**ANNEXURE-VI**

**PFI Comments/Suggestions: NPCL True Up Petition for FY 2023-24**

## A. HIGHER DISTRIBUTION LOSS LEVELS

1) Noida Power Company Limited (NPCL) in the True Up Petition for FY 2023-24, has claimed 7.49% Distribution losses. PFI has noted that NPCL in revised submissions (excel forms) has submitted 3,130 MU of Energy Sales for FY 2023-24 (Form No. F-46) out of which 57% is HT Sales. Further, NPCL in "**APPENDIX - VI: Cost Allocation- Wheeling & Retail Supply Activity"** has submitted the Voltage wise Energy Sales for FY 2023-24, *although the same is differing with the excel forms*, as shown below

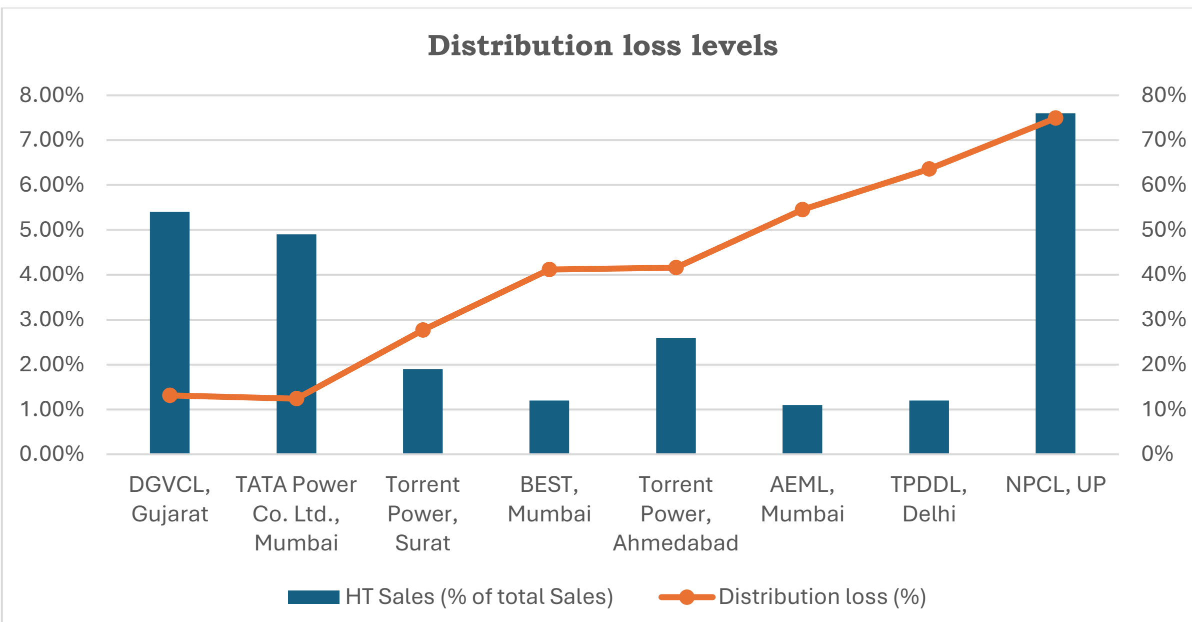
| Table-1: Energy Sales for FY 2023-24 | |
|---|---|
| **Voltage Level** | **Energy Sales (MU)** |
| 132 KV | 57.72 |
| 33 KV | 1,362.69 |
| 11 KV | 970.02 |
| LT | 745.48 |
| **Total** | **3,135.91** |

2) As above, NPCL has claimed 3,136 MU of Energy Sales for FY 2023-24 out of which Energy Sales at LT level are just 23% of the total Sales while rest of the Sales are at HT Sales, i.e., 76% of the total Sales, huge. It is quite evident that at HT level the loss levels, as the Distribution utilities with high HT Sales, are operating at very low Distribution loss levels. Further, 50% of the Domestic Energy Sales (at LT level) of NPCL are for Registered Societies, getting supply at single point with very low loss levels. So, NPCL has a very unique consumer base and Sales mix where the scope of Distribution loss is very low. The DISCOM is providing supply to Rural consumers only 1% of the total Energy which provides an edge to NPCL to maintain low Distribution loss levels. However, despite such a huge proportion of Sales at HT level and Single point connection, NPCL has claimed 7.49% of Distribution loss levels.

3) PFI has prepared a comparative of other Distribution utilities operating with similar Sales mix and has observed that the Distribution loss levels for such utilities are significantly less than those of NPCL although the LT sales of such utilities are more than those of NPCL. The detailed submission in this regard is as follows:

| Distribution utility | Total Energy Sales (MU) | HT Sales (% of total Sales) | Distribution loss (%) |
|---|---|---|---|
| DGVCL, Gujarat | 29,555 | 54% | 1.31% |
| TATA Power Co. Ltd., Mumbai | 5,958 | 49% | 1.24% |
| Torrent Power, Surat | 3,914 | 19% | 2.77% |
| BEST, Mumbai | 5,396 | 12% | 4.12% |
| Torrent Power, Ahmedabad | 8,453 | 26% | 4.16% |
| AEML, Mumbai | 11,323 | 11% | 5.45% |
| TPDDL, Delhi | 9,947 | 12% | 6.36% |
| **NPCL, UP** | **3,136** | **76%** | **7.49%** |

**Actual Trued-Up data for FY 2023-24 for utilities other than NPCL and TPDDL. For TPDDL, actuals for FY 2022-23*




4) As above, Distribution utilities like DGVCL (Gujarat), TPL (Surat), TPCL (Mumbai) with HT sales mix lower than NPCL are able to achieve Distribution loss levels of around 2.5%. Even the utilities like BEST (Mumbai), Torrent Power (Ahmedabad), AEML (Mumbai) and TPDDL (Delhi) with fewer HT Energy Sales are able to contain

their losses less than that of NPCL. However, with the same set of electricity Distribution equipment such as Distribution Transformer, Feeders, Cables, Switches, Isolators, Meters, etc. as used by other Distribution utilities as above, NPCL is operating at higher loss levels.

