ORDER

ON

TRUE UP FOR THE F.Y. 2021-22,

REVIEW FOR THE F.Y. 2022-23 &

AGGREGATE REVENUE REQUIREMENT

AND

TARIFF FOR THE F.Y. 2023-24

For

Power Department,

Government of Sikkim

March, 2023

Sikkim State Electricity Regulatory Commission
Gangtok, Sikkim

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ABBREVIATIONS

Abbreviation	Description
A&G	Administration & General
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal For Electricity
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
Crs	Crore
D/E	Debt Equity
E&PDS	Energy & Power Department, Govt. of Sikkim
EHT	Extra High Tension
ER	Eastern Region
FAC	Fuel Adjustment Costs
FDR	Fixed Deposits Receipts
FSTPS	Farakka Super Thermal Power Station
FY	Financial Year
GFA	Gross Fixed Assets
HP	Horse Power
HT	High Tension
SSERC	Sikkim State Electricity Regulatory Commission
KHSTPS	Kahalgaon Thermal Power Station
KV	Kilovolt
KVA	Kilo Volt Amps
kWh	Kilo Watt hour
L.T.M.D.	Low Tension Maximum Demand
LNG	Liquefied Natural Gas
LT	Low Tension
LTC	Leave Travel Concession
MU	Million Units
MVA	Million Volt Amps
MW	Mega Watt
NHPC	National Hydroelectric Power Corporation Ltd.
O&M	Operation & Maintenance
PGCIL	Power Grid Corporation of India Limited
PLF	Plant Load Factor
PLR	Prime Lending Rate
PTC	Power Trading Corporation of India Ltd.
R&M	Repairs and Maintenance
RoR	Rate of Return
Rs.	Rupees
₹	Rupees
S/s	Sub Station

SBI	State Bank of India
SERC	State Electricity Regulatory Commission
SPV	Special Purpose Vehicle
T&D	Transmission & Distribution
TSTPS	Talcher Super Thermal Power Station
UI	Unscheduled Interchange
WBSEDCL	West Bengal State Electricity Distribution Company Ltd.
MYT	Multi Year Tariff

1. BACKGROUND

Before the
Sikkim State Electricity Regulatory Commission for the State of Sikkim, Gangtok

Case No:P-01/PDS/2022

In the matter of

Petition for True Up for the F.Y. 2021-22, Review for the F.Y. 2022-23, Annual Revenue Requirement (ARR) and Tariff for F.Y. 2023-24 filed by the Power Department, Government of Sikkim, herein after referred to as 'PDS'---Petitioner.

Coram

Shri K. B. Kunwar, Chairperson

ORDER

Date of Order: 21st March, 2023.

1. INTRODUCTION

This order relates to the Petition filed by the Power Department, Government of Sikkim (PDS), the Deemed Distribution Licensee in Sikkim for True-Up for 2021-22, Review for 2022-23 and approval of Tariff for F.Y. 2023-24 in terms of Sikkim State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) (Second Amendment) Regulations, 2017 and Sikkim State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2020.

1.1 SIKKIM STATE ELECTRICITY REGULATORY COMMISSION

Sikkim State Electricity Regulatory Commission (hereinafter referred to as 'Commission') came into existence on 15th November, 2003 after the notification constituting the Commission was issued by the Government of Sikkim in Sikkim Government Extraordinary Gazette Notification No. 28/P/GEN/97/524 dated 15.11.2003. The Commission however became operational from April, 2011.

Section 86 of the Electricity Act, 2003 (36 of 2003) lays down the functions of the State Commission. These functions include: determination of tariff for generation, transmission, distribution and wheeling of electricity (wholesale, bulk or retail), as the case may be within the State. Further, Section 62 (1) of the Act empowers the State Commission to determine tariffs, both in accordance with the provisions of the Act as also under the Regulations framed by the State Regulatory Commission, for supply of electricity by a generating company to a distribution licensee, for transmission of electricity, for wheeling of electricity and retail sale of electricity within the State.

In the discharge of its functions, the Commission is guided by National Electricity Plan, the National Tariff Policy and other Acts/Policies and guidelines issued by the Government of India and the State Government from time to time.

1.2 POWER DEPARTMENT, GOVERNMENT OF SIKKIM

Power Department, Government of Sikkim is a State Government Department and is engaged in Distribution, Transmission and Generation & Retail Supply of Electricity in the State of Sikkim. PDS is the sole Distribution Licensee in the State and is a Deemed Distribution as per the provisions of the Electricity Act, 2003.

1.3 MULTI YEAR TARIFF REGULATIONS

The Commission had notified the Sikkim State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) (Second Amendment)

Regulations, 2013 on 21st May 2014 whereby the 1st 3-year Control Period for Multi Year Tariff Regime was fixed from F.Y. 2015-16 to F.Y. 2017-18. However, due to various reasons, the ARR and Tariff proposals of the PDS could not be taken up under the Multi Year Tariff Regime. Therefore, the Commission amended the said regulations thereby re-fixing the 1st 3-year Control Period from F.Y .2018-19 to F.Y. 2020-21. Thus, the ARR and Tariff were brought under Multi Year Tariff Regime from the F.Y. 2018-19.

The Commission notified the Sikkim State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2020 on 9th September 2020, for Control Period from F.Y. 2021-22 to F.Y.2023-24.

1.4 FILING OF PETITION BY PDS

The Petition for Truing Up for F.Y. 2021-22, Review for F.Y. 2022-23 and approval of ARR and proposed Tariff for F.Y. 2023-24 was filed by the PDS before the Hon'ble Commission on 23rd November 2022 via letter No. 05/PD/REV/NODAL/2014-15(Part-II)/579 as per the provisions of Section 61, 62 and 64 of the Electricity Act, 2003 and SSERC (Terms and Conditions of Tariff Determination for Generation, Transmission ,Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2020.

The Petition was admitted and registered as Case No. 01/PDS/2022 by the Hon'ble Commission on 28th November 2011. Thereafter, via letter No. 318/SSERC/2017-18/Part-I/328 dated 29.11.2022, the Commission informed the Petitioner that its Petition has been admitted subject to the following conditions: -

i. The Petitioner shall file/submit additional data/information and documents as and when sought by the Commission.
ii. The Petitioner shall provide clarifications/justifications and details of calculations/estimates/projections made/adopted by it for arriving at the figures presented in the petition.
iii. The Petitioner shall appear before the Commission as and when directed by the Commission.

1.5 INTERACTION WITH THE PETITIONER

After admission of the Petition and allotment of case number, the Commission vide its letter No. 318/SSERC/2017-18/Part-I/329 dated 30th November 2022 directed the Petitioner for issue of Public Notice in local newspapers seeking comments and objections from the consumers and other stake holders on the ARR and tariff proposed for F.Y. 2023-24.
During scrutiny of the Petition filed by the PDS, the Commission observed numerous data gaps and directed the PDS to submit additional information/clarifications on the figures and projected/estimated figures presented in the Petition.

The details of communications made by the Commission and the replies/responses received from the Petitioner are as under:

Sl.No	Queries/Clarifications sought by the Commission		Replies/Responses furnished by the Petitioner	
	Letter No/Emai	Date	Letter No/Email	Date
1	Email	27.12.2022	05/PD/Rev/Nodal/2014-15/(Part-II)/587	18.02.2023
2	Email (Part-1)	10.02.2022	Email	18.01.2023
3	Email (Part 2)	10.02.2022	Email	20.02.2023
4	Email	01.03.2023	Email	23.02.2023
5	Email	06.03.2023	Email	09.03.2023

The Commission also directed the Petitioner to appear before the Commission for detailed discussion on the Petition and accordingly a meeting was held with the representatives of the PDS on 28th February 2023. The various aspects of the tariff petition were discussed in detail and the submissions of the PDS were noted by the Commission.

During the meeting, the Commission made numerous observations and sought clarifications/justifications from the PDS. One of the main observations was regarding the "proposal for introduction of charging the Industrial Consumers (HT and LT (Urban/Rural Consumers) on KVAH basis in lieu of exiting KWH basis" and the Commission sought the reasons/justifications and benefits of the proposed change from the PDS.

The representatives of the PDS submitted the following reasons and justifications for the need of introducing KVAH billing in lieu of KWH basis:-

- That almost all the major power consuming industries namely the pharmaceutical companies have installed capacitors and are maintaining very good power factor (above 90 % to unity) and as such the PDS is able to realize the bills for the actual power.
- That there are numerous industries and commercial units like stone crusher plants, welding & fabrication units and other allied units, whose power factor is extremely poor (in the range of 30% to 50%). Due to poor power factor being maintained by these units, the PDS is suffering huge losses.
- The PDS has observed huge revenue losses due to unaccounted energy every year and poor power factor is one of the major reasons for the same.
- With the introduction of KVAH basis of energy measurement, the PDS will be able to collect payments for actual energy and thereby leading to loss reduction and better revenue collection.
- PDS submitted that once billing starts on KVAH basis, the industrial units will be automatically forced to install capacitors or take measures to improve their power factor. PDS further felt that the step will make the industrial units more disciplined so far as power consumption is concerned and will also take steps for judicious use of power, thereby preventing wastage of power.

Some of the other submissions and prayers made by the PDS during the meeting were as under:-

- Being one of the major revenue generators for the State, the PDS is under pressure to improve its revenue collection.
- Funding for new schemes/projects by the Government of India is also linked to performance and loss reduction targets set by the Government of India and as such the PDS has to take all possible steps for improving its financial state.

1.6 PUBLIC HEARING PROCESS

The Commission vide its letter dated 30th November 2022 directed the PDS to issue Public Notice in local newspapers soliciting comments/views and objections of the public and other stake holders on the Petition for approval of ARR and Tariff proposal as required under Section 64 of the Electricity Act, 2003.

PDS issued Public Notices in the local newspapers giving an abridged form of its ARR and Tariff Petition and invited objections, suggestions, comments and views of the members of the public, consumers and stake holders. The PDS had issued the Public Notices in the following newspapers inviting objections, suggestions, comments and views latest by 23.12.2022:

1. **Sikkim Express (English Daily)----------------** 3rd December, 2022
2. **Hamro Varta (Nepali)-----------------------------**3rd December, 2022

The copies of the Tariff petition were made available by the PDS to the general public, consumers and interested persons free of cost at the following offices:

1. Chief Engineer (West) cum Nodal Officer (Revenue), Power Department, Govt. of Sikkim, Kazi Road,Gangtok, East Sikkim.

The ARR and Tariff petition were also uploaded in the official website of the Power Department **"power.sikkim.gov.in"** in downloadable format for the ease of public and stake holders.

1.7 NOTICE FOR PUBLIC HEARING

As required by the provisions of the Electricity Act, 2003, wide publicity was given by the PDS on the ARR and the proposed tariff for F.Y. 2023-24 by issuing 'Public Notice' in local newspapers. The notices were published in the local newspapers on 3rd December' 2022. PDS sought the views/opinions/suggestions and objections of general public, interested parties, stakeholders and the consumers on the proposed ARR and Tariff proposal. Through the

Public Notice, PDS placed the ARR and Tariff proposals in public domain and set 23rd December, 2022 as the last date for receipt of comments/suggestions/views and objections on the ARR and proposed Tariff for F.Y. 2023-24.

Thereafter, the Commission issued a separate Public Notice in local newspapers giving date, time and venue of the public hearing to be conducted by the Commission. The Public Notice was also placed in the official website of the Commission (**"www.sserc.in"**). The Commission through the Public Notice made an appeal the general public and the stake holders to participate in the Public Hearing and for placing their views/comments/suggestions on the ARR & Tariff proposals and also that interested individuals & parties shall be heard by the Commission.

The Commission published the Public Notice for the Hearing in the following newspapers:

1. **Sikkim Express (English)---------** 18th January 2023 & 2nd February 2023
2. **Hamro Prajashakti (Nepali)-----** 18th & 29th January 2023

1.8 PUBLIC HEARING

Hearing on the Petition of the PDS was held on 23rd February 2023 in the Courtroom of the Commission at Deorali, Gangtok, Sikkim from 10.30 AM onwards till 2.30 PM for all categories of consumers. The Hearing was chaired by the Chairperson of the Commission.

The Officials of the PDS and Commission attended the Public Hearing. Like the previous years, this year too hardly any response was received from the general public, individuals, industries or other stake holders to the Public Notice issued by the Power Department, Govt. of Sikkim. Only one response/application requesting certain suggestions/submissions was submitted by the Indian Army vide letter No. 145/11/186/Q dated 10th December 2022, through Col. Amit Kumar Tiwari, Commanding Officer, 6 Engineers Regiment.

No member of the public, industries or other stake holders participated in the public hearing. The sole participation came from the Indian Army through Major Deepak Singh Bohra. The views, comments, requests and suggestions given by the Indian Army, the replies/clarifications given by the Power Department in response to the submissions the Indian Army and the comments/views of the Commission are dealt with in Chapter 4.

1.9 STATE ADVISORY COMMITTEE MEETING

In order to obtain the views/suggestions/comments of the Members of the State Advisory Committee on the Petition filed by the PDS and especially the Tariff proposed for F.Y.2023-24, a meeting of the Committee was held on 27th February 2022 from 11.00 am onwards in the Chamber of the Hon'ble Chairperson. The meeting was chaired by the Hon'ble Chairperson.

The Committee discussed the ARR and Tariff proposal of the PDS for F.Y. 2023-24 including True Up for F.Y. 2021-22 and Review for F.Y. 2023-24. The views, comments, observations and suggestions of the Committee are given hereunder:

A meeting of the State Advisory Committee was held on 27th February 2023 in the Chamber of the Chairperson, SSERC to discuss and deliberate on the Tariff petition filed by the Power Department, Government of Sikkim.

The meeting was chaired by the Hon'ble Chairperson. The following members of the State Advisory Committee (SAC) participated in the meeting:

1. Shri K.B.Kunwar - Chairperson SSERC
2. Shri Nim Tshering Lepha - Member
3. Shri D.P.Sharma,IAS(retd.) - Member
4. Shri Uttam . Pradhan - Member
5. Shri Dinesh Kharel - Member
6. Shri Narayan Khatiwada - Member
7. Mrs Deepa Rani Thapa - Ex-officio Member (Secretary Food &Civil Supplies Department)
8. Ms Karma Doma Youtso - Member Secretary (Secretary,SSERC)

The Members of the State Advisory Committee extensively deliberated on the different aspects of the Tariff Petition filed by the Power Department, Government of Sikkim. The Committee Members shared their views, comments and suggestions on each agenda items. The deliberations of the State Advisory Committee on each agenda item are given hereunder:

1.Truing Up for FY 2021-22

With the permission of the Chair, Shri Palchen D.Chaktha,Director,SSERC, briefed the house on the Petition filed by the Power Department for Truing Up of the Annual Revenue Requirement (ARR) for the F.Y. 2021-22. He apprised the house that SSERC vide its Tariff Order dated 26.02.2021 had approved the estimated/projected ARR for the F.Y. 2021-22 (the 1st year of the 2nd Three Year control period under Multi Year Tariff Regime). He further added that SSERC vide its Order dated 14th March 2022 had undertaken performance review of the ARR for F.Y 2021-22 and approved the revised ARR. He further apprised the House that the figures submitted by the Department in the Truing Up are the actuals and after detailed scrutiny of the records/data, accounts etc submitted by the Department, SSERC shall be approving the True Up for F.Y 2021-22.

The Members of the SAC deliberated on the agenda item. The comments, observations and suggestions of the Members are as under:

- The Members of the Committee observed that the cost of generation for the F.Y 2021-22 has been indicated as nil and that employee cost is ever increasing for the Department. They noted that overall ARR gap has been reduced to ₹ 77.82 cores as against initially approved gap of ₹ 102.69 crores in the truing up. The Committee Members observed that reduction in the ARR gap is due to nil cost of generation, reduction in cost of power purchase and repair & maintenance. The Members wanted to know the reasons for nil generation cost, reduction of power purchase cost and repair & maintenance.

- Chairperson SSERC apprised the Members that reduction in power purchase cost is due to surrendering of high-cost thermal power by the Department. He added that the Department was being overburdened due to purchase of high-cost thermal power and as advised by the Commission, the Department has surrendered a major chunk of thermal power. He further added that all the small hydropower projects under the Department has been leased out to private power developers and therefore no cost of generation has been claimed in the ARR by the Department. He further informed the House that due to handing over of the small hydropower projects to private developer, there is reduction in repair & maintenance cost.

- SAC Members observed that the actual revenue from power sale within the State for F.Y 2021-22 at ₹ 305.13 crores is more than the initial approved sale of ₹ 259.32 crores and noted that the Department has been improving its revenue generation, which is good for the State.

- The Members recalled that the ever-increasing employee cost has been discussed many times in the past by the Committee and that the Committee had stressed on the need for finding ways and means for taking maximum output from the excess manpower of the Department. The Members felt that proper training and skill development courses should be provided to the excess manpower so that optimum utilization of human resource available be made. The Members opined that increase in employee cost is also attributable to pay revision, revision in DA , promotions etc and therefore hike in employee cost cannot be avoided altogether but the Department must explore possible ways to get maximum output from its employees.

- The Committee Members opined that Power Department is one of the major revenue generating departments for Sikkim and therefore, the Department must take steps for reducing all kinds of losses and try to narrow the revenue gap.

- The Committee Members observed that SSERC had issued directives to the Power Department on several matters in the past as per the suggestions of the Committee and the improvements being done by the Department, though at a slow pace, indicates that the Department is complying with the directives and making efforts for improvement.
- The Committee Members observed that the actual revenue from sale of power outside the State is less than the initially approved figure, which will surely affect the revenue of the State and as such the Department must explore ways and means to improve the revenue from sale of power. The Members opined that reduction in outside State sale of power could be due to coming up of large number of green/renewable energy projects in the country, especially solar and wind projects. The Members felt that the trends in other States must be same as in Sikkim due to more generation and less buyers of electricity in the country.
- The Members of the Committee expressed their happiness to note that the Department had been able to bring down the ARR gap to ₹ 77.82 crores as against ₹ 102.69 crores initially approved by the Commission. The Members advised that the Department must continue more vigorously initiatives like installation of remote sensing meters/prepaid meters, surprise checks for illegal & unauthorized connections, checking of electricity theft, electricity efficiency measures etc, to further r improve the overall financial state of the Department.

2. Review for F.Y. 2022-23

- The Members of the Committee opined that there is nothing much to be discussed on the review of ARR for F.Y 2022-23 as the figures are projections only. However, they opined that review gives an idea of the results expected at the end of the financial year and will help the Department to take advance corrective measures to tackle the issues in the poor performing areas.
- The Members opined that the Department must concentrate on the lacking areas and explore all possible ways to make improvement. The Committee Members hoped that the actual figures of the Department during truing up in the future will give ample reasons for everyone to be happy.
- The Members opined that since the Department has surrendered high-cost thermal power and also handed over the generating stations to private party, there is bound to be good savings and hoped that the overall picture at the end of the year will be a very promising one.

3. Estimated ARR for F.Y. 2023-24

- The Committee Members were of the view that the ARR for F.Y 2023-24 had been approved by the SSERC in its order dated 26th February 2021, based on projections/estimations done by the Department, therefore the Department needs to ensure that the projections/estimations are done in a scientific manner to ensure that there are no major differences in the figures projected/estimated and the actuals at the time of truing up.
- The Committee Members opined that major differences in the projected/estimated figures and the actual figures at the end of the year indicate lack of proper analysis and also of poor methodology adopted by the Department to arrive at the projected/estimated figures. The Committee Members suggested that the Department needs to be advised to do more serious homework before submission of the data/figures and calculations before the Commission.
- The Members felt that setting up of solar and other green power generation needs to be done to augment the power availability within the State which will avoid power purchase from outside State at a high price.

4.Tariff Proposed by the Department for F.Y. 2023-24

- The Members of the Committee observed that the Department has proposed for hiking the tariff of domestic and commercial consumers whereas the tariff of other consumers have been left untouched and opined that the domestic consumers should not be burdened with high tariff.
- The Members observed that normally tariff for high consuming consumers should be lower than that of low consuming consumers as an incentive whereas it is not so in Sikkim, since Sikkim is a small state.
- The Committee Members opined that the cost of all things have gone up and it is unreasonable to expect electricity tariff to stay constant but it does not mean that losses due to any negligence should be passed on to the consumers by unreasonable hike of tariff.
- The Committee Members observed that tariff of consumers except that of HT consumers has not been hiked/reviewed during the last few years. Therefore, the plea of the Department for marginal hiking in tariff is logical and reasonable in view of the fact that the cost of all services and items have gone up significantly.

- The Members opined that it is a false notion that electricity is free. Electricity generation, transmission and distribution involve cost and therefore reasonable return of the cost of electricity is necessary for sustenance of the Licensees and tariff should reflect the actual cost of electricity, the Members further opined.
- The Members opined that Tourism is one of the main sources of income for the people of Sikkim and therefore it is necessary that hotels, homestays, restaurants etc catering to tourists should not be burdened with high tariff. The Members added that tourism sector also provides maximum employment to the locals and therefore excessive hike in tariff of commercial category consumers should be avoided to encourage local entrepreneurs.
- The Members of the Committee felt that more and more youths of Sikkim are taking up small business entrepreneurship and are trying to be self-employed apart from creating employment opportunities. The growth of the State depends a lot on the younger generation who are eager to try new business ventures and therefore they must be encouraged, for which providing electricity at reasonable rate is necessary.
- The Members felt that industrial units carry out commercial activities in the State and make handsome profits as they get incentives and relaxations in Sikkim and therefore the tariff being charged to them is justifiable. However, they added that charging excessive tariff will also discourage them from investing in the State and therefore and as such it is necessary to consider a very well-balanced tariff structure that is good for the growth of business and at the same time that doesn’t impact the revenue of the State.
- The Members also felt the need for doing away with too many tariff slabs and having a simple tariff structure in the State, which is easy to understand.

5. Requisition of Indian Army for change in Tariff Category/Creation of separate Tariff Category

- The Members felt that every Indian is proud of the Indian Army and owe gratitude to them for their selfless service and sacrifice for the nation, but at the same time they were of the view that no consumer should be given preferential treatment by burdening other consumers.
- The Members of the Committee recalled that the tariff applicable to the Indian Army was considerably reduced in the past by the SSERC and any further reduction in the tariff may not

be feasible considering the fact that there are many other consumers like ITBP, SAP etc also are grouped in the same category.

- The Members felt that giving tariff relief exclusively to the Army is bound to invite the attention of other consumers in Bulk Category and every consumer under the Bulk category will make a beeline for reduction of tariff. If the tariff for all consumers in the category is reduced, there will be serious impact on the revenue of the Department and the State.
- The Members opined that as already advised to the Army in the past, they should take immediate steps for installation of MDI meters, which will provide good relief to the them.
- The Members felt that creating separate tariff category or slab for the Army may not be advisable as the Government of India is insisting for rationalization of tariff and reduction in number of consumer category/slabs. However, the Members suggested that to honour and boost the morale of the Army, relief may be given to them by way of increasing the rebate, while maintaining status quo so far as the energy charges are concerned.
- The Members opined that it is not justifiable for the Army to compare tariff of Himachal Pradesh, Assam or Arunachal Pradesh to that of Sikkim. They added that SERCs are autonomous statutory bodies and the Electricity Act, 2003 empowers the SERCs to determine tariff for their respective States following the norms/procedures and regulations notified by the respective SERCs. The parameters for tariff determination differ from State to State and so are the costs of electricity generation, transmission and distribution and therefore it is upto the SSERC to take the final call keeping all factors into consideration.

6. Any other item with the permission of the Chair

Some of additional points/issues discussed and deliberated by the Committee with the permission of the Chair were as under:

- The Members observed that introduction of prepaid meters is a welcome step and it will go a long way in reduction of losses and pilferages. However, they pointed out that it is very difficult for the consumers with prepaid meters to know the details like units consumed, rate applicable etc. Therefore, they suggested that a system/facility needs to be created whereby the consumers can easily get these details.

- The Members observed that most of the street lights are not switched off timely and seen alight during the day time, which is a wastage of electricity and also loss of revenue. They felt that the matter should be brought to the notice of the Power Department.

- The Committee Members felt that there is lack of information/awareness among the public on existence and functioning of:

  i. Consumer Grievance Cell

  ii. Consumer Grievance Redressal Forum

  iii. Rights of consumers,

  iv. Electricity Ombudsman

  The Members suggested that wide publicity and awareness on the above need to be done so that the consumers can redress their grievances.

- The Members also observed that there is erratic power supply during the peak tourist season in the State, which creates lot a of problem/inconveniences for the tourists as well as hotel and other business unit operators. They added that in this age of digital world everyone is dependent on technology and use gadgets and online platforms for all kinds of works. So, it is necessary to have reliable/uninterrupted power supply.

- The Members observed that hotels, restaurants and shops use cold storages/fridge for storing meat, poultry and other perishable items but due to frequent power failures, the items get spoiled and wasted thereby suffer extensive losses. The Department needs to ensure uninterrupted and quality power supply, the Members stressed.

- The Members noted that consumers are liable to pay fines and surcharge for defaulting and therefore the Department too should pay compensation to the consumers for their failures/negligence in providing quality/uninterrupted power supply as per the standing norms/rules and regulations notified by the Commission.

- The Members of the Committee suggested that necessary directives and advisories to the Department be issued by the Commission on the points/issues highlighted above for strict compliance by the Department.

2. SUMMARY OF AGGREGATE REVENUE REQUIREMENT FOR FY 2023-24

2.1 Aggregate Revenue Requirement (ARR)

The Petitioner has submitted the Aggregate Revenue Requirement for the FY 2023-24 for meeting its expenses and estimated the revenue with the existing tariff. The projected ARR and Revenue gap are shown in the table below:

Table 2.1: Aggregate Revenue Requirement Projected by PDS

Sl. No.	Particulars	FY 2021-22 (Provisional)	FY 2022-23 (Estimated)	FY 2023-24 (Projected)
1	Cost of Fuel	0.39	0.41	0.45
2	Cost of Generation			
3	Cost of Power Purchase	234.68	119.29	139.51
4	Employee Costs	187.51	188.94	194.25
5	Repair and Maintenance Expense	11.53	10.13	11.15
6	Administration and General Expenses	3.73	5.37	5.63
7	Depreciation	36.45	38.03	38.93
8	Interest Charges	0.00	0.00	0.00
9	Interest on Working Capital	5.81	3.87	3.38
10	Previous Year Expenses of Power Cost	4.13	0.00	1.00
11	Return on NFA/Equity	0.00	0.00	0.00
12	Transmission Charge (Intra State)	41.17	44.94	44.94
13	**Tota l Revenue Requirement**	**525.40**	**410.98**	**439.24**
14	Less: Non Tariff Income	2.78	2.90	3.05
15	**Net Revenue Requirement**	**522.62**	**408.08**	**436.19**
16	Revenue from Tariff	305.13	287.68	349.84
17	Revenue from Outside State Sales	139.67	187.54	187.54
18	**Gap/Surplus (14-15-16)**	**77.82**	**(67.14)**	**(101.19)**

2.2 Tariff – Existing vs. Proposed

In its Petition, PDS has submitted the proposed Tariffs for the FY 2023-24, as detailed in the table below:-

Table 2.2: Existing Tariffs v/s Proposed Tariffs for the F.Y. 2023-24

Sl. No.	Particulars	Existing Rate Paisa /kWh	Proposed Rate Paisa /kWh
1	**Domestic**		
a)	Up to 50 Units	100	120
b)	51 to 100 Units	200	240
c)	100 to 200 Units	300	370
d)	200 to 400 Units	350	460
e)	401 & above	400	500
2	**Commercial**		
a)	Up to 50 Units	300	330
b)	51 to 100 Units	400	400
c)	100 to 200 Units	500	560
d)	200 to 400 Units	600	600
e)	401 & above	630	640
3	**Public Lighting**		
	Rural Areas	400	400
	Urban Areas	500	500
4	**Industrial**		
A	HT		
a)	HT (AC) above 3.3 KV		
b)	Upto 100 KVA	540	540
c)	100-250 KVA	590	590
d)	250-500 KVA	640	640
e)	500KVA and Above	690	690
B	**LT (Rural)**		
a)	Up to 500 Units	360	360
b)	501-1000 Units	440	440
c)	1001 & Above	580	580
C	**LT(Urban)**		
a)	Up to 500 Units	530	530
b)	501-1000 Units	620	620
c)	1001 & Above	715	715
5	**BULK SUPPLY**		
a)	LT	550	550
b)	HT	550	550

2.3 Prayers of PDS

The PDS has in its Petition prayed for the following:-

- To consider and approve the True-up of expenses for the F.Y. 2021-22.
- To review the estimates for the F.Y. 2022-23.
- To admit the Petition and approve the ARR and Tariff for the FY 2023-24.
- To approve category-wise tariff, including fixed/demand charges submitted by PDS to meet revenue requirement for the F.Y. 2023-24.
- To approve the suggestions regarding the tariff philosophy.
- Pass such orders as the Commission may deem fit and necessary, keeping in view the facts and circumstances of the case.

