

**True-up for FY 2014-15,
APR for FY 2018-19 &
Tariff Proposal for the FY 2019-20**

**for
Distribution Total Business**

Submitted by:
Department of Power
Government of Nagaland

November, 2018



नागालैण्ड NAGALAND

AFFIDAVIT

BEFORE HON'BLE ELECTRICITY REGULATORY COMMISSION
FOR THE STATE OF NAGALAND

FILE No: _____

CASE No: _____

IN THE MATTER OF :

Petition for Approval of Tariff Proposal for FY 2019-20 under MYT period FY 2017-18 to 2019-20 for The State of Nagaland under Sections 61, 62 and 64 of The Electricity Act 2003

AND

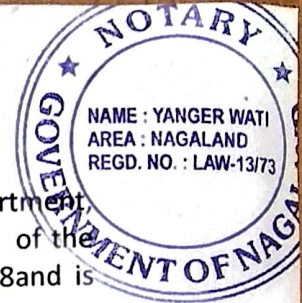
IN THE MATTER OF : The Power Department, Electricity House,
THE PETITIONER Kohima, Nagaland

.....Petitioner

I, Moa Aier, S.E (Rev) son of Lt.I. N. Manen Ao (aged 54 years), (occupation) Government Service residing at Kuda 'B', Dimapur, the deponent named above do hereby solemnly affirm and state on oath as under:-

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Yangar Wati
YANGER WATI
NOTARY PUBLIC
NAGALAND



1. That the deponent is the Superintendent Engineer (Rev) of Power Department, Government of Nagaland, who is authorized as per the order of the Administration of the Government of Nagaland OrderNo. CEL/RMC/R-21/2249 dated 16th November, 2018 and is acquainted with the facts deposed to below.

2. I, the deponent named above do hereby verify that the contents of the accompanying petition are based on the records of the Power Department, Government of Nagaland maintained in the ordinary course of business and believed by them to be true and I believe that no part of it is false and no material has been concealed there from.

Details of enclosures:

a) Proposal for Determination of Tariff for FY 2019-20 under MYT control period of FY 2017-18 to FY 2019-20.

b) Petition Fee – Rs. 2,00,000/- vide DD No.

dated :

The Power Department, Govt. of Nagaland.

Petitioner

Place : Kohima

Dated : th November, 2018

I, Advocate, Kohima, do hereby declare that the person making this affidavit is known to me through the perusal of records and I am satisfied that he is the same person alleging to be deponent himself.

Advocate

Solemnly affirmed before me on thisday of, 2018 at a.m./p.m. by the deponent who has been identified by the aforesaid Advocate. I have satisfied myself by examining the deponent that he understood the contents of the affidavit which has been read over and explained to him. He has also been explained about section 193 of Indian Penal Code that whoever intentionally gives false evidence in any of the proceedings of the Commission or fabricates evidence for purpose of being used in any of the proceedings shall be liable for punishment as per law.

Solemnly affirmed before me this day, I certify that I read over and explained the contents to the declarant and that the declarant seemed perfectly to understand them "

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YANGGER WATI
NOTARY PUBLIC
NAGALAND

BEFORE THE HON'BLE NAGALAND ELECTRICITY REGULATORY COMMISSION

Filing No:

Case No:

IN THE MATTER OF:

Petition For True-Up of FY 2014-15, Annual Performance Review of FY 2018-19 and Aggregate Revenue Requirement (ARR) & Tariff Proposal for FY 2019-20 of Department of Power, Govt. of Nagaland

AND IN THE MATTER OF:

Department of Power, Govt. of Nagaland, Electricity House, Kohima – 797 001, Nagaland

PETITIONER

PETITIONER, UNDER SECTIONS 45, 46, 61, 62 AND 64 OF THE ELECTRICITY ACT, 2003 FILES FOR INITIATION OF PROCEEDINGS BY THE HON'BLE COMMISSION FOR DECIDING ON THE MATTERS CONCERNING THE APPROVAL OF THE TRUE-UP FOR FY 2014-15, ANNUAL PERFORMANCE REVIEW FOR FY 2018-19 AND TARIFF PETITION OF CHANDIGARH ELECTRICITY DEPARTMENT FOR FY 2019-20

The applicant respectfully submits hereunder:

- 1) The Petitioner, the Department of Power, Govt. of Nagaland (DPN) has been allowed to function as an integrated Distribution licensee for the license area of Nagaland.
- 2) Pursuant to the enactment of the Electricity Act, 2003, DPN is required to submit its Annual Revenue Requirement (ARR) and Tariff Petition as per the provisions outlined in section 61, 62 & 64 of EA 2003, and the governing regulations thereof.
- 3) DPN has submitted its petition for determination of Annual Revenue Requirement and tariff proposal for FY 2019-20 on the basis of the principles outlined in the MYT Tariff Regulations 2014 notified by the Hon'ble Commission.
- 4) This petition includes the True-Up Petition for FY 2014-15, Review Petition for FY 2018-19 and ARR & Tariff Petition for FY 2019-20.
- 5) DPN is submitting the true up for the FY 2014-15 based on the accounts prepared on commercial accounting principle and duly audited by AG.
- 6) DPN along with this petition is submitting the statutory formats with additional/ supplementary data & information available and shall further make available the same to the extent available with DPN as may be required by the Hon'ble Commission during its processing.

Prayers to the Commission

DPN respectfully prays that the Hon'ble Commission may

- a. Examine the proposal submitted by the Petitioner for a favorable dispensation as detailed in the enclosed proposal;
- b. Consider the submissions and allow the True-Up for FY 2014-15, revised estimate for FY 2018-19 and approve Aggregate Revenue Requirement and Retail Tariff for DPN for FY 2019-20;
- c. Approve the revenue gap and appropriate tariff increase as detailed in the enclosed proposal;
- d. Pass suitable orders for implementation of the tariff proposals for the FY 2019-20 for making it applicable from April 1, 2019 onwards;
- e. Approve the terms and conditions of Tariff Schedules and various other matters as and the proposed changes therein;
- f. Condone any inadvertent 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;
- g. Pass such orders as the Hon'ble Commission may deem fit and proper, keeping in view the facts and circumstances of the case;

Department of Power, Govt. of Nagaland

Petitioner

Place: Kohima.

Date:11.2018.

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Chapter 1: Introduction and Background

Department of Power, Government of Nagaland

- 1.1. The Department of Power of The State of Nagaland is responsible for power supply in the state of Nagaland. DPN has generation capacity of 24 MW of its own. Apart from this, the entire power requirements for DPN are met through its share from Central Sector Power generation, which is wheeled through the PGCIL network of North Eastern region and power purchases from electricity traders/ other sources.
- 1.2. The total area of the territory is 16,527 sq. kms. The State of Nagaland is having a population of around 19.81 lacs as per 2011 census spread over towns and villages. The State of Nagaland is located on 438 kms from Guwahati. The present demand for Nagaland is being met mainly by power from various central generating stations, and Likimro Hydro Electric Project. DPN has projected 2,71,248 consumers with an annual energy consumption of about 616.10 MUs for the FY 2018-2019. These consumers can be broadly classified into following five categories:
 - Domestic
 - Commercial
 - Industrial both HT & LT
 - Others -Public lighting, water works ,Agricultural etc.
- 1.3. The Department of Power of Government of Nagaland hereinafter called "DPN", a deemed licensee under section 14 of the Electricity Act 2003, is carrying out the business of transmission, distribution and retail supply of electricity in the state of Nagaland. The Department of Power, Nagaland (DPN) has been allowed to function as an integrated distribution licensee of State of Nagaland. The Department of Power doesn't have its own generation except for 24 MW Likimro Hydro Electric Project and procures power from its allocation from central generating stations NTPC, NHPC & NEEPCO. The remaining is met through short term purchase under bilateral transactions and power exchange.
- 1.4. All the divisions of Nagaland are electrified and any desiring consumer can avail power supply by submitting requisition in the prescribed form to the appropriate office of the Department subject to fulfilment of the requisite conditions and payment of charges.

- 1.5. DPN has updated the Proforma Accounts upto FY 2016-17 and the Proforma Accounts for the FY 2016-17 is under compilation. The Proforma Accounts has been audited by AG upto FY 2014-15. DPN has updated its Fixed Asset Register upto 31.03.2016. The FAR for the FY 2016-17 & FY 2017-18 is under compilation.
- 1.6. DPN had filed its first petition for Annual Revenue Requirement and Determination of Tariff for the FY 2011-12 under section 62 of the Electricity Act, 2003 and under the NERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2010 to the Hon'ble Commission in November, 2010. The Tariff Order was issued by the Hon'ble Commission on 27th June, 2011 and the new tariff was made effective from 1st April, 2011.

Filing of Multi Year Tariff Petition and Annual Performance Review Petition

- 1.7. The Nagaland Electricity Regulatory Commission (NERC), in exercise of powers conferred by sub section (1) of section 181 and clauses (zd), (ze) and (zf) of sub section (2) of section 181, read with sections 61, 62, 83 and 86, of the Electricity Act 2003 (36 of 2003) and all other powers enabling it in this behalf, has issued the NERC(Multi Year Tariff) Regulations, 2016, hereinafter referred to as "MYT Regulations".
- 1.8. As per the Regulations, the Distribution Licensee were required to file a Business Plan & Tariff Petition for Control Period of three financial years from April 1, 2017 to March 31, 2020, which shall comprise but not be limited to detailed category-wise sales and demand projections, power procurement plan, capital investment plan, financing plan and physical targets before the Hon'ble Commission as part of the Tariff Filing before the beginning of the Control Period.
- 1.9. Accordingly, the Department of Power, Nagaland had filed a Business Plan & Tariff Petition for approval of Annual Revenue Requirement for MYT Control period FY18 to FY20 and determination of retail tariff for FY18 in accordance to the principles laid down under section 61, 62 and 64 of the Electricity Act 2003, NERC MYT Regulations 2016, provisions of National Electricity Policy & National Tariff Policy, NERC (Conduct of Business) regulations 2010 and other relevant regulations. The Hon'ble Commission in its order dated 28.03.2017 approved the Business Plan & Annual Revenue Requirement for FY 2017-18 to FY 2019-20 and retail tariff for FY 2017-18.

