

ORDER

ON

PROVISIONAL TRUE UP FOR THE FY 2018-19, REVIEW FOR THE FY 2019-20& AGGREGATE REVENUE REQUIREMENT AND TARIFF FOR THE FY 2020-21

For

Power Department,

Government of Sikkim

March, 2020

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

Before the

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

Case No.: MYT/2020-21/P-01/PDS.

In the matter of

Petition for Aggregate Revenue Requirement (ARR) & Tariff for the FY 2020-21, Provisional True Up for the FY 2018-19 and Review for the FY 2019-20filed by the Power Department, Government of Sikkim, herein after referred to as 'PDS'----Petitioner.

Coram

Shri N. R. Bhattarai, Chairperson

<u>ORDER</u>

Date of Order:16th March, 2020.

1. BACKGROUND AND BRIEF HISTORY

The Sikkim State Electricity Regulatory Commission (hereinafter referred to as the 'Commission') came into existence on 15th November, 2003 as a one man Commission. The notification constituting the Commission was issued vide Sikkim Government Extraordinary

Gazette Notification **No. 28/P/GEN/97/524 dated 15.11.2003**. The Commission, althoughconstituted in 2003, became operative only in April, 2011, after the Chairperson was appointed on 11th April, 2011 on the recommendations of the Selection Committee constituted by the State Government vide Home Department Notification No. 34/Home/2011 dated 11.04.2011 in terms of Section 85 of the Electricity Act, 2003, hereinafter referred to as the Act. Thereafter, the Secretary and other officials were appointed and the Commission began its work.

The Section 86 of the Elecrtciity Act, 2003 (36 of 2003) lays down the functions of the State Commission. These functions include: determination of the 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 the tariff, 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.

1.1 PDS – Filing of ARR and Tariff Petition

The Power Department, Government of Sikkim (hereinafter referred to as "PDS"), is a deemed licensee under Section 14 of the Act and is carrying on the business of distribution and retail supply of electricity in the State of Sikkim.

PDS vide its letter no. 5/P/Rev/NODAL/14-15/201 dated 27th November, 2019 filed its petition before the Hon'ble Commission for consideration and approval of the provisional true up for the FY 2018-19, review for the FY 2019-20and Aggregate Revenue Requirement (ARR) & determination of tariff for the FY 2020-21in accordance with the provisions of the Sikkim State Electricity Regulatory Commission (Conduct of Business) Regulations, 2012 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, 2013, (Multi Year Tariff) (First Amendment)

Regulations, 2015 and (Multi Year Tariff) (Second Amendment) Regulations, 2017 (herein after referred to as MYT Regulations). The petition was received by the Commission on 29th November, 2019.

The SSERC had notified the SSERC(Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2013 vide Gazette Notification No. 204 Dated 21st May, 2014 thereby specifying the first 3-year control period as commencing from 1stApril, 2015 to 31st March, 2018 and making it mandatory for all Distribution ,Wire & Retail Supply Business, Transmission Licensees and Generation Company to file petition under the multi year tariff regime from 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 further, 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.

The Commission carried out necessary amendments in the SSERC (MYT) Regulations, 2013 and issued the SSERC (Multi Year Tariff) (First Amendment) Regulations, 2015 vide Gazette Notification No. 92 Dated 18th March, 2015. Further, the Commission notified the SSERC (Multi Year Tariff) (Second Amendment) Regulations, 2017 vide Gazette Notification No. 367 Dated 24th August, 2017 thereby rescheduling the 3-year control period as from 1st April, 2018 to 31stMarch, 2021. The second amendment to the MYT Regulations also set the dateline for filing of Business Plan and Capital Investment Plan for 3-year control period by the Licensees as 1st September, 2017. The PDS filed a petition before the Hon'ble Commission requesting the Commission to permit/allow it to file the Business and Capital Investment Plans along with the MYT petition by 30th November, 2017 vide petition dated 28th August, 2017. The Commission registered the petition as Case No. MYT/P-01/SSERC/2017-18 and considering the fact that the SSERC (MYT) (Second Amendment) Regulations, 2017 was notified only on 24th August, 2017 very limited time was available to the PDS for filing of the Business and Capital Investment Plans within the dateline (1st September, 2017), therefore the Commission vide its letter No. 315/SSERC/2017-18/309 dated 18th September, 2017 permitted the PDS to file the Business and Capital Investment Plans with the MYT Petition.

In compliance to the provisions of the SSERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2013 and SSERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) (First Amendment) Regulations, 2016 and SSERC (Terms and Conditions for Determination of Tariff for Generation of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) (First Amendment) Regulations, 2016 and SSERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) (Second Amendment Regulations), 2017, the PDS filed its petition under MYT regime for the FY 2020-21 vide letter No. 5/P/Rev/NODAL/14-15/201 dated 27th November, 2019. The petition was received by the Commission on 29th November, 2019 and registered as case no. MYT/2020-21/P-01/PDS and the petition was admitted by the Commission on 5th December, 2019.

1.2 Interaction with the Petitioner

The PDS had filed its petition before the Hon'ble Commission vide its letter no. 5/P/Rev/NODAL/14-15/201 dated 27th November, 2019 for consideration and approval of the provisional true up for the FY 2018-19 in accordance with the provisions of the Sikkim State Electricity Regulatory Commission (Conduct of Business) Regulations, 2012 and Sikkim State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2012, plus review for the FY 2019-20 and Aggregate Revenue Requirement (ARR) & determination of tariff for the FY 2020-21 in accordance with the provisions of the

Sikkim State Electricity Regulatory Commission (Conduct of Business) Regulations, 2012 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, 2013, (Multi Year Tariff) (First Amendment) Regulations, 2015 and (Multi Year Tariff) (Second Amendment) Regulations, 2017.

The Commission during the scrutiny and examination of the ARR and Tariff Petition, observed that the PDS had not filed or submitted the required information and data with the Petition and the Commission made several communications to the PDS through letters and e-mails directing it to furnish the additional information/data and clarifications to the Commission. The details of the communications made by the Commission and the responses/replies given by the PDS are as given below:

Communications made by the Commission		Response/Replies received from PDS	
Letter No. / E-mail	Dated	Letter No. / E-mail	Dated
318/SSERC/2017-18/330	02.12.2019	30/ACE/HQ-II/E&P/2017-18/206	07.01.2020
E mail	02.12.2019	Email	26.12.2019
E-mail	02.12.2019	Email	07.01.2020

In addition to the aforementioned letters and emails, the Commission also had several discussions with the PDS over phone and in person whereby the Commission was able to seek the clarifications and informations required for considering and processing the ARR/Tariff Petition of the PDS. The PDS furnished the requisite informations and clarifications to the Commission thereby enabling the Commission to take the whole process forward.

The Commission had several round of discussions/meetings/interactions with PDS regarding the ARR and the tariff proposal for the FY 2020-21 filed before the Commission. The prime objectives of the discussions/meetings/interactions was to discuss the various items of the ARR threadbare and as well as to deliberate on the projections made by the Department. During the said meetings and interactions, the Commission sought clarifications and justifications on the estimations and projections made in the ARR. The details of the meetings held with the PDS are as under:

- i. 2ndDecember, 2019
- ii. 3rd January, 2020

1.3 Admission of the Petition

Although the petition was filed by the PDS on 29th November, 2019, the Commission admitted the Petition on 5thDecember, 2019after thoroughly going through the details submitted by the PDS. The Petition was registered as Case no. MYT/2020-21/P-01/PDS. Thereafter, the Commission directed the PDS to issue public notice, soliciting objections, views and suggestions from the public by publishing the Public Notice in local newspapers vide letter no. 318/SSERC/2017-18/350 dated 24th December , 2019.

1.4 Public Hearing Process

The PDS issued "Public Notice" in accordance with Section 64 of the Electricity Act, 2003 incorporating thesalient features of its petition and inviting objections, suggestions, comments and views of the members of the public, consumers and stake holders. The PDS arranged publication of the Public Notice in the following newspapers, requesting submission of the objections, suggestions, comments and views latest by 10th February, 2020.

Name of Newspaper		Date of Publication	
i.	Summit Times (English)	17 th & 19 th January, 2020.	
ii.	Dainik Mirmiray (Nepali)	17 th January, 2020.	

The copies of the Tariff petition were also made available for purchase by interested persons from the Head Office of the petitioner on payment of amount. The petition filed by the PDS was also uploaded in the official website of the Commission.

No written objections, comments or suggestions were received by the Commission from the consumers and general public in response to the Public Notice issued by the PDS.Details of the objectors and the responses of the PDS are briefly narrated in Chapter 4.

1.5 Notice for Public Hearing

The Commission published notice for "Public Hearing" on the ARR/Tariff Petition of the PDS in the following leading newspapers, giving due intimation to the general public, interested parties, stakeholders and the consumers about the public hearing to be held at ChintanBhavan, Gangtok on 19th February, 2020. Through the Public Notice, the Commission also appealed to the general public and the stake holders to participate in the Public Hearing and express their views will be heard by the Commission. The Public Notice was also uploaded in the official web site of the Commission "**www.sserc.in**".

	Name of Newspapers	Date of Publication
•	Sikkim Express (English)	1 st and 7 th February, 2020.
•	SamayDainik (Nepali)	1 st and 8 th February, 2020.
•	Summit Times (English)	1 st and 7 th February, 2020.
•	HamroPrajashakti (Nepali)	1 st and 7 th February, 2020.

The copies of the Public Notice issued by the Commission in the above said newspapers are enclosed as Annexure 2A(i) & (ii), 2B(i)& (ii), 3A(i) & (ii) and 4A(i)& (ii) to this Tariff Order.

1.6 Public Hearing

The Public Hearing was held on 19th February, 2020, after adopting the due process of publishing of Public Notice sufficiently in advance. The Chairperson of the Commission, other Officials from the Commission as well as the Officials representing the Petitioner (PDS) were present in full strength at the designated venue and time in order to conduct the Public Hearing.

As usual no, there was no major participation by the public or stake holders in the Public Hearing. Only one individual ,few representatives from the Army and Pharmaceutical Industries participated in the hearing. The participants placed their views,comments ,objections and suggestions in the hearing. The PDS responded to the suggestions, views and objections of the participants. The views, suggestions, comments and objections given/raised by the participants have been taken into consideration while issuing this Tariff Order. The list of participants who attended the Public Hearing,details of the views, suggestions,objections and comments of the participants alongwith the response of the PDS and comments of the Commission are briefly narrated in Chapter 4.

1.7 Compliance of Directives

In its previous Tariff Orders, the Commission had issued certain directives to PDS in the public interest. PDS has furnished a compliance report on the same. The comments of the Commission on the compliance report, along with fresh directives issued are given inChapter 10.

1.8 Layout of the Order

This order is divided into Thirteen Chapters, as under:

- 1. First Chapter Thisprovides the background regarding ARR and Tariff proposal and details of the Public Hearing process.
- 2. Second Chapter This contains a summary of ARR and Tariff Proposals and the prayer of the petitioner.
- 3. Third Chapter Thisprovides an overview of the power sector in Sikkim.
- Fourth Chapter Thiscontains a brief summary of the objections raised, response of PDS and the Commission's comments on the same.
- 5. Fifth Chapter Thisdeals with the provisional true-up for the FY 2018-19.
- 6. Sixth Chapter -This deals with the review for the FY 2019-20.
- 7. Seventh Chapter This contains the Annual Revenue Requirement for the FY 202021, the Commission's analysis and decisions thereon.

- Eighth Chapter This contains the Annual Revenue Requirement for the FY 2020-21 for Transmission Function, the Commission's analysis and decisions thereon.
- 9. Nineth Chapter This contains the Annual Revenue Requirement for the FY 2020-21for Generation Function, the Commission's analysis and decisions thereon.
- 10. Tenth Chapter -This dealswith PDS' compliance of earlierdirectives, comments of the Commission and fresh directives to PDS.
- 11. Eleventh Chapter This discusses the principles of tariff policy and retail supply tariff for the FY 2020-21.
- 12. Twelveth Chapter -This deals with the approved Wheeling Charges.
- 13. Thirteenth Chapter This covers the Fuel and Power Purchase Adjustment Mechanism and FPPCA Formula.

1.9 State Advisory Committee Meeting

The Commission, with the aim of obtaining the views, suggestions, comments and considered opinion of the members of the State Advisory Committee (SAC) on the Annual Revenue Requirement (ARR) and Tariff Petition for FY 2020-21 of the Power Department, conducted a meeting of the SAC on 3rdJanuary, 2020 under the Chairmanship of ShriN.R.Bhattarai, Hon'ble Chairperson, SSERC in his chamber.

The Commission prepared a gist of the important features of the ARR and Tariff Petition of the Power Department for the FY 2020-21 including Truing Up for FY 2018-19 and Review for FY 2019-20. The gist was circulated to the members of the SAC well in advance, giving them sufficient time for study of the prominent features, projections, estimations, assumptions and calculations done by the Power Department in its ARR/Tariff Petition filed before the Commission.

The following persons attended the meeting:

- 1. Shri N. R. Bhattarai, Honble Chairperson, SSERC
- 2. Shri D. P. Sharma (I.A.S,retd), Member SAC
- 3. Ms. C. C. Bhutia, Secretary, SSERC

- 4. Shri A. B. Rai, PCE cum Secretary, Power Department, Govt. of Sikkim
- 5. Shri L. B. Chettri, Secretary, Food & Civil Supplies Department, Govt. of Sikkim
- 6. Shri U. K. Pradhan, Member SAC
- 7. Shri D. N. Khatiwada, Chief Engineer, Power Department, Govt. of Sikkim
- 8. Shri P. D. Chaktha, Director (T&T), SSERC
- 9. ShriJigme W. Bhutia, Joint Director (IT), SSERC
- 10. ShriSonamPalzor, Deputy Director, SSERC
- 11. Shri Karma Lodro, Executive Engineer, Power Department, Govt. of Sikkim
- 12. Shri P. R. Gyansapa, Assistant Engineer, SSERC
- 13. Shri Chandra P. Sharma, Assistant Engineer (Trading), Power Department

The members of the SAC deliberated and discussed the various aspects of the ARR/Tariff Petition. The members also sought clarifications from the Power Department on basis of the assumptions & estimations/projections made by the Department in its Petition. The members of the SAC put forth their considered views, suggestions and opinions on the ARR/Tariff proposals. The abstract of the observations, views, suggestions and comments of the SAC members on the different components of the ARR/Tariff Petition are presented herein under:

Item No. 1: Truing up for FY 2018-19

- The members of the SAC observed that slowly but steadily the Power Department has been making good progress towards reduction of the ARR gap. The members expressed their happiness on the fact that the revenue gap for FY 2018-19 has come down from the approved figure of ₹ 81.96 Crores to ₹ 3.14Crores.The members opined that reduction in the revenue gap is a positive sign for the department and also an indicator that the steps and measures taken by the department are producing fruitful results.
- The SAC members also took note of the fact that the power sale outside the State has gone up significantly and opined that the department must make efforts to increase the outside state sale of power and look for prospective buyers to get the

best tariff in the market.

Members of the SAC observed that the "employee costs" of the Power Department is increasing every financial year and is one of the major causes of revenue gap. They stressed on the need for curtailing the 'employee costs' and suggested that proper planning and effective use of the manpower needs to be done by the Department.

Item No. 2: Review for FY 2019-20

- \geq SAC Members observed that although the ARR figures for FY 2019-20 are only estimations/projections but the 'cost of power purchase' indicates an increasing trend. The members opined that 'power purchase cost' is one of the main contributors in the ARR and as such the Department must look for ways and means to curtail the cost of power purchase. The members observed that the State is buying thermal power from outside at high price whereas the same power is fetching very less tariff while trading outside the State. The members also observed that efforts need to be made by the Department to surrender high cost thermal power to reduce the cost of power purchase. They also observed that once again the 'employee costs' is estimated to go up in the FY 2019-20 as well. The members opined that unless the department is able to bring down the purchase of high cost thermal power, increase its own generation and reduce the AT&C losses, it will be difficult for the Department to reduce the revenue gap and become a profit making utility. Members of the SAC expressed their displeasure in the excessive delay in recommissioning of Lower Lagyap HEP by the Department and advised the Department to speed up the re-commissioning of the Project.
- SAC members observed that AT&C losses is high in the State and measures need to be taken by the Department to bring down the losses. The members expressed their happiness on the steps being taken by the Department for installing 'pre-paid' meters in all the major town/cities in the State. They opined that installing prepaid meters will definitely help in bringing down the losses. The members suggested that

prepaid metering should be extended to the entire State.

Item No. 3: Revised ARR for FY 2020-21

- Members of the SAC observed that the estimated revenue gap for FY 2020-21 is ₹ 72.66 Crores and even if the tariff hike is done as proposed by the Department, it will take 8 years to bridge the gap. They opined that even if the AT&C losses are considered around 30%, the total loss in terms of revenue is significant and opined that high AT&C losses is one of the main reason for the revenue gap. They further opined that until and unless the Department takes strict measures to reduce the losses, the revenue gap will not come down in the near future.
- The members of the SAC observed that the employee costs is almost doubling up and felt that the manpower available with the Department must be used productively. They opined that the estimated revenue from sale of power outside the State appears to be on lower side and hoped that the actual revenue surpasses the estimated figure at the end of the financial year. The members felt that if the Department can re-commission its own projects it will help in generating better revenue. The SAC members stressed on the need for prioritizing timely completion of the various ongoing works including strengthening of transmission system/power evacuation lines being implemented by the Department/PGCIL so that efficient system is available for power transmission/evacuation and sale/purchase by interested parties.
- The SAC members took note of the efforts and measure being undertaken by the Department and felt that the Department has to improve its revenue realization to meet up the salaries of the huge manpower. The members opined that the Department needs to function more like a commercial/corporate body in order to improve both its service quality and its financial health. The members opined that the Department needs to take strict action against payment defaulters, illegal lines, etc like the power utilities in other States and at the same time improve the quality

of its service and response to consumer complaints. SAC members felt that actions like line disconnection, imposition of fines etc need to be done by the Department against defaulters.

- The SAC members appreciated the steps taken by the Department towards 'online bill payment', 'prepaid metering' and suggested that such facilities need to be extended to all parts of the State for the ease and comfort of the consumers. SAC members observed that 'meter readers' need to be strictly directed to take proper meter reading in the presence of the house owner as is done in West Bengal to ensure correct billing and avoid under or over billing. They opined that pilferage of power is very high in the rural areas and some measure must be developed to check it.
- The members of the SAC suggested that it will be good to introduce 'direct transfer' of benefits to the public for subsidized power. The members also stressed on the need for creating consumer awareness on '100 units free power' being provided in the rural areas. They opined that the rural consumers are not aware of the facts of the 100 units free power and they have the impression that entire power being consumed by them is free. The member suggested that awareness campaigns need to be undertaken by the Department to educate the consumers.

Item No. 4: Proposed Tariff for FY 2020-21

The SAC members apprised that there are some complaints/issues in the supply of power to industries in the State like instances of poor voltage and irregular power supply ,which hampers production in the industries/factories. The members advised Power Department to look into such issues and take immediate steps resolving the issues. They opined that a major portion of the revenue of the Department comes from the industrial consumers and as such the Department must ensure 24x7 uninterrupted and quality power supply to the industries if it wants to scale up its revenue generation.SAC members opined that no room should be left for any kind of complaint else the industrial consumers have the option to purchase power from other sources in open access, in which case the revenue of the Department will be impacted. They added if Lower Lagyap HEP is commissioned then the power supply in the industrial area will get more stable and therefore the Department must make efforts to commission the project at the earliest.

- SAC members opined that the debt burden of the State is high and the State needs revenue but at the same time the public should not be over burdened with high tariff.
- The SAC members observed that no major hike in tariff of H.T industrial consumers have been done in the last year and also that hike in the tariff of domestic consumers will have negligible impact in the overall revenue generation. The SAC members opined that the Industrial consumers get subsidy from the Government of India apart from other benefits given by the State Government and therefore the Department may consider hiking of tariff for Industrial consumers and leave domestic tariff unchanged. The SAC members observed that Delhi is giving free power to its citizens and people of Sikkim also expects the same. The general public feel that Sikkim has so many hydropower projects and therefore power tariff should be low if not free.
- Power Department representatives submitted that the it only proposes to recover a meagre portion of the revenue gap through tariff hike and added that average tariff hike proposed by the Department is only ₹0.21 per unit or average hike of 3.73% to generate additional revenue of ₹ 9.57 crores. They submitted that the Department cannot and has not proposed for major hike to avoid tariff shock to the consumers. They further added that as per Government of India guidelines 'cross subsidy' has to be done away in the long run and therefore it is necessary to slowly bring the 'domestic category' tariff' at par with other category consumers rather than resorting to sudden hike in tariff in the future to comply with the Gol guidelines.

- The representatives of the Power Department submitted that it may not be advisable to hike 'industrial tariff' frequently and make the tariff unreasonably high. They added that as per Open Access regulations, consumers have the right to buy power from the sources/supplier they prefer and the Department can't stop the consumers from buying power through open access and any unreasonable increase in industrial tariff may result in loosing of the industrial consumers by the Department.
- SAC members observed that huge numbers of small hotels and homestays have mushroomed in the areas adjoining to urban areas and it is necessary that the Department identifies such areas and charge applicable tariff. The members however opined that small and part time hotel/home stay runners may not agree to pay commercial tariff as their business activities are not regular and their power consumption is also not too high but it is good if the Department conducts some survey to see the load pattern in such areas. The members also suggested that the Department must prepare a list of the actual BPL families in the rural areas to identify them and provide the 100 units of free power. It will be proper if the BPL list prepared by the Food and Civil Supplies Department is adopted by the Power Department, the members added. The members felt that the genuine list of BPL families must be put in place so that the benefits of subsidy are passed to the actual BPL families.
- SAC members observed that a slight hike in tariff of 'domestic category' had been already done in the last financial year and therefore the tariff of domestic consumers be kept un-changed in the FY 2020-21. The members felt that taking strict measures for proper and timely billing, proper meter reading, system strengthening, increasing trained field personnel including metering of left out consumers and replacement of faulty/damaged meters will go a long way in reducing the revenue gap. Coupled with these measures, a slight hike in the tariff of industrial consumers will be reasonable, the members advised.

- The SAC members noted that the overall energy sales projection for FY 2020-21 shows slight increase and they hoped that the figures will go up when the actual figures known at the end of the year. Members opined and suggested that the Department should make untiring efforts to fetch the best market price available for the outside State sale of power to boost the revenue generation and take strong measure to bring down the AT&C losses.
- SAC members endorsed the fact that reduction of T&D losses is a challenging task in the State but not impossible. They opined that bringing down the AT&C losses will automatically reduce the revenue gap and therefore the Department needs to try and achieve the loss targets set by the Commission.
- The SAC members felt that the Department has to improve its own generation and reduce its dependence on thermal power from outside. The members opined that the Department has to take steps for reviving the stalled power projects and also look for setting up of new power plants in the State.
- The members stressed on the need for reducing the cost of power purchase especially the high cost thermal power but at the same time advised that having a reasonable & balanced power back up is necessary. The members further advised that the matter pertaining to surrendering of thermal power be vigorously pursued by the Department with the concerned GoI agencies/Ministry to avoid un-necessary payment of capacity charges. Members also advised the Power Department to very carefully go through the terms & conditions of the new PPAs so that the State is not trapped in financial burden.
- The SAC members observed that the average rate at which the Power department is purchasing power from SPDCL appears to be higher compared to other sources like NHPC, PTC (Chukha) and remarked that generally for a hydropower plant the power tariff should go down with time and same is not the case with SPDCL.
- > The representatives of the Power Department submitted that the tariff is as per the

PPA signed with the SPDCL but with the approval of the State Government, the tariff was hiked to enable SPDC to pay off their loan. Once SPDCL achieves break-even, the tariff has to come down. The department representatives submitted that they will get in touch with SPDC to understand the present status of SPDCL loan repayment and break -even point.

The Power Department representatives also informed that as per the PPA with SPDCL, Power Department had to provide facilities/infrastructure for power evacuation to SPDCL till their point of connection and despite of that the Department is buying power from SPDCL at comparatively higher rates. They submitted that in the coming days the tariff of SPDCL power needs to be reviewed in line with the standing regulations.

2. SUMMARY OF AGGREGATE REVENUE REQUIREMENT FORFY 2020-21

2.1 Aggregate Revenue Requirement (ARR)

The Petitioner has submitted the Aggregate Revenue Requirement for the FY 2020-21 for meeting its expenses and estimated the revenue with the existing tariff. The projected ARR and Revenue gap are shown in the table below:

		((₹inCrores)
Sl.	Particulars	FY 2019-20	FY 2020-21
No.	Farticulars	(Estimated)	(Projected)
1	2	3	4
1	Cost of Fuel	0.20	0.22
2	Cost of Generation	18.83	19.19
3	Cost of Power Purchase	269.04	282.66
4	Employee Costs	107.26	136.69
5	Repair and Maintanance Expenses	23.71	26.53
6	Administration and General Expenses	4.86	4.86
7	Depreciation	18.10	20.17
8	Interest Charges	0.00	0.00
9	Interest on Working Capital	12.92	13.77
10	Return on NFA/Equity	0.00	0.00
11	Transmission Charges (Intra State)	42.60	44.51
12	Total Revenue Requirement	497.53	548.61
13	Less: Non Tariff Income	1.31	1.35
14	Net Revenue Requirement	496.21	547.26
15	Revenue from Tariff	237.47	256.45
16	Revenue from Outside State Sale	218.14	218.14
17	Gap (14 - 15 - 16)	40.60	72.66
18	Revenue surplus carried over	0.00	0.00
19	Additional revenue from proposed tariff	0.00	9.57
20	Regulatory asset	0.00	0.00
21	Energy sales within states (MUs)	422.61	460.39

Table 2.1: Aggregate Revenue Requirement Projected by PDS

2.2 Tariff – Existing vs. Proposed

In its Petition, PDS has submitted the proposed Tariffs for the FY 2020-21, as detailed in the table below:

	Sl.		Existing Rate	Proposed Rate
	No.	Category of Consumers	Paisa/kWh	Paisa/kWh
	1	2	3	4
1		Domestic		
	a)	Up to 50 units	120	130
	b)	51 to 100 units	240	250
	c)	101-200 units	370	380
	d)	201 to 400 units	460	470
	e)	401 & above	500	510
2		Commercial		
	a)	Up to 50 units	330	340
	b)	51 to 100 units	400	410
	c)	101 to 200 units	560	570
	d)	201 to 400 units	600	600
	e)	401 & above	640	640
3		Public lighting		
		Rural Areas	300	300
		Urban Areas	500	500
4		Industrial		
	Α	НТ		
	a)	HT (AC) above 3.3 KV		
	b)	Upto 100 KVA	400	425
	c)	100 - 250 KVA	450	470
	d)	250- 500 KVA	500	525
	e)	500 KVA & above	550	600
	B	LT (Rural)		
	a)	Up to 500 units	360	360
	b)	501 - 1000 units	440	440
	c)	1001 & above	580	580
	С	LT (Urban)		
		Up to 500 units	530	535
	b)	501 - 1000 units	620	625
	c)	1001 & above	715	715
5		Bulk supply		
	a)	LT	650	650
	b)	HT	660	660

Table 2.2: Existing Tariffs v/s Proposed Tariffs for the FY 2020-21

Sikkim State Electricity Regulatory Commission

2.3 Prayers of PDS

The PDShas in its Petition prayed for the following:

- To consider and approve the Provisional True-up of expenses for the FY 2018-19.
- ToReview the estimates for the FY 2019-20.
- To admit the Petition and approve the ARR and Tariff for the FY 2020-21.
- To approve category-wise tariff, including fixed/demand charges submitted by PDS to meet revenue requirement for the FY 2020-21.
- To approve the suggestions regarding thetariffphilosophy.
- Pass such orders as the Commission may deem fit and proper, keeping in view the facts and circumstances of the case.