3. POWER SECTOR – AN OVERVIEW

3.1 INTRODUCTION

Sikkim, a state of India, is located in the North Eastern part of the country. With a total geographical area 7,096 SqKm and population of 6,10,577 as per 2011 census, it is the smallest State in the country in terms of geographical area and population. Sikkim is bordered by the Tibet Autonomous Region of China to the north and north east, by the Kingdom of Bhutan to the southeast, Nepal to the west and the State of West Bengal to the South.

Sikkim was a sovereign independent kingdom ruled by the Chogyals or Dharma Kings until 1950, when it became a protectorate of India. It became the 22nd State of the Union of India on 16th May 1975. Despite its small size, Sikkim has great political and strategic importance for the country because of its location along several international boundaries. Sikkim is surrounded by mountains and there is very little lowlands and the variation of relief is extreme. Within a stretch of about 80 kilometers, the land rises from 225 m in the Teesta River to about 8600 m at Mt. Kangchen-Dze-Nga (Kangchenjunga). Almost two third of its total area consists of perpetually snow-covered mountains, dominated by Mt. Kangchedzenga, the 3rd highest peak in the world. Sikkim is drained by two main river systems viz Teesta and Rangit. These two rivers cut deep valleys into the mountains thereby descending steeply into the plains of West Bengal. Teesta and Rangit rivers are joined by numerous tributaries during their long journey from the Himalayas to the Great Plains of India.

The unique geography of Sikkim makes it one of the most beautiful States in the country. Many pristine lakes, beautiful streams and rivulets and magnificent peaks adorn Sikkim and make it a land of unparalleled natural beauty. Sikkim is also a bio-diversity hot spot and some of the rarest flora and fauna are found here. A major chunk of its total area is under forest cover (almost 50%) and thus Sikkim is also one of the greenest States in the country.

KNP or Kangchenjunga National Park, home to some of the most endangered species of flora and fauna has been declared as “UNESCO World Heritage Site” the first in India under ‘Mixed Category’ (Culture and Nature). Sikkim also has the distinction of being the “First

Organic State" in the country, apart from being the first State to ban the use of chemicals, pesticides and single use plastics. All these unique initiatives taken by the State Government and its natural beauty make Sikkim it one of the mots preferred tourist destinations in the world.

Although Sikkim joined the Indian Union late, it has seen unprecedented growth and development in all sectors. One of the primary reasons for its rapid growth and development is its small population. Surprisingly, although Sikkim has one of the highest growth rates among the small States, it has one of the lowest per capita power consumptions in the country. The reason for very low per capita power consumption is again due to the small population and absence of heavy industries. The total metered consumers in the State in 2022 was around 1.20 Lakhs. Pharmaceutical units, breweries/distilleries and Indian Army are among the major power consumers in the State. In addition, there are small-scale industries, poultry farms, hotels, home stays, resorts and food processing units operating in the State but the power demand from this group is very small. A major chunk of the consumers as such falls under the Domestic category (87%) followed by Commercial, Bulk Supply, LT Industrial and HT Industrial categories.

PDS is the only deemed licensee in the State engaged in transmission, distribution and supply of electricity in the State. PDS is a deemed licensee under the provisions of Electricity Act, 2003.The PDS is also a generation utility and owns a few small hydropower projects and diesel generating stations. The PDS has recently leased out all its small hydropower projects to private power developer and thus there is no small hydropower project under the PDS. The PDS, being a State Government Department functions with budgetary support from the State Government and also many of its schemes are funded by the Government of India.

Sikkim Power Development Corporation Limited (SPDCL), a Government of Sikkim Enterprise is another State Government Generating Company with 51% stake of the State Government. SPDCL is engaged in the development and operation of small hydropower projects in the State. The SPDCL presently owns and operates 4 (four) small hydropower projects with a total installed capacity of 13 MW.

3.2 CONSUMER PROFILE

As on 31st March 2022, the total number of registered consumers stood at 123805 with an annual power consumption of 495.19 MUs. The category-wise consumer profile is as given in the table below:

Category	No. of consumers 2021-22	Percentage of break up
Domestics	108,313	87.48
Commercial	12,466	10.06
Public Lighting	47	0.03
Temporary Supply	0	0.00
HT Industrial Consumers	560	0.45
LT Industrial Consumers	616	0.49
Bulk Supply	1,803	1.45
Total	**123,805**	**100**

3.3 Hydro Power Project Development

Central Water Commission (CWC), Government of India, had assessed the total hydropower potential of Sikkim to be around 8000 MW. CWC had conducted surveys and feasibility studies of various hydropower projects in the State and prepared Pre-Feasibility Reports (PFRs). The PFRs were later submitted to the State Government and based on the PFRs prepared by the CWC, decision was taken by the State Government to tap the hydropower potential of the State. Accordingly, the State Government initiated the process for implementation of the projects through NHPC Limited and private power developers on Build, Own and Operate (BOO) and Build, Own, Operate and Transfer (BOOT) basis. The projects commissioned in the State so far are given below:

Sl.No	Name of the Project	Installed Capacity (MW)	Developer
1	Teesta -III HEP	1200	Teesta Urja Ltd (A Govt. of Sikkim Undertaking)
2	Dikchu HEP	96	Sneha Kinetics Power Projects Pvt Ltd
3	Chujachen HEP	110	Gati Infrastructures Pvt Ltd

4	Teesta –V HEP	510	NHPC Ltd
I 5	Rangit –III HEP	60	NHPC Ltd
n 6	Tashiding HEP	97	Shiga Energy Pvt Ltd
7	Jorethang Loop HEP	96	DANS Energy Pvt Ltd
a d 8	Rongnichu HEP	96	Madhya Bharat Power Corporation Pvt Ltd

In addition to the above, some more projects are under implementation and are as indicated below:-

Projects under Implementation/to be implemented

Sl.No	Name of the Project	Installed Capacity (MW)	Developer
1	Teesta -IV HEP	520	NHPC Ltd
2	Teesta-VI HEP	500	NHPC Ltd
3	Rangit- IVHEP	120	NHPC Ltd
4	Rangit-II HEP	66	Sikkim Hydropower Ventures Pvt Ltd

3.4 Transmission and Distribution Network in the State

As the deemed licensee for Distribution and Transmission of electricity within the State, the PDS owns and operates Transmission and Distribution network in the State. The details of the Transmission and Distribution network owned and being operated by the PDS as on 31st March, 2021 are as given below:-

I. Power Transformers

Sl No	Description (MVA)	Quantity (No)	Total Capacity (in MVA)
1	2.5 MVA	8	20
2	5 MVA	26	130
3	6MVA	1	6
4	7.5 MVA	8	60
5	10 MVA	8	80
6	15 MVA	1	15
7	20 MVA	1	20
8	50 MVA	2	100
	Total	**55**	**431**

II. Distribution Transformers

Sl No	Description KVA	Quantity (No)	Total Capacity (in KVA)
1	3000	2	6000
2	2500	10	25000
3	2000	6	12000
4	1600	6	9600
5	1500	10	15000
6	1250	5	6250
7	1000	18	18000
8	800	2	1600
9	750	16	12000
10	650	1	650
11	630	4	2520
12	615	1	615
13	500	155	77500
14	450	1	450
15	400	7	2800
16	375	2	750
17	350	2	700
18	315	94	29610
19	300	34	10200
20	250	61	15250
21	200	158	31600
22	160	14	2240
23	150	46	6900
24	125	8	100
25	100	269	26900
26	63	581	36603
27	50	15	750
28	25	1052	26300
29	16	1	16
30	10	391	3910
	Total	**2972**	**382714**

III. EHT Lines, HT Lines and LT Lines

Sl No	Description	Length
A	**EHT Lines**	(Ckt.Km)
1	**132KV**	68.50
2	**66 KV**	432.10
	Total EHT Lines	**500.60 Ckt.Km**
B	**HT Lines**	(Ckt.Km)
1	11 KV (Over Head)	**3214 Ckt.Km**
2	11 KV (Underground)	**154 Ckt.Km**
	Total Ckt.Km	**3368 Ckt.Km**
C	**LT Lines**	
1	LT (Over Head)	**4982 Ckt.Km**
2	LT (Underground)	**210 Ckt.Km**
3	LT AB cable	**44 Ckt.Km**
	Total Ckt.Km	**5236 Ckt.Km**

4. BRIEF SUMMARY OF OBJECTIONS RAISED, RESPONSE OF PDS AND COMMENTS OF THE COMMISSION

Suggestions and Objections Received in Response to Public Notice Issued by the Power Department, Government of Sikkim.

As directed by the Commission, Power Department, Government of Sikkim, published a public notice giving details of the Annual Revenue Requirement and Tariff proposed by it for the F.Y 2023-24 in the local newspapers as indicated below:

1. Sikkim Express (English daily)- 3rd December 2022
2. Hamro Varta (Nepali daily) - 3rd December 202

The last date for submission of the objection and suggestions was 23rd December 2022. Like the previous years, this year too hardly any response was received from the general public, individuals, industries or other stake holders to the public notice issued by the Power Department, Govt. of Sikkim.

Only one response was received from the Indian Army vide their letter No. 145/11/186/Q dated 10th December 2022, through Col. Amit Kumar Tiwari, Commanding Officer, 6 Engineers Regiment. The submissions and suggestions made by the Indian Army are given hereunder:

Submissions/suggestions /Petition of the Indian Army:

- Indian Army is deployed in the upper reaches of Himalayan ranges in Sikkim State. The area is highly uncongenial for human habitat and the living conditions are further made harsh by inclement weather conditions synonymous with such region.
- For maintaining operational readiness in such difficult region, multiple defence establishments are set up at various locations leading up to the mountain passes. In addition to the various operational establishments, Indian Army is also running various tourist attractions in the State., most prominent of them being the Hanuman Tok Mandir and Baba Harbhajan Mandir.
- Electricity forms a basic necessity for such establishments both for security and survival purpose. At present, electricity at various defence establishments is provided by State Power Department.
- This unit is responsible for the payment of monthly electricity bills for multiple connections in Army establishments from 17 Mile Stone to Changu and Kupup, falling under the purview of Gangtok and Rongli Sub Divisions of State Power Department.
- At present tariff being levied on Army establishments is in accordance with Bulk Supply (noncommercial) rates. Indian Army has approached various State Government for creation of separate power tariff slab for defence establishment as a domestic consumer. Even in Sikkim, many meetings and discussions have already taken place between the State Power Department, SSERC and representatives of the Indian Army to consider the petition of **Defence Establishments from Milestone 13 and beyond to be considered as domestic consumer.** It is pertinent to note that such establishments in highly mountainous region are

mainly for billeting/residence of troops with stationing of few officers for day-to-day routine. In this context, Government of Himachal Pradesh has already notified a tariff slab for the Indian Army, designating them as domestic consumer, as against erstwhile bulk supply consumer.

- Keeping in view the contribution of the defence forces in the region and further improving the cordial and amiable relationship shared by the State of Sikkim and the Indian Army, it is petitioned to consider creation of separate power tariff slab for defence establishments in the State by considering the defence establishment as domestic consumer instead of bulk supply consumer.

The Commission forwarded the petition received from the Indian Army to the Power Department via letter No. 318/SSERC/2017-18/Part-I/342 dated 13.12.2022, with the directive to file/furnish the response/replies to the Indian Army within a period of one week from the date of issue of the directive.

The Power Department vide its letter No. 13/CE/Elect/Rev/2022-23/71 dated 19.12.2022 filed/furnished its replies/responses to the petition of the Indian Army. The replies/responses filed by the Power Department are given below:

Replies/Responses of the Power Department,Govt. of Sikkim:

- Power Department extends its deepest gratitude to the Indian Army for the services rendered by it at high altitude and extremely harsh climatic conditions. The Department appreciates and commends the selfless service of the Indian Army.
- Power Department is making every possible effort to maintain regular power supply to high altitude areas despite tough challenges faced during line fault.
- Power Department being a major revenue generating sources associated with collection of non-tax revenue for the State exchequer, is bound by certain rules and regulations of the State, namely:-
    a. The rate applicable to domestic consumer and general public are on the basis of socio-economic status of the general rural public of State. The Department purchases power at high rates from Gencos and same is provided to the general public at lower rates. The merging of any other category of consumer under domestic category may not justify in comparison to power purchased at higher rates.As per the PPA with different Gencos , tariff is charged at ₹ 4.00 to 5.00 per unit and power purchased through exchange on real time basis varies from ₹ 5.00 to 12.00 per unit. Hence changing of tariff category of consumer at this juncture can affect the state revenue.
    b. There is a provision to review the contract demand for load above 45 KW under Bulk Category, for which maximum demand indicator (MDI) can be installed as per the connected load. Accordingly, defence establishments can review their contract demand on the basis of connected load. Accordingly, the Department prays for maintaining status-quo so far as the tariff applicable to Indian Army is concerned.

Comments/observations of the Commission:

- The Commission has the highest respect for the Indian Army and salute them for their sacrifices for maintaining security and safety of the country. The Commission is well aware of the challenging and tough conditions at high altitudes under harsh climatic conditions as well the hardships faced by the our defence personnel. Therefore, every Indian takes pride in Indian Army and should extend all possible cooperation to our jawans and officers.

- The Commission feels that the submissions made by the Indian Army and their petition for bringing a section of their area of operations/establishments under domestic tariff category, considering that the power is being used only in residences of troops and officers in such areas appear reasonable and deserves consideration by the Power Department. At the same time the Commission also is aware of the fact that presently Indian Army is drawing power from the sub-stations/transformers of the Power Department through dedicated supply lines/system and as such the nature of drawal of power by the Indian Army falls under Bulk Category.

- Indian Army has cited example of Himachal Pradesh, where Indian Army has been placed under domestic category. The Commission observes that Himachal Pradesh Electricity Regulatory Commission (HPERC) in its tariff order dated 29.03.2022 determining the tariff for F.Y.2023 and press note dated 30.03.2022. However, the Commission further observes that:

  i. Although HPERC has brought all defence establishments under domestic tariff category , domestic tariff is applicable only if separate circuits are provided, that facilitates segregation of billing of domestic or other nature of use of electricity.

  ii. Commercial establishments within defence cantonment area are to be charged at commercial rates

  iii. Bulk category tariff is still applicable to both Military Engineering Service (MES) and defence establishments where the power is being drawn through single point connection by the consumer and the consumer further distributes for its bonafide use (but no sale/resale is done by the consumer). Bulk tariff applicable to MES till MES obtains open access.

  iv. The domestic tariff slabs approved by the HPERC is as under:

Slabs	Units per Month	Approved Tariff per Unit (FY 2023)	Fixed charges ₹/Month	Remarks
1	01-125	3.50	55.00	Life line consumers
2	01-125	4.15	85.00	All other consumers
	126-300	5.05		
3	Above 300	5.65		

v. The HPERC domestic average tariff for consumers other than lifeline consumers works out to ₹ 4.95 per unit in addition to ₹ 85.00 per month fixed charges.

vi. The Bulk Category tariff in Himachal Pradesh is as under:

Sl. No	Particular	Tariff (₹ per unit)	Fixed Charges (₹ per KVA/Month)
1	LT	5.00	250
	HT	4.50	350
	EHT	4.30	350

The average bulk tariff in Himachal Pradesh works out o ₹ 4.75 per unit (considering LT &HT).

vii. The Current Tariff (F.Y 2022-23) applicable to Indian Army under Bulk Category in Sikkim are as under:

Sl. No	Particular	Tariff (₹ per unit)	Fixed Charges	
			For contract demand below 45KW	For contract demand above 45KW
1	All consumptions (LT&HT)	5.50	₹ 500 per month	₹ 150 per KVA/Month

A rebate of 2% on energy charges is given to the Bulk Supply Consumers. Thus, energy charges after applying rebate is ₹ 5.39 per unit, which is only ₹0.44 per unit higher than the average domestic tariff applicable to Army compared to tariff of HPERC.

The average bulk category tariff in Sikkim is ₹ 5.39 compared to ₹ 4.75 per unit in Himachal Pradesh, thus tariff in Sikkim is higher by ₹ 0.64 per unit. However, the Fixed charges (per KVA) in Sikkim is lower than that of Himachal Pradesh except for contract demand below 45 KW, for which Sikkim charges a minimum fixed charge of ₹ 500/month.

Electricity charges/tariff depend on a number of factors depending on the geographical location of a State, its distance from generating stations and also on the different project parameters. Further consumption patterns, nature of consumers, nature of sources of the energy are different in different States and thus tariff can't be uniform throughout the country.

The Electricity Act, 2003, has mandated the State Electricity Regulatory Commissions (SERCs) in each State to determine the tariff in its area of jurisdiction and accordingly the SERCs determine the tariff based on prefixed/notified norms and parameters. These parameters and norms are different in different States and therefore it is not reasonable on the part of the Indian Army to expect SSERC to fix tariff similar to that of HPERC.

Submissions, views and objections raised in the Public Hearing

The Commission issued public notices in local newspapers soliciting participation of public and other stake holders in the public hearing to be held on 23rd February 2023, to obtain their views,suggestions,objections and comments on the petition filed by the Power Department for approval of Truing Up for F.Y. 20121-22, Review for F.Y. 2022-23 and ARR & Tariff proposed for F.Y 2023-24. The Commission through the Public Notice requested all interested consumers, stake holders and general public to appear before the Commission and place their views, comments, suggestions and objections, if any, and that their submissions/pleadings shall be heard in person by the Commission.

In order to give wide publicity and to ensure participation by public and stake holders, the Commission published the Notice in the following newspapers :

4. Sikkim Express (English edition) - 18th January 2023 & 2nd February 2023
5. Hamro Prajashakti (Nepali edition) - 18th & 29th January 2023

The Commission also uploaded the public notice and the tariff petition of the Power Department in its official website for the information of public and other stake holders.

An open public hearing was held in the Court Room of the Commission at Deorali,Gangtok on 23rd February 2023 from 10.30 AM onwards for all categories of consumers. Despite all publicity given for public hearing and request made by the Commission for active participation by consumers and stake holders in the hearing, there was no participation by public or stake holders. The sole participation came from the Indian Army.

The details of the submissions made by the Indian Army, the replies/responses given by the Power Department and the views/observations of the Commission are as under:-

<u>Submissions of the Indian Army</u>

Major Deepak Singh Bohra representative of the Indian Army and made the following submissions/prayers:

i. Indian Army has approached both the Power Department and Commission many times in the past and has pleaded for bringing the tariff applicable to the Indian Army under Domestic Category from existing Bulk Category. He added that several rounds of interactions had been held in the past with the Power Department for finding a mutually acceptable solution.

ii. Indian Army is one of the largest consumers of power in Sikkim and therefore it is also one of the major revenue generators for the State. Indian Army has around 42 connections drawing electricity from the Power Department under the Gangtok and Pakyong districts and pays around ₹ 1.47 crores as power tariff annually. In addition, the Indian Army makes prompt payment of the electricity bills and as such even a slight reduction in the tariff will help in making good savings for the Army. The money so saved can be used by the Army for meeting expenses of other infrastructural works needed in the difficult and challenging areas near the international borders.

iii. The Indian Army operates in the areas beyond 13^{th} Mile with altitude above 9000 feet and in such areas the consumption of electricity by the Indian Army is similar to that of domestic consumers. He added that in the said areas electricity is being used by the Officers and jawans for lighting and heating purposes only and therefore it is reasonable that domestic tariff is made applicable to the Indian Army in such areas.

iv. As suggested by the Power Department and discussed in the past, Indian Army has already initiated steps for installing Maximum Demand Indicator (MDI) in its area and the proposal is under consideration by the authorities in the Army.

v. The estimated cost of installation of MDI will be around ₹ 55.00 Lakhs and it will atleast take a year for installing of MDI. The cost of installation of MDI is almost 50% of the total annual power bill being paid by the Army and even if the tariff of Army is brought down to ₹ 5.00 per unit, the annual saving for Army will be around ₹ 38.00 Lakhs, which is less than the cost of MDI installation. Therefore, even installing the MDI, the Army stands to be on the losing side. In view of the stated facts, Army requests that a separate tariff slab be created for the Army for the ensuing financial year so that benefits of revised tariff is available till completion of installation of MDI meters. Once the MDI installation is completed, a study of the impact of revised tariff on the revenue of the Power Department can be undertaken and tariff can be accordingly reviewed in the next financial year if there is a major impact on the revenue.

vi. Tariff for Army in Arunachal Pradesh and Assam is around ₹ 4.00 per unit only compared to ₹ 5.50 per unit being charged in Sikkim and as such review of tariff in Sikkim be considered.

vii. Indian Army works shoulder to shoulder and in close coordination with the Power Department and all power related infrastructure work requirements of the Army have been executed through the Power Department in the form of Deposit Works and works in future too shall be taken up through the Power Department including the proposed MDI installation. As such, Indian Army is a close partner for development of the State and understand the need for the Department to fulfill its financial/revenue targets and therefore the Army should not be viewed only as a revenue generator for the State.

Replies/Responses of Power Department

The responses/replies of the representatives of Power Department, Govt. of Sikkim are as under:

- Government of India has fixed certain financial and other targets that are bound to be achieved by the Department. Further, there are directives for bringing down the AT&C losses and improving the revenue generation. As such, it will be very difficult to take up any exercise that has an adverse impact/effect on the predetermined targets of the Department.

- Department has full sympathy for Army personnel and is ready to extend all possible help and cooperation to them. However, there are other consumers like ITBP and Sikkim Armed Police, who are grouped with the Indian Army under Bulk Consumer category and they too are posted in border areas/high altitude areas and giving special treatment to Indian Army alone will be opening the floodgates. All consumers who are in Bulk Category will also start making request/claim for review of their tariffs, which will seriously impact the revenue of the Department.
- Providing special tariff for Army will incite other consumers to approach the Courts and will create more issues and problems thereby causing worthless usage of time and resources.
- Department purchases power at high rates and as such reduction in tariff is not financially feasible. The Department had already apprised the Indian Army many times in the past about the difficulties/limitations of the Department and its inability to consider the request of the Army for creation of a separate tariff slab/category.
- Department had been advising the Indian Army to install MDI meters since last few years but same has not been taken up till date. Once MDI meters are installed, the Army will be paying only for actual electricity consumption and there will automatic savings in their energy bills.
- The cost of supplying electricity in high altitudes is more as the Department has to pay double salary to its employees working in high altitudes. Similarly, the cost of repair & maintenance of equipments, machineries and other infrastructures are also higher in high altitudes. Therefore, reduction in tariff will have an adverse impact not only on the revenue but also on the quality of services being provided by the Department.
- Department can help Indian Army in exploring other ways and means to improve efficiency of power usage. Department can take up installation of solar power in large open areas in defense areas like Baba Mandir and other areas and solar power can be bundled and fed into the supply lines of the Army. Similarly, the possibility of installing wind power projects can be explored in the defence areas near the borders. Both solar and wind power will help in reduction of power consumption of the Army.
- If the Army is willing, the Department will propose for exclusive solar power projects for the Army and seek financial assistance from the Government of India.
- It's the prerogative of the State Government to provide electricity at subsidized rates or direct subsidy to the consumers and the Department has no say whatsoever in the matter. Electricity does not come free and so are all other items. Even if the State Government gives free power to the people, the cost of free power is to be paid to the Department in advance. So if the tariff is reduced or power is made free for certain category of consumers, to recover the cost of power supplied, some other consumer has to bear the cost in the form of cross subsidy.

- The Government of Sikkim is levying charges towards water usage/environment cess from all power developers and therefore the cost of power is going up. However, the electricity tariff in Sikkim has not been hiked for last 5 to 6 years for most of the consumer categories. The tariff applicable to Indian Army was infact reduced to ₹ 5.50 per unit for both LT & HT during 2019-20 from ₹ 6.50 and ₹ 6.60 per unit respectively for Bulk LT & HT consumers.
- Various development and infrastructure related projects/schemes are sanctioned for each State by the Government of India, for which the Department has to achieve certain financial/revenue generation milestones/targets fixed by the Government of India. In the event of failure to achieve the milestone/targets, the fund provided is converted into loan by the Government of India, which affects the sustainability of the Department. Therefore, tariff of electricity has to be cost based not only to avoid revenue losses to the State but also for obtaining funds needed for development of the State.
- Due to huge gap between the cost of power purchase and revenue realization from sale of power, the Department has surrendered high-cost thermal power allocated to the State and stopped purchase of thermal power except the minimum quantity required to cater to base load. The Department has been forced to take these steps to improve its poor financial health and to bring down the revenue gap. In view of the critical financial condition of the Department, any decision to reduce the electricity tariff will further worsen the financial health of the Department.

  Power Department is one of the major revenue generating Departments for the State and therefore worsening of the financial position of the Department will have major impact on the State as a whole.

<u>Comments/Observations of the Commission</u>

The comments/observations of the Commission on the pleas/submissions of the Indian Army and the replies and responses of the Power Department are as under:

- The Commission is well aware of the tough climatic conditions and challenging situations in which the Officers and jawans of the Indian Army are operating near the international borders. The Commission deeply respects and commends the Indian Army for their selfless service to the nation and its people.
- The Commission has been exploring all possible ways and means to provide relief to the Indian Army. Despite the rising cost of electricity all across the nation, the Commission has provided relief to the Indian Army by reducing the tariff during the F.Y 2019-20.
- The Commission is bound to follow the established rules/regulations and norms while determining the electricity tariff and therefore it can’t increase or decrease the tariff arbitrarily. Tariff fixation is done considering the income and expenditures of the Department but at the same time ensuring that the tariff so determined/fixed don’t affect the financial sustainability of the Department nor does it impact the consumers.
- As per the directives and guidelines of the Government of India, the Commission has to determine/fix the tariff to reflect the actual cost of supply of electricity and

also ensure that one category of consumer is not overburdened while giving relief to some other category. Thus, creating a special tariff category for the Indian Army will amount to giving preferential treatment to one particular class of consumer.