- 1.10. As per the multi-year framework outlined in MYT Regulations 2016, the licensee is required to file Annual Performance Review petition in the subsequent years of the Control Period along with True-up of previous year and Retail Tariff proposal for ensuing year. However, the Proforma Accounts for the FY 2017-18 is yet to be finalised & audited by AG. Hence, the True-up for the FY 2017-18 is not submitted. The AG has completed the audit of Proforma Accounts for the FY 2014-15. Accordingly, Department of Power is filing the instant petition for approval of True-up for the FY 2014-15, Annual Performance Review for the FY 2018-19 and retail tariff proposal for the FY 2019-20.

Chapter 2: True up of FY 2014-15

- 2.1. The Hon'ble Commission in the Tariff order dated 31-03-2014 has approved ARR & Tariff for the FY 2014-15.
- 2.2. NERC determination of Tariff Regulations stipulate that the True-up for a FY is to be done on the basis of Audited Accounts. Since, the audit for Proforma Accounts for the year was pending, DPN could not file the True-up petition for the FY 2014-15 till date. The audited accounts for the FY 2014-15 is now available, hence, DPN is filing the True-up petition for the year.

Energy Sales, Number of Consumers and Connected Load for FY 2014-15

- 2.3. The total energy sales for FY 2014-15 stand at 522.22 MUs based on actuals as against 476.05 MUs approved by the Commission during in the Tariff Order for the year dated 31-03-2014
- 2.4. The tables below summarize the approved and actual energy sales for DPN for the FY 2014-15:

Table 1: Approved and Actual Sales for FY 2014-15 (MUs)

Sl. No.	Categories	Approved in T.O. dated 31st March, 2014	Actual
1	Domestic	279.00	298.51
2	Commercial	53.00	64.68
3	Industries	23.38	51.29
4	Public Lighting	6.00	9.48
5	Irrigation & Agriculture	0.05	-
6	Public Water Works	3.70	4.67
7	Bulk Supply	65.00	81.52
	Total	430.13	510.15
8	Inter State	2.40	0.52
9	Sales to Traders	43.52	11.55
	Grand Total	476.05	522.22

Power Purchase Quantum and Cost

- 2.5. DPN meets its requirement from allocations from central generating stations like NTPC, NHPC, NEEPCO & OTPC apart from own generation from Likhimro Hydro Power Project and other MHEPs. The allocation from CGS consists of a fixed share of allocation for a year, and the Govt. of India changes the variable share of allocation from the unallocated quota, time to time. Since, during the peak summer seasons the allocation of power from various sources is inadequate, therefore the DPN procures power from short-term sources i.e. power exchange, UI, banking etc.
- 2.6. The table below shows the summary of actual Power Purchase from various sources for the FY 2014-15 including Transmission Charges, UI charges and purchase from short term sources i.e. power exchange, UI, etc.

Table 2: Power Purchase Cost for FY 2014-15

Source	Approved in T.O. dated 31st March, 2014	Actual
Power Purchase Cost	196.30	235.35
Total	196.30	235.35

- 2.7. As against the Commission approved total power purchase cost of Rs. 196.30 Crores for the FY 2014-15, DPN has incurred actual power purchase cost of Rs. 235.35 Crores. The higher cost is primarily on account of higher rate/units of power from various sources. The petitioner requests the Hon'ble Commission to approve the total power purchase cost of Rs. 235.35 Crores against power purchase for the FY 2014-15.

Intra-State Transmission and Distribution (T&D) Loss

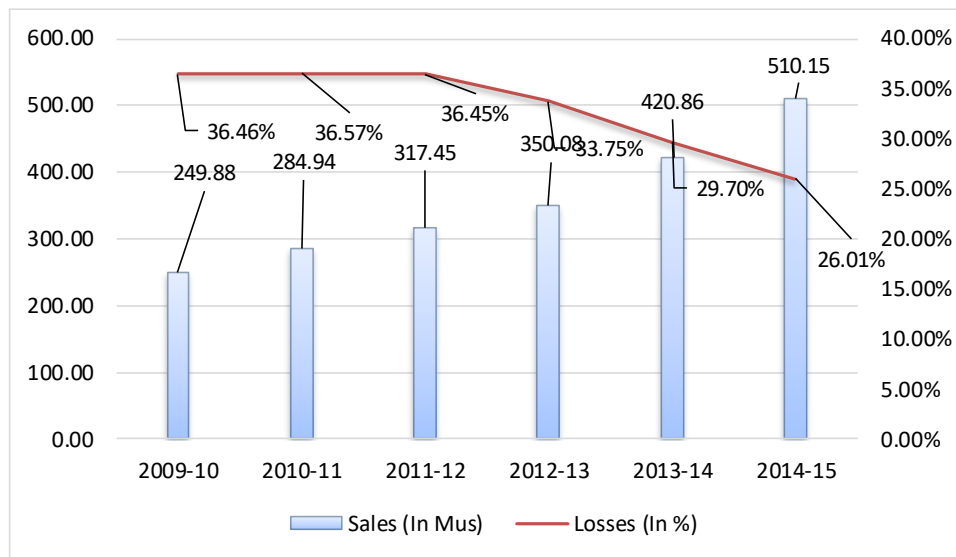
- 2.8. Considering actual sales of 510.15 MUs as above, the actual T&D works out to be 26.01% as against a loss level of 26.50% approved by Commission for the FY 2014-15 vide Tariff Order dated 31-03-2014. The computation of T&D loss for the FY 2014-15 is provided in table below:

Table 3: Energy Balance for FY 2014-15

Energy Available	2014-15 (Actual)
ENERGY REQUIREMENT	
Energy Sales within State	510.15
Sales to other distribution licensees	12.07
Total Energy Sales	522.22
Overall T & D Losses %	26.01
Overall T & D Losses (MUs)	183.61
Total Energy Requirement	705.83
Energy Availability	
Power Purchase from CGS/UI	602.98
Free Power from DHEP	18.70
Generation	84.14
Total Energy Availability	705.83
Energy Surplus/ (Gap)	0.00

- 2.9. DPN submits to the Hon'ble Commission that the losses have been in the range of 36.57% to 26.01% during the period of FY 2009-10 to FY 2013-14. DPN has restricted the T&D loss for the FY 2014-15 to 26.01%. It is difficult to bring the losses substantially from this level. The trajectory of loss from FY 2009-10 to FY 2014-15 is provided in the figure below:

Graph 1: T&D loss trajectory for the period FY 2009-10 to FY 2014-15



2.10. One of the primary reasons of stagnation in losses is the dominance of domestic category in the sales mix. In spite of an increase in overall sale, maximum increase in sales have happened in the domestic category resulting in a higher proportion of the overall sales as compared to other categories of consumers.

2.11. It is submitted to the Hon'ble Commission that while the distribution area of DPN is small, the scope for addition of HT consumers is limited or negligible. As a result, the sales to such categories is generally restricted leading to stagnation of T&D losses. With maximum sales to LT consumers, DPN feels that further reduction in the T&D loss in the state of Nagaland shall be possible after implementation of its various IT/strengthening schemes.

2.12. In view of the above, it is submitted that the Hon'ble Commission may kindly consider & revise the loss target to a level which is achievable under the circumstances detailed above.

2.13. Accordingly, the Hon'ble Commission is requested to kindly approve the actual distribution losses for the FY 2014-15.

Operation and Maintenance Expenses

- 2.14. The summary of approved and actual Employees Expenses, A&M expenses and A&G expenses as incurred by the DPN in the FY 2014-15 is as below:

Table 4: O & M Expenses for FY 2014-15 (in Rs Crores)

O & M Expenses	Approved in T.O. dated 31st March, 2014	Actual
Employee Expenses	76.35	93.38
R & M Expenses	14.57	19.17
A & G Expenses	2.68	2.62
Total O&M Expenses	93.60	115.17

- 2.15. The petitioner requests the Hon'ble Commission to approve the same on actual basis as the total O&M expenses of Rs. 115.17 Crores for FY 2014-15 are higher than the approved O&M expenses of Rs. 93.60 Crores for FY 2014-15.

GFA and Depreciation

- 2.16. It is submitted that DPN has considered the GFA as per the audited accounts for the FY 2014-15. The depreciation for the FY has also been considered accordingly. The DPN did not have the FAR for the FY 2014-15 hence, the details of capitalisation of assets is not available for the year. Therefore, no asset addition has been considered in the audited accounts & instant petition for the year 2014-15. However, the department has prepared the FAR as on 31.03.2016 and all the assets constructed/procured has been incorporated therein. DPN has accordingly, submitted the details of assets as per GFA in subsequent petitions.
- 2.17. The table below presents the approved and actual asset details for the FY 2014-15. The Hon'ble Commission is requested to approve the same:

Table 5: Asset Addition for FY 2014-15 (Rs Crores)

Particulars	Approved in T.O. dated 31st March, 2014	Actual
Asset Addition during FY 2014-15	30.00	0.00

2.18. The table below presents the approved and actual depreciation for the FY 2014-15:

Table 6: Depreciation for FY 2014-15 (Rs Crores)

Particulars	Approved in T.O. dated 31st March, 2014	Actual
Depreciation for the year	4.49	5.78

2.19. DPN humbly requests the Hon'ble Commission to approve the depreciation based on actuals.

Interest on Loan

2.20. For the purpose of determination of opening normative loan for FY 2014-15, the approved opening normative loan for FY 2014-15 in the Tariff Order for the year has been considered as opening normative loan for FY 2014-15. The addition in normative loan has been considered based on 70:30 debt-equity ratio in line with the Regulations notified by the Hon'ble Commission. Repayment of the loan has been considered to be equal to the depreciation for the year as provided in the MYT Regulations. An interest rate of 14.75% as on April 1st, 2014 which is the SBI PLR rate has been applied on the average normative debt in order to estimate the normative interest cost for the FY 2014-15.