5) In this regard, Gujarat Electricity Regulatory Commission (GERC) has observed that reduction in distribution loss is mainly attributable to increase in consumption of industrial consumers and modernization/improvement of the distribution network. Relevant extract of GERC's Tariff Order dtd. 31/03/2025 for DVCL (Case No. 2422/2024) is as follows:

*"**Commission's Analysis***

*The petitioner has submitted that the actual distribution losses are 1.31% against 4.68% approved in the Tariff Order dated 31st March 2023. The Commission finds that the reason for reduction in distribution loss is mainly attributable to increase in consumption of industrial consumers during FY 2023-24. Further, other reasons have also been noted by the Commission. The Commission has examined the audited accounts of the Petitioner and found out the sales figure during FY 2023-24 as 29,554.62 MU against the claimed figure of 29,554.00 MU. Considering the actual sales of 29,554.62 MUs, the Distribution Loss in FY 2023-24 works out to 1.31%."*

6) Relevant extract of GERC's Tariff Orders dtd. 29/03/2025 for Torrent Power- Surat (Case No. 2427/2024) and Torrent Power- Ahmedabad (Case No. 2426/2024) is as follows:

*"4.3.3 The reduction in distribution losses in the licensed area has taken place due to modernization/ improvement of the distribution network, augmentation of the old assets, etc. Substantial capitalisation of assets over a period of time and concentrated efforts of the Petitioner, which has resulted in reduction in transformation losses as well as line losses and ultimately overall Distribution Losses."*

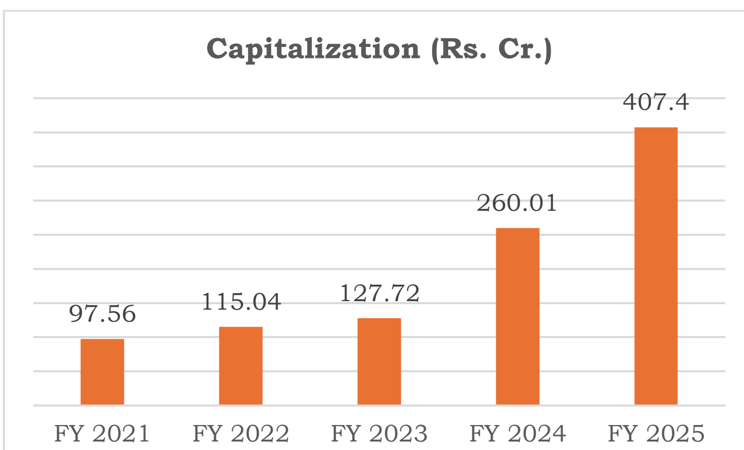
7) As submitted above, the issue of higher Distribution loss levels of NPCL has also been acknowledged by Hon'ble UPERC and NPCL was directed to put in serious efforts to

achieve optimum Distribution Loss levels. In this regard, the relevant extract of Business Plan Order dtd. 26/11/2020 approved by Hon'ble UPERC is as follows:

*"5.3. The Commission would reiterate that despite huge capital expenditure / system improvements undertaken by NPCL every year there has been no reduction in loss levels rather the Petitioner is now projecting increased losses. It may be noted that the Commission has also been allowing year on year significant Capital investment proposed by Petitioner which also includes the capex for reduction in Distribution Losses through meter replacement, cable replacement, etc., which helps in reducing the Technical Losses as well as Commercial Losses and the same should reflect in the loss numbers projected by the Petitioner.*

***Further, the Distribution Licensees like Torrent Power Limited operating in cities like Surat and Ahmedabad, which have similar demographics as those of Petitioner, have been able to achieve Distribution Losses as low as around 3.43% in the past. Therefore, there is enough scope for Petitioner to put in more efforts to achieve optimum Distribution Loss levels**."*

8) It is also pertinent to note that NPCL over time has invested huge Capital Expenditure on modernization/improvement of the distribution network, augmentation of the old assets, for reduction in Distribution Losses through meter replacement, cable replacement, etc., which helps in reducing the Technical Losses as well as Commercial Losses, as shown in the Figure below:




**FY 2021, 2022 and 2023 as approved in True-Up and rest as approved in ARR*

9) However, despite huge capital expenditure undertaken by NPCL every year there has been no significant reduction in loss levels as compared to other utilities operating

with lesser HT network than that of NPCL. NPCL has not been able to relate the investments made in CAPEX with reduction in its loss levels. Similar observation has been recorded by Hon'ble Commission in Business Plan Order dtd. 26/11/2020 for NPCL, relevant extract of which are as follows:

*"The Commission has analyzed the three aspects i.e. load, sales and the loss trajectory simultaneously. It has been observed that in the past,* ***no particular trend or relation of capex with the three aspects can be ascertained.*** *Further, based on the past trends, it can be said that the licensees have not made proper submission / projections. As per the submission the load will increase, the sales will increase and the distribution losses will reduce. Along with this, there is reduction in capital expenditure. In other words, the performance will improve despite reducing capital expenditure which may not be correct.* ***Such submissions by the Licensees are making the complete process of approval/ acceptance of business plan futile and would lead to improper planning and decision making which will further deteriorate the performance of the licensee."***

10) **Based on the above, it can be ascertained that NPCL is not able to provide actual data pertaining to Energy Sales, Loss levels, investment in CAPEX, etc. Therefore, in view of above, PFI requests that Hon'ble Commission may conduct Physical Energy Audit of its network covering detailed assessment of the complete electrical distribution system like Substation Equipment, Transformer, cable loading, Feeder wise loading, normal and emergency loads, electricity distribution in various areas, assessment of feeder wise connected load at various voltage levels, billing (with break up) done at each voltage level, assessment of feeder wise losses, etc. Physical verification and site visits of all import/export metering locations for Distribution Network area of NPCL should be done to ascertain the actual loss levels. Similar exercises have been conducted in the past by other SERCs[11].**

11) **Therefore, observing the prevailing low loss levels for FY 2023-24 of other Distribution utilities such as DGVCL, Torrent Power, TATA Power, AEML, etc. which have sort of similar Demography and Sales profile as NPCL, it is felt that**

[11] https://www.derc.gov.in/sites/default/files/TOR_EA_BRPL_final.pdf

**Distribution Loss of NPCL for FY 2023-24 would have been 5.00% rather than 7.50%. Further, for FY 2025-26, Distribution loss levels to be allowed as 4.00% (0.5% reduction y-o-y over the proposed 5% loss for FY 2023-24)**

12) In view of above, PFI has reworked on power purchase quantum and cost considering 5% Distribution loss, as follows:

| Particulars | Claimed by NPCL | Allowable as per Regulatory provisions |
|---|---|---|
| Retail Sales (MU) | 3,130.40 | 3,130.40 |
| Distribution Losses | 7.49% | 5.00% |
| Energy at Discom Periphery for Retail Sales (MU) | 3383.86 | 3295.16 |
| Intra-State Transmission Losses | 3.09% | 3.09% |
| Energy Available at State periphery for Transmission (MU) | 3491.75 | 3400.23 |
| Inter-State Transmission Loss | 3.26% | 3.26% |
| Energy Purchase from Stations connected to ISTS PGCIL (MU) | 3609.42 | 3514.81 |
| Additional Quantum as per approved DL (MU) | | 94.60 |
| APPC (Rs./kWh) | 5.77 | 5.77 |
| **Additional Power Purchase Cost (Rs. Cr.)** | | **-54.59** **(94.60*5.77/10)** |

**APPC is as considered by NPCL in the Petition for FY 2023-24*

13) **As tabulated above, there is an additional quantum of 95 MU above proposed Distribution losses of 5% which translates to minus (-) Rs. 54.59 Crore of Power Purchase Cost for True-up FY 2023-24. Since NPCL has achieved the targeted Distribution Loss of 7.50%, as approved by UPERC, no reversal of target is proposed. However, considering the above submissions, it is requested to Hon'ble UPERC conduct energy audit covering at least 70% of all Distribution Transformers & Power Transformers and other major equipment to ascertain Actual Distribution Loss levels. If such study has been conducted by Hon'ble UPERC, then the report of the same may kindly be provided to us.**

