

ARUNACHAL PRADESH STATE ELECTRICITY REGULATORY COMMISSION

True Up Order for FY 2017-18

True Up Order for FY 2018-19

True Up Order for FY 2019-20

True Up Order for FY 2020-21

True Up Order for FY 2021-22

True Up Order for FY 2022-23

For

Department of Power,
Government of Arunachal Pradesh

Issued on 9th January, 2024

Arunachal Pradesh State Electricity Regulatory Commission अरुणाचल प्रदेश राज्य विद्युत नियामक आयोग

2ND FLOOR, O. T. BUILDING, NITI VIHAR MARKET, T. T. MARG, ITANAGAR-791111

Website: www.apserc.nic.in

Before

The Arunachal Pradesh State Electricity Regulatory Commission (APSERC)

Itanagar, Arunachal Pradesh

Petition No. TP 02 of 2023

In the matter of:

Petition for True Up Order for the FY 2017-18, FY 2018-19, FY 2019-20, FY 2020-21, FY 2021-22 and 2022-23

In the matter of:

Department of Power, Govt. of Arunachal Pradesh

-- Petitioner

CORAM:

Shri R. K. Joshi, Chairperson

Shri Nich Rika, Member (Law)

ORDER

(Passed on 9th January, 2024)

I. LIST OF ABBREVIATION USED

ACS

Average Cost of Supply

APSERC

Arunachal Pradesh State Electricity Regulatory Commission

ARR

Aggregate Revenue Requirement

AT&C

Aggregate Technical and Commercial

APDoP

Arunachal Pradesh Department of Power

FY

Financial Year

Secretary

State Electricity Regulatory Commission Arunachal Pradesh

Kwh

Kilo Watt Hour

MU

Million Unit

MW

Mega Watt

NLDC

National Load Dispatch Centre

NERLDC

North Eastern Regional Load Dispatch Centre

NERPC

North Eastern Regional Power Committee

O&M

Operation and Maintenance

RLDC

Regional Load Dispatch Centre

R&M

Repair and Maintenance

II. INTRODUCTION:

CITY REGULA 1. The Arunachal Pradesh State Electricity Regulatory Commission(APSERC) was constituted on 7th May 2010 by the Government of Arunachal Pradesh in compliance to the section 82 of the Electricity Act 2003.

- 2. The APSERC was doing smoothly as per provisions of prevalent laws/rules till the retirement Shri RP Singh the then Chairperson of the APSERC from the post Chairperson on 31st December 2019.
- 3. The Post of Chairperson remained vacant till 17th July 2023 and hence no regulatory activities were taken up during this intervening period.
- 4. After about three and half years Shri RK Joshi and Shri Nich Rika joined as Chairperson and Member(Law) on 18th July 2023 and regulatory activities started again.
- 5. The Petitioner, the Department of Power, is a government department functioning under the Government of Arunachal Pradesh, is the sole electricity Distribution Utility for the entire state of Arunachal Pradesh and is a deemed Distribution Licensee as per Section 14, proviso 3 of the Electricity Act 2003.
- 6. The Commission issued ARR and Tariff Order for FY 2017-18 on 26th September 2017 whose true-up was still pending.
- 7. The Commission also issued ARR and Tariff Order for FY 2018-19 with True-up of FY 2016-17 and Review of FY 2017-18 on 31st May 2018.
- 8. During the intervening period mentioned in Sl. No 2,3 and 4 above, the petitioner continued to follow the tariff order of FY 2018-19 while billing electricity supplied to the consumers.

9. The Commission had issued the Retail Supply Tariff Order for FY 2018-19, FY 2019-20, FY 2020-21, FY 2021-22, 2022-23 and 2023-24 on 25th October, 2023.

III. PROCEDURAL HISTORY:

- 1. As per the MYT Regulations, 2018, the licensee is required to file Petition for True-up annually. Further, as per directives of Hon'ble APTEL in the Judgment dated 11th November, 2011 in the matter of O.P. No.1 of 2011, the DISCOMs are required to file their True-up Petitions for every year regularly.
- The Petitioner vide letter dated 29th November, 2023, filed their true up Petition for FY 2018- 19, FY 2019-20, FY 2020-21, FY 2021-22 and 2022-23.
- Thereafter, the Commission admitted the Petition on 12th December 2023 with a direction to the Petitioner for publishing in abridged form in the local newspapers for inviting Comments/suggestions/ objections from various stakeholders. Further, the Commission directed the Petitioner to furnish additional supporting documents to substantiate the figures claimed in the petition.
- The Petitioner published the abridge form in two Newspapers viz: Arunachal Front and Echo of Arunachal Sentinel on 20th December 2023 inviting objections/ suggestions, if any, from the stakeholders. The last date for filing objections/ suggestions was 26th December 2023.
- 5. No objections/suggestions were received till 26th December 2023.
- The Petitioners submitted the consolidated additional information vide letter dated 28th December, 2023.

राज्य विद्यत

7. Since, no objections/ suggestions were received from any corner, the commission decided to forego hearing procedure.

IV. PRAYERS BEFORE THE HON'BLE COMMISSION:

The petitioner prayed

- 1. To admit this Petition for approval of True Up for FY 2017-18 to 2022-23.
- 2. To grant any other relief as the Hon'ble Commission may consider appropriate.

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- 3. To pass any other order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.
- 4. The petitioner craves leave of the Hon'ble Commission to allow further submissions, additions, and alterations to this petition as may be necessary from time to time.

V. COMMISSION ANALYSIS AND ORDER:

1. TRUE-UP OF FY 2017-18

1.1. ENERGY SALES

The actual Energy sales (414.53 MU) within the State is more than the approved Energy Sales 378.08 MU for FY 2017-18. However, since this is an Uncontrollable Factor as per Regulation 2.7 of APSERC, MYT Regulations- 2018, the Commission now approves energy sales for the FY 2017-18 at 414.53 MU as per the actuals furnished by APDOP as shown below in Table below:

Table 1.1 - Energy Sales approved by the Commission for FY 2017-18

SI. No	Description	Unit	Approved in the Tariff order for FY 2017-18	Actuals as per Petitioner's Submission	Now approved (Trued Up)
1.	Energy Sales within the State	MU	378.08	414,53	414.53

1.2. AT&C LOSSES

Table 1.2 - AT&C losses approved by the Commission for FY 2017-18

SI. No	Description	Unit	Approved in the Tariff order for FY 2017-18	Actuals as per Petitioner's Submission	Now approved (Trued Up)
1.	AT&C Loss	%	41	63.48	41

In the above Table, the actual AT&C loss of 63.48% is more than the approved losses 41% by the Commission for the FY 2017-18. It is observed that the Petitioner has neither mentioned the diagnosis conducted to pin-points the areas resulting such high losses nor indicated the adequate steps to reduce the AT&C losses of distribution system.

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As a result, the Energy Requirement of APDOP went up significantly, in comparison to what it would have been if the AT&C loss is reduced as approved by the Commission. The lower AT&C loss would have saved the exchequer of Govt. of Arunachal Pradesh and enable development of better eco-system in state's Energy Sector, which in turn would have generated other useful economic activities.

Therefore, the Commission now approves AT&C Loss level of 41% for the FY 2017-18 against the actual loss level of 63.48% as it falls under the category of controllable Factor as per regulation 2.7 of APSERC MYT Regulations- 2018.

However, for this 112.93 MU of unproductive excess energy purchased by spending Rs 37.31 Crs. from public money of state exchequer at average cost of power of Rs 3.30/unit, concern officers of APDOP are liable to answer on it, as per regulation 10.14 of APSERC MYT Regulations- 2018.

1.3. TOTAL ENERGY REQUIREMENT

Table 1.3- Total Energy Requirement approved by the Commission for FY 2017-18

Sl. No	Description	Unit	Approved in the Tariff order for FY 2017-18	Actuals as per Petitioner's Submission	Now approved (Trued Up)
1	Total Energy Requirement	MU	718.57	848.63	735.70

The total Energy requirement accounting, approved AT&C losses, by the Commission was 718.57 MU which is quite lower than actual energy requirement as submitted by APDOP i.e. 848.63 MU only due to the exorbitant AT & C loss levels. More Energy requirement at the periphery of APDOP means more Power is required to be purchased and hence more Power purchase cost, which eventually led to the requirement of higher subsidy to be provided by the Government to cover up the inefficiencies in the distribution system. This cannot be recovered through Consumer Tariff and are therefore met through Government subsidy only.