2.21. The Hon'ble Commission is requested to approve the interest on normative loans as computed in the table below:

Table 7: Interest on Normative Capital Loan for FY 2014-15 (Rs Crores)

Particulars	Approved in T.O. dated 31st March, 2014	Actual
Opening Normative Loan	0.00	84.85
Add: Normative Loan during the year		-
Less: Normative Repayment		14.14
Closing Normative Loan		70.71
Average Normative Loan		77.78
Rate of Interest (@SBAR rate)		14.75%
Interest on Normative Loan including bank charges		11.47

Interest on Working Capital

- 2.22. Interest on working capital has been computed as per the NERC Tariff Determination Regulation. The requirement for working capital and interest thereon is as given in the table below:

Table 8: Interest on Working Capital for FY 2014-15 (Rs Crores)

Particulars	Approved in T.O. dated 31st March, 2014	Actual
One month's Fuel Cost	0.01	0.03
One month's Power Purchase Cost	16.35	19.61
One month's employee costs	6.36	7.78
One month's Administration & General expenses	0.22	0.22
One month R & M Cost	1.21	1.60
Total	24.15	29.24
SBI PLR as on the date	14.45%	14.75%
Interest on working capital	3.48	4.31

Provision for Bad and Doubtful Debt

- 2.23. The DPN has not written off any bad debt in the FY 2014-15, hence no claim towards bad debt is made in the petition.

Return on Equity

- 2.24. Tariff Determination Regulation provides that Return on Equity shall be computed on 30% of the capital base or the actual equity whichever is lower @ 15.5% p.a. The DPN has computed the Return on Equity based on the opening GFA for the FY 2014-15. Return on Equity computed is provided in the table given below.

Table 9: Return on Net Fixed Assets for FY 2014-15 (Rs Crores)

Particulars	Approved in T.O. dated 31st March, 2014	Actual
Opening equity	0.00	141.42
Addition in Equity (30% Capex for the FY)		0.00
Closing Equity		141.42
Average Equity Amount		141.42
Reasonable return @ 15.50%		21.92

Non-Tariff Income

2.25. The table below presents the approved and actual Non-Tariff Income for the FY 2014-15:

Table 10: Non-Tariff Income for FY 2014-15 (Rs Crores)

Particulars	Approved in T.O. dated 31st March, 2014	Actual
Non-Tariff Income	5.78	5.52

Revenue from Tariff

2.26. The billed revenue on actual sales and prevailing tariff as approved by the Commission is given in the table below.

Table 11: Revenue on Current Tariff for FY 2014-15 (Rs Crores)

Particulars	Approved in T.O. dated 31st March, 2014	Actual
Revenue from sale of Power	218.18	159.24
Total	218.18	159.24

Aggregate Revenue Requirement and Surplus for FY 2014-15

- 2.27. The Aggregate Revenue Requirement and revenue gap for the FY 2014-15 is as given in the table below:

Table 12: Aggregate Revenue Requirement and Gap for True-Up of FY 2014-15 (Rs Crores)

S. No.	Particulars	Approved in T.O. dated 31st March, 2014	Actual
1	Fuel cost	0.08	0.33
2	Power Purchase cost	196.3	235.35
3	O&M Expenses:		
a	Employee cost	76.35	93.38
b	Repairs & Maintenance expenses	14.57	19.17
c	Administration and General Expenses	2.68	2.62
4	Depreciation	4.49	5.78
5	Interest & Finance charges including interest on Consumers Security Deposit	-	11.79
6	Interest on working capital	3.48	4.31
7	Provision for bad debts	0.15	0.00
8	Return on equity	-	21.92
9	Total Revenue Requirement (1 to 8)	298.10	394.66
10	Less Non tariff income	5.78	5.52
11	Aggregate Requirement (9 - 10)	292.32	389.14
12	Revenue from retail sales at Existing Tariff	205.29	159.24
13	Revenue Surplus/(Gap) for the Year	(87.03)	(229.90)

- 2.28. Based on the actual ARR and Revenue for FY 2014-15 as per the accounts, it is observed that there is a revenue deficit of Rs. 229.90 Crores. **Therefore, DPN requests the Hon'ble Commission to approve the above revenue deficit of Rs. 229.90 Crore for FY 2014-15 as presented above.**

Chapter 3: Review of ARR for FY 2018-19

- 3.1. The Nagaland Electricity Regulatory Commission had notified the Multi Year Distribution Tariff Regulations, 2016 (MYT Regulations).
- 3.2 DPN had filed a Business plan for the period of FY 2017-18 to FY 2019-20 along with requisite details as provided in NERC (Multi-Year Tariff) Regulations 2016. The Hon'ble Commission in the MYT Order dated 28-03-2017 had approved ARR for the Control Period of FY 2017-18 to FY 2019-20 as per the MYT Regulations 2016.
- 3.3 Regulation 5.2 (b) of the MYT Regulations 2016 states the following:

“From the first year of the Control Period and onwards, the Petition shall comprise of:

 - i) Truing Up for previous years under Nagaland Electricity Regulatory Commission(Terms and Conditions for Determination of Tariff) Regulations, 2010 Annual Performance Review for current year in accordance with these Regulations;*
 - ii) Revenue from the sale of power at existing tariffs and charges for the ensuing year;*
 - iii) Revenue gap for the ensuing year calculated based on ARR approved in the Tariff Order or MYT Order and truing up for the previous year;*
 - iv) Application for revision of tariff for the ensuing year.”*
- 3.4 The petitioner is hereby filing annual performance review for FY 2018-19 as per the MYT framework and request the Hon'ble Commission to consider the revision in parameters based on the 6 months actual figures and balance six months estimates.

Energy sales and Connected Load

- 3.5 The sales for the FY 2018-19 has been estimated based on CAGR of actual sales for the FY 2011-12 to FY 2017-18. The CAGR for past five/three/two/one-year growth have been applied appropriately on the actual sales for the FY 2017-18 to arrive at the estimated sales for the FY 2018-19. The calculation of five/three/two/one-year CAGR is provided at Table 32 & 33 of para 4.3 of this petition. The approved and estimated sales for full year and actual sales for six months of FY 2018-19 is given in the table below:

Table 13: Energy sales for FY 2018-19 (MUs)

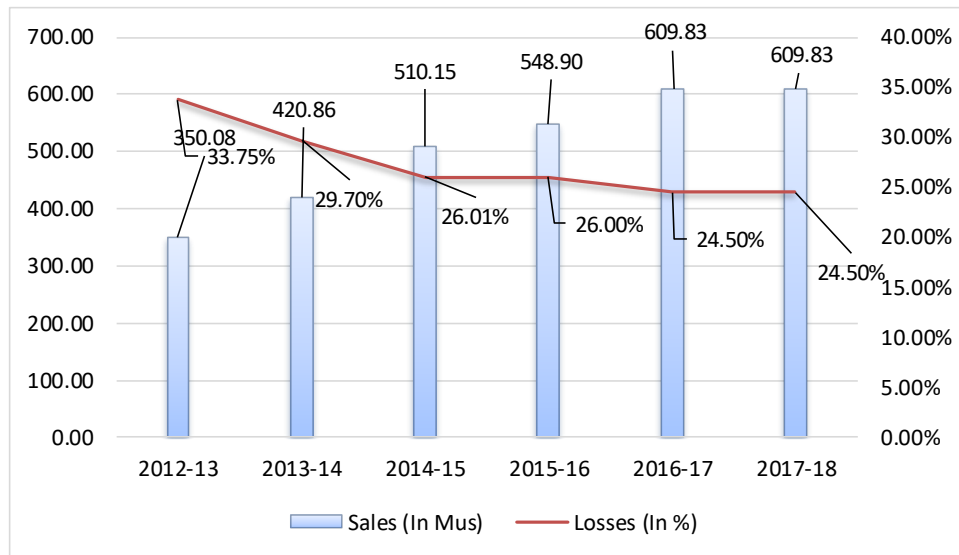
S. No.	Categories	Approved in T.O. dated 29th March 2018	Estimated for FY 2018-19
1	Domestic including BPL	359.06	377.27
2	Commercial	109.99	98.41
3	Industrial	66.72	70.28
4	Public Lighting	15.57	19.61
5	Public Water Works	6.86	13.78
6	Irrigation & Agriculture	0.05	0.02
7	Bulk Supply	136.88	113.25
8	Power Trading		29.52
			-
	Grand Total	695.13	722.14

- 3.6 It is submitted that the Hon'ble Commission may kindly consider and approve the revised estimates of sales for the FY 2018-19.

Intra-state T&D Losses

- 3.7 As per the Tariff Order dated 28-03-2017 the T&D loss as approved by the Commission for FY 2018-19 is 24.50% (21.5% distribution loss & 3% intra-state transmission loss). While DPN is dedicated for reducing the intra-state T&D losses in the state and targeting to achieving the T&D trajectory set by the Hon'ble Commission it requests the Hon'ble Commission to consider the geographical & topographical condition of the state for setting reasonable loss reduction target for the FY 2018-19. As discussed in the previous chapter, DPN has highlighted that while the sales have increased in the last three years, losses remained stagnant without much improvement due to majority of the increase in the sales in the LT category. It is difficult to bring the losses substantially from this level. The trajectory of loss from FY 2012-13 to FY 2017-18 is provided in the figure below:

Graph 2: T&D loss trajectory for the period FY 2013-14 to FY 2017-18



- 3.8 One of the primary reasons of stagnation in losses is the dominance of domestic category in the sales mix. In spite of an increase in overall sale, maximum increase in sales have happened in the domestic category resulting in a higher proportion of the overall sales as compared to industrial consumers where the sales have remained stagnant leading to a reduction in overall share.
- 3.9 It is submitted to the Hon'ble Commission that T&D reduction is difficult because of topographical conditions apart from the fact that maximum in demand is to domestic category and the scope for addition of HT consumers is limited or negligible. As a result the sales to such categories is generally restricted leading to stagnation of T&D losses.
- 3.10 With sales mostly to LT consumers, DPN feels that further reduction in the T&D loss in the state shall be possible after implementation of its various IT/strengthening schemes.
- 3.11 In view of the above, it is submitted that the Hon'ble Commission may kindly consider & revise the loss target to a level which is achievable under the circumstances detailed above.

Energy Requirement

3.12 For computation of energy requirement, DPN has estimated inter-state transmission losses as approved in the tariff order for the FY 2018-19.