## B. INAPPROPRIATE POWER PROCUREMENT PLANNING: OVER DEPENDENCY ON SHORT TERM POWER PURCHASE

14) PFI has noted that, in FY 2023-24, 36% of power has been purchased from short term sources against the total power purchase requirement. Such huge dependence on short term arrangement which is volatile in nature and costly too, reflects unwise/

imprudent power procurement planning of NPCL. Such improper planning is not only for FY 2023-24, but it has been continued in the past and even has been projected for future years by NPCL themselves that they will continue such imprudent practices tabulated as follows:

| Particulars | True-Up FY 2021-22 | True-Up FY 2022-23 | True-Up FY 2023-24 |
|---|---|---|---|
| Net Short Term Power Purchase (STPP) (MU) | 943.71 | 1,399.34 | 1,288.48 |
| Total Power Purchase quantum (MU) | 2,535.84 | 3,107.61 | 3,609.62 |
| **STPP (% of Total Power)** | **37%** | **45%** | **36%** |
| STPP Cost (Rs. Cr.) | 545.64 | 994.74 | 798.07 |
| **STPP Cost (Rs./kWh)** | **5.78** | **7.11** | **6.20** |

15) Every State Electricity Regulatory Commission u/s 87 of the Electricity Act 2003 (Act) representing various Sectoral experts of the respective State notify State Advisory Committee. PFI notes from the previous Tariff Orders of Hon'ble UPERC that issue related to over-reliance on short-term power purchase by NPCL is a Legacy issue and has been raised by various stakeholders, State Advisory Committee members and even Hon'ble UPERC itself. Way back, while determining the Tariff for FY 2013-14 Hon'ble UPERC directed NPCL to that the entire quantum of required power supply is tied up through optimum long-term Power Purchase Agreements (PPAs), so that the need for costly short-term power purchase, is minimized and eliminated. Hon'ble UPERC cautioned NPCL that any delay in actual implementation of Long Term Power Procurement will increase the dependence on short term power purchase which may worsen financial position of NPCL and may give undesirable tariff shocks to the consumers. However, till today NPCL has not been able to arrange Long-Term Power for the consumers and has been relying heavily on Short Term Power. Relevant extract of the Tariff Order for FY 2013-14 dtd. 31/05/2013 is as follows:

***"11.11 LONG TERM POWER PROCUREMENT:***

*11.11.1 Power purchase cost is the main cost element which accounts for about 85% of the total cost for the distribution business. The power purchase cost is determined from the demand and supply position. The power purchase cost projected is based on the projected demand of power purchase and the expected price for each unit of power.*

*11.11.2 NPCL is facing power shortage scenario since 6-7 years and had it envisaged or forecasted demand through proper planning and initiated efforts for long term power procurement through some tie-ups or even through own generation capacity, the situation would have been different. In this situation, the Commission reiterates that NPCL needs to vigorously pursue setting up its own power plant for meeting its power purchase needs.*

*11.11.3 NPCL should map a 5 to 10 years long-term power procurement plan on the basis of the demand forecast and assessment of power availability. Such a plan is useful for determining the demand and supply position which would facilitate NPCL to enter into long-term power purchase agreements with State Generating Stations, Non-conventional Energy Sources, Merchant Power Producers Independent Power Producers (IPP) and Captive Power Plants.*

*11.11.4 The objective of the long-term power procurement plan is to secure available and reliable power supply to all consumers with economically viable tariffs, while satisfying power supply planning and security standards.*

*11.11.5 The Commission is of the view that NPCL should ensure that the entire quantum of required power supply is tied up through optimum long-term Power Purchase Agreements (PPAs), so that the need for costly short-term power purchase, is minimised and eliminated.*

*…*

*11.11.7 The Commission acknowledges that the long term power procurement from April 2014 would surely help NPCL to a large extent but the actual commencement of of the PPA is the key and any delay in actual implementation will increase the dependence on short term power purchase for more than 50% of the demand till a few* *more years which may worsen financial position of NPCL and may give undesirable tariff shocks to the consumers. Therefore, NPCL is directed to closely monitor the development of the project from where the Long-term power has been tied-up and keep the Commission duly informed on the same."*

16) PFI notes that no suitable measures have been taken by NPCL for improving their Power Procurement Planning for the past many years. Without adequate Long Term Tied up Power, NPCL cannot guarantee Energy Security, which is a strategic, priority driven by the need to ensure a reliable, affordable, and sustainable energy supply for its growing economy and population, for its consumers.

17) Thus, considering the consistent imprudent Power Purchase Planning continuing for the past many years by NPCL despite the directions of Hon'ble UPERC, **it is now submitted by PFI that such high-cost power be restricted at APPC rate (derived from long term and medium-term sources only) which is Rs. 3.96/kWh for FY 2023-24. Such high-cost power of NPCL should not be borne by consumers at large. Allowable Power Purchase Cost as per Regulatory principles in True-Up is Rs. 1,864 Cr (2,152.31 - 288). Rs. 288 Cr. is derived as [(798.07- (1288.48 × 3.96/10)] which may be allowed through some suitable mechanism by Hon'ble Commission in consultation with Govt. of Uttar Pradesh.**

## C. HIGH OPERATIONS & MAINTENANCE (O&M) EXPENSES

18) NPCL has claimed Rs. 166.77 Cr. of O&M Expenses in True-Up of FY 2023-24 as per their Audited Accounts, however, Hon'ble UPERC approved Rs. 89.92 Cr. of O&M expenses in ARR of FY 2023-24 based on Regulatory provisions.

19) PFI submits that Regulation-8.2 (i) of *UPERC MYT Regulations, 2019* specifies that O&M expenses are Controllable Factors and so the same to be allowed based on lowest of the normative, actual, & audited value for each component, as done by Hon'ble Commission in past True-Up Orders.

20) Further, PFI submits that NPCL has also claimed additional O&M expenses worth Rs. 7.34 Cr. pertaining to SOP Compliance, CGRF, DT Metering, etc. However, this is to be noted that such expenses are not allowed by the Commission in the previous Tariff Orders that such expenses were not considered for approving the norms of O&M Expenses. In this regard, relevant extract of the Tariff Order dtd. 10/10/2024 is as follows:

*"5.6.84 With regards to the claim of the Petitioner to include the additional O&M expenses i.e., expenses incurred for the compliance of directive of the State Commission, impact of Service Tax, impact of GST and Cost of Borrowing of DPS, it has been observed that the Petitioner, for the first time, started claiming these expenses as a part of normative O&M expenses. The Petitioner had claimed these expenses separately in the previous tariff filings. The Commission disallowed these expenses in the previous Tariff Orders hence these claims have not been considered for approving the norms of O&M Expenses. The Commission has already disallowed the financing cost of DPS & additional claim of the impact of GST; hence, these claims have not been considered for approving the norms of O&M expenses for FY 2022-23."*