- There are directives/guidelines of the Government of India for simplification of tariff structure and reducing the number of tariff slabs so as to rationalize the tariff and therefore creating additional tariff slabs for the Indian Army will be in contradictory to the standing guidelines/directives.
- Power is supplied to the Indian Army through transmission lines and transformers that are exclusively dedicated to the Army. Public and other consumers are not permitted to draw power from the lines/transformers meant for the Army. The power is being drawn by the Army from single point unlike the domestic consumers who draw power from shared transformers. Therefore, there is major difference in the way the Indian Army and public draw power and as such equating Indian Army with public (domestic consumers) is not justifiable.
- Indian Army is placed under Bulk Category along with other consumers like ITBP, Sikkim Armed Police, Hospitals, Government Non-Residential Buildings etc. The Commission has kept the tariff of bulk category constant since the F.Y 2019-20. As such maintaining the same tariff for last 4 years in itself is a big relief for the Indian Army including other consumers in the Bulk Category.
- The mandate for determining tariff has been given to the respective State Electricity Regulatory Commissions (SERCs) by the Electricity Act, 2003 and accordingly the SERCs determine the tariff in their States. The cost of electricity generation, transmission and distribution are state/region and site specific and accordingly tariff varies from State to State, region to region and also project to project. Therefore, the tariff of one State can't be equated to that of another State.
- The suggestion of Power Department for installation of MDI meters by the Indian Army needs to be taken forward as it is going to benefit the Army in the long run although its immediate benefit may not be visible.
- The Commission shall take into consideration the submissions made by the Army and also the counter submissions of the Power Department while finalizing the tariff order. The Commission will also explore any possible ways in which some relief can be given to the Indian Army.

5. TRUE UP FOR THE F.Y. 2021-22

5.1 Preamble

The Commission vide its Order dated 26.02.2021 had approved the ARR and Tariff for the F.Y. 2021-22 based on the projected data submitted by the PDS. Now, the PDS has submitted proposals for True up for the F.Y. 2021-22, duly furnishing the actuals for the FY 2021-22, stating that these are as per the provisional accounts prepared by them.

"*Regulation 5 of the SSERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2020, contains the following provisions:*

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

i. Truing Up for FY 2020-21 to be carried out under Sikkim State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2013 and Sikkim State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) (Second Amendment) Regulations, 2017;

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 determination of tariff for the ensuing year."

The PDS has submitted the audited accounts for the FY 2021-22. PDS has stated that the data furnished for the FY 2021-22 are the actual.

5.2 Energy Demand (Sales)

The energy sales approved by the Commission, vide its Tariff Order for the FY 2021-22, the actual sales given by PDS, as per provisional accounts with the True up Petition for the FY 2021-22 and now approved by the Commission, are summarised in the table below.

Table 5.1: Energy Sales approved by Commission for FY 2021-22

Sl. No.	Particulars	As approved by the Commission in MYT Order dated 26.02.21	Actual As per Provisional Accounts	Now Approved by Commission
1	Domestic	129.53	135.14	135.14
2	Commercial	44.57	45.80	45.80
3	Public Lighting	0.41	0.89	0.89
4	Temporary Supply	2.60	4.86	4.86
5	HT Industrial Consumers	208.04	272.69	272.69
6	LT Industrial Consumers	2.17	2.60	2.60
7	Bulk Supply	34.28	33.20	33.20
8	**Total**	**421.59**	**495.20**	**495.20**
9	Outside State	488.87	441.79	441.79
10	**Total**	**910.46**	**936.99**	**936.99**

The Commission now approves energy sales for the F.Y. 2021-22 at 936.99 MUs, as per the actuals furnished by PDS.

5.3 Transmission & Distribution Losses (T&D Losses)

The Commission in its order for the FY 2021-22, had fixed the target of T&D Losses at 20.00% for the FY 2021-22. The PDS in its True up Petition for the FY 2021-22, has stated that the provisional T&D losses during the FY 2021-22 is 22.17% as per provisional accounts.

Commission's Analysis:

The inter-state transmission loss (pool loss) for the FY 2021-22 has been considered at 2.80 % and T&D Loss, when recalculated, is as shown in table below.

Table 5.2: T&D Loss calculation approved by the Commission for FY 2021-22

Sl. No.	Particulars	Units	2021-22 As approved by the Commission in MYT Order dated 26.02.21	Actual As per Provisional Accounts	Actual Distribution Losses
1	Own Generation	MUs	8.00	0.02	0.02
2	Energy Purchased form NTPC	MUs	481.55	212.00	212.00
3	Energy Purchased from WBSEDCL	MUs	48.92	52.00	52.00
4	Energy Purchased form NHPC	MUs	58.38	35.62	35.62
5	**Energy Purchased (2+3+4)**	MUs	**588.85**	**299.62**	**299.62**
6	Pool Loss	%	2.14	2.80	2.80
7	Pool Loss	MUs	12.60	34.04	8.39
8	Net Energy Available (5-7)	MUs	576.25	265.58	291.23
9	Energy Purchased from PTC	MUs	47.43	40.38	40.38
	Energy Purchased from Teesta PTC	MUs	0.00	119.06	119.06
10	Energy Purchased from SPDC	MUs	41.53	41.81	41.81
11	UI purchased	MUs	20.83	56.49	56.49
12	Kreate Purchase	MUs	-	37.32	37.32
13	RTM Purchase	MUs	-	41.09	41.09
14	Free Energy	MUs	340.65	579.82	579.82
15	Total Energy Available at state periphery (1+8+9+10+11+12)	MUs	1034.69	1181.57	1207.22
16	Outside State Sale through UI/Trading	MUs	507.70	441.79	441.79
17	Return Banking	MUs	0.0	103.53	103.53
18	Net Energy Available for sale within the state (15-16-17)	MUs	526.99	636.27	661.92
19	Energy Sale with in the State	MUs	421.59	495.20	495.20
20	T & D loss (15-16)	MUs	105.40	141.07	166.72
21	**T & D loss**	%	**20.00**	**22.17**	**25.19**

Though the Revised T& D losses worked out is 25.19%. However, the Commission now approves T&D Loss at 20% for the FY 2021-22 as approved in the MYT Order.

5.4 Own Generation

The Commission in its Tariff Order dated 26.2.2021 had approved Own Generation for the PDS at 10.00 MUs for the FY 2021-22. Now, the PDS has furnished actual own generation as 0.02 MUs during the FY2021-22, as detailed in the table below:

Table 5.3: Own Generation approved by the Commission during FY2021-22

(in MUs)

Sl. No.	Particulars	As approved by the Commission in MYT Order dated 26.02.2021	Actual As per Provisional Accounts	Now Approved by Commission
1	Total Generation	10	0.02	**0.02**
2	**Total**	**10**	**0.02**	**0.02**

The Commission now approves Own Generation of PDS during the FY 2021-22 at 0.02 MUs, as per actuals furnished by PDS.

5.5 Power Purchase

The Commission in its Tariff Order dated 26.2.2021 had approved the power purchase quantity of 1018.46 MUs including free power quantity of 340.65 MUs. Now, the PDS has furnished actual for the FY 2021-22 at 1215.59 MUs including free power of 579.82 MUs in the ARR and Tariff Petition for the FY 2023-24, as detailed in table below.

Table 5.4: Power Purchase approved by the Commission during FY2021-22

Sl. No.	Particulars	As approved by the Commission in MYT Order dated 26.02.2021	Actual As per Provisional Accounts	Now Approved by Commission
	NTPC			
1	BSTPP- I	129.28	21.61	21.61
2	BSTPP-II	--	101.22	101.22
3	FSTPP	88.33	--	0.00
4	KHSTPP-I	68.39	--	0.00
5	KHSTPP-II	31.34	--	0.00
6	TSTPP	136.28	--	0.00
7	DARLAPLI	1.48	38.50	38.50
8	KBUNL	16.10	14.19	14.19
9	NPGCL	10.35	36.48	36.48
	Total (A)	**481.55**	**212.00**	**212.00**
	NHPC			
10	RANGIT-III, NHPC	4.60	4.66	4.66
11	TEESTA-V, NHPC	53.78	30.96	30.96
	Total (B)	**58.38**	**35.62**	**35.62**
	Other			
12	CHUKHA, PTC	47.43	40.38	40.38
13	WBSEDCL	48.92	52.00	52.00
14	SPDC	41.53	41.81	41.81
15	UI/ Deviation		56.49	56.49

16	Kreate Purchase		37.32	37.32
17	RTM Purchase		41.09	41.09
18	PTC Teesta		119.06	119.06
	Total (C)	**137.88**	**388.15**	**388.15**
	TOTAL (A+B+C)	**677.81**	**635.77**	**635.77**
19	Free Power	340.65	**579.82**	**579.82**
	Grand Total	**1018.46**	**1215.59**	**1215.59**

The Commission now approves power purchase of 1215.59 MUs, including free power of 579.82 MUs during the FY 2021-22, as per the actuals furnished by PDS.

5.6 Energy Balance

The details of energy requirement and availability approved by the Commission in its Tariff Order dated 26.2.2021 for the FY 20212-22 and the actuals furnished by the PDS, and now approved by the Commission, are presented in table below:

Table 5.5: Energy Balance approved by the Commission for FY 2021-22

Sl. No.	Particulars	Units	As approved by the Commission in MYT Order dated 26.02.2021	Actual As per Provisional Accounts	Now Approved by Commission
A.	**ENERGY REQUIRMENT**				
1	Energy Sale within the state	Mus	421.59	495.20	495.20
2	Outside State sale through UI/ Trading	Mus	488.87	441.79	441.79
3	Total Energy Sale (1 +2)	Mus	910.46	936.99	936.99
4	Overall T & D losses	~~%~~	20.00	22.17	20.00
5	Overall T & D losses	Mus	105.40	141.06	123.80
6	**Total Energy Requirement (3+5)**	**Mus**	**1015.86**	**1078.06**	**1060.80**
B.	**ENERGY AVAILABILITY**				
1	Own Generation	Mus	10.00	0.02	0.02
2	Power Purchase from CGS / UI etc.	Mus	677.81	635.79	635.79
3	Free Power	Mus	340.65	579.82	579.82
4	Overall pool loss	%	2.14	2.80	2.80
5	Overall pool loss	Mus	12.60	34.04	8.39
6	**Total Energy Availability (1 + 2 +3 -5)**	**Mus**	**1015.86**	**1181.59**	**1207.24**
C	**ENERGY SURPLUS/ (GAP)**	**Mu**	**0.00**	**103.53**	**146.44**

5.7 Fuel Cost

PDS is having 12 hydro generating stations, with a total installed capacity of 35.70 MWs and 2 diesel-generating stations, with a total installed capacity of 4.99 MWs. The fuel cost approved by the Commission in its Tariff Order dated 26.2.2021, actuals furnished by PDS and the cost now approved by the Commission are given in table below.

Table 5.6: Fuel Cost approved by the Commission for FY 2021-22

Sl. No.	Particulars	As approved by the Commission in MYT Order dated 26.02.21	Actual As per Provisional Accounts	Now Approved by Commission
1	Cost of Fuel	**0.18**	**0.39**	**0.39**
2	**Total**	0.20	0.39	0.39

The Commission now approves the fuel cost of ₹ 0.39 Crores for the FY 2021-22, as per actuals furnished by PDS.

5.8 Power Purchase Cost

The Power Purchase Cost approved by the Commission in the Tariff Order for the FY 2021-22, actuals furnished by PDS and the cost now approved by the Commission are given in table below.

Table 5.7: Power Purchase Cost approved by the Commission for FY 2021-22

Sl. No.	Particulars	As approved by the Commission in MYT Order dated 26.02.2021	Actual As per Provisional Accounts	Now Approved by Commission
1	Total Energy Purchased	249.26	234.68	218.84
2	Transmission & Other Charges	28.75	41.33	41.33
	Total	**278.01**	**276.01**	**260.17**

The petitioner has claimed the power purchase cost of ₹ 276.01Crore. The petitioner has purchased the excess power due to higher distribution losses. However, the Commission has considered only the Approved distribution losses of 20%. Therefore, the excess power is being disallowed by the Commission. Accordingly, the Commission now approves power purchase cost of ₹ 260.17 Crores for the FY 2021-22.

5.9 Employee Cost

The Commission vide its Order dated 26.2.2021, had approved employee cost at ₹105.34 Crores for the FY 2021-22. The PDS has furnished actuals at ₹ 187.51 Crores for the FY 2021-22 and the cost now approved by the Commission for PDS as a whole due to non-availability of segregated audited accounts are given in table below.

Table 5.8: Employee Cost approved by the Commission for FY 2021-22

Sl. No.	Particulars	As approved by the Commission in MYT Order dated 26.02.2021	Actual As per Provisional Accounts	Now Approved by Commission
1	Employee Cost	105.34	187.51	187.51
2	**Total**	**105.34**	**187.51**	**187.51**

The Commission, now approves ₹ 187.51 Crores towards employee cost for the FY 2021-22.

5.10 Repair and Maintenance Expenses

The Commission vide its Order dated 26.2.2021 had approved Repair & Maintenance Expenses of ₹22.20 Crores for the FY 2021-22. The PDS has furnished actual Repair & Maintenance Expenses at ₹ 11.53 Crores for the FY 2021-22andthe cost now approved by the Commission for PDS as a whole due to non-availability of segregated audited accounts are given in table below: -

Table 5.9: Repair & Maintenance Expenses approved by the Commission for FY 2021-22

Sl. No.	Particulars	As approved by the Commission in MYT Order dated 26.02.2021	Actual As per Provisional Accounts	Now Approved by Commission
1	Repair & Maintenance Expenses	22.02	11.53	11.53
2	**Total**	**22.02**	**11.53**	**11.53**

The Commission, accordingly, now approves ₹ 11.53 Crores towards Repair & Maintenance Expenses for the F.Y. 2021-22.

5.11 Administrative and General Expenses

The Commission vide its Order dated 26.2.2021 had approved ₹ 3.49 Crores towards Administrative and General Expenses for the FY 2021-22. The PDS has furnished actuals at ₹ 3.73Crores for the FY 2021-2 2and the cost now approved by the Commission for PDS as a whole due to non-availability of segregated audited accounts are given in table below:-

Table 5.10: A & G Expenses approved by the Commission for FY 2021-22

Sl. No.	Particulars	As approved by the Commission in MYT Order dated 26.02.2021	Actual As per Provisional Accounts	Now Approved by Commission
1	Administration & General Expenses	3.49	3.73	3.73
2	**Total**	**3.49**	**3.73**	**3.73**

The Commission now approves ₹ 3.73 Crores towards Administrative & General Expenses for the FY 2021-22.

5.12 Gross Fixed Assets

In the absence of valid information regarding gross fixed assets, the Commission in its Tariff Order dated 26.2.2021, had not approved the value of gross fixed assets. The PDS in its True up Petition for the FY 2021-22, PDS has stated that the values of gross fixed assets performa accounts, as detailed in table below:

Table 5.11: Gross Fixed Assets during FY 2021-22

Sl. No.	Particulars	Amount
1	Opening Balance	1099.47
2	Addition During The Year	62.32
3	Less Deduction	0.00
4	**Closing Balance of GFA (1+2)**	1161.79

Commission's Analysis:

Depreciation allowed on the GFA as furnished by the PDS and admitted in this order is as under

5.13 Depreciation

The PDS in its True up Petition for the FY 2021-22, has furnished actuals at ₹ 62.32 Crores for the FY 2021-22.

Commission's Analysis:

The Commission in its Tariff Order dated 26.2.2021 had approved a depreciation of ₹ 23.12 Crores for the FY 2021-22.

Now based on the performa accounts, the Commission calculated Depreciation is shown in the table below:

Table 5.12: Depreciation approved by the Commission for FY2021-22

Sl. No.	Particulars	Amount
1	Opening Balance of NFA as on 01.04.2021	464.37
2	Addition During the Year	62.32
3	NFA value of assets deletion during the year	0.00
4	Closing Balance to end of 31.03.2021(1+2-3)	526.69
5	Average GFA	495.53
6	Rate of Depreciation	5.28%
7	**Depreciation**	**26.16**

The Commission accordingly now approves a depreciation of ₹ 26.16 Crores for the FY 2021-22.

5.14 Interest and Finance Charges

The PDS in its True Up Petition for the FY 2021-22, has not furnished interest and finance charges during the FY 2021-22.

Commission's Analysis:

The Commission in its Tariff Order dated 26.2.2021 had not approved any interest and finance charges. PDS has not shown any loans and interest. No interest is allowed in Tariff Order for the FY 2021-22. **The Commission therefore, does not consider any interest.**

5.15 Interest on Working Capital

The PDS in its True up Petition for the FY 2021-22, has furnished Interest on Working

Capital at ₹ 5.81 Crores during the FY 2021-22.

Commission's Analysis:

As per Regulations, 32 of SSERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2020., interest on working capital shall be calculated on normative basis notwithstanding that the Licensee has not taken working capital loan from any outside agency.

(a) The Distribution Licensee shall be allowed interest on the estimated level of working capital for the Distribution Wires Business for the financial year, computed as follows:

(i) Operation and maintenance expenses for one month; plus

(ii) Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus

(iii) Receivables equivalent to two (2) months of the expected revenue from charges for use of Distribution Wires at the prevailing tariffs; minus

(iv)Amount, if any, held as security deposits under clause (b) of sub- section (1) of Section 47 of the Act from Distribution System Users except the security deposits held in the form of Bank Guarantees.

(b) Interest shall be allowed 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.

Accordingly, the Commission has arrived at the interest on working capital as shown in the Table below.

Table 5.13: Interest on Working Capital calculated by the Commission for FY 2021-22

Sl. No.	Particulars	Total Cost	Working Capital & Interest
1	O & M Expenses		
a)	Employee Cost	187.51	15.63
b)	Repair &Maintenance Expenses	11.53	0.96
c)	Administration & General Expenses	3.73	0.31
2	Maintenance of Spares		

3	Receivables	497.35	82.89
	Less: Security Deposited		13.65
4	Total		**86.14**
5	SBAR as on 01.04.2020		7.55%
6	**Interest on Working Capital**		**6.50**

Table 5.14: Interest on Working Capital now approved by the Commission for FY 2021-22

Sl No	Category	As approved by the Commission in MYT Order dated 26.02.2021	Actual As per Provisional Accounts	Now Approved by Commission
1	Interest on Working Capital	7.32	5.81	6.50
2	**Total**	**7.32**	**5.81**	**6.50**

The Commission now approves interest on working capital at ₹ 6.50 Crores for the FY 2021-22 as against the ₹ 5.81 Crores furnished by PDS.

5.16 Return on Equity

PDS has not claimed any amount towards Return on Equity for the FY 2021-22.

Commission's Analysis:

Regulation 29 of SSERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2020, provides for return on equity at 14% PA on the equity amount appearing in the audited balance sheet of the annual accounts.

The PDS has not produced audited annual accounts. In addition, since it is a State Government Department, the expenses are funded by the Government. **As such, no separate return is to be allowed as return on equity.**

5.17 Non-Tariff Income

PDS has projected non-tariff income at ₹ 2.78 Crores during the FY 2021-22

Commission's Analysis:

As per Regulation 69 of SSERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2020, non-tariff income comprises of:

- Meter /metering equipment/service line rentals
- Service charges
- Customer charges
- Revenue from late payment surcharge
- Recoveries on account of theft and pilferage of energy
- Miscellaneous receipts.
- Interest on staff loans and advances
- Interest on advances to suppliers
- Income from other business
- Income from staff welfare activities
- Excess found on physical verification of stores
- Interest on investments fixed and call deposits and bank balances
- Prior period Income.

Keeping in view the above types of income the Commission had approved a non-tariff income of ₹1.30Croresin its Tariff Order dated 26.2.2021. PDS now submits a non-tariff Income of ₹2.78Croresastheactuals.

Table 5.15: Non-Tariff Income approved by the Commission for FY 2021-22

Sl. No.	Particulars	As approved by the Commission in MYT Order dated 26.02.21	Actual As per Provisional Accounts	Now Approved by Commission
1	Non- Tariff Income	1.30	2.78	2.78
2	**Total**	**1.30**	**2.78**	**2.78**

The Commission therefore approves ₹ 2.78 Crores towards Non-Tariff Income for the FY 2021-22, as per the actuals furnished by PDS.

5.18 Revenue from Existing Tariffs for the FY 2021-22

Revenue from existing tariffs approved by the Commission for the FY 2021-22 in the Tariff Order dated 26.2.2021 and actuals furnished by the PDS and now approved by the Commission are furnished in the table below.

Table 5.16: Revenue from Sales approved by Commission for FY 2021-22

Sl. No.	Particulars	As Approved by Commission in Review Order Dated 26.2.2021	Actual As per Provisional Accounts	Now Approved by Commission
1	Domestics	29.54	30.22	30.22
2	Commercial	21.43	23.90	23.90
3	Public Lighting	0.19	0.16	0.16
4	Temporary Supply	2.60	2.79	2.79
5	HT Industrial Consumers	180.56	225.57	225.57
6	LT Industrial Consumers	0.93	1.90	1.90
7	Bulk Supply	22.09	19.26	19.26
8	Outside States	--	139.67	139.67
9	Revenue from IPP	--	1.33	1.33
10	**Total**	**257.34**	**444.80**	**444.80**

The Commission now approves revenue from existing tariff at ₹ 444.80 Crores including revenue from outside sales at ₹ 139.67 Crores for the FY 2021-22, as per the actuals furnished by PDS.

5.19 Aggregate Revenue Requirement (ARR) for the FY 2021-22

The ARR for the FY 2021-22 approved by the Commission in its Tariff Order dated 26.2.2021, actuals furnished by the PDS and now approved by the Commission are furnished in the table below:-

Table 5.17: Aggregate Revenue Requirement approved by Commission for FY 2021-22

Sl. No.	Particulars	As Approved by Commission in Review Order Dated 26.2.2021	Actual As per Provisional Accounts	Now Approved by Commission
1	Cost of Fuel	0.18	0.39	0.39
2	Cost of Generation	22.3	0.00	0.00
3	Cost of Power Purchase	278.01	234.68	218.84
5	Intra State Transmission Charge	48.18	41.17	41.33
4	Employee Costs	105.34	187.51	187.51
6	Repair and Maintenance Expense	22.02	11.53	11.53
7	Administration and General Expenses	3.49	3.73	3.73
8	Depreciation	23.12	36.45	26.16
9	Interest Charges	0.00	0.00	0.00
10	Interest on Working Capital	7.32	5.81	6.50
11	Previous Year Expenses of Power Cost	0.00	4.13	4.13
12	**Total Revenue Requirement**	**509.97**	**525.40**	**500.13**
13	Less: Non Tariff Income	1.30	2.78	2.78
14	**Net Revenue Requirement**	**508.67**	**522.62**	**497.35**
15	Revenue from Tariff	259.32	305.13	305.13
16	Revenue from Outside State Sales	146.66	139.67	139.67
17	**Gap/(Surplus)**	**102.69**	**77.82**	**52.55**

True up for the F.Y 2021-22 indicates that the revenue gap has been arrived to ₹ 52.55 Crores, as against ₹ 102.69 Crores approved by the Commission in the Tariff Order dated 26.02.2021 and Revenue Gap of ₹ 77.82 Crores claimed by PDS.

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 26.2.2021 based on the projected data furnished by the PDS. Now the PDS 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 26.2.2021, the Commission had approved energy sales of 914.55 MUs for the FY 2022-23. The PDS in its Review Petition for the FY 2022-23 has submitted the estimated sales considering actual for ascertain 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 PDS and approved by the Commission are shown in table below:

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

Sl. No.	Consumer Category	As approved by the Commission in MYT Order dated 26.02.21	Review Estimate	Now Approved by Commission
1	Domestics	141.89	137.36	137.36
2	Commercial	45.89	33.98	33.98
3	Public Lighting	0.44	0.23	0.23
4	Temporary Supply	2.73	3.71	3.71
5	HT Industrial Consumers	240.78	288.87	288.87
6	LT Industrial Consumers	2.36	1.99	1.99
7	Bulk Supply	36.54	18.10	18.10
	Total	**470.63**	**484.24**	**484.24**
	Outside State	443.92	373.02	373.02
8	**Total**	**914.55**	**857.26**	**857.26**

The Commission now approves energy sales for the FY 2022-23 of 857.26 MUs as projected by PDS.

6.3 Transmission & Distribution Losses (T&D Losses)

The Commission in its order for the FY2022-23 had fixed the target of T&D Losses at 18%. PDS in its Review Petition for the FY 2022-23, has stated that the estimated T&D Losses during the FY 2022-23 is at 12.14%.

Commission's Analysis: The pool loss for the FY2022-23 is considered at 2.80% and T&D Loss is shown as detailed in table below:

Table 6.2: T&D Loss calculation approved by the Commission for FY 2022-23

Sl. No.	Particulars	Units	As approved by the Commission in Review Order dated 26.02.2021	Review Estimate	Now Approved by Commission
1	Own Generation	**Mus**	**12.00**	0.02	0.02
2	Energy Purchased form NTPC	**Mus**	481.55	89.33	89.33
3	Energy Purchased from WBSEDCL	**Mus**	48.92	52.00	52.00
4	Energy Purchased form NHPC	**Mus**	58.38	49.72	49.72
5	Energy Purchased (2+3+4)	**Mus**	**588.85**	**191.05**	**191.05**
6	Pool Loss	**%**	2.14	2.80	2.80
7	Pool Loss	**MUs**	12.60	27.74	5.35
8	Net Energy Available (5-7)	**MUs**	576.25	163.31	185.70
9	Energy Purchased from PTC	**MUs**	47.43	41.00	41.00
	Energy Purchased from Teesta PTC	**MUs**		0.0	0.0
10	Energy Purchased from SPDC	**MUs**	41.53	50.00	50.00
11	Energy Purchased from Rongichu HP	**MUs**	0	6.87	6.87
12	UI purchased	**MUs**	8	60.00	44.97
13	Free Energy	**MUs**	340.65	641.87	641.87
13	**Total Energy Available at state periphery (1+8+9+10+11+12)**	**MUs**	**1025.86**	**1016.20**	**963.56**
14	Outside State Sale through UI/Trading	**MUs**	**451.92**	373.02	373.02
15	**Return Banking**	**MUs**	**0.00**	90.00	0.00
15	Net Energy Available for sale within the state (13-14-15)	**MUs**	**573.94**	**553.18**	**590.54**
16	Energy Sale with in the State	**MUs**	470.63	484.24	484.24
17	T & D loss (15-16)	**MUs**	103.31	68.94	106.30
18	**T & D loss**	**%**	**18.00**	**12.46**	**18.00**

The Commission now approves T&D Loss for the FY 2022-23 at 18%.

6.4 Own Generation

PDS was operating some of the small hydropower projects out of 12 small hydro generating stations owned by it (with installed capacity of 35.70 MWs Small Hydro and 2 diesel generating stations) with a total installed capacity of 4.99 MWs.The Commission in its Tariff Order for the FY 2022-23 had approved own generation at 12 MUs. The PDS has revised for the FY 2022-23 and approved by the Commission are shown in table below.

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

Sl. No.	Stations	As approved by the Commission in MYT Order dated 26.02.21	Review Estimate	Now Approved by Commission
1	Total Generation	12	0.02	0.02
2	Total	0	0.02	0.02

The Commission now approves Own Generation during the FY 2022-23 at 0.02 MUs, as per RE furnished by the PDS.

6.5 Power Purchase

The Commission in its Tariff Order dated 26.2.2021 had approved power purchase quantity at 1018.46 MUs including free power quantity at 340.65 MUs. The PDS has furnished RE for the FY 2022-23 at 990.79 Mus including free power of 641.87 MUs in Review Petition for the FY 2022-23 as detailed in table below:

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

Sl. No.	Stations	As approved by the Commission in Review Order dated 26.02.2021	Review Estimate	Now Approved by Commission
1	**NTPC**			
a)	FSTPP	88.33	0.14	0.14
b)	KHSTPP-I	68.39	0.00	0.00
c)	KHSTPP-II	31.34	0.00	0.00
d)	BSTPP	129.28	0.53	0.53
e)	TSTPP	136.28	0.00	0.00
f)	KBUNL	16.10		0.00
g)	DARLAPAPLI	1.48	72.87	72.87
h)	NPGCL	10.35	15.79	15.79
2	**NHPC**			
a)	RANGIT- III	4.60	5.46	5.46
b)	TEESTA – V	53.78	44.26	44.26
3	**Other Source**			

a)	PTC	47.43	41.00	41.00
b)	WBSEDCL	48.92	52.00	52.00
c)	SPDC	41.53	50.00	50.00
d)	SPDC Chetan HEP			
e)	Rongichu Hydro Power		6.87	6.87
4	UI/Deviation		60.00	44.97
5	Free Power	340.65	641.87	641.87
	PTC Teesta		0.00	0.00
6	**Total**	**1018.46**	**990.79**	**975.76**

The Commission now approves power purchase of 975.76 MUs including free power of 641.87 MUs during the FY 2022-23.