3.13 The revised energy balance for FY 2018-19 is as given in the table below, the Hon'ble Commission is requested to approve the same:

Table 14: Energy Balance for FY 2018-19

Energy Available	FY 2018-19
Energy Sales	722.14
Distribution Loss %	21.50
Distribution Loss (MUs)	197.78
Total Energy Requirement	919.92
Energy Availability	
Own Generation	96.20
Power from ER	93.50
ER Total Loss (%)	2.14
Regional Loss (MUs)	2.00
Net Energy from ER (MU's)	91.50
Power from NER	576.63
Total Power purchased	668.13
NER Tr. Loss %	2.60
NER Tr. Loss	17.37
Net Energy Available	650.76
Over Drawn/Shortterm	201.41
Total Energy Available at state periphery	948.37
Intra State Tr. Loss @3%	28.45
Net Energy available for Sale	919.92
Demand Supply (Gap) / Surplus	0.00

Power Purchase Quantum and Cost

3.14 The Petitioner submits that it procures power from various sources from:

- Central Generating Stations (CGS) such as that of NTPC, NHPC , OTPC and NEEPCO
- Other Sources such as bilateral agreement, banking arrangement, power exchange, UI etc.

- 3.15 For the purpose of review of FY 2018-19 power purchase quantum, DPN has considered actual six months power availability from various sources including short-term sources and balance six months availability has been computed based on the firm and unallocated power allocation from the various Central Generating Stations as per the revised allocation statement issued by Northern Regional Power Committee.
- 3.16 Shortfall in power from allocations, if any, based on the estimated sales and losses for FY 2018-19 has been considered to be procured from short term sources i.e. power exchange, other trading sources.
- 3.17 DPN is also required to procure power from renewable sources for meeting the RPO as per the renewable regulations. It is submitted that DPN procures power from its own generating station – Likhimro HEP to meet the Non-Solar RPO. However, with regard to Non-solar RPO it is submitted that DPN does not have tied up sources of solar power as on date . However, new solar projects in the state are being developed and procurement from these sources shall help DPN meet the Solar RPO requirement. In view of the above, it is requested that the Commission may allow DPN to meet the Solar & Non-solar RPO through Non-Solar sources. Further, gaps may be allowed to be carried forward to be met in future years when solar sources are commissioned. The status of cumulative RPO compliance estimated for FY 2018-19 is provided below.

Table 15: Breakup of quantum of RPO Obligation for FY 18-19

Particulars	Target			Projected (in MUs)	Compliance (4-5)
	RPO	Revised Sales (Excluding Hydro)	RPO (in MUs) (3X2)		
1	2	3	4	5	6
Solar	2.00%	334.36	6.69	0.00	6.69
Non-Solar	6.60%	334.36	22.07	96.20	-74.13
Total	8.60%		28.76	96.20	-67.44

- 3.18 The power purchase cost for FY 2018-19 is computed based on the estimated units to be procured from the generating stations as per the allocations.
- a. The fixed cost for each plant is computed based upon the plant wise actual fixed charges for the FY 2017-18 & H1 of FY 2018-19.

- b. The variable charge for the thermal plants has been considered based on the actual variable charge during the first six months of FY 2018-19.
 - d. The generation units available from thermal plants are computed considering the actual power available during the FY 2017-18 & H1 of FY 2018-19 For hydel plants, the design energy or actual generation in the past three years has been considered as the basis for projections.
 - e. The deficit in energy is proposed to be met through short term power.
 - f. PGCIL, NRLDC and reactive Energy charges are computed based upon the half yearly figures available and have been pro-rated for the balance period.
- 3.19 Based on the actual six months power purchase cost and projected six months power purchase quantum and cost, the revised estimation of annual power purchase units and cost is summarized in the table below:

Table 16: Estimated Power Purchase Quantum and Cost for FY 2018-19

Particulars	Approved in T.O. dated 29th March 2018		Estimated	
	Units (in MUs)	Cost (in Rs. Cr.)	Units (in MUs)	Cost (in Rs. Cr.)
NEEPCO				
Khandang	12.44	2.75	16.75	78.44
Koppili - I	45.91	4.77	63.34	
Koppili - II	5.96	1.34	6.31	
Ranganadi	77.35	24.13	73.94	
Doyang	10.16	5.01	15.48	
Free Power	20.43		31.19	
NEEPCO - Gas Based				
AGBPP	106.87	48.08	79.62	
AGTPP	40.03	21.27	34.22	
NHPC				
Loktak	36.99	15.28	55.04	14.40
NTPC				
Farakka	45.94	18.70	40.79	84.35
Kahalgaon	28.59	10.51	23.52	
Talcher	32.05	8.44	29.19	
BGTPP	45.74	37.71	69.64	
ONGCTPC				
PALATANA	136.84	46.98	131.09	46.35
OTHER				
GEPL	62.93	18.90		
PTC	12.02	4.46		
APPCPL				
DEVIATION/SHORTTERM	123.60	32.49	201.41	59.35
Total	843.85	300.82	871.54	282.89
REC Purchase		7.02		
Total power purchase	843.85	307.84	871.54	282.89
PGCIL- Transmission Charges		42.60		36.82
NERLDC Charges		0.93		0.49
Grand Total	843.85	351.37	871.54	320.20

3.20 In view of above, DPN proposes total power purchase units of 871.54 MUs and power purchase cost of Rs. 320.20 Crores for the FY 2018-19.

The Hon'ble Commission may kindly consider the above submissions and approve the power purchase units & cost as proposed.

Cost of Generation

- 3.21 DPN has it's won 24 MW Likimro HEP. The cost of generation approved by the Hon'ble Commission and revised estimates for the FY 2018-19 is provided below. Hon'ble Commission may kindly consider and approve the same.

Table 17: Approved and Estimated Cost of Generation for FY 2018-19 (Rs Crores)

Particulars	Approved in T.O. dated 29th March	Estimated FY 2018-19
Cost of Generation	15.90	15.42

Operations and Maintenance Expenses

- 3.22 Operation & Maintenance Expenses consists of three elements viz Employee Expenses, A&G Expenses and R&M Expenses. As per the MYT Regulations, O&M expenses shall be treated as controllable parameter and shall not be revised except those attributable to directions of the Hon'ble Commission.
- 3.23 DPN has estimated the Employee Expenses, A&G Expenses and R&M Expenses for the FY 2018-19 based on the actual for the period April, 2018 to September, 2018 and projected figures for the period of October, 2018 to March, 2019.
- 3.24 The actual O&M expenses for first six months of FY 2018-19 under the three heads Employee expenses, R&M expenses and A&G expenses are summarized in table below:

Table 18: Actual O&M Expense for six months of FY 2018-19 (Rs. Crore)

Particulars	Approved in T.O. dated 29th March 2018	Actual FY 2018-19 (Apr-Sep)
Employee Expenses	107.62	52.56
R&M Expenses	6.05	12.70
A&G Expenses	3.28	0.97
Total O&M Expenses	116.95	66.23

- 3.25 Based on the actual for six months, the estimated figures of various heads under O&M expenses for the FY 2018-19 is provided in the table below along with the respective approved expenses:

Table 19: Approved and Estimated O&M Expenses for FY 2018-19 (Rs Crores)

Particulars	Approved in T.O. dated 29th March 2018	Estimated
Employee Expenses	107.62	116.80
R&M Expenses	6.05	31.75
A&G Expenses	3.28	2.43
Total O&M Expenses	116.94	150.97

3.26 The Hon'ble Commission is requested to consider and approve the total O&M expenses as computed in the table above.

Capital Expenditure and Capitalization

3.27 The Hon'ble Commission had approved a capital expenditure of Rs. 106.19 Crores for FY 2018-19. DPN plans to meet the approved capital expenditure during the financial year.

GFA and Depreciation

3.28 DPN has considered the opening GFA of Rs. 1775.82 Crores for the FY 2017-18 and considered the actual additions of Rs. 339.68 Crores during the year to arrive at the opening GFA of Rs. 2115.50 Crores for the FY 2018-19.

3.29 For the FY 2018-19, approved capitalization as per the MYT Order has been considered and any variation shall be submitted at the time of true-up for the year.

3.30 DPN requests the Hon'ble Commission to approve the fixed assets in the table below:

Table 20: Approved and Estimated Assets Addition for FY 2018-19 (Rs Crores)

Particulars	Approved in T.O. dated 29th March 2018	FY 2017-18 (Actual)	FY 2018-19 (Estimated)
Opening GFA	2115.5	1,775.82	2,115.50
Asset Capitalized	106.19	339.68	106.19
Closing GFA	2221.69	2,115.50	2,221.69

3.31 The petitioner submits that it has initiated activities with respect to the preparation/up-dation of Fixed Asset Register for the FY 2016-17 & FY 2017-18 and request the Hon'ble Commission to approve the same as and when they are prepared.

- 3.32 Depreciation has been calculated on the basis of the opening GFA & proposed additions during the FY 2018-19 at the rate prescribed in the MYT Regulations. The approved and revised depreciation for FY 2018-19 is provided below:

Table 21: Approved and Estimated Depreciation for FY 2018-19 (Rs Crores)

Particulars	Approved in T.O. dated 29th March 2018	Estimated
Opening Assets at the Beginning of the year	2115.5	2,115.50
Addition of assets during the year	106.19	106.19
Gross Fixed assets at the end of the year	2221.69	2,221.69
Depreciation for the year	93.91	93.91

Interest on Loan

- 3.33 In line with the methodology adopted by DPN for consideration of GFA as detailed above, the opening normative loan has also been considered on the same lines. The opening normative loan has been considered at 70% of GFA and the actual assets capitalized for the FY 2017-18 & approved capitalisation for the FY 2018-19 has been considered for arriving at the total normative loan for the year.
- 3.34 Repayment of the normative loan during FY 2018-19 has been considered equivalent to the depreciation in line with the MYT Regulations.
- 3.35 Since, there is no actual loan for DPN the interest at the SBI Bank rate of 13.45% as on April 1st, 2018 has been applied on the average normative debt in order to project the interest on normative loans for FY 2018-19. The Hon'ble Commission is requested to approve the interest on normative loans as computed in the table below:

Table 22: Estimated Interest on Normative Loan for FY 2018-19 (Rs Crores)

Particulars	Approved in T.O. dated 29th March 2018	Estimated
Opening Normative Loan	0.00	1,480.85
Add: Normative Loan during the year (70% of proposed capitalization)		74.33
Less: Opening Cumulative repayments		181.12
Less: Normative Repayment (Equivalent to Depreciation for the year)		93.91
Closing Normative Loan		1,280.15
Average Normative Loan		1,380.50
Rate of Interest (SBI		13.45%
Interest on Normative Loan		185.68

Interest on Working Capital

- 3.36 As per clause 29.4 of NERC MYT Regulations 2016 the working capital of a licensee shall consist of -
- Operation and maintenance expenses for one month; plus
 - Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus
 - Receivables equivalent to one (1) month of the expected revenue from sale of electricity at the prevailing tariffs; minus
 - 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;
- 3.37 The SBI Advance rate as on 1st April, 2018 13.45% is considered for computation of interest on working capital. The DPN requests the Commission to approve the revised working capital requirement and interest computed as per the regulations is summarized in the table below:

Table 23: Interest on Working Capital for FY 2018-19 (Rs. Crores)

Particulars	Approved in T.O. dated 29th March 2018	Estimated
Receivables equivalent to 1 month of expected revenue from sale of electricity at prevailing rates	29.72	30.61
Maintenance of spares at 1% of historical costs of fixed assets	22.22	21.16
O&M Expenses for one month	9.75	12.58
Amount held as Security Deposit in Cash	0	0.00
Total Working Capital after deduction of Consumer Security Deposit	61.69	64.34
SBI Base Rate (%)	12.80%	13.45%
Interest on Working Capital	7.90	8.65

Return on Equity

3.38 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 relatable 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”

3.39. In line with the methodology adopted by DPN for calculation of normative loan as detailed above, the opening equity has also been considered on the same lines. The opening normative equity has been considered at 30% of GFA and the actual assets capitalized for the FY 2017-18 & approved capitalisation for the FY 2018-19 has been considered for arriving at the total normative equity for the year.