3. POWER SECTOR – AN OVERVIEW

3.1 Introduction

Sikkim with a total geographical area 7,096 SqKm and population of 6,10,577 as per 2011 census is one of the smallest and youngest States of India. Sikkim is a landlocked State and shares its boundaries with three countries viz Bhutan,Nepal and China and the neighbouring State of West Bengal. Sikkim is endowed with rich natural resources and bio-diversity. The State is blessed with un-paralleled natural beauty and is among the top tourist destinations in the country. Every year numerous tourists, both domestic and international visit the State to enjoy it pristine natural beauty and rich & varied cultural heritage.

Sikkim has more than 47 % of its total geographical area under forest cover making it not only one of the greenest States in the country but also a biodiversity hot spot. The third highest peak of the world **Mount Kangchen Dzenga** is located in the Sikkim, which is perpetually covered in snow and its natural beauty is a feast to the eyes of the visitors. Sikkim has many parks, sanctuaries and reserved forests & biospheres, which provide a safe haven for the highly endangered flora and fauna. The dense forests of Sikkim are home to a variety of Floras like Orchids, Rhododendrons,Silver Fir,Juniper, Magnolias, Blue Poppies, Primulas, Galdioli etc and Faunas like Red Panda, Blue Sheep, Snow Leopard, Blood Pheasants, Barking Deer, Himalayan Black Beer etc.The **KangchenDzenga National Park (KNP)** has been declared as **"UNESCO world heritage site"** under mixed category by the United Nations Organization. The KNP is a home to some of the rarest flora and fauna. The unspoilt and breathtaking beauty of the State draws huge number of both domestic and foregin tourists .

Sikkim also has the distinction of being the first Chemical Free State. Use and sale of all kinds of chemical fertilizers, insecticides and pesticides in the State is prohibited including sale of inorganic fruits, vegetables and other products. Sikkim is one of the first States in the country to take up organic farming and todayit is recognized worldwide as the **"First Organic**" **State"** in India and world. Although Sikkim has very limited area available for agriculture and other activities, it has been able to make a global mark in the field of Organic Farming. Sikkim has become the pioneer of Organic farming in the country and has the distinction of being declared the first **"Organic State"** in the Country. The major sources of revenue for the State is Eco-Tourism, Hydropower and Organic Farming apart from horticulture and floriculture.

The power demand in the State is very small primarily due to its small population and absence of heavy industries. The major demand for power is from from pharmaceutical units, breweries and distilleries. There are numerous small scale industries, hotels, home stays, resorts and food processing units as well but the power demand from this group is very small. Major portion of the consumers as such fall under the Domestic category.

The PDS is the only deemed licensee in the State taking care of transmission, distribution and supply of electricity in the State. The PDS is a deemed licensee under the provisions of Electricity Act, 2003, in the State of Sikkim. The PDS also a generation utility and owns a number of small hydropower projects and diesel generating stations. The PDS is a State Government Department and so far it has not started functioning like a commercial entity. The PDS fucntions with budgetary support from the State Government and also many of its schemes are funded by the Government of India.

Another State owned generating company in the State is the Sikkim Power Development Corporation Limited (SPDCL), A Government of Sikkim Enterprise. SPDCL is a Corporation with 51% stake of the State Government of Sikkim and is engaged in the development and operation of small hydropower projects in the State. The SPDCL presently owns and operates 3 (three) small hydropower projects with total installed capacity of 10 MW. SPDCL is implementing 3 MW Chatten Hydropower Project in North Sikkim and the project is expected to commission shortly.

3.2 Development of Hydro Power Projects in Sikkim

Sikkim's unique geography provides ample scope for development of hydropower projects. Rivers likeTeesta and Rangit having their origins from Glacial lakes located at extreme high altitude makes tapping of the rivers for generation of hydropower. Apart from the two main rivers draining the State , there are numerous other small rivers and streams which provide good feasibility for development of small hydropower projects. The steep terrain of the State makes these rivers and streams cascade and fall through deep gorges and slopes thereby creating favourable locations for tapping of the water for generation of hydropower.

The total hydropower potential of the State is assessed to be around 8000 MW by the Central Water Commission (CWC) ,Government of India. CWC had undertaken surveys and feasibility studies of various hydropower projects in the State and prepared Pre-Feasibility Reports (PFRs). The PFRs were submitted to the State Government by the CWC. Based on the PFRs prepared by the CWC, the State Government took the decisions 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) modes . The projects are at different stages of development. Some of the projects have already been commissioned, some are at advance stage of construction and others are at survey and investigation stage. As on date, the following projects have been commissioned:

Sl. No.	Name of the Project	Capacity (In MWs)	Owner/developer
1	Teesta Stage - V HEP	510	NHPC Limited
2	Rangit Stage - III HEP	66	NHPC Limited
3	Chuzachen HEP	110	Gati Infrastructure Pvt. Ltd.
4	Jorethang Loop HEP	96	DANS Energy Pvt. Ltd.
5	Teesta Stage – III HEP	1200	Teesta Urja Ltd.
6	Dikchu HEP	96	Sneha Kinetic Power Projects Pvt. Ltd.
7	Tashiding HEP	97	Shiga Energy Pvt. Ltd.

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Although a number of hydropower projects were allotted to Independent Power Developers and NHPC Limited, most of the works of the project have not been able to make progress as envisaged primarily due to financial crunch and overall slowdown of pace in the hydro power sector in the Country.

As per the Impleementation Agreements, Sikkim will receive free power from the various hydropower projects @12% after their commissioning for the first 15 years of their operation and from the 16th year onwards @ 15% for the entire duration of the agreement period, which is 35 years.

Some of the projects which are under implementation and some whose works have been either delayed or stalled due to financial crunch and other reasons are as given below:

- i. 500 MW Teesta-VI HEP
- ii. 120 MW Rangit IV HEP
- iii. 300 MW Panan HEP
- iv. 54 MW Bhasmey HEP
- v. 96 MW Rongnichu HEP
- vi. 66 MW Rangit-II HEP
- vii. 520 MW Teesta-IV HEP

3.3 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 the transmission and distribution network within the State. The details of the Transmission and Distribution network owned and being operated by the PDS as on 31st March, 2014 are as given below:

I. Sub-Stations

Sl. No.	Description	No.
1	132/66 KV	2
2	66/11 KV	19

II. EHT Lines, HT Lines and LT Lines

Sl. No.	Description	Length
EHT Lin	es	
1	132 KV	14.80 Ckt.Km
HT Lines	5	
2	66 KV D.C.	43.80 Ckt.Km
3	66 KV S.C.	184.50 Ckt.Km
	Total 66 KV Lines	227.30 Ckt.Km
4	11 KV / 3 Phase	242.62 Km
5	11 KV / 2 Phase	44.55 Km
	Total 11 KV Lines	287.17 Km
LT Lines		
6	LT / 3 Phase	1301.52 Km
7	LT / Single Phase	3581.37 Km
	Total LT Lines	4882.89 Km

III. Power Transformers

Sl. No.	Description	Quantity (No.)	Total Capacity (In MVA)
1	20 MVA	1	20.00
2	15 MVA	1	15.00
3	10 MVA	3	30.00
4	7.5 / 7.0 MVA	6	44.50
5	5 MVA	15	75.00
6	2.5 MVA	16	40.00
7	Total	42	224.50

IV. Distribution Transformers

Sl. No.	Capacity (In KVA)	Quantity (No.)	Total Capacity (In MVA)
1	1600	0	-
2	1500	2	3,000.00
3	1000	2	2,000.00
4	750	10	7,500.00
5	650	2	1,300.00
6	630	0	-
7	615	1	615.00
8	500	58	29,000.00
9	450	1	450.00
10	400	1	400.00
11	375	0	-
12	300	67	20,100.00
13	250	20	5,000.00
14	200	58	11,600.00
15	160	6	960.00
16	150	30	4,500.00
17	125	1	125.00
18	100	155	15,500.00
19	63	359	22,617.00
20	50	10	500.00
21	25	743	18,575.00
22	10	442	4,420.00
23	Total	1968	148,162.00

3.4 Consumer Profile and Energy Sales

The total number of registered consumers in the State as on 31stMarch, 2019 was 1,14,006 with annual consumption of about 380.81 MUs. The Energy Sales outside the State for the FY 2018-19 was 759.63 MUs.The category-wise number of consumers and energy sales during the FY 2018-19 are given in table below.

Sl.	Consumer Category No. of Consumer		Energy Sales		
No.	Consumer Category	(Nos.)	(%)	(MUs)	(%)
1	Domestic	99,303	87.10%	107.46	28.22%
2	Commercial	11,581	10.16%	40.91	10.74%
3	Public Lighting	34	0.03%	0.25	0.07%
4	Temporary Supply	-	-	4.69	1.23%
5	HT Industrial Consumers	594	0.52%	197.67	51.91%
6	LT Industrial Consumers	631	0.55%	4.89	1.28%
7	Bulk Supply	1,863	1.63%	24.94	6.55%
8	Total	114,006	100.00%	380.81	100.00%

Table 3.1: Consumer profile and Energy Sales during the FY 2018-19

3.5 Transmission and Distribution (T & D) Losses

The total Transmission and Distribution (T&D) losses approved by the Commission are given in Chapter 5for the FY 2018-19are160.92 MUs and percentage loss is 29.70%. The details of T&D losses for the FY 2018-19are given inthetable below.

Sl. No.	Particulars	Unit	FY 2018-19
1	Own generation	MUs	7.44
2	Energy purchased from NTPC	MUs	577.08
3	Energy purchased from WBSEDCL	MUs	43.84
4	Energy purchased from NHPC	MUs	35.30
5	Energy purchased (2+3+4)	MUs	656.22
6	Pool loss	%	2.14
7	Pool loss	MUs	14.04
8	Net energy available (5-7)	MUs	642.18
9	Energy purchased from PTC	MUs	32.72
10	Energy purchased from SPDC	MUs	33.80
11	UI purchased	MUs	27.90
12	Free energy	MUs	557.32
13	Total energy available at state periphery (1+8+9+10+11+12)	MUs	1301.36
14	Outside state sale through UI / Trading	MUs	759.63
15	Net energy available for sale within the state (13-14)	MUs	541.73
16	Energy sales within the state	MUs	380.81
17	T & D loss (15-16)	MUs	160.92
18	T & D loss	%	29.70

 Table 3.2: T&D Loss calculation approved by the Commission for the FY 2018-19

The Technical and commercial Losses of the system have not been segregated.

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3.6 Demand and Supply Position

The allocation from various Central Generating Stations (CGS), Chukka (PTC) and share in Rammam HEP in West Bengal is about 191.36 MWs, as detailed in table below:

Sl.	Correct	Capacity	Allocation		
No.	Source	(In MWs)	(In %)	(In MWs)	
	Central Sector				
1	FSTPP, NTPC	1,600.00	1.63%	26.08	
2	KHSTPP-I, NTPC	840.00	1.55%	13.02	
3	KHSTPP-II, NTPC	1,500.00	0.33%	4.95	
4	BSTPP, NTPC	1,320.00	1.52%	20.06	
5	TSTPP, NTPC	1,000.00	2.40%	24.00	
6	KBUNL, NTPC	390.00	0.51%	1.99	
7	RANGIT-III, NHPC	60.00	13.33%	8.00	
8	TEESTA – V, NHPC	510.00	13.19%	67.27	
	Others				
9	СНИКНА, РТС	270.00	2.22%	5.99	
10	WBSEDCL	50.00	20.00%	10.00	
11	SPDC	10.00	100.00%	10.00	
12	TOTAL	7,540.00		191.36	

Table 3.3: Power Allocation from CGS and other sources

3.7 Power Supply

(a) Own Generation

PDS owns twelve (12) hydroelectric power stations, with a total installed capacity of 35.70 MWs and two (2) diesel generation stations, with a total installed capacity of 4.99 MWs. The details of the generation stations owned by the PDS and their present status are as detailed in table below.

Sl. No.	Name of Projects	Installed Capacity (In MWs)	Remarks
	Hydro		
1	Lower LhagapHydel Power (LLHP)	2 x 6.00	Shut down due to 18th September, 2011 Earthquake
2	Jali Power House (JPH)	6 x 0.35	Operational
3	Rimbi-I	3 x 0.20	Shut down
4	Rimbi-II	2 x 0.05	Shut down
5	Rothak	2 x 0.10	Powerhouse abandoned
6	Rongnichu	5 x 0.50	No generation due to failure of water conductor system
7	Chaten	2 x 0.50	Powerhouse abandoned
8	Meyongchu	2 x 2.00	Operational
9	Upper RongnichuHydel Project (URHP)	4 x 2.00	Project handed over to private party For Restoration
10	Kalez	2 x 1.00	Operational
11	Lachung	2 x 0.10	Powerhouse abandoned
12	Rabomchu	2 x 1.50	Operational
	Diesel		
13	Diesel Power House Gangtok	4 x 1.00	Operational
14	DPH LLHP, Ranipool	4 x 0.248	Shut down due to 18th September, 2011 Earthquake
	Total	40.692	

Table 3.4: PDS own installed capacity

The own generation of the PDS is very small as most of it powerhouses are not operational. Thus only a tiny quantum of its energy requirement is met by the PDS from its own generation. Most of the powerhouses suffered heavy damages during the 2011 earthquake and restoration works could not be taken up due to financial crunch. The PDS meets the power demad of the State through the allocation from the Central Generating Stations (CGS) and other sources. In addition to the allocation of power from CGS and other sources, the PDS also procures energy from the Sikkim Power Development Corporation (hereinafter referred to as SPDC). SPDC owns three hydro stations, with an installed capacity of 10 MWs, and the small quantum of power generated from these stations is supplied to PDS.

(b) Power purchase

The PDS purchases power from various Central Generating Stations and other sources for meeting its energy requirements. The different sources of power and quantum of power purchased during the FY 2018-19 and the average unit cost of energy purchased is given in table below:

Sl. No.	Stations	Power Purchased (In MUs)	Cost of Power (₹inCrores)	Average Cost (₹/kWh)
1	NTPC			
	a) FSTPP	162.51	52.71	3.24
	b) KHSTPP-I	90.80	29.80	3.28
	c) KHSTPP-II	35.44	11.38	3.21
	d) BSTPP	118.82	48.24	4.05
	e) TSTPP	155.43	42.57	2.74
	f) KBUNL	14.08	7.10	5.04
2	NHPC			
	a) RANGIT-III	4.45	1.75	3.94
	b) TEESTA-V	30.85	7.69	2.49
3	Other Sources			
	a) PTC	32.72	7.86	2.40
	b) WBSEDCL	43.84	5.45	1.24
	c) SPDC	33.80	13.52	4.00
4	UI/Deviation	27.90	8.74	
5	Free Power	557.32		
6	Transmission & Other Charges		19.56	
7	Rebate/Other Charges		-0.16	
8	Total	1307.96	256.23	

3.8 Energy Balance

The supply and demand scenario during the FY 2018-19 approved by the Commission are given in Chapter 5, is given in table below:

Sl. No.	Particulars	Unit	FY 2018-19
Α	ENERGY REQUIREMENT		
1	Energy sales within the state	MUs	380.81
2	Outside state sale through UI / Trading	MUs	759.63
3	Total energy sales (1+2)	MUs	1140.44
4	Overall T & D losses	%	29.70
5	Overall T & D losses	MUs	160.92
6	Total energy requirement (3+5)	MUs	1301.36
B	ENERGY AVAILABILITY		
1	Own generation	MUs	7.44
2	Power purchased from CGS/UI etc.	MUs	750.65
3	Free Power	MUs	557.32
4	Overall pool loss	%	2.14
5	Overall pool loss	MUs	14.04
6	Total energy availability (1+2+3-5)	MUs	1301.36
С	ENERGY SURPLUS/(GAP)	MUs	0.00

Table 3.6: Energy Balance of PDS for FY 2018-19

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

Wide publicity was given by the PDS, by publishing a "Public Notice" containing the extract of the ARR and Tariff proposals for FY 2020-21 in the local newspapers. The extract of the ARR and Tariff proposals were published by the PDS in the local newspapers seeking objections, views, comments and suggestions from the consumers, general public and other stake holders. The Department published the Public Notice in the following newspapers:

- i. Summit Times (English), Date of Publication 17thand 19th January 2020.
- ii. Dainik Mirmiray (Nepali), Date of Publication 17th January 2020.

The Commission also directed the PDS to upload the ARR and Tariff Petition in the official website of the Department and to make the copies of the ARR and the Tariff Petition available to the public. Accordingly, the ARR and Tariff Petition were uploaded by the Department in its official website in downloadable format and facilities were created by the Department for providing hard copies of the Petition to interested persons. The Commission also uploaded the ARR and Tariff Petition in its official website.

The last date for receipt of the objections, comments, suggestions and views was 10^{th} February, 2020. However, no written objections or suggestions were received in response to the Public Notice issued by the PDS.

In order to ensure transparency while determining the ARR and Tariff as envisaged by the Elecrtciity Act, 2003, the Commission conducted an open 'Public Hearing' on the ARR and Tariff proposals of the Power Department for FY 2020-21 including Truing Up for FY 2018-19 and Review for FY 2019-20 on 19thFebruary, 2020 at ChintanBhawan, Gangtok, Sikkim. The primary aim of conducting the Public Hearing was to obtain the views of the general public and other stake holders on the ARR/Tariff proposals and participation of the public in the regulatory process. In order to encourage and ensure maximum participation from the consumers and other stake holders in the Public Hearing, the Commission published 'Public

Notice' in the local newspapers well in adavance requesting the interested individuals, parties and stake holders to participate in the hearing.

- i. Sikkim Express (English), Date of Publications: 1st and 7th February 2020.
- ii. Summit Times (English), Date of Publications: 1st and 7th February 2020.
- iii. Samay Dainik (Nepali), Date of Publications: 1st and 8th February 2020.
- iv. Hamro Prajashakti (Nepali), Date of Publication : 1stand 7thFebruary 2020.

Proceedings of the Public Hearing

The Commission conducted an open 'Public Hearing' on 19thFebruary, 2020 between 10:30 AM to 2:30 PM for categories of consumers. The list of general public, stake holders, officials of the Commission and the officials of the PDS who attended the hearing is placed as Annexure-II.

The objections raised including the views, suggestions and comments given by the Objector as well as the responses/replies and clarifications furnished by the PDS during the Public Hearing and the comments of the Commission are given here under:

Objection/Suggestion/Submission No.1:

- 1. Major A.S.Bawa, GSO-2 (Ops), H.Q 17th Mountain Division
- 2. Major Saurabh, EPO,60 Engr. Regiment

Major Bawa and Major Saurabh submitted that they don't have any objection or grievance to place before the Commission but only a case in point to submit for consideration by the Commission and the Power Department. They made the following submissions:

- i. Electricity is being supplied to the Army under 'Bulk Category' consumer and the tariff of ₹ 6.50 per unit being levied for said category is one of the highest amongst the different categories of consumers in the State.The rebate of 2% for the Bulk Category is also one of the lowest.
- ii. Presently the Army is drawing power from the Power Department at 37 different locations through transformers/sub-stations falling under Tadong and Rongli area.

- iii. Electricity utilization by the Army is solely for the purpose of domestic use by troops deployed at forward post and is not for any industrial or commercial activity. The power is being utilized purely for lighting purposes in the bunkers in the forward areas.
- iv. Electricity supply at far flung posts goes a long way in boosting the morale of the troops deployed in harsh and extreme weather conditions.
- v. The Bulk Supply tariff being charged to the Army areas falling under Gangtok and Burtuk Cantonment area can be considered reasonable as power consumption is MES. However, for the areas beyond 17th Mile and forward areas near international border, it would be reasonable and justifiable if 'domestic tariff' or a new category of tariff is charged.
- vi. Army representatives informed the house that huge towers/pylons have been erected by the Power Department in the border areas, which pose threat to the Army aircrafts/planes and suggested that flashing 'beacons' or warning 'lights' be provided on the top of the towers so that aircrafts/planes can get warning in advance specially during the night and during poor weather conditions.

Responses/Replies/Clarifications furnished by the Power Department:

Shri P.M.Sharma, Chief Engineer and ShriBikashDeokota, Addl.Chief Engineer, Power Department, Government of Sikkim furnished the following responses/clarifications to the submissions of the Army:

- The electricity being supplied to the Army under Bulk Category is 'High Tension Industrial Supply' (HTS). For industrial category consumers drawing HTS power, two part tariff is charged i.e. energy charges plus demand charges. However, considering the non-commercial nature of electricity use by the Army, only single part tariff (energy charges) with monthly minimum charge is levied from the Army under Bulk Supply category. As such, the tariff being charged to the Army is very reasonable.
- Bulk Supply consumer category has been specially created for supply of electricity to non-commercial organisations like M.E.S, Border Roads Organisation, Hospitals, etc.

- Operation, maintenance, repairs of the transmission & distribution lines, transformers and other electrical equipments in high altitude areas and forward areas near the international borders is very difficult due to harsh weather conditions and the Department incurs higher expenses in such areas compared to other areas.
- Army is a single unit and having different tariffs for different areas of the Army is not feasible and has lot of practical difficulties.
- The Department representatives requested the Army to provide the details of the tariffs being levied to the Army by other Distribution Utilities in other States like Himachal Pradesh, Uttarakhandetc so that the Department can compare the tariffs and consider the submission of the Army in the future.
- Power Department representatives informed that warning lights/beacons are already installed on the high towers/pylons to warn aircrafts/planes of possible danger.

Shri P.T.Bhutia, PCE cum Secretary, Power Department, Govt. of Sikkim assured that the Department will look into the submissions made by the Army for possible consideration in the future.

Comments of the Commission:

The Commission observed that the submissions made by the Army are well taken and they deserved to be taken into consideration as the Army jawans and officers work in the harshest weather conditions and very difficult and far flung posts to safeguard the nation. At the same time the Commission noted that the clarifications/justifications given by the Power Department are also relevant and can't be side aside is totally. The submissions made by the Army as well as the clarifications/justifications given by the Power Department have been taken into consideration by the Commission while finalizing the present tariff order.

Objection/Suggestion/Submission No. 2:

1. Shri K.B.Gurung, Former Vice President, Sikkim KrantikariMorcha,Gangtok, East Sikkim

The gist of the various points/objections raised, suggestions/views and comments offered by Shri K.B.Gururng during the Public Hearing are as under:

- i. Shri Gurung apprised the house that he had participated in the Public Hearing conducted by the Commission at the same venue in February 2019 and had raised various points and made requests to the Commission for reducing the tariff of electricity in the State. He added that his request for reducing of electricity tariff was not considered by the Commission during the last financial year and tariffs were hiked by the Commission.
- ii. He apprised the house that last year he had participated in the proceedings of the Public Hearing as an individual but this time he is representing the party (Sikkim Krantikari Morcha). He added that his party has formed the Government in the State and therefore his views can be taken as views of the party and the Government.
- iii. Shri Gurung submitted that numerous hydropower projects were allotted to private power developers as well the NHPC Ltd by the previous Government. These hydropower projects have used up the rich natural resources of the State and also caused damage to the environment. The people of Sikkim parted with their precious lands and consented for setting up of the projects with the hope of reaping good benefits from the projects by way of free power to the locals, employment & business opportunities and overall development of the State. He opined that no such benefits came from these projects for the people of Sikkim.
- iv. Shri Gurung opined that the huge quantity of free power is being given to Sikkim from the hydropower projects developed by private developers and NHPC and as such the free power available from these projects should be sufficient to provide electricity to the people of Sikkim free of cost.
- v. He highlighted that the T& D losses in the State has not been reduced to the national average of 15% inspite of huge funds provided by the Central Government for taking up of up gradation & improvement of the transmission and distribution networks in the State. He observed that the losses are more than 39% in the State even after implementation of numerous schemes aimed at bringing down of the losses since last many years. He opined that the Department must ensure not only proper utilization of the funds provided by the Central Government but also see that the

works are executed of highest quality and standard. He added that the money belongs to the people and every penny has to be accounted for.

- vi. He observed that no timely actions are taken by the Power Department for timely commissioning of cable laying works, replacement of damaged and old transformers and other works.
- vii. He observed that power generated for the own powerhouses of the Power Department was sufficient to meet the electricity requirements of the State earlier. But of late , the power generation capacity of the Department has gone down nor the Department has been able build new powerhouses nor taken steps to revive/recommission the existing powerhouses for meeting the power demand of the State.
- viii. Shri Gurung stressed on the need for improving the generation capacity of the State to meet the demand. He observed that almost more than 8 years have passed since the September 2011 earthquake that damaged the 8 MW Lower Lagyap Hydropower Project but till date the repair works of the project have not been completed. He observed that the project was generating around 8 to 10 MW prior to the earthquake but as on date there is nil generation. He added that if the project restoration works are held up due to public grievances like non-payment of land compensation or other issues, the Department has to make efforts to see that the grievances are taken care of. He opined that if public properties have been damaged then it is the right of the public to demand for compensation.
- ix. Shri Gurung opined that if project restoration works are being illegally held up by people, the Department needs to seek administrative help from the State Government through District Collector, BDOs and Police. He added that the Department should make full use of its legal cell for dealing issues with public in a legal way.
- x. Shri Gurung highlighted that projects like Jali Powerhouse , URHP etc are totally lying idle for the last so many years. He added that Jali Powerhouse is a 'State Heritage Project' and said project needs to be properly renovated and maintained for preservation of history and heritage.

- xi. He observed that revenue from sale of power to domestic consumer in the State is around ₹ 23.00 Crores only ,which constitute only a tiny portion of the overall revenue from power sale. He opined that revenue from sale of power to industrial consumers is less than what should have been and attributed 'power pilferage and power theft' by the industries to be the possible reasons for less revenue from sale of power to industrial category consumers. He added strict measure need to be taken by the Department to check such power pilferages/theft for improving the revenue.
- xii. Shri Gurung stressed on the need for setting up of a 'Vigilance Committee' comprising members not only from the Department but also from the public and other third parties for conducting surprise checks to effectively control pilferage and theft of power.
- xiii. He opined that proper coordination between the different engineering wings within the Power Department is necessary for effective and professional functioning of the Department.
- xiv. Shri Gurung stated that the present Government had made promised of providing free electricity to the public during its election campaign and people have voted the present government to power with the hope that the promises made during election campaign will be fulfilled. Providing free power to the people has been one of the key policy of the present government and as such increasing power tariff will amount to cheating the public.
- xv. Shri Gurung opined that free power should be given to the public from the 12% free power that the State is getting from the various private owned and NHPC owned hydropower projects. He submitted that the people of Sikkim and Sikkim State have sacrificed a lot for while allowing development of hydropower projects in the State and therefore it is justifiable and reasonable for people of Sikkim to demand some benefits from the projects. He added, if people don't even get a little benefit from those projects the purpose and aim of allowing the projects will be defeated.
- xvi. Shri Gurung opined that the AAP Government lead by ShriArbindKejriwal in Delhi is providing free power to people although Delhi doesn't have any hydropower projects therefore it is not impossible for Sikkim to give free power to its people when Sikkim has so many hydropower projects.