21) Based on the Regulatory provisions, PFI has worked out O&M expenses for FY 2023-24 using CPI and WPI inflation as considered by NPCL, as tabulated below:

| Sr. No. | Particulars | Trued-Up FY 2022-23 | Inflation | | Allowable as per Regulatory provisions |
|---|---|---|---|---|---|
| | | Normative | WPI | CPI | Normative |
| 1 | Employee Expenses | 32.87 | | 5.46% | 34.66 |
| 2 | R&M Expenses | 47.29 | 7.23% | | 50.71 |
| 3 | A&G Expenses | 17.53 | 7.23% | | 18.80 |
| 4 | Gross O&M Expenses | 97.69 | | | 104.17 |
| 5 | Expenses Capitalized | 6.52 | | | 11.58 |
| **6** | **Net O&M Expenses** | **91.17** | | | **92.59** |

22) **Hon'ble UPERC is requested to allow O&M expenses of Rs. 92.59 Cr. The differential amount of Rs. 74 Cr. may be allowed through some suitable mechanism developed by Hon'ble Commission in consultation with Govt. of Uttar Pradesh.**

## D. RETURN ON EQUITY

23) PFI submits that NPCL has claimed Rs. 79 Cr. of Return on Equity (RoE) in True-Up of FY 2023-24, however, Hon'ble UPERC in ARR Order for FY 2023-24 approved Rs 62 Cr. of RoE.

24) PFI has observed that NPCL has erred in computing RoE and has not considered the opening Equity same as approved by Hon'ble Commission as closing for FY 2022-23 (in True-Up). PFI has reworked the RoE as per the Regulatory principles considering opening Equity for FY 2023-24 same as approved by Hon'ble Commission in True-Up of FY 2022-23 as closing Equity, as tabulated below. Addition in Equity has been considered same as claimed by NPCL and RoE @15% as per Regulation 22 of MYT Regulations, 2019 for the Distribution Utilities.

| **Particulars** | **Claimed by NPCL** | **Allowable as per Regulatory provisions** |
|---|---|---|
| Equity (Opening Balance) | 513.87 | 374.87 |
| Less: Reduction in equity due to retirement or replacement of assets | 0.00 | 0.00 |
| Additions during the year | 21.21 | 21.21 |
| Equity (Closing Balance) | 535.08 | 396.08 |
| Average Equity | 524.47 | 385.47 |
| Rate of Return on Equity | 15.0% | 15.0% |
| **Return on Equity** | **78.67** | **57.82** |

25) **So, Hon'ble UPERC is requested to allow Rs. 57.82 Cr. of RoE for NPCL for FY 2023-24. The differential amount of Rs. 21 Cr. may be allowed through some suitable mechanism developed by Hon'ble Commission in consultation with Govt. of Uttar Pradesh..**

## E. LESSER NON- TARIFF INCOME (NTI)

26) PFI submits that NPCL has claimed Rs. 18.78 Cr. of NTI (including Revenue from Open Access Consumers) in True-Up of FY 2023-24 while the other income as per Accounts is Rs. 61.36 Cr. NPCL has not claimed entire Non-Tariff Income in the True-Up Petition as shown in the Audited Accounts for FY 2023-24. PFI submits that NPCL has only one business i.e. distribution in Greater Noida, hence all income in the Balance Sheet should be accounted for while computing NTI.

27) The Hon'ble Commission in the previous Tariff Orders has ruled that entire income of NPCL as shown in the Accounts should form part of NTI. In this regard, relevant extract of the Tariff Order dtd. 10/10/2024 is as follows:

*"The Commission is of the view that the Petitioner has only one business i.e. distribution in Greater Noida, hence all income in the Balance Sheet comes under the ambit of the True-Up. Further, in case, the Appellant has some other business the same would have been covered as per relevant provision / Regulation of other business."*

28) Extract of Audited Accounts of NPCL for FY 2023-24 showcasing NTI of Rs. 61.36 Cr. is as follows:

**Noida Power Company Limited**
**Notes to the financial statement for year ended 31 March 2024**
(All amount in Rs. Lakh, unless otherwise stated)

| **28 Other income** | **For the year ended 31 March 2024** |
|---|---|
| Interest income: | |
| On non-current investments | 11 |
| On bank deposits | 4,472 |
| Other | 54 |
| Dividend income | 2 |
| Gain on sale of short-term investments (net) | 237 |
| Other non-operating income: | |
| Liquidated damages recovery | 706 |
| Supervision charges | 4 |
| Delayed payment charges | 577 |
| Gain on fair valuation of investments | 17 |
| Income from telecom service provider | 6 |
| Miscellaneous income | 50 |
| | 6,136 |

29) Based on above, NTI for NPCL for FY 2023-24 as worked out by PFI is **Rs. 61.36 Cr.** against the claim of **Rs. 18.78 Cr. The differential amount of Rs. 43 Cr. may be allowed through some suitable mechanism developed by Hon'ble Commission in consultation with Govt. of Uttar Pradesh.**

## F. SUMMARY

30) As stipulated in above Sections, the summary of True-up of FY 2023-24 for NPCL is as follows. Hon'ble UPERC is requested to kindly consider the same.

***Table 5:*** *Summary of True-Up of FY 2023-24 for NPCL (Rs. Cr.)*

| Particulars | Claimed by NPCL | To be allowed in FY 2023-24 | To be met through suitable mechanism |
|---|---|---|---|
| Power Purchase Cost | 2,152 | 1,864 | 343 |
| *Optimization through Long term power purchase* | 0 | 288 | 288 |
| O&M Expenses | 167 | 93 | 74 |
| Return on Equity | 79 | 58 | 21 |
| Other Expenses | 395 | 395 | 0 |
| Less: Non-Tariff Income | 19 | 61 | 43 |
| **Net Revenue Requirement** | **2,774** | **2,348** | **426** |
| Less: Revenue from Tariff | 2,321 | 2,321 | 0 |
| **(Gap)/Surplus** | **(453)** | **(453)** | |

## PRAYERS BEFORE HON'BLE UPERC FOR TRUE-UP FY 2023-24 FOR NPCL:-

1) **To consider the comments / suggestions of Power Foundation of India (PFI) on True-Up of FY 2023-24 for NPCL.**

2) **On Account of high Distribution loss levels, to consider the losses for the FY 2023-24 using the methodology worked out by PFI and accordingly derives the Power Purchase requirement of NPCL for FY 2023-24**

3) **On Account of high reliance on Short Term Power and non- Strategic Power Purchase Planning, to not consider high-cost Short Term Power claimed for FY 2023-24. Such high-cost Short Term power be restricted at APPC rate (derived from long term & Medium term sources) which is Rs. 3.96/kWh for FY 2023-24.**

4) **To allow O&M expenses, Return on Equity and Non- Tariff Income for FY 2023-24 considering the Regulatory provisions as per the working by PFI.**

5) **The differential as per Regulatory principles and as claimed by NPCL should not be borne by consumers at large in the form of Tariff Hike. Such differential may be adjusted through some suitable mechanism by Hon'ble Commission in consultation with Govt. of Uttar Pradesh.**