However, the Commission approves the Total Energy Requirement at 735.70 MU as per the approved AT & C loss level of 41% and for this 112.93 MU of unproductive excess energy purchased by spending Rs 37.31 Crs. from public money of state exchequer at average cost of power of Rs 3.30/unit, concern officers/of APDOP are liable to answer on this.

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1.4. TOTAL POWER PROCUREMENT

Although, this component is an Uncontrollable factor as per regulation 2.7 of APSERC, MYT Regulations- 2018, the Commission does not approve the actual Figure of Total Power purchase at 758.22 MU as shown in Table below. This is due to the reason that despite not allowing UI as a source to purchase power, APDOP has purchased a hefty 90.88 MU from the same. This is breach of Directions of the Commission and an unwarranted practice that has been followed by APDOP for a long time despite numerous directions in this regard by the Commission. Hence taking strong measures this time, the Commission does not approve the Energy taken from UI and approves the Total Power purchase as 667.34 MU.

Table 1.4 - Total Quantum of Approved Power Procurement for FY 2017-18 (MU)

Sl no	Description	unit	As per the Tariff Petition for FY 2017-18	Approved in the Tariff order for FY 2017-18	Actuals as per Petitioner's Submission	Now approved (Trued Up)
1	From CGS	MU	471.94	501.32	606.32	606.32
2	DHPD	MU	70.93	59.41	61.02	61.02
3	UI	MU	80	Ha AND O	90.88	
4	Free power	MU	157.84	157.84	167.15	167.15
5	Total	MU	780.71	718.57	925.37	834.49
6	Total Power Purchase	MU	622.87	Tae\$60.73	758.22	667.34

1.5. POWER PURCHASE COST

The figures at Sl. 2 & 3 of Table below reflect that more Quantum of power (MU) was purchased more than approved by the Commission and so was the total Power Purchase cost (Rs Crs). However, the Commission does not approve the Cost of power purchase as per the Actuals submitted by APDOP and lessen the cost of UI purchase from Total power purchase cost of Rs 250.37 Crs as shown in table below. As against the Actuals, the Commission approves the Cost of power purchase at Rs 238.07 Crs.

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Table 1.5 -Total Cost of Power purchase Approved for FY 2017-18

Sl. No	Description	Unit	Approved in the Tariff order for FY 2017-18	Actuals as per Petitioner's Submission	Now approved (Trued Up)
1	Total Energy Requirement	MU	718.57	848.63	735.70
2	Total Power Purchase	MU	560.73	758.22	667.34
3	Cost of Power Purchase	Rs Crs	196.63	250.37	238.07

Whatever the Revenue Gap comes for FY 2017-18 after Truing Up, the cost of Rs 12.30 Crs. of Energy taken from UI shall not to be passed on to the Consumers.

1.6. FUEL COST

APDOP has DG sets of different capacities owned by himself installed at different locations with total installed capacity of about 20.45 MW. These DG sets are kept as standby and used as and when required. The power generated from it is not included in the power purchase cost. The Expenditure on DG sets is included in the Fuel Cost.

Table 1.6 -Fuel Cost approved by the Commission for FY 2016-17

Sl. No	Description	Unit	Approved in the Tariff order for FY 2016-17	Actuals as per Petitioner's Submission	Now approved (Trued Up)
1.	Fuel cost	Rs. Crs	0.875	0	0

From the above table it is observed that Rs 0.875 Crs was approved by the Commission in Tariff Order for FY 2017-18 for Fuel Cost. but Now in the true up petition the petitioner has informed that cost associated with fuel, specifically POL (Petroleum, Oil, and Lubricants) to operate the DG sets are included within the Repairs & maintenance Cost, so Fuel cost is not itemized separately. So in true up no fuel cost is approved.

1.7. TOTAL REVENUE REQUIREMENT

The Total Revenue Requirement for the FY 2017-18 submitted by APDOP in Tariff petition

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for FY 2017-18, approved by the Commission in its Tariff Order for FY 2017-18, actuals furnished by the APDOP and now approved by the Commission are furnished in the Table below.

From the Table it can be observed that an amount of Rs 432.21 Crs was filed by APDOP in its Tariff Petition of FY 2017-18 but Rs 424.865 Crs was approved by the Commission in the Tariff Order for 2017-18. The Actual Figure as submitted by APDOP in True up Tariff Petition of FY 2017-18 is Rs 565.71 Crs. However, as seen from the Calculations below the Approved Total Revenue Requirement comes out to be Rs 553.46 Crs by the Commission as against the actual Figure of Rs 565.71 Crs.

Table 1.7 - Total Revenue Requirement (Rs Crs)- Commission's Analysis

Sl no	Description	As per the Tariff Petition for FY 2017-18	Approved in the Tariff order for FY 2017-18	Actuals as per Petitioner's Submission	Now approved (True Up)
1	Cost of power purchase	203.19	196.63	5 250.37	238.07
2	Employee cost	197.5	197.15	265.52	265.52
3	Repair & Maintenance cost	25.5	25.5	44.25	44.25
4	Administrative cost	1.15	1.15	□ 5.57	5.57
5	Fuel cost	4.87	0.875	E / 0	0
6	Depreciation	0	0	0	0
7	Interest on working capital	0	0 10	0	0
8	Interest & Finance charges	7 0	500	0	0
9	Return on Equity	गण्य विद्	0	0	0
10	Solar compliance	0	2.76	0	0
11	Annual license fee	0	0.05	0	0.05
12	Investment for training & safety of personnel	0	0.75	0	0
13	Total Revenue requirement	432.21	424.865	565.71	553.46

1.8. REVENUE GAP AND AVERAGE COST OF SUPPLY

As shown in Table below, True up for the FY 2017-18 indicates that the Revenue gap has been increased to ₹ 369.48 Crores, as against ₹ 263.585 Crores approved by the Hon'ble Commission in the Tariff Order for the FY 2017-18.

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Also, the Average Cost of Supply has increased to Rs 13.35/unit as against Rs 9.62/unit approved by the Hon'ble Commission in its Tariff Order for the FY 2017-18.

Table 1.8 - Revenue GAP and Average Cost of Supply- Commissions' Analysis

Sl. No	Description	Unit	As per the Tariff Petition for FY 2017-18	Approved in the Tariff order for FY 2017- 18	Actuals as per Petitioner's Submission	Now approved (True Up)
1	Revenue from energy sale within the state	Rs Crs	144.29	142.88	183.93	183.93
2	Revenue from surplus sale of power	Rs Crs	22.22	14.83	0	0
3	Non- tariff Income	Rs Crs	3.57	4 - 3.57	0	0
4	Deviation Export	Rs. Crs	0	10,	0	0
5	Total Income	Rs Crs	170.08	161.28	183.93	183.93
6	Total Revenue Requirement	Rs Crs	432.21	424.865	565.71	553.41
7	Revenue Gap	Rs Crs	262.13	263.585	381.78	369.48
8	Net Revenue Requirement	Rs Crs	428.64	421.295	565.71	553.41
9	Energy Sales within State	MU	497.15	438.04	491.27	414.53
10	Average cost of supply	Rs/unit	8.62	9.62	11.52	13.35

No other parameter of the ARR has been noticed to have impacted the ARR for FY 2017-18 and there is no ARR gap or surplus required to be carried forward to further years. As such, no impact is required to be passed on to the Consumers due to True Up by the Commission for the FY 2017-18. No amount of ARR is generated for adjustment as Regulatory Asset or surplus for FY 2017-18 or later years.

1.9. SUMMARY OF TRUE UP FOR FY 2017-18

The Commission analysed each component in details and tallied with the accounts submitted by the petitioner. The Commission noted that Rs. 75 Lakhs was approved for training and skilling, which was not taken up and also found that the AT&C loss is very high at 63.48%

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against the approved 41%. However, the Commission approves the true-up as shown in table below with a direction to take care of high AT&C losses and Capacity Building programme.