- xvii. He endorsed the fact that nothing comes for free. However, he opined that some relief must be given to the people by reducing the domestic tariff if giving free power is impractical. He added that reducing the domestic tariff by 20% or so will be of good relief to the people and suggested that some hike in tariff for commercial and industrial consumers is justifiable.
- xviii. Shri Gurung submitted that both the Commission and the Power Department has to consider reducing domestic tariff and added that giving free power to the public is included in the election manifesto of the party in power and therefore it is a part of the State Government's policy.

Responses/Replies/Clarifications furnished by the Power Department:

The responses, replies and clarifications furnished by the representatives of the Power Department to the views, comments, objections, queries and submissions of ShriK.B.Gurung are as given under:

- Shri P.T.Bhutia,PCE cum Secretary,Power Department, Govt. of Sikkim, stated that the Department heartily welcomes healthy criticism and the positive views/suggestions given by ShriGurung. ShriBhutia submitted that it is not justifiable to compare the present power scenario of Sikkim with the scenario some 30 to 40 years ago. He added that the power supply and demand scenario has drastically changed in the last 3 to 4 decades. He further added that there were hardly any industrial or commercial consumers in Sikkim some 20 to 30 years ago and the power demand within the State was very meagre then.
- Shri Bhutia submitted that there has been tremendous increase in commercial activities and many industrial units have come up in the State in the recent years resulting in heavy increase in the power demand. He added that there were no bulk category consumers in Sikkim some few years back but now the situation is totally different.
- Shri Bhutia added that the per capita power consumption in the State has gone up significantly due to use of modern electrical appliances and gadgets in every household. The sudden rise in power demand in the State has put immense stress on

the existing power transmission and distribution networks in the State but despite all difficulties, the Department has not failed to supply quality power in the State.

- Shri Bhutia submitted that apart from disruption of power supply due to local technical faults and natural causes like storm, landslides etc, the power supply in the State is more than satisfactory. He added that unlike other States, load shedding is not done by the Department and quality power is being supplied 24x7 by the Department.
- Shri Bhutia submitted that establishment cost and cost of setting up of new infrastructure were very less in the past but today cost of everything has gone up and building infrastructure to meet the ever growing power demand is not an easy task. He further added that many schemes and funding being earlier done by the Government of India have been either discontinued or funding stopped due to change in policy or change in guidelines/parameters and therefore inspite of all efforts being made by the Department, funds matching with the requirements of the Department are not coming as expected. The Government of India has come up with strict advisories& guidelines which need to be followed and there are also time bound targets/datelines etc to be met for obtaining funding of schemes/proposals. However, it is quite difficult for the Department to fulfil the said guidelines/strictures due to practical difficulties and as a result only limited funds are being released by the Government of India. The quantum of fund approved and released by the Government of India are very meagre compared to the demand/estimated costs submitted by the Power Department. Due to such circumstances, the Department is compelled to resort to short time planning to avoid high fund requirements.
- Shri P.M.Sharma, Chief Engineer, Power Department,Govt. of Sikkim submitted that the Department has already taken up remote metering and online billing systems for Industrial Consumers and the same will cover all the consumers in a phased manner. He added that with the introduction of the remote metering and online billing system, the Department is able to check possible theft of electricity that was existent earlier under manual billing system.
- Shri Sharma submitted that the Power Department only files its petition for approval of the Annual Revenue Requirement and Tariff proposals before the Hon'ble Commission and it is for the Hon'ble Commission to consider whether to approve the proposals of the Commission or not. The decision of giving free power to any

category of consumer lies solely with the State Government and the Power Department has no authority so far as providing free power is concerned more so because of the fact that the Department is a State Government Department.

- Shri Bikash Deokota, Addl.Chief Engineer,PowerDepartment,Govt. of Sikkim informed the house that pilferage of power is more in the rural areas particularly due to 100 units free power. He added that the Department is seriously working on methods to check pilferage of power in the rural areas. He opined that concept of 'free power' is totally a wrong notion as nothing comes for free and added that when free power is given to certain category/group of consumers , some other consumers are paying for the free power through cross subsidies.
- Shri Deokota submitted that though States like Delhi are giving free power to certain categories of consumers, it is through subsidy and the Government has to pay the subsidised amount to the Distribution Company and as such the Government has to recover the subsidized amount by way some or other means from the public only.
- Shri Yogendra Sharma, Chief Engineer (Mechanical), Power Department, Govt. of Sikkim apprised the house that the repair works of 8 MW Lower Lagyap HEP pertaining to the mechanical wing of the Department have been completed in 2018 and testing of the repaired water conductor system was done in January 2019. He added that as per the approved costs, only 6 km length of the water conductor system was repaired but in the meanwhile, there has been a breach in the pipe at a new location.
- Shri Sharma further informed that the local people living in the vicinity of the water conductor system and other land owners are not allowing the Department engineers and workers to carry out the repair works. The public are agitated and feel that the breached section of the pipe is posing danger to their lives and properties. He added that the matter has been already brought to the notice of the State Government.
- Shri Pragya Singh, Additional Chief Engineer (Civil), Power Department,Govt. of Sikkim informed that all civil works related to 8 MW Lower Lagyap HEP have been completed already but due to the breach in a section of the water conductor system, as already highlighted by Chief Engineer (Mechanical), the local public have not allowed the Department to carry out further necessary works. The public have made demands for compensation and other protective measures, he added. He informed that the new breach in the pipe has occurred near the Surge Shaft of the Project.

- Shri P.T.Bhutia,PCE cum Secretary, Power Department, Govt. of Sikkim clarified that giving free power to the people is a policy decision to be taken by the State Government. Neither the Department nor the Hon'ble Commission has the authority to give free power to the public, he added.
- Shri Bhutia further added that the submissions/views and suggestions given by ShriK.B.Gurung for providing free power to the public and vis-a-vis reducing the tariff for domestic consumers have been noted by the Commission and the same shall be brought to the notice of the State Government for consideration.

Comments of the Commission:

The Hon'ble Commission welcomed healthy criticism the and positive suggestions/comments given by Shri K.B.Gurung on the various aspects of the power sector in the State. The Commission opined that healthy criticism is extremely necessary and it acts as a scale to measure where one stands. The Commission observed that some of the points and issues raised by ShriGurung are very pertinent and the Department needs to pay full attention to the points/issues raised for improving the efficiency and overall performance of the Department. The Commission further opined that the present power demand and supply scenario in the State can't be compared with the scenario some thirty or forty years ago. The Commission observed that both load and demand pattern in the State have gone significant changes during the last few decades. However, the Commission opined that it is absolutely important for the Power Department to learn from the past and plan for the future.

The Hon'ble Commission apprised that holding of Public Hearing on the ARR and Tariff petition is a statutory provision given in the Electricity Act, 2003 to bring in transparency in the overall process of fixing of tariff by the Commission. The Commission further added that as per the existing guidelines and provisions of the Electricity Act, 2003, if the Government decides to provide electricity to the people at subsidized rates or for free, the Government has to pay in advance to the Distribution Company/Utility ,the amount for such subsidized/free power to be given to the public. The Commission observed that since the

Power Department is a State Government Department, the decision whether to give free power or power at subsidized rates is a policy decision to be taken by the State Government. The Power Department being the sole DisCom in the State may bring the matter to the notice of the State Government for appropriate decision.

Objection/Suggestion/Submission No. 3:

- 1. Shri Kalyan Sinha, Senior Executive, Sun Pharma Laboratories Ltd.
- 2. Shri Bijay Singh, Senior Executive, Sun Pharma Laboratories Ltd.
- 3. Shri Sumit Nandy, Senior Executive, Sun Pharma Laboratories Ltd.

The representatives of Sun Pharma Laboratories Ltd made the following submissions, suggestions and grievances before the Forum:

- i. Power Department/Commission should consider providing some incentives by way of additional rebate to the H.T industries/consumers who maintain good power factor. The representatives added that providing some incentives will encourage the consumers to maintain better power factor and it will also go a long way in helping the Department in reduction of the high T&D losses. They submitted thatDisComs in other States are providing incentives/rebates for maintaining good power factor.
- ii. The Company representatives suggested that it would be more appropriate if Time of the Day (ToD) is introduced for H.T industrial consumers.
- iii. The representatives of the Company submitted that the transformer installed at its premise had remained shut down/non operative for considerable period of time due to some fault but the Power Department levied the full charges (demand/fixed charges) from the Company even for the non-operational period. The representatives requested that the Department should consider exemption of payment of the fixed charges in such scenario.

Responses/Replies/Clarifications furnished by the Power Department:

Responding to the suggestions and submission of the Company, Shri D.N.Khatiwada, Chief Engineer, Power Department, Government of Sikkim, informed the house that presently there is a rebate of 2% for the HT consumers for payment of bill within the due date and there is no provision for incentive for maintaining of good power factor. He further informed that there is a provision for penalty for poor factor at the rate of 1% on the total energy charge for the month for every 1% drop or part thereof in the average power factor during the month below 95%. He opined that by maintaining good power factor, the Company is not attracting the penalty and as such should be satisfied.

- Replying to the grievances in respect of charging full fixed charges , Shri P.M Sharma, Chief Engieer and Mrs. Shova Thapa, Additional Chief Engineer, Power Department, Govt. of Sikkim apprised the house that a petition was filed by the Company before the Consumer Grievance Rederssal Forum (CGRF) and the CGRF had disposed off the petition through its order alongwith detailed reply. They added that the CGRF had clearly stated in its order that the Company has the option of approaching the Electricity Ombudsman , if it was aggrieved by the order of the CGRF, as per Section 42 sub-section 6 of the Electricity Act, 2003. However, in the present case , the Company has not made any sort of representation before the Electricity Ombudsman for redressal of its grievances, if any. They submitted that the Company is ought to have approached the Electricity Ombudsman and by not doing so, it can be normally assumed that the Company has accepted the order issued by the CGRF and today's forum is not the appropriate forum for taking up of the issue/grievance raised by the Company representatives.
- Shri P.T.Bhutia, PCE cum Secretary, Power Department,Govt of Sikkim assured that the suggestions given by the Company representatives have been noted and the Department will keep them in consideration while finalizing its ARR and Tariff Petitions in the future.

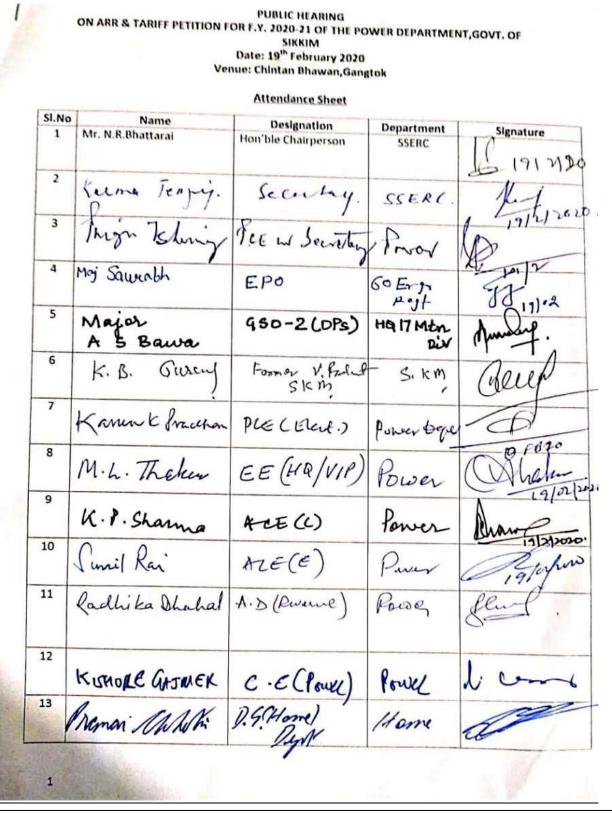
Comments of the Commission:

The Hon'ble Commission opined that considering the very small power demand within the State, so far the Commission has not felt the necessity for introducing Time of Day (ToD) tariff in the State. Introducing ToD tariff, if at all needed in future will be considered and for which the readiness of the Power Department is needed, the Commission opined.

The Hon'ble Commission observed that suggestion for introducing some incentive for maintaining good poor factor is well taken and the same shall be taken into consideration in the future. The Commission observed that there is need for creating awareness amongst the consumers regarding functioning of the CGRFs so that aggrieved consumers can approach the CGRF for redressal of their grievances. The Commission advised that the Power Department should educate and inform the people about the CGRFs, their functions and the procedure for resolving the grievances.

The Commission advised the Company that if they have any grievances in the future, they can approach the appropriate forums like CGRFs, Electricity Ombudsman and even the Commission within the stipulated time frame for redressal of their grievances. The Commission apprised that the Public Hearing is a forum where consumers are to give their suggestions, comments, views and objections on the ARR and tariff proposal for the upcoming financial year and not for redressal of grievances falling under the ambit of CGRFs and Electricity Ombudsman.

List of Participants in the Public Hearing Held on 28thFebruary, 2019 at Gangtok, East <u>Sikkim</u>



Sikkim State Electricity Regulatory Commission

I.No	Name	Designation	Department	Signature
14	Yogendan Sharma	PCECM)	Power	5
15	Rinzing Caller	Sr. V-0	Power	-
16	Dily k. Sherwa	ALE (LAEDA)	low	avator
17	Show Thefa	ACT (Shat)	Rom	Paramp 19/22
18	Pragya Singh	ACE (civil)	Power Dept	(P) 454/2/2020
19	B. Desture	A-li (Elut)	ų	1 Jalorino
20	D.T.Bhontie	Amerton/Acats	. 11	Argh
21	P.M. Shani	CE(YN)	Power	6P
22	T.T. lepehr	LE (MQ)	have	OB you
23	D.N. Khatiwara	CE (OLM/200)Re) knur	62
24	H.B. Sulla	CE (Plg,)	Power	\$1 months
25	Concheck	CE (wer)	Pm.	Anes
26	R. Thapa	Pr.CE-I	Poures. a	18mg
27	Kalyon Sinks	Sp. Executive Sunpharma Lobonatorice	Engmeering	Jula 12020 4568
28	SUMIT NAMBY	Executive SUN PHARMA LABORATOR LTD	GUIGHEE DAN	SNow 19 1915-06/1020 8013577 899

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SI.No	Name	Designation	Department	Signature
29	BIJAY SINGH	SY. EXECUTIVE SUN PHARMA LABORATORIES LTP.	ENGINEERING.	191Feb 1020.
30	P.D. Chrille	Ducetor (TST)	SSERC	Kenahly 19.2
31	P.L. Gymo apa	AE CE)	SSELL	Alm 19/2/20
32	T. L. Buti	J.D (IT).	SSERC	A 312/2/20.
33	Iram Dayof	2.2.	ssere	\$9102/2020
34	K. N. Nepal	Sr. Acett	SSERC	29/1/2020
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5. PROVISIONAL TRUE UP FOR THE FY 2018-19

5.1 Preamble

The Commission had approved the ARR and Tariff for the FY 2018-19 vide its Order dated 28.03.2018, based on the projected data submitted by the PDS. Now,thePDS has submitted proposals for provisional True up for the FY 2018-19, duly furnishing the actuals for the FY 2018-19, stating that these are as per the provisional accounts prepared by them.

"Regulation 5.1 of the SSERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) (Second Amendment) Regulations, 2017, 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 2017-18 to be carried out under Sikkim State Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2012 and Truing Up for FY 2018-19 and onwards accordance with these regulations;

ii. Revenue from the sale of power at existing tariffs and charges for the ensuing year;

iii. Revenue gap for the ensuing year calculated based on ARR approved in the Tariff Order or MYT Order and truing up for the previous year;

iv. Application for determination of tariff for the ensuing year."

The PDS has not submitted the audited accounts for the FY 2018-19. Therefore, true up cannot be done. PDS has stated that though the accounts are not audited, the data furnished for the FY 2018-19aretheactuals and Provisional True up may be done with regard to the actuals. This is discussed in the succeeding paragraphs.

5.2 Energy Demand (Sales)

The energy sales approved by the Commission,vide its Tariff Order for the FY 2018-19, the actual sales given by PDS, as per provisional accounts with the ARR & Tariff Petition for the FY 2020-21 and now approved by the Commission, are summarised in the table below.

				(In MUs)
SI. No.	Category	As approved by the Commission in Tariff Order dated 29.05.2019	Actuals as per Provisional Accounts	Now approved by the Commission
1	Domestic	106.85	107.46	107.46
2	Commercial	40.33	40.91	40.91
3	Public Lighting	0.28	0.25	0.25
4	Temporary Supply	1.60	4.69	4.69
5	HT Industrial	192.78	197.67	197.67
6	LT Industrial	4.65	4.89	4.89
7	Bulk Supply	25.00	24.94	24.94
8	Total	371.49	380.81	380.81

The Commission now approves energy sales for the FY 2018-19 at 380.81 MUs, as per the actuals furnished by PDS.

5.3 Transmission & Distribution Losses (T&D Losses)

The Commission in its revised order for the FY 2018-19, had fixed the target of T&D Losses at 24.00% for the FY 2018-19. The PDS in its ARR & Tariff Petition for the FY 2020-21, has stated that the actual T&D losses during the FY 2018-19 is 29.79 % as per provisional accounts.

Commission's Analysis:

The inter-state transmission loss (pool loss) for the FY 2018-19has been considered at 2.14% and T&D Loss, when recalculated, is as shown in table below.

Sl. No.	Particulars	Unit	As approved by the Commission in Tariff Order dated 29.05.2019	Provisional Accounts	Now approved by the Commission
1	Own generation	MUs	12.00	7.44	7.44
2	Energy purchased from NTPC	MUs	552.42	577.08	577.08
3	Energy purchased from WBSEDCL	MUs	23.96	43.84	43.84
4	Energy purchased from NHPC	MUs	46.78	35.30	35.30
5	Energy purchased (2+3+4)	MUs	623.16	656.22	656.22
6	Pool loss	%	2.14	2.03	2.14
7	Pool loss	MUs	13.34	13.34	14.04
8	Net energy available (5-7)	MUs	609.82	642.88	642.18
9	Energy purchased from PTC	MUs	37.29	32.72	32.72
10	Energy purchased from SPDC	MUs	26.35	33.80	33.80
11	UI purchased	MUs	21.44	27.90	27.90
12	Free energy	MUs	457.02	557.32	557.32
13	Total energy available at state periphery (1+8+9+10+11+12)	MUs	1163.92	1302.06	1301.36
14	Outside state sale through UI / Trading	MUs	675.12	759.63	759.63
15	Net energy available for sale within the state (13-14)	MUs	488.80	542.43	541.73
16	Energy sales within the state	MUs	371.49	380.81	380.81
17	T & D loss (15-16)	MUs	117.31	161.62	160.92
18	T & D loss	%	24.00	<mark>29.79</mark>	29.70

Table 5.2: T&D Loss calculation approved by the Commission for FY 2018-19

The Commission now approves T&D Loss at 29.70% for the FY 2018-19.

5.4 Own Generation

The Commission in its Tariff Order dated 29.05.2019 had approved Own Generation for the PDS at 12.00 MUs for the FY 2018-19. Now, the PDS has furnished actual own generation as 7.44 MUs during the FY 2018-19, as detailed in the table below.

(In MUs)

Sl. No.	Stations	As approved by the Commission in Tariff Order dated 29.05.2019	the Commission in Tariff Order	
1	Total Generation	12.00	7.44	7.44
2	Total	12.00	7.44	7.44

 Table 5.3: Own Generation approved by the Commission during FY 2018-19

The Commission now approves Own Generation of PDS during the FY 2018-19 at 7.44 MUs, as per actuals furnished by PDS.

5.5 Power Purchase

The Commission in its Tariff Order dated 29.05.2019had approved the power purchase quantity of 1165.26 MUs including free power quantity of 457.02 MUs. Now, the PDS has furnished actual for the FY 2018-19 at 1307.96 MUs including free power of 557.32 MUs in the ARR and Tariff Petition for the FY 2020-21, as detailed in table below.

Sl. No.	Stations	As approved by the Commission in Tariff Order dated 29.05.2019	Actuals as per Provisional Accounts	(In MUs) Now approved by the Commission
1	NTPC			
	a) FSTPP	133.01	162.51	162.51
	b) KHSTPP-I	77.59	90.80	90.80
	c) KHSTPP-II	36.11	35.44	35.44
	d) BSTPP	123.32	118.82	118.82
	e) TSTPP	166.63	155.43	155.43
	f) KBUNL	15.76	14.08	14.08
2	NHPC			
	a) RANGIT-III	4.38	4.45	4.45
	b) TEESTA-V	42.40	30.85	30.85
3	Other Sources			
	a) PTC	37.29	32.72	32.72
	b) WBSEDCL	23.96	43.84	43.84
	c) SPDC	26.35	33.80	33.80
4	UI Purchase	21.44	27.90	27.90
5	Free Power	457.02	557.32	557.32
6	Total	1165.26	1307.96	1307.96

Table 5.4: Power Purchase approved by the Commission during FY 2018-19

The Commission now approves power purchase of 1307.96 MUs, including free power of 557.32 MUs during the FY 2018-19, 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 29.05.2019for the FY 2018-19 and the actuals furnished by the PDS, and now approved by the Commission, are presented intable below:

Sl. No.	Particulars	Unit	As approved by the Commission in Tariff Order dated 29.05.2019	Provisional Accounts	Now approved by the Commission
Α	ENERGY REQUIREMENT				
1	Energy sales within the state	MUs	371.49	380.81	380.81
2	Outside state sale through UI / Trading	MUs	675.12	759.63	759.63
3	Total energy sales (1+2)	MUs	1046.61	1140.44	1140.44
4	Overall T & D losses	%	24.00	<mark>29.79</mark>	29.70
5	Overall T & D losses	MUs	117.31	<mark>161.61</mark>	160.92
6	Total energy requirement (3+5)	MUs	1163.92	1302.06	1301.36
	ENERGY AVAILABILITY			[
1	Own generation	MUs	12.00	7.44	7.44
2	Power purchased from CGS/UI etc.	MUs	708.24	750.64	750.64
3	Free Power	MUs	457.02	557.32	557.32
4	Overall pool loss	%	2.14	2.03	2.14
5	Overall pool loss	MUs	13.34	13.34	14.04
6	Total energy availability (1+2+3-5)	MUs	1163.92	1302.06	1301.36
С	ENERGY SURPLUS/(GAP)	MUs	0.00	0.00	0.00

Table 5.5: Energy Balance approved by the Commission for FY 2018-19

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 29.05.2019, actuals furnished by PDS and the cost now approved by the Commission are given in table below.

				(₹inCrores)
Sl. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Provisional Accounts	Now approved by the Commission
1	Cost of fuel	0.18	0.18	0.18
2	Total	0.18	0.18	0.18

Table 5.6: Fuel Cost approved by the Commission for FY 2018-19

The Commission now approves the fuel cost of ₹ 0.18 Crores for the FY 2018-19, as per actuals furnished by PDS.

5.8 Power Purchase Cost

The Power Purchase Cost approved by the Commissionin the Tariff Order for the FY 2018-19, actuals furnished by PDS and the cost now approved by the Commission are given in table below.

Sl. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Actuals as per Provisional Accounts	Now approved by the Commission
1	Power Purchase Cost	260.90	256.23	256.23
2	Total	260.90	256.23	256.23

Table 5.7: Power Purchase Cost approved by the Commission for FY 2018-19

The Commission now approves power purchase cost of ₹ 256.23 Crores for the FY 2018-19, as per actuals furnished by PDS.

5.9 Employee Cost

The Commission vide its Order dated 29.05.2019, had approved employee cost at ₹76.95 Crores for the FY 2018-19 only for distribution utility. The PDS has furnished actuals at ₹85.97 Crores for the FY 2018-19 only for distribution utility and the cost now approved by the Commission for PDS as a whole due to non-availablity of segregated audited accounts are given in table below.

(**T**)

(**₹**inCrores)

Sl. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Actuals as per Provisional Accounts	Now approved by the Commission
1	Employee Cost	76.95	85.97	122.82
2	Total	76.95	85.97	122.82

Table 5.8: Employee Cost approved by the Commission for FY 2018-19

The Commission, now approves ₹122.82 Crores towards employee cost for the FY 2018-19.

5.10 Repair and Maintenance Expenses

The Commission vide its Order dated 29.05.2019 had approved Repair & Maintenance Expenses of ₹20.42 Crores for the FY 2018-19 only for distribution utility. The PDS has furnished actual Repair & Maintenance Expenses at ₹ 16.50 Crores for the FY 2018-19 only for distribution utility and the cost now approved by the Commission for PDS as a whole due to non-availablity of segregated audited accounts are given in table below.

Table 5.9: Repair & Maintenance Expenses approved by the Commission for FY 2018-19

(₹inCrores)

Sl. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Actuals as per Provisional Accounts	Now approved by the Commission
1	Repair & Maintenance Expenses	20.42	16.50	23.58
2	Total	20.42	16.50	23.58

The Commission, accordingly, now approves ₹ 23.58 Crores towards Repair & Maintenance Expenses for the FY 2018-19.

5.11 Administrative and General Expenses

The Commission vide its Order dated 29.05.2019 had approved ₹3.63Crores towards Administrative and General Expenses for the FY 2018-19only for distribution utility. The PDS

has furnished actuals at ₹3.36Crores for theFY 2018-19only for distribution utilityand the cost now approved by the Commission for PDS as a whole due to non-availablity of segregated audited accounts are given in table below.

Sl. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Actuals as per Provisional Accounts	(₹inCrores) Now approved by the Commission
1	Administrative & General Expenses	3.63	3.36	4.81
2	Total	3.63	3.36	4.81

Table 5.10: A & G Ex	penses approved	ov the Commission	for FY 2018-19
		.,	

The Commission now approves ₹4.81 Crores towards Administrative & General Expenses for the FY 2018-19.

5.12 Capital Investment and Capitalisation

Capital investment and capitalisation during the FY 2018-19 approved by the Commission, vide its Order dated 29.05.2019 and actuals furnished by PDS and now approved by the Commission are furnished in table below.

Table 5.11: Capital Investment and	Capitalisation approved for FY 2018-19	
Table Biller Capital Intestinent and		

				(₹inCrores)
Sl. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Actuals as per Provisional Accounts	Now approved by the Commission
1	Opening balance of CWIP	136.95	39.25	136.95
2	Capital Investment during the vear	47.54	50.42	50.42
3	Total (1+2)	184.49	89.67	187.37
4	Capitalisation during the year	61.09	54.58	2.56
5	Closing balance of CWIP (3-4)	123.40	35.09	184.81

The Commission now approves the capital investment of ₹ 50.42 Crores and capitalisation of ₹ 2.56 Crores during the FY 2018-19.