6) **To consider the additional submissions, if any, made by PFI for NPCL True-Up of FY 2023-24.**

## PFI Comments/Suggestions: NPCL ARR Petition for FY 2025-26

### A. HIGHER DISTRIBUTION LOSS LEVELS

1) As submitted by PFI in the True-Up Section, NPCL has a very unique consumer base and Sales mix where the scope of Distribution loss is very low. Energy Sales at LT level are just 23% of the total Sales while rest of the Sales are at HT Sales, i.e., 76% of the total Sales, huge. Further, 50% of the Domestic Energy Sales (at LT level) of NPCL are for Registered Societies, getting supply at single point with very low loss levels. Further, NPCL is providing supply to Rural consumers with only 1% of the total Energy which provides an edge to NPCL to maintain low Distribution loss levels. However, despite such a huge proportion of Sales at HT level and Single point connection, NPCL has very high Distribution loss levels. In ARR of FY 2025-26, NPCL has submitted 7.45% of Distribution losses.

2) PFI has prepared a comparative of other Distribution utilities operating with similar Sales mix and has observed that the Distribution loss levels for such utilities are significantly less than those of NPCL although the LT sales of such utilities are more than those of NPCL. The detailed submission in this regard is as follows:

| Distribution utility | Total Energy Sales (MU) | HT Sales (% of total Sales) | Distribution loss (%) |
|---|---|---|---|
| DGVCL, Gujarat | 29,555 | 54% | 1.31% |
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| Torrent Power, Surat | 3,914 | 19% | 2.77% |
| BEST, Mumbai | 5,396 | 12% | 4.12% |
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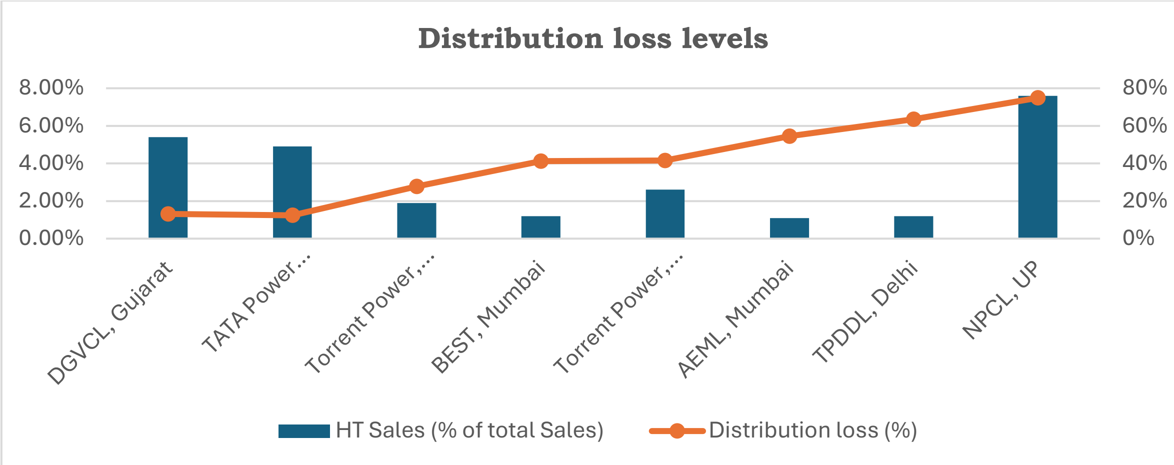
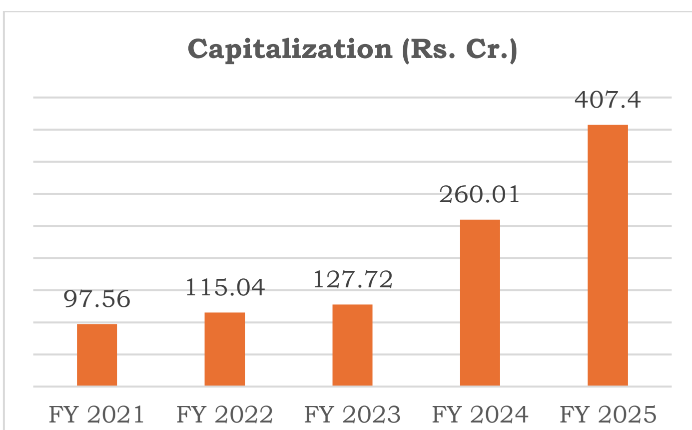
| AEML, Mumbai | 11,323 | 11% | 5.45% |
| TPDDL, Delhi | 9,947 | 12% | 6.36% |
| **NPCL, UP** | **3,136** | **76%** | **7.49%** |

**Actual Trued-Up data for FY 2023-24 for utilities other than NPCL and TPDDL. For TPDDL, actuals for FY 2022-23*




3) As above, Distribution utilities like DGVCL (Gujarat), TPL (Surat), TPCL (Mumbai) with HT sales mix lower than NPCL are able to achieve Distribution loss levels of around 2.5%. Even the utilities like BEST (Mumbai), Torrent Power (Ahmedabad), AEML (Mumbai) and TPDDL (Delhi) with fewer HT Energy Sales are able to contain their losses less than that of NPCL. However, with the same set of electricity Distribution equipment such as Distribution Transformer, Feeders, Cables, Switches, Isolators, Meters, etc. as used by other Distribution utilities as above, NPCL is operating at higher loss levels.

4) It is also pertinent to note that NPCL over time has invested huge Capital Expenditure on modernization/improvement of the distribution network, augmentation of the old assets, for reduction in Distribution Losses through meter replacement, cable replacement, etc., which helps in reducing the Technical Losses as well as Commercial Losses, as shown in the Figure below:




**FY 2021, 2022 and 2023 as approved in True-Up and rest as approved in ARR*

5) However, despite huge capital expenditure undertaken by NPCL every year there has been no significant reduction in loss levels as compared to other utilities operating with lesser HT network than that of NPCL. NPCL has not been able to relate the investments made in CAPEX with reduction in its loss levels.