Table 1.9 - Summary of True Up for FY 2017-18

	True Up o	of FY 2017-18		
SL No.	Item of Expenses	Actual FY 2017-18 (Rs Cr)	Approved in Tariff Order 2017-18 (Rs Cr)	True-up approved by the Commission (Rs Cr)
1	Cost of Power Purchase	209.88	196.63	197.58
2	Fuel Cost	0	0.875	0
3	Employee Cost	265.52	197.15	265.52
4	R&M Expenses	RE C44.25	25.5	44.25
5	Administration and General expenses	5.57	1.15	5.57
6	Depreciation	0	0	0
7	Interest on Working Capital	0	20	0
8	Interest Charges Including interest on working capital)	0	To So	0
9	Return on NFA/Equity	0	0-	0
10	Provision for Bad Debt	0	0-	0
11	Renewable Energy (Solar) Purchase Obligation	मेव जया 0	2.76	0
12	Annual License Fee for 2017-18	0	0.05	0.05
13	Safety Harness and Skilling/Training	0	0.75	0
14	Total NERPC board fund and Fees and charges of NERLDC/ NERPC	विद्युत्ति विक	0	0.48
15	Interstate Transmission Charges	40.01	0	40.01
16	Intrastate Transmission Charges	0	0	0
17	Solar Compliance	0	0	0
18	Total Revenue Requirement	565.71	424.87	553.46
19	Less: Non-Tariff income		3.57	
20	Net Revenue Requirement	565.71	421.30	553.46
21	Revenue from Existing Tariff	183.93	142.88	183.93
22	Revenue from Sale of Surplus Power	0	14.83	0

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23	Total Annual Income	183.93	161.28	183.93
24	Total Gap	381.78	263.59	369.53
25	Regulatory Assets		0	
26	Energy Sales within State (MU)	414.53	378.08	414.53
27	Total Energy Sale (MU)	491.27	438.04	414.53
28	Gross Energy Input (MU)	925.37	718.57	834.49
29	Average Cost of Supply based on billed Energy (ACS) (20/26 - Rs/Kwh)	13.65	11.14	13.35
30	AT&C Loss	63.48%	41%	41%



2. TRUE-UP OF FY 2018-19

2.1. ENERGY SALES

The actual Energy sales (437.79 MU) within the State is more than the approved Energy Sales 423.61 MU for FY 2018-19. However, since this is an Uncontrollable Factor as per Regulation 2.7 of APSERC, MYT Regulations- 2018, the Commission now approves energy sales for the FY 2018-19 at 437.79 MU as per the actuals furnished by APDOP as shown below in Table below:

Table 2.1 - Energy Sales approved by the Commission for FY 2018-19

Sl. No	Description	Unit	Approved in the Tariff order for Petitioner's Submission	Now approved (Trued Up)
1.	Energy Sales within the State	MU	423.61 437.79	437.79

2.2. AT&C LOSSES

Table 2.2 - AT&C losses approved by the Commission for FY 2018-19

Sl. No	Description	Unit	Approved in the Tariff order for FY 2018-19 Actuals as per Petitioner's Submission	Now approved (Trued Up)
1.	AT&C Loss	%	38 61.93	38

In the above Table, the actual AT&C loss of 61.93% is more than the approved losses 38% by the Commission for the FY 2018-19. It is observed that the Petitioner did not take adequate steps to reduce the AT&C losses by examining the health of each component of distribution system.

As a result, the Energy Requirement of APDOP went up significantly, in comparison to what it would have been if the AT&C loss is reduced as approved by the Commission. The lower AT&C losses would have saved the exchequer of Govt. of Arunachal Pradesh and enable development of better eco-system in state's Energy Sector, which in turn would have generated other useful economic activities.

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Therefore, the Commission now approves AT&C Loss level of 38% for the FY 2018-19 against the actual loss level of 61.93% as it falls under the category of controllable Factor as per regulation 2.7 of APSERC MYT Regulations- 2018.

However, for this 185.43 MU of unproductive excess energy purchased by spending Rs. 80.97 Crs. from public money of state exchequer at average cost of power of Rs 4.37/unit, concern officers of APDOP are liable to answer regulation 10.14 of APSERC MYT Regulations- 2018..

2.3. TOTAL ENERGY REQUIREMENT

Table 2.3 - Total Energy Requirement approved by the Commission for FY 2018-19

Sl. No	Description	Unit	Approved in the Tariff order for FY 2018-19	Actuals as per Petitioner's Submission	Now approved (Trued Up)
1	Total Energy Requirement	MU	683.24	924.82	739.39

The total Energy requirement accounting for AT&C losses, as approved by the Commission was 683.24 MU which is quite lower than actual energy requirement as submitted by APDOP at actual sales and AT&C loss level i.e. 924.82 MU only due to the exorbitant AT & C loss levels. More Energy requirement at the periphery of APDOP means more Power is required to be purchased and hence more Power purchase cost, which eventually led to the requirement of higher subsidy to be provided by the Government as inefficiencies in the distribution system, cannot be recovered through Consumer Tariff and are met through Govt. subsidy only. However, the Commission approves the Total Energy Requirement at 739.39 MU as per the approved AT & C loss level of 38%.

However, the Commission approves the Total Energy Requirement at 739.39 MU as per the approved AT & C loss level of 38% and for this 185.43 MU of unproductive excess energy purchased by spending Rs 80.97 Crs. from public money of state exchequer at average cost of power of Rs 4.37/unit, concern officers of APDOP are liable to answer on this aspect.

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2.4. TOTAL POWER PROCUREMENT

Although, this component is an Uncontrollable factor as per regulation 2.7 of APSERC, MYT Regulations- 2018, the Commission does not approve the actual Figure of Total Power purchase at 821.41 MU as shown in Table below. This is due to the reason that despite not allowing UI as a source to purchase power, APDOP has purchased a hefty 88.07 MU from the same. This is breach of Directions of the Commission and a wrong and unfair practice that has been followed by APDOP for a long time despite numerous directions by the Commission to not consider UI as a source of Power procurement. Hence taking strong measures this time, the Commission does not approve the Energy taken from UI and approves the Total Power purchase as 733.34 MU.

Table 2.4 - Total Quantum of Approved Power PRocurement for FY 2018-19 (MU)

SI no	Description	STA Jinh	As per the Tariff Petition for FY 2018-19	Approved in the Tariff order for FY 2018-19	Actuals as per Petitioner's Submission	Now approved (Trued Up)
1	From CGS	MU	593.94	618.25	671.64	671.64
2	DHPD	MÜ	70.93	Ha 362	61.7	61.7
3	UI	MU	52.15	0	88.07	
4	Free power	MU	149	194.12	163.3	163.3
5	Total	MU	866.02	874.37	984.71	896.64
6	Total Power Purchase	MU	717.02	680.25	821.41	733.34

2.5. POWER PURCHASE COST

The figures at Sl. 2 & 3 of Table below reflect that more Quantum of power (MU) was purchased more than approved by the Commission and so was the total Power Purchase cost (Rs Crs). However, the Commission does not approve the Cost of power purchase as per the Actuals submitted by APDOP and lessen the cost of UI purchase from Total power purchase cost of Rs 358.86 Crs as shown in table below. As against the Actuals, the Commission approves the Cost of power purchase at Rs \$21.49 Crs.

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Table 2.5 - TABLE TOTAL Cost of Power purchase Approved for FY 2018-19

SI. No	Description	Unit	Approved in the Tariff order for FY 2018-19	Actuals as per Petitioner's Submission	Now approved (Trued Up)
1	Total Energy Requirement	MU	683.24	924.82	739.39
2	Total Power Purchase	MU	680.25	821.41	733.34
3	Cost of Power Purchase	Rs Crs	186.06	358.86	321.49

Whatever the Revenue Gap comes for FY 2018-19 after Truing Up, the cost of Rs 37.37 Crs of Energy taken from UI shall not to be passed on to the Consumers.

2.6. FUEL COST

APDOP has DG sets of different capacities owned by himself installed at different locations with total installed capacity of about 20.45 MW. These DG sets are kept as standby and used as and when required. The power generated from it is not included in the power purchase cost. The Expenditure on DG sets is included in the Fuel Cost.