3.40. Rate of return on equity is considered 15.50% as per provision 26 of the MYT regulations 2016. The proposed RoE for FY 2018-19 is as below:

Table 24: Estimated Return on Equity for FY 2018-19 (Rs Crores)

Particulars	Approved in T.O. dated 29th March 2018	Estimated
Opening Equity	0.00	634.65
Addition in Equity		31.86
Closing Equity		666.51
Average Equity Amount		650.58
Reasonable return @ 15.50%		100.84

Provision for Bad and Doubtful Debt

3.41. 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.”

3.42. 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 2018-19. Hon'ble Commission may allow the same.

Non-Tariff Income

- 3.43. DPN is not proposing any revision in the Non-Tariff Income approved for the FY 2018-19. The actual shall be submitted for true-up along with the audited accounts. Hon'ble Commission may kindly consider the same.

Table 25: Approved and estimated Non-Tariff Income for FY 2018-19 (Rs Crores)

Particulars	Approved in T.O. dated 29th March 2018	Estimated
Non-Tariff Income	10.35	10.35

Revenue on Current Tariff

- 3.44. The revised estimation of revenue based on the estimated sales and approved tariff for FY 2018-19 is provided in the table below:

Table 26: Approved and Estimated Revenue on Existing Tariff for FY 2018-19 (Rs Crores)

S. No.	Category / Slab of Consumers	Approved in T.O. dated 29th March 2018	Estimated
1	Domestic	105.05	117.14
2	Industrial	38.42	42.41
3	Bulk Supply	86.23	71.35
4	Commercial	75.51	68.01
5	Public water works & sewage	4.12	8.27
6	Public Lighting	3.85	2.66
7	Agriculture	0.02	0.01
8	Single Point Metered Rural	45.24	45.59
9	Single Point Metered Urban	8.68	11.88
10	Total	367.11	367.31

Estimated Aggregate Revenue Requirement and Gap for FY 2018-19

- 3.45. Based on the revised ARR and revenue projection, the revenue deficit for FY 2018-19 shall be as below:

Table 27: Estimated Aggregate Revenue Requirement and Surplus for the FY 2018-19 (Rs Crores)

S. No.	Particulars	Approved in T.O. dated 29th March 2018	Estimated
1	Cost of power purchase	307.84	282.89
2	Cost of Generation	15.90	15.42
3	Operation & Maintenance Expenses	116.95	150.97
4	Transmission charges	43.53	37.31
5	Interest and finance charges		185.68
6	Depreciation	93.91	93.91
7	Interest on working capital	7.90	8.65
8	Return on Equity	-	100.84
9	Total Revenue Requirement (1 to 8)	586.03	875.68
10	Less: Non-Tariff Income	10.35	10.35
11	Net Revenue Requirement (9-10)	575.68	865.33
12	Revenue from retail sales		367.31
13	Revenue from Power Trade		13.50
14	Revenue Surplus/(Gap) for the Year (12 + 13 - 11)		(484.52)

- 3.46. The revenue deficit determined for the FY 2018-19 amounts to Rs. 484.52 Crores and the Hon'ble Commission is requested to approve the same. This revenue deficit has not been carried forward as the same has been funded as budgetary support from the Govt. of Nagaland.

Chapter 4: Approval of the various ARR Components for FY 2019-20

- 4.1. The Hon'ble Commission in the MYT Order had approved ARR for the Control Period FY 2017-18 to FY 2019-20 as per the NERC MYT Regulations, 2016.
- 4.2. The petitioner is hereby filing the review of ARR for FY 2019-20 and Tariff Proposal for the year based on the changes in uncontrollable parameters i.e. sales, power purchase, etc. as per the MYT framework and request the Hon'ble Commission to consider the revision in the ARR based on the actual of FY 2017-18 and 6 months actual for FY 2018-19. The section below covers each parameter in detail along with justification for revision.

Revised Projections for Number of Consumers, Connected Load and Energy sales

- 4.3. The number of consumers, connected load & energy sales for the FY 2019-20 has been projected based on CAGR of actual figures for the FY 2011-12 to FY 2016-17. The CAGR for past five/three/two/one-year growth have been applied year over year appropriately on the actual figures for the FY 2017-18 to arrive at the projected number of consumers, connected load & Energy sales for the FY 2019-20. The calculation of CAGR & revised projection of number of consumers, connected load & energy sales is provided in Tables below.

Table 28: Calculation of CAGR for Number of consumers

S. No.	Categories	FY12	FY13	FY14	FY15	FY16	FY17	CAGR for 5 Years	CAGR for 3 Years	CAGR for 1 Years
1	Domestic including BPL	1,72,846	1,80,000	1,93,672	2,09,019	2,42,270	2,51,173	7.76%	9.05%	3.67%
2	Commercial	17,612	18,800	18,836	19,181	19,846	21,968	4.52%	5.26%	10.69%
3	Industrial	2,050	2,400	2,426	2,604	2,896	4,677	17.93%	24.46%	61.50%
4	Public Lighting	592	600	600	600	600	621	0.96%	1.15%	3.50%
5	Public Water Works	38	30	30	30	30	34	-2.20%	4.26%	13.33%
6	Irrigation & Agriculture	2	2	2	1	1	1	-12.94%	-20.63%	0.00%
7	Bulk Supply	600	700	718	775	1,050	1,500	20.11%	27.84%	42.86%
8	Total	1,93,740	2,02,532	2,16,284	2,32,210	2,66,693	2,79,974			

Table 29: Category wise Number of Consumers considered for FY 19-20

S. No.	Categories	17-18 (Actual)	CAGR Used	18-19 (Estimated)	19-20 (Projected)
1	Domestic including BPL	2,58,429	7.76%	2,78,486	3,00,100
2	Commercial	22,071	4.52%	23,068	24,111
3	Industrial	4,690	17.93%	5,531	6,523
4	Public Lighting	621	0.96%	627	633
5	Public Water Works	38	0.00%	38	38
6	Irrigation & Agriculture	1	0.00%	1	1
7	Bulk Supply	1,522	20.11%	1,828	2,196
8	Total	2,87,372		3,09,580	3,33,602

It is submitted that the Hon'ble Commission may kindly consider and approve the number of consumers as projected above.

Table 30: Calculation of CAGR for Connected load

S. No.	Categories	FY12	FY13	FY14	FY15	FY16	FY17	CAGR for 5 Years	CAGR for 3 Years	CAGR for 1 Years
1	Domestic including BPL	76,000	85,000	88,000	95,000	1,01,200	1,02,300	6.12%	5.15%	1.09%
2	Commercial	10,800	12,500	12,800	14,460	15,724	17,200	9.75%	10.35%	9.39%
3	Industrial	7,200	8,200	8,500	10,225	11,054	11,400	9.63%	10.28%	3.13%
4	Public Lighting	8,000	8,000	8,000	8,000	8,000	8,000	0.00%	0.00%	0.00%
5	Public Water Works	710	710	750	750	750	750	1.10%	0.00%	0.00%
6	Irrigation & Agriculture	20	20	20	10	10	10	-12.94%	-20.63%	0.00%
7	Bulk Supply	20,000	22,000	22,000	27,000	29,400	31,400	9.44%	12.59%	6.80%
8	Total	1,22,729	1,36,430	1,40,070	1,55,446	1,66,137	1,71,059			

Table 31: Category wise Connected Load considered for FY19-20

S. No.	Categories	17-18 (Actual)	CAGR Used	18-19 (Estimated)	19-20 (Projected)
1	Domestic including BPL	1,03,198	6.12%	1,09,518	1,16,224
2	Commercial	17,266	9.75%	18,950	20,799
3	Industrial	11,418	9.63%	12,517	13,722
4	Public Lighting	8,000	0.00%	8,000	8,000
5	Public Water Works	750	1.10%	758	767
6	Irrigation & Agriculture	10	0.00%	10	10
7	Bulk Supply	31,468	9.44%	34,439	37,690
8	Total	1,72,110		1,84,192	1,97,212

It is submitted that the Hon'ble Commission may kindly consider and approve the connected load as projected above.