6.6 Energy Balance

The details of energy requirement and availability projected by the PDS and approved by the Commission for the FY 2022-23 and now approved by the Commission are furnished in table below:-

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

Sl. No.	Particulars	Units	As approved by the Commission in MYT Order dated 26.02.21	Review Estimate	Now Approved by Commission
A.	**ENERGY REQUIRMENT**				
1	Energy Sale within the state	Mus	470.63	484.24	484.24
2	Outside State sale through UI/ Trading	Mus		373.02	373.02
3	Total Energy Sale (1 +2)	Mus	470.63	857.26	857.26
4	Overall T & D losses	~~%~~	18.00	12.46	18.00
5	Overall T & D losses	Mus	103.31	68.94	106.30
6	Total Energy Requirement (3+5)	Mus	**573.94**	**788.32**	**963.56**
B.	**ENERGY AVAILABILITY**				
1	Own Generation	Mus	12.00	0.02	0.02
2	Power Purchase from CGS / UI etc.	Mus	677.81	348.92	333.89
3	Free Power	Mus	340.65	641.87	641.87
4	Overall pool loss	%	2.14	2.80	2.80
5	Overall pool loss	Mus	12.60	27.74	5.35
6	Total Energy Availability (1 + 2 +3 -5)	Mus	**1017.86**	**963.07**	**970.43**
C	**ENERGY SURPLUS/ (GAP)**	Mus	**443.92**	**89.82**	**6.87**

6.7 Fuel Cost

The fuel cost approved by the Commission in Tariff Order for the FY 2022-23, RE furnished by PDS and now approved by the Commission are furnished in table below.

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

Sl. No.	Stations	As approved by the Commission in MYT Order dated 26.02.21	Review Estimate	Now Approved by Commission
1	Cost of Fuel	0.20	0.41	0.41
2	**Total**	0.20	0.41	0.41

The Commission now approves fuel cost of ₹ 0.41 Crores for the FY 2022-23, against the same projected in RE by PDS.

6.8 Cost of Generation

The cost of generation approved by the Commission in Tariff Order for the FY 2022-23, RE furnished by PDS and now approved by the Commission are furnished in table below.

Table 6.7: Cost of Generation approved by the Commission for FY 2022-23

Sl. No.	Particulars	As approved by the Commission in MYT Order dated 26.02.21	Review Estimate	Now Approved by Commission
1	Cost of Generation	22.79	0.00	0.00
2	**Total**	**22.79**	**0.00**	**0.00**

The Commission now approves cost of generation of ₹ 0.00 Crores for the FY 2022-23 same as projected in Review Estimate by the PDS.

6.9 Power Purchase Cost

The Power Purchase Cost approved by the Commission for the FY 2022-23, RE furnished by the PDS and now approved by the Commission are furnished in table below.

Table 6.8: Power Purchase Cost approved by the Commission for FY 2022-23

Sl. No.	Particulars	As approved by the Commission in MYT Order dated 26.02.21	Review Estimate	Now Approved by Commission
1	Total Energy Purchased	261.73	119.29	119.29
2	Transmission & Other Charges	30.19	45.04	45.04
	Total	**291.92**	**164.33**	**164.33**

The Commission now approves the power purchase cost of ₹ 164.33 Crores for the FY 2022-23, as per Review Estimate (RE) furnished by PDS.

6.10 Intra State Transmission Charges

The Intra State Transmission Charges approved by the Commission in Tariff Order for the FY 2022-23, RE furnished by PDS and now approved by the Commission are furnished in table below.

Table 6.9: Intra State Transmission Charges approved by the Commission for FY 2022-23

Sl. No.	Particulars	As approved by the Commission in MYT Order dated 26.02.21	Review Estimate	Now Approved by Commission
1	Intra State transmission Charge	50.55	44.94	44.94
2	**Total**	**50.55**	**44.94**	**44.94**

The Commission now approves Intra State Transmission Charges of ₹ 44.94 Crores for the FY 2022-23 against the same projected in RE by PDS.

6.11 Employee Cost

The Commission in its Order dated 26.2.2021 had approved employee cost at ₹111.66 Crores for the FY 2022-23. The PDS has furnished RE at ₹188.94 Crores for the FY 2022-23. The details shown in the table below:

Table 6.10: Employee Cost approved by the Commission for FY 2022-23

Sl. No.	Particulars	As approved by the Commission in MYT Order dated 26.02.21	Review Estimate	Now Approved by Commission
1	Employee Cost	111.66	188.94	188.94
2	**Total**	111.66	188.94	188.94

The Commission now approves the employee cost of ₹ 188.94 Crores for the FY 2022-23, against same RE furnished by PDS.

6.12 Repair and Maintenance Expenses

The Commission in its Order dated 26.2.2021 had approved Repair & Maintenance Expenses at ₹ 23.34 Crores for the FY 2022-23. The PDS has estimated at ₹ 10.13 Crores for the FY 2022-23 and now approved by the Commission are furnished in table below.

Table 6.11: Repair & Maintenance Expenses approved by the Commission for FY 2022-23

Sl. No.	Particulars	As approved by the Commission in MYT Order dated 26.02.21	Review Estimate	Now Approved by Commission
1	Repair & Maintenance Expenses	**23.34**	**10.13**	**10.13**
2	**Total**	**23.24**	**10.13**	**10.13**

The Commission now approves ₹ 10.13 Crores towards Repair & Maintenance Expenses for the FY 2022-23, as per RE furnished by PDS.

6.13 Administrative and General Expenses

The Commission in its Order dated 26.2.2021, had approved ₹3.70 Crores towards Administrative and General Expenses for the FY 2022-23. The PDS has furnished RE at ₹ 5.37 Crores for the FY 2022-23 and now approved by the Commission are furnished in table below.

Table 6.12: A & G Expenses approved by the Commission for FY 2022-23

Sl. No.	Particulars	As approved by the Commission in MYT Order dated 26.02.21	Review Estimate	Now Approved by Commission
1	Administration & General Expenses	3.70	5.37	5.37
2	**Total**	3.70	5.37	5.37

The Commission now approves ₹ 5.37 Crores towards Administrative & General Expenses for the FY 2022-23 as per RE furnished by PDS.

6.14 Gross Fixed Assets

In the absence of valid information regarding gross fixed assets, the Commission in its Tariff

Order dated 26.2.2021, had not approved the value of gross fixed assets. The PDS in its review petition for the FY 2022-23 has stated that the values of gross fixed assets have been taken from the Performa accounts, as detailed in table below:-

Table 6.13: Gross Fixed Assets furnished by PDS for FY 2022-23

Sl. No.	Particulars	Amount
1	Opening Balance	1161.79
2	Addition During The Year	26.48
3	**Closing Balance (1+2)**	1188.27

Commission Analysis:

In the absence of audited annual accounts, the information furnished by PDS cannot be taken as authentic.

6.15 Depreciation

The PDS in its review petition has furnished depreciation of ₹38.03 Crores for the FY 2022-23.

Commission's Analysis:

The PDS has not furnished the calculation at which the amount of depreciation was arrived at. As such the depreciation has been worked out accordingly as detailed in table below.

Table 6.14: Depreciation approved by the Commissionfor2022-23

Sl. No.	Particulars	Amount
1	Opening Balance of NFA as on 01/04/2022	526.69
2	Addition During the Year	26.48
3	Closing Balance to end of 31/03/2023(1+2)	553.17
4	Average GFA	539.93
5	Rate of Depreciation	5.28%
6	**Depreciation**	**28.51**

The Commission accordingly approves depreciation at ₹ 28.51 Crores for the FY 2022-23.

6.16 Interest and Finance Charges

The PDS has not projected interest and finance charges during the FY 2022-23.

Commission's Analysis:

The Commission in its Tariff Order dated 26.2.2021 had not approved any interest and finance charges for the FY 2022-23. PDS has not shown any loans and interest. **As such the Commission has not considered interest and finance charges during the FY 2022-23.**

6.17 Interest on Working Capital

The PDS has furnished interest on working capital at ₹ 3.87 Crores during the FY 2022-23.

Commission's Analysis:

As per Regulations, 32.3 of SSERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) 2020, interest on working capital shall be calculated on normative basis notwithstanding that the Licensee has not taken working capital loan from any outside agency.

(a) The Distribution Licensee shall be allowed interest on the estimated level of working capital for the Distribution Wires Business for the financial year, computed as follows:

(i) Operation and maintenance expenses for one month; plus

(ii) Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus

(iii) Receivables equivalent to two (2) months of the expected revenue from charges for use of Distribution Wires at the prevailing tariffs; minus

(iv)Amount, if any, held as security deposits under clause (b) of sub- section (1) of Section 47 of the Act from Distribution System Users except the security deposits held in the form of Bank Guarantees.

(b) Interest shall be allowed 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.

Accordingly, the interest on working capital works out to ₹ 5.86 Crores, as detailed in the table below:-

Table 6.15: Interest on Working Capital calculated by the Commission for FY2022-23

Sl. No.	Particulars	Total Cost	Working Capital & Interest
1	O & M Expenses		
a)	Employee Cost	188.94	15.75
b)	Repair & Maintenance Expenses	10.13	0.84
c)	Administration & General Expenses	5.37	0.45
2	Maintenance of Spares		
3	Receivables	445.59	74.27
	Less: Security Deposit		13.65
4	Total	650.03	77.65
5	SBAR as on 01.04.2022		**7.55%**
6	**Interest on Working Capital**		**5.86**

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

Sl. No.	Particulars	As approved by the Commission in MYT Order dated 26.02.21	Review Estimate	Now Approved by Commission
1	Interest on Working Capital	7.71	3.87	5.86
2	**Total**	**7.71**	**3.87**	**5.86**

The Commission now approves interest on working capital at ₹ 5.86 Crores for the FY 2022-23 against the RE furnished by PDS at ₹ 3.87 Crores.

6.18 Return on Equity

The PDS has not projected return on equity for the FY 2022-23.

Commission's Analysis:

Regulation 29 of SSERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) (Second Amendment Regulations), 2020, provides for return on equity at 14% PA on the equity amount appearing in the audited balance sheet of the annual accounts.

The PDS has not produced audited annual accounts. In addition, since it is a State Government Department, the expenses are funded by the Government. **As such, no separate return is to be allowed for return on equity.**

6.19 Non-Tariff Income

The PDS has furnished non-tariff income at ₹2.90 Crores during the FY 2022-23

Commission's Analysis:

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

Sl. No.	Particulars	As approved by the Commission in MYT Order dated 26.02.21	Review Estimate	Now Approved by Commission
1	Non- Tariff Income	**1.33**	**2.90**	**2.90**
2	**Total**	**1.33**	**2.90**	**2.90**

The Commission now approves Non-Tariff Income at ₹ 2.90 Crores for the FY 2022-23, as per the RE furnished by PDS.

6.20 Revenue from tariff for the FY 2022-23

Revenue from the tariff approved by the Commission for the FY 2022-23 in its Tariff Order dated 26.2.2021 and revised estimates furnished by the PDS and now approved by the Commission are shown in the table below:-

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

Sl. No.	Particulars	As approved by the Commission in Order dated 26.02.2021	Review Estimate	Now Approved by Commission
1	Domestics		20.10	20.10
2	Commercial		15.40	15.40
3	Public Lighting		-0.60	-0.60
4	Temporary Supply		1.80	1.80
5	HT Industrial Consumers		225.80	225.80
6	LT Industrial Consumers		15.30	15.30
7	Bulk Supply		10.00	10.00
	Total	**286.03**	**287.68**	**287.80**
8	Outside States	133.18	187.54	187.54
9	**Total**	**419.21**	**475.22**	**475.34**

The Commission approves the Revenue from Tariff at ₹475.34 Crores including Revenue from outside sales at₹ 187.54 Crores for the FY 2022-23.

6.21 Aggregate Revenue Requirement (ARR) for the FY 2022-23

The ARR for the FY 2022-23 approved by the Commission in its Tariff Order dated 26.2.2021, Revised Estimate furnished by the PDS and now approved by the Commission are furnished in table below.

Table 6.19: Aggregate Revenue Requirement and Gap approved for FY 2022-23 (Rs Crore)

Sl. No.	Particulars	2022-23 As approved by the Commission in Review Order dated 14.03.2022	Review Estimate	Now Approved by Commission
1	Cost of Fuel	0.18	0.41	0.41
2	Cost of Generation	22.79	0.00	0.00
3	Cost of Power Purchase	291.91	164.33	164.33
4	Intra State Transmission Charge	50.55	44.94	44.94
5	Employee Costs	111.66	188.94	188.94
6	Repair and Maintenance Expense	23.34	10.13	10.13
7	Administration and General Expenses	3.70	5.37	5.37
8	Depreciation	24.40	38.03	28.51
9	Interest Charges	0.0	0.00	0.00
10	Interest on Working Capital	7.71	3.87	5.86
11	Return on NFA/Equity	0.0	0.00	0.00
12	**Total Revenue Requirement**	**536.24**	**456.02**	**448.49**
13	Less: Non Tariff Income	1.33	2.90	2.90
14	**Net Revenue Requirement**	**534.91**	**453.12**	**445.59**
15	Revenue from Tariff	286.03	287.68	**287.80**
16	Revenue from Outside State Sales	133.18	187.54	**187.54**
17	**Gap/(Surplus)**	**115.70**	**(22.10)**	**(29.75)**

Review for the FY 2022-23 indicates that the revenue gap has arrived to surplus of ₹ 29.75 Crores against deficit of ₹115.70 Crores approved by the Commission for the FY 2022-23.

7. AGGREGATE REVENUE REQUIREMENT FOR THE F.Y. 2023-24, COMMISSION'S ANALYSIS AND DECISIONS

7.1 Consumer Categories

The PDS was serving 1,23,805 consumers as on 31.03.2022 in its area of operation. The consumers could be broadly categorized as under:

LT Category

- Domestic - Rural, Urban
- Commercial - Rural, Urban
- Public Lighting
- Industrial - Rural, Urban
- Temporary Supply

HT Category

- Industrial

LT & HT Category

- Bulk Supply

The PDS serves the consumers at 250 V, 440 V and 11 kV levels. It is reported that, except public lighting, most of the consumers are metered. However the unmetered consumers are being provided with meters in a phased manner.

7.1.1 Growth of Consumers

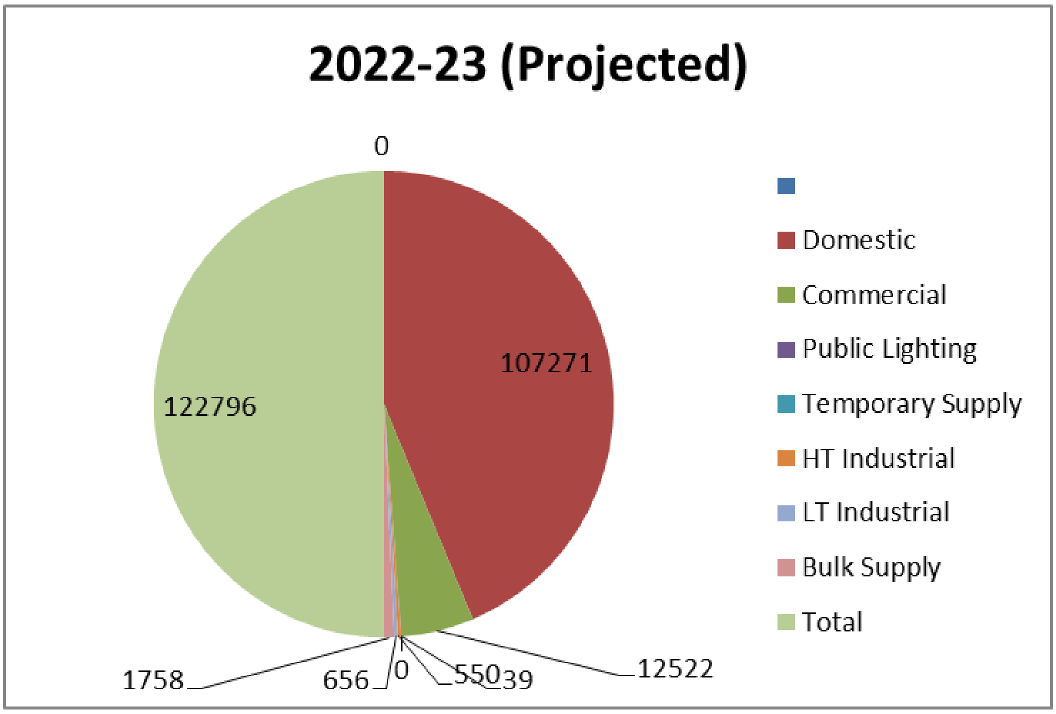
Details of the category-wise growth of consumers over the actuals during the FY 2021-22, the estimated figures for the FY 2022-23 and the projections for the FY 2023-24 are furnished in the table below: -

Table 7.1: Projected of no. of consumers

(In No)

Sl. No.	Category	2021-22 (Actual)	2022-23 (Estimated)	2023-24 (Projected)
1	Domestic	108313	110493	112139
2	Commercial	12466	12898	13090
3	Public Lighting	47	47	48
4	Temporary Supply	-	-	0
5	HT Industrial	560	596	605
6	LT Industrial	616	594	603
7	Bulk Supply	1803	1826	1854
8	**Total**	**123805**	**126454**	**128340**

Chart 7.1: No. of consumers projected by PDS for FY 2023-24



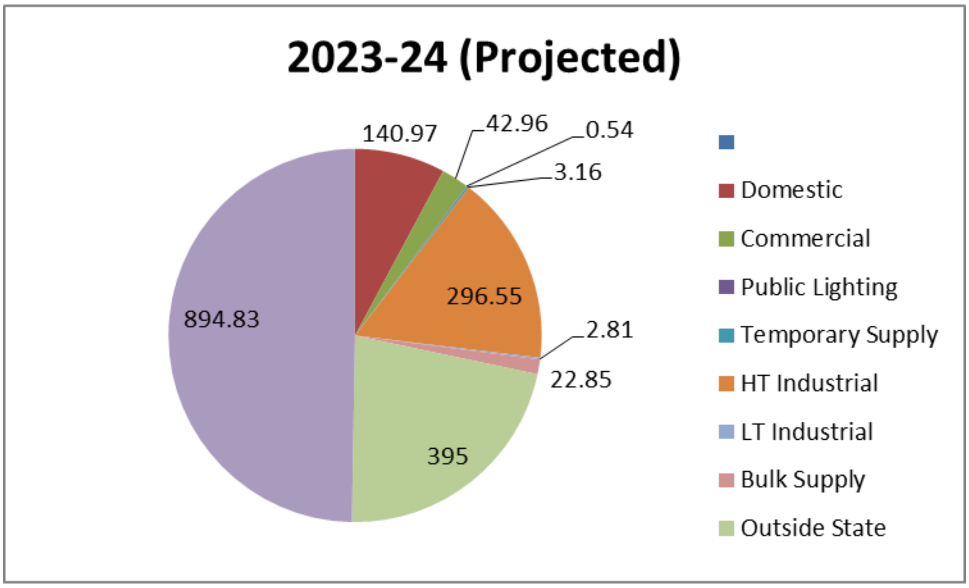
7.2 Category-wise Energy Sales

Category-wise energy sales approved by the Commission for the FY 2023-24 vide Tariff Order dated 26.2 2021 and the projected energy sales to various categories of consumer for the FY 2023-24 is given in table below:

Table 7.2: Energy Sales projected by PDS for the FY 2023-24

Sl. No.	Category	As Approved by Commission in MYT Order Dated 26.2.2021	2023-24 (Projected)
1	Domestic	155.43	140.97
2	Commercial	47.24	42.96
3	Public Lighting	0.49	0.54
4	Temporary Supply	2.87	3.16
5	HT Industrial	278.68	296.55
6	LT Industrial	2.55	2.81
7	Bulk Supply	38.95	22.85
	Outside State	393.42	395.00
8	**Total**	**919.63**	**894.83**

Chart 7.2: Energy Sales projected by PDS for FY 2023-24



The PDS has projected the category-wise energy sales for the FY 2023-24 based on the actual past sales and growth rate and new developments on account of Government policies, socio-economic changes, industrial growth etc., which would affect consumption across various categories of consumers. In addition to this, the growth trend in number of consumers have been taken as guiding factors in arriving at the requirement of demand and energy.

7.2.1 Analysis of Energy Sales Projections by PDS and the Commission's decision

Reasonable projection of category-wise energy sales is essential for determining the energy required to be purchased and likely revenue by sale of electricity. Sales forecast using the CAGR as the basis for projections is a tried and tested method and is used extensively across the states and accepted by the Regulators.

The CAGR of the past energy sales from the FY 2016-17 to FY 2021-22 is worked out and shown in table below:

Table 7.3: CAGR of energy sales

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 4 years from FY 2017-18 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 1 years from FY 2020-21 to FY 2021-22
	(In MUs)						(In %)				
Domestic	96.74	98.72	107.46	107.94	112.78	135.14	6.91%	8.17%	7.94%	11.89%	19.83%
Commercial	39.68	38.38	40.91	42.05	34.11	45.80	2.91%	4.52%	3.84%	4.36%	34.27%
Public Lighting	0.26	0.17	0.25	0.34	0.31	0.89	27.90%	51.26%	52.69%	61.79%	187.10%
Temporary Supply	2.92	3.38	4.69	2.36	3.06	4.86	10.73%	9.50%	1.19%	43.50%	58.82%
HT Industrial	156.16	174.43	197.67	226.64	223.39	272.69	11.79%	11.82%	11.32%	9.69%	22.07%
LT Industrial	1.31	4.43	4.89	1.85	2.02	2.60	14.69%	-12.47%	-18.99%	18.55%	28.71%
Bulk Supply	26.4	24.16	24.94	30.17	27.69	33.20	4.69%	8.27%	10.01%	4.90%	19.90%
Total	**323.47**	**343.67**	**380.81**	**411.35**	**403.36**	**495.18**					

Table 7.4: Specific monthly consumption/consumer

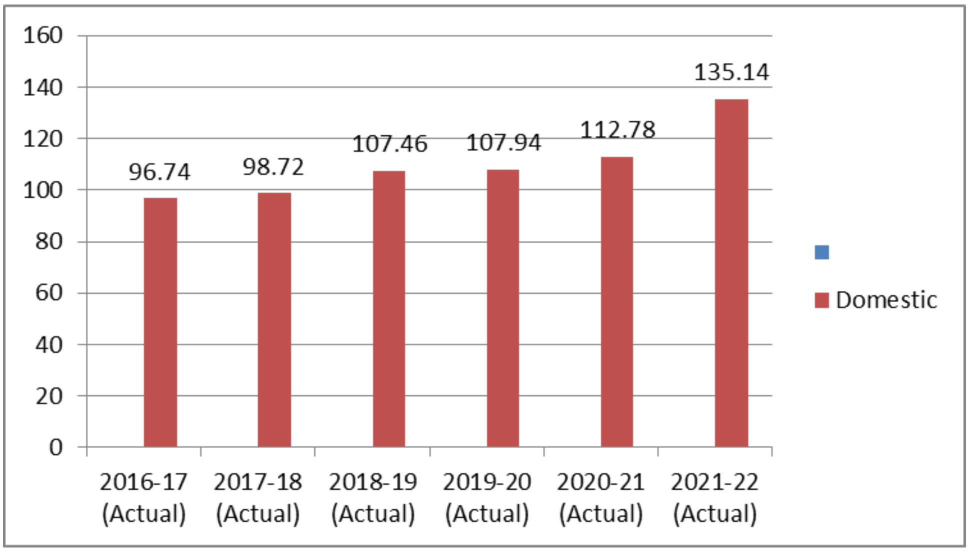
Sl. No.	Category	2021-22(Actual)
1	Domestic	125
2	Commercial	367
3	HT Industrial	48695
4	LT Industrial	422
5	Bulk Supply	1842

The consumption of each category of consumers is discussed below, so as to arrive at a reasonable projection of energy sales for the FY 2023-24.

Domestic

The PDS has projected energy sales to this category at 140.97 MUs for the FY 2023-24. The trend of the actual consumption in the category for the FY 2016-17 to FY 2021-22 is shown in the chart below:

Chart 7.3: Trend of actual consumption – Domestic Category



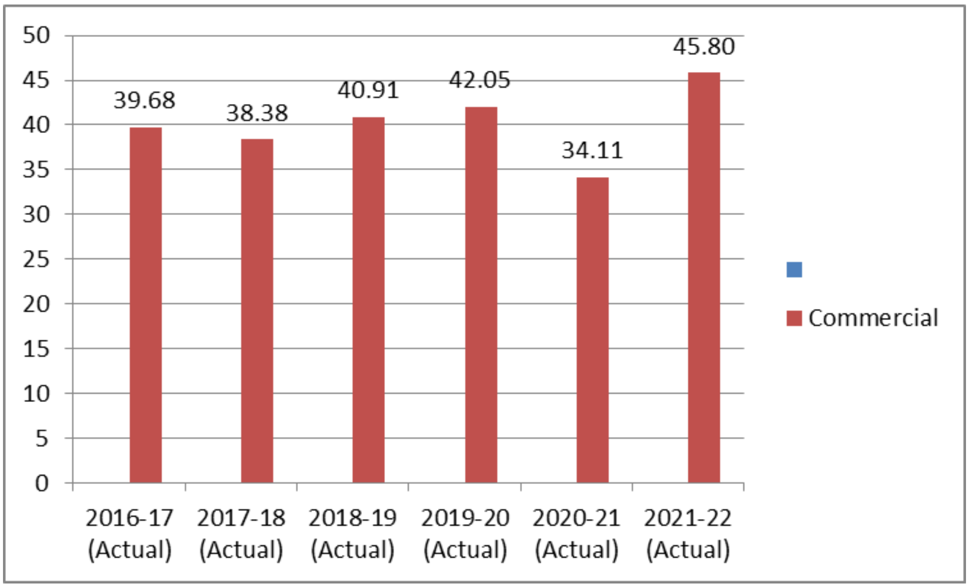
On analysis of the above trend and CAGR over different periods it is seen that the 5 years CAGR FY 2016-17 to FY 2021-22 is 6.91%, 4 years CAGR (FY 2017-18 to FY 2021-22) is 8.17%, the 3 years CAGR (FY 2018-19 to FY 2021-22) is 7.94%, 2 years CAGR (FY 2019-20 to FY2021-22) is 11.89% and the YoY growth (FY 2020-21 to FY 2021-22) is 19.83%. The actual specific consumption during the FY 2021-22 is 125 Kwh. On analysis of the above trend, the CAGR for 4 years of 8.17 % is considered reasonable & consumption work out to 158.12 MUs for the FY 2023-24.

The Commission approves energy sales at 158.12 MUs against 140.97 MUs projected by PDS for the FY 2023-24.