5.13 Gross Fixed Assets

In the absence of valid information regarding gross fixed assets, the Commission in its Tariff Order dated 29.05.2019, had not approved the value of gross fixed assets. The PDS in its ARR and Tariff Petition for the FY 2020-21,PDS has stated that the values of gross fixed assets are taken from the Asset Registers, as detailed in table below:

Table 5.12: Gross Fixed Assets during FY 2018-19

		(₹inCrores)
Sl. No.	Particulars	Amount
1	Opening balance	977.44
2	Additions during the year	2.56
3	Closing balance (1+2)	980.00

Commission's Analysis:

In the absence of audited annual accounts, the information furnished by PDS cannot be taken as authentic. As such, depreciation cannot be allowed on the opening GFA as furnished by the PDS.

5.14 Depreciation

The PDS in its ARR and Tariff Petition for the FY 2020-21, has furnished actuals at ₹16.85 Crores for the FY 2018-19 only for the distribution utility.

Commission's Analysis:

The Commission in its Tariff Order dated 29.05.2019 had approved a depreciation of ₹16.41 Crores for the FY 2018-19 on the average GFA of ₹310.75 Crores at the rate of 5.28%.

Now, the PDS has stated that ₹ 2.56 Crores were capitalised during the FY 2018-19. The depreciation calculated by PDS of ₹ 26.85 Crores for PDS as a whole department. Now the Commission calculated Depreciation is shown in the table below:

		(₹inCrores)
Sl. No.	Particulars	Amount
1	Opening balance GFA as on 01.04.2018	366.33
2	Additions during the year	2.56
3	Closing balance to end of 31.03.2019 (1+2)	368.89
4	Average GFA	367.61
5	Rate of depreciation	5.28%
6	Depreciation	19.41

Table 5.13: Depreciation approved by the Commission for FY2018-19

The Commission accordingly now approves a depreciation of ₹19.41 Crores for the FY 2018-19.

5.15 Interest and Finance Charges

The PDS in its ARR and Tariff Petition for the FY 2020-21, has not furnished interest and finance charges during the FY 2018-19.

Commission's Analysis:

The Commission in its Tariff Order dated 29.05.2019had 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 2018-19. **The Commission therefore, does not consider any interest.**

5.16 Interest on Working Capital

The PDSin its ARR and Tariff Petition for the FY 2020-21, has furnished Interest on Working Capital at ₹11.94 Crores during the FY 2018-19.

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) (Second Amendment Regulations), 2017, interest on working capital shall be calculated on normative basis notwithstanding that theLicensee 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 capitalas shown in the Table below.

			(₹inCrores)
Sl. No.	Particulars	Total Cost	Working Capital & Interest
1	O & M Expenses		
a)	Emoployee Cost	122.82	10.24
b)	Repair & Maintenance Expenses	23.58	1.97
c)	Administrative & General Expenses	4.81	0.40
2	Maintenance of Spares		
3	Receivables	444.30	74.05
4	Total		86.65
5	SBAR as on 01.04.2018		8.70%
6	Interest on Working capital		7.54

Table 5.14: Interest on Working Capital calculatedby the Commission for FY 2018-19

Table 5.15: Interest on Working Capital now approved by the Commission for FY 2018-19

				(₹inCrores)
SI. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Provisional Accounts	Now approved by the Commission
1	Interest on Working Capital	6.68	11.94	7.54
2	Total	6.68	11.94	7.54

The Commission now approves interest on working capital at ₹ 7.54 Crores for the FY 2018-19 as against the ₹11.94 Crores furnished by PDS.

5.17 Return on Equity

PDS has not claimed any amount towards Return on Equity for the FY 2018-19.

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), 2017, 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.

5.18 Non-Tariff Income

PDS has projected non-tariff income at ₹1.27Crores during the FY 2018-19.

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) (Second Amendment Regulations), 2017, 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 ₹1.59 Crores in its Tariff Order dated 29.05.2019. PDS now submits a non-tariff Income of ₹1.27Crores as the actuals.

(₹inCrores)

Sl. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Provisional Accounts	Now approved by the Commission
1	Non Tariff Income	1.59	1.27	1.27
2	Total	1.59	1.27	1.27

 Table 5.16: Non-Tariff Income approved by the Commission for FY 2018-19

The Commission therefore considers ₹1.27 Crores towards Non-Tariff Income for the FY 2018-19, as per the actuals furnished by PDS.

5.19 Revenue from Existing Tariffs for the FY 2018-19

Revenue from existing tariffs approved by the Commission for the FY 2018-19 in the Tariff Order dated 29.05.2019, and actuals furnished by the PDS and now approved by the Commission are furnished in the table below.

				(₹inCrores)
Sl. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Actuals as per Provisional Accounts	Now approved by the Commission
1	Domestic	28.03	27.52	27.52
2	Commercial	22.87	24.69	24.69
3	Public Lighting	0.12	0.13	0.13
4	Temporary Supply	2.50	3.58	3.58
5	HT Industrial Consumers	134.07	148.12	148.12
6	LT Industrial Consumers	2.41	1.71	1.71
7	Bulk Supply	20.05	20.44	20.44
8	Outside State	200.39	218.14	218.14
9	Total	410.44	444.32	444.33

Table 5.17: Revenue from Sales approved by Commission for FY 2018-19

The Commission now approves revenue from existing tariff at ₹ 444.33 Crores including revenue from outside sales at ₹ 218.14Croresfor the FY 2018-19, as per the actuals furnished by PDS.

5.20 Aggregate Revenue Requirement (ARR) for the FY 2018-19

The ARR for the FY 2018-19 approved by the Commission in its Tariff Order dated 29.05.2019, actuals furnished by the PDS and now approved by the Commission are furnished in the table below.

				₹inCrores)
Sl. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Actuals as per Provisional Accounts	Now approved by the Commission
1	Cost of Fuel	0.18	0.18	0.18
2	Cost of Generation	18.48	17.34	0.00
3	Cost of Power Purchase	260.90	256.23	256.23
4	Intra State Transmission Charges	40.80	40.37	0.00
4	Employee Costs	76.95	85.97	122.82
5	Repair & Maintenance Expenses	20.42	16.50	23.58
6	Administrative & General Expense	s 3.63	3.36	4.81
7	Depreciation	16.41	16.85	19.41
8	Interest Charges	0.00	0.00	0.00
9	Interest on Working Capital	6.68	11.94	7.54
10	Return on NFA/Equity	0.00	0.00	0.00
11	Total Revenue Requirement	444.45	448.73	434.57
12	Less: Non Tariff Income	1.59	1.27	1.27
13	Net Revenue Requirement	442.86	447.46	433.30
14	Revenue from Tariff	210.05	226.18	226.19
15	Revenue from Outside State Sale	200.39	218.14	218.14
16	Gap/(Surplus) (12 - 13 - 14)	32.42	3.14	(11.03)

Table 5.18: Aggregate Revenue Requirement approved by Commissionfor FY 2018-19

Provisional True up for the FY 2018-19 indicates that the revenue surplus has been arrived to ₹11.03 Crores, as against ₹ 32.42 Crores revenue deficit approved by the Hon'ble Commission in the Tariff Order dated 29.05.2019.

6. REVIEW FOR THE FY 2019-20

6.1 Preamble

The Commission had approved the ARR and Tariffs for the FY 2019-20 in its order dated 29.05.2019 based on the projected data furnished by the PDS. Now the PDS has submitted proposals for review of the FY 2019-20duly furnishing data based on the revised estimates for the FY 2019-20.

6.2 Energy Demand (Sales)

Vide its Tariff Order dated 29.05.2019, the Commission had approved energy sales of 405.08 MUs within the state for the FY 2019-20, as against 436.19 MUs projected by PDS.The PDS in its Review Petition for the FY 2019-20 has submitted the estimated sales considering actuals fora certain period and estimate for the balance period.

Accordingly comparative statements of category-wise energy sales approved by the Commission for the FY 2019-20, estimate by PDS and approved by the Commission are shown in table below:

(In MUs				
Sl. No.	Category	As approved by the Commission in Tariff Order dated 29.05.2019	Review Estimate	Now approved by the Commission
1	Domestic	111.26	150.19	116.08
2	Commercial	41.14	45.47	42.44
3	Public Lighting	0.29	0.29	0.29
4	Temporary Supply	3.38	3.60	4.92
5	HT Industrial	215.33	189.38	207.55
6	LT Industrial	5.67	5.67	5.13
7	Bulk Supply	28.00	28.00	26.04
8	Total	405.08	422.60	402.46

Table 6.1: Energy Sales approved by the Commission for FY 2019-20

The Commission now approves energy sales for the FY 2019-20 at 402.46 MUs against 422.60 MUs projected by the PDS.

6.3 Transmission & Distribution Losses (T&D Losses)

The Commission in its order for the FY 2019-20 had fixed the target of T&D Losses at 22.00%. PDS in its Review Petition for the FY 2019-20, has stated that the estimated T&D Losses during the FY 2019-20 is at 27.14%.

Commission's Analysis:

The pool loss for the FY 2019-20 is considered at 2.14% and T&D Loss is shown as detailed in table below:

Sl. No.	Particulars	Unit	As approved by the Commission in Tariff Order dated 29.05.2019	Review Estimate	Now approved by the Commission
1	Own generation	MUs	30.00	10.00	10.00
2	Energy purchased from NTPC	MUs	552.42	577.08	577.08
3	Energy purchased from WBSEDCL	MUs	23.96	43.84	43.84
4	Energy purchased from NHPC	MUs	46.78	35.30	35.30
5	Energy purchased (2+3+4)	MUs	623.16	656.22	656.22
6	Pool loss	%	2.14	1.54	2.14
7	Pool loss	MUs	13.34	10.09	14.04
8	Net energy available (5-7)	MUs	609.82	646.13	642.18
9	Energy purchased from PTC	MUs	37.29	32.72	32.72
10	Energy purchased from SPDC	MUs	26.35	33.80	33.80
11	UI purchased	MUs	0.00	27.90	27.90
12	Free energy	MUs	457.02	557.32	557.32
13	Total energy available at state periphery (1+8+9+10+11+12)	MUs	1160.48	1307.87	1303.92
14	Outside state sale through UI / Trading	MUs	641.16	727.88	787.93
15	Net energy available for sale within the state (13-14)	MUs	519.32	579.99	515.99
16	Energy sales within the state	MUs	405.08	422.60	402.46
17	T & D loss (15-16)	MUs	114.24	157.39	113.53
18	T & D loss	%	22.00	27.14	22.00

Table 6.2: T&D Loss calculation approved by the Commission for FY 2019-20

The Commission now approves T&D Loss for the FY 2019-20 at 22.00%.

6.4 Own Generation

At present,PDS is having 12 small 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 Commission in its Tariff Order for the FY 2019-20 had approved own generation at 30.00 MUs. The PDS has revised for the FY 2019-20 and approved by the Commission are shown in table below.

				(In MUs)
Sl. No.	Stations	As approved by the Commission in Tariff Order dated 29.05.2019	Review Estimate	Now approved by the Commission
1	Total Generation	30.00	10.00	10.00
2	Total	30.00	10.00	10.00

Table 6.3: Own Generation approved by the Commission for FY 2019-20

The Commission now approves Own Generation during the FY 2019-20 at 10 MUs, as per RE furnished by the PDS.

6.5 **Power Purchase**

The Commission in itsTariff Order dated 29.05.2019 had approved power purchase quantity at 1143.82 Mus including free power quantity at 457.02 MUs.The PDS has furnished RE for the FY 2019-20 at 1307.96 MUs including free power of 557.32 MUs in Review Petition for the FY 2019-20 as detailed in table below:

				(In MUs)
SI. No.	Stations	As approved by the Commission in Tariff Order dated 29.05.2019	Review Estimate	Now approved by the Commission
1	NTPC			
	a) FSTPP	133.01	162.51	162.51
	b) KHSTPP-I	77.59	90.80	90.80
	c) KHSTPP-II	36.11	35.44	35.44
	d) BSTPP	123.32	118.82	118.82
	e) TSTPP	166.63	155.43	155.43
	f) KBUNL	15.76	14.08	14.08
2	NHPC			
	a) RANGIT-III	4.38	4.45	4.45
	b) TEESTA-V	42.40	30.85	30.85
3	Other Sources			
	a) PTC	37.29	32.72	32.72
	b) WBSEDCL	23.96	43.84	43.84
	c) SPDC	26.35	33.80	33.80
4	UI/Deviation	0.00	27.90	27.90
5	Free Power	457.02	557.32	557.32
6	Total	1143.82	1307.96	1307.96

Table 6.4: Power Purchase approved by the Commission for FY 2019-20

The Commission now approves power purchase of 1307.96 MUs including free power of 557.32 MUs during the FY 2019-20.

6.6 Energy Balance

The details of energy requirement and availability projected by the PDSand approved by the Commission for the FY 2019-20 and now approved by the Commission are furnished in table below.

Sl. No.	Particulars	Unit	As approved by the Commission in Tariff Order dated 29.05.2019	Review Estimate	Now approved by the Commission
Α	ENERGY REQUIREMENT				
1	Energy sales within the state	MUs	405.08	422.60	402.46
2	Outside state sale through UI / Trading	MUs	641.16	727.88	787.93
3	Total energy sales (1+2)	MUs	1046.24	1150.48	1190.39
4	Overall T & D losses	%	22.00	27.14	22.00
5	Overall T & D losses	MUs	114.24	157.39	113.53
6	Total energy requirement (3+5)	MUs	1160.48	1307.87	1303.92
B	ENERGY AVAILABILITY				
1	Own generation	MUs	30.00	10.00	10.00
2	Power purchased from CGS/UI etc.	MUs	686.80	750.64	750.64
3	Free Power	MUs	457.02	557.32	557.32
4	Overall pool loss	%	2.14	1.54	2.14
5	Overall pool loss	MUs	13.34	10.09	14.04
6	Total energy availability (1+2+3-5)	MUs	1160.48	1307.87	1303.92
C	ENERGY SURPLUS/(GAP)	MUs	0.00	0.00	0.00

Table 6.5: Energy Balance approved by the Commission for FY 2019-20

6.7 Fuel Cost

The fuel cost approved by the Commission in Tariff Order for the FY 2019-20,RE furnished by PDS and now approved by the Commission are furnished in table below.

				(≠ inCrores)
SI. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019		Now approved by the Commission
1	Cost of fuel	0.18	0.20	0.20
2	Total	0.18	0.20	0.20

The Commission now approves fuel cost of ₹ 0.20 Crores for the FY 2019-20, 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 2019-20, RE furnished by PDS and now approved by the Commission are furnished in table below.

					(₹inCrores)
	Sl. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Review Estimate	Now approved by the Commission
	1	Cost of Generation	18.83	18.83	18.83
I	2	Total	18.83	18.83	18.83

The Commission now approves cost of generation of ₹ 18.83Crores for the FY 2019-20 same as approved for the FY 2019-20 in the Tariff order dated 29.05.2019, against the same projected in RE by PDS.

6.9 **Power Purchase Cost**

The Power Purchase Cost approved by the Commission for the FY 2019-20, 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 2019-20

_					(₹inCrores)
	Sl. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Review Estimate	Now approved by the Commission
	1	Power Purchase Cost	255.07	269.04	269.04
	2	Total	255.07	269.04	269.04

The Commission now approves the power purchase cost of ₹ 269.04 Crores for the FY 2019-20, as per 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 2019-20, RE furnished by PDS and now approved by the Commission are furnished in table below.

(**₹**inCrores)

SI. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Review Estimate	Now approved by the Commission
1	Intra State Transmission Charges	42.60	42.60	42.60
2	Total	42.60	42.60	42.60

The Commission now approves Intra State Transmission Charges of ₹42.60 Crores for the FY 2019-20 same as approved for the FY 2019-20 in the Tariff order dated 29.05.2019, against the same projected in RE by PDS.

6.11 Employee Cost

The Commission in its Order dated 29.05.2019 had approved employee cost at ₹79.92 Crores for the FY 2019-20 only for distribution function. The PDS has furnished RE at ₹107.26 Crores for the FY 2019-20. The details shown in the table below:

Table 6.10: Employee Cost approved by the Commission for FY 2019) -20
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				(₹inCrores)
SI. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Review Estimate	Now approved by the Commission
1	Employee Cost	79.92	107.26	90.27
2	Total	79.92	107.26	90.27

The Commission now approves the employee cost of ₹ 90.27 Crores for the FY 2019-20,against RE furnished by PDS of ₹ 107.26 Crores.

6.12 Repair and Maintenance Expenses

The Commission in its Order dated 29.05.2019 had approved Repair & Maintenance Expenses at ₹21.19 Crores for the FY 2019-20. The PDS has estimated at ₹23.71 Crores for the FY 2019-20 and now approved by the Commission are furnished in table below.

Table 6.11: Repair & Maintenance Expenses approved by the Commission for FY 2019-20

(₹inCrores)

SI. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Review Estimate	Now approved by the Commission
1	Repair & Maintenance Expenses	21.19	23.71	23.71
2	Total	21.19	23.71	23.71

The Commission now approves ₹23.71 Crores towards Repair & Maintenance Expenses for the FY 2019-20, as per RE furnished by PDS.

6.13 Administrative and General Expenses

The Commission in its Order dated 29.05.2019, had approved ₹3.73 Crores towards Administrative and General Expenses for the FY 2019-20. The PDS has furnished RE at ₹4.86 Crores for the FY 2019-20 and now approved by the Commission are furnished in table below.

Table 6.12: A & G E	kpenses approved b	v the Commission	for FY 2019-20

				(₹ inCrores)
Sl. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Review Estimate	Now approved by the Commission
1	Administrative & General Expense	s 3.73	4.86	4.86
2	Total	3.73	4.86	4.86

The Commission now approves ₹4.86 Crores towards Administrative & General Expenses for the FY 2019-20 as per RE furnished by PDS.

(₹inCrores)

6.14 Capital Investment and Capitalisation

Capital investment and capitalisation during the FY 2019-20 approved by the Commission in its Order dated 29.05.2019 and RE furnished by PDS and now approved by the Commission are furnished in tablebelow.

Sl. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Review Estimate	Now approved by the Commission
1	Opening balance of CWIP	47.17	35.09	184.81
2	Capital Investment during the year	47.87	99.41	47.87
3	Total (1+2)	95.04	134.50	232.68
4	Capitalisation during the year	57.85	81.87	47.96
5	Closing balance of CWIP (3-4)	37.19	52.63	184.72

The Commission now approves the capital investment of ₹47.87 Crores and capitalisation of ₹47.96 Crores during the FY 2019-20.

6.15 Gross Fixed Assets

In the absence of valid information regarding gross fixed assets, the Commission in its Tariff Order dated 29.05.2019, had not approved the value of gross fixed assets. The PDS in its review petition for the FY 2019-20 has stated that the values of gross fixed assets have been taken from the asset registers, as detailed in table below.

(₹ in Crores)
, , , , , , , , , , , , , , , , , , ,

Table 6.14: Gross Fixed Assets furnished by PDS for FY 2019-20

Sl. No.	Particulars	Amount
1	Opening balance	980.00
2	Additions during the year	47.96
3	Closing balance (1+2)	1027.96

Commission Analysis:

In the absence of audited annual accounts the information furnished by PDS cannot be taken as authentic. As such, depreciation cannot be allowed on the opening GFA furnished by the PDS.

6.16 Depreciation

The PDS in its review petition has furnished depreciation of ₹18.10 Crores for the FY 2019-20.

Commission's Analysis:

The PDS has not furnished the calculation at which the amount of depreciation was arrived at. The Commission in its Tariff Order dated 29.05.2019 had approved depreciation of ₹19.28 Crores for the FY 2019-20 on the average GFA of ₹365.15 Crores at the rate of 5.28%. As such the depreciation has been worked out accordingly as detailed in table below.

		(≠ inCrores)
Sl. No.	Particulars	Amount
1	Opening balance GFA as on 01.04.2019	341.29
2	Additions during the year	47.71
3	Closing balance to end of 31.03.2020 (1+2)	389.00
4	Average GFA	365.15
5	Rate of depreciation	5.28%
6	Depreciation	19.28

Table 6.15: Depreciation approved by the Commissionfor2019-20

The Commission accordingly approves depreciation at ₹19.28 Crores for the FY 2019-20.

6.17 Interest and Finance Charges

The PDS has not projected interest and finance charges during the FY 2019-20.

Commission's Analysis:

The Commission in its Tariff Order dated 29.05.2019had not approved any interest and finance charges for the FY 2019-20.PDS has not shown any loans and interest. **As such the**

Commission has not considered interest and finance charges during the FY 2019-20.

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6.18 Interest on Working Capital

The PDS has furnished interest on working capital at ₹12.92 Crores during the FY 2019-20.

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) (Second Amendment Regulations), 2017, 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 on1st April of the financial year in which the Petition is filed.

Accordingly, the interest on working capital works out to ₹8.08 Crores, as detailed in table below:

			(₹inCrores)
Sl. No.	Particulars	Total Cost	Working Capital & Interest
1	O & M Expenses		
a)	Employee Cost	90.27	7.52
b)	Repair & Maintenance Expenses	23.71	1.98
c)	Administrative & General Expenses	4.86	0.41
2	Maintenance of Spares		
3	Receivables	476.44	79.41
4	Total		89.31
5	SBAR as on 01.04.2019		9.05%
6	Interest on Working capital		8.08

 Table 6.16: Interest on Working Capital calculated by the Commission forFY 2019-20

Table 6.17: Interest on Working Capital approved by the Commission for FY 2019-20

(₹in	Cro	res)
		\mathbf{U}	1651

Sl. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Review Estimate	Now approved by the Commission
1	Interest on Working Capital	6.66	12.92	8.08
2	Total	6.66	12.92	8.08

The Commission now approves interest on working capital at ₹8.08 Crores for the FY 2019-20 against the RE furnished by PDS at ₹12.92Crores.

6.19 Return on Equity

The PDS has not projected return on equity for the FY 2019-20.

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), 2017, 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.

6.20 Non-Tariff Income

The PDS has furnished non-tariff income at ₹1.31Crores during the FY 2019-20.

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) (Second Amendment Regulations), 2017, non-tariff income comprises of:

- Meter / metering equipment / service line rentals
- Service charges
- Customer charges
- Revenue from late payment surcharge
- Recovery 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 fixed investments and call deposits and bank balances
- Prior period Income.

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Sl. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Review Estimate	(<i>₹</i> inCrores) Now approved by the Commission
1	Non Tariff Income	1.62	1.31	1.31
2	Total	1.62	1.31	1.31

Table 6.18: Non-Tariff Income approved by the Commission for FY 2019-20

The Commission now approves Non-Tariff Income at ₹ 1.31 Crores for the FY 2019-20,as per the RE furnished by PDS.

6.21 Revenue from tariff for the FY 2019-20

Revenue from the tariff approved by the Commission for the FY 2019-20 in its Tariff Order dated 29.05.2019 and revised estimates furnished by the PDS and now approved by the Commission are shown in table below.

				(₹inCrores)
Sl. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Review Estimate	Now approved by the Commission
1	Domestic	29.43	39.22	30.31
2	Commercial	23.71	23.80	22.21
3	Public Lighting	0.14	0.13	0.13
4	Temporary Supply	2.95	3.00	4.10
5	HT Industrial Consumers	153.41	146.19	160.22
6	LT Industrial Consumers	2.41	2.40	2.17
7	Bulk Supply	22.03	22.74	21.15
8	Outside state	182.44	218.14	236.14
9	Total	416.52	455.62	476.44

Table 6.19: Revenue from the Tariff approved by the Commission for FY 2019-20

The Commission approves the Revenue from Tariff at ₹476.44 Crores including Revenue from outside sales at ₹236.14 Crores for the FY 2019-20.

6.22 Aggregate Revenue Requirement (ARR) for the FY 2019-20

The ARR for the FY 2019-20 approved by the Commission in its Tariff Order dated 29.05.2019, Revised Estimate furnished by the PDS and now approved by the Commission are furnished in tablebelow.

				(₹ in Crores)
Sl. No.	Particulars	As approved by the Commission in Tariff Order dated 29.05.2019	Review Estimate	Now approved by the Commission
1	Cost of Fuel	0.18	0.20	0.20
2	Cost of Generation	18.83	18.83	18.83
3	Cost of Power Purchase	255.07	269.04	269.04
4	Intra State Transmission Charges	42.60	42.60	42.60
5	Employee Costs	79.92	107.26	90.27
6	Repair & Maintenance Expenses	21.19	23.71	23.71
7	Administrative & General Expense	s 3.73	4.86	4.86
8	Depreciation	19.28	18.10	19.28
9	Interest charges	0.00	0.00	0.00
10	Interest on Working Capital	6.66	12.92	8.08
11	Return on NFA /Equity	0.00	0.00	0.00
12	Total Revenue Requirement	447.46	497.53	476.87
13	Less: Non Tariff Income	1.62	1.31	1.31
14	Net Revenue Requirement	445.84	496.21	475.56
15	Revenue from Tariff	234.08	237.47	240.30
16	Revenue from Outside State Sale	182.44	218.14	236.14
17	Gap/(Surplus) (14 - 15 - 16)	29.31	40.60	(0.88)

Table 6.20: Aggregate Revenue Rec	uirement and Gap a	pproved for FY 2019-20
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Review for the FY 2019-20 indicates that the revenue surplus has arrived to ₹ 0.88 Crores as against ₹ 29.31 Crores revenue deficit approved in the Tariff Order for the FY 2019-20.

7. AGGREGATE REVENUE REQUIREMENT FOR THE FY 2020-21, COMMISSION'S ANALYSIS AND DECISIONS

7.1 Consumer Categories

The PDSwas serving 1,14,006 consumers as on 31.03.2019 inits area of operation. The consumers could be broadly categorised 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.