Table 32: Calculation of CAGR for Energy sales

S. No.	Categories	FY12	FY13	FY14	FY15	FY16	FY17	CAGR for 5 Years	CAGR for 3 Years	CAGR for 2 Years	CAGR for 1 Years
1	Domestic including BPL	212.36	232.53	269.80	298.51	284.48	342.00	10.00%	8.23%	7.04%	20.22%
2	Commercial	34.72	39.87	52.99	64.68	82.64	82.58	18.92%	15.94%	12.99%	-0.07%
3	Industrial	14.48	17.82	25.15	51.29	63.36	61.29	33.45%	34.57%	9.31%	-3.26%
4	Public Lighting	4.96	5.27	4.90	9.48	11.00	14.60	24.10%	43.90%	24.10%	32.73%
5	Public Water Works	2.44	3.07	3.10	4.67	4.59	9.24	30.51%	43.91%	40.66%	101.31%
6	Irrigation & Agriculture	0.03	0.04	0.02	0.02	0.02	0.02	-7.79%	0.00%	0.00%	0.00%
7	Bulk Supply	48.46	51.48	64.90	81.52	102.84	100.10	15.61%	15.54%	10.81%	-2.66%
8	Outside state	63.69	30.97	23.81	12.07	23.68	25.00	-17.06%	1.64%	43.92%	5.57%
9	Total	381.14	381.05	444.67	522.24	572.60	634.83				

Table 33: Category wise Energy Sales considered for FY 19-20

S. No.	Categories	17-18 (Actual)	CAGR Used	18-19 (Estimated)	19-20 (Projected)
1	Domestic including BPL	348.60	8.23%	377.27	408.30
2	Commercial	84.88	15.94%	98.41	114.09
3	Industrial	64.29	9.31%	70.28	76.82
4	Public Lighting	15.80	24.10%	19.61	24.33
5	Public Water Works	10.56	30.51%	13.78	17.99
6	Irrigation & Agriculture	0.02	0.00%	0.02	0.02
7	Bulk Supply	102.20	10.81%	113.25	125.49
8	Outside state	29.52	0.00%	29.52	29.52
9	Total	655.87		722.14	796.58

Table 34: Energy Sales for FY 19-20 (In Mus)

S. No.	Categories	Approved in T.O. dated 28th March 2017	Projected
1	Domestic including BPL	316.28	408.30
2	Commercial	120.99	114.09
3	Industrial	110.81	76.82
4	Public Lighting	16.11	24.33
5	Public Water Works	7.85	17.99
6	Irrigation & Agriculture	0.05	0.02
7	Bulk Supply	150.57	125.49
8	Power Trading		29.52
	Total	722.65	796.58

In view of the above submissions it is requested that the Hon'ble Commission may kindly approve the energy sales of 796.58 Mus for the FY 2019-20 as projected.

Energy Availability and Power Purchase Quantum

- 4.4. Since, DPN does not have any generation capacity of its own, except for 24 MW Likhimro HEP, it relies entirely on the allocation of power from the Central Generating Stations like NTPC, NHPC, NEEPCO & OTPC. The current firm and unallocated power allocation from the various Central Generating Stations have been considered while projecting the power purchase from various generating stations.
- 4.5. The Energy availability to DPN from various plants is considered on the below mentioned methodology
- The current firm and unallocated power allocation from the various Central Generating Stations have been considered as per the recent revised allocation statement issued by Northern Regional Power Committee. Current allocation from different plants to DPN has been considered for the availability to DPN for FY 2019-20.
 - The generation units available from each plant are computed considering the availability from the plants during the FY 2017-18 & H1 of FY 2018-19.
 - The deficit in energy is proposed to be met through short term power.
- 4.6. Based on the above assumptions and methodology, the power availability to DPN from various generating stations during FY 2019-20 is as summarized below:

Table 35 Energy Available from different plants for FY 2019-20

S. No.	Source	Name of Project	Type	Capacity	Total Avg Entitlement in %	Entitlement in MW
1	NTPC	Farakka STPS	Coal	1600.00	0.43	6.88
2		Kahalgaon STPS	Coal	840.00	0.42	3.53
3		Talcher STPS	Coal	1000.00	0.42	4.20
4		BGTTP	Coal	250.00	4.93	10.70
5	NHPC	Loktak HEP	Hydel	105.00	6.44	6.76
6	NEEPCO	DOYANG HEP	Hydel	75.00	17.97	13.48
7		AGBPP	Gas	291.00	5.81	16.91
8		AGTTP	Gas	84.00	5.74	4.52
9		KHANDONG HEP	Hydel	50.00	6.65	3.33
10		KOPILI HEP	Hydel	200.00	6.15	12.30
11		RANGANADI HEP	Hydel	405.00	5.34	21.63
12		KOPILI - II HEP	Hydel	25.00	5.74	1.44
13		PARE	Hydel	110.00	5.40	5.94
14	OTPC	Palatana	Gas	726.00	3.72	27.00
15	LHEP	Own Generation	Hydel	24.00	100.00	24.00

4.7. Based on the above entitlements and reasonable assumptions, the energy availability to DPN from various generating stations during the FY 2019-20 is as summarized below:

Table 36: Energy Available from different plants for FY 2019-20 (in MUs)

S. No.	Source	Name of Project	Type	Capacity	Total Avg Entitlement in %	Entitlement in MW
1	NTPC	Farakka STPS	Coal	1600.00	0.43	6.88
2		Kahalgaon STPS	Coal	840.00	0.42	3.53
3		Talcher STPS	Coal	1000.00	0.42	4.20
4		BGTTP	Coal	250.00	4.93	10.70
5	NHPC	Loktak HEP	Hydel	105.00	6.44	6.76
6	NEEPCO	DOYANG HEP	Hydel	75.00	17.97	13.48
7		AGBPP	Gas	291.00	5.81	16.91
8		AGTTP	Gas	84.00	5.74	4.52
9		KHANDONG HEP	Hydel	50.00	6.65	3.33
10		KOPILI HEP	Hydel	200.00	6.15	12.30
11		RANGANADI HEP	Hydel	405.00	5.34	21.63
12		KOPILI - II HEP	Hydel	25.00	5.74	1.44
13		PARE	Hydel	110.00	5.40	5.94
14	OTPC	Palatana	Gas	726.00	3.72	27.00
15	LHEP	Own Generation	Hydel	24.00	100.00	24.00

Power Purchase from Renewable Sources/RECs

4.8. DPN is also required to procure power from renewable sources for meeting the RPO as per the renewable regulations. It is submitted that DPN procures power from its own generating station – Likhimro HEP to meet the Non-Solar RPO. However, with regard to Non-solar RPO as submitted in the APR section above, DPN does not have tied up sources of solar power as on date. However, new solar projects in the state are being developed and procurement from these sources shall help DPN meet the Solar RPO requirement. In view of the above, it is requested that the Commission may allow DPN to meet the Solar & Non-solar RPO through Non-Solar sources. Further, gaps may be allowed to be carried forward to be met in future years when solar sources are commissioned. The projected cumulative RPO compliance for the FY 2019-20 is provided below.

4.9. The RPO targets for the control period to be achieved by the DPN during FY 2019-20 as specified in the Regulations is as follows:

Table 37: RPO for FY 2019-20

FY	Solar RPO (%)	Non-Solar RPO (%)
2019-20	2.00	6.60

4.10. The summary of projected Solar and Non-Solar compliance by DPN for FY 2019-20 is summarized in the table below:

Table 38: Calculation of RPO for FY 2019-20

	Target			Projected (in MUs)	Compliance (in MUs) (4-5)
	RPO	Revised Sales (Excluding Hydro)	RPO (in MUs) (3X2)		
1	2	3	4	5	6
Solar	2.00%	406.60	8.13	0.00	8.13
Non-Solar	6.60%	406.60	26.84	98.40	-71.56
Total	8.60%		34.97	98.40	-63.43

- 4.11. It is submitted that the Hon'ble Commission may kindly consider and allow the RPO compliance projections as above.

Power Purchase cost

- 4.12. It is submitted that CERC has issued new Tariff Orders for the period of FY 2014-19 for a number of generating stations based on which the fixed and energy charges from these stations have undergone a change. Therefore, it is important to consider the revised Tariff Orders of these generating stations for projection of power purchase cost.
- 4.13. Also, the actual power purchase cost from other generating sources is available for FY 2017-18 and six months for FY 2018-19. The assumptions considered for projection of power purchase cost from various generating station are detailed below:
- a. The Fixed Cost for each plant is computed based upon the % allocation of the plant capacity to DPN and corresponding annual fixed charges approved for the generating stations as per their recent tariff orders for the control period (FY 2014-19) approved by CERC. For generating plants where tariff orders are still pending, fixed charges from FY 2017-18 have been considered along with escalation of 5% annual escalation.
 - b. The Energy Charges for thermal plant are computed by escalating the variable charges for FY 2017-18 by 5% and multiplying it with the number of available units for the year.
 - c. In case of hydro plants the variable charge has been computed based on the revised annual charges and design energy of the plant
 - d. PGCIL Charges, NERLDC Charges, Reactive Energy charges are computed at an escalation of 5% y-o-y over actuals billed per unit in for FY 2017-18.

- e. Shortfall in power after accounting for energy availability from all stations has been considered to be met from short term sources. The rate of short term power has been considered at Rs. 3.09 per unit.

The projected power purchase cost is as illustrated in the table below:

Table 39: Projected Power Purchase Cost for FY 2019-20 (Rs. Crores)

Plant	Units (in MUs)	Projected Cost (in Rs. Cr.)
Central Sectors		
Farakka STPS	40.79	88.57
Kahalgaon STPS	23.52	
Talcher STPS	29.19	
BGTPP	69.64	
Loktak HEP	55.04	15.12
DOYANG HEP	15.48	82.36
AGBPP	79.62	
AGTPP	34.22	
KHANDONG HEP	16.75	
KOPILI HEP	63.34	
RANGANADI HEP	73.94	
KOPILI - II HEP	6.31	
AGTPP 2	-	
Palatana	131.09	48.67
Others		
GEPL		
PTC		
APPCPL		
DEVIATION/SHORTTERM	288.42	89.24
Free Power	31.19	0.00
Total	958.55	323.96
Cost of REC certificates		
Grand Total	958.55	323.96

- 4.14. The other charges comprising of inter-state transmission charges, scheduling charges etc. are projected considering an increase of 5% y-o-y over the actual cost for FY 2017-18. The projected charges are as summarized in the table below:

Table 40: Transmissions and Other Charges projected for FY 2019-20 (Rs. Crore)

Particulars	Approved in T.O. dated 28th March 2017	Revised/ Proposed
PGCIL Charges	44.73	38.66
SLDC Charges	0.98	0.52
Total	45.71	39.18

- 4.15. Total cost projected for FY 2019-20 with respect to approved power purchase cost is as provided in table below. The Hon'ble Commission is requested to approve the same.