6) **Therefore, looking at the prevailing low loss levels of other Distribution utilities such as DGVCL, Torrent Power, TATA Power, AEML, etc. which have sort of similar Demography and Sales profile as NPCL, it is prudent to set Distribution loss levels at 4% for FY 2025-26 for NPCL and accordingly, Power Purchase Quantum and Cost should be allowed at the Distribution losses of 4%.**

7) In view of the above, PFI has reworked on power purchase quantum and cost considering 4% Distribution loss, as follows:

| **Particulars** | **Claimed by NPCL** | **As per Regulatory provisions** |
|---|---|---|
| Retail Sales (MU) | 4,083.65 | 4,083.65 |
| Distribution Losses | 7.45% | 4.00% |
| Energy at Discom Periphery for Retail Sales (MU) | 4412.37 | 4253.80 |
| Intra-State Transmission Losses | 3.35% | 3.09% |
| Energy Available at State periphery for Transmission (MU) | 4565.31 | 4389.43 |
| Inter-State Transmission Loss | 3.62% | 3.26% |
| Energy Purchase from Stations connected to ISTS PGCIL (MU) | 4736.78 | 4537.35 |
| Additional Quantum as per approved DL (MU) | | 199.43 |
| APPC (Rs./kWh) | 5.87 | 5.87 |
| **Additional Power Purchase Cost as per approved DL (Rs. Cr.)** | | **-117.06** |

**APPC is as considered by NPCL in the Petition for FY 2025-26*

8) **As shown in the table above, additional quantum of 199 MU above Distribution losses at 4% that translates to Rs. 117 Cr. This may be adjusted through some suitable mechanism developed by Hon'ble Commission in consultation with Govt. of Uttar Pradesh.**

## B. POOR POWER PROCUREMENT PLANNING: OVER RELIANCE ON SHORT TERM POWER

9) In the True-Up Section, PFI has submitted that 36% of power has been purchased from short term sources against the total power purchase requirement. Such huge dependence on short term arrangement which is volatile in nature and costly too, reflects unwise/ imprudent power procurement planning of NPCL. Such improper planning is not only for FY 2023-24, but it has been continued in the past and even has been projected for future years by NPCL themselves that they will continue such imprudent practices tabulated as follows:

| Particulars | True-Up FY 2021-22 | True-Up FY 2022-23 | True-Up FY 2023-24 |
|---|---|---|---|
| Net Short Term Power Purchase (STPP) (MU) | 943.71 | 1,399.34 | 1,288.48 |
| Total Power Purchase quantum (MU) | 2,535.84 | 3,107.61 | 3,609.62 |
| **STPP (% of Total Power)** | **37%** | **45%** | **36%** |
| STPP Cost (Rs. Cr.) | 545.64 | 994.74 | 798.07 |
| **STPP Cost (Rs./kWh)** | **5.78** | **7.11** | **6.20** |

10) PFI notes from the previous Tariff Orders of Hon'ble UPERC that issue related to over-reliance on short-term power purchase by NPCL is a Legacy issue and has been raised by various stakeholders, State Advisory Committee members and even Hon'ble UPERC itself. Way back, while determining the Tariff for FY 2013-14 Hon'ble UPERC directed NPCL to that the entire quantum of required power supply is tied up through optimum long-term Power Purchase Agreements (PPAs), so that the need for costly short-term power purchase, is minimized and eliminated. Hon'ble UPERC cautioned NPCL that any delay in actual implementation of Long Term Power Procurement will increase the dependence on short term power purchase which may worsen financial position of NPCL and may give undesirable tariff shocks to the consumers. However, till today NPCL has not been able to arrange Long-Term Power for the consumers and has been relying heavily on Short Term Power.

11) PFI notes that no suitable measures have been taken by NPCL for improving their Power Procurement Planning for the past many years. Thus, considering the consistent imprudent Power Purchase Planning continuing for the past many years by NPCL despite the directions of Hon'ble UPERC, **it is now submitted by PFI that such high-cost power be restricted at APPC rate (derived from long term and**

**medium sources only). The high-cost short term power of NPCL should not be borne by consumers at large in the form of Tariff Hike.**

## C. HIGH TRANSMISSION CHARGES

12) NPCL has claimed Rs. 351.60 Cr. of Transmission Charges in the ARR of FY 2025-26, while the actual Transmission Charges claimed by NPCL for FY 2023-24 are Rs. 197.01 Cr. which translates to 134% increase y-o-y. NPCL has not provided any detailed justification for such an abnormal increase.

13) PFI submits that the Transmission Charges proposed by NPCL for FY 2025-26 are without any basis. So, PFI has worked out Transmission Charges for FY 2025-26 considering 5% y-o-y increase over the actual Transmission Charges of FY 2023-24. As per the PFI working, Transmission Charges for FY 2025-26 should be Rs. 217.20 Cr against Rs. 351.60 Cr. claimed by NPCL. **PFI requests Hon'ble Commission to pass through Rs. 217.20 Cr. of Transmission Charges for FY 2025-26 in ARR of NPCL, as per Regulatory provisions and the differential amount of Rs. 134 Cr. may be adjusted through an appropriate mechanism developed by Hon'ble Commission in consultation with Govt. of Uttar Pradesh.**

## D. HIGH OPERATIONS & MAINTENANCE (O&M) EXPENSES

14) NPCL has claimed Rs. 269.97 Cr. of O&M Expenses in the ARR of FY 2025-26, while the actual O&M Expenses claimed by NPCL for FY 2023-24 are Rs. 166.77 Cr., based on Audited Accounts for FY 2023-24. However, PFI based on the Regulatory provisions and as per the previous True-UP Orders has worked out Rs 92.59 Cr. of O&M Expenses for FY 2023-24.

15) PFI submits that the O&M Expenses proposed by NPCL for FY 2025-26 are without any basis. So, PFI has worked out O&M Expenses for FY 2025-26 considering 5% y-o-y increase over the O&M Expenses worked out by PFI for FY 2023-24. As per the PFI working, O&M Expenses for FY 2025-26 should be Rs. 102.08 Cr against Rs. 269.97 Cr. claimed by NPCL. **PFI requests Hon'ble Commission to pass through Rs. 108.08 Cr. of O&M Expenses in ARR of FY 2025-26 for NPCL, as per Regulatory provisions and the differential of Rs. 162 Cr. may be adjusted**

**through an appropriate mechanism developed by Hon'ble Commission in consultation with Govt. of Uttar Pradesh.**

## E. RETURN ON EQUITY (RoE)

16) NPCL has claimed Rs. 101.95 Cr. of RoE in the ARR of FY 2025-26, while the RoE claimed by NPCL for FY 2023-24 is Rs. 78.67 Cr. however, the same is not based on Regulatory provisions as the Opening equity is not matching with the Closing approved by the Commission. PFI based on the Regulatory provisions and as per the previous True-UP Orders has worked out Rs 57.82 Cr. of RoE for FY 2023-24. So, NPCL has claimed 33% increase y-o-y in RoE for FY 2025-26 over the RoE for FY 2023-24.

17) PFI submits that the RoE proposed by NPCL for FY 2025-26 is without any basis. So, **PFI requests Hon'ble Commission to allow RoE for FY 2025-26 for NPCL, as per the Regulatory provisions and the differential, if any, may be adjusted through an appropriate mechanism developed by Hon'ble Commission in consultation with Govt. of Uttar Pradesh.**

## F. LESSER NON- TARIFF INCOME (NTI)

18) NPCL has claimed Rs. 16.29 Cr. of NTI (inc. Revenue from Open Access Consumers) in the ARR of FY 2025-26, while the actual NTI claimed by NPCL for FY 2023-24 is Rs. 18.78 Cr. However, PFI based on the Regulatory provisions and as per the previous True-UP Orders has worked out Rs 61.36 Cr. of NTI for FY 2023-24.