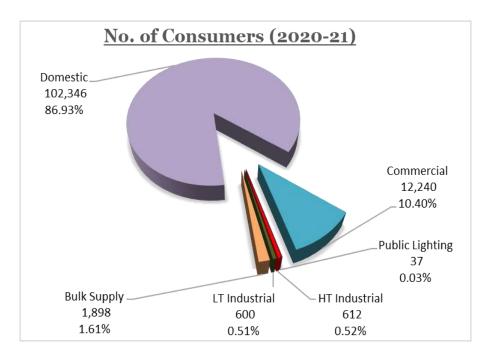
7.1.1 Growth of Consumers

Details of the category-wise growth of consumers over the actuals during the FY 2018-19, the estimated figures for the FY 2019-20 and the projections for the FY 2020-21 are furnished in table below:

				(In No.)
Sl.	Category	2018-19	2019-20	2020-21
No.	Category	(Actual)	(Estimated)	(Projected)
1	Domestic	99,303	100,339	102,346
2	Commercial	11,581	12,000	12,240
3	Public Lighting	34	36	37
4	Temporary Supply	0	0	0
5	HT Industrial	594	600	612
6	LT Industrial	631	588	600
7	Bulk Supply	1,863	1,861	1,898
8	Total	114,006	115,424	117,733

Table 7.1: Projected of no. of consumers

Chart 7.1: No. of consumers projected by PDSfor FY 2020-21



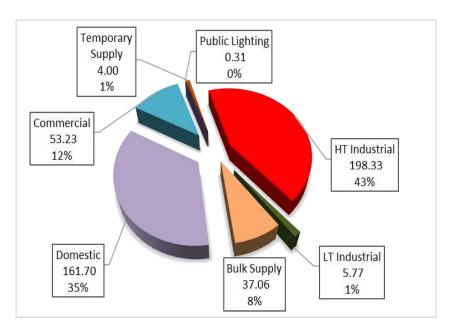
7.2 Category-wise Energy Sales

Category-wise energy sales approved by the Commission for the FY 2020-21 vide Tariff Order dated 28.03.2018 and the projected energy sales to various categories of consumer for the FY 2020-21 as given in table below:

			(In MUs)
Sl. No.	Category	As approved by the Commission in Tariff Order dated 28.03.2018	Projected by EPDS
1	Domestic	127.91	161.70
2	Commercial	47.75	53.23
3	Public Lighting	0.31	0.31
4	Temporary Supply	1.80	4.00
5	HT Industrial	255.95	198.33
6	LT Industrial	1.64	5.77
7	Bulk Supply	36.88	37.06
8	Total	472.24	460.39

Table 7.2: Energy Sales projected by PDS for the FY 2020-21

Chart 7.2: Energy Sales projected by PDS for FY 2020-21



The PDS has projected the category-wise energy sales for the FY 2020-21 based on the actual past sales and growth rate and new developments on account of Government policies, socioeconomic 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 2014-15 to FY 2018-19 is worked out and shown in table below:

SI. No.	Category	2014-15 (Actual)	2015-16 (Actual)	2016-17 (Actual)		2018-19 (Actual)	to FY	CAGR for 3 years from FY 2014-15 to FY 2017-18	CAGR for 2 years from FY 2015-16 to FY 2017-18	CAGR for YOY from FY 2016-17 to FY 2017-18
			(In MUs) (In				n %)			
1	Domestic	78.93	74.96	96.74	98.72	107.46	8.02	12.76	5.40	8.85
2	Commercial	35.33	37.43	39.68	38.38	40.91	3.73	3.01	1.54	6.59
3	Public Lighting	0.29	0.15	0.26	0.17	0.25	-3.64	18.56	-1.94	47.06
4	Temporary Supply	1.36	1.16	2.92	3.38	4.69	36.27	59.31	26.73	38.76
5	HT Industrial	110.49	126.30	156.16	174.43	197.67	15.65	16.10	12.51	13.32
6	LT Industrial	1.37	1.34	1.31	4.43	4.89	37.39	53.96	93.21	10.38
7	Bulk Supply	20.98	23.37	26.40	24.16	24.94	4.42	2.19	-2.80	3.23
8	Total	248.75	264.71	323.47	343.67	380.81				

Table 7.3: CAGR of energy sales

				(In kWh)
Sl.	Category	2016-17	2017-18	2018-19
No.	Category	(Actual)	(Actual)	(Actual)
1	Domestic	85	85	90
2	Commercial	292	282	294
3	HT Industrial	28,290	26,333	27,731
4	LT Industrial	444	641	646
5	Bulk Supply	1,453	1,109	1,116

Table 7.4: Specific monthly consumption/consumer

The consumption of each category of consumers is discussed below, so as to arrive at a reasonable projection of energy sales for the FY 2020-21.

Domestic

The PDS has projected energy sales to this category at 161.70 MUs for the FY 2020-21. The trend of the actual consumption in the category for the FY 2014-15 to FY 2018-19 & RE for the FY 2019-20 is shown in the chart below:

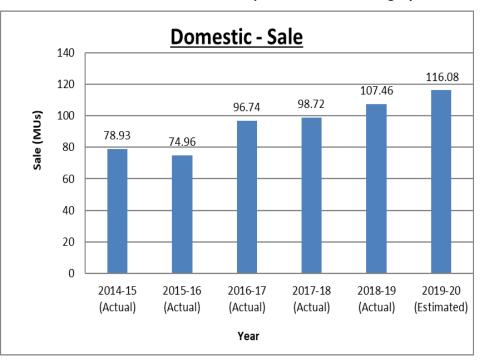


Chart 7.3: Trend of actual consumption – Domestic Category

On analysis of the above trend and CAGR over different periods it is seen that the 4 years CAGR (FY 2014-15 to FY 2018-19) is 8.02%, the 3 years CAGR (FY 2015-16 to FY 2018-19) is 12.76%, 2 years CAGR (FY 2016-17 to FY 2018-19) is 5.40% and the YoY growth (FY 2017-18 to FY 2018-19) is 8.85%. The actual specific consumption during the FY 2018-19 is 90 Kwh.On analysis of the above trend, the CAGR for 4 years of 8.02% is considered reasonable & consumption work out to 125.39 MUs for the FY 2020-21.

The Commission approves energy sales at 125.39 MUs against 161.70 MUs projected by PDSfor the FY 2020-21.

Commercial

The PDS has projected energy sales to this category at 53.23 MUs for the FY 2020-21. In this category negative growth is observed duringtheFY 2017-18 over the previous year's sale and PDS has not furnished reasons for such negative growth. The trend of the actual consumption in the category for the FY 2014-15 to FY 2018-19& RE for the FY 2019-20 is shown in the chart below:

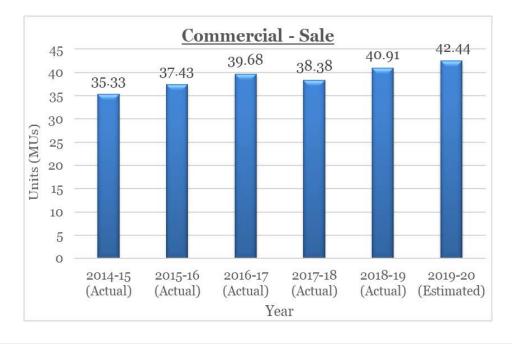


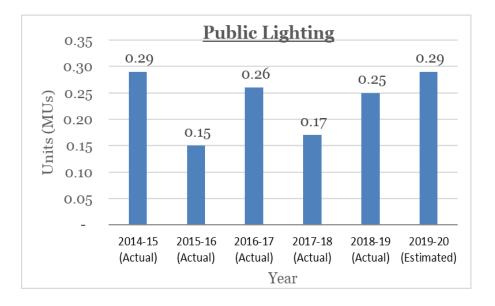
Chart 7.4: Trend of actual consumption – Commercial Category

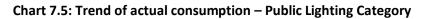
On analysis of the above trend and CAGR over different periods it is seen that the 4 years CAGR (FY 2014-15 to FY 2018-19) is 3.73%, the 3 years CAGR (FY 2015-16 to FY 2018-19) is 3.01%, 2 years CAGR (FY 2016-17 to FY 2018-19) is 1.54% and the YoY growth (FY 2017-18 to FY 2018-19) is 6.59%. The actual specific consumption during the FY 2018-19 is 294Kwh.On analysis of the above trend, the CAGR for 4 years of 3.73% is considered reasonable & consumption work out to 44.02 MUs for the FY 2020-21.

The Commission approves energy sales at 44.02 MUs against 53.23 MUs projected by PDS for the FY 2020-21.

Public Lighting

The PDS has projected energy sales to this category at 0.31 MUs for the FY 2020-21. This is an unmetered category and negative growth is observed during the FY 2015-16& FY 2017-18 over the previous year's sale and PDS has not furnished reasons for such negative growth. The trend of the actual consumption in the category for the FY 2014-15 to FY 2018-19 & RE for the FY 2019-20 is shown in the chart below:





On analysis of the above trend and CAGR over different periods it is seen that the 4 years CAGR (FY 2014-15 to FY 2018-19) is (-) 3.64%, the 3 years CAGR (FY 2015-16 to FY 2018-19) is 18.56%, 2 years CAGR (FY 2016-17 to FY 2018-19) is (-) 1.94% and the YoY growth (FY 2017-18 to FY 2018-19) is 47.06%. On analysis of the above trend, CAGR over different periods and actual consumption of 0.25 MUs in the FY 2018-19, the consumption work out to 0.30 MUs against 0.31 MUs projected by PDS for the FY 2020-21.

The Commission approves energy sales at 0.30 MUs against 0.31 MUs projected by PDS for the FY 2020-21.

Temporary Supply

The PDS has projected energy sales to this category at 4.00 MUs for the FY 2020-21. The trend of the actual consumption in the category for the FY 2014-15 to FY 2018-19 & RE for the FY 2019-20 is shown in the chart below:





On analysis of the above trend and CAGR over different periods it is seen that the 4 years CAGR (FY 2014-15 to FY 2018-19) is 36.27%, the 3 years CAGR (FY 2015-16 to FY 2018-19) is59.31%, 2 years CAGR (FY 2016-17 to FY 2018-19) is 26.73% and the YoY growth (FY 2017-18 to FY 2018-19) is 38.76%. On analysis of the above trend, CAGR over different periods and actual consumption of 4.69 MUs in the FY 2018-19, the consumption work out to 5.17 MUs against 4.00 MUs projected by PDSfor the FY 2020-21.

The Commission approves energy sales at 5.17 MUs against 4.00 MUs projected by PDS for the FY 2020-21.

HT Industrial

The PDS has projected energy sales to this category at 198.33 MUs for the FY 2020-21. The trend of the actual consumption in the category for the FY 2014-15 to FY 2018-19& RE for the FY 2019-20 is shown in the chart below:

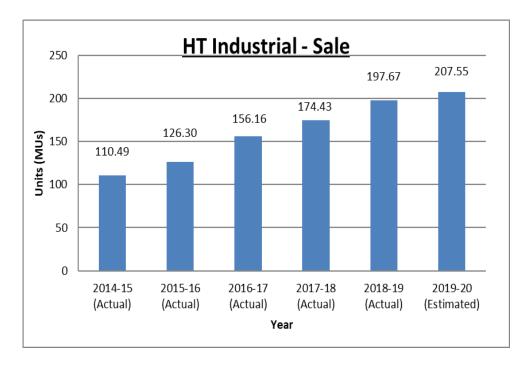


Chart 7.7: Trend of actual consumption – HT Industrial Category

On analysis of the above trend and CAGR over different periods it is seen that the 4 years CAGR (FY 2014-15 to FY 2018-19) is 15.65%, the 3 years CAGR (FY 2015-16 to FY 2018-19) is 16.10%, 2 years CAGR (FY 2016-17 to FY 2018-19) is 12.51% and the YoY growth (FY 2017-18 to FY 2018-19) is 13.32%. The actual specific consumption during the FY 2018-19 is 27,731 kWh.On analysis of the above trend, CAGR over different periods and actual consumption of 197.67 MUs in the FY 2018-19, the consumption work out to 217.93 MUs against 198.33 MUs projected by PDSfor the FY 2020-21.

The Commission approves energy sales at 217.93 MUs against 198.33 MUs projected by PDS for the FY 2020-21.

LT Industrial

The PDS has projected energy sales to this category at 5.77 MUs for the FY 2020-21.The trend of the actual consumption in the category for the FY 2014-15 to FY 2018-19 & RE for the FY 2019-20 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 4 years CAGR (FY 2014-15 to FY 2018-19) is 37.39%, the 3 years CAGR (FY 2015-16 to FY 2018-19) is53.96%, 2 years CAGR (FY 2016-17 to FY 2018-19) is 93.21% and the YoY growth (FY 2017-18 to FY 2018-19) is 10.38%. The actual specific consumption during the FY 2018-19 is 646 Sikkim State Electricity Regulatory Commission Page 88 kWh. On analysis of the above trend, CAGR over different periods and actual consumption of 4.89 MUs in the FY 2018-19, the consumption work out to 5.39 MUs against 5.77 MUs projected by PDS for the FY 2020-21.

The Commission approves energy sales at 5.39 MUs against 5.77 MUs projected by PDS for the FY 2020-21.

Bulk Supply

The PDS has projected energy sales to this category at 37.06MUsfor the FY 2020-21. In this category negative growth is observed duringtheFY 2017-18 over the previous year's sale and PDS has not furnished reasons for such negative growth. The trend of the actual consumption in the category for the FY 2014-15 to FY 2018-19& RE for the FY 2019-20 is shown in the chart below:

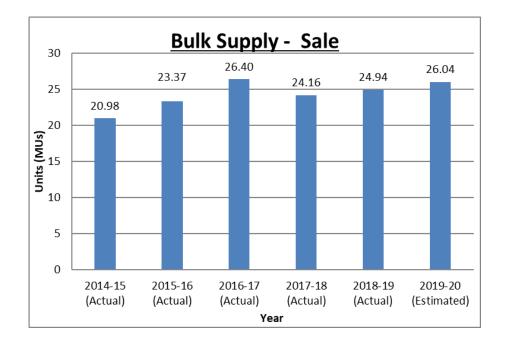


Chart 7.9: Trend of actual consumption – Bulk Supply Category

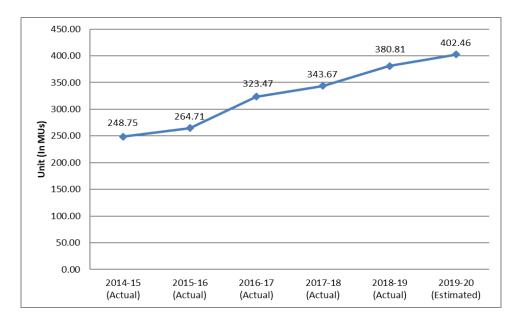
On analysis of the above trend and CAGR over different periods it is seen that the 4 years CAGR (FY 2014-15 to FY 2018-19) is 4.42%, the 3 years CAGR (FY 2015-16 to FY 2018-19)

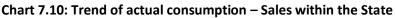
is2.19%, 2 years CAGR (FY 2016-17 to FY 2018-19) is (-) 2.80% and the YoY growth (FY 2017-18 to FY 2018-19) is 3.23%. The actual specific consumption during the FY 2018-19 is 1,116kWh. On analysis of the above trend, the CAGR for 4 years of 4.42% is considered reasonable & consumption work out to 27.19 MUs for the FY 2020-21.

The Commission approves energy sales at 27.19 MUs against 37.06 MUs projected by PDS for the FY 2020-21.

Total sales

The trend of the actual consumption within the state of Sikkim for the FY 2014-15 to FY 2018-19 & RE for the FY 2019-20 is shown in the chart below:





7.3 Category-Wise Energy Sales

The category-wise energy sales approved by the Commission for the FY 2020-21 is given in table below:

		(In MUs)
Sl. No.	Category	FY 2020-21
1	Domestic	125.39
2	Commercial	44.02
3	Public Lighting	0.30
4	Temporary Supply	5.17
5	HT Industrial	217.93
6	LT Industrial	5.39
7	Bulk Supply	27.19
8	Total	425.40

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

The Commission approves total energy sales within the state at 425.40 MUs for the FY 2020-21.

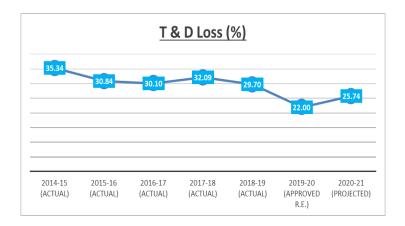
7.4 Transmission and Distribution Losses (T&D Losses)

PDS has submitted that it had achieved reduction in T&D losses over the past years owing to improvement works executed every year. However, the reduction of the distribution losses may not be possible beyond a certain level due to topographical conditions and technical limitations. PDS stated that in the past year the range of distribution losses have been in the range of 29% to 41%. PDS projected T&D Losses at 25.74% for the FY 2020-21.

Commission's Analysis:

The chart below depicts the trend of actual T&D losses for the FY 2014-15 to FY 2018-19, R.E. of T&D loss for the FY 2019-20 & projected T&D losses for the FY 2020-21.





During the FY 2018-19, the actual T&D Lossesworksout to 29.70%, while in the FY 2019-20 the T&D Losses are approved at 22.00%, as discussed in the review of the respective years. In the Tariff Order for the FY 2018-19, the T&D Losses were fixed and as per the trajectorytheCommission has fixed the T&D losses at 24.00%, 22.00% & 20.00% for the FY 2018-19, FY 2019-20 & FY 2020-21 respectively. However, PDS has projected T&D losses at 25.74% for the FY 2020-21. So, trajectory loss % target is considered as reasonable. PDS should take steps to keep the T&D losses as projected for the FY 2020-21.

The Commission accordingly approves T&D Losses at 20.00% for the FY 2020-21.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:

Sl. No.	Particulars	Unit	FY 2020-21
1	Energy sales approved	MUs	425.40
2	T & D Losses approved	%	20.00
3	T & D Losses approved	MUs	106.35
4	Energy requirement	MUs	531.75

Table 7.6: Energy Requirement approved by the Commission

7.5 Power Procurement

7.5.1 Own Generation

The PDS owns 12 mini hydroelectric power stations, with a total installed capacity of 35.70 MWs, and 2 diesel generation stations, with a total installed capacity of 4.99 MWs,totaling 40.69 MWs, as detailed in table below:

Sl. No.	Name of Projects	Installed Capacity (In MWs)	Remarks
	Hydro		
1	Lower Lhagap Hydel Power (LLHP)	2 x 6.00	Shut down due to 18th September, 2011 Earthquake
2	Jali Power House (JPH)	6 x 0.35	Operational
3	Rimbi-I	3 x 0.20	Shut down
4	Rimbi-II	2 x 0.05	Shut down
5	Rothak	2 x 0.10	Powerhouse abandoned
6	Rongnichu	5 x 0.50	No generation due to failure of water conductor system
7	Chaten	2 x 0.50	Powerhouse abandoned
8	Meyongchu	2 x 2.00	Operational
9	Upper Rongnichu Hydel Project (URHP)	4 x 2.00	Project handed over to private party for restoration
10	Kalez	2 x 1.00	Operational
11	Lachung	2 x 0.10	Powerhouse abandoned
12	Rabomchu	2 x 1.50	Operational
	Diesel		
13	Diesel Power House Gangtok	4 x 1.00	Operational
14	DPH LLHP, Ranipool	4 x 0.248	Shut down due to 18th September, 2011 Earthquake
	Total	40.69	

Table 7.7: Installed capacity of own generating stations	Table 7.7: Installed	capacity of own	generating stations
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The PDS has projected a generation of 12.00 MUs for the FY 2020-21 from its own generating stations. As per PDS data the net total own generation for the period of 01.04.2019 to 30.09.2019 is 3.05 MUs. The PDS has stated that some projects will start functioning from the FY 2020-21 onwards.

The Commission accordingly approves net own generation at 12.00 MUs from its own generating stations as projected by PDS for the FY 2020-21.

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, as detailed in table below:

Sl.	Source		Allocation		
No.	Source	(In MWs)	(In %)	(In MWs)	
	Central Sector				
1	FSTPP, NTPC	1,600.00	1.63%	26.08	
2	KHSTPP-I, NTPC	840.00	1.55%	13.02	
3	KHSTPP-II, NTPC	1,500.00	0.33%	4.95	
4	BSTPP, NTPC	1,320.00	1.52%	20.06	
5	TSTPP, NTPC	1,000.00	2.40%	24.00	
6	KBUNL, NTPC	195.00	0.55%	1.07	
7	RANGIT-III, NHPC	60.00	13.33%	8.00	
8	TEESTA – V, NHPC	510.00	13.19%	67.27	
	Others				
9	CHUKHA, PTC	270.00	2.22%	5.99	
10	WBSEDCL	50.00	20.00%	10.00	
11	SPDC	10.00	100.00%	10.00	
12	TOTAL	7,355.00		190.45	

Table 7.8: Power Allocation

The chart below depicts the allocation of power from various sources:

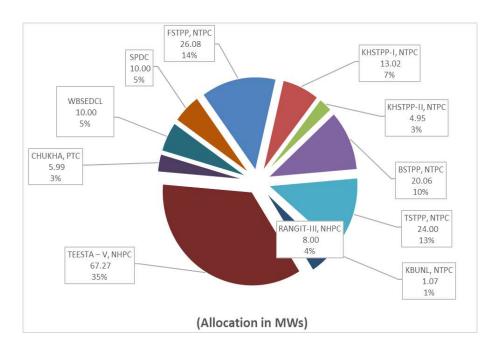


Chart 7.12: Allocation of Power

The PDS has based the power purchase projectionsattheMerit 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 hydropower stations.

The actual power procurement projected for the FY 2020-21 is furnished in table below:

	(In MUs)			
Sl. No.	Source	FY 2020-21 (As approved by the Commission in MYT Order dated 28.03.2018)	FY 2020-21 (Projected)	
	Central Sector			
1	FSTPP, NTPC	113.07	162.51	
2	BSTPP, NTPC	30.18	118.82	
3	KHSTPP-I, NTPC	63.97	90.80	
4	KHSTPP-II, NTPC	21.63	35.44	
5	TSTPP, NTPC	153.89	155.43	
6	KBUNL, NTPC	0.00	14.08	
7	RANGIT-III, NHPC	4.34	4.45	
8	TEESTA-V, NHPC	31.87	30.85	
	Others			
9	CHUKHA, PTC	45.62	32.72	
10	WBSEDCL	52.65	43.84	
11	SPDC	27.09	33.80	
12	UI/Deviation	0.00	27.90	
13	Free Power	360.56	557.32	
14	TOTAL	904.87	1307.96	

Table 7.9: Summary of Power Purchase furnished by PDS

Commission's Analysis:

As seen from the power procurement projection, the PDS has projected the power drawal during the financial year at the same level of actual drawal during the FY 2018-19and estimated of the FY 2019-20.

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:

		(In MUs)
Sl. No.	Source	FY 2020-21
	Central Sector	
1	FSTPP, NTPC	162.51
2	BSTPP, NTPC	118.82
3	KHSTPP-I, NTPC	90.80
4	KHSTPP-II, NTPC	35.44
5	TSTPP, NTPC	155.43
6	KBUNL, NTPC	14.08
7	RANGIT-III, NHPC	4.45
8	TEESTA-V, NHPC	30.85
	Others	
9	CHUKHA, PTC	32.72
10	WBSEDCL	43.84
11	SPDC	33.80
12	UI/Deviation	0.00
13	Free Power	557.32
14	TOTAL	1280.06

Table 7.10: Power Procurement approved by the Commission

The Commission approves power procurement of 1280.06 MUs including free power of 557.32 MUs for the FY 2020-21.

7.6 Energy requirement and availability

The energy requirement and availability projected for the FY 2020-21are furnished by the PDSinthe table below:

Sl. No.	Source	FY 2020-21 (As approved by the Commission in MYT Order dated 28.03.2018)	FY 2020-21 (Projected)
А	ENERGY REQUIREMENT		
1	Energy Sales within State	472.24	460.39
2	Sales Outside State	349.48	689.86
3	Total Energy Sales	821.71	1150.25
4	Overall T & D Losses %	20.00	25.74
5	Overall T & D Losses (MUs)	118.06	159.61
6	Total Energy Requirement	939.78	1309.86
В	ENERGY AVAILABILITY		
7	Power Purchase from CGS/UI etc.	544.31	750.64
8	Free Power	360.56	557.32
9	Less: Overall Pool Loss	10.09	10.09
10	Generation	45.00	12.00
11	Total Energy Availability	939.78	1309.86
C	ENERGY SURPLUS/(GAP)	0.00	0.00

Table 7.11: Energy Balance projected by PDS

Commission's Analysis:

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

Sl. No.	Particulars	Unit	FY 2020-21
Α	ENERGY REQUIREMENT		
1	Energy sales within the state	MUs	425.40
2	Overall T & D losses	%	20.00
3	Overall T & D losses	MUs	106.35
4	Total energy requirement (1+3)	MUs	531.75
В	ENERGY AVAILABILITY		
1	Own generation	MUs	12.00
2	Power purchased from CGS/UI etc.	MUs	722.74
3	Free Power	MUs	557.32
4	Overall pool loss	%	2.14
5	Overall pool loss	MUs	14.04
6	Total energy availability (1+2+3-5)	MUs	1278.02
С	ENERGY SURPLUS/(GAP)	MUs	746.27

Table 7.12: Energy Balance approved by the Commission

The energy balance approved for a surplus energy of 746.27 MUs for the FY 2020-21.

7.7 Aggregate Revenue Requirement

The PDS has projected Aggregate Revenue Requirement at ₹547.26 Crores for the FY 2020-21, as detailed in table below:

			(₹ inCrores)
		FY 2020-21	
SI.	Particulars	(As approved by the	FY 2020-21
No.		Commission in MYT	(Projected)
		Order dated 28.03.2018)	
1	Cost of Fuel	0.18	0.22
2	Cost of Power Purchase	250.50	282.66
3	Cost of Generation	19.19	19.19
4	Transmisssion Charges (Intra State)	44.51	44.51
5	Employee Costs	88.52	136.69
6	Repair and Maintanance Expenses	15.67	26.53
7	Administration and General Expenses	0.95	4.86
8	Depreciation	21.35	20.17
9	Interest Charges	-	-
10	Interest on Working Capital	8.16	13.77
11	Return on NFA/Equity	-	-
12	Income Tax	-	-
13	Total Revenue Requirement	449.03	548.61
14	Less: Non Tariff Income	1.65	1.35
15	Net Revenue Requirement	447.38	547.26

Table 7.13: Aggregate Revenue Requirement projected by PDS

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

7.8 Fuel Cost

The PDS has projected fuel cost at ₹ 0.22Crores for the FY 2020-21.

The Commission approves fuel cost at ₹ 0.22 Crores for the FY 2020-21,as projected by PDS.

7.9 Cost of Generation

The PDS has projected Cost of Generationat ₹19.19 Crores for the FY 2020-21 as approved in the MYT Order dated 28.03.2018. The details of expenses projected by the PDS are furnished in table below:

Table 7.14: Cost of Generation projected by PDS

		(₹inCrores)
Sl.	Particulars	FY 2020-21
No.	T atticulars	(Projected)
1	Cost of Generation	19.19

Commission's Analysis:

The Commission approved the Cost of Generation for the FY 2020-21, as detailed in table below.

Table 7.15: Cost of Generationa pproved by the Commission

		(₹inCrores)
Sl. No.	Particulars	FY 2020-21
1	Cost of Generation	19.19

The Commission therefore approves the Cost of Generationat ₹19.19 Crores for the FY 2020-21.