Commercial

The PDS has projected energy sales to this category at 42.96 MUs for the FY 2023-24. growth is observed during the FY 2016-17 & FY 2021-22 over the previous year's sale The trend of the actual consumption in the category for the FY 2016-17 to FY 2021-22 is shown in the chart below:

Chart 7.4: Trend of actual consumption – Commercial Category



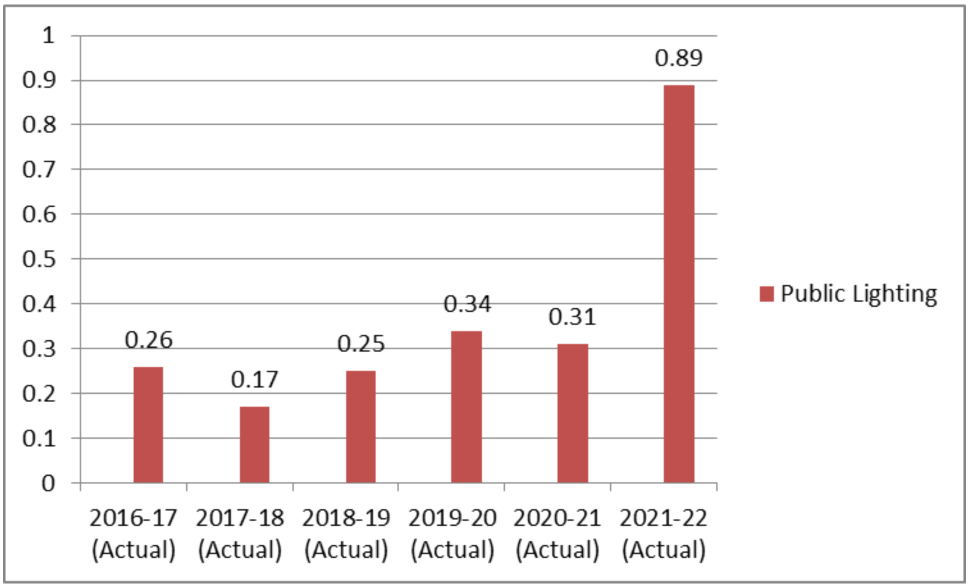
On analysis of the above trend and CAGR over different periods it is seen that the 5 years CAGR for FY 2016-17 to FY 2021-22 is 2.91 %, 4 years CAGR (FY 2017-18 to FY 2021-22) is 4.52%, the 3 years CAGR (FY 2018-19 to FY 2021-22) is 3.84%, 2 years CAGR (FY 2019-20 to FY 2021-22) is 4.36 % and the YoY growth (FY 2020-21 to FY 2021-22) is 34.27%. The actual specific consumption during the FY 2021-22 is 367 Kwh. On analysis of the above trend, the CAGR for 4 years of 4.52 % is considered reasonable & consumption work out to 50.03 MUs for the FY 2023-24.

The Commission approves energy sales at 50.03 MUs against 42.96 MUs projected by PDS for the FY 2023-24.

Public Lighting

The PDS has projected energy sales to this category at 0.54 MUs for the FY 2023-24.The trend of the actual consumption in the category for FY 2016-17 to FY 2021-22 is shown in the chart below:

Chart 7.5: Trend of actual consumption – Public Lighting Category



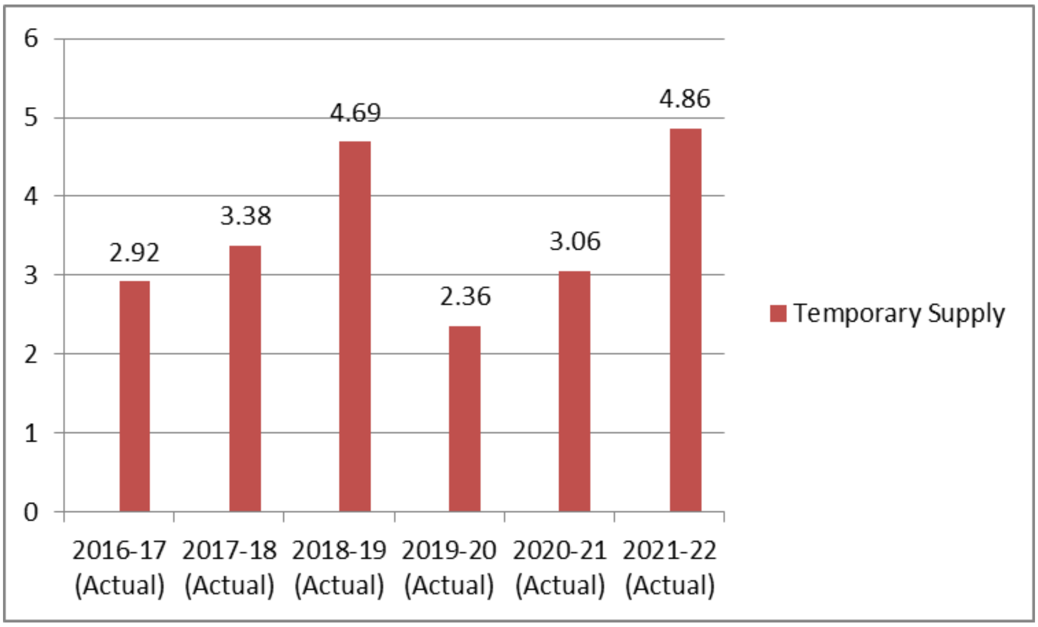
On analysis of the above trend and CAGR over different periods, it is seen that the 5 years CAGR for FY 2016-17 to FY 2021-22 is 27.90 %, 4 years CAGR (FY 2017-18 to FY 2021-22) is -51.26%, the 3 years CAGR (FY 2018-19 to FY 2021-22) is 52.69%, 2 years CAGR (FY 2019-20 to FY 2021-22) is 61.79% and the YoY growth (FY 2020-21 to FY 2021-22) is 187.10%. On analysis of the above trend, CAGR over different periods and actual consumption of 0.89 MUs in the FY 2021-22, which seems to very high, therefore the Commission has accepted the sale projection of 0.54 MUs projected by PDS for the FY 2023-24.

The Commission approves energy sales at 0.54 MUs as projected by PDS for the FY 2023-24.

<u>Temporary Supply</u>

The PDS has projected energy sales to this category at 3.16 MUs for the FY 2023-24. The trend of the actual consumption in the category for the FY 2016-17 to FY 2021-22 is shown in the chart below:

Chart 7.6: Trend of actual consumption – Temporary Supply Category



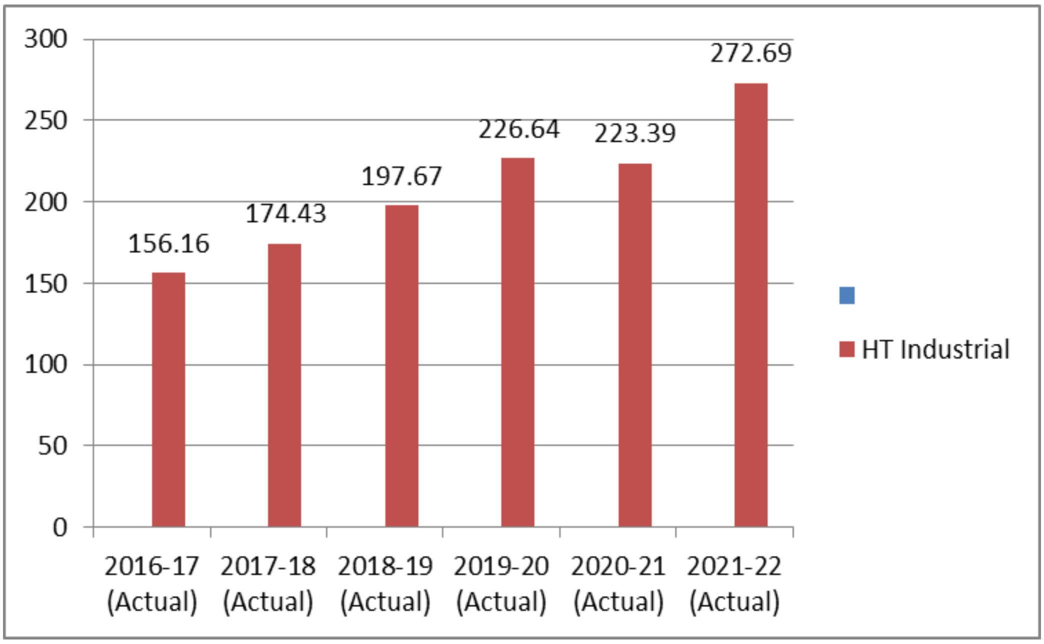
On analysis of the above trend and CAGR over different periods it is seen that the 5 years CAGR for FY 2016-17 to FY 2021-22 is 10.73%, 4 years CAGR (FY 2017-18 to FY 2021-22) is -9.50%, the 3 years CAGR (FY 2018-19 to FY 2021-22) is 1.19%, 2 years CAGR (FY 2019-20 to FY 2021-22) is 43.50% and the YoY growth (FY 2020-21 to FY 2021-22) is 58.82%. On analysis of the above trend, CAGR over different periods and actual consumption of 4.86 MUs in the FY 2021-22 seems to be on higher side, therefore the Commission has accepted the consumption of 3.16 MUs projected by PDS for the FY 2023-24.

The Commission approves energy sales at 3.16 MUs as projected by PDS for the FY 2023-24.

HT Industrial

The PDS has projected energy sales to this category at 296.55 MUs for the FY 2023-24. The trend of the actual consumption in the category for the FY 2016-17 to FY 2020-21 & RE for the FY 2021-22 is shown in the chart below

Chart 7.7: Trend of actual consumption – HT Industrial Category



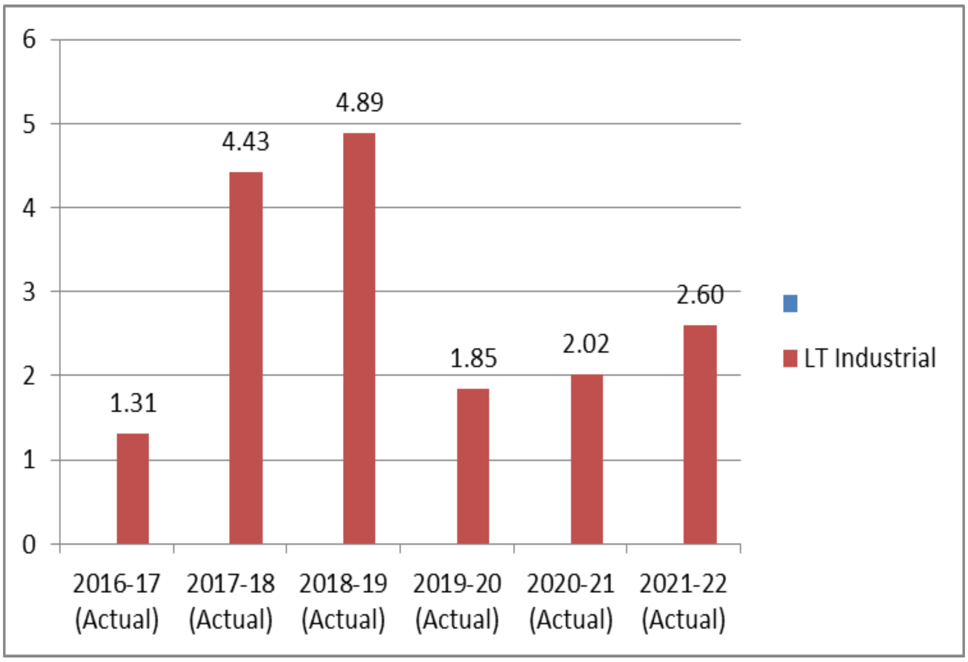
On analysis of the above trend and CAGR over different periods it is seen that the 5 years CAGR for FY 2016-17 to FY 2021-22 is 11.79%, 4 years CAGR (FY 2017-18 to FY 2021-22) is -11.82%, the 3 years CAGR (FY 2018-19 to FY 2021-22) is 11.32%, 2 years CAGR (FY 2019-20 to FY 2021-22) is 9.69% and the YoY growth (FY 2020-21 to FY 2021-22) is 22.07%. On analysis of the above trend, CAGR over different periods and actual consumption of 272.69 MUs in the FY 2021-22, based on 2 year CAGR, the consumption work out to 328.10 MUs against 296.55 MUs projected by PDS for the FY 2023-24.

The Commission approves energy sales at 328.10 MUs against 296.55 MUs projected by PDS for the FY 2023-24.

LT Industrial

The PDS has projected energy sales to this category at 2.81 MUs for the FY 2023-24.The trend of the actual consumption in the category for the FY 2016-17 to FY 2021-22 is shown in the chart below:

Chart 7.8: Trend of actual consumption – LT Industrial Category



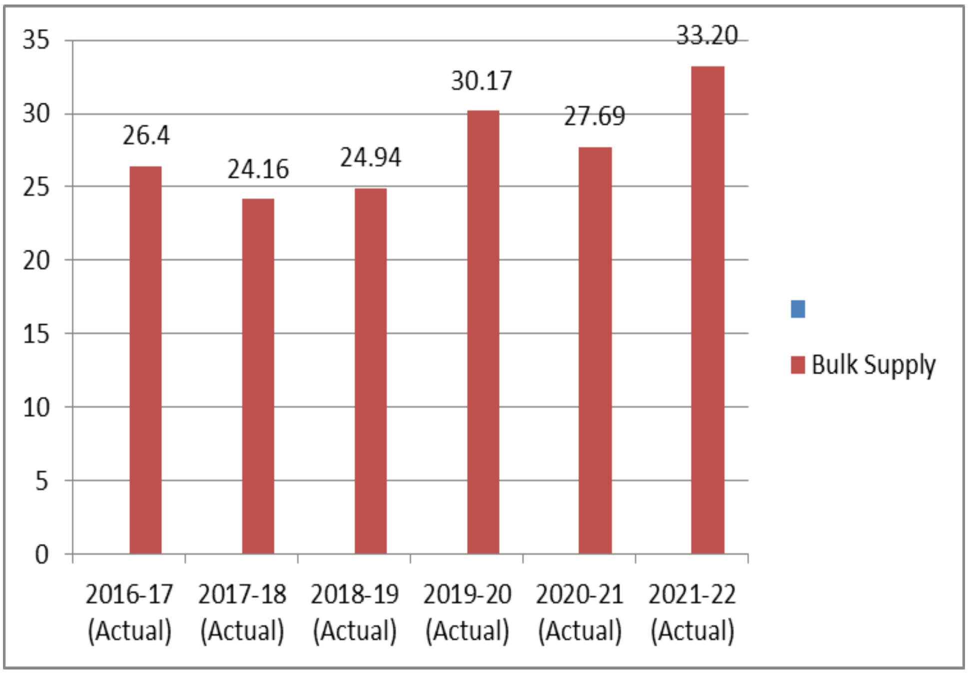
On analysis of the above trend and CAGR over different periods it is seen that the 5 years CAGR for FY 2016-17 to FY 2021-22 is 14.69%, 4 years CAGR (FY 2017-18 to FY 2021-22) is -12.47%, the 3 years CAGR (FY 2018-19 to FY 2021-22) is -18.99%, 2 years CAGR (FY 2019-20 to FY 2021-22) is 18.55% and the YoY growth (FY 2020-21 to FY 2021-22) is 28.71%.The actual specific consumption during the FY 2021-22 is 422 kWh. On analysis of the above trend, CAGR over different periods and actual consumption of 2.60 MUs in the FY 2021-22, based on 5% increase, the consumption work out to 2.87 MUs against 2.81 MUs projected by PDS for the FY 2023-24.

The Commission approves energy sales at 2.87 MUs against 2.81 MUs projected by PDS for the FY 2023-24.

<u>Bulk Supply</u>

The PDS has projected energy sales to this category at 22.85 MUs for the FY 2023-24 The trend of the actual consumption in the category for the FY 2016-17 to FY 2021-22 is shown in the chart below :

Chart 7.9: Trend of actual consumption – Bulk Supply Category



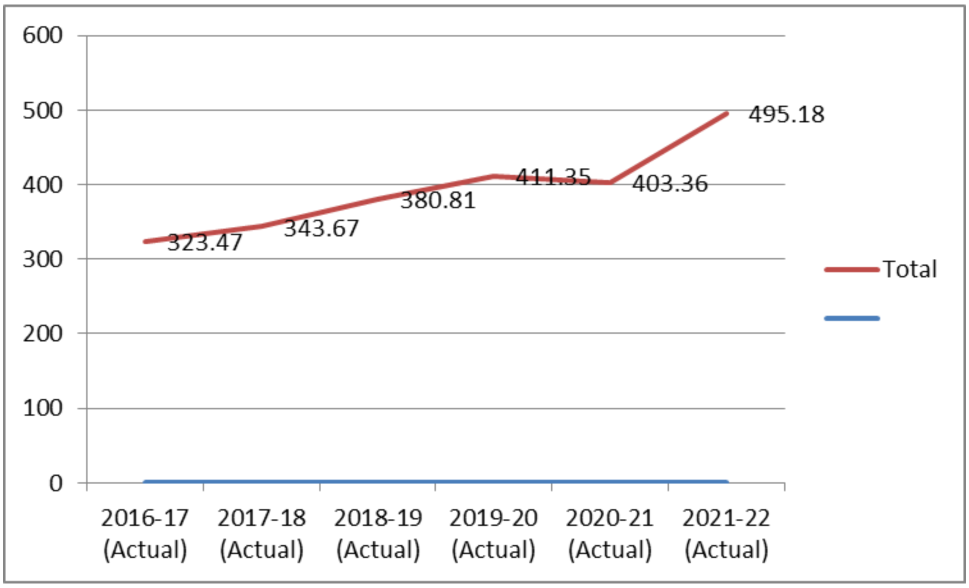
On analysis of the above trend and CAGR over different periods it is seen that the 5 years CAGR for FY 2016-17 to FY 2021-22 is 4.69%, 4 years CAGR (FY 2017-18 to FY 2021-22) is 8.27%, the 3 years CAGR (FY 2018-19 to FY 2021-22) is 10.01%, 2 years CAGR (FY 2019-20 to FY 2021-22) is 4.90% and the YoY growth (FY 2020-21 to FY 2021-22) is 19.90%. The actual specific consumption during the FY 2021-22 is 1842 kWh. On analysis of the above trend, CAGR over different periods and actual consumption of 33.20 MUs in the FY 2021-22, however PDS has projected the sales on lower side, accordingly the consumption of 22.85 MUs projected by PDS for the FY 2023-24.

The Commission approves energy sales at 22.85 MUs as projected by PDS for the FY 2023-24.

<u>Total sales</u>

The trend of the actual consumption within the state of Sikkim for the FY 2016-17 to FY2021-22 is shown in the chart below:

Chart 7.10: Trend of actual consumption – Sales within the State



7.3 Category-Wise Energy Sales

The category-wise energy sales approved by the Commission for the FY 2023-24 is given in table below:

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

Sl. No.	Category	FY 2023-24
1	Domestic	158.12
2	Commercial	50.03
3	Public Lighting	0.54
4	Temporary Supply	3.16
5	HT Industrial	328.10
6	LT Industrial	2.87
7	Bulk Supply	22.85
8	**Total**	**565.66**

The Commission approves total energy sales within the state at 565.66 MUs for the FY 2023-24.

7.4 Transmission and Distribution Losses (T&D Losses)

PDS projected T&D Losses at 25.72% for the FY 2023-24.

Commission's Analysis:

During the FY 2021-22, the actual T&D Losses work out to 22.17%, while in the FY 2022-23 the T&D Losses are approved at 18%, as discussed in the review of the respective years. In the MYT Tariff Order, the T&D Losses were fixed and as per the trajectory the Commission has fixed the T&D losses at 16% for FY 2023-24. However, PDS has projected T&D losses at 13.59 % for the FY 2023-24. So, trajectory loss % target 13.59 % is considered as reasonable. PDS should take steps to keep the T&D losses as projected for the FY 2023-24.

The Commission accordingly approves T&D Losses at 13.59 % for the FY 2023-24.The PDS shall make all efforts for reduction of losses in the system.

Energy Requirement

The energy requirement of PDS to meet the demand would be the sum of energy sales to consumers within the State and T&D Losses, as worked out in table below:

Table 7.6: Energy Requirement approved by the Commission

Sl. No.	Particulars	Unit	FY 2023-24
1	Energy sales approved	MUs	565.66
2	T & D Losses approved	%	13.59
3	T & D Losses approved	MUs	88.96
4	Energy requirement	MUs	654.62

7.5 Power Procurement

7.5.1 Own Generation

The Power Department at present is operating the Diesel Power House, Gangtok only and the MUs projected is 0.03 MUs. Power Department's own generating stations except for Diesel Power House, Gangtok have been handed over to private technical partners. The details are given below:-

Table 7.7: Installed capacity of own generating stations

Sl. No	Name of Projects	Installed Capacity (in MWs)	Remarks
	HYDRO		
1	Lower Lagyap Hydel Project (LLHP)	12.00	Project handed over to private party for operation and maintenance.
2	Jali Power House (JHP)	2.10	Project handed over to private party for operation and maintenance
3	Rimbi-I HEP	0.60	Project handed over to private party for operation and maintenance
4	Rongnichu HEP Stage-II	2.50	Project handed over to private party for operation and maintenance
5	Meyongchu HEP	4.00	Project handed over to private party for operation and maintenance
6	Upper Rongnichu Hydel Project (URHP)	8.00	Project handed over to private party for operation and maintenance
7	Kalez Khola HEP	2.00	Project handed over to private party for operation and maintenance
8	Rabomchu HEP	3.00	Project handed over to private party for operation and maintenance
	Total	**34.20**	
	Diesel		
1	Diesel Power House Gangtok	4 x 1.00	Operational

The PDS has projected a generation of 0.03 MUs for the FY 2023-24 from its own generating stations.

The Commission accordingly approves net own generation at 0.03 from its own generating station as projected by PDS for the FY 2023-24.

7.5.2 Power purchase from Central Generating Stations

The balance energy requirement of PDS is mainly met from allocation of power from Central Stations of NTPC, NHPC and other sources such as PTC, SPDC and WBSEDCL etc. PDS submitted that No power will be available from FSTPP, KHSTPP-I, KHSTPP-II and TSTPP. Also, availability of power from PTC Teesta has been taken into consideration.

The PDS has based the power purchase projection sat the Merit Order Dispatch Principles while determining power purchase 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 their disposal.

Accordingly, PDS has considered purchase of the entire power available from all the possible sources during the financial year to meet the demand to the extent possible.

Besides the above, the PDS is also entitled for free power from some hydro power stations.

The actual power procurement projected for the FY 2023-24 is furnished in table below:-

Table 7.8: Summary of Power Purchase furnished by PDS

Sl. No.	Source	2023-24 As approved by the Commission in MYT Order dated 26.02.21	2023-24 (Projected)
	Central Sector		
1	FSTPP, NTPC	129.28	0.00
2	BSTPP, NTPC	88.33	0.67
3	KHSTPP-I, NTPC	68.39	0.00
4	KHSTPP-II, NTPC	31.34	0.00
5	TSTPP, NTPC	136.28	0.00
6	DARLAPALI	1.48	65.87
7	KBNUL	16.10	
8	NPGCL	10.35	15.00
9	RANGIT-III, NHPC	4.60	6.00
10	TEESTA-V, NHPC	53.78	48.68
	Others		
11	CHUKHA, PTC	47.43	60.25
12	WBSEDCL	48.92	72.65
13	SPDC	41.53	72.50
	Rongichu Hydro Power		9.35
14	UI /over drawn (net)		75.00
15	Free Power	340.65	674.19
	TOTAL	**1018.46**	**1100.16**

Commission's Analysis

The Commission has considered the power procurement projected by PDS during the financial year except power procurement from UI/Deviation. If any contingency arises to procure power apart from allocated sources, the same will be considered at the time of true up & review. Power procurement approved by the Commission is shown in the table below:-

Table 7.9: Power Procurement approved by the Commission

Sl. No.	Source	FY 2023-24
	Central Sector	
1	FSTPP, NTPC	0.00
2	BSTPP, NTPC	0.67
3	KHSTPP-I, NTPC	0.00
4	KHSTPP-II, NTPC	0.00
5	TSTPP, NTPC	0.00
6	DARLAPALI	65.87
7	KBNUL	0.00
8	NPGCL	15.00
9	RANGIT-III, NHPC	6.00
10	TEESTA-V, NHPC	48.68
	Others	
11	CHUKHA, PTC	60.25
12	WBSEDCL	72.65
13	SPDC	72.50
14	Rongichu Hydro Power	9.35
15	Free Power	674.19
	TOTAL	**1025.16**

The Commission approves power procurement of 1025.16 MUs including free power of 674.19 MUs for the FY 2023-24.

7.6 Energy requirement and availability

The energy requirement and availability projected for the FY 2023-24 are furnished by the PDS in the table below:

Table 7.10: Energy Balance projected by PDS

Sl. No.	Particulars	2021-22 (Actual)	2022-23 (Estimates)	FY 2023-24 (Projected)
A.	**ENERGY Requirement**			
1	Energy Sale within the state	495.20	484.24	509.83
2	Outside State sale through UI/ Trading	441.79	303.02	385.00
3	Total Energy Sale (1 +2)	936.99	857.26	894.83
4	Overall T & D losses	22.17	12.46	13.59
5	Overall T & D losses	141.06	68.94	80.20
6	Total Energy Requirement	1078.06	788.32	975.04
B.	**ENERGY AVAILABILITY**			
1	Own Generation	0.02	0.02	0.03
2	Power Purchase from CGS / UI etc.	634.48	348.92	425.97
3	Free Power	581.11	641.87	674.19
4	Overall pool loss	12.60	27.74	30.80
5	Total Energy Availability (1 + 2 +3 -4)	1181.57	963.07	1069.39
C	**ENERGY SURPLUS/ (GAP)**	**103.51**	**89.82**	**94.35**

Commission's Analysis:

Considering the inter-state transmission loss at 2.14%, the energy balance is worked out as detailed in table below:

Table 7.11: Energy Balance approved by the Commission

Sl. No.	Particulars	Units	FY 2023-24 (Projected)
A.	**ENERGY Requirement**		
1	Emery Sale within the state	Mus	565.66
2	Overall T & D losses	%	13.59
3	Overall T & D losses	Mus	88.96
4	**Total Energy Requirement**	**Mus**	**654.62**
B.	**ENERGY AVAILABILITY**		
1	Own Generation	Mus	0.03
2	Power Purchase from CGS / UI etc.	Mus	350.97
3	Free Power	Mus	674.19
4	Overall pool loss	%	2.14
5	Overall pool loss	Mus	4.67
6	**Total Energy Availability (1 + 2 +3 -5)**	**Mus**	**1020.33**
C	**ENERGY SURPLUS/ (GAP)**		**365.71**

The energy balance approved for a surplus energy of 365.71 MUs for the FY 2023-24.

7.7 Aggregate Revenue Requirement

The PDS has projected Aggregate Revenue Requirement at ₹ 436.19 Crores for the FY 2023-24, as detailed in table below:-

Table 7.12: Aggregate Revenue Requirement projected by PDS

Sl No.	Particulars	2023-24 As approved by the Commission in MYT Order dated 26.02.21	Projected 2023-24
1	**2**	**3**	**4**
1	Cost of Fuel	0.18	0.45
2	Cost of Generation	23.31	Nil
3	Cost of Power Purchase	306.51	139.51
4	Intra State Transmission Charges	53.04	44.94
5	Employee Costs	118.36	194.25
6	Repairs & Maintenance Expenses	24.74	11.15
7	Administration and General Expenses	3.93	5.63
8	Depreciation	24.98	38.93
9	Interest Charges	-	-
10	Interest on Working Capital	8.09	3.38
11	Return on Equity	-	-
12	Previous Year Exp. Of Power Cost	-	1.00
13	**Total Revenue Requirement**	**563.14**	**439.24**
14	Less: Non- Tariff Income	1.35	3.05
15	**Net Revenue Requirement**	**561.79**	**436.19**
16	Revenue from Tariff	312.87	349.84
17	Revenue from Outside State Sale	118.03	187.54
18	**Gap /Surplus**	**130.90**	**(101.19)**

The expenses projected by PDS and the Commission’s analysis are discussed hereunder.

7.8 Fuel Cost

The PDS has projected fuel cost at ₹ 0.45 Crores for the FY 2023-24.