19) PFI submits that the NTI proposed by NPCL for FY 2025-26 is without any basis. So, PFI has worked out NTI for FY 2025-26 considering 5% y-o-y increase over the NTI worked out by PFI for FY 2023-24. As per the PFI working, NTI for FY 2025-26 should be Rs. 67.65 Cr against Rs. 16.29 Cr. claimed by NPCL.

20) **PFI requests Hon'ble Commission to allow Rs. 67.65 Cr. of NTI for FY 2025-26 for NPCL, as worked out by PFI as per Regulatory provisions and the differential amount of Rs. 51 Cr. may be adjusted through an appropriate mechanism developed by Hon'ble Commission in consultation with Govt. of Uttar Pradesh.**

## G. ENERGY STORAGE

21) India's evolving energy storage policy framework underscores its commitment to enhancing grid flexibility and supporting renewable energy integration. Since 2019, a robust regulatory ecosystem has been crafted to support energy storage deployment through national initiatives around technical standards, legal frameworks, transmission charges, RA planning, market mechanisms, and financial incentives, as well as state-level initiatives.

22) In a significant regulatory development, the MoP clarified Legal Status to ESS on January 29, 2022. The order identifies Energy Storage Systems (ESS) as an essential component of the power system under the Electricity Act of 2003, permitting ESS to function as a standalone or integrated element within generation, transmission, or distribution networks. The ESS can be operated by various entities, and standalone ESS projects can be licensed independently and granted connectivity under specific rules, encouraging broader ESS applications and ownership models.

23) The Waiver of Inter-State Transmission System (ISTS) Charges for solar, wind (onshore and offshore), and green hydrogen projects was mandated by the Ministry of Power (MoP) on November 23, 2021, with subsequent amendments in November 2021, December 2022, and May and June 2023. This waiver also applies to Hydro Pumped Storage Projects (PSP) and Battery Energy Storage Systems (BESS) commissioned up to June 30, 2025.

24) Central Electricity Authority (CEA) on 28/06/2023, has established RA planning guidelines at both national and state levels, an important step forward, and has recently come up with state-wise RA reports with up to 5-year or 10-year RA projections. The CEA Resource Adequacy guidelines also outline a framework for incorporating ESS in RA planning.

25) Recent national and state government policies have begun to lay a foundation that will support ESS deployment and its integration into RA planning and procurement, electricity markets, and system operations.

26) CEA in its Report for Resource Adequacy Plan[12] for the State of Uttar Pradesh for the period from FY 2024-25 to FY 2031-32 has identified that:

- Uttar Pradesh is likely to witness an energy deficit ranging from 1409 MU to 89113 MU in different years from 2023-24 to 2031-32 with the existing and planned capacity addition.
- Uttar Pradesh is likely to have unserved energy in coming years and needs to contract storage-based capacities for meeting energy requirements other than the planned capacities, owing to the high quantum of renewable based capacity i.e., solar and wind that is planned by Uttar Pradesh.
- **The quantum of storage-based capacities is about 25437 MW/ 101748 MWh likely to be required to complement the solar generation.**

27) Many DISCOMs in the country have initiated out the bidding process for ESS and for many of them the tariff discovered has also been adopted by respective SERCs. Few such DISCOMs along with their ESS proposal pertaining to the objective of Energy Arbitrage are as follows:

| Category | Energy Storage Tender_ DISCOMs | Capacity |
|---|---|---|
| **BESS** | GUVNL Phase II (March 2024) | 500 MWh |
| | GUVNL Phase III (June 2024) | 1000 MWh |
| | MSEDCL (August 2024) | 600 MWh |
| | UPPCL (August 2024) | 1200 MWh |
| | GUVNL Phase IV (August 2024) | 800 MWh |
| **PSP** | MSEDCL (Sept 2024) | 24000 MWh |

28) Various SERCs have approved Energy Storage based on the proposal received from their DISOCMs. Like, in Delhi, DERC has approved a 20 MW/40 MWh standalone BESS project for their DISCOM on 1/05/2024. On 26/09/2024, MERC approved the procurement of 1000 MW of energy storage from pumped hydro storage (PHS) projects in Maharashtra, with an additional greenshoe option of 2000 MW, allowing for potential expansion. The bid results, as outlined in MERC's order, provide a benchmark for competitive energy storage costs in the region. For projects designed

[12] https://cea.nic.in/wp-content/uploads/resource_adequacy_st/2024/08/Resource_Adequacy_Report_Uttar_Pradesh_UPPCL.pdf

to discharge up to 8 hours daily, with a maximum continuous discharge of 5 hours—enabling two cycles per day—the levelized cost of storage is estimated at ₹3.2 per kWh. This price is highly competitive.

29) Standalone and co-located ESS can play an important role in meeting RA requirements under India's emerging RA framework. Going forward, state-level RA frameworks need to be closely aligned with long-term planning and resource procurement processes to support cohesive implementation.

30) **However, in the Tariff Petition for ARR of FY 2025-26, it is noted that NPCL has not submitted any proposal related to ESS.**

31) **In view of the above, PFI submits that Energy Storage is an effective tool for Energy arbitrage for DISCOMs in optimization of their Power Purchase Cost. For instance, in BESS, Batteries can be charged in the off-peak hours and can be discharged in Peak hours, thus, avoiding reliance of DISCOMs on high-cost short term Power from markets or not scheduling the high-cost Power Plants. With steep reduction in Battery prices in FY 2024-25 and active participation by various DISCOMs, as stipulated above, NPCL necessitates to also consider Energy Storage as part of their Power Procurement Planning in line with Resource Adequacy Planning formulated by CEA for Uttar Pradesh.**

## H. PM Surya Ghar – Muft Bijli Yojna and Demand Side Management

32) PM Surya Ghar: Muft Bijli Yojana, the world's largest domestic rooftop solar initiative, is transforming India's energy landscape with a bold vision to supply solar power to one crore households by March 2027. By March 2025, installations under the scheme are expected to exceed 10 lakhs, with the numbers doubling to 20 lakh by October 2025, reaching 40 lakhs by March 2026, and ultimately achieving the target of one crore by March 2027[13]. The scheme is projected to add 30 GW of solar capacity through rooftop installations in the residential sector, significantly contributing to India's renewable energy goals.

[13] https://pib.gov.in/PressReleasePage.aspx?PRID=2081250

33) Through this rooftop solar scheme many domestic consumers will have Net metering connections which will have a sizeable impact on the domestic category sales. However, in the Tariff Petition for ARR of FY 2025-26, it is noted that NPCL has not submitted any proposal related to **PM Surya Ghar – Muft Bijli Yojna**.

34) Further, NPCL has also not submitted any proposal related to **Demand Side Management (DSM) initiatives**. DSM is a strategic approach to energy conservation that seeks to manage consumer demand for energy rather than simply supply it. It is a coordinated set of activities and programs undertaken by electric utilities, developers, government agencies, and end-use customers to ensure that electric power service can be delivered to consumers at the lowest cost consistent with reliable supply. DSM also seeks to promote energy conservation and peak load reduction through voluntary or mandatory actions taken by the above-mentioned participants.