Table 2.6 - Fuel Cost approved by the Commission for FY 2018-19

SI. No	Description	Unit	Approved in the Tariff order for FY 2018-19	Actuals as per Petitioner's Submission	Now approved (Trued Up)
1.	Fuel cost	Rs. Crs	2.205	0	0

From the above table it is observed that Rs 2.205 Crs was approved by the Commission in Tariff Order for FY 2018-19 for Fuel Cost. but Now in the true up petition the petitioner has informed that cost associated with fuel, specifically POL (Petroleum, Oil, and Lubricants) to operate the DG sets are included within the Repairs & maintenance Cost, so Fuel cost is not itemized separately. So in true up no fuel cost is approved.

2.7. TOTAL REVENUE REQUIREMENT

The Total Revenue Requirement for the FY 2018-19 submitted by APDOP in Tariff petition

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for FY 2018-19, approved by the Commission in its Tariff Order for FY 2018-19, actuals furnished by the APDOP and now approved by the Commission are furnished in the Table below.

From the Table it can be observed that an amount of Rs 689.83 Crs was filed by APDOP in its Tariff Petition of FY 2018-19 but Rs 568.01 Crs was approved by the Commission in the Tariff Order for 2018-19. The Actual Figure as submitted by APDOP in True up Tariff Petition of FY 2018-19 is Rs 684.18 Crs. However, as seen from the Calculations below the Approved Total Revenue Requirement comes out to be Rs 646.81 Crs by the Commission as against the actual Figure of Rs 646.86 Crs.

Table 2.7 - Total Revenue Requirement (Rs Crs)- Commission's Analysis

Sl. No.	Description	As per the Tariff Petition for FY 2018-19	Approved in the Tariff order for FY 2018-19	Actuals as per Petitioner's Submission	Now approved (True Up)
1	Cost of power purchase	287.86	186.06	358.86	321.49
2	Employee cost	325.84	325.84	267.49	267.49
3	Repair & Maintenance cost	43.9359	43.9359	50.55	50.55
4	Administrative cost	6.48	6.48	₱ 7.28	7.28
5	Fuel cost	25.7125	2.205	E 0	0
6	Depreciation	0	0/3	0	0
7	Interest on working capital	0	0,00	0	0
8	Interest & Finance charges	0	- C-O	0	0
9	Return on Equity	गण्य0ावद्यु	0	0	0
10	Solar compliance	0	2.69	0	0
11	Annual license fee	0	0.05	0	0.05
12	Investment for training & safety of personnel	0	0.75	0	0
13	Total Revenue requirement	689.83	568.01	684.18	646.86

2.8. REVENUE GAP AND AVERAGE COST OF SUPPLY

As shown in Table below, True up for the FY 2018-19 indicates that the Revenue gap has been increased to ₹ 476.69 Crores, as against ₹ 379.66 Crores approved by the Hon'ble Commission in the Tariff Order for the FY 2018-19.

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Also, the Average Cost of Supply has increased to Rs 14.77/unit as against Rs 13.32/unit approved by the Hon'ble Commission in its Tariff Order for the FY 2018-19.

Table 2.8 - Revenue GAP and Average Cost of Supply- Commissions' Analysis

SI. No	Description	Unit	As per the Tariff Petition for FY 2018-19	Approved in the Tariff order for FY 2018- 19	Actuals as per Petitioner's Submission	Now approved (True Up)
1	Revenue from energy sale within the state	Rs Crs	155.03	161.47	202.73	202.73
2	Revenue from surplus sale of power	Rs Crs	23.07	23.07	5.37	5.37
3	Non- tariff Income	Rs Crs	3.81	4 3.81	0	0
4	Deviation Export	Rs. Crs	0	P	0	0
5	Total Income	Rs Crs	181.91	188.35	208.1	208.1
6	Total Revenue Requirement	Rs Crs	689.83	568.01	684.18	646.81
7	Revenue Gap	Rs Crs	507.92	379.66	476.08	438.71
8	Net Revenue Requirement	Rs Crs	686.02	564.2	684.18	646.81
9	Energy Sales within State	MU	408.45	423.61	498.11	437.78
10	Average cost of supply	Rs/unit	16.80	13.32	13.74	14.77

No other parameter of the ARR has been noticed to have impacted the ARR for FY 2018-19 and there is no ARR gap or surplus required to be carried forward to further years. As such, no impact is required to be passed on to the Consumers due to True Up by the Commission for the FY 2018-19. No amount of ARR is generated for adjustment as Regulatory Asset or surplus for FY 2018-19 or later years.

2.9. SUMMARY OF TRUE UP FOR FY 2018-19

The Commission analysed each component in details and tallied with the accounts submitted by the petitioner. The Commission noted that Rs. 75 Lakhs was approved for training and skilling, which was not taken up and also found that the AT&C loss is very high at 61.93%

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against the approved 38%. However, the Commission approves the true-up as shown in table below with a direction to take care of high AT&C losses and Capacity Building programme.

Table 2.9 - Summary of True Up for 2018-19

	True Up	of FY 2018-19		
SI. No.	Item of Expenses	Actual FY 2018-19 (Rs Cr)	Approved in Tariff Order 2018-19 (Rs Cr)	True-up approved by the Commission (Rs Cr)
1	Cost of Power Purchase	324.37	186.06	287
2	Fuel Cost	0	2.21	0
3	Employee Cost	267.49	325.84	267.49
4	R&M Expenses	RE 30/55	43.94	50.55
5	Administration and General expenses	7.28	6.48	7.28
6	Depreciation	0	0	0
7	Interest on Working Capital	0	0.0	0
8	Interest Charges Including interest on working capital)	0		0
9	Return on NFA/Equity	0	000	0
10	Provision for Bad Debt	0	00	0
11	Renewable Energy (Solar) Purchase Obligation	मेव जवर 0	2,69	0
12	Annual License Fee for 2018-19	0	0.05	0.05
13	Safety Harness and Skilling/Training	0	0.75	0
14	Total NERPC board fund and Fees and charges of NERLDC/ NERPC	विद्युतं7३व्यंत्र	0	0.73
15	Interstate Transmission Charges	33.76	0	33.76
16	Intrastate Transmission Charges	0	0	***************************************
17	Solar Compliance	0	0	0
18	Total Revenue Requirement	684.18	568.02	646.86
19	Less: Non-Tariff income		3.81	8
20	Net Revenue Requirement	684.18	564.21	646.86
21	Revenue from Existing Tariff	202.73	161.47	202.73
22	Revenue from Sale of Surplus Power	5.37	23.07	5.37

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23	Total Annual Income	208.1	188.35	208.1
24	Total Gap	476.08	379.67	438.76
25	Regulatory Assets	0	0	
26	Energy Sales within State (MU)	437.79	423.61	437.79
27	Total Energy Sale (MU)	498.11	423.61	456.03
28	Gross Energy Input (MU)	985.13	715.44	896.64
29	Average Cost of Supply based on billed Energy (ACS) (20/26- Rs/Kwh)	15.63	13.41	14.78
30	AT&C Loss	61.93%	38%	38%



3. TRUE-UP OF FY 2019-20 AND FY 2020-21

On 25th October 2023, the Commission issued a Tariff Order allowing retail tariffs, ARR and other components approved for FY 2018-19 to be continued for FY 2019-20 to FY 2023-24 except AT&C loss trajectory, which shall be as per trajectory issued by Ministry of Power, Govt of India. As the Ministry of Power provides the trajectory form FY 2021-22, so for FY 2019-20 & FY 2020-21 trajectory approved in Tariff Order dated 31/05/2018 shall be applicable.

3.1. ENERGY SALES OF FY 2019-20 AND FY 2020-21

The Commission here approves the energy sales for the FY 2019-20 and FY 2020-21 at 455.99 MU and 405.99 MU as per the actuals furnished by APDOP as shown below in Table below:

Table 3.1 - Energy Sales approved by the Commission for FY 2019-20 and FY 2020-21

Description	Appro in th Tari order FY 20	e Actuals as per ff Petitioner's for Submission fo	Actuals as per Petitioner's Submission fo FY 2020-21	Now approved (Trued Up) for FY 2019- 20	Now approved (Trued Up) for FY 2020- 21
Energy Sales within the State	MU 423.6	455.99	405.08	455.99	405.99

3.2. AT & C LOSSES OF FY 2019-20 AND FY 2020-21

Table 3.2 - AT&C losses approved by the Commission for FY 2019-20 and FY 2020-21

Description	Unit	Approved in the Tariff order for FY 2018-19	Actuals as per Petitioner's Submission for FY 2019-20	Actuals as per Petitioner's Submission for FY 2020- 21	Now approved for FY 2019-20 (Trued Up)	Now approved FY 2020- 21 (Trued Up)
AT&C Loss	%	38	33.6	53.3	35	32

The Commission now approves AT&C Loss level for the FY 2019-20 and FY 2020-21 as tabulated above.