The Commission approves fuel cost at ₹ 0.45 Crores for the FY 2023-24, as projected by PDS.

7.10 Power Purchase Cost

Power Purchase Cost projected for the FY 2023-24

The PDS has projected a power purchase cost at ₹ 139.51 Crores. The details are furnished in the table below:

Table 7.13: Power Purchase Cost projected by PDS

Sl. No.	Source	Energy Received (MUs)	Cost of Power (Rs. In Crore)
1	**NTPC**		
a)	BSTPP	0.67	0.77
b)	FSTPP		0.00
c)	KHSTPP-I		0.00
d)	KHSTPP-II		0.00
e)	TSTPP		0.00
f)	DARLPALI	65.87	27.02
g)	KBUNL	0	
h)	NPGCL	15	10.67
	Total	**81.54**	
2	**NHPC**		
a)	RANGIT- III	6	2.63
b)	TEESTA – V	48.68	11.62
	Total	**54.68**	
3	**Other Source**		
a)	PTC	60.25	15.57
b)	WBSEDCL	72.65	8.57
c)	SPDC	72.5	28.07
4	**Other Charge**		
	R0ngichu Hydro Power	9.35	2.39
5	UI/Deviation	75.00	24.70
6	Free Power	674.19	0.00
	Other Charges		7.5
8	**Total**	**1100.16**	**139.51**

Commission Analysis:

As seen from the above, the PDS has claimed the power purchase cost for the FY 2023-24. The Commission has considered the power purchase cost at as at FY 2023-24 as projected by PDS except UI power and other charges claimed by PDS.

As per the SSERC (Renewable Energy Purchase Obligation and Its Compliance) (First Amendment) Regulations, 2022, the applicable RPO levels for the FY 2023-24 is 10.40% for Non-Solar and 6.85% for Solar. The RPO Regulation requires the procurement from hydro sources to be excluded from consumption (total consumption of its consumer including T&D

losses) for arriving at the energy quantum for calculation of RPO. If any further amendment issued by the CERC/Commission, the same shall be applicable for determination of RPO.

The Commission has also worked out the same on the basis of the approved energy sales & purchases quantity. The details are furnished in the table below:

Table 7.14: RPO Compliance approved by the Commission

Sl. No.	Source	FY 2023-24
1	RANGIT- III , NHPC (Hydro)	6.00
2	TEESTA - V , NHPC (Hydro)	48.68
3	CHUKHA, PTC (Hydro)	60.25
4	RAMMAM, WBSEDCL (Hydro)	72.65
5	SPDC (Small Hydro)	72.50
6	Rongichu Hydro Power	9.35
7	FREE POWER (Hydro)	674.19
9	**TOTAL Hydro Generation Available (including Free Power)**	**943.62**
10	**Total Consumption including T & D Loss**	**654.62**
11	**Excess Hydro Generation available (including Free Power)**	**289.00**

The table also shows that the PDS is complying with the RPO requirement. However, the power procurement projection for the FY 2023-24 shows that there is no provision for procurement of power from solar sources. Further, PDS is directed to make efforts for developing solar sources & procuring power from solar sources so as to meet any future applicable Solar RPO. The detail of Power Purchase quantum and cost approved by the Commission is given in the Table below:-

Table 7.15: Power Purchase Cost approved by the Commission

Sl. No.	Source	Energy Received (Mus)	Unit Cost (Rs. / KWH)	Cost (₹ in Crore)
1	**NTPC**			
a	BSTPP	0.67	11.49	0.77
b	FSTPP	0.00		0.00
c	KHSTPP-I	0.00		0.00
d	KHSTPP-II	0.00		0.00
e	TSTPP	0.00		0.00
f	DARLPALI	65.87	4.10	27.02
g	KBUNL	0.00		0.00
h	NPGCL	15.00	7.11	10.67
2	**NHPC**			
a	RANGIT- III	6.00	4.38	2.63
b	TEESTA – V	48.68	2.39	11.62
3	**PTC**			
A	PTC	60.25	2.58	15.57
4	**Other Source**			
a	WBSEDCL	72.65	1.18	8.57
b	SPDC	72.5	3.87	28.07
	Rongichu Hydro Power	9.35	2.56	2.39
5	**Total Energy Purchased**	**350.97**		**107.31**

The Commission approves the power purchase cost at ₹ 107.31 Crores for purchase of 350.97 MUs & Free Power of 671.19 MUs for the FY 2023-24 against the total cost of ₹139.51 Crores as projected by the PDS.

7.11 Intra State Transmission Charges

The PDS has projected Intra State Transmission Charges at ₹ 44.94 Crores. The details of expenses projected by the PDS are furnished in the table below:

Table 7.16: Intra State Transmission Charges projected by PDS

Sl. No.	Particulars	FY 2023-24 (Projected)
1	Intra State Transmission Charge	44.94

Commission's Analysis:

The Commission approved the Intra State Transmission Charges for the FY 2023-24, as detailed in table below.

Table 7.17: Intra State Transmission Charges approved by the Commission

Sl. No.	Particulars	FY 2023-24
1	Intra State Transmission Charge	44.94

The Commission therefore approves the Intra State Transmission Charges at ₹ 44.94 Crores for the FY 2023-24.

7.12 Employee Cost

PDS has projected employee cost for the FY 2023-24 as shown in the table below:

Table 7.18: Employee Cost furnished by PDS

Sl. No.	Particulars	FY 2023-24 (Projected)
1	Employees Expense	194.25

Commission's Analysis:

The Commission has considered all the factors, the employee cost are approved by the Commission for the FY 2023-24 as shown in table below. Further, the Commission directs PDS to furnish the details of Employee Cost at the time of Review & True-up.

Table 7.19: Employee Cost approved by the Commission

Sl. No.	Particulars	FY 2023-24
1	Employees Expense	194.25

The Commission therefore approves the employee cost at ₹194.25 Crores as projected by the PDS for the FY 2023-24. The above Employee Expenses are approved.

7.13 Administrative and General Expenses

The PDS has projected Administrative and General Expenses at ₹5.63 Crores for the FY2023-24. The Administrative and General Expenses include Conveyance expenses, Telephone and Postage expenses, Electricity and Water charges, Consultancy fee and other professional charges. The details of expenses projected by the PDS are furnished in the table below:

Table 7.20: Administrative and General Expenses Projected by PDS

Sl. No.	Particulars	FY 2023-24
1	Administration & General Expense	5.63

Commission's Analysis:

The Commission has considered all the factors, the A&G expenses are approved by the Commission for the FY 2023-24 as shown in table below. Further, the Commission directs PDS to furnish the details of A&G expenses at the time of Review & True-up.

Table 7.21: Administration & Generation Expenses approved by the Commission

Sl. No.	Particulars	FY 2023-24
1	Administration & General Expense	5.63

The Commission therefore approves the Administrative and General Expenses at ₹5.63 Crores as projected by the PDS for the FY 2023-24. The above Administrative and General Expenses are approved.

7.14 Repairs and Maintenance Expenses

The PDS has projected at ₹11.15 Crores for the 2023-24 towards Repair and Maintenance Expenses which includes expenses towards operation and maintenance of electrical equipments, plant & machinery, vehicles, furniture and fixtures, office equipments and buildings. The details of expenses projected by PDS are furnished in the table below:-

Table 7.22: Repair and Maintenance Expenses projected by PDS

Sl. No.	Particulars	FY 2023-24 (Projected)
1	Repair & Maintenance Expense	11.15

Commission's Analysis:

The Commission has considered all the factors, Repair and Maintenance Expenses are approved by the Commission for the FY 2023-24 as shown inthe table below. Further, the Commission directs PDS to furnish the details of Repair and Maintenance Expenses at the time of Review & True-up.

Table 7.23: Repair and Maintenance Expenses approved by the Commission

Sl. No.	Particulars	FY 2023-24
1	Repair & Maintenance Expense	11.15

The Commission therefore approves the Repair and Maintenance Expenses at ₹ 11.15 Crores for the FY 2023-24. The above Repair and Maintenance Expenses are approved.

7.15 Depreciation

The PDS has projected depreciation of ₹38.93 Crores for the FY 2023-24. The PDS has stated that the depreciation has been calculated on the value of the opening GFA plus additions during the year at the rates prescribed in the SSERC Regulations. The Depreciation calculated for the assets of the distribution function. The same is detailed in the table below:

Table 7.24: Depreciation Projected by PDS

Sl. No.	Particulars	FY 2023-24 (Projected)
1	Depreciation	38.93

Commission's Analysis:

As discussed earlier, the depreciation on the opening GFA cannot be considered. The Commission has approved the Depreciation of₹ Crores for the FY 2023-24, as detailed in the table below: -

Table 7.25: Depreciation approved by the Commission

Sl. No.	Particulars	FY 2023-24
1	Opening GFA	553.17
2	Addition during the Year	15.00
3	Closing GFA	568.17
4	Average GFA	560.67
5	Rate of Depreciation	5.28
6	**Depreciation**	29.60

The Commission therefore approves the Depreciation at₹ 29.60 Crores for the FY 2023-24. The above Depreciation is approved.

7.16 Interest and Finance Charges

The PDS has not projected interest and finance charges during the FY 2023-24.

Commission's Analysis:

The Commission has not found any loan with PDS. **As such the Commission has not considered interest and finance charges during the FY 2023-24.**

7.17 Interest on Working Capital

The PDS has projected interest on working capital at ₹3.38 Crores for the FY 2023-24 on normative basis.

The PDS has worked out interest on working capital as detailed in the table below:-

Table 7.26: Interest on Working Capital Projected by PDS

Sl. No.	Particulars	FY 2023-24 (Projected)
1	O & M Expenses for 1 month	17.59
2	Receivable equivalent to 2 month's Revenue	58.31
3	**Total Working Capitals**	**75.90**
4	Less : Security Deposit of Consumers	12
5	**Net Working Capital**	**63.90**
6	SBI Advance Rate	7.3
7	**Interest on Working Capital**	**3.38**

Commission's Analysis:

As per Regulation of SSERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2020, interest on working capital shall be calculated on normative basis, notwithstanding the fact that the licensee has taken working capital loan from any outside agency. Accordingly, the Interest on Working Capital has been worked out on the costs approved by the Commission, as detailed in the table below:-

Table 7.27: Interest on Working Capital approved by the Commission

Sl. No.	Particulars	FY 2023-24
1	O & M Expenses for 1 month	17.59
2	Maintenance Spares @ 1% plus Escalation @ 6% per annum	0.00
3	Receivable equivalent to 2 month's Revenue	93.86
4	**Total Working Capitals**	**111.45**
5	Less : Security Deposit of Consumers	13.65
6	**Net Working Capital**	97.80
7	SBI Advance Rate	7.55
8	**Interest on Working Capital**	**7.38**

The Commission approves the Interest on Working Capital at ₹ 7.38 Crores for the FY 2023-24. The above Interest on Working Capital is approved.

7.18 Return on Equity

The PDS has not projected Return on Equity during the FY 2023-24.

Commissions Analysis:

Regulation 29 of SSERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2020, provides for Return on Equity at 14% p.a. on the equity amount appearing in the audited balance sheet of annual accounts.

The PDS has not produced audited annual accounts. In addition, it is a State Government Department; the expenses are funded by the Government. **As such, no separate return is to be allowed for Return on Equity.**

7.19 Provision for Bad Debts

The PDS has not claimed any provision for bad debts during the FY 2023-24.

The PDS has not claimed Previous Year Expenses of Power Cost of Rs. 1 Crore, which is not considered by the Commission.

7.20 Non-Tariff Income

The PDS has projected a Non-Tariff Income ₹3.05 Crores for the FY 2023-24.

Commission's Analysis:

PDS is directed to submit the details of the energy meters provided by the department and procured by the consumers at their cost. Further, PDS has projected the Non-tariff Income of ₹3.05 Crores.

The Commission approves the Non-Tariff Income at ₹ 3.05 Crores for the FY 2023-24, as projected by the PDS for the FY 2023-24.

7.21 Revenue from Existing Tariff

The PDS has projected revenue from sale of energy with existing tariff at ₹ 349.84 Crores within the states for the FY 2023-24. Further, the PDS has projected revenue from outside state sale at ₹ 187.54 Crores for the FY 2023-24.

Commissions Analysis:

It is observed that the revenue from domestic category contributes after the highest contribution by HT Industrial. Hence, impact of change in tariff on the revenue is mostly dependent on these categories. The revenue approved at the existing Tariff is detailed in the table below:

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

Sl. No.	Particulars	FY2023-24
1	Total Sales within the State	348.81
2	Sale outside State	178.14
3	**Total Sales (1+2)**	**526.95**

The Commission approves revenue from sale of energy with existing tariff at ₹348.81 Crore on sale of 565.66 MUs within the state at an average rate of ₹6.16/kWh & ₹178.14 Crores on sale of 365.71 MUs from outside State sale at an average rate of ₹4.87/kWh for the FY 2023-24.

7.22 Aggregate Revenue Requirement (ARR) and Gap

The Aggregate Revenue Requirement and gap projected by PDS for the FY 2023-24 is furnished in table below:-

Table 7.29: Aggregate Revenue Requirement projected by PDS

Sl No.	Particulars	2023-24 As approved by the Commission in MYT Order dated 26.02.21	Projected 2023-24
1	**2**	**3**	**4**
1	Cost of Fuel	0.18	0.45
2	Cost of Generation	23.31	0.00
3	Cost of Power Purchase	306.51	139.51
4	Intra State Transmission Charges	53.04	44.94
5	Employee Costs	118.36	194.25
6	Repairs & Maintenance Expenses	24.74	11.15
7	Administration and General Expenses	3.93	5.63
8	Depreciation	24.98	38.93
9	Interest Charges	0.00	0.00
10	Interest on Working Capital	8.09	3.38
11	Previous Year Expenses of Power Cost	0.00	1.00
12	Provision for Bad Debts	0.00	0.00
13	**Total Revenue Requirement**	**563.14**	**439.24**
14	Less: Non- Tariff Income	1.35	3.05
15	**Net Revenue Requirement**	**561.79**	**436.19**
16	Revenue from Tariff	312.87	349.84
17	Revenue from Outside State Sale	118.03	187.54
18	**Gap/Surplus**	**130.90**	**(101.19)**

Based on the approvals of the above projections, the ARR & Gap of PDS for the FY 2023-24 works out as given in table below: -

Table 7.30: Aggregate Revenue Requirement approved by the Commission

Sl. No.	Particulars	Approved in MYT	FY 2023-24 (Projected)	FY 2023-24 (Approved)
1	Cost of Fuel	0.18	0.45	0.45
2	Cost of Generation	23.31	0.00	0.00
3	Cost of Power Purchase	306.51	139.51	107.31
4	Intra State Transmission Charge	53.04	44.94	44.94
5	Employee Costs	118.36	194.25	194.25
6	Repair and Maintenance Expense	24.74	11.15	11.15
7	Administration and General Expenses	3.93	5.63	5.63
8	Depreciation	24.98	38.93	29.60
9	Interest Charges	0.00	0.00	0.00
10	Interest on Working Capital	8.09	3.38	7.38
11	Return on NFA/Equity	0.00	1.00	0.00
12	**Total Revenue Requirement**	**563.14**	**439.24**	**400.72**
13	Less: Non Tariff Income	1.35	3.05	3.05
14	**Net Revenue Requirement**	**561.79**	**436.19**	**397.67**
15	Revenue from Tariff	312.87	349.84	348.81
16	Revenue from Outside State Sales	118.03	187.54	178.14
17	**Gap/(Surplus) (14-15-16)**	**130.90**	**(101.19)**	**(129.28)**

Accordingly, the Commission approves the Aggregate Revenue Requirement at ₹ 397.67 Crores against ₹436.19 Crores projected by PDS for the FY 2023-24. Further the Commission has computed surplus of ₹ 129.28 crores based on revenue from existing tariff.

7.23 Revenue Gap for the FY 2023-24

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

Table 7.31: Approved Revenue at Revised Tariff & Gap/surplus

Sl.No	Particulars	FY 2023-24
1	**Net Revenue Requirement**	397.67
2	Revenue from Tariff	350.89
3	Revenue from Sale Outside the State	178.14
4	**GAP/(Surplus)**	**(131.36)**
5	Energy Sale within the State	565.66
6	Energy Sale Outside the State	365.71
7	**Average Cost of Supply Rs/ kWh**	**7.03**

Revenue surplus of ₹ 131.36 Crores has been arrived at on the basis of the approved data for the FY 2023-24. The Revenue Surplus is about 33% of the Net Revenue Requirement. The average cost of supply for the FY 2023-24 is ₹ 7.03/kWh & average revenue from tariff is ₹ 6.01/kWh. The average revenue gap is ₹1.35/kWh.

The Commission observes that the PDS has been able to bring down the projected Revenue Gap significantly as against the gap approved in the MYT Order dated 26.02.2021. The reduction in the projected revenue gap is attributable to reduction in cost of power purchase and cost of generation. Reduction in power purchase cost is owing to surrendering of high-cost thermal power by the PDS. The PDS has leased out all the small hydropower projects owned by it to private power developers, due to which the cost of generation has come down to zero for the PDS. As a result, as per the revised projections approved by the Commission, the projected revenue surplus for the PDS for FY 2023-24 is ₹ 129.28 crores considering revenue from sale of power at existing tariffs.

7.24 Recovery of Revenue Gap for the FY 2023-24

As can be seen from Table 7.31, there is a revenue surplus of ₹131.36 Crores during the FY 2023-24, which is 33% of net ARR for the FY 2023-24. The existing tariff was fixed with effect from 01.04.2022.

Despite the projected/estimate surplus revenue, the PDS has prayed and pleaded before the Commission for marginal hike in tariff for Domestic and Commercial Category consumers. PDS pleaded that the Tariffs of these two categories of consumers have not been revised since last few years despite the fact that cost of all things and services have gone up. Whereas the industrial tariffs have been revised on few occasions. The tariffs for Domestic and Commercial consumers are much lower compared to that of Industrial consumers, which means that Domestic and Commercial consumers are getting subsidized power at the expense of other consumers. The PDS submitted that as per the guidelines of the Government India/National Tariff Policy, tariff should reflect the actual cost of supply but the same is not so in Sikkim. The PDS submitted that tariff is a sensitive subject having substantial impact on social, economic and financial well-being of the public at large and as well as for viability and growth of power sector. PDS submitted that being a State Government Department, revenue gaps of the last many years had been absorbed by the State Government to avoid passing of the burden to the consumers.

PDS submitted that it had suffered massive revenue losses in the past and is now making all possible efforts to bridge the revenue gap and as per the review for F.Y 2022-23 and projections for F.Y 2023-24, the PDS is on its way to bridge the gap and achieve surplus revenue, subject to actuals/truing up in the future. Therefore, the PDS prays that the proposal for marginal hike proposed by it be considered by the Commission, which will help the Department make up for the accumulated gaps/losses suffered by it in the past financial years (till F.Y. 2021-22).

The Commission observed that PDS has been making all possible efforts to bring down the losses and to bridge the ARR gap and it has shown positive indication in the recent years in this regard, by being able to substantially reduce the ARR gap. True Up for F.Y 2021-22 shows that the PDS has been able to bring down the revenue gap significantly whereas the Review for F.Y. 2022-23 indicates that the PDS is on its way to achieve surplus revenue for the first time. In view of the above facts and submissions of the PDS, the Commission deems it reasonable to incentivize the PDS by very nominal hike of tariffs for Domestic and Commercial category consumers (much lower than tariff hike proposed by the PDS). Although the minimal hike will have no major impact on the overall ARR, it will enable the PDS to recover the accumulated revenue gaps and also bring down the high cross subsidy existing between the consumers. The Commission also takes into account the need for tariff rationalization and determining cost reflective tariff as per guidelines of the Government of India. Owing to revision of tariffs, the PDS is expected to get additional revenue of ₹ 2.08 Crores as detailed in the table given below:

Table 7.32: Revenue from revised Tariff approved by the Commission for FY 2023-24

Sl. No.	Particulars	Energy Sale (MUs)	Total (₹ In Crores)
1	**Domestic (DLT)**		
a)	Up to 50 Units	53.93	5.93
b)	51 to 100 Units	38.67	8.12
c)	100 to 200 Units	30.42	9.43
d)	200 to 400 Units	18.72	6.74
e)	401 & above	16.38	6.72
	Total	**158.12**	**36.94**
2	**Commercial**	0.00	0.00
a)	Up to 50 Units	9.07	2.81
b)	51 to 100 Units	6.88	2.82
c)	100 to 200 Units	5.68	2.90
d)	200 to 400 Units	3.28	2.00
e)	401 & above	25.13	16.08
	Total	**50.03**	**26.61**
3	Public Lighting	0.00	0.00
a)	Rural Areas	0.24	0.09
b)	Urban Areas	0.30	0.15
	Total	**0.54**	**0.25**
4	**Temporary**	**3.16**	**3.16**
5	**Industrial**	**0.00**	**0.00**
A	HT	0.00	0.00
a)	HT (AC) above 3.3 KV	0.00	0.00
a)	Upto 100 KVA	51.09	31.19
b)	100-250 KVA	39.73	30.94
c)	250-500 KVA	24.98	28.16
d)	500KVA and Above	212.30	176.46
	Total HT	**328.10**	**266.75**
B	**LT (Rural)**		
a)	Up to 500 Units	1.01	0.36
b)	501-1000 Units	0.63	0.28
c)	1001 & Above	0.26	0.15
	Total	**1.90**	**0.79**
C	**LT(Urban)**		
a)	Up to 500 Units	0.41	0.22
b)	501-1000 Units	0.34	0.21
c)	1001 & Above	0.22	0.16
	Total	**0.97**	**0.58**
6	**BULK SUPPLY**		
a)	LT	8.94	6.36
b)	HT	13.91	9.45
	Total	**22.85**	**15.81**
7	**Grand Total**	**565.66**	**350.89**

With the revision of tariff, the PDS will generate additional revenue of ₹2.08 crores ,which results in revenue surplus of ₹ 131.36 Crores, which the PDS shall use for meeting up the gaps of previous years.

The Commission, accordingly, approves revenue from revised tariffs at ₹ 350.89 Crores with the energy sales of 565.66 MUs. Accordingly, the PDS will have a projected surplus of ₹ 131.36 due to tariff revision as against ₹ 129.28 Crores and has been arrived on the basis of the approved data for the FY 2023-24.

8. DIRECTIVES AND ADVISORIES

1. Introduction

The Hon'ble Commission in its Multi Year Tariff Order dated 26th February, 2021 the FY 2021-22 to FY 2023-24 and also Tariff Order dated 14th March, 2022 for F.Y. 2022-23 had issued a number of directives and advisories for compliance by the PDS. The directives and advisories were issued by the Commission with the aim and objective of not only improving the overall performance and efficiency of the department but also to ensure that the quality and standard of service to the consumers improve in the long run. The advisories and directives were issued with the sole intention to help the Department to make steady improvement its financial state and reduction of the revenue gaps in the future.

This section of the Tariff Order deals with the different directives issued by the Hon'ble Commission and status of compliance of the directives by the PDS, the views/comments of Commission on the past directives and fresh directives for compliance.

Directives issued in the F,Y 2016-17 Tariff Order

Directive 1: Improving Own Generation

The own generation form the various Powerhouses of the PDS has seen a decline over the years and it is seen that most of the Powerhouses were non-operational for considerable period of time. The PDS is directed to prepare a time bound plan for restoring full generation of the Powerhouses to improve its own generation. The Commission has observed that PDS has made only bare minimum provisions under the Repair & Maintenance Head and as such it is observed that timely repairs and requisite maintenance of the power plants are not being done. The PDS needs to concentrate both resource and planning on the power plants having good generation capacity.

Compliance:

In compliance to the directive of Hon'ble Commission, the Department is keeping detailed status of progress of the seven projects handed over on PPP mode. Out of seven power houses, three HEP, 2x2MW Meyong Chu, 2x1.5Mw Rabom Chu and 2x1MW Kalez Khola HEP have been re-commissioned and COD was achieved on 1st May 2022, 12th June 2022 and 17th October 2022 respectively. The LLHP project is expected to be re-commissioned with COD within the month of

November -December 2022 and the remaining projects are under progress and expected to be re-commissioned very soon

Commission's comments:

The Commission commends the Department for complying with the directives issued and directs the Department to regularly update the Commission regarding progress of the remaining projects.

Directive 2: Segregation of Technical & Commercial Loss

The PDS is directed to take appropriate action for segregating the Technical and Commercial losses. The exercise towards segregating the losses may be done in a phased manner beginning with the major towns/cities in phase -1 and other areas in later phases.

Compliance:

The department has taken up step in the direction of loss reduction in the system. The key measures are as below:-

- The conversion of consumer electromechanical meter to prepaid meter system.
- Consumer metering percentage has reached 97%
- The department has initiated appointment of certified energy auditor as per the guidelines of Bureau of Energy Efficiency (BEE) for detail system study including segregation of technical and commercial losses. The department shall be carrying out the Energy Audit in compliance to the BEE guidelines and Regulations.

The installation of smart meter under the Revamped Distribution Sector Scheme (RDSS) in all the distribution substation including consumer premises is one of the main steps proposed for loss assessment zone wise /area wise.

Commission's comments:

The Commission is pleased to note the initiatives taken by the Department towards loss reduction and advises that all such measures/initiatives are completed within targeted time frame.

Directive 6: Energy Audit

The Commission has fixed the loss reduction trajectory for the FY 2017-18, FY 2018-19 and FY 2019-20. In order to achieve the loss reduction target, the PDS is directed to conduct energy audit to identify the high loss areas and submit a report before filing of the next petition.

Compliance:

Department was unable to appoint energy auditor due to lack of certified energy auditor in the state .However we have initiated proposal for appointment of Energy Auditors as per the guidelines of Bureau of Energy Efficiency (BEE) . The BEE has issued timelines for conduct of Energy Accounting in Discoms. Hence in compliance to the guidelines of BEE the department is in the process to engage the empaneled energy auditors from BEE to carry out complete system study and to asses actual loss circle wise /subdivision wise.

Commission's comments:

The Department is directed to expedite the process of empanelment of energy auditors and ensure that energy auditing is done at the earliest.

Directives issued in the FY 2019-20 Tariff Order

Directive 4: Surrendering of High-Cost Thermal Power

One of the major components of the ARR is the power purchase cost. The PDS is procuring thermal power from different sources at high cost. Even when no power is drawn from such thermal power stations, the PDS has to pay the Demand Charges. Having back up thermal power is essential to meet the power demand during the lean season, when power from hydro sources is insufficient. The PDS needs to review the PPAs signed for thermal power and explore the possibility of surrendering high cost thermal power. The PDS is directed to carry out a detailed study of the power demand and supply in the State and consider surrendering high cost thermal power or review the terms and conditions of the existing PPAs to get power at competitive price. The PDS is directed to submit proposals for surrendering of such power as well as review of the PPAS to the concerned agency/department of the Government of India.

Compliance:

The department had perused surrendering of high cost Thermal power with GOI and in this context the following high cost thermal power houses have been surrendered: 1.Talchar 2. Kahal Gaon-I 3. Kahal Gaon –II 4. Barh Stg-I 5. Barah Stg-II, 6. Kanti Bijlee Nigam 7. Farakka. At present we are drawing power from Darlipalli and Nabinagar (NPGCL) NTPC power house only

Commission's comments:

The Commission has noted the action taken and lauds the efforts made by the Department.

Directive 5: Development of Roof Top Solar Projects

Considering the huge target of 175 GW of Renewable Energy (RE) by 2022 set by the Government of India and also the RE generation targets for each State/UT set by the Ministry of New & Renewable Energy, Government of India, the PDS/SREDA must take necessary steps for timely implementation of renewable projects especially solar power in the State to contribute towards the renewable energy target of the country. The PDS may explore the possibility of giving up the import of high cost thermal power and in lieu set up rooftop and ground mounted solar projects in the State to meet the RE and also Renewable Purchase Obligations.