7.10 Power Purchase Cost

PDS has furnished actual power purchase cost including inter State Transmission charges, as shown in table below:

	(₹inCrores)							
SI.		Energy	Variable		Total		Total Cost i/c	Unit Cost
No.	Source	received	Cost			Others	supplementary	(₹ / Kwh)
110.		(MUs)	(Ps./Unit)	Cost	Cost		bills	
1	NTPC							
	a) FSTPP	162.51		38.23	15.19	-0.70	52.71	3.24
	b) BSTPP	118.82		26.14	22.78	-0.67	48.24	4.06
	b) KHSTPP-I	90.80		20.46	9.41	-0.08	29.80	3.28
	c) KHSTPP-II	35.44		7.67	3.82	-0.11	11.38	3.21
	d) TSTPP	155.43		26.95	15.07	0.55	42.57	2.74
	e) KBUNL	14.08		3.73	3.40	-0.03	7.10	5.04
	TOTAL	577.08		123.18	69.67	-1.04	191.80	
2	NHPC							
	a) RANGIT-III	4.45		0.85	0.91	-	1.75	3.94
	b)TEESTA -V	30.85		3.52	4.17	-	7.69	2.49
	TOTAL	35.30		4.36	5.08	-	9.45	
3	Other sources							
	a) PTC	32.72					7.86	2.40
	b)WBSEDCL	43.84					5.45	1.24
	c) SPDC	33.80					13.52	4.00
4	Other Charges							
	a) Transmission							
	& Other						19.56	0.19
	Charges							
5	UI Purchase	27.90					8.74	3.13
6	Free Power	557.32					-	-
7	Rebate/ Other						-0.16	
<u>′</u>	Charges						-0.16	
8	Total	1,307.96					256.23	

Table 7.16: Actual Power Purchase Cost furnished by PDS for FY 2018-19

Power Purchase Cost projected for the FY 2020-21

The PDS has projected a power purchase cost at ₹282.66 Crores including interstate transmission charges of ₹21.56Crores and REC Purchase ₹0.16 Crores for the FY 2020-21. Free power is projected at 557.32 MUs and UI purchase is projected at the cost of ₹9.64 Crores for the FY 2020-21. The details are furnished in thetable below:

Sl. No.	Source	Energy received (MUs)	Unit Cost (₹ / Kwh)	Total Cost i/c supplementary bills (₹inCrores)
1	NTPC			
	FSTPP	162.51	3.58	58.12
	BSTPP	118.82	4.48	53.19
	KHSTPP-I	90.80	3.62	32.85
	KHSTPP-II	35.44	3.54	12.55
	TSTPP	155.43	3.02	46.94
	KBUNL	14.08	5.56	7.83
2	NHPC			
	RANGIT-III	4.45	4.35	1.93
	TEESTA -V	30.85	2.75	8.48
3	РТС			
	СНИКНА	32.72	2.65	8.66
4	Other sources			
	WBSEDCL	43.84	1.37	6.01
	SPDC	33.80	4.41	14.91
	UI Purchase	27.90	3.45	9.64
5	Total Energy Purchase	750.64		261.12
6	Rebate/Other Charges			-0.16
7	REC Purchase			0.16
8	Transmission Charges			21.56
9	Net Power Purchase Expenses (Excl. Free Power)	750.64		282.66

Table 7.17: Power Purchase Cost projected by PDS

Commission Analysis:

As seen from the above, the PDS has claimed the power purchase cost for theFY 2020-21 at the escalation of 5.00% year over year where the base rate as actually paid during the FY 2018-19& H1 of FY 2019-20. The Commission has considered the power purchase cost at the escalation of 5.00% year over year where the base rate as the station-wise average rate on the basis of the bill for the month of September, 2019 to compute the power purchase cost for the FY 2020-21. Accordingly, the power purchase cost for the FY 2020-21 is worked out, as detailed in table below.

The PDS has projected cost of ₹9.64 Crores under UI/deviation. The Commission has not considered the same asthere is surplus power. The Commission has not considered ₹(-) 0.16 Crores for the FY 2020-21under Rebate/Other Charges as projected by PDS.If there is need for such, the same would be considered at the time of True up.

As per the SSERC(Renewable Energy Purchase Obligation and Its Compliance) (First Amendment) Regulations, 2017, the applicable RPO levels for the FY 2020-21 is10.25% for Non Solar and 6.75% 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.

Further, The PDS has projected cost of ₹ 0.16 Crores under REC purchase.

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:

		(In MUs)
Sl. No.	Source	FY 2020-21
1	RANGIT-III, NHPC	4.45
2	TEESTA - V, NHPC	30.85
3	CHUKHA, PTC	32.72
4	RAMMAM, WBSEDCL	43.84
5	SPDC	33.80
6	EPDS	12.00
7	FREE POWER	557.32
8	Total Hydro Generation available (including Free Power)	714.98
9	Total Consumption including T&D Loss	531.75
10	Excess Hydro Generation available (including Free Power)	183.23

Table 7.18: RPO Compliance approved by the Commission

The table also shows that the PDS is compling the RPO requirement for the FY 2020-21. However, the power procurement projection for the FY 2020-21 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. The detail of Power Purchase quantum and cost approved by the Commission is given in the Table below:

Sl. No.	Source	Energy received (MUs)	Unit Cost (₹ / Kwh)	Total Cost i/c supplementary bills (₹inCrores)
1	NTPC			
	FSTPP	162.51	3.88	63.03
	BSTPP	118.82	5.04	59.88
	KHSTPP-I	90.80	3.79	34.45
	KHSTPP-II	35.44	3.63	12.87
	TSTPP	155.43	3.63	56.41
	KBUNL	14.08	5.65	7.96
2	NHPC			
	RANGIT-III	4.45	3.51	1.56
	TEESTA -V	30.85	2.06	6.36
3	РТС			
	СНИКНА	32.72	2.51	8.21
4	Other sources			
	WBSEDCL	43.84	1.34	5.89
	SPDC	33.80	3.18	10.76
	UI Purchase	0.00	0.00	0.00
5	Total Energy Purchase	722.74		267.36
6	Rebate/Other Charges			-
7	Transmission Charges			23.83
8	Free Power	557.32		-
9	REC Purchase			-
10	Net Power Purchase Expenses	1,280.06		291.19

Table 7.19: Power Purchase Cost approved by the Commission

The Commission approves the power purchase cost at ₹291.19 Crores including transmission charges at ₹23.83 Crores for purchase of 722.74 MUs & Free Power of 557.32 MUs for the FY 2020-21 against the total cost of ₹282.66 Crores as projected by the PDS.

7.11 Intra State Transmission Charges

The PDS has projected Intra State Transmission Charges at ₹44.51Crores as approved by the Commission in the MYT Order dated 28.03.2018 for the FY 2020-21. The details of expenses projected by the PDS are furnished in the table below:

Table 7.20: Intra State Transmission Charges projected by PDS

		(₹inCrores)
Sl.	Dontioulong	FY 2020-21
No.	Particulars	(Projected)
1	Intra State Transmission Charges	44.51

Commission's Analysis:

The Commission approved the Intra State Transmission Charges for the FY 2020-21, as detailed in table below.

Table 7.21: Intra State Transmission Charges approved by the Commission

		₹ inCrores)
Sl. No.	Particulars	FY 2020-21
1	Intra State Transmission Charges	44.51

The Commission therefore approves the Intra State Transmission Charges at ₹ 44.51 Crores for the FY 2020-21.

7.12 Employee Cost

PDS has furnished the total strength of employees in the table below:

Sl. No.	Particulars	2018-19 (Actuals)	2019-20 (Estimated)	2020-21 (Projected)
1	Number of employees as on 1st April	3002	2958	2984
2	Number of employees on deputation/ foreign service as on 1st April		0	0
3	Total Number of employees (1+2)	3002	2958	2984
4	Number of employees retired / retiring during the year	44	38	52
5	Number of appointments during the year	0	64	64
6	Number of employees at the end of the year (3-4+5)	2958	2984	2996

Table 7.22: Employee Strength

Employee productive parameters as shown below:

Table 7.23: Employee Productive Parameters

Sl.	Particulars	2018-19	2019-20	2020-21
No.	Faruculais	(Actuals)	(Estimated)	(Projected)
1	Number of Consumers	114006	115424	117733
2	Number of Employees	2958	2984	2996
3	Energy sold within state in MU	380.81	402.46	425.40
4	Employees per MU of energy sold	7.77	7.41	7.04
5	Employees for 1000 consumers	25.95	25.85	25.45

PDS has projected employee cost for the FY 2020-21 as shown in the table below:

Table 7.24: Employee Cost furnished by PDS

		(₹inCrores)
Sl.	Particulars	FY 2020-21
No.	I al ticulars	(Projected)
1	Employee Expenses	136.69

PDS has stated that employee cost include salaries, allowances, Bonus,Leave Travel Cocession (LTC) & Honorarium etc. Employee Cost have been estimated based on the actuals of the FY 2018-19. Employee Cost for the FY 2020-21 is projected by escalating the cost of the H1 of FY 2019-20 considering all factors affecting the employee costs.

Commission's Analysis:

PDS has furnished actuals for the FY 2018-19 in the Format prescribed. The employee's productivity parameters over last few years are provided below:

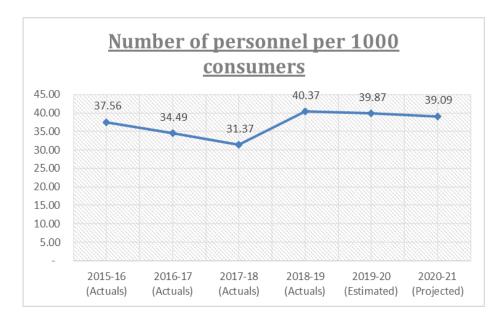


Chart 7.13: Number of personnel per 1000 consumers

It is observed that PDS has projected to reduce the number of personnel per 1000 consumers during the end of the FY 2020-21. Further, the PDS should take steps for rationalization & effective utilization of its manpower.

The Commission has considered all thefactors, the employee cost are approved by the Commission for the FY 2020-21as shown in table below.Further, the Commission directs PDS to furnish the details of Employee Cost at the time of Review & True-up.

Table 7.25: Employee Cost approved by the Commission

		(` ≢ nCrores)
Sl. No.	Particulars	FY 2020-21
1	Employee Expenses	94.78

The Commission therefore approves the employee cost at ₹94.78 Crores as projected by the PDS for the FY 2020-21. The above Employee Expenses are approved only for Distribution Function.

7.13 Administrative and General Expenses

The PDS has projected Administrative and General Expenses at ₹4.86Croresfor the FY2020-21. The Administrative and General Expenses include Computerization, Communication, Rent, Rates and Taxes, Travelling & Conveyance expenses, Insurance, Telephone and Postage expenses, Electricity and Water charges, Technical and Consultancy fee, freight and notional related expenses etc.The details of expenses projected by the PDS are furnished in the table below:

		(₹inCrores)
Sl.	Particulars	FY 2020-21
No.	1 al ticulai s	(Projected)
1	Administration & General Expenses	4.86

Commission's Analysis:

The Commission has considered all the factors, the A&G expenses are approved by the Commission for the FY 2020-21 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.

	(₹inCrores	
Sl. No.	Particulars	FY 2020-21
1	Administration & General Expenses	4.86

Table 7.27: Administration & Generation Expenses approved by the Commission

The Commission therefore approves the Administrative and General Expenses at ₹4.86 Crores as projected by the PDS for the FY 2020-21. The above Administrative and General Expenses are approved only for Distribution Function.

7.14 Repairs and Maintenance Expenses

The PDS has projected at ₹26.53 Crores for the 2020-21 towards Repair and Maintenance Expenses which includes expenses towards operation and maintenance of electrical equipment, plant & machinery, vehicles, furniture and fixtures, office equipment and buildings. The details of expenses projected by PDS are furnished in the table below:

 Table 7.28: Repair and Maintenance Expenses projected by PDS

(₹inCror		(₹inCrores)	
	Sl.	Particulars	FY 2020-21
	No.	1 al ticulai s	(Projected)
	1	Repair & Maintenance Expenses	26.53

Commission's Analysis:

The Commission has considered all the factors, the Repair and Maintenance Expenses are approved by the Commission for the FY 2020-21 as shown in table below. Further, the Commission directs PDS to furnish the details of Repair and Maintenance Expenses at the time of Review & True-up.

		(₹inCrores)
Sl. No.	Particulars	FY 2020-21
1	Repair & Maintenance Expenses	26.53

Table 7.29: Repair and Maintenance Expenses approved by the Commission

The Commission therefore approves the Repair and Maintenance Expenses at ₹26.53 Crores for the FY 2020-21. The above Repair and Maintenance Expenses are approved only for Distribution Function.

7.15 Capital Investment

The PDS has proposed a Capital Investment of ₹135.72 Crores during the FY 2020-21.The Capital Investment had projected by the PDS for the FY 2020-21, is furnished in the table below:

		(₹inCrores)
Sl.	Particulars	FY 2020-21
No.	raruculars	(Projected)
1	Schemes sanctioned under MDs	4.74
2	Building/Upgradation of Transformers	0.75
3	APDRP	0.00
4	NEC Schemes	4.07
5	NLCPR Schemes	0.00
6	State Share of NEC/NLCPR Schemes	0.00
7	CSS Schemes	0.00
8	RGGVY	0.00
9	DeendayalUpadhaya Gram JyotiYojana (DDUGJY)	32.15
10	Integrated power Dev. Scheme (IPDS)	51.31
11	State Share for Integrated power Dev. Scheme (IPDS)	42.70
12	Land compensation	0.00
13	Others	0.00
14	Grand Total	135.72

Table 7.30: Investment plan projected by PDS

Progress in completion of works and their capitalization is furnished in table below:

		(₹inCrores)
Sl.	Particulars	FY 2020-21
No.	i ai ticulai 5	(Projected)
1	Opening Balance	52.63
2	Add: New Investments	135.72
3	Total (1+2)	188.35
4	Less: Investment Capitalised	114.65
5	Closing Balance (3-4)	73.70

Table 7.31: Works in Progress

Commission's Analysis:

As seen from the above, the PDS has projected a capital investment of ₹135.72 Crores for the FY 2020-21. Further, the PDS has projected a capitalisation of ₹114.65Crores for the FY 2020-21. It is showing that the Petitioner has not submitted the detailed investment plan and cost benefit analysis of the schemes envisaged during the period. Regulation 25 & 26of SSERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2013, provides as follows:

"CapitalCost

- 1 Capital cost to be allowed by the Commission for the purpose of determination of tariff for Generating Company, Transmission Licensee and Distribution Licensee for their respective businesses will be based on the capital investment plan prepared by the Generating Company, Transmission Licensee or Distribution Licensee.
- 2 Capital cost for a project shall include:
 - (a) The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange rate variation on the loan during construction up to the date of commercial operation of the project, as admitted by the Commission after prudence check;

- (b) capitalized initial spares subject to the ceiling rates specified in these Regulations; and
- (c) additional capitalization determined under Regulation 26:

Provided that the assets forming part of the project but not put to use or not in use, shall be taken out of the capital cost.

3 The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff:

Provided that prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff.

4 The approved Capital Cost shall be considered for determination of tariff and if sufficient justification is provided for any escalation in the Capital Cost, the same may be considered by the Commission subject to the prudence check:

Provided that in case the actual capital cost is lower than the approved capital cost, then the actual capital cost will be considered for determination of tariff of the Generating Company or Transmission Licensee or Distribution Licensee.

- 5 The actual capital expenditure on date of completion, for the original scope of work based on audited accounts of the Company, limited to original cost, may be considered subject to the prudence check by the Commission.
- 6 Where the power purchase agreement or bulk power transmission agreement provides for a ceiling of capital cost, the capital cost to be considered shall not exceed such ceiling.
- 7 The capital cost may include capitalized initial spares:
 - (a) Upto 2.5% of original capital cost in case of coal based/lignite fired generating stations;
 - (b) Upto 4.0% of original capital cost in case of gas turbine/combined cycle generating stations;
 - (c) Upto 1.5% of original capital cost in case of hydro-generating stations; and

- (d) Upto 1.5% of original capital cost in case of Transmission Licensee and Distribution Licensee.
- 8 The amount of any contribution or deposit made by the consumers and Government grant, towards works for connection to the distribution system or transmission system of the Distribution Licensee or Transmission Licensee, shall be deducted from the original cost of the project for the purpose of calculating the amount under debt and equity under Regulation, 28.
- 9 Any expenditure on replacement, renovation and modernization or extension of life of old fixed assets, as applicable to Generating Company, Transmission Licensee and Distribution Licensee, shall be considered after writing off the net value of such replaced assets from the original capital cost and will be calculated as follows:

Net Value of Replaced Assets = OCFA – AD – CC;

Where;

- OCFA : Original Capital Cost of Replaced Assets;
- AD : Accumulated depreciation pertaining to the Replaced Assets;
- CC : Total Consumer Contribution pertaining to the Replaced Assets.

Additional Capitalization

- 1 The following capital expenditure, actually incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to the prudence check:
 - (a) Due to Un-discharged liabilities within the original scope of work;
 - (b) On works within the original scope of work, deferred for execution;
 - (c) To meet award of arbitration and compliance of final and unappeasable order or decree of a court arising out of original scope of works;
 - (d) On account of change in law;
 - (e) On procurement of initial spares included in the original project costs subject to the

ceiling norm laid down in Regulation 25.7;

(f) Any additional works/services, which have become necessary for efficient and successful operation of a generating station or a transmission system or a distribution system but not included in the original capital cost:

Provided that original scope of work along with estimates of expenditure shall be submitted as a part of Business Plan:

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of the generating Unit/Station or transmission system or distribution system.

Provided further that the assets forming part of the project but not put to use shall not be considered.

2 Impact of additional capitalization on tariff, as the case may be, shall be considered during Truing Up of each financial year of the Control Period."

As required above the petitioner is directed to provide the scheme wise details as required along with cost benefit analysis and approvals with future filings. Further, the petitioner has not submitted the basis of the capex and capitalization considered for the FY 2019-20. The petitioner is directed to submit the same & scheme wise detailed breakup for the ensuing year as well as for the past FY with next filings.

In view of the above the Commission provisionally approves the capital investment of ₹19.47 Crores against ₹135.72 Crores projected by the PDS for the FY 2020-21 and capitalisation of ₹30.52 Crores against ₹114.65 Crores projected by the PDS for the FY 2020-21.

7.16 Gross Fixed Assets (GFA)

The PDS has stated that the opening GFA for the FY 2019-20 has been taken from the assets register and works capitalised during the FY 2020-21 have been added and the GFA computed, as detailed in the table below:

Sl. No.	Year	(₹inCrores) FY 2020-21
1	Opening Balance	639.99
2	Addition during the year	30.52
3	Closing Balance	670.51

Table 7.32: Gross Fixed Assets Movement

Commissions Analysis:

In the absence of audited accounts the opening GFA as on 01.04.2019, furnished by the PDS cannot be taken into consideration for the purpose of allowing depreciation or return on equity etc.

7.17 Depreciation

The PDS has projected depreciation of ₹20.17 Crores for the FY 2020-21. The PDS has stated that the depreciation has been calculated on the value of the opening GFA plus additions during the yearat 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 7.33: Depreciation Projected by PDS

		(₹inCrores)
Sl.	Particulars	FY 2020-21
No.	i ai ticular ș	(Projected)
1	Depreciation	20.17

Commission's Analysis:

As discussed earlier, the depreciation on the opening GFA cannot be considered. The Commission has approved the Depreciation of ₹21.35 Crores as same as approved in the MYT Order dated 28.03.2018 for the FY 2020-21, as detailed in the table below:

(₹inCrore		(₹inCrores)
Sl. No.	Particulars	FY 2020-21
1	Opening GFA	389.00
2	Additions during the Year	30.52
3	Closing GFA	419.52
4	Average GFA	404.26
5	Rate of depreciation	5.28%
6	Depreciation	21.35

The Commission therefore approves the Depreciation at ₹21.35 Crores for the FY 2020-21. The above Depreciation are approved only for Distribution Function.

7.18 Interest and Finance Charges

The PDS has not projected interest and finance charges during the FY 2020-21.

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 2020-21.

7.19 Interest on Working Capital

The PDS has projected interest on working capital at ₹13.77 Crores for the FY 2020-21 on normative basis as per 32.3 of SSERC(Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2013, on requirement of:

- Operation & maintenance expenses for one month; plus
- Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus
- Receivables equivalent to two (2) months of the expected revenue from charges for use of Distribution Wires at the prevailing tariffs; minusmonthRepair &Maintenance Cost and
- 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.

The rate of interest on working capital has been considered as per State Bank Advance Rate (SBAR) as on 1st April of the respective yeari,e. 01.04.2019.

The PDS has worked out interest on working capitalas detailed in the table below:

		(₹inCrores)
Sl.	Particulars	FY 2020-21
No.	Farticulars	(Projected)
1	O & M Expenses for 1 month	14.01
2	Maintenance Spares @1% plus esclation @ 6% per annun	n 6.71
3	Receivables equivalent to 2 month's Revenue	79.10
4	Total Working Capital	99.82
5	Less: Security Deposit of Consumers	-
6	Net Working Capital	99.82
7	SBI Advance Rate	13.80%
8	Interest on Working Capital	13.77

Table 7.35: Interest on Working Capital Projected by PDS

Commission's Analysis:

As per Regulation as per 32.3 of SSERC(Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2013, 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:

_		(₹inCrores)
Sl. No.	Particulars	FY 2020-21
1	O & M Expenses for 1 month	10.51
2	Maintenance Spares @1% plus esclation @ 6% per annun	n –
3	Receivables equivalent to 2 month's Revenue	78.35
4	Total Working Capital	88.87
5	Less: Security Deposit of Consumers	-
6	Net Working Capital	88.87
7	SBAR as on 01.04.2019	9.05%
8	Interest on Working Capital	8.04

Table 7.36: Interest on Working Capital approved by the Commission

The Commission approves the Interest on Working Capital at ₹8.04 Crores for the FY 2020-21. The above Interest on Working Capital are approved only for Distribution Function.

7.20 Return on Equity

The PDS has not projected Return on Equity during the FY 2020-21.

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, 2013, 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.

7.21 Provision for Bad Debts

The PDS has not claimed any provision for bad debts during the FY 2020-21.

7.22 Non-Tariff Income

The PDS has projected a Non-Tariff Income₹1.35Croresfor the FY 2020-21.

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, 2013, non-tariff income comprises of:

- Income from rent of land or buildings;
- Income from sale of scrap;
- Income from statutory investments;
- Interest on delayed or deferred payment on bills;
- Interest on advances to suppliers/contractors;
- Rental from staff quarters;
- Rental from contractors;
- Income from hire charges from contactors and others;
- Income from advertisements, etc.;
- Meter/Metering equipment rentals;
- Revenue from late payment charges;
- Recovery for theft and pilferage of energy
- Miscellaneous receipts;
- Interest on advances to suppliers;
- Excess found on physical verification;
- Prior period income.

The PDS has stated that most of the consumers buy and use their own energy meters and non-tariff income from meter rent is only received against meters provided by the department.

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 ₹1.35 Crores.

The Commission approves the Non-Tariff Income at ₹1.35 Crores for the FY 2020-21, as projected by the PDS for the FY 2020-21.

7.23 Revenue from Existing Tariff

The PDS has projected revenue from sale of energy with existing tariff at ₹256.45 Crores within the states for the FY 2020-21. Further, the PDS has projected revenue from outside state sale at ₹218.14 Crores for the FY 2020-21.

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 tablebelow:

Sl. No.	Particulars	Energy Sales (In MUs)	Average Rate (₹/Kwh)	Amount (₹inCrores)
1	Domestic	125.39	2.63	32.99
2	Commercial	44.02	5.23	23.04
3	Public Lighting	0.30	4.26	0.13
4	Temporary Supply	5.17	7.50	3.88
5	HT Industrial	217.93	7.64	166.43
6	LT Industrial	5.39	4.04	2.18
7	Bulk Supply	27.19	6.56	17.83
8	Total sales within State	425.40	5.79	246.48
9	Sales Outside State	746.27	3.00	223.65
10	Total Sales (8+9)	1171.67	4.01	470.13

Table 7.37: Revenue at Existing Tariff as approved by the Commission for FY 2020-21

The Commission approves revenue from sale of energy with existing tariff at ₹246.48 Crores on sale of 425.40 MUs within the state at an average rate of ₹5.79/kWh & ₹223.65 Croreson sale of 746.27 MUs from outside State sale at an average rate of ₹3.00/kWh for the FY 2020-21.

7.24 Aggregate Revenue Requirement (ARR) and Gap

The Aggregate revenue requirement and gap projected by PDS for the FY 2020-21 is furnished in table below.

_		FY 2020-21	
Sl. No.	Particulars	(As approved by the Commission in MYT Order dated 28.03.2018)	FY 2020-21 (Projected)
1	Cost of Fuel	0.18	0.22
2	Cost of Generation	19.19	19.19
3	Cost of Power Purchase	250.50	282.66
4	Intra State Transmission Charges	44.51	44.51
5	Employee Costs	88.52	136.69
6	Repair & Maintenance Expenses	15.67	26.53
7	Administrative and General Expenses	0.95	4.86
8	Depreciation	21.35	20.17
9	Interest Charges	-	-
10	Interest on Working Capital	8.16	13.77
11	Return on NFA/Equity	-	-
12	Total Revenue Requirement	449.03	548.61
13	Less: Non Tariff Income	1.65	1.35
14	Net Revenue Requirement	447.38	547.26
15	Revenue from Tariff		256.45
16	Revenue from Sale Outside the State		218.14
17	Gap		72.66

Table 7.38: Aggregate Revenue Requirement projected by PDS

(₹inCrores)

Based on the approvals of the above projections, the ARR& Gap of PDS for the FY 2020-21 works out as detailed in table below:

		(₹inCrores)
Sl. No.	Particulars	FY 2020-21
1	Cost of Fuel	0.22
2	Cost of Generation	19.19
3	Cost of Power Purchase	291.19
4	Intra State Transmission Charges	44.51
5	Employee Costs	94.78
6	Repair & Maintenance Expenses	26.53
7	Administrative and General Expenses	4.86
8	Depreciation	21.35
9	Interest Charges	-
10	Interest on Working Capital	8.04
11	Return on NFA/Equity	-
12	Total Revenue Requirement	510.68
13	Less: Non Tariff Income	1.35
14	Net Revenue Requirement	509.33

Table 7.39: Aggregate Revenue Requirement approved by the Commission

Accordingly, the Commission approves the Aggregate Revenue Requirement at ₹509.33 Crores against ₹ 547.26 Crores projected by PDS for the FY 2020-21.

7.25 Revenue Gap for the FY 2020-21

Based on the Aggregate Revenue Requirement and revenue from existing tariffs for FY 2020-

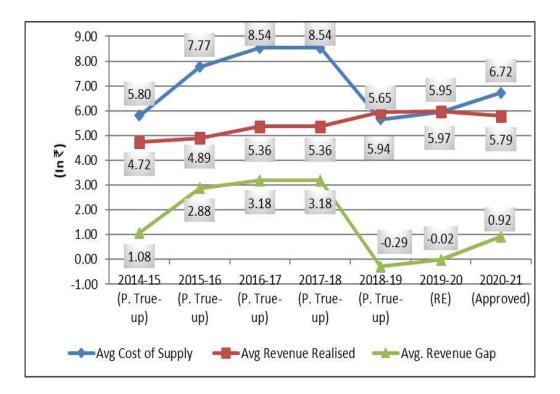
21, the resultant GAP is as shown in the table below.