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However, for the FY 2019-20 and FY 2020-21, this 156.48 MU and 236.49 MU of unproductive excess energy purchased by spending Rs. 64.32 Crs. and Rs. 132.85 Crs. from public money of state exchequer at average cost of power of Rs 4.11/unit and Rs 5.62/unit, concern officers of APDOP are liable to answer as per regulation 10.14 of APSERC MYT Regulations- 2018 on this aspect.

3.3. TOTAL ENERGY REQUIREMENT OF FY 2019-20 AND FY 2020-21

Table 3.3 - Total Energy Requirement approved by the Commission

Description	Unit	Approved in the Tariff order for FY 2018-19	Actuals as per Petitioner's Submission For FY 2019- 20	Actuals as per Petitioner's Submission For FY 2020- 21	Now approved for FY 2019-20 (Trued Up)	Now approved for FY 2020-21 (Trued Up)
Total Energy Requirement	MU	683.24	891.06	861.53	734.58	625.04

The total Energy requirement accounting for AT&C losses are 734,58MU and 625.04 MU which is quite low than actual energy requirement as submitted by APDOP at actual sales and AT&C loss level i.e. 891.06 MU and 861,53 MU only.

However, the Commission approves the Total Energy Requirement at 734.58 MU and 625.04 MU as per the approved AT & C loss level of 35% and 32% and for this 156.48 MU and 236.49 MU of unproductive excess energy purchased by spending Rs. 64.32 Crs. and Rs. 132.85 Crs. from public money of state exchequer at average cost of power of Rs 4.11/unit and Rs 5.62/unit, concern officers of APDOP are liable to answer.

3.4. TOTAL POWER PROCUREMENT OF FY 2019-20 AND FY 2020-21

The Commission does not approve the actual Figure of Total Power purchase at 867.56 MU and 746.27 MU for FY 2019-20 & FY 2020-21 as shown in Table below. This is due to the reason that despite not allowing UI as a source to purchase power, APDOP has purchased 20.31 MU and 39.92 MU from the same, therefore the Commission does not approve the Energy taken from UI and approves the Total Power purchase as 847.25 MU and 706.35 MU for FY 2019-20 & FY 2020-21 as shown in Table below.

Secretary

Table 3.4 - Total Quantum of Approved Power Procurement

SI no	Description	uni t	Approve d in the Tariff order for FY 2018- 19	Actuals as per true up Petition for FY 2019-20 Submissio n	Actuals as per true up Petition for FY 2020-21 Submissio n	Now approve d for FY 2019-20 (Trued Up)	Now approve d FY 2020-21 (Trued Up)
1	from CGS	MU	618.25	703.32	575.33	703.32	575.33
2	DHPD	MU	62	66.46	76.6	66.46	76.6
3	HPDCL	MU			0.83		0.83
4	DIKSHI	MU		29.7	16.3	29.7	16.3
5	SOLAR (APEDA)	MU		0.99	0.52	0.99	0.52
6	UI	MU	YTIS	RE20.31/	39.92		
7	Banking	MU	CIK	46.78	36.12	46.78	36.12
8	IEX Purchase	MU			0.65		0.65
9	Free power	MU	194.12	209.84	400.19	209.84	400.19
10	Total	MU	874.37	1077.4	1146.46	1057.09	1106.54
11	Total Power Purchase	MU	680.25	867.56	746.27	847.25	706.35

3.5. POWER PURCHASE COST OF FY 2019-20 AND FY 2020-21

The Commission does not approve the Cost of power purchase as per the actuals submitted by APDOP and lessen the cost of UI purchase from Total power purchase cost of Rs 356.78 Crs & Rs 419.43 Crs for respective year as shown in table below. As against the Actuals, the Commission approves the Cost of power purchase at Rs 333.4 Crs & 390.39 Crs. For FY 2019-20 and FY 2020-21.

Table 3.5 - Total Cost of Power purchase Approved for FY 2019-20 & FY 2020-21

SI no	Description	unit	Approved in the Tariff order for FY 2018- 19	Actuals as per true up Petition for FY 2019-20 Submission	Actuals as per true up Petition for FY 2020-21 Submission	Now approved for FY 2019-20 (Trued Up)	Now approved FY 2020- 21 (Trued Up)
1		MU	683.24	891.06	861.53	734.58	625.04

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	Total Energy Requirement						
2	Total Power Purchase	MU	680.25	867.56	746.27	847.25	706.35
3	Cost of Power Purchase	Rs Crs	186.06	356.78	419.43	333.4	390.39

Whatever the Revenue Gap comes for FY 2019-20 and FY 2020-21 after Truing Up, the cost of Rs 23.38 Crs and Rs. 29.44 Crs. of Energy taken from UI shall not to be passed on to the Consumers.

3.6. TOTAL REVENUE REQUIREMENT OF FY 2019-20 AND FY 2020-21

The Actual Figure as submitted by APDOP in True up Tariff Petition of FY 2019-20 & FY 2020-21 are Rs 723.63 Crs and Rs. 781.1 Crs. However, as seen from the Calculations below the Approved Total Revenue Requirement comes out to be Rs 700.3 Crs and Rs. 752.11 Crs. by the Commission as against the actual Figure for the FY 2019-20 and FY 2020-21.

Table 3.6 - Total Revenue Requirement (Rs Crs)- Commission's Analysis

SI no	Description	Approve d in the Tariff order for FY 2018- 19	Actuals as per true up Petition for FY 2019-20 Submissio n	Actuals as per true up Petition for FY 2020-21 Submissio n	Now approve d for FY 2019-20 (Trued Up)	Now approve d FY 2020-21 (Trued Up)
1	Cost of power purchase	186.06	356.78	419.43	333.4	390.39
2	Employee cost	325.84	312.81	315.38	312.81	315.38
3	Repair & Maintenance cost	43.9359	48.18	40.83	48.18	40.83
4	Administrative cost	6.48	5.86	5.46	5.86	5.46
5	Fuel cost	2.205	0	0	0	0
6	Depreciation	0	0	0	0	0
7	Interest on working capital	0	0	0	0	0

12	safety of personnel Total Revenue requirement	0.75 568.01	723.63	781.1	700.3	752.11
11	Annual license fee Investment for training &	0.05	0	0	0.05	0.05
10	Solar compliance	2.69	0	0	0	0
9	Return on Equity	0	0	0	0	0
8	Interest & Finance charges	0	0	0	0	0

3.7. REVENUE GAP AND AVERAGE COST OF SUPPLY OF FY 2019-20 AND FY 2020-21

The Commission here approves the Average Cost of Supply as Rs 15.36/unit and Rs 18.57/unit for the FY 2019-20 and FY 2020-21.

Table 3.7 - Revenue GAP and Average Cost of Supply- Commissions' Analysis

SI no	Description	Unit	Approved in the Tariff order for FY 2018-19	Actuals as per true up Petition for FY 2019-20 Submissi on	Actuals as per true up Petition for FY 2020-21 Submissi on	Now approv ed for FY 2019-20 (Trued Up)	Now approv ed FY 2020-21 (Trued Up)
1	Revenue from energy sale within the state	Rs Crs	161.47	211.93	264.26	211.93	264.26
2	Revenue from surplus sale of power	Rs Crs	23.07	32.81	216.18	32.18	216.18
3	Non- tariff Income	Rs Crs	3.81	0	0	0	0
4	Deviation Export	Rs. Crs	0	0	0	0	0
5	Total Income	Rs Crs	188.35	244.74	480.44	244.11	480.44
6	Total Revenue Requirement	Rs Crs	568.01	723.63	781.1	700.3	752.11
7	Revenue Gap	Rs Crs	379.66	478.89	300.66	456.19	271.67
8	Net Revenue Requirement	Rs Crs	564.2	723.63	781.1	700.3	752.11

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10	State Average cost of	Rs/un	13.32	15.87	19.28	15.36	18.57
	State	MU	423.61	455.99	405.08	455.99	405.08

No other parameter of the ARR has been noticed to have impacted the ARR for FY 2019-20 and FY 2020-21 and there is no ARR gap or surplus required to be carried forward to further years. As such, no impact is required to be passed on to the Consumers due to True Up by the Commission for the FY 2019-20 and FY 2020-21. No amount of ARR is generated for adjustment as Regulatory Asset or surplus for FY 2019-20 and FY 2020-21 or later years.