Compliance:

Detail of solar plants installed by Power Department & SREDA is enclosed in the RPO compliance report enclosed in the Petition.

Commission's comments:

The Department and SREDA are advised to align solar/other renewable power project implementation targets/schedule duly taking into account the RPO trajectories set by the Commission from time to time.

Directives (FY 2021-22)

Directive 1: Quarterly Report of Functioning of the CGRFs

The Department has informed that 4 (four) no's of Consumer Grievances Redressal Forums (CGRFs) have been constituted for each of the four districts in the State. Regulation 61 sub-regulation (i) of the SSERC (Redressal of Grievances of Consumers and Establishment of Forum of Electricity Ombudsman) Regulations, 2012 stipulates the CGRF has to submit quarterly report on the number of complaints received, redressed and pending within 15 days at the end of quarter to the Commission.

Similarly regulation 61(ii) stipulates that the CGRF shall furnish to the Commission, by 30thApril every year a report containing a general review of the activities of their offices during the preceding financial year.

The Commission observes that the quarterly report of the CGRF of only the East District is being furnished to the Commission whereas no reports are being furnished by the remaining three CGRFs. The CGRFs also have not submitted the report as specified by regulation 62 (ii) SSERC (Redressal of Grievances of Consumers and Establishment of Forum of Electricity Ombudsman) Regulations, 2012.

The Commission directs the Department that all the four CGRFs may be directed to regularly furnish their quarterly report to the Commission and invariably submit the annual reports by 30thApril of every year.

Compliance:

As directed by the Hon'ble Commission two new CGRF at Pakyong and Soreng districts have been established.

Commission's comments:

The Commission is happy to note the compliance of directives by the Department. The Department is directed to ensure that all the CGRFs submit the reports to the Commission within the stipulated time and also see that the consumers are made aware of the CGRFs.

5.2 Directive 2: Submission of RPO Compliance Report

The Department has neither incorporated/highlighted the RPO Compliance while filing ARR Petition before the Hon'ble Commission nor submitted separate RPO compliances to the Commission for the past financial years i.e. 2017-18 to 2019-20.As per the RPO Regulations notified by the Commission, the Department has to comply with the long term RPO trajectory (both Solar and Non-Solar). If the Department has not met the RPO targets set by the Commission, the Department has to purchase RECs for meeting the targets.

Therefore, the Department is directed to submit a detailed report indicating RPO compliance covering the F.Y 2017-18 to 2019-20 and submit the compliance report to the Commission within a period of 60 days from the date of issue of this Order.

Compliance:

Renewable purchase obligation is not applicable to the state as the State hydro exceeds generation than the total power consumption.

Commission's comments:

The RPO compliance is being regularly monitored by the Government of India and also the RPO trajectories are being regularly revised by the Government of India and the Commission. The Department is advised to regularly update itself on the RPO trajectories and ensure that compliance of RPO is accordingly updated as well.

<u>6. (Directives) F.Y 2021-22</u>

6.1 Directive 1: Information on RPO/HPO Compliance

The Power Department is directed to create a separate page in its official website indicating the details of RPO/HPO compliance. The Department is advised to ensure that the RPO/HPO compliance details are provided in such a form/manner in the website that the details are very easy to see and understand.

Compliance:

As directed by the Hon'ble Commission separate page has been created in the official website of Power Department www.power.sikkim.gov.in under the head RPO/HPO compliance report. The detail RPO/HPO compliance report has been uploaded in the website. The table is enclosed below.

SIKKIM HPO, SOLAR & OTHER PROJECTED CALCULATION FOR FY 2021-22		
	Availability of Hydro ower in the State (in MWh)	**RPO Compliance/Applicable**

F.Y	NHPC	IPP	Chujachen	SPDC + RHPPL	Other Sources	Total Hydro Availability	Total Consumption (in MWh)	Energy Surplus (+) Deficit (-) in MWh
	A	B	C	D	E	F=(A+E)	G	H=(F-G)
	386876	**147688**	**80000**	**43504**	**211453**	**869521**	**635948**	**233573**
Note: From above table it is much clear that Power Department, Government of Sikkim met its entire consumption from hydro sources only and even after its consumption the state is having surplus hydro power. In such scenario no RPO compliance is applicable to PDS								

Commission's comments:

The Commission has taken note of the compliance of directive by the Department and advises the Department to regularly update the RPO compliance in its website.

Introduction of Direct Benefit Transfer

In order to prevent and curtail the revenue losses, especially in the rural areas, where the State Government is proving free electricity upto 100 units, the Department is directed to introduce Direct Benefit Transfer (DBT) and transfer the subsidies well in advance to the eligible consumers and realize the bills for electricity consumed by the consumers. However, before introduction of the DBT, the Department is advised to properly inform and sensitize the consumers about the DBT and the concept of free power considering the notion of free power amongst the rural masses and past unsuccessful attempt of DBT.

Compliance:

The proposal is under active consideration of the Government.

Commission's comments:

The Commission reiterates the directives and advises the Department to expedite the process for introduction of DBT, which is also mandatorily required under the Electricity (Rights of the Consumers) Rules 2020.

7. Fresh Directives for F.Y 2022-23

7.1 Directive 1: Quality of Power

PDS is directed to ensure reliable and quality power supply, which is not only basic need but also the right of the consumers. Rapid advancement in technology and its dependence on electricity to function, demands availability of quality/reliable power supply 24x7. The PDS is also directed to adhere to the standards of operation and see that it is complying with the provisions of the Electricity (Rights of Consumers) Rules, 2020 notified by the Government of India.

Compliance:

The refurbishment of entire 66/11kv substation in the State is under progress under the scheme "Power System Development Fund (PSDF)" funded under CSS to improve the overall quality of power supply in the State .The scheme involves restrengthening, improvement of substation equipment with improved protection system to reduce the power outages.

Comments of the Commission

The Commission has taken note of the steps taken by the Department. The Commission stresses the need for providing 24x7 quality power supply and directs the Department to update itself regarding the provisions of the Electricity (Rights of Consumers) Rules 2020 and ensure strict compliance of the provisions of the said rules

7.2 Directive 2: General Awareness to the public

PDS is directed to disseminate proper and correct information to public/consumers on all schemes/process/initiatives etc such as pre-paid metering, CGRF, use of energy efficiency tools by conducting awareness camps and through print and electronic media and also through social media platforms.

Compliance:

The State Designated Agency (SDA) under the guidelines of Bureau of Energy Efficiency (BEE) has conducted awareness campaign on energy conservation and benefit of using star rated appliances /LED bulb etc. at various educational institutions at GPU level all over the State.

Comments of the Commission

The Department is directed to conduct extensive awareness camps in all parts of the State for benefit of the consumers.

7.3 Directive 3: Planning for Efficient Pre-paid metering

In anticipation of the proposal of the PDS to install pre-paid meter in the State, it is directed to ensure that proper technical and infrastructural backups are put in place well in advance to ensure smooth and trouble-free transition and operation of the pre-paid metering system, duly keeping factors like operation, back up, data management, verification, rectification functions etc.

Compliance:

The department had disseminated information to every house hold prior to conversion of electromechanical system of meter to prepaid meter system. To address the public grievances on issues of prepaid meter, the department has already nominated officers at the circle level and its team of division /sub division officers for addressing any problem that may arise.

Comments of the Commission

The Commission observes that proper information regarding the prepaid meters have still not been completely disseminated to the consumers and many doubts/questions still linger in the minds of the consumers. Further, the facilities need to be created for providing information like units consumed, tariff being charged, etc to the consumers.

The Department is directed to take more tangible steps in this regard for the benefit and ease of the consumers

7.4 Directive 4: Up-gradation and maintenance of Distribution & Transmission Network.

PDS is directed to upgrade and also carry out timely maintenance of Distribution & Transmission networks before occurrence of any avoidable breakdowns and disruption of power supply. Critical and frequently needed spares need to be kept in stock to ensure timely restoration. PDS may consider keeping spare/standby transformers to replace the faulty ones to avoid long power outages.

Compliance:

The entire system up-gradation including up-gradation of distribution substation, replacement of overhead conductor with covered conductor to reduce line fault etc has been incorporated in the Revamped Distribution Sector Scheme (RDSS) scheme. The scheme shall improve the quality, reliability and operational efficiencies with financial sustainability of the Department.

Comments of the Commission

The Commission commends the Department for the efforts and action taken and advises the Department to ensure implementation of schemes in a very well-planned manner to avoid both cost and time over run

7.5 Directive 5: Verification of actual consumer category.

PDS is directed to verify and check the 'true consumer category' in both rural and urban areas. Due to the rise of tourism activities in the State, there is a possibility that the old domestic consumer connections are now being catering to commercial purpose, which may seriously impact the revenue of the Department and also during this process the entire actual system load can be verified.

Compliance:

As directed by the Hon'ble Commission the field level officers are directed to monitor the exact assessment of various category of consumers and their billed units. The monitoring of change of category of consumer are done on regular basis by the field level officers. The Units billed and assessment is also regularly monitored from the Head Office and the Revenue Cell of the Department has been interacting with the field engineers and the staff of the sub divisions so as to increase their motivation levels for achieving the desired revenue target.

Comments of the Commission

The Department is directed to continue regular monitoring and surprise checks by Senior Officers to ensure that no illegal/unauthorized drawal of power is being done.

<u>Fresh Directives for F.Y 2023-24</u>

1. Public Awareness initiatives & campaigns

The Commission observes that there is lack of awareness among the consumers regarding existence/functioning of Consumer Grievance Cell, Consumer Grievance Redressal Forums and Electricity Ombudsman and the details of grievances redressal mechanism.

The Department is directed to give wide publicity through print and electronic media, social media platforms, awareness camps in schools/colleges and also through platforms like Gram Sabhas, Awareness Camps of Consumer Affairs Department regarding the various grievance redressal mechanisms.

2. Electricity wastage

The Commission observes many instances of wastage of electricity in rural areas and villagers are still seen using incandescent bulbs instead of LED bulbs and lights are not switched off during the day time. The street lights are also seen not being switched off timely and are often seen alight during the day time. The Department is advised to direct the field staff to sensitise the rural consumers on the need/benefit of saving energy and also for timely switching off the street lights to avoid wastage of power.

3. Dissemination of information on prepaid meters

Despite the efforts made by the Department, it is observed that the consumers have many doubts and false information about prepaid meters. The Department is directed to make more efforts for giving correct information to the consumers about prepaid meters including step by step explanation of the online recharge/self-recharging of prepaid meters for the ease of the consumers.

4. Reliable & Quality Power Supply

Commission is receiving frequent complaints regarding irregular power supply and power outages both in rural and urban areas from consumers. The Department is directed to ensure reliable and quality 24x7 power supply to its consumers, which is right of the consumers. The Department has to strictly comply with the standard of performance notified by the Commission and take note that failure to adhere to the standards will invite invoking of clauses for payment of compensation/fines.

5. Call Centre for Consumer Services.

Section 14 of the Electricity (Rights of Consumers) Rules, 2020, notified by the Government of India provides that:

(1) For providing common services like new connection, disconnection, reconnection, shifting of connection, change in name and particulars, load change, replacement of meter, no supply, the distribution licensee shall establish a centralised 24x7 toll-free call centre with effect from such date as may be specified by the Commission.

(2) While other modes to provide services like paper application, email, mobile, website, etc., may continue, the licensees shall endeavour to provide all services through a common Customer Relation Manager (CRM) System to get a unified view of all the services requested, attended and pending, at the backend for better monitoring and analytics.

(3) The CRM shall have facilities for SMS, email alerts, notifications to consumers and officers for events like receipt of application, completion of service, change in status of application, etc; online

status tracking and auto escalation to higher level, if services are not provided within the specified time period.

In view of the above provisions of the Electricity (Rights of Consumers) Rules, 2020, the Department is directed to immediately establish a centralised 24&7 toll free call centre in all the districts in the State. The Department is also directed to take immediate steps/measures to fulfil/comply with the other provisions mentioned above.

9. TARIFF PRINCIPLES AND DESIGN

9.1 Background

(a) The Commission in determining the revenue requirement of PDS for the ARR and retail tariff for the FY 2023-24 has been guided by the provisions of electricity Act, 2003. The National Tariff Policy (NTP), CERC Regulations in this regard and SSERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2020,. 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 the Cross subsidies "within a period 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 GOI in January, 2006 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 NTP mandates that Multi Year Tariff (MYT) framework be adopted for determination of tariff from 1st April, 2015. However, the Commission permitted the PDS to file petition under single year tariff regime till FY 2017-18 considering the fact that the PDS was functioning as a State Government Department and the fact that the Generation, Distribution and Transmission business had not been segregated. An attempt was made by the PDS to file petition under multi year tariff regime during the FY 2015-16 but the petition was not admitted by the Commission as the PDS was not in a position to furnish the vital details/data/documents etc. required for processing of the petition under MYT regime. Therefore, the Commission deemed it fit to continue with single year tariff regime till such a time that the PDS is in a position to furnish the basic/bare necessary data/figures/details required by the Commission.

(c) The mandate of the NTP is that tariff should be within plus / minus 20% of the average cost of supply. It is not possible for the Commission to implement this at present because of consumers' paying capacity in Sikkim is low. There has been a high level of the fluctuating revenue gap. However, in this tariff order an element of performance target has been indicated by setting target for T&D loss reduction. The improved performance, by reduction of loss level, and increase in sale will result in substantial reduction in average cost of supply. The Commission has considered for a nominal increase in tariff in view of the paying capacity of the consumers.

(d) Clause 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 SSERC would notify the roadmap, within six Months with a target that latest by the end of the FY tariffs are within ± 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.

(e) Regulation 72 of SSERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2020 specifies that,

"The amount received by the Distribution Licensee by way of cross subsidy surcharge as approved by the Commission in accordance with the Sikkim State Electricity Commission (Terms and Condition of Intra-State Open Access)

regulations, 2012 as applicable and as amended from time to time, shall be deducted from the Aggregate Revenue Requirement in calculating the tariff supply of electricity by such Distribution Licensee at the time of truing up."

(f) The Commission has considered special treatment to BPL consumers. It has also aimed at raising the per capita consumption of the State. The Commission endeavors that the tariff progressively reflects cost of supply in a reasonable period and the Government subsidy is also reduced gradually. The tariff has been rationalized with regards to inflation, paying capacity and to avoid tariff shock.

9.2 Tariff Proposed by the PDS and Approved by the Commission

(a) Existing & Proposed Tariff

PDS 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 to meet the expenses to a reasonable extend. The PDS has proposed tariff revision as indicated in table below:

Table 9.1: Existing Tariffs v/s proposed Tariffs for FY 2023-24

Sl. No.	Particulars	Existing Rate Paisa /kWh	Proposed Rate Paisa /kWh
1	**Domestic**		
a)	Up to 50 Units	100	120
b)	51 to 100 Units	200	240
c)	100 to 200 Units	300	370
d)	200 to 400 Units	350	460
e)	401 & above	400	500
2	**Commercial**		
a)	Up to 50 Units	300	330
b)	51 to 100 Units	400	400
c)	100 to 200 Units	500	560
d)	200 to 400 Units	600	600
e)	401 & above	630	640
3	**Public Lighting**		
a	Rural Areas	400	400
b	Urban Areas	500	500

4	**Industrial**		
A	**HT**		
a)	HT (AC) above 3.3 KV		
b)	Upto 100 KVA	520	520
c)	100-250 KVA	570	570
d)	250-500 KVA	620	620
e)	500KVA and Above	670	670
B	**LT (Rural)**		
a)	Up to 500 Units	360	360
b)	501-1000 Units	440	440
c)	1001 & Above	580	580
C	**LT(Urban)**		
a)	Up to 500 Units	530	530
b)	501-1000 Units	620	620
c)	1001 & Above	715	715
5	**BULK SUPPLY**		
a)	LT	550	550
b)	HT	550	550

(b) Tariff Categories

The approved tariff categories v/s sub categories are given below:

- Domestic Supply (DS)
- Commercial Supply (CS)
- LT Industrial Supply (LTIS)
- Public Lighting
- HT Supply
- Bulk Supply
  a. LT
  b. HT
- Temporary Supply

(c) Tariffs approved by the Commission

Having considered the Petition of the PDS for approval of Aggregate Revenue Requirement (ARR) and determination of retail tariff for sale of energy and having approved the ARR under Para 7.24, the Commission has revised the tariff for different categories of consumers as detailed in the table below:

Table 9.2: Tariff approved by the Commission for FY 2023-24

Sl No	Category of Consumers	Energy Charges	Fixed Charges	
		Rate approved (Paisa/Unit)	Monthly Minimum Charge (₹ per Month)	Demand Charge (₹/KVA/Month)
1	2	3	4	5
1	**Domestic**			
a)	Up to 50 units	110	1 Phase: ₹50 3 Phase: ₹200	Nil
b)	51 to 100 units	210		
c)	101 to 200 units	310		
d)	201 to 400 units	360		
e)	401 and above	410		
2	**Commercial**			
a)	Up to 50 units	310	**Applicable to Sanctioned Load of below 25 KVA** 1 Phase: ₹200 3 Phase: ₹500	**Applicable to Sanctioned Load of 25 KVA & Above** Rural : ₹60 Urban : ₹ 100
b)	51 to 100 units	410		
c)	101 to 200 units	510		
d)	201 to 400 units	610		
e)	401 and above	640		
3	**Public Lighting**			
a)	Rural Areas	400		
b)	Urban Areas	500	Nil	Nil
4	**Industrial (To be billed on KVAH basis)**			
A	**HT**			
a)	**HT (AC) above 3.3 KV**			
b)	Upto 100 KVA	540	Nil	₹200/KVA/Month
c)	100 to 250 KVA	590		₹250/KVA/Month
d)	250 to 500 KVA	640		₹290/KVA/Month
e)	500 KVA and above	690	Nil	₹560/KVA/Month
B	**LT (Rural)**			
a)	Up to 500 units	360	**Contract Load 45 KW & Below** ₹ 500/Month **Contract Load above 45 KW** ₹ 120/KVA/Month	**Sanctioned load above 25 KVA with shared transformer** ₹ 60/KVA/Month
b)	501 to 1000 units	440		
c)	1001 and above	580		

C	**LT (Urban)**			
a)	Up to 500 units	530	**Contract Load 45 KW & Below** ₹500/Month **Contract Load above 45 KW** ₹200/KVA/Month of sanctioned load	**Sanctioned load above 25 KVA with shared transformer** ₹100/KVA/Month
b)	501 to 1000 units	620		
c)	1001 and above	715		
5	**Bulk Supply**			
a)	LT	550	**Contract Load 45 KW & Below** LT: ₹ 500/Month HT: ₹ 500/Month	**Contract Load above 45 KW** LT: ₹150/KVA/Month of sanctioned load HT: ₹150/KVA/Month of sanctioned load
b)	HT	550		

This order shall come into force from 01.04.2023 and shall remain effective till revised/ amended by the Commission. The Order shall be uploaded in the official website of Commission and copies of the Order be forwarded to the State Government, Power Department, Central Electricity Authority and Central Electricity Regulatory Commission.

The Commission directs the Power Department, Government of Sikkim, to publish the tariff approved by the Commission in two local newspapers having wide circulation in the State for information of the public and also to upload it in the official website of the Department.

Accordingly, the Case No. P-01/PDS/2022 stands disposed off.

Sd/-

(K. B. Kunwar)

Chairperson

Place: Gangtok

Date: 21.03.2023.

10. WHEELING CHARGES

10.1 Wheeling Charges

The net distribution ARR approved is segregated into wire business and retail supply business in accordance with the matrix detailed in the table below:

Table 10.1: Allocation Matrix

Sl No.	Particulars	Wire Business	Retail Supply Business
1	Cost of Fuel	0	100
2	Cost of Power Purchase	0	100
3	Employees Costs	60	40
4	Repair &Maintenance Expense	90	10
5	Administration & General Expense	50	50
6	Depreciation	90	10
7	Interest Charge	90	10
8	Interest on Working Capital	10	90
9	Return on NFA/Equity	90	10
10	Non-Tariff Income	10	90

The expenses are segregated into wire business and retail supply business as per the above Matrix and shown in the table below:

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

Sl No.	Particulars	Approved Cost	Wire Business	Retail Supply Business
1	Cost of Fuel	0.45	-	0.45
2	Cost of Generation	0.00	-	0.00
3	Cost of Power Purchase	107.31	-	107.31
4	Intra State Transmission Charge	44.94	44.94	-
5	Employees Costs	194.25	116.55	77.70
6	Repair &Maintenance Expense	11.15	10.04	1.12
7	Administration & General Expense	5.63	2.82	2.82
8	Depreciation	29.60	26.64	2.96
9	Interest Charge	0.00	0.00	0.00
10	Interest on Working Capital	7.38	0.74	6.65

11	Return on NFA/Equity	0.00	0.00	0.00
12	Less : Non-Tariff Income	3.05	0.31	2.75
13	**Total**	**397.67**	**201.42**	**196.25**

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

The Commission has arrived wheeling charges based on the above wire cost and energy sale for the FY 2023-24 and shown in the table below:

Table 10.3: Wheeling Tariff approved by the Commission

Sl No.	Particulars	FY 2023-24
1	ARR for Wheeling Function approved by Commission (In Rs Crore)	201.42
2	Total Sale (within State + Outside State State) (In Mus)	931.37
3	**Wheeling Tariff (Rs/ kWh) arrived at by Commission**	**2.16**

The wheeling tariff of ₹ 2.16 per kWh arrived at by the Commission is based on the total ARR for the combined businesses (generation, distribution/retail supply and transmission) being handled by the PDS as a single entity. PDS being a State Government Department, operates with the budgetary support from the State Government and its transmission and distribution systems/networks have been set up with the funds provided by the Government of India under various schemes. No segregated accounts are available for wire and retail supply. Therefore, the wheeling tariff of ₹ 2.16 per kWh is on higher side compared to the wheeling tariffs prevalent in other States and the Commission is of the view that charging wheeling tariff at ₹ 2.16 per kWh will be detrimental to open access consumers and against the National Policy of providing a congenial atmosphere for growth and usage of green energy in the country.

In view of the above and taking into account the wheeling tariff prevalent in other States and in the interest of the consumers, wheeling tariff at 25% of tariff arrived at by the Commission is approved as indicated below for F.Y 2023-24:

The Commission approves wheeling Tariff at ₹0.54 per kWh for the F.Y. 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 any 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 surcharges

12.2 The Ministry of Power, Government of India has notified the Electricity (Amendment) Rules, 2022 and Rule 14 of the said Amendment Rules provides for specifying a price adjustment formula by the Appropriate Commission for recovery of the costs, arising on account of the variation in the price of fuel, or power purchase costs and that the impact in the cost due to such variation shall be automatically passed through in the consumer tariff, on a monthly basis, using the formula and such monthly automatic adjustment shall be trued up on annual basis by the Appropriate Commission:

Provided that till such a methodology and formula is specified by the Appropriate Commission, the methodology and formula specified in the **Schedule – II** of the Rules shall be applicable:

Accordingly, the Commission specifies the formula given by the Ministry of Power, Government of India in Schedule-II to the Electricity (Amendment) Rules, 2022 as the formula for computation of Fuel and Power Purchase Adjustment Surcharge as under:

Fuel and Power Purchase Adjustment Methodology

1. Computation of fuel and power purchase adjustment surcharge:

(1) For these rules “Fuel and Power Purchase Adjustment Surcharge” (FPPAS) means the increase in cost of power, supplied to consumers, due to change in Fuel cost, power purchase cost and transmission charges with reference to cost of supply approved by the State Commission

(2) Fuel and power purchase adjustment surcharge shall be calculated and billed to consumers, automatically, without going through regulatory approval process, on a monthly basis, according to the formula, prescribed by the respective the State Commission, subject to true up, on an annual basis, as decided by the State Commission: Provided that the automatic pass through shall be adjusted for monthly billing in accordance with these rules.

(3) Fuel and Power Purchase Adjustment Surcharge shall be computed and charged by the distribution licensee, in $(n+2)^{th}$ month, on the basis of actual variation, in cost of fuel and power purchase and Interstate Transmission Charges for the power procured during the nth

month. For example, the fuel and power purchase adjustment surcharge on account of changes in tariff for power supplied during the month of April of any financial year shall be computed and billed in the month of June of the same financial year: Provided that in case the distribution licensee fails to compute and charge fuel and power purchase adjustment surcharge within this time line, except in case of any force majeure condition, its right for recovery of costs on account of fuel and power purchase adjustment surcharge shall be forfeited and in such cases, the right to recovery the fuel and power purchase adjustment surcharge determined during true-up shall also be forfeited.

(4) The distribution licensee may decide, fuel and power purchase adjustment surcharge or a part thereof, to be carried forward to the subsequent month in order to avoid any tariff shock to consumers, but the carry forward of fuel and power purchase adjustment surcharge shall not exceed a maximum duration of two months and such carry forward shall only be applicable, if the total fuel and power purchase adjustment surcharge for a Billing Month, including any carry forward of fuel and power purchase adjustment surcharge over the previous month exceeds twenty per cent of variable component of approved tariff.

(5) The carry forward shall be recovered within one year or before the next tariff cycle whichever is earlier and the money recovered through fuel and power purchase adjustment surcharge shall first be accounted towards the oldest carry forward portion of the fuel and power purchase adjustment surcharge followed by the subsequent month.

(6) In case of carry forward of fuel and power purchase adjustment surcharge, the carrying cost at the rate of State Bank of India Marginal cost of Funds-based lending Rate plus one hundred and fifty basis points shall be allowed till the same is recovered through tariff and this carrying cost shall be trued up in the year under consideration.

(7) Depending upon quantum of fuel and power purchase adjustment surcharge, the automatic pass through shall be adjusted in such a manner that, (i) If fuel and power purchase adjustment surcharge≤5%, 100% cost recoverable of computed fuel and power purchase adjustment surcharge by distribution licensee shall be levied automatically using the formula. (ii) If fuel and power purchase adjustment surcharge>5%, 5% fuel and power purchase adjustment surcharge shall be recoverable automatically as per 6(i) above. 90% of the balance fuel and power purchase adjustment surcharge shall be recoverable automatically using the formula and the differential claim shall be recoverable after approval by the State Commission during true up.

(8) The revenue recovered on account of pass-through fuel and power purchase adjustment surcharge by the distribution licensee, shall be trued up later for the year under consideration and the true up for any financial Year shall be completed by 30th June of the next financial year.

(9) In case of excess revenue recovered for the year against the fuel and power purchase adjustment surcharge, the same shall be recovered from the licensee at the time of true up along with its carrying cost to be charged at 1.20 times of the carrying cost rate approved by the State Commission and the under recovery of fuel and power purchase adjustment surcharge shall be allowed during true up, to be billed along with the automatic Fuel and Power Purchase Adjustment Surcharge amount.

Explanation:-For example in the month of July, the automatic pass through component for the power supplied in May and additional Fuel and Power Purchase Adjustment Surcharge, if any, recoverable after true up for the month of April in the previous financial year, shall be billed.

(10) The distribution licensee shall submit such details, in the stipulated formats, of the variation between expenses incurred and the fuel and power purchase adjustment surcharge recovered, and the detailed computations and supporting documents, as required by the State Commission, during true up of the normal tariff.

(11) To ensure smooth implementation of the fuel and power purchase adjustment surcharge mechanism and its recovery, the distribution licensee shall ensure that the licensee billing system is updated to take this into account and a unified billing system shall be implemented to ensure that there is a uniform billing system irrespective of the billing and metering vendor through interoperability or use of open source software as available.

(12) The licensee shall publish all details including the fuel and power purchase adjustment surcharge formula, calculation of monthly fuel and power purchase adjustment surcharge and recovery of fuel and power purchase adjustment surcharge (separately for automatic and approved portions) on its website and archive the same through a dedicated web address.

