, representatives from Department of Power (DPN) and New & Renewable Energy (N&RE) and expressed his wish for a good interaction and a fruitful discussion with definite solutions.

Review of 15th SAC Meeting Minutes:

The Chairman highlighted the Members in brief with regard to the follow up actions initiated by the Commission in response to the advices of the SAC Members in the last meeting.

AGENDA: Filing of APR for FY 2022-23 and ARR & Tariff proposal for FY 2023-24.

The Committee Members examined in detail the relevant parameters projected in the proposed Tariff Petition.

On perusal of the petition, it came to the notice of the members that the DPN is yet to file the true up petition for FY 2022-23 (Audited Accounts). Hence, the Members present advice the Commission not to entertain the Tariff Petition unless the petition is filed based on Audited Accounts.

The DPN Officials present in the Meeting informed the Members present that finalization of the True up petition upto 2022-23 (Audited Accounts) is under process and the same will be filed before the Commission within this Financial Year.

With regard to Annual Performance Review (APR) for FY 2022-23, DPN has estimated a revised ARR of Rs. 744.07 Crore with a Revenue gap of Rs. 27.38 Crore against the approved ARR of Rs. 631.11 with Revenue gap of Rs. 20.74 Crore.

With regard to tariff proposal for FY 2023-24, DPN has proposed ARR of Rs. 765.54 Crore with a revenue gap of Rs. 18.26 Crore. DPN has also proposed an overall increase in tariff by 2.91%.

After through deliberation, the members advised the Commission to determine and finalise the present tariff petition as it deems fit which may be reviewed based on the final audited reports to be submitted by DPN.

Concluding Remarks:

The Chairperson thanked the SAC Members present and the Departmental Officers for the successful & fruitful discussions in the meeting concerning Power Sector in the State and requested to extend their support & cooperation in the years to come also.

Sd/-
Er. HEKAVI N AYEMI
Deputy Director,
NERC, Kohima.

List of State Advisory Committee Member Present:

1. Shri. Khose Sale, Chairman, NERC,
2. Shri. C. R. Lotha, SAC Member,
3. Shri. T. Meren Paul, SAC Member,
4. Shri. Bishnu Bhattacharjee, SAC Member,
5. Shri. K. Shiwoto Wotsa, SAC Member,
6. Shri. Jonas Yanthan, SAC Member,
7. Shri. Kekhriengulie Theunuo, SAC Member,
8. Shri. Joshua Sheqi, SAC Member,
9. Er. Mhonlumo Kikon, E.E (Distribution), Department of Power, Nagaland.
10. Er. Lhoubeizo Kesiye, Deputy Director, N& RE Department, Nagaland,
11. Er. Imliakum, Project Officer, N& RE Department, Nagaland,
12. Er. Hekavi N Ayemi, Deputy Director, NERC,
13. Shri. Limawapang Lkr, Deputy Director (Legal), NERC,
14. Shri. Shivito Wotsa, Account Officer, NERC