



1. OVERVIEW OF TANGEDCO

1.1 Preamble

This section presents the background and reasons for filing of this Petition.

1.2 Background

- 1.2.1 Tamil Nadu Electricity Board (TNEB) came into existence on 1st July 1957 under the repealed Act of Electricity (Supply) Act 1948 and has been in the business of generation, transmission and distribution of electricity in the state of Tamil Nadu.
- 1.2.2 Over the last few decades, there has been significant interest in opening the Electricity sector to competition and, by extension, interest in designing electricity markets to push the sector towards more efficient outcomes. Accordingly, the Electricity Act, 2003 ("the Act" or "EA 2003") was enacted with effect from 10th June, 2003 which requires the State Governments to initiate major changes in the Industry Structure and Operations of the state power sector.
- 1.2.3 In line with the Electricity Act 2003, Sections 131 to 134 mandates reorganisation of the State Electricity Boards into functional entities and corporatisation of the same. Therefore, in order to meet the requirements under the Act, the Government of Tamil Nadu (GoTN) and the Tamil Nadu Electricity Board (TNEB) proposed to restructure the state power sector.
- 1.2.4 In accordance with the above mandate the Government of Tamil Nadu (GoTN) had given in- principle approval for the re-organization of TNEB by establishing a holding company, named TNEB Ltd and two subsidiary companies, namely Tamil Nadu Transmission Corporation Limited (TANTRANSCO) and Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) vide G.O.Ms.No.114 Energy (B2) Department dated 8th October 2008 with the stipulation that the aforementioned companies shall be fully owned by Government.
- 1.2.5 Based on the approval of Memorandum of Association and Articles of Association of TANGEDCO and TNEB Limited by the Government of Tamil Nadu vide G.O.Ms.No.94 Energy (B2) Department dated 16th Nov 2009, Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) and TNEB Limited was incorporated on 1st Dec 2009 with an authorized share capital of Rs. 5.00 Crore and paid up capital of Rs. 5.00 Lakhs each for TANGEDCO and TNEB Limited. The Certificates of commencement of business have been obtained for the TANGEDCO on 16th March, 2010 and for TNEB Ltd on 12th March, 2010 respectively.
- 1.2.6 The proposal for Assets Transfer and Employee transfer called as Tamil Nadu Electricity Board (Reorganization and Reforms) Transfer Scheme 2010 has been notified by Government of Tamil Nadu vide G.O. (Ms).No.100 Energy (B2) Department dated 19th October,2010 with the effective date of implementation as 1st November,2010. Based on the above notification TNEB has been re-organized from 1st November,2010.



- 1.2.7 As per the Transfer Scheme the provisional period for transfer of Assets is 1 year and for transfer of employees is 3 years. From 1st November, 2010 onwards all the employees of the erstwhile TNEB shall stand transferred to and absorbed in TANGEDCO on a provisional basis and assigned to the services of the relevant transferee.
- 1.2.8 Subsequently, as per the request of TNEB Limited, the second provisional transfer scheme was notified by the State Government vide G.O. (Ms.) No.2, Energy (B2) department, dated 2nd January, 2012 with amendment in the restructuring of Balance Sheet of TNEB for the successor entities, i.e., TANGEDCO and TANTRANSCO, considering the audited balance sheet of TNEB for FY 2009-10 and it had extended the provisional time for final transfer of assets and liabilities to the successor entities of erstwhile TNEB up to 31st October, 2012.
- 1.2.9 Subsequently, the audited balance sheet as on 31st October, 2010 was ready and as a result the final transfer scheme was notified by the Government of Tamil Nadu vide G.O.Ms No.49, Energy (B1) department, dated 13th August, 2015, which is the final amendment to the earlier transfer scheme (G.O. (Ms).No.100 Energy (B2) Department dated 19th Oct 2010 and G.O. (Ms.) No.2, Energy (B2) department, dated 2nd January, 2012) which gave effect to the transfer of assets and liabilities to successor entities of erstwhile TNEB as on 1st November, 2010.
- 1.2.10 Post restructuring, TANGEDCO as per the notification, was provided with the functions of generation and distribution of electricity in the State of Tamil Nadu.
- 1.2.11 TANGEDCO as the State Generation and Distribution Utility is entrusted with the duty of generating power and distribution of the same to the end consumers through its generating stations and vast distribution network.
- 1.2.12 Starting with a modest installed capacity of 156 MW on 1st July, 1957, the Board's own generating capacity in its command has grown to 33877.31 MW. The installed capacity of conventional energy sources of Tamil Nadu Generation and Distribution Corporation Limited is 18974.10 MW as on 1st April, 2022 which includes TANGEDCO's Hydro (2321.90 MW), Thermal (4320 MW), Gas Stations (516.08 MW), share from Central Generating Stations (6972 MW), Captive Power Plants (508.62 MW), Independent Power Project (1105.50 MW), LTOA (2830 MW) & MTOA (400 MW). The installed capacity of non-conventional energy sources as on 1st April 2022 (infirm power) is 14903.21 MW which includes generation from wind (8615.22 MW), Solar (5303.50 MW), Biomass (262.59 MW) and Co-generation plants (721.90 MW).
- 1.2.13 Tamil Nadu met an all-time peak demand of 17,563 MW as on 29.04.2022 and all-time high-energy consumption of 388.08 MU on 29th April, 2022 making it the second state in the country next to Maharashtra in highest energy consumption. The present demand of power in the State is around 15,500 - 16,000 MW. This demand will be met by generation from existing power stations, power from projects to be commissioned in the coming years and also through power purchase.