Table 7.40: Approved Revenue	at Existing Tariff & Gap
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		(₹inCrores)
Sl. No.	Particulars	FY 2020-21
1	Net Revenue Requirement	509.33
2	Revenue from Tariff	246.48
3	Revenue from Sale Outside the State	223.65
4	Gap	39.20
5	Energy Sales within the State	425.40
6	Energy Sales outside the State	746.27
7	Average Cost of Supply ₹/kWh	6.72

The Revenue gap of ₹39.20 Crores has been arrived at on the basis of the approved data for the FY 2020-21. The Revenue Gap is about 7.70% of the net Revenue Requirement. The average cost of supply for the FY 2020-21 is ₹6.72/kWh & average revenue from tariff is ₹5.79/kWh. The average revenue gap is ₹0.92/kWh.

The chart below provides the trend of Cost of Supply, Average Revenue & Gap over the past few years.





The Commissionis of the view that the PDS shall make efforts to bridge the revenue gap by improving the operational performance, particularly by reduction of distribution losses which, in turn, would reduce the resource gap. A concerted effort needs to be made to recover the outstanding arrears, especially from government departments & other high end users in the State, i.e., industrial units, hotels, etc. The Commission observes that a sizeable quantum of power is purchased by the PDS for meeting the energy demand of the State (within the State consumption). The PDS needs to make efforts to improve its own generation, so that a sizeable part of the State's demand is met from its own generation.

7.26 Recovery of Revenue Gap for the FY 2020-21

As seen from para7.25 above, there is a revenue gap of ₹39.20 Crores during the FY 2020-21 which is 7.70% of net ARR for the FY 2020-21. The existing tariff was fixed with effect from 01.04.2020.PDS does not propose to recover the entire Gap as this may result in huge burden on the consumers. Tariff is a sensitive subject having substantial impact on social, economic and financial well-being of the public at large as well as the viability and growth of power sector. Recovery of entire Gap through tariff increase is not practicable as this would make power unaffordable to the general consumers.

PDS being a Government Department funded by budgetary support from State Government, it proposes to absorb the unrecovered gap. However, PDS proposed an average increase in tariffto bridge the gap partially.

As such, the Commission considers it to revise the tariffs at an average of 6.48% without giving tariff shock to consumers to bridge the gap partially. Owing to revision of tariffs, the PDS is expected to get additional revenue of ₹15.97 Crores as detailed in table below:

Sl. No.	Category	Energy Sales (In MUs)	Total (₹ in Crores)
1	Domestic (DLT)		
a)	Up to 50 units	49.17	4.92
b)	51 to 100 units	29.17	5.83
c)	101-200 units	21.15	6.35
d)	201 to 400 units	17.02	5.96
e)	401 & above	8.87	3.55
	Total	125.39	26.60
2	Commercial (CLT)		
a)	Up to 50 units	6.51	1.95
b)	51 to 100 units	7.29	2.92
c)	101 to 200 units	11.86	5.93
d)	201 to 400 units	10.56	6.34
e)	401 & above	7.80	4.92
	Total	44.02	22.05
3	Public lighting		
a)	Rural Areas	0.09	0.04
, b)	Urban Areas	0.21	0.10
,	Total	0.30	0.14
4	Temporary	5.17	3.88
5	Industrial		
	HT		
	Upto 100 KVA	11.76	9.47
-	100 - 250 KVA	24.26	20.84
	250- 500 KVA	49.61	41.95
e)	500 KVA & above	132.30	115.97
	Total HT	217.93	188.20
В	LT (Rural)		
a)	Up to 500 units	4.97	2.24
	501 - 1000 units	0.14	0.09
c)	1001 & above	0.12	0.08
	Total	5.23	2.40
С	LT (Urban)		
a)	Up to 500 units	0.01	0.01
	501 - 1000 units	0.01	0.01
	1001 & above	0.13	0.10
	Total	0.15	0.12
	Total LT (B+C)	5.39	2.52
	Total Industrial (A+B+C)	223.32	190.74
6	Bulk supply		
a)	<u>,</u> ц	11.82	8.27
	HT	15.37	10.76
	Total	27.19	19.03
7	Grand Total	425.40	262.45

Table 7.41: Revenue from revised Tariff approved by the Commission for FY 2020-21

Sikkim State Electricity Regulatory Commission

With the revision of tariff, the PDS will generate additional revenue of ₹15.97Crores.Thereby, the revenue gap is calculated to ₹23.23Crores (i.e. ₹39.20 Crores–₹15.97 Crores), which the PDS shall meet by improving internal efficiency.

The Commission, accordingly, approves revenue from revised tariffs at ₹262.45 Crores with the energy sales of 425.40 MUs.The Revenue gap has been reduced to ₹23.23 Crores as against ₹39.20 Crores (approved in Para 7.25) and has been arrived on the basis of the approved data for the FY 2020-21.

8. DIRECTIVES AND ADVISORIES

Introduction

The Hon'ble Commission in its Tariff Order Dated 29th May, 2019 for the FY 2019-20 and also in the Tariff Orders issued prior to FY 2019-20, had issued a number of Directives for compliance by the PDS. The directives were issued by the Hon'ble Commission keeping into consideration the various measures and steps required to be taken for not only improving the overall performance and efficiency of the department but also to ensure that the quality of service to the consumers improves in the long run. The compliance of directives would also ensure that the PDS is complying with the various guidelines, notifications and policy decisions issued/taken by the Government of India vis-à-vis the rules and regulations notified by the Hon'ble Commission.

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.

Directive 22: Renewable Energy Projects

As the Government of India is keen on building up its Renewable Energy capacity, the State could also look at the option of taking up Renewable Energy projects to increase its overall generation capacity. As per the Solar Radiation data available with the Ministry of new and Renewable Energy, the annual average solar radiation at Gyalshing is 3.70 KWh/M²/Day); Namchi is 4.79 KWh/M²/Day) and Gangtok 2.89 KWh/M²/Day). The annual average insulation data available in the State is much better than the data shown against some of the European countries who have gone in for major solar projects.

Compliance:

The State Government has notified rooftop solar policy and all industrial units in the State have been requested to install solar PV system in their premises. Also, some progress has been made through centrally aided projects. The status report on the Solar Rooftop Projects under Sikkim Renewable Energy Development Agency (SREDA) is enclosed vide Enclosure A.

Commission's comments:

The Commission welcomes and appreciates the steps taken by the PDS for notification of the State Rooftop Solar Policy. The Hon'ble Commission feels that having a policy is only a small step and massive efforts need to be made by the PDStowards addition of solar power generation in the State. The Hon'ble Commission directs both the PDSand the SREDA to vigorously pursue the new solar projects proposals submitted to the MNRE so as to ensure that timely approval/sanction is accorded. The Hon'ble Commission also directs to the SREDA and the PDS to complete the processes for approval to float the NIT in a time bound manner.

Directives issued in the FY 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 the 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 feared 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 line with the observation of the Hon'ble Commission, Department is making all efforts to revive the non functional power houses. The renovation of 12 MW Lower LagyapHydel Project is completed and the commissioning is stalled due to public resentment in the water conductor system. 4 MW Meyongchu HEP in North Sikkim has been renovated and has retrieved its generation and at present both the units are generating. 3 MW Rabomchu HEP

in North Sikkim and 2 MW Kalez Khola HEP in West Sikkim have problem in water conductor and intake structure requiring certain funds for restoration and requisition for the same has been placed before the State Government.

Commission's comments:

The Hon'ble Commission is of the view that it is very important for the Power Department to re-operationalize its own powerhouses and increase its own generation. The Hon'ble Commission is of the opinion that the issues and grievances of the public need to redressed by the Department through proper dialogue keeping the Project idle inspite of it being ready for re-commissioning is neither in the interest of the Department nor for the State. The Hon'ble Commission advises the to Department work out the detail revenue generation possible from the stalled projects and submit a report to the State Government highlighting the financial benefits of re-commissioning of the projects, justifying the allocation of funds needed for restoration/repair. The Hon'ble Commission feels that if the stalled projects are not taken up for timely restoration, their condition will further deteriorate rendering the projects worthless.

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 phase manner beginning with the major towns/cities in phase -1 and other areas in later phases.

Compliance:

Action in this regard has already been initiated. The Feeder metering and 100% consumer metering are under way through IPDS and DDUGJY.

Commission's comments:

The Commission reiterates the directive and directs the Department to initiate steps for segregation of the losses.

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 the energy audit to identify the high loss areas and submit a report before filing of the next petition.

Compliance:

100% metering will be achieved through IPDS and DDUGJY. Installation of prepaid meters has already been started in the following major towns such as Rangpo, Singtam and Jorethang. Remaining towns are expected to be taken up subsequently. Also, vigilance squads have been formed for checking pilferages.

Commission's comments:

The Hon'ble Commission takes note of the efforts being made by the Department and at the same time directs the Department to invariably try and conduct energy auditing.

Directives issued in the FY 2017-18 Tariff Order

Directive 1: Solar Rooftop Projects

The PDS is directed to submit the status of the master plan/proposal prepared/proposal already approved and sanctioned by the Government of India for implementation of Roof Top Solar Projects in Privatte and Government Buildings in the State along with the details of capacity anticipated and area of roof top available within a period of two months from the date of this order.

Compliance:

A comprehensive list indicating the status of Solar Power Project under implementation/ sanctioned and submitted for approval and sanction by MNRE is attached vide Annexure A1 and A2. The following steps are being taken by the department/SREDA to expedite the installation of solar power plants and increase the solar generation as well as meet up the RPO obligation:

The solar policy of the state encourages installation of Solar Power Plants by individual consumers on their rooftop and supply the surplus to the State Grid. Power Department has directed the private industries and Pharmaceutical Companies to install solar power plants. The Energy Conservation Building Code for the State has framed and awaiting Government approval. The code mandates commercial buildings to install solar rooftop plants depending upon their contract demand. Draft copy of the ECBC Rule is forwarded to the UD&HD for observation and that shall be included in the Building By-laws after notification of the Code. With the Technical Assistance of MNRE, SREDA & Power Department are working jointly to empanel Vendors for executing Solar Projects in the State and develop Unified Web Portal for Solar Power interconnection to facilitate consumers for Grid Connected Solar Power Project of 166 kWp has been approved by the Government to be installed at Tashiling Secretariat Block 1 and 2 on BOOT model. Process of conducting survey of Government Premises like, Session Courts, Primary Health Centres, Wireless stations, etc. at districts is underway for installation of solar plants.

Commission's comments:

The Hon'ble Commission lauds the steps taken by the Department for development of solar roof top power in the State. The Hon'ble Commission feels that having all the rules, guidelines,codes etc. in place is very important to facilitate clarity and ease of developing solar projects by prospective individuals,Companies etc. The Department/SREDA is directed to expedite notification of the ECB Rule.

Directives issued in the FY 2019-20 Tariff Order

Directive 1: Energy Efficiency

The Department is directed to comply with the provisions of the Energy Efficiency Act, 2001 and ensure that steps be taken for appointment of inspection officers and also designate

the State Designated Agency for Energy Efficiency as required under the Act.

Compliance:

Power department is notified as State Designated Agency in order to promote the policies & programs of Bureau of Energy efficiency on efficient use of energy and its conservation in the State. Power Department/SDA has designated Electrical Inspector, GoS as the Inspecting Officer under the EC Act 2003.

Commission's comments:

The Hon'ble Commission is happy to note that the Department has complied with the directives of the Commission.

Directive 2: Collection of Electricity Bill in Rural Areas

The Department may explore the possibility of extending bill collection desk or centres in villages to provide the rural consumers the ease of paying their electricity bill. Alternatively, the Department may entrust collection of bills by the Office of the Gram Panchayats or local registered NGOs or self help groups. Such steps will not only improve the billing and revenue collection of the Department but will also encourage the rural consumers to pay their bills on time and avoid their travelling to the banks and queuing up in long lines.

Compliance:

The advice of the Hon'ble Commission is noted please.

Commission's comments:

The Hon'ble Commission reiterates the advice/suggestion and opines that the Department must think out of box and come out with innovative ways and means to encourage the rural consumers to pay their bills on time. Pilferage of electricity and lack of proper billing are the main cause of high revenue losses in the rural areas. The Department must initiate steps to check pilferage and timely collection of bills, if it intends to improve the revenue collection and reduce the losses.

Directive 3: Timely furnishing of data/information/replies

The Commission receives requests and directives from Ministry of Power, Government of India and other agencies like the Forum of Regulators, Central Electricity Authority (CEA), Central Electricity Regulatory Commission etc. seeking data/information pertaining to the power sector, which need time bound replies. The Commission observes that the Department is not only very slow in furnishing of such data/information requested but also tends to ignore the letters being issued by the Commission. The Department often doesn't furnish the requisite data/information on time and most occasions don't respond to the letters sent by the Commission inspite of repeated reminders. The Commission directs the Department that action be taken to ensure that proper and timely replies/responses be given to all letters and communications sent by the Commission.

Compliance:

The advice of the Hon'ble Commission is noted please.

Commission's comments:

The Commission reiterates the directives and stresses that the Department must furnish replies/responses and other information/data sought by the Commission within the stipulated time frame. Non-adherence of the directives will be viewed seriously by the Commission in future .

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:

Presently the Department has thermal power allocation from Six Stations of NTPC & Its subsidiaries totalling to 90 MW which is flagged as " A ". A committee has been constituted in the Department vide order no : 141/Adm dated 28/04/2019 for the samesubject and the same is flagged as " B ". The committee had its first meeting and a general consensus amongst the members was that thermal power allocation of 88 MW was necessary for the Department as the existing annual consumption growth in the state was roughly 6-7%. This will provide the necessary energy security along with enough quantum of Energy to tide over the maximum drawl period of winter months. From the existing thermal allocation, the allocation of Kantee Bijlee Utpadan Nigam Ltd (KBUNL , 2 MW) could be surrendered.

In addition to the allocation from these six thermal plants there are some more Power Purchase Agreements with NTPC & Subsidiaries for which the Department & the State Government has been corresponding with NTPC & Ministry of Power, GOI for termination/cancellation. The status of same had been made available to the Hon'ble commission vide letter no 30/GOS/E&P/TRD/2018-2019/97 dated 7/3/2019.

There has been further communication with Ministry of Power, GOI & NTPC on the subject of cancellation/termination of Power Purchase Agreements and for latest status photocopy of these letters are appended and flagged as "C".

Commission's comments:

The Commission takes note of the efforts made by the Department and directs the

Department to vigorously continue pursuing the same with the Government of India at appropriate level.

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:

A comprehensive list indicating the status of Solar Power Project under implementation/ sanctioned and submitted for approval and sanction by MNRE is attached vide Annexure A1 and A2.

The following steps are being taken by the department/SREDA to expedite the installation of solar power plants and increase the solar generation as well as meet up the RPO obligation:

The solar policy of the state encourages installation of Solar Power Plants by individual consumers on their rooftop and supply the surplus to the State Grid. Power Department has directed the private industries and Pharmaceutical Companies to install solar power plants. The Energy Conservation Building Code for the State has framed and awaiting Government approval. The code mandates commercial buildings to install solar rooftop plants depending upon their contract demand. Draft copy of the ECBC Rule is forwarded to the UD&HD for observation and that shall be included in the Building By-laws after notification of the Code. With the Technical Assistance of MNRE, SREDA & Power Department are working jointly to empanel Vendors for executing Solar Projects in the State and develop Unified Web Portal

for Solar Power interconnection to facilitate consumers for Grid Connection. This will ease and encourage the individual consumers. As a demonstration project Grid Connected Solar Power Project of 166 kWp has been approved by the Government to be installed at Tashiling Secretariat Block 1 and 2 on BOOT model. Process of conducting survey of Government Premises like, Session Courts, Primary Health Centres, Wireless stations, etc. at districts is underway for installation of solar plants.

Commission's comments:

The Commission takes note of the actions initiated by the Department and directs the Department to expedite the process of approval and notification of necessary rules, codes etc.

Fresh Directives (FY 2020-21)

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 subregulation (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) <u>SSERC (Redressal of Grievances of Consumers and Establishment of Forum of Electricity</u> 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.

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, 2018-19 and 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.

Further ,the Department is directed to submit the necessary supporting documents like power purchase bills and other details (for power purchased from mini,micro, small hydropower and generation data of own powerhouses , details of solar power purchased/generated, details of RECs, details of 25 MW and above hydropower purchased, details of free power received from IPP/NHPC /Other sources) alongwith the RPO compliance report. All the supporting documents and details to be duly certified by the concerned Officer (s).

9. TARIFF PRINCIPLES AND DESIGN

9.1 Background

(a) The Commission in determining the revenue requirement of PDS for the ARRand retail tariff for the FY 2020-21has 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, 2013, Multi Year Tariff (First Amendment) Regulations, 2015 and Multi Year Tariff (Second Amendment) Regulations, 2017. 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.The PDS had filed its petition before the Hon'ble Commission for the FY 2018-19 as per the MYT Regulation, 2013 and the Commission issued the MYT Order on 28th March, 2018. Now, the PDS had filed its petition before the Hon'ble Commission for the FY 2019-20 as per the MYT Regulation, 2013.

- (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.
 For example, if the average cost of service is ₹3.00 per unit, at the end of year 2018-19, the tariff for the Cross subsidized categories excluding those referred to in para-1 above should not be lower than ₹ 2.40 per unit and that for any of the Cross subsidizing categories should not go beyond ₹3.60 per unit.
- (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, 2013 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 2020-21 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. ThePDS has proposed tariff revision as indicated in table below:

Sl. No.	Category of Consumers	Existing Rate Paisa/kWh	Proposed Rate Paisa/kWh
	Domestic U	120	120
,	Up to 50 units	120	130
	51 to 100 units	240	250
/	101-200 units	370	380
	201 to 400 units	460	470
/	401 & above	500	510
2	Commercial		
	Up to 50 units	330	340
	51 to 100 units	400	410
	101 to 200 units	560	570
,	201 to 400 units	600	600
	401 & above	640	640
3	Public lighting		
	Rural Areas	300	300
	Urban Areas	500	500
4	Industrial		
Α	НТ		
	HT (AC) above 3.3 KV		
,	Upto 100 KVA	400	425
	100 - 250 KVA	450	470
/	250- 500 KVA	500	525
	500 KVA & above	550	600
	LT (Rural)		
,	Up to 500 units	360	360
	501 - 1000 units	440	440
,	1001 & above	580	580
	LT (Urban)		
	Up to 500 units	530	535
	501 - 1000 units	620	625
c)	1001 & above	715	715
5	Bulk supply		
a)	LT	650	650
b)	HT	660	660

Table 9.1: Existing Tariffs v/s proposed Tariffs for FY 2020-21

(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 case no.: MYT/2019-20/P-01/PDSof PDS for approval of Aggregate Revenue Requirement (ARR) and determination of retail tariff for sale of energy and having approved aggregate revenue requirement under Para 7.24, the Commission has revised the tariff for different categories of consumers as detailed in the table below:

Sl. No.	Category of Consumers	Monthly Minimum Charges (₹/Consumer)	Demand Charges (HT Supply only) (₹/kVA/Month)	Approved Energy Charges (Paisa/kWh)
1	Domestic			
	Up to 50 units			100
	51 to 100 units			200
· · · ·	101-200 units	Single Phase - 40		300
	201 to 400 units	3 Phase - 200		350
	401 & above			400
2	Commercial			400
	Up to 50 units			300
· · · · ·	51 to 100 units			400
	101 to 200 units	Single Phase - 200		500
· · · · ·	201 to 400 units	3 Phase - 500		600
· · · · ·	401 & above			630
· · · · ·	Public lighting			
	Rural Areas			400
	Urban Areas			500
4	Industrial			
Α	HT			
a)	HT (AC) above 3.3 KV			
b)	Upto 100 KVA		200	500
c)	100 - 250 KVA		250	550
d)	250- 500 KVA		290	600
e)	500 KVA & above		555	650
В	LT (Rural)			
a)	Up to 500 units			450
b)	501 - 1000 units	120		600
c)	1001 & above			650
	LT (Urban)			
a)	Up to 500 units			650
b)	501 - 1000 units	200		700
c)	1001 & above			800
5	Bulk supply			
· · · · ·	LT	200		700
b)	HT	200		700

 Table 9.2:Tariffs approved by the Commission for FY 2020-21

Details are given in tariff schedule in the Appendix.

This order shall come into force from 01.04.2020 and shall remain effective till revised/ amended by the Commission. The Order shall be uploaded in the official website of Commission and copies to be forwarded to the 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. MYT/2020-21/P-01/PDS stands disposed of.

Sd/-

(N. R. Bhattarai) Chairperson

Place: Gangtok Date: 16.03.2020.

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:

			(In %)
Sl.	Particulars	Wire	Retail Supply
No.	T articulars	Business	Business
1	Cost of Fuel	-	100.00
2	Cost of Power Purchase	-	100.00
3	Employee Costs	60.00	40.00
4	Repair & Maintenance Expenses	90.00	10.00
5	Administrative and General Expenses	50.00	50.00
6	Depreciation	90.00	10.00
7	Interest Charges	90.00	10.00
8	Interest on Working Capital	10.00	90.00
9	Return on NFA/Equity	90.00	10.00
10	Non Tariff Income	10.00	90.00

Table 10.1: Allocation Matrix

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 20-21
--------------------------------------	----------------------------------

				(₹ inCrores)
Sl.	Particulars	Approved	Wire	Retail Supply
No.	1 al ticulars	Total Cost	Business	Business
1	Cost of Fuel	0.22	-	0.22
2	Cost of Generation	19.19	-	19.19
3	Cost of Power Purchase	291.19	-	291.19
4	Intra State Transmission Charges	44.51	44.51	-
5	Employee Costs	94.78	56.87	37.91
6	Repair & Maintenance Expenses	26.53	23.88	2.65
7	Administrative and General Expenses	4.86	2.43	2.43
8	Depreciation	21.35	19.22	2.14
9	Interest Charges	-	-	-
10	Interest on Working Capital	8.04	0.80	7.24
11	Return on NFA/Equity	-	-	-
12	Less: Non Tariff Income	1.35	0.14	1.22
13	Total	509.33	147.57	361.76

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 2020-21 and shownin the table below:

Sl. No.	Particulars	FY 2020-21
1	ARR for wheeling function approved By the Commission (In RsCrores)	147.57
2	Total sales within State - approved (In MUs)	425.40
3	Wheeling Tariff (₹/kWh)	3.47

Table 10.3: Wheeling Tariff approved by the Commission

The Commission approves wheeling Tariff at ₹3.47/kWh for the FY 2020-21.

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 Accordingly, The Commission has specified the formula for working out the Fuel and power purchase cost Adjustment (FPPCA) charges and other terms and conditions of FPPCA. Accordingly, the distribution licensee is to recover the FPPCA charges as per formula specified below:

The Fuel and Power Purchase Cost Adjustment (FPPCA) formula is given below:

$$\frac{Q_{c}(RC_{2}-RC_{1})+Q_{0}(RO_{2}-RO_{1})+Q_{pp}(R_{pp2}-R_{pp1})+V_{z}+A}{(Ps./kWh)} = \frac{Q_{c}(RC_{2}-RC_{1})+Q_{0}(RO_{2}-RO_{1})+Q_{pp}(R_{pp2}-R_{pp1})+V_{z}+A}{(QP_{g1}+Q_{pp1}+Q_{pp2})} X [1 - \frac{L}{100}] X 100$$

Where,

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

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

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

 R_{c2} = Weighted average base rate of coal supplied ex-power station coal yard for

the adjustment period in ₹/MT

- Q_o = Actual Quantity of oil (in KL) consumedduringthe adjustmentperiodornormativeoilconsumptionasperTarifforderwhicheverisless.
- R_{o1} = Weighted average baserate f oil expowerstation($\overline{\langle KL}$)approved by the Commission for the adjust ment period.
- R_{o2} = Weightedaverageactualrateofoil expowerstationsupplied(₹/KL)duringtheadjustmentperiod.
- Q_{pp} = Total powerpurchasedfromdifferent sources(kWh)=Qpp2+Qpp3

$$Q_{pp1} = Q_{pp3} \left[1 - \frac{TL}{100}\right]$$
 in kWh

TL = Transmissionloss(CTU)(inpercentageterms).

- Q_{pp2} = Power Purchase from sources with delivery point within the state transmission or distribution system (in kWh)
- Q_{pp3} = Power Purchase from sources on which CTU transmission loss is applicable (in kWh)
- R_{pp1} = Average rate of Power Purchase as approved by the Commission (₹/kWh)
- R_{pp2} = Average rate of Power Purchase as approved by the Commission (₹/kWh)
- Q_{pg} = Own power generation (kWh)
- Q_{pg1} = Own Power generation (kWh) at generator terminal approved auxiliary consumption
- L = Percentage T&D loss as approved by the Commission or actual, whichever is lower.

- SHR = Station Heat Rate as approved by the Commission (Kcal / kWh)
- TSL = Percentage Coal Transit and Stacking Loss as approved by the Commission
- GCV = Weighted average gross calorific value of coal as fired basis during the adjustment period (Kcal / Kg)
- Vz = Amount of variable charges on account of change of cost of unknown factors like water charges, taxes or any other unpredictable and unknown factors not envisaged at the time of Tariff fixation subject to prior approval of the Commission (₹)
- A = Adjustment, if any, to be made in the current period to account for any excess
 / shortfall in recovery of fuel of Power Purchase cost in the past adjustment
 period, subject to the approval of the Commission (₹)

PSE = Power sold to exempted categories (Presently Agriculture and BPL-KutiriyotiConsumers)

If there are more than one power station owned by the Licensee Qc, Rc1, Rc2, Qo, Ro1, Rot, Qpg and Qpgi will be computed separately for each power station and sum of the increase/decrease of cost of all power stations shall be taken into consideration. Can levy FPPCA charges with the prior approval of the Commission. Levy of FPPCA charges shall be subject to the following terms and conditions.

11.3 Terms and Conditions for application of the FPPCA formula

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

10% of the approved avg. cost of supply in the Tariff order and balance amount, if any, in the FPPCA over and above this ceiling shall be carried forward to be billed in subsequent month.