3.8. SUMMARY OF TRUE UP FOR FY 2019-20 AND FY 2020-21

The Commission analysed each component in details and tallied with the accounts submitted by the petitioner. The Commission approves the true-up as shown in table below with a direction to take care of high AT&C losses and Capacity Building programme.

Table 3.8 - SUMMARY OF TRUE UP FOR FY 2019-20 AND FY 2020-21

	Tr	ue Up of FY 2	019-20 & FY	2020-21		
SL No.	Item of Expenses	Actual Actual		True-up approved by the Commission for FY 2019-20 (Rs Cr)	True-up approved by the Commission for FY 2020-21 (Rs Cr)	
1	Cost of Power Purchase	308.15	352.86	284.77	323.82	
2	Fuel Cost	0	0	0	0	
3	Employee Cost	312.81	315.38	312.81	315.38	
4	R&M Expenses	48.18	40.83	48.18	40.83	
5	Administration and General expenses	5.86	5.46	5.86	5.46	
6	Depreciation	0	0	0	0	
7	Interest on Working Capital	0	0	0	0	
8	Interest Charges Including interest on working capital)	0	0	0	0	
9	Return on NFA/Equity	0	0	0	0	

10	Provision for Bad Debt	0	0	0	0
11	Renewable Energy (Solar) Purchase Obligation	0	0	0	0
12	Annual License Fee for FY 2019-20 & FY 2020-21	0	0	0.05	0.05
13	Safety Harness and Skilling/Training	0	0	0	0
14	Total NERPC board fund and Fees and charges of NERLDC/ NERPC	1.05	0.65	1.05	0.65
15	Interstate Transmission Charges	40.58	RE54.12	40.58	54.12
16	Intrastate Transmission Charges	6.99	11.81	PL 6.99	11.81
17	Solar Compliance	0	0	0	0
18	Total Revenue Requirement	723.62	781.11	700.29	752.12
19	Less: Non-Tariff income			ON	
20	Net Revenue Requirement	723.62	781.11	700.29	752.12
21	Revenue from Existing Tariff	211.93	196.52	211.93	196.52
22	Revenue from Sale of Surplus Power	32.81	46.14	32.81	46.14
23	Total Annual Income	244.74	242.66	244.74	242.66
24	Total Gap	478.88	538.45	455.55	509.46
25	Regulatory Assets	0	0	0	
26	Energy Sales within State (MU)	455.99	405.08	455.99	405.99
27	Total Energy Sale (MU)	642.78	690.39	567.84	675.49
28	Gross Energy Input (MU)	1077.85	1146.8	1057.09	1106.54
29	Average Cost of Supply based on billed Energy (ACS) (20/26- Rs/Kwh)	15.87	19.28	15.36	18.53

30	AT&C Loss	33.60%	53.60%	35%	32%



4. TRUE-UP OF FY 2021-22 & FY 2022-23

On 25th October 2023, the Commission issued a Tariff Order allowing retail tariffs, ARR and other components approved for FY 2018-19 loss to be continued for FY 2019-20 to FY 2023-24 except AT&C loss trajectory, which shall be as per trajectory issued by Ministry of Power, Govt of India. Therefore, the ARR components for FY 2021-22 & FY 2022-23 shall be same as that of FY 2018-19.

4.1. ENERGY SALES OF FY 2021-22 & FY 2022-23

The Commission here approves the energy sales for the FY 2019-20 at 437.79 MU as per the actuals furnished by APDOP as shown below in Table below:

Table 4.1 - Energy Sales approved by the Commission

Description	Unit	Approved in the Tariff order for FY 2018-19	Actuals as per Petitioner's Submission fo FY 2021-22	Actuals as per Petitioner's Submission fo FY 2022-23	Now approved (Trued Up) for FY 2021-22	Now approved (Trued Up) for FY 2022-23
Energy Sales within the State	MU	423.61	518/25	582.1	518.25	582.1

4.2. AT & C LOSSES OF FY 2021-22 & FY 2022-23

Table 4.2 - AT&C losses approved by the Commission

Description	Unit	Approved in the Tariff order for FY 2018-19	Actuals as per Petitioner's Submission for FY 2021-22	Actuals as per Petitioner's Submission for FY 2022- 23	Now approved for FY 2021-22 (Trued Up)	Now approved FY 2022- 23 (Trued Up)
AT&C Loss	%	38	50.7	56.24	45%	35%

As per Ministry of Power notification no. F,No.24-3/3/2019-PFC(MoP) Part (2) (E-263367) dated 30/05/2023, the Commission now approves AT&C Loss level for the FY 2021-22 and FY 2022-23 as tabulated above.

However, for the FY 2021-22 & FY 2022-23, this 16.5 MU and 134.59 MU of unproductive

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State Electricity Regulatory Commission Arunachal Pradesh

excess energy purchased by spending Rs. 9.09 Crs. and Rs. 86.52 Crs. from public money of state exchequer at average cost of power of Rs 5.51/unit and Rs 6.43/unit, concern officers of APDOP are liable to answer regulation 10.14 of APSERC MYT Regulations- 2018..

4.3. TOTAL ENERGY REQUIREMENT OF FY 2021-22 & FY 2022-23

Table 4.3 - Total Energy Requirement approved by the Commission

Description	Unit	Approved in the Tariff order for FY 2018-19	Actuals as per Petitioner's Submission For FY 2021- 22	Actuals as per Petitioner's Submission For FY 2022- 23	Now approved for FY 2021-22 (Trued Up)	Now approved for FY 2022-23 (Trued Up)
Total Energy Requirement	MU	683.24	C1003.17 ^E G	1072.33	986.67	937.74

The total Energy requirement accounting for AT&C losses are 986.67 MU and 937.74 MU which are quite low than actual energy requirement as submitted by APDOP at actual sales and AT&C loss level i.e. 1003.17 MU and 1072.33 MU only.

However, the Commission approves the Total Energy Requirement at 986.67 MU and 937.74 MU as per the approved AT & C loss level of 45% and 35% and for this 16.5 MU and 134.59 MU of unproductive excess energy purchased by spending Rs. 9.09 Crs. and Rs. 86.52 Crs. from public money of state exchequer at average cost of power of Rs 5.51/unit and Rs 6.43/unit, concern officers of APDOP are liable to answer.

4.4. TOTAL POWER PROCUREMENT OF FY 2021-22 & FY 2022-23

The Commission does not approve the actual Figure of Total Power purchase at 830.24 MU and 934.42 MU for FY 2021-22 & FY 2022-23 as shown in Table below. This is due to the reason that despite not allowing UI as a source to purchase power, APDOP has purchased 48.82 MU and 66.05 MU from the same, therefore the Commission does not approve the Energy taken from UI and approves the Total Power purchase as 781.42 MU and 868.37 MU for FY 2021-22 & FY 2022-23 as shown in Table below.