1.3 Final Transfer Scheme

1.3.1 The accumulated losses of erstwhile TNEB to an extent of Rs. 34,741.35 Crore has been adjusted in the Final Transfer Scheme notified vide G.O. M.S No. 49 dated 13th August 2015, by revaluation of assets to an extent of Rs. 54,658.71 Crore and the excess revaluation reserve of Rs. 12,265.99 Crore, Rs. 7,163.58 Crore and Rs. 487.79 Crore transferred to TANGEDCO, TANTRANSCO and TNEB Ltd., respectively. Through the notification of final transfer scheme, the Government of Tamil Nadu has assigned the Assets and Liabilities (as on 31st October, 2010) to TANGEDCO on final basis.

1.3.2 Impact of Final Balance Sheet:

The transfer value of the Fixed Assets forming part of Schedules A, B and C of the respective Transferees have been done at book values excluding the land, buildings, plant and machineries, lines, cables, and network, which are revalued based on the guideline value resulting into Revaluation Reserve of Rs.12,265.99 Crore for TANGEDCO.

- i. For the purpose of Return on Equity, Equity Capital of Rs. 2,290.72 Crore has been considered as per the final transfer scheme.
- ii. Long Term Loan has been considered as Rs. 19,307.65 Crore in line with the notified balance sheet and interest is calculated on the actual basis which was accrued from 1st November, 2010 to 31st March, 2011 and the differential treatment between provisional and final transfer scheme has been adjusted in the FY 2015-16. Some of the generic loans such as bonds, loan from HUDCO, LIC, Tamil Nadu Power finance and medium-term Loan availed by erstwhile TNEB and has been considered as the long-term loan of TANGEDCO.
- iii. The allocation of fixed assets and loans are similar and has been transferred under the Final transfer scheme resulting in additional debt burden of the debt obligation on TANGEDCO.
- iv. The transfer value of the fixed assets is determined based on revenue potentials of the asset and in line with the provisions of the Act.
TANGEDCO submits that the opening balance sheet as per final transfer scheme has been considered for the calculation of ARR in the present petition.
- v. TANGEDCO requests the Hon'ble Commission to allow the variation in expenses with respect to Final transfer scheme and allow the same to adjust in the ARR in the current petition.

1.4 Ujwal Discom Assurance Yojana (UDAY)

1.4.1 On 9th January, 2017 the Ministry of Power, Government of India entered into a Memorandum of Understanding (MoU) with the Government of Tamil Nadu and TANGEDCO under the Ujwal Discom Assurance Yojana (UDAY) Scheme for the operational and financial turnaround of the DISCOM.

1.4.2 The salient features of the scheme are as follows:



Details for True-up for FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21, APR for FY 2021-22 and Determination of ARR for FY 2022-23 to FY 2026-27

- i. Under the scheme, the Government of Tamil Nadu is taking over 75% of the outstanding distribution function debt of Rs. 30,420 Crore of TANGEDCO as on 30th September, 2015 during FY 2016-17 itself.
- ii. The balance 25% outstanding debt to be re-priced or re-issued as State guaranteed Discom bonds at coupon rates 3-4% lower than the average existing interest rate.

41



2. OVERALL APPROACH FOR PRESENT FILING

2.1 Present Approach

- 2.1.1 The Hon'ble Commission on 03rd August 2005 notified the TNERC (Terms and Conditions for Determination of Tariff) Regulations, 2005. In the said Regulation, the Commission specified that the licensee has to file the Aggregate Revenue Requirement (ARR) for each year in the format prescribed, containing the details of the expected aggregate revenue that the licensee is permitted to recover at the prevailing tariff and the estimated expenditure. In line with the same, TANGEDCO is filing its ARR for consideration of the Hon'ble Commission in the formats laid down for providing information relating to past, current and future performance.
- 2.1.2 Further, as per TNERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 the application for determination of tariff for the existing Generating Stations shall be accompanied by information in the formats provided by the Hon'ble Commission for the previous years, current year and ensuing years which are part of the control period as specified in the MYT Regulations. Thus, TANGEDCO is filing the petition for True-up for both the generation and distribution businesses.
- 2.1.3 As per the Amendment to Tamil Nadu Electricity Regulatory Commission Terms and conditions for determination of tariff for intra state transmission / Distribution of Electricity under MYT framework Regulations 2009 dated 28th November, 2012, the control period is defined as:
- “(i) Control Period: The control period under the MYT framework shall be for duration of 3 years. The year preceeding the first year of the control period shall be the base year.”*
- 2.1.4 Further based on the above amendment to the existing Regulations, the control period for TANGEDCO was from FY 2013-14 to FY 2015-16 , FY 2016-17 to FY 2018-19, FY 2019-20 to 2021-22. TANGEDCO has now requested the Hon'ble Commission to extend the Control Period for 2 more years for filing the ARR for FY 2022-23 to FY 2026-27.
- 2.1.5 Further, the Hon'ble Commission vide its daily Order M.P. No. 35 of 2020 dated 8 December, 2020 directed TANGEDCO to file the ARR petition for the FY 2021-22 to 2024-25 along with true-up for the period from FY 2016-17 to 2019-20, FY 2020-21 for Performance Review on or before 29 December, 2020. TANGEDCO hereby submits that as per the Tariff Order dated 11th August 2017, the ARR for TANGEDCO is approved upto FY 2018-19 only. TANGEDCO wishes to submit that all the ARR figures for FY 2019-20 and FY 2020-21 are based on audited accounts of the respective years and has been considered for true-up of FY 2019-20 and FY 2020-21. Accordingly, TANGEDCO has taken the cognizance of actual available