Formula:

$$\text{Monthly FPPAS for } n^{th} \text{ Month (\%)} = \frac{(A-B)*C + (D-E)}{\{Z * (1- \text{Distribution losses in \%}/100)\} * ABR}$$

Where,

N^{th} month means the month in which billing of fuel and power purchase adjustment surcharge component is done. This fuel and power purchase adjustment surcharge is due to changes in tariff for the power supplied in $(n-2)^{th}$ month

A is Total units procured in $(n-2)^{th}$ Month (in kWh) from all Sources including Long-term, Medium–term and Short-term Power purchases (To be taken from the bills issued to distribution licensees)

B is bulk sale of power from all Sources in $(n-2)^{th}$ Month. (in kWh) = (to be taken from provisional accounts to be issued by State Load Dispatch Centre by the 10^{th} day of each month).

C is incremental Average Power Purchase Cost= Actual average Power Purchase Cost (PPC) from all Sources in (n-2) month (Rs./ kWh) (computed) - Projected average Power Purchase Cost (PPC) from all Sources (Rs./ kWh)- (from tariff order)

D = Actual inter-state and intra-state Transmission Charges in the $(n-2)^{th}$ Month, (From the bills by Transcos to Discom) (in Rs)

E = Base Cost of Transmission Charges for $(n-2)^{th}$ Month. = (Approved Transmission Charges/12) (in Rs)

Z = [{Actual Power purchased from all the sources outside the State in $(n-2)^{th}$ Month. (in kWh)* (1 – Interstate transmission losses in % /100) + Power purchased from all the sources within the State(in kWh)}*(1 – Intra state losses in %) – B]/100 in kWh

ABR = Average Billing Rate for the year (to be taken from the Tariff Order in Rs/kWh)

Distribution Losses (in %) = Target Distribution Losses (from Tariff Order)

Inter-state transmission Losses (in %) = As per Tariff Order

Note:

1. The Power Purchase Cost shall exclude any charges on account of Deviation Settlement Mechanism.
2. Other charges which include Ancillary Services and Security Constrained Economic Despatch shall not be included in Fuel and Power Purchase Adjustment Surcharge and adjusted though the true-up approved by the State Commission

12.3 Recovery of Costs due to Change in Law

Rule 3 of the Electricity (Timely Recovery of Cost Due to Change in Law) Rules, 2021 notified by the Ministry of Power, Government of India provides for adjustment in tariff due to change in law. The rules states that **"on the occurrence of change in law, the monthly tariff or charges shall be adjusted and recovered in accordance with these Rules to compensate the affected party so as to restore to affected party to the same economic position as if change in law have not occurred".**

Accordingly, recovery of cost due to change in Law shall be done as per the provisions of Rule 3 sub rules (1) to (9) of the Electricity (Timely Recovery of Cost Due to Change in Law) Rules, 2021, as amended from time to time.

Further, the formula for determination of impact on tariff or charges due to change in law as provided in **The Schedule to the said Rules** shall be applicable to all generating companies or transmission licensees

APPENDIX

TARIFF SCHEDULE FOR THE FY 2023-24

I. DOMESTIC SUPPLY (DS):

Type of Consumer:

Power supply to private house, residential flats and Government schools, residential buildings for light, Heating/electrical appliances, fans etc for domestic purpose. This schedule can also be made applicable to the charitable organization after verifying the genuineness of their non-commercial aspects by the concerned Divisional Office.

(a) Nature of service:

Low Tension AC 430/230 volts, 50 cycles/sec (Hz)

(b) Rate:

Units Consumption	Paisa per kWh (Unit)
Up to 50	110
51 to 100	210
101 to 200	310
201 to 400	360
Consumption exceeding 400 units	410

(c) Monthly Minimum Charge:

Details	Rate (In ₹)
Single Phase Supply	50.00
Three Phase Supply	200.00

(d) Monthly Rebate (if paid within due date): 5% on Energy Charges

(*Due date shall be 10 days which shall be reckoned from the date of issue of the bill***)**
(e)Annual Surcharge (charge on the gross arrear outstanding every March end):10%

If electricity supplied in domestic premises issued for commercial purpose, the entire supply shall be charged under commercial supply.

II. COMMERCIAL SUPPLY (CS):

Type of Consumer:

Supply of energy for light, fan, heating and power appliances in commercial and non-domestic establishments such as shops, business houses, hotel, restaurants, petrol pumps, service stations, garages, auditoriums, cinema houses, nursing homes, dispensaries, doctors clinic which are used for privates gains, telephone exchange, nurseries, show rooms, x-ray plants, libraries banks, video parlours, saloons, beauty parlours, health clubs or any house of profit as identified by the Assistant Engineer/Executive Engineer of the Department. In the event of exceeding connected load of 25 KVA and above, the Demand charge at the following rates shall be imposed. The seasonal consumers are allowed to install MDI meter for assessment of their monthly load profile.

(a) Nature of supply:

Low Tension AC 430/230volts, 50 cycles/Sec (Hz)

(b) Rate:

<table>
<tr><th>Consumption range</th><th colspan="2">Paisa per Kwh (Unit)</th></tr>
<tr><td>Upto 50</td><td colspan="2">310</td></tr>
<tr><td>51 to 100</td><td colspan="2">410</td></tr>
<tr><td>101 to 200</td><td colspan="2">510</td></tr>
<tr><td>201 to 400</td><td colspan="2">610</td></tr>
<tr><td>Consumption exceeding 400 units</td><td colspan="2">640</td></tr>
<tr><td rowspan="2">Demand Charges- For those establishments whose sanctioned load is more than 25 KVA and does not have independent transformer but run their unit through shared transformers.</td><td>Rural</td><td>Urban</td></tr>
<tr><td>₹ 60/KVA/Month plus energy charges shown above</td><td>₹100/KVA/Month plus energy charges shown above</td></tr>
</table>

If electricity supplied in domestic premises is used for commercial purpose, the entire supply shall be charged under commercial supply. Consumer having connected load of 50 KVA and above shall install their own independent transformer.

(c) Monthly Minimum Charge:

(i) Consumer having sanctioned load below 25 kVA shall be charged in the following rates:-

Details	Rate (In ₹)
Single Phase Supply	200.00
Three Phase Supply	500.00

(ii) Consumer having sanctioned load of 25 KVA and above, demand charge is Monthly Minimum Charge.

(d) Monthly Rebate (if paid within due date):5% on Energy Charges

(*Due date shall be 10 days which shall be reckoned from the date of issue of the bill*)

(e)Annual Surcharge (charge on the gross arrear outstanding every March end):10%

III. LOW TENTION INDUSTRIAL SUPPLY (LTIS):

Type of Consumer:

Power supply to the industries like poultry, agriculture load, fabrication and sheet metal works or any other units of such kind under small-scale industries having connected load not exceeding 25 kVA in total. In the event of exceeding connected load beyond 25 kVA, the Demand charge at the following rates shall be imposed.

(a) Nature of service:

Low Tension AC 430/230volts, 3 phase/single phase, 50 cycles/Sec (Hz)

(b) Rates:

Units Consumption	**Paisa per Unit (KVAh)**	
Area	**Rural**	**Urban**
Upto 500	360	530
501 to 1000	440	620
1001 & Above	580	715
Demand Charge – for those establishments whose sanction load is more than 25 KVA & does not have independent transformer but run their unit through shared transformers.	₹ 60/kVA/Month plus energy charges as shown above	₹100/kVA/Month plus energy charge as shown above

(c) Monthly Minimum Charge:

(i) Consumer having contract demand of load 45 KW & below shall be charged in the following rates:-

Rural Areas	₹ 500/Month
Urban Areas	₹ 500/Month

(ii) Consumer having contract demand of load above 45 KW shall be charged in the following rate.

Rural Areas	₹ 120/KVA/Month of sanctioned load
Urban Areas	₹ 200/KVA/Month of sanctioned load

(d) Monthly Rebate (if paid within due date) :5% on Energy Charges

(*Due date shall be 10 days which shall be reckoned from the date of issue of the bill*)

(e) Annual Surcharge (charge on the gross arrear outstanding every March end):10%

IV. HIGH TENSION INDUSTRIAL SUPPLY (HTIS):

Type of Consumer:

All types of supply with contract demand at single point having 3 phase supply and voltage 11 kV & above.

(a) Nature of supply:

High Tension AC, 11 kV & above, 3 phase, 50 cycles/Sec (Hz)

Executive Engineer should sanction the demand In the Requisition and Agreement form of the Department before the service connection is issued based on the availability of quantum of power. The demand sanctioned by the Executive Engineer will be considered as the Contract Demand, however, the Contract Demand can be reviewed once a year if the consumer so desires. A maximum demand indicator will be installed at the consumer premises to record the maximum demand on the monthly basis. If in a month, the recorded maximum demand exceeds the contract demand, that portion of the demand in excess of the contract demand will be billed at twice the prevailing demand charges.

Energy meters are compulsorily to be installed on HT side of all transformers having capacity equal to or above 200 KVA. The meters are also allowed to install on LT side of those consumers having transformer capacity less than 200 KVA, but in such case the assessed energy consumption shall be grossed up by 4% to account for as transformation loss.

(b) Rate:

Units Consumption	Charges
Up to 100 kVA Demand Charge Plus Energy Charge	₹ 200/kVA/Month +540 Paisa/KVAh
Above 100 to 250 kVA Demand Charge Plus Energy Charge	₹250/kVA/Month + 590 Paisa/KVAh
Above 250 to 500 kVA Demand Charge Plus Energy Charge	₹290/kVA/Month + 640 Paisa/KVAh
Above 500 kVA Demand Charge Plus Energy Charge	₹560/kVA/Month + 690 Paisa/KVAh

(c) Monthly Minimum Charges: Demand Charges

(d) Monthly Rebate (if paid within due date): 2% on Energy Charges

(*Due date shall be 20 days which shall be reckoned from the date of issue of the bill*)

(d) **Annual Surcharge (charge on the gross arrear outstanding every March end):**10%

V. BULK SUPPLY (BS) (NON – COMMERCIAL SUPPLY):

Type of Consumer:

Available for general mixed loads to M.E.S. and other Military Establishments, Borders roads, Sikkim Armed Police Complex (SAP), Electric Vehicle Charging Station, all Government Non-residential buildings Hospitals, Aerodromes and other similar establishments as identified as such supply by the Concerned Executive Engineer.

(a) Nature of service:

Low Tension AC 430/230 volts or High tension11 kV & above

Executive Engineer should sanction the demand in the Requisition and Agreement form of the Department before the service connection is issued.

(b) Rate:

All Units Consumption	Paisa/Unit
LT (430/230 Volts)	550
HT (11kV or 66 kV)	550

(c) Monthly Minimum Charge:

(i) Consumer having contract demand of load 45 KW & below shall be charged in the following rate.

LT (430/230Volts)	₹ 500/month
HT (11kV or66kV)	₹ 500/month

(ii) Consumer having contract demand of load above 45 KW shall be charged in the following rate.

LT (430/230 Volts)	₹ 150 /kVA/month of Sanctioned Load
HT (11kV or 66 kV)	₹ 150 /kVA/month of Sanctioned Load

(d) Monthly Rebate (if paid within due date): *3% on Energy Charges*

(*Due date shall be 20 days which shall be reckoned from the date of issue of the bill*)

(e) Annual Surcharge (charge on the gross arrear outstanding every March end): 10%

(f) Consumer having contract demand of load above 45 KW and above shall have the option of installing Maximum Demand Indicator (MDI) meter at their premises if the consumer so desires.

VI. SUPPLY TO ARMY PENSIONERS:

Type of Consumer:

Provided to the army pensioners or their surviving widows based on the list provided by Sikkim Rajya Sainik Board.

(a) Nature of service:

Low Tension AC 230/430 volts, 50 cycles/Sec (Hz)

(b) Rate: Domestic supply rate is applicable.

(i) Up to 100 units: To be billed to Secretary, Rajya Sainik Board

(ii) 101 and above: To be billed to the Consumer

Minimum charges, surcharges, and rebate etc. will be applicable as per domestic supply category.

VII. SUPPLY TO BLIND:

Type of Consumer:

Service connection provided to a house of a family whose head of the family is blind and the same is certified by the National Association for Blinds.

(a) Nature of service:

Low Tension AC 230/430 volts, 50 cycles/Sec (Hz)

(b) Rate: Domestic supply rate is applicable.

(i) Up to 100 units: To be billed to Secretary, Social Welfare Department

(ii) 101 and above: To be billed to the Consumer

Minimum charges, surcharges, and rebate etc. will be applicable as per domestic supply category.

VIII. SUPPLY TO THE PLACES OF WORSHIP (PW):

Type of Consumer:

Supply of power to Gumpas, Manilakhangs, Tsamkhangs, Mandirs, Churches, and Mosques as identified by the State Ecclesiastical Department.

(a) Nature of service:

Low Tension 430/230 volts, 50 cycles/Sec (Hz).

b) Rate: Domestic Supply Rate is applicable

(i) **Upto 100 units:** To be billed to Secretary, Ecclesiastical Department.

(ii) 101 and above : To be billed to the Consumer.

Minimum charges, surcharges, and rebate etc. will be applicable as per domestic supply category.

IX. PUBLIC LIGHTING ENERGY CONSUMPTION CHARGES

It has been decided that the electrical energy consumption charges of public lighting, street light etc. in urban area shall be paid by the Urban Development & Housing Department. Similarly, the consumption of electrical energy for street fight etc. in rural areas shall be paid by the concerned Panchayat / Rural Development Department. The necessary meter/metering equipments shall be provided by the Power Department and for which the standard (Tariff Schedule) charges is also applicable in accordance with rules and regulations of the Department.

Rate:

Category	Rate
Rural Areas	400 Paisa/KWH
Urban Areas	500 Paisa/KWH

X. TEMPORARY SUPPLY:

Type of consumer:

The assessment of energy consumption shall be on the basis of recorded meter reading and not on average basis, however if the connection is being taken for less than one month, an advance payment should be taken from the consumer as per his/her connected load based on average system calculation shown in tariff schedule.

Approval of the Temporary Supply and its duration will be the discretion of the Assistant Engineer of the Department.

In notified Municipal towns viz Gangtok,Ranipool, Singtam, Rangpo, Jorethang,Naya Bazar, Namchi and Gyalshing, where prepaid meters are being installed, the temporary connection shall only be provided through prepaid energy meter for consumers having connected load below 45 KW.

Nature of Service:

(a). Low tension AC 430/230 volts, 50 Hz /H.T. AC 11 kV whichever is applicable and possible at the discretion of the department.

(b) Rate:

Twice the Tariff under schedule DS/CS/LTIS/HT for corresponding permanent supply (**Temporary supply connection shall not be entertained without energy meter).** Two months assessment on sanction load shall have to be paid in advance as security deposit before taking the connection.

XI. ADDITIONAL REBATE FOR CONSUMERS HAVING PREPAID METERS

(i) 1% additional rebate on energy charges will be allowed to consumers having prepaid meters.

(ii) No meter rent shall be charged to the consumer having prepaid meter.

(iii) Vending Charge of ₹ 17/meter/month, which is inclusive of all taxes shall be applicable

(iv) The above shall be in consonance to the Gazette Notification No. 28 dated 04/02/2020 along with any amendments therein with respect to the prepaid consumer.

XII. SCHEDULE FOR MISCELLANEOUS CHARGES

Service Connection

Following procedures should be strictly followed while giving the new service connection. On receipt of written application with requisite, Revenue Stamp from any intending consumer addressed to the Assistant Engineer (Commercial/Revenue) the department will issue the Requisition and Agreement Form of the Department. This Form will be issued on production of Bank Receipt at the following rates:

Commercial/Domestic Supply	LTUS/Bulk Supply	HTS
₹ 50.00	₹ 100.00	₹ 200.00

He/ She will complete the form in all respect and submit to the office of the Assistant Engineer. Assistant Engineer will issue the service connection estimate with the approval of the Executive Engineer. If the Substation of the area or any other connected Electrical network is under capacity, the department can decline the service connection till the capacity is increased as required. If the demand is more than 25 kVA the Department reserves the right to ask the applicant to provide suitable substation at his/her cost.

The Power Department also reserves the right to disconnect the service connection of any consumer if he/she increases the load above sanctioned load without written approval of the Department and will treat such cases as theft of power.

(a) Single connection will be provided to the legal landlord of the building. However, an additional connection can also be given in the name of his legal heir subject to production of valid agreement by the landlord stating that he/she shall take the responsibility to clear all the electricity dues created thereof by his legal heir before the close of every financial year.

(b) In case the flat or part of the private building is occupied by Government / Semi Government/Government Undertakings offices, separate service connection in the name of Head of Office can be given with the approval of the concerned Executive Engineer.

(c) ₹ 50.00 per certificate shall be charged for issuing NDC (No dues certificate), NOC (No objection certificate) or any other kind of certificate to be issued to the consumer by the Department.

XIII. METER RENT / Month

(i)	Energy Meter	
(a)	Single Phase	₹40.00
(b)	Three phase	₹ 80.00
(ii)	Maximum demand indicator	₹200.00
(iii)	Time switch	₹150.00

XIV. TESTING OF METERS

i)	Energy Meters Single Phase	₹ 200
ii)	Other Metering Instruments	₹ 250

XV. DISCONNECTION & RECONNECTION

(i)	DS and CS category	₹150.00
(ii)	LTIS, HTS & Bulk category	₹250.00

Unless otherwise demanded by the Department replacement of meters or shifting the position of meter boards etc., can be entertained exclusively on the specific written request of the consumer against a payment of ₹ 100.00 each time which does not include the cost of requirement and labour and the same will be extra.

XV. REPLACEMENT OF FUSES

Service for replacement of fuses in the main cut-outs available against the following Payments:-

(i)	Low tension	Single phase	₹30.00
		Three phase	₹40.00
(ii)	High tension		₹50.00

XVII. RESEALING OF METERS

If by any reason the seal affixed in the meter or cut-outs installed and secured by the Department are found tampered, the Department reserves the right to disconnect the service connection immediately and impose penalty as applicable under The Indian Electricity Act, 2003. In addition the consumer is liable for payment for resealing charge @₹ 50.00 per call of such services.

XVIII. SECURITY DEPOSIT

Security deposit shall be deposited, by the consumer, in the following rates for the meters provided by the Department.

1	Electronic Meter	3 phase	₹500.00
		1 phase	₹200.00
2	Electromagnetic Meters	3 phase	₹150.00
		1 phase	₹75.00

The Security deposit will be forfeited and the line will be disconnected if the consumer tampers the meter. The line will be reconnected only after the fresh security deposit is deposited and other applicable charges are paid alongwith the penalty.

All High Tension Industrial consumers shall deposit security amount equivalent to two months anticipated bill inclusive of demand charge and energy charge. The Security Deposit shall be in the form of Fixed Deposit from State Bank of Sikkim/Scheduled Banks in the name of Secretary, Power Department. In case of default in payment , the same shall be adjusted against electricity dues. In such case , the consumer again has to re-deposit the security amount.

XIX. OTHER CONDITIONS FOR SUPPLY OF ELECTRICAL ENERGY

(a) Meter found out of order

In the event of meter being found out of order (which includes meter ceasing to record, running fast or slow, creeping or running reverse direction) and where the actual errors on reading cannot be ascertained, the meter will be declared faulty and the correct quantum of energy consumption shall be determined by taking the average consumption for the previous three months.

If the average consumption for the three months cannot be taken due to the meter ceasing to record the consumption or any other reason, then the correct consumption will be determined based on the average consumption for succeeding 'three months (after installation of meter) where any differences or dispute arise as to the correctness of meter reading or bill amount etc. then the matter shall be decided by the concerned Chief Engineer of the department upon written intimation either from the concerned Executive Engineer or from concerned consumer. However, the bill should be paid on or before the due date. The amount so paid will be considered as advance to the credit of the consumer's account until such time as the billed amount in dispute is fully settled. After determining the correct consumption due billing will be made and necessary adjustment shall be done in the next bill issued. This method shall be applicable to all categories of consumers.

(b) Defaulting consumer

The Department shall not give any type of service connection to a defaulting consumer.

(c) Fixing the position of meter/metering equipment

During the inspection of Assistant Engineer of the Department the point of entry of supply of mains and position of meter, cut-out/metering equipments etc. will be decided and should not be changed later on without written permission from Department.

The Department will in no case fix the meter, main cut-out metering equipments nor allow the same to remain in any position where the employees are prohibited from entering or where there is difficulty of access for employees**.**

(d) Notification/application before connection

The consumer must submit an application for new service connection or should apply for additional power supply well in advance for domestic and commercial purpose. In the case of High Tension Industrial/Low Tension Industrial/Bulk Supply consumers, longer period notices which may extend to six months or more may be required to enable the Department to make necessary arrangement for such supply, which will subject to its availability in the system. The Assistant Engineer of the area will issue seven clear days' notice to the applicant for inspecting his/her premises to verify the feasibility of providing power supply.

(e) Sketch of the premises

(i) A neat sketch of the premises should be submitted for internal electrification of the building showing the light points, light plug points, power plug points, fan/exhaust fan points, main isolator position, distribution Control system location and other fittings etc.

(ii) In the case of industrial/workshop etc. the consumer should submit a neat sketch showing the location of all E&M equipments and its motor capacity if any etc. in addition to the above.

(f) Load sanction

Depending on the availability of the quantum of electrical energy in the system, the load shall be sanctioned for all categories of consumers by the authorized officer of the Department.

XX. LAND - free of cost for service connection and other association facilities:

The consumer shall provide the necessary land to the Department belonging to his/her on free of cost basis and afford all reasonable facilities for bringing in the direct cables or over headlines from the Department's T&D system for servicing the consumers but also cables or overhead lines connecting 'the department's other consumers and shall permit the department to provide all requisite switch gear thereto on the above premises and furnish supply to such other consumers through cables/ overhead lines and terminals situated on the consumer's premises.

XXI. ACCESS TO PREMISES AND APPARATUS

(a) If any consumer obstructs or prevents departments authorized officers/employees in any manner, from inspecting his/her premises at any time to which the supply is afforded or where the electrical installations or equipments belonging to the department or the consumers situated in such premises and if there is scope of suspecting any malpractice, the authorized officer; employees of the department may disconnect the power supply forthwith without notice and keep such power supply disconnected till the consumer affords due facilities for inspection. If such inspection reveals nothing to undertake any malpractice or pilferage, the department will then restore the power supply to his/her premises.

(b) If such inspection reveals any commission of malpractice as specified in the "Malpractice clauses mentioned below, this may be dealt as per the relevant clauses which are indicated in the sub-head of malpractice.

(c) The department shall not be responsible for any loss or damage or inconvenience caused to the consumer on account of such disconnection of supply.

XXII. INTERFERENCE WITH SUPPLY MAINS AND APPARATUS

(a) A consumer shall not interfere with the supply main or apparatus including the metering arrangement, which may have been installed in his/her premises.

(b) The consumer shall not keep connected to the department supply system if any apparatus to which the department has taken reasonable objection or which the department may consider likely to interfere with or affect injudiciously the department's equipments installed in his/her premises or the Department's supply to other consumer.

(c) The consumer shall not keep the unbalanced loading of three phase supply taken by him/her from the Department.

(d) The consumer shall not make such use of supply given to him/her by the department as to act prejudicially to the department's supply system in any manner whatsoever.

XXIII. MALPRACTICE

(i) Contravention of any provision of the terms conditions of supply the Indian Electricity Act 2003, the Indian Electricity Rules 1956 or any other law/rule governing the supply and use of electricity regulating order shall be treated as malpractice and the consumer indulging in any such malpractice shall be liable at law/rule/order,subject to generality as above.

(ii) Cases mentioned hereunder, shall be generally treated as malpractice:-

(a) Exceeding the sanctioned/contract load authorized by the department without the permission of the department.

(b) Addition, alteration and extension of electrical installation in the consumer's premises without permission of the department or extension to any premises other than the one for which supply sanctioned/contracted for.

(c) Unauthorized supply of electricity to any service which is including the service line disconnected by the Department against electricity revenue arrear or any other offended clauses and the same service line reconnected without permission of the department.

(d) Non-compliance of orders in force, imposing restrictions of use of energy for rational and equitable distribution thereof.

(e) Use of electricity for any purpose other than that for which supply is contracted /sanctioned for.

(f) Resale of energy without the permission of the department.

(g) Theft of energy.

(h) Obstruction to lawful entry of authorized officer/employee of the department into consumer's premises.

(i) Interfering and tampering with the meter and metering system.

XXIV. PAYMENT OF COMPENSATION FOR MALPRACTICES

Where a consumer is found to be indulging in malpractice with regard to use of electricity and use of device to commit theft of energy etc, the Assessing Authority of the department will decide about the payment of compensation amount to be imposed against such consumer as per the relevant rules and regulations.

XXV. INSTITUTION OF PROSECUTION

Any officer/employee authorized to inspect and deal with cases of malpractice and theft of energy may launch prosecution as an aggrieved person as mentioned in section 135 & 150 of the Indian Electricity Act 2003.

XXVI. READING OF METER AND PREPARATION OF BILL

(a) The meter reading will be taken once in a month. The reading of meter will be recorded by meter reader in a card provided near the meter and open to inspection by consumer. Bill for energy consumption charges will be prepared based on the reading noted in the card.

(b) Any complaint with regard to the accuracy of the bill the same shall be intimated immediately by the consumer to the Assistant Engineer, who has issued the bill quoting the bill number/ account number, date etc.

(c) If the consumer does not receive the electricity bill he shall inform the Assistant Engineer concerned about the non-receipt of his bill and on such representation, a copy will be supplied to him.

XXVII.DISCONNECIION OF SUPPLY FOR NON-PAYMENT OF ELECTRICITY BILL AND LEGAL ACTION

If the consumer fails to pay any bill presented to him/her the department shall be at liberty to take action under sub- section (1) of section 56 of Indian Electricity Act 2003 for disconnection of supply. The disconnection notice is printed in the bill form and further notice will not be issued by the department for disconnection.

XXVIII.FAILURE OF POWER SUPPLY

The Department shall not be responsible for loss, damage or compensation whatsoever out of failure of supply. However, the Department shall abide by the Standard of Performance Regulations notified by the Commission and as amended from time to time.

XXIX. RESTRICTION OF POWER SUPPLY

The supply of electricity is liable to be curtailed or staggered or cut off altogether as may be ordered by the State Government or any other enactment as amended from time to time governing the supply and use of electricity.

XXX. CONSUMER NUMBER

Consumer number shall be given to all the consumers. The same shall also be written in the Meter Reading Card and the electricity bill. Consumer must know his/her consumer number and should quote the consumer number while corresponding with the department for prompt attention by the department**.**

XXXI. FUSE CALL

In case the department's main fuse or fuses fail, the consumer or his representative may give the intimation in the adjacent control room either in person or through phone. Employees bearing the identity cards of the department are allowed to replace those fuses. Consumers are not allowed to replace those fuses and they will render themselves liable to pay heavy penalty if the department's seals are been found broken.

In attending the fuse – off calls. Top most priority will be given to cases of fire due to short circuit, accident, arcing in consumer’s main etc.

XXXII. THEFT OF POWER

Theft of power is a criminal offence under the Electricity Act,2003. Whoever commits the theft of power shall be punishable in accordance with Indian Electricity Act 2003.

XXXIII. SUPPLY WITHOUT METER

Where a supply to the consumer is given without meter the consumption of Electrical Energy in kWh will be computed in the manner indicated below:

1. Government office building: Sanctioned load (kW) x 6 hrs x 30 days x 60 /100
2. Other Consumers: Sanctioned load (kW) x 8 hrs x 30 days x 60 /100

XXXIV. SUBSIDY

The subsidy will be provided based on the subsequent Notification issued by the Government of Sikkim and as amended from time to time.