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

REVENUE FROM APPROVED TARIFF FOR THE FY 2020-21

Annexur -1

Sl. No.	Category	No. of Consumers	Connected Load (In MW)	Contracted Max. Demand (In KVA)	Energy Sales (In MUs)	Demand Charges (`/KVA/ Month)	Energy Charges (₹/Kwh)	Demand Charges (₹in Crores)	Energy Charges (₹in Crores)	Total (₹in Crores)
	Domestic (DLT)									
<i>,</i> ,	Up to 50 units	102,346			49.17		1.00	-	4.92	4.92
	51 to 100 units	81,877			29.17		2.00	-	5.83	5.83
	101-200 units	30,704			21.15		3.00	-	6.35	6.35
- í	201 to 400 units	6,141			17.02		3.50	-	5.96	5.96
· · ·	401 & above	614			8.87		4.00	-	3.55	3.55
	Total	102,346			125.39			-	26.60	26.60
2	Commercial (CLT)									
a)	Up to 50 units	12,240			6.51		3.00	-	1.95	1.95
b)	51 to 100 units	12,000			7.29		4.00	-	2.92	2.92
c)	101 to 200 units	9,600			11.86		5.00	-	5.93	5.93
d)	201 to 400 units	7,200			10.56		6.00	-	6.34	6.34
e)	401 & above	3,600			7.80		6.30	-	4.92	4.92
	Total	12,240			44.02			-	22.05	22.05
3	Public lighting									
a)	Rural Areas	13			0.09		4.00	-	0.04	0.04
b)	Urban Areas	24			0.21		5.00	-	0.10	0.10
	Total	37			0.30			-	0.14	0.14
4	Temporary				5.17			-	3.88	3.88
	Industrial									
Α	НТ									
a)	HT (AC) above 3.3 KV									
	Upto 100 KVA	612		14,960	11.76	200.00	5.00	3.59	5.88	9.47
	100 - 250 KVA	371		25,000		250.00	5.50	7.50	13.34	20.84
d)	250- 500 KVA	191		35,000		290.00	6.00	12.18	29.77	41.95
	500 KVA & above	117		45,000			6.50		86.00	115.97
	Total HT	612			217.93			53.24	134.98	
В	LT (Rural)									
	Up to 500 units	561			4.97		4.50	-	2.24	2.24
	501 - 1000 units	253			0.14		6.00	-	0.09	0.09
	1001 & above	120			0.14		6.50	-	0.08	0.08
	Total	561		650		60.00	5.50	0.05	2.40	2.40
	LT (Urban)	501			3.23			5.05		
	Up to 500 units	39			0.01		6.50	-	0.01	0.01
· · · ·	501 - 1000 units	39			0.01		7.00		0.01	0.01
	1001 & above	55			0.01		8.00		0.10	0.01
<i>,</i>	Total	39		900		100.00	0.00	0.11	0.10	0.10 0.12
	Total LT (B+C)	600		500	5.39	100.00		0.11		
	Total Industrial (A+B+C)	1,212			223.32			53.40		
	Bulk supply	1,212			223.32			55.40	137.30	1.50.74
a)		1,617			11.82		7.00		8.27	8.27
	LI HT	281		1	11.82		7.00		10.76	
	Total	1,898			27.19		7.00	-		
	Total	1,090			27.19			-	19.03	19.05
7	Grand Total	117,733	-		425.40			53.40	209.05	262.45

<u>Annexure – 2A(i)</u>

Public Notice issued by the SSERC in Sikkim Express (English Edition)

Publication Date: 1st February, 2020

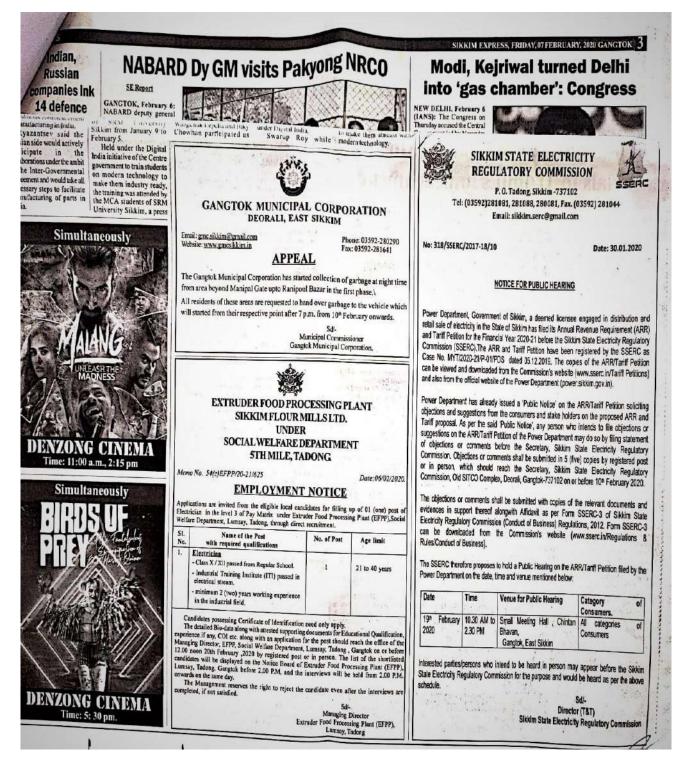
SIKKIM EXPRESS, SATURDAY, M FEBRUARY, 2020 GANGTON 3 **Guiding Juniors** mille programme concludes across State SE Report career counselling and communication skills The programme was pleviesed to ensure children (Y) GANGTOK, Jasuary 31: Guiding Junices, the two-O DESTRUCTION OF THE OWNER OF THE It promised 30,000 greet wars, a Green Industry forsidor to check air polition, it also promised Debhi fanana Development Boad is clearing the Yasuna. On the education front, the manifesto promises 10 new collepts, a cycle for EWS grits in Class 9 and 12 and an escooty and heinset for EWS grits in Class 9 and 12 and an escooty and heinset for EWS beit fandao's scheme. The party promised pied drinking water for all by 5024 a slong with the implementations' 07 Austra Ausschemes in the city. The popule from the form at R. 2 per Ag. if the numbers of prover stay the numbers. LAITKOR : : SHILLONG- 793010 Ŵ SIKKIM STATE ELECTRICITY ADMISSION OPEN FOR CLASS VI IN RESPECT OF BPL **REGULATORY COMMISSION** SEPC CATEGORIES FOR THE ACADEMIC SESSION 1020-21 UNDER QUOTA SPONSORED BY THE P. O. Tadong, Sikkim -737102 Tel: (03592)281081, 281088, 280081, Fax. (03592) 281044 NORTH EASTERN COUNCIL (NEC) Email: sikkim.serc@gmail.com ADMISSION OPEN FOR CHILDREN OF BPL CATEGORIES FOR MEGHALAYA & SIKKIM STATES SPONSORED BY THE NORTH EASTERN COUNCIL (MC). THE ENTRANCE EXAM WILL BE CONDUCTED AT 1990 HRS ON 16 Date: 30.01.2020 No: 318/SSERC/2017-18/10 FEBRUARY MODISUNDAY) AT ASSAM REFLES PUBLIC SCHOOL, LAITKOR, SHELLONG-10. NOTICE FOR PUBLIC HEARING TOTAL SEATS ALL OTTED TO SIKKIM - TWO & MECHALAYA THREE Power Department, Government of Sikkim, a deemed licensee engaged in distribution and retail sale of electricity in the State of Sikkim has field to Annual Revenue Requirement (ARR) and Tariff Petition for the Financial Year 2020/21 before the Sikkim State Electricity Regulatory Commission (SSERC) The ARR and Tariff Potition have been registered by the SSERC as Case No. MT2202-2179-216705 deted 06.12.2019. The copies of the ARR/Tariff Petitions) can be viewed and diverticated from the Commission's vehicle (www.sserct.inflamff Petitions) and also from the official vetosite of the Power Department (power alkkim gov in). PAPERSFOR THE ENTRANCE TEST-ENGLISH, MATHEMATICS AND HINDI ×. (VTH STDLEVEL FOR SOMARKS EACH) FOR FURTHER DETAILS CONTACT 0364-2705445, 2705446, 2705447 & 2705449. WALK IN INTERVIEW FOR Power Department has already issued a Public Notice' on the ARR/Tariff Polition soliciting Power Department has already issues a Public Notice on the AHM/ and Petition Solutions, objections and suggestions from the constances and stake holders on the proposal ARR and Tanth grappeal. As per the said Public Notice, any person who intends to file objections or suggestions on the AHM/TertP Pation of the Power Decartment may do as by Filing statement of objections or comments before the Soundary, Sixian State Electricity Regulatory Dominisation. Other or comments before the submitted in 5 (file) cosies by registened part or in person, which should make the submitted in 5 (file) cosies by registened parts Dominisation, Old SITCO Complex, Decords, Sangtok-1337102 on or before 10th Petruary 2020. Project Titled: "Monitoring survey of cancer risk factors and health system response in North East Region (NER)" (8 months) Applications are invited for posts to be filled up on a porely temporary or contractual basis under ICMR-NCOBR fanded project estilled "Meetitering survey of cancer risk factors and health system sesponse in North East Region (NER)". The project is for the period of eight standar and requires extensive twineling throughout Siddim. Interested local candidates (COI holders) are requested to conce with Bio Data along with all relevant documents, (Original and Xerox explosion) on 64232020 to Department of Histopathology, 2¹⁰ Finer, Right Wing, New STNM Hespital, Sochakgung, from 1000AM to 2100PM. undan to launch ati on Feb 2 Contractor and the second s The objections or commerks shall be submitted with copies of the relevant documents and existences in support thereof alongwith Athdavit as per Form SSERD-3 of Sikkin State Electricity Regulatory Commission (Conduct of Business) Regulators, 2012, Form SSERD-3 cond can be downloaded from the Commission's website (www.sserc.in/Regulators & Histopathology, 2rd 10:00AM to 2 00PM. Designation **Oculification Required** No. of Rules/Conduct of Business). The SSERC Interdore proposes to hold a Public Hearing on the ARR/Tanif Petition filed by the Power Department on the date, time and venue mentioned below: MBBS / BDS/ BAMS from a recognized university with one year research/teaching experience Sciencist B (Medical) 81 SEKENSELPSNE Category Time Venue for Public Hearing Date or BOS/ BAMS / B V Se from a mongrized university with two years research/eaching experience 19ª February 10.30 AM to Small Meeting Hall , Chintan All categori 2030 2.30 PM Ebonan, đ experience for 290 furnities in a safe, screne and secured ambience. Along with all top-of-the-line features in it's Ganglok, East Sikkim OF MPHVMD in Community Medicine /Public of-the-line features in it's clean, the project boats of another exclusive feature of providing Fench window in every flat. — Rajeev Santhesi, partner, Roodrakch Infantech anded that the project is a sure shot value for macroey in some of the quality and ementings offered. Interested parties/persons who intend to be heard in senson may appear before the Sikkim State Electricity Regulatory Commission for the purpose and would be heard as par the above health from a recognized university. Graduate in Social Work /Sociology / Statistics or equivalent subjects from a recognized university. Project Technical Officer (Medical Social Worker / Social Worker / Sr. Investigator) ch id, his ossi uni u 54 Director (T&T) Sikkim State Electricity Reg ł ŧ £ espitals and only those cards tion to the HIMC. The mode adjustion and does not income mion at an red far an The selected students in the camp will be further considered for an order of the system of sch forms only a part of the system of sch (d) As per the Goscowards of field (d) dated 53 key 2014, the wards of C summand size-roots at the place of parts (TATEST

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Annexure – 2A(ii)

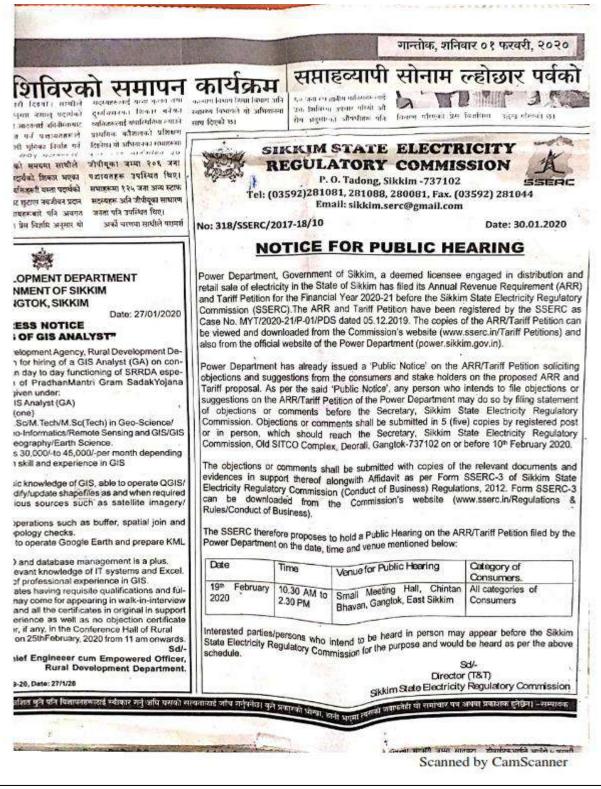
Public Notice issued by the SSERC in Sikkim Express (English Edition)

Publication Date: 7th February, 2020



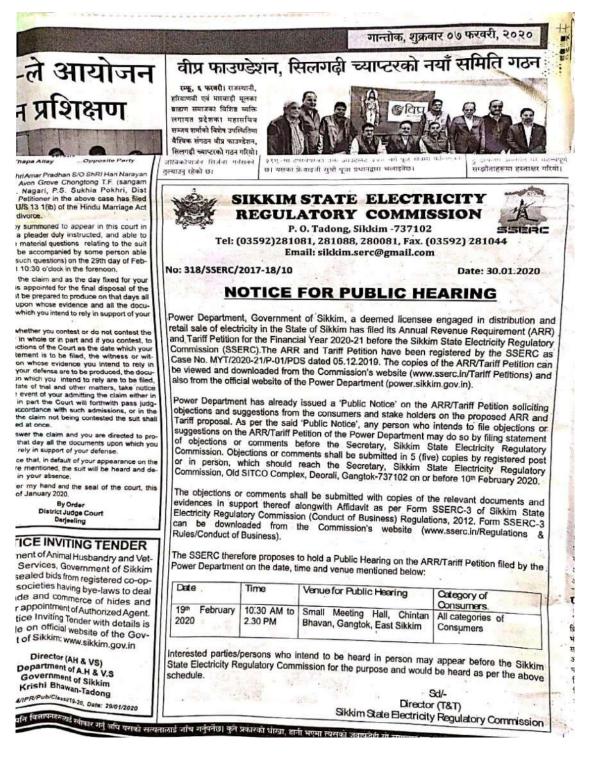
<u>Annexure – 2B(i)</u> Public Notice issued by the SSERC in Hamro Prajashakti (Nepali Edition)

Publication Date: 1st February, 2020



Annexure – 2B(ii) Public Notice issued by the SSERC in Hamro Prajashakti (Nepali Edition)

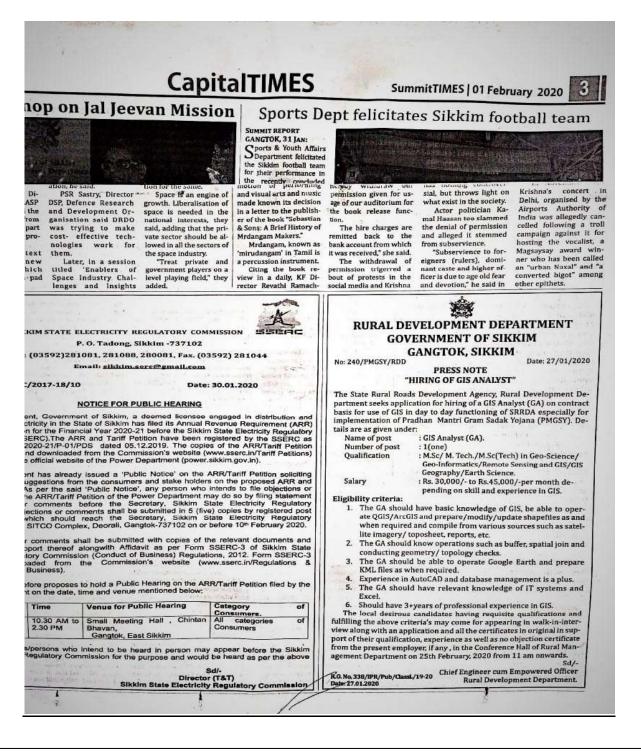
Publication Date: 7th February, 2020



<u>Annexure – 3B(i)</u>

Public Notice issued by the SSERC in Summit Times (English Edition)

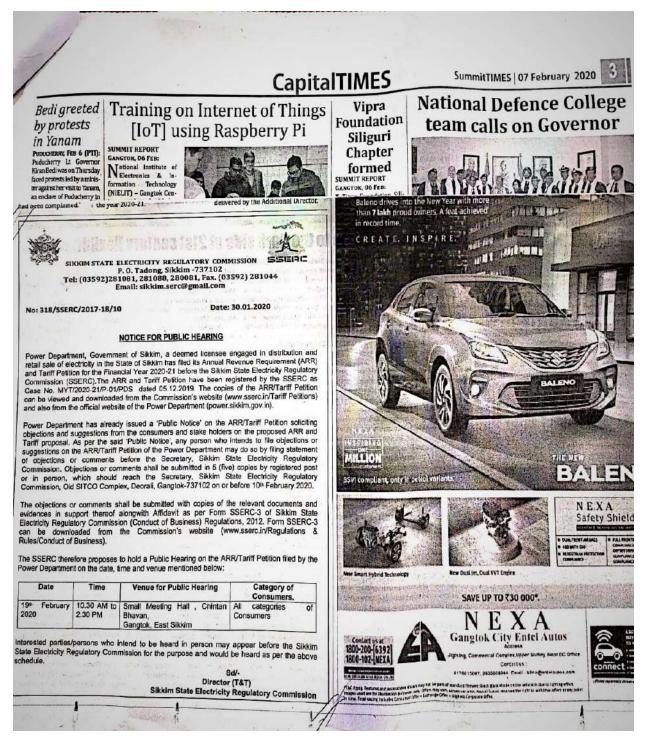
Publication Date: 1stFebruary, 2020



Annexure – 3B(ii)

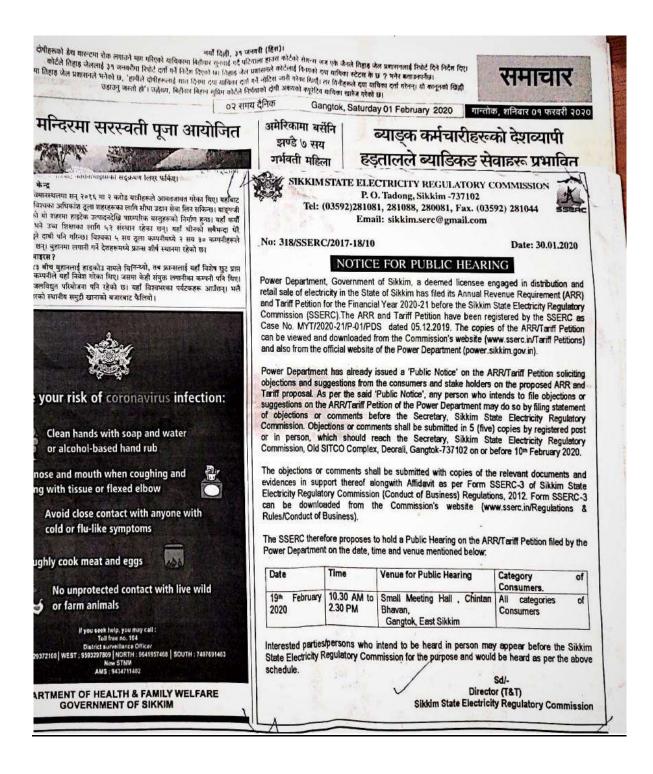
Public Notice issued by the SSERC in Summit Times (English Edition)

Publication Date: 7th February, 2020



<u>Annexure – 4B(i)</u> Public Notice issued by the SSERC in Samay Dainik (Nepali Edition)

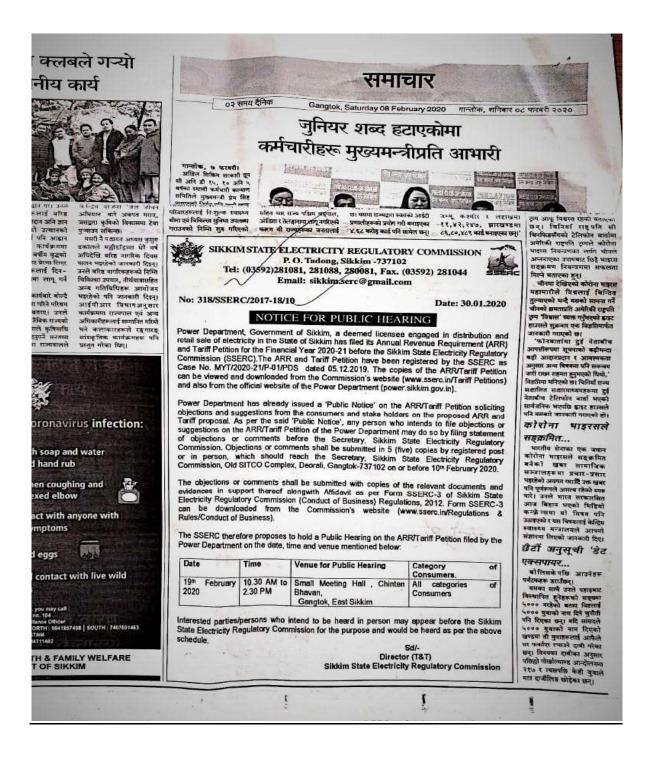
Publication Date: 1st February, 2020



<u> Annexure – 4B(ii)</u>

Public Notice issued by the SSERC in Samay Dainik (Nepali)

Publication Date: 8th February, 2020



APPENDIX

TARIFFSCHEDULEFOR THE FY 2020-21

I. DOMESTIC SUPPLY (DS):

Type of Consumer:

Power supply to private house, residential flats and Government schools, residential buildings for light, Heating/electrical appliances, fansetc. 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) Natureofservice:

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

(a) Rate:

Units Consumption	Paisa perkWh(Unit)
Up to 50	100
51 to 100	200
101 to 200	300
201 to 400	350
Consumption exceeding 400units	400

(c) Monthly MinimumCharge:

Details	Rate (In ₹)
Single PhaseSupply	40.00
ThreePhaseSupply	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 isused for commercial purpose, the entire supply shall be charged under commercial supply.

Free supply of electricity for consumption upto 100 units applicable to all the domestic consumers in rural areas under Gram Panchayat Unit (GPU) as notified by the Rural Management and Development Department as per clause 1 of Government Gazette Notification No.33/P/GEN/97/PART-V dated 25.11.2014 shall be determined on the basisof assessment recorded through energy meter only and assessment accounted on average basis shall not be entertained for subsidy. In the event of crossing the subsidized limit of 100 units of electricity in any month, the entire consumption for the month shall be charged to such consumer as per the tariff.

II. COMMERCIAL SUPPLY (CS):

TypeofConsumer:

Supply of energy for light, fan, heating and power appliances in commercial and nondomestic 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 parlors, saloons, beauty parlors, health clubs or any house of profit as identified by the Assistant Engineer/Executive Engineer concerned of the Department. In the event of exceeding connected load beyond25 KVA, 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) Natureofsupply:

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

(b) Rate:

Consumption range	Paisa per Kwh (Unit)	
Upto 50	300	
51 to 100	400	
101 to 200	500	
201 to 400	600	
Consumption exceeding 400 units	630	
Demand Charges- For those	Rural Urban	

establishments whose sanctioned	₹ 60/KVA/Month plus	₹100/KVA/Month plus
load is more than 25 KVA and does	energy charges shown	energy charges shown
not have independent transformer	above	above
but run their unit through shared		
transformers.		

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

(c) Monthly MinimumCharge:

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

Details	Rate (In ₹)
Single PhaseSupply	200.00
ThreePhaseSupply	500.00

(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%

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) Natureofservice:

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

(b) Rate:

Units Consumption	Paisa per kWh	
Area	Rural	Urban
Upto 500	450	650
501 to 1000	600	700
1001 & Above	650	800
Demand Charge – for those establishments	₹60/kVA/Month	₹100/kVA/Month
whose sanction load is more than 25 KVA $\&$	plus energy charges	plus energy charge
does not have independent transformer but run their unit through shared transformers.	as shown above	as shown above

(c) Monthly MinimumCharge:

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

Rural Areas	₹ 1000/Month
Urban Areas	₹ 2000/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 EnergyCharges

(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 (HTS):

Type ofConsumer:

All types of supply with contract demand at single point having 3 phase supply and voltage

11 kV& above.

(a) Natureofsupply:

High TensionAC,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 200KVA. The meters are also allowed to install on LT side of those consumers having transformer capacity less than 200 KVA, but is 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 +500 Paisa/Unit
Above 100 to 250 kVA Demand Charge Plus Energy Charge	₹250/kVA/Month + 550 Paisa/Unit
Above 250 to 500 kVA Demand Charge Plus Energy Charge	₹290/kVA/Month + 600 Paisa/Unit
Above 500 kVA Demand Charge Plus Energy Charge	₹555/kVA/Month + 650 Paisa/Unit

(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)

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

(f) Penalty for poor Power Factor: The power factor adjustment charges shall be levied at the rate of 1% on the total energy charge for the month of every 1% drop or part thereof in the average power factor during the month below 95%.

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), all Government Non-residential buildings Hospitals, Aerodromes and other similar establishments as identified as such supply by the Concerned Executive Engineer.

(a) Natureofservice:

LowTension 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 (430/230Volts)	700
HT (11kV or66kV)	700

(c) Monthly Minimum Charge:

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

LT (430/230Volts)	₹ 2000/month
HT (11kV or66kV)	₹ 2000/month

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

LT (430/230Volts)	₹ 200 /kVA/month of Sanctioned Load
HT (11kV or66kV)	₹ 200/kVA/monthof Sanctioned Load

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

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 SainikBoard.

(a) Natureofservice:

LowTensionAC 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:

TypeofConsumer:

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 theConsumer

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:

Unit Consumption Slab	Paisa per kWh (Unit)
Places of worship having:	
(i) Having 3 light points	
A) up to 100 units	
B)Above 101 units	
(ii) Having 4 to 6 light points.	
A) up to 150 units	
B)Above 151 units	
(iii) Having 7 to 12 light points	Domestic rate is applicable.
A) up to 300 units	
B)Above 301 units	
(iv) Having 13 and more light points	
A) up to 500 units	
B)Above 501 units	
A) To be billed to Secretary, Ecclesiastical Department and to be	
submitted to the head of Department in the District.	
B) To be billed to Head of the Place of worship.	

Minimum charges, surcharges, and rebateetc. 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 Management & Development Department. The necessary meter/metering equipments shall be provided by the Energy & 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
UrbanAreas	500 Paisa/KWH

X. TEMPORARY SUPPLY:

Type of consumer:

Available for temporary purposes and for the period not exceeding two months in the first instance but can be extended for the further-period not exceeding one month on each occasion. The Assessment of energy consumption shall be on the basis of recorded meter reading and not on average, 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 the average system of calculation shown in the tariff schedule. Approval of the Temporary Supply and its duration will be the discretion of the Assistant Engineer of the Department. If the temporary connection is more than approved period, such use of electricity will be treated as theft of power.

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.

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 BR for ₹ 25/- (Rupees Twenty Five Only). 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 Energy & 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 cutouts 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.

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 the 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 onsumer.

(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 give not less than 2 months notice before the supply or additional supply is required. In the case of HTIS/LTIS/BS consumers, longer notice 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 and seven clear days notice shall be given by the Assistant Engineer of the area to the applicant for the Purpose of inspecting the premises and investigating the feasibility of power supply. If service can be affected by extending service line alone, the consumer will be given a written permission from the office of the Assistant Engineer about providing the service connection to his premises.

(e) Sketch of the premises

(i) A neat sketch of the premises should also submit the proposed 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 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 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 restriction 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 fail 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 what so ever out of failure of supply.

XXIX. RESTRICTION OF POWER SUPPLY

The supply of electricity is liable to be curtailed or staggered or cut off all together 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 is given to all the consumers. The same is written in the Meter reading card also. 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 electricity act. 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