35) In view of above, PFI submits that Sales forecast for NPCL in ARR of FY 2025-26 may be done considering the impact of **PM Surya Ghar – Muft Bijli Yojna and Demand Side Management (DSM) initiatives**.

## I. Other Issues pertaining to non-alignment with the MoP Rules

### I.1 REVENUE GAP (ELECTRICITY (AMENDMENT) RULES, 2024 DTD. 10/01/2024)

36) MoP vide Electricity (Amendment) Rules, 2024 dtd. 10/01/2024 has specified the following with regard to Revenue Gap between approved Annual Revenue Requirement and estimated Annual Revenue from approved tariff:

> ***"23. Gap between approved Annual Revenue Requirement and estimated annual revenue from approved tariff–*** *The tariff shall be* ***cost reflective*** *and there* ***shall not be any gap*** *between approved Annual Revenue Requirement and estimated annual revenue from approved tariff except under natural calamity conditions:*
>
> *Provided that such gap, Created if any,* ***shall not be more than three percent of the approved Annual Revenue Requirement****.*
>
> *…."*

37) The Rules have clearly specified that the tariff shall be cost reflective and there shall not be any gap between approved Aggregate Revenue Requirement and Estimated Annual Revenue from approved tariff except under natural calamity conditions. And if at all, the Gap is Created it shall not be more than 3% percent of the approved Annual Revenue Requirement.

38) **It is noted from the Tariff Petition of NPCL that for ARR of FY 2025-26 there is a Revenue Gap of Rs. 1,189 Cr. at existing Tariff which is 37% of ARR. Thus, the tariff is non-cost reflective.**

39) Hon'ble APTEL in its judgement dated 11/11/2011 in OP 1 of 2011 has laid the significance of cost reflective tariff as follows:

> *"56. It is to be pointed out in this context, that the legislative intent in enacting the Act, 2003 is to secure effective Regulations characterised by tariff rationalisation with timely cost reflective tariff determination based on the principles set out in Section 61 read with the National Tariff Policy. …"*

40) Section 62 of the Act empowers SERCs to determine the Tariff on cost plus basis for the utilities regulated by them engaged in generation, transmission and distribution of electricity. Section 63 empowers SERCs to adopt the Tariff discovered through transparent process of bidding. Determination of cost-reflective tariff of Distribution Licensees by SERCs plays a significant role as it lays the foundation of routing revenue up the supply chain.

41) Hon'ble Supreme Court's in its judgement in PTC India Vs. CERC dated 15/03/2010 has ruled that the term "tariff" includes within its ambit not only the fixation of rates but also the rules and regulations relating to it. Through Sections 61 and 62 of the Act, the Appropriate Commission shall determine the actual tariff in accordance with the provisions of the Act, including the terms and conditions which may be specified by the Appropriate Commission under Section 61 of the said Act. Under the 2003 Act, it becomes clear from Section 62 with Section 64, that although tariff fixation is legislative in character, the same under the Act is made appealable vide Section 111. These provisions, namely Sections 61, 62 and 64 indicate the dual nature of functions performed by the Regulatory Commissions, viz, decision-making and specifying terms and conditions for tariff determination.

42) Similarly, Hon'ble APTEL vide its judgment dated 04/09/2012 in Appeal No. 94 of 2012 has stated that the term 'Regulate' has got a wider scope and implication not merely confined to determination of tariff. Section 61 and 79 not only deal with the tariff but also deal with the terms and conditions of tariff. The terms and conditions necessarily include all terms related to tariff.

43) Further, Tariff Policy, 2016, also states that in terms of Section 61(g) of the Act, the Appropriate Commission shall be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity.

44) **In view of above, PFI submits before UPERC to determine cost-reflective Tariff for FY 2025-26 as per the principles stipulated in MoP rules dated 10/01/2024.**

### I.2 TIME OF DAY (ELECTRICITY (RIGHTS OF CONSUMERS) AMENDMENT RULES, 2023 DTD. 14/06/2023)

45) Electricity (Rights of Consumers) Amendment Rules, 2023 dtd. 14/06/2023 stipulates that every consumer category except Agriculture should have Time of Day (TOD) Tariff with effect from 01/04/2025 and shall be made effective immediately after installation of Smart Meters, for the consumers with Smart Meters.

46) **However, NPCL has not submitted any status of ToD in their area (tariff category wise).** Therefore, the actual implementation of Electricity (Rights of Consumers) Amendment Rules, 2023 dtd. 14/06/2023 related to ToD cannot be ascertained.

47) **Thus, PFI requests UPERC to formulate ToD tariff for all eligible consumers in line with the MoP Electricity (Rights of Consumers) Amendment Rules, 2023 dtd. 14/06/2023 as amended from time to time.**

## J. SUMMARY

48) As stipulated in above Sections, summary of ARR for FY 2025-26 of NPCL is as follows. Hon'ble UPERC is requested to kindly consider the same.

*Summary of ARR for FY 2025-26 for NPCL (Rs. Cr.)*

| Particulars | Claimed by NPCL | To be allowed in FY 2025-26 | To be met through suitable mechanism |
|---|---|---|---|
| Power Purchase Cost | 2,239 | 2,122 | 117 |
| *For excess losses than target* | 0 | 117 | 117 |
| Transmission Charges | 352 | 217 | 134 |
| O&M Expenses | 270 | 108 | 162 |
| Other Expenses | 351 | 351 | 0 |
| Less: Non-Tariff Income | 16 | 68 | 51 |
| **Net Revenue Requirement** | **3,196** | **2,731** | **465** |
| Less: Revenue from Tariff | 2,962 | 2,962 | 0 |
| **(Gap)/Surplus** | **(234)** | **(234)** | |

**PRAYERS BEFORE HON'BLE UPERC FOR ARR OF FY 2025-26 FOR NPCL:-**

1) **To consider the comments / suggestions of Power Foundation of India (PFI) on ARR of FY 2025-26 for NPCL.**

2) **On Account of high Distribution loss levels, to consider the losses for the upcoming Control period from FY 2025-26 to FY 2029-30 using the methodology worked out by PFI for FY 2025-26 and accordingly derives the Power Purchase requirement of NPCL for FY 2025-26.**

3) **To consider high-cost Short Term Power claimed in FY 2025-26, on Account of high reliance on Short Term Power and non- Strategic Power Purchase Planning to be paid through some suitable mechanism developed by Hon'ble Commission in consultation with Govt. of Uttar Pradesh. Such high-cost Short Term power be restricted at APPC rate (derived from long term & Medium-term sources)**

4) **To allow Transmission Charges, O&M expenses and Non- Tariff Income for FY 2025-26 considering 5% y-o-y escalation over the worked-out Charges for FY 2023-24 by PFI.**

5) **To consider the submission of PFI on ARR of FY 2025-26 for NPCL and to approve the expenses as per Regulatory provisions. The differential amount may be adjusted through an appropriate mechanism developed by Hon'ble Commission in consultation with Govt. of Uttar Pradesh.**

6) **To consider the additional submissions, if any, made by PFI for NPCL ARR for FY 2025-26.**

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