Table 4.4 - Total Quantum of Approved Power Procurement

Secretary

SI no	Description	uni t	Approve d in the Tariff order for FY 2018- 19	Actuals as per true up Petition for FY 2021-22 Submissio	Actuals as per true up Petition for FY 2022-23 Submissio	Now approve d for FY 2021-22 (Trued Up)	Now approve d FY 2022-23 (Trued Up)
1	From CGS	MU	618.25	611.47	709.51	611.47	709.51
2	DHPD	MU	62	48.06	41.97	48.06	41.97
3	HPDCL	MU		4.69	5.24	4.69	5.24
4	DIKSHI	MU		47.99	65.17	47.99	65.17
5	SOLAR (APEDA)	MU		0.47	0.96	0.47	0.96
6	UI	MU	0	48.82	66.05		
7	Banking	MU	TRICITY	64.8 ⁻ 4)	39.37	64.8	39.37
8	IEX Purchase	MU	1	3.94	6.15	3.94	6.15
9	Free power	MU	194.12	498.43	588.44	498.43	588.44
10	Total	MU	874.37	1328.67	1522.86	1279.85	1456.81
11	Total Power Purchase	MU	680.25	830.24	934.42	781.42	868.37

4.5. POWER PURCHASE COST OF FY 2021-22 & FY 2022-23

The Commission does not approve the Cost of power purchase as per the Actuals submitted by APDOP and lessen the cost of UI purchase from Total power purchase cost of Rs 458.05 Crs & Rs 600.84 Crs for respective year as shown in table below. As against the Actuals, the Commission approves the Cost of power purchase at Rs 438.17 Crs & 579.55 Crs. For FY 2021-22 and FY 2022-23.

Table 4.5 - Total Cost of Power purchase Approved

Sl no	Description	Unit	Approved in the Tariff order for FY 2018- 19	Actuals as per true up Petition for FY 2021-22 Submission	Actuals as per true up Petition for FY 2022-23 Submission	Now approved for FY 2021-22 (Trued Up)	Now approved FY 2022- 23 (Trued Up)
1		MU	683.24	1003.17	1072.33	986.67	937.74

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	Total Energy Requirement						
2	Total Power Purchase	MU	680.25	830.24	934.42	781.42	868.37
3	Cost of Power Purchase	Rs Crs	186.06	458.05	600.84	438.17	579.55

Whatever the Revenue Gap comes For FY 2021-22 and FY 2022-23 after Truing Up, the cost of Rs 19.88 Crs and Rs. 21.29 Crs. of Energy taken from UI shall be shall not to be passed on to the Consumers.

4.6. TOTAL REVENUE REQUIREMENT OF FY 2021-22 & FY 2022-23

The Actual Figure as submitted by APDOP in True up Tariff Petition of FY 2021-22 & FY 2022-23 are Rs 835.27 Crs and Rs. 1028.09 Crs. However, as seen from the Calculations below the Approved Total Revenue Requirement comes out to be Rs 815.44 Crs and Rs. 1006.85 Crs. by the Commission as against the actual Figure for the FY 2021-22 and FY 2022-23.

Table 4.6 - Total Revenue Requirement (Rs Crs)- Commission's Analysis

SI no	Description	Approve d in the Tariff order for FY 2018- 19	Actuals as per true up Petition for FY 2021-22 Submissio n	Actuals as per true up Petition for FY 2022-23 Submissio n	Now approve d for FY 2021-22 (Trued Up)	Now approve d FY 2022-23 (Trued Up)
1	Cost of power purchase	186.06	458.05	600.84	438.17	579.55
2	Employee cost	325.84	336.88	372.93	336.88	372.93
3	Repair & Maintenance cost	43.9359	28.85	28.96	28.85	28.96
4	Administrative cost	6.48	9.24	15.11	9.24	15.11
5	Fuel cost	2.205	0	0	0	0
6	Depreciation	0	0	0	0	0

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7	Interest on working capital	0	0	0	0	0
8	Interest & Finance charges	0	0	0	0	0
9	Return on Equity	0	0	0	0	0
10	Solar compliance	2.69	2.25	10.25	2.25	10.25
11	Annual license fee	0.05	0	0	0.05	0.05
12	Investment for training & safety of personnel	0.75	0	0	0	0
13	Total Revenue requirement	568.01	835.27	1028.09	815.44	1006.85

4.7. REVENUE GAP AND AVERAGE COST OF SUPPLY OF FY 2021-22 & FY 2022-23

The Commission here approves the Average Cost of Supply as Rs 15.73/unit and Rs 16.58/unit for the FY 2021-22 and FY 2022-23.

Table 4.7 - Revenue GAP and Average Cost of Supply- Commissions' Analysis

SI no	Description	Unit	Approved in the Tariff order for FY 2018-19	Actuals as per true up Petition for FY 2021-22 Submissi on	Actuals as per true up Petition for FY 2022-23 Submissi on	Now approv ed for FY 2021-22 (Trued Up)	Now approv ed FY 2022-23 (Trued Up)
1	Revenue from energy sale within the state	Rs Crs	161.47	223.11	264.26	223.11	264.26
2	Revenue from surplus sale of power	Rs Crs	23.07	128.81	216.18	128.81	216.81
3	Non- tariff Income	Rs Crs	3.81	0	41.59	0	41.59
4	Deviation Export	Rs. Crs	0	0	0	0	0
5	Total Income	Rs Crs	188.35	351.92	522.03	351.92	522.66
6	Total Revenue Requirement	Rs Crs	568.01	835.27	1028.09	815.44	1006.85
7	Revenue Gap	Rs Crs	379.66	483.35	506.06	463.52	484.19

Secretary

8	Net Revenue Requirement	Rs Crs	564.2	835.27	986.5	815.44	965.26
9	Energy Sales within State	MU	423.61	518.25	582.1	518.25	582.1
10	Average cost of supply	Rs/un it	13.32	16.12	16.95	15.73	16.58

No other parameter of the ARR has been noticed to have impacted the ARR for FY 2021-22 and FY 2022-23 and there is no ARR gap or surplus required to be carried forward to further years. As such, no impact is required to be passed on to the Consumers due to True Up by the Commission for the FY 2021-22 and FY 2022-23. No amount of ARR is generated for adjustment as Regulatory Asset or surplus for FY 2021-22 and FY 2022-23 or later years.

4.8. SUMMARY OF TRUE UP FOR FY 2021-22 & FY 2022-23

The Commission analysed each component in details and tallied with the accounts submitted by the petitioner. The Commission approves the true-up as shown in table below with a direction to take care of high AT&C losses and Capacity Building programme.

Table 4.8 - SUMMARY OF TRUE UP FOR FY 2021-22 & FY 2022-23

	True Up of FY 2021-22 & FY 2022-23										
SL No.	Item of Expenses	Actual FY 2021- 22 (Rs Cr)	Actual FY 2022- 23 (Rs Cr)	True-up approved by the Commission for FY 2021-22 (Rs Cr)	True-up approved by the Commission for FY 2022-23 (Rs Cr)						
1	Cost of Power Purchase	337.84	475.75	317.96	454.46						
2	Fuel Cost	0	0	0	0						
3	Employee Cost	336.88	372.93	336.88	372.93						
4	R&M Expenses	28.85	28.96	28.85	28.96						
5	Administration and General expenses	9.24	15.11	9.24	15.11						
6	Depreciation	0	0	0	0						
7	Interest on Working Capital	0	0	0	0						
8	Interest Charges Including interest on working capital)	0	0	0	0						
9	Return on NFA/Equity	0	0	. 0	0						

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Provision for Bad Debt	0	0	0	0
Renewable Energy (Solar) Purchase Obligation	2.25	10.25	2.25	10.25
Annual License Fee for FY 2021-21 & FY 2022-23	0	0	0.05	0.05
Safety Harness and Skilling/Training	0	0	0	0
Total NERPC board fund and Fees and charges of NERLDC/ NERPC	1.02	1.12	1.02	1.12
Interstate Transmission Charges	107.75	112.51	107.75	112.51
Intrastate Transmission Charges	11.45	11.45	11.45	11.45
Solar Compliance	SIGITY	REGULA)	0	0
Total Revenue Requirement	835.28	1028.08	815.45	1006.84
Less: Non-Tariff income		41.59	0	41.59
Net Revenue Requirement	835.28	986.49	815.45	965.25
Revenue from Existing Tariff	223.11	264.26	223.11	264.26
Revenue from Sale of Surplus Power	128.81	216.18	128,81	216.18
Total Annual Income	351.92	522.03	351.92	522.03
Total Gap	483.36	506.05	463.53	484.81
Regulatory Assets	0	0	0	0
Energy Sales within State (MU)	518,25	1582. Nav	518.25	582.1
Total Energy Sale (MU)	844.14	1032.92	831	1018.16
Gross Energy Input (MU)	1329.06	1523.15	1279.85	1456.81
Average Cost of Supply based on billed Energy (ACS) (20/26- Rs/Kwh)	16.12	16.95	15.73	16.58
()				
	Renewable Energy (Solar) Purchase Obligation Annual License Fee for FY 2021-21 & FY 2022-23 Safety Harness and Skilling/Training Total NERPC board fund and Fees and charges of NERLDC/ NERPC Interstate Transmission Charges Intrastate Transmission Charges Solar Compliance Total Revenue Requirement Less: Non-Tariff income Net Revenue Requirement Revenue from Existing Tariff Revenue from Sale of Surplus Power Total Annual Income Total Gap Regulatory Assets Energy Sales within State (MU) Total Energy Sale (MU) Average Cost of Supply based on billed Energy	Renewable Energy (Solar) Purchase Obligation Annual License Fee for FY 2021-21 & FY 2022-23 Safety Harness and Skilling/Training Total NERPC board fund and Fees and charges of NERLDC/ NERPC Interstate Transmission Charges Intrastate Transmission Charges Solar Compliance Total Revenue Requirement Less: Non-Tariff income Net Revenue Requirement Revenue from Existing Tariff Revenue from Sale of Surplus Power Total Annual Income Total Gap Regulatory Assets Energy Sales within State (MU) Total Energy Sale (MU) Average Cost of Supply based on billed Energy 10 10 10 10 10 10 10 10 10 1	Renewable Energy (Solar) 2.25 10.25 Purchase Obligation 0 0 Annual License Fee for FY 2021-21 & FY 2022-23 0 0 Safety Harness and Skilling/Training 0 0 Total NERPC board fund and Fees and charges of NERLDC/ NERPC 1.02 1.12 Interstate Transmission Charges 107.75 112.51 Intrastate Transmission Charges 11.45 11.45 Solar Compliance 0 0 Total Revenue Requirement 835.28 1028.08 Requirement 835.28 986.49 Net Revenue Requirement 835.28 986.49 Revenue from Existing Tariff 223.11 264.26 Revenue from Sale of Surplus Power 128.81 216.18 Total Annual Income 351.92 522.03 Total Gap 483.36 506.05 Regulatory Assets 0 0 Energy Sales within State (MU) 518.25 582.1 (MU) 1329.06 1523.15 Average Cost of Supply based on billed Energy 16.12 1	Renewable Energy (Solar) Purchase Obligation Annual License Fee for FY 2021-21 & FY 2022-23 Safety Harness and Skilling/Training O

The Commission analysed each and every components and found most components has escalated to much higher amount than the amount approved by the

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Commission. However, the Commission has also noted that cost escalation over the time is natural due growth and expansion of infrastructures of the petitioner and inflation and found these escalations to be reasonable and hence approved as follows in the Table.



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VI. IMPACT OF FREE POWER

Table 5.1 - Impact of FREE Power

Sl.	Description	unit	Actuals as per Petition er's for FY 2017-18 Submiss ion	Actuals as per Petition er's for FY 2018-19 Submiss ion	Actuals as per true up Petition for FY 2019-20 Submiss ion	Actuals as per true up Petition for FY 2020-21 Submiss ion	Actuals as per true up Petition for FY 2021-22 Submiss ion	Actuals as per true up Petition for FY 2022-23 Submiss ion
1	from CGS	MU	606.32	671.64	703.32	575.33	611.47	709.51
2	DHPD	MU	61.02	61.7	66.46	76.6	48.06	41.97
3	HPDCL	MU	90.88	88.07		0.83	4.69	5.24
4	DIKSHI	MU		CONTRACTOR OF THE PERSON OF TH	29.7	16.3	47.99	65.17
5	SOLAR (APEDA)	MU	CTRICI	TY REG	0.99	0.52	0.47	0.96
6	UI	MU	4		20.31	39.92	48.82	66.05
7	Banking	MU	1/4	1	46.78	36.12	64.8	39.37
8	IEX Purchase	MU	16		S. S	0.65	3.94	6.15
9	Free Power From DIKSHI	MU		参		ISS	2.13	11.64
10	Free power	MU	167.15	163.3	209.84	400.19	496.3	576.8
11	Total Power	MU	925.37	984.71	1077.4	1146.46	1328.67	1522.86
12	Total Free Power	MU	167.15	163.3	209.84	400.19	498.43	588.44
13	Total Power Purchase Cost	Rs. Crs.	250.37	358.86	356.78	419.43	458.05	600.84
14	Total Revenue Requirement	Rs. Crs.	565,71	684.18	723.62	781.11	835.28	1028.08
15	Revenue from Existing Tariff	Rs. Crs.	183.93	202.73	211.93	196.52	223.11	264.26
16	Revenue from Sale of Surplus Power	Rs. Crs.	0	5.37	32.81	46.14	128.81	216.18
17	Total Annual Income	Rs. Crs.	183.93	208.1	244.74	242.66	351.92	522.03
20	Average Cost of Supply based on billed Energy (ACS) (Rs/Kwh)	Rs/K wh	13.65	15.63	15.87	19.28	16.12	16.95
21	Cost of FREE Power (20*12)	Rs. Crs.	228.11	255.21	333.00	771.68	803.34	997.23

	(MU*(Rs/Kw H))/10							
23	Difference of Total annual income and cost of free power (17-21)	Rs. Crs.	-44.18	-47.11	-88.26	-529.02	-451.42	-475.20



VII. DIRECTIVES:

- 1. Since the Revenue Gap created by the petitioner (which could have been reduced by improving the efficiency as per committed AT&C loss as well as controlling unwarranted UI procurement), is mitigated by the State Government through grants, the trued up Revenue Gap shall not pass through and reflect in the next tariff petition. The inefficiency of the distribution licensee cannot be covered by the Grants from public money and concern officials of APDOP should be answerable for it.
- 2. Despite many flagship Schemes specially designed for reduction of AT&C losses in past and present, the AT&C losses consistently remained above 50%, and it even rose upto 61.93% in the FY2018-19. Matter needs serious introspection to plug the losses and conduct diagnostic exercise at individual feeder/transformer/subdivision/division/circle and zonal level. Commission hereby direct the APDOP, to conduct such exercise and submit results to Commission before next petition. Commission also directs APDOP to bring down the AT&C losses as per the trajectory issued by the MoP with due consultation with APDOP itself.
- 3. It is seen that the APDOP has been selling its surplus power received from its tied up Generating stations in open market/outside entities to earn revenue on the understanding that this sort of commercial arrangement has been profitable to APDOP. However no supporting documents have been submitted with the petition to demonstrate its claim. The APDOP is directed to submit the related documents like the power purchase bills, power selling bills etc., generating station & entity wise to demonstrate that process is optimised and ultimately profitable instead of surrendering it. Justification along with supporting documents should be provided to the commission failing which, such commercial arrangement shall be disallowed next time.
- 4. It is Mandatory to pay annual licensee to the Commission by the Licensees /deemed licensees. The DoP, AP a deemed licensee has not paid any annual license fee so far. The DoP, AP is hereby directed pay the annual license fees regularly.
- Capacity Development Programme is essential part of any organisation, The DoP, AP, despite keeping provision skilling and training has not spent on it. The DoP, AP should conduct regular training programme.
- 6. The liabilities and responsibilities of Transmission as well as SLDC are also getting clubbed in these true ups petitions, which is contrary to the provisions of the Electricity Act. Therefore, this practise shall be discontinued by distribution licensee and if not followed, petitions shall be rejected.

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- 7. It is mentioned in petition that full revenue gap is arranged by the GoAP as a grant through budgetary support. It is observed that APDoP is utilising such grant without accounting "Cost of Money" principles into its accounts which is making the state's power eco-system inefficient including uncontrolled AT&C losses. Actually, to know the efficiency of APDoP in utilising these funds of Government Exchequer, the concept of "Cost of Money" in form of ROE, ROI, Interest etc., were ordered by the Commission. However, compliance of the above is not intimated.
- 8. Many other observations of commission have not been attended in the true up petition along with non-compliance of directives of the tariff orders. Such con-complied petitions shall be disallowed from the next time.

With the above terms the instant Petition hereby disposed of.

Date: 9th January, 2024

Place: Itanagar

R. K. Joshi Chairperson

Secretary

State Electricity Regulatory Commission Arunachal Pradesh