Table 41: Projected Power Purchase Cost for FY 2019-20 (Rs. Crores)

Particulars	Approved in T.O. dated 28th March 2017	Revised/ Proposed
Total Power Purchase Cost	325.14	323.96

T&D Losses and Energy Requirement

- 4.16. As per the Tariff Order dated 28-03-2017 the T&D loss as approved by the Commission for FY 2019-20 is 24% (distribution loss – 21% & Intra-state Transmission loss -3%). DPN is dedicated for reducing the intra-state T&D losses in the state, however, as discussed in the previous chapter, it is submitted that while the sales have increased in the last three years, losses remained stagnant without much improvement due to majority of the increase in the sales in the LT category. DPN submits to the Hon'ble Commission that the losses have been in the range of 33.75% to 24.50% during the period of FY 2012-13 to FY 2017-18. DPN has restricted the T&D loss for the FY 2017-18 to 24.50%. It is difficult to bring the losses substantially from this level.

- 4.17. One of the primary reasons of stagnation in losses is the dominance of domestic category in the sales mix. In spite of an increase in overall sale, maximum increase in sales have happened in the domestic category resulting in a higher proportion of the overall sales as compared to industrial consumers where the sales have remained stagnant leading to a reduction in overall share.
- 4.18. It is submitted to the Hon'ble Commission that T&D reduction is difficult because of topographical conditions apart from the fact that maximum in demand is to domestic category and the scope for addition of HT consumers is limited or negligible. As a result the sales to such categories is generally restricted leading to stagnation of T&D losses.
- 4.19. With sales mostly to LT consumers, DPN feels that further reduction in the T&D loss in the state shall be possible after implementation of its various IT/strengthening schemes.
- 4.20. In view of the above, it is submitted that the Hon'ble Commission may kindly consider the above submission while deciding the T&D loss trajectory.
- 4.21. The Transmission losses in the interstate circuit is considered at the levels approved by the Hon'ble Commission in the MYT order for the FY 2019-20. The Hon'ble Commission may kindly consider & approve the same.

Table 42: Energy Balance for FY 2019-20

Particulars	Approved in T.O. dated 28th March 2017	Projection
Energy Sales	722.65	796.58
Distribution Loss %	21.00%	21.00%
Distribution Loss (MUs)	192.10	211.75
Total Energy Requirement	914.75	1,008.32
Energy Availability		
Own Generation	90.00	98.40
Power from ER	106.58	93.50
ER Total Loss (%)	2.26%	2.26%
Regional Loss (MUs)	2.41	2.11
Net Energy from ER (MU's)	104.17	91.39
Power from NER	613.67	576.63
Total Power purchased	717.84	668.02
NER Tr. Loss %	2.66%	2.66%
NER Tr. Loss	19.09	15.34
Net Energy Available	698.75	652.68
Over Drawn/Shortterm	154.30	288.42
Total Energy Available at state periphery	943.04	1,039.51
Intra State Tr. Loss @3%	28.29	31.19
Net Energy available for Sale	914.75	1,008.32
Demand Supply (Gap) / Surplus	0.00	0.00

Cost of Generation

4.22. DPN has it's won 24 MW Likimro HEP. The cost of generation approved by the Hon'ble Commission and revised estimates for the FY 2019-20 is provided below. Hon'ble Commission may kindly consider and approve the same.

Table 43: Approved and Projected Cost of Generation for FY 2019-20 (Rs Crores)

Particulars	Approved in T.O. dated 28th March 2017	Projected
Cost of Generation	16.81	16.96

Operations and Maintenance Expenses

- 4.23. Operation & Maintenance Expenses consists of three elements viz. Employee Expenses, A&G Expenses and R&M Expenses. As per the MYT Regulations, O&M expenses shall be treated as controllable parameter and shall not be revised except those attributable to directions of the Commission.
- 4.24. Accordingly, DPN has revised employee expenses and A&G expenses & R & M for FY 2019-20 as approved by the Hon'ble Commission in the MYT Order based on the actual O&M for the FY 2017-18 & H1 of FY 2018-19. The O&M expenses for the FY 2019-20 is provided in the table below:

Table 44: Approved and Projected O&M Expenses for FY19-20 (Rs Crores)

Particulars	Approved as per T.O. dated 28th March 2017	Projection
Employee Expense	113.78	128.48
R&M Expense	6.39	34.92
A&G Expense	3.46	2.67
Total O&M Expenses	123.63	166.07

- 4.25. The Hon'ble Commission is requested to approve the total O&M expenses as computed in the above table for the FY 2019-20.

GFA and Depreciation

- 4.26. DPN has considered the opening GFA of Rs. 2115.50 Crores for the FY 2018-19 as submitted in the APR section above and considered the approved additions of Rs. 106.19 Crores for the FY 2018-19 to arrive at the opening GFA of Rs. 2221.69 Crores for the FY 2019-20.
- 3.39 For the FY 2019-20, approved capitalization as per the MYT Order has been considered and any variation shall be submitted at the time of truing-up for the year.
- 3.40 DPN requests the Hon'ble Commission to approve the fixed assets in the table below:

Table 45: Approved and Projected Assets Addition for FY 2019-20 (Rs Crores)

Particulars	Approved in T.O. dated 28th March 2017	Revised/ Proposed
Opening GFA	2,221.69	2,221.69
Asset Capitalized	906.90	906.90
Closing GFA	3,128.59	3,128.59

- 3.41 The petitioner submits that it has initiated activities with respect to the preparation/up-dation of Fixed Asset Register for the FY 2016-17, FY 2017-18 and FY 2018-19 request the Hon'ble Commission to approve the same as and when they are prepared.
- 3.42 Depreciation has been calculated on the basis of the opening GFA & proposed additions during the FY 2019-20 at the rate prescribed in the MYT Regulations. The approved and revised depreciation for FY 2019-20 is provided below:

Table 46: Approved and Projected Depreciation for FY 2019-20 (Rs Crores)

Particulars	Approved as per T.O. dated 28th March 2017	Revised/ Proposed
Depreciation for the year	97.20	97.20

Interest on Loan

- 3.43 Since, there is no actual loan for DPN the interest at the SBI Bank rate of 13.45% as on April 1st, 2018 has been applied on the average normative debt in order to project the interest on normative loans for FY 2019-20. The Hon'ble Commission is requested to approve the interest on normative loans as computed in the table below:

Table 47: Projected Interest on Normative Loan for FY 2019-20 (Rs Crores)

Particulars	Approved in T.O. dated 28th March 2017	Revised/ Proposed
Opening Normative Loan	0.00	1280.15
Add: Normative Loan during the year (70% of proposed capitalization)		634.83
Less: Normative Repayment		97.20
Closing Normative Loan		1817.78
Average Normative Loan		1548.97
Rate of Interest		13.45%
Interest on Normative Loan including bank charges		208.34

Interest on Working Capital

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

- e. Operation and maintenance expenses for one month; plus
- f. Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus
- g. Receivables equivalent to one (1) month of the expected revenue from sale of electricity at the prevailing tariffs; minus
- h. 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;

3.45 The SBI Advance rate as on 1st April, 2018 13.45% is considered for computation of interest on working capital. The DPN requests the Commission to approve the revised working capital requirement and interest computed as per the regulations is summarized in the table below:

Table 48: Interest on Working Capital for FY 2019-20 (Rs. Crores)

Particulars	Approved in T.O. dated 28th March 2017	Revised/ Proposed
Receivables equivalent to 1 month of expected revenue from sale of electricity at prevailing rates	51.89	33.92
Maintenance of spares at 1% of historical costs of fixed assets	19.44	22.22
O&M Expenses for one month	11.70	13.84
Amount held as Security Deposit in Cash	0	0.00
Total Working Capital after deduction of Consumer Security Deposit	83.04	69.97
SBI Base Rate (%)	14.75%	13.45%
Interest on Working Capital	12.25	9.41

Return on Equity

3.46 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 relatable 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”

3.47. In line with the methodology adopted by DPN for calculation of normative loan as detailed above, the opening equity has also been considered on the same lines. The opening normative equity has been considered at 30% of GFA and the actual assets capitalized for the FY 2017-18 & approved capitalisation for the FY 2018-19 & FY 2019-20 has been considered for arriving at the total normative equity for the year.

3.48. Rate of return on equity is considered 15.5% as per provision 26 of the MYT regulations 2016. The proposed RoE for FY 2019-20 is as below:

Table 49: Projected Return on Equity for FY 2019-20 (Rs Crores)

Particulars	Approved in T.O. dated 28th March 2017	Revised/ Proposed
Opening Normative Equity	0.00	666.51
Addition During the year		272.07
Closing Normative Equity		938.58
Average Normative Equity		802.54
Return on Equity@15.50%		124.39

Provision for Bad and Doubtful Debt

3.49. 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."

3.50. 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 2019-20. Hon'ble Commission may allow the same.

Non-Tariff Income

3.51. DPN is not proposing any change in the Non-tariff income approved by the Hon'ble Commission for FY 2019-20. The proposed Non-tariff Income for the FY 2019-20 as shown in the below table:

Table 50: Projected Non-Tariff Income for FY 2019-20 (Rs. Crores)

Particulars	Approved in T.O. dated 28th March 2017	Revised/ Proposed
Non-Tariff Income	10.87	10.87

Aggregate Revenue Requirement of FY 2019-20

4.46 Based on the above discussion, the revised projection for Aggregate Revenue Requirement for FY 2019-20 is as given in the table below:

Table 51: Projected Aggregate Revenue Requirement for FY 2019-20 (Rs. Crores)

S. No.	Particulars	Approved in T.O. dated 28th March 2017	Revised/ Proposed
1	Cost of power purchase	325.14	323.96
2	Cost of Generation	16.81	16.96
3	Operation & Maintenance Expenses	123.63	166.07
4	Transmission charges	45.71	39.18
5	Interest and finance charges	-	208.34
6	Depreciation	97.20	97.20
7	Interest on working capital	12.25	9.41
8	Return on Equity	-	124.39
9	Total Revenue Requirement (1 to 8)	620.74	985.51
10	Less: Non-Tariff Income	10.87	10.87
11	Net Revenue Requirement (9-10)	609.86	974.64
12	Revenue from retail sales		407.01
13	Revenue from Power Trade		13.50
14	Revenue Surplus/(Gap) for the Year (12 + 13 - 11)		(554.13)

Revenue based on Existing Tariff

4.47 Based on the revised projection of sale and the existing tariff approved by the Commission as per the Tariff Order for the FY 2018-19, the estimated revenue for FY 2019-20 is summarized in table below:

Table 52: Revised Projections for Revenue on Existing Tariff for FY 2019-20 (Rs Crores)

S. No.	Category / Slab of Consumers	Projected
A	Domestic	126.77
B	Industrial	46.36
C	Bulk Supply	79.06
D	Commercial	78.85
E	Public water works & sewage	10.79
F	Public Lighting	2.97
H	Agriculture	0.01
I	Single Point Metered Rural	49.34
J	Single Point Metered Urban	12.85
	Total	407.01

Revenue Gap for FY 2019-20

- 4.48 Based on the revised ARR and revenue for FY 2019-20, the expected revenue gap is summarized in table below:

Table 53: Proposed Revenue Gap on Existing Tariff for FY 2019-20 (Rs. Crore)

S. No.	Particulars	FY 2019-20
1	Net Revenue Requirement	974.64
2	Revenue from retail sales at Existing Tariff	407.01
3	Revenue from Power Trade	13.50
4	Revenue Surplus/(Gap) for the Year (2+3-1)	(554.13)

- 4.49 **The above revenue gap for FY 2019-20 only and does not include any revenue gap for true-up of FY 2014-15 and APR for FY 2018-19. The proposed treatment for coverage of the revenue gap along with carrying cost is detailed in the subsequent Chapter.**

Chapter 5: Revenue Gap and Basis of proposal for revision of Tariff

- 5.1. The revenue gap on account of revised ARR for the FY 2019-20 is Rs. 554.13 Crores
- 5.2. The recovery of the above revenue gap through tariff hike shall lead to tariff shock and make electricity unaffordable for public. Accordingly, DPN proposes to partial recovery of Revenue Gap through tariff hike. The balance of the revenue gap shall be funded through the budgetary support of the Government of Nagaland.
- 5.3. In accordance with the above submission, DPN has proposed revision in retail tariff for various categories for FY 2019-20.
- 5.4. 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.
- 5.5. The power purchase cost is primary cost of supply and constitutes major proportion of Aggregate Revenue Requirement(ARR) of the department. Further, power purchase cost is directly proportional to the energy sale. Hence, recovery of power purchase cost is essential to enable the department to sustain & meet the rising power demand in the state.
- 5.6. Accordingly, DPN proposes to recover at-least the average cost of power purchase for per unit energy sale. Therefore, it is proposed to increase the tariff of lowest slab in all categories so as to recover the average cost of power for per unit sale. The average cost of power purchase for per unit supply based on the power purchase cost for the FY 2017-18 is Rs. 4.53.
- 5.7. Therefore the average cost of Power Purchase for per unit sale which is Rs. 4.53 is used as the basic tariff slab.

- 5.8 In view of the above, the tariff proposal for FY 2019-20 for individual categories is given below along with the comparison of existing and proposed energy charges.
- 5.9 The table below presents the existing and proposed tariff for various categories.

Table 54: Existing and Proposed Tariff

SI No.	CATEGORY		Existing Rate Rs./kwh	Proposed Rate Rs./kwh
1	2		3	4
A	1	CATEGORY 'A' DOMESTIC		
		(a) 0 to 30 kwh	3.65	4.50
		(b) 31 to 100 kwh	4.85	5.40
		(c) 101 to 250 kwh	5.95	6.00
		(d) > 250 kwh	6.95	7.00
	2	CATEGORY 'B' INDUSTRIAL		
		(a) < 500 kwh	5.25	5.80
		(b) 501 to 5000 kwh	6.30	6.50
		(c) > 5000 kwh	7.20	7.20
	3	CATEGORY 'C' BULK	6.30	6.30
	4	CATEGORY 'D' COMMERCIAL		
		(a) < 60 kwh	6.70	7.00
		(b) 61 to 240 kwh	7.90	8.10
		(c) > 240 kwh	9.00	9.20
	5	CATEGORY 'E' P.W.W.	6.00	6.60
	6	CATEGORY 'F' Public Light	To be recovered from consumers *	To be recovered from consumers *
7	CATEGORY 'G' INTERSTATE	5.70	6.00	
8	CATEGORY 'H' AGRICULTURE	3.00	4.70	
9	CATEGORY 'I' TEMPORARY CONNECTION	DLF Rs.10.00 Others Rs.13.00	DLF Rs.11.00 Others Rs. 14.00	
10	Kutir Jyoti(point)	Same as DLF	Same as DLF	
11	SINGLE POINT METERED RURAL	3.60	5.00	
12	SINGLE POINT METERED URBAN	4.65	5.50	
	*	Charges for public lighting have to be recovered from the Consumers of Domestic, Commercial, Industrial and Bulk categories at the rates shown below:		
		Domestic	Rs. 10 per connection / month	Rs. 10 per connection / month
		Commercial	Rs. 15 per connection / month	Rs. 15 per connection / month
54 Page		Industrial	Rs. 20 per connection / month	Rs. 20 per connection / month
		Bulk Supply	Rs. 25 per connection / month	Rs. 25 per connection / month

The Revenue from proposed tariff at the projected energy sales for the FY 2019-20 is provided in the below.

Table 55: Revenue from Proposed Tariff (Rs. Crores)

S. No.	Category / Slab of Consumers	Projected
A	Domestic	137.33
B	Industrial	48.68
C	Bulk Supply	79.06
D	Commercial	82.14
E	Public water works & sewage	11.87
F	Public Lighting	2.97
G	Agriculture	0.01
H	Single Point Metered Rural	68.53
I	Single Point Metered Urban	15.20
	Total	445.79

- 5.4. The Additional Revenue from proposed tariff at the projected energy sales for the FY 2019-20 is provided in the below.

Table 56: Additional Revenue from Proposed Tariff (Rs. Crores)

S. No.	Particular	2019-20
		Projected
1	Revenue from Existing Tariff	407.01
2	Revenue from Proposed Tariff	445.79
3	Addiotional Revenue from Proposed Tariff (2-1)	38.78

- 5.5. The recovery of the Revenue Gap based on the proposed tariff is detailed in the table below.

Table 57: Revised Revenue Gap based on Proposed Tariff (Rs. Crore)

Particulars	FY 2019-20
ARR for FY 2019-20	974.64
Revenue at Existing Tariff	407.01
Revenue from Power Trade	13.50
Surplus/ (Gap) for the year	(554.13)
Additional Revenue from Proposed Tariff	38.78
Surplus/ (Gap)	(515.34)

- 5.6. In view of the above submissions, it can be seen that the tariff structure proposed by DPN for the FY 2019-20 shall recover 45.74% of the ARR for the FY 2019-20.
- 5.7. In light of the above submission the DPN requests the Hon'ble Commission to approve the revised tariff proposals as below.**

Table 58: Tariff Schedule

SI No.	CATEGORY	Proposed Rate Rs./kwh
1	2	3
A	1 CATEGORY 'A' DOMESTIC	
	(a) 0 to 30 kwh	4.50
	(b) 31 to 100 kwh	5.40
	(c) 101 to 250 kwh	6.00
	(d) > 250 kwh	7.00
	Monthly minimum charges - Rural	150.00 pm/kw of contract demand or part thereof
	Monthly minimum charges - Urban	200.00 pm/kw of contract demand or part thereof
	2 CATEGORY 'B' INDUSTRIAL	
	(a) < 500 kwh	5.80
	(b) 501 to 5000 kwh	6.50
	(c) > 5000 kwh	7.20
	Monthly minimum charges	200.00 pm/kv of contract demand or part thereof
	3 CATEGORY 'C' BULK	6.30
	Monthly minimum charges	200.00 pm/kva of contract demand or part thereof
	4 CATEGORY 'D' COMMERCIAL	
	(a) < 60 kwh	7.00
	(b) 61 to 240 kwh	8.10
	(c) > 240 kwh	9.20
	Monthly minimum charges	200.00 pm/kw of contract demand or part thereof
	5 CATEGORY 'E' P.W.W.	6.60
	Monthly minimum charges	100.00 pm/kva or part thereof
	6 CATEGORY 'F' Public Light	To be recovered from consumers *
	7 CATEGORY 'G' INTERSTATE	6.00
	8 CATEGORY 'H' AGRICULTURE	4.70
	Monthly minimum charges	75.00 pm/HP or part thereof
	9 CATEGORY 'I' TEMPORARY CONNECTION	DLF Rs.11.00 Others Rs. 14.00
	10 Kutir Jyoti(point)	Same as DLF
	11 SINGLE POINT METERED RURAL	5.00
	12 SINGLE POINT METERED URBAN	5.50
	*	Charges for public lighting have to be recovered from the Consumers of Domestic, Commercial, Industrial and Bulk categories at the rates shown below:
	Domestic	Rs. 10 per connection / month
	Commercial	Rs. 15 per connection / month
57 Page	Industrial	Rs. 20 per connection / month
	Bulk Supply	Rs. 25 per connection / month

B	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/kwhpm or part thereof
G	BILLING PERIODICALLY		Monthly
H	CHARGES OF POLES USAGE FOR ADVERTISMENT		Rupees
	1	Charges for application and agreement forms	100.00
	2	Charges towards dismantling of hoardings/banners	300.00
	3	The pole rental charges for advertisements: -	Rs./per month
		a. Category I-Commercial area (Max size 3'x2')	100
		b. Category II-Residential area (Max size 3'x2')	60
		c. Category III-National Highway (Max size 3'x2') (Outside the city/town limit)	40

Chapter 6: Tariff Schedule for Prepaid Metered Consumers

6.1 It is submitted that the Department has introduced prepaid metering as pilot scheme for selected subdivisions. 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.

6.2 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 inprinciple separate Tariff Schedule is proposed for the prepaid metered consumers. It is submitted that Hon'ble Commission may kindly consider & approve the same.

Table 59: Tariff Schedule for Prepaid Metered Consumers

SI No.	CATEGORY	Proposed Rate Rs./kwh
		3
1	CATEGORY 'A' DOMESTIC	
	All Units	5.00
2	CATEGORY 'B' INDUSTRIAL	
	All Units	5.80
3	CATEGORY 'C' BULK	
	All Units	6.30
4	CATEGORY 'D' COMMERCIAL	
	All Units	7.40
5	CATEGORY 'H' AGRICULTURE	
	All Units	4.70

- Meter Rent: Same as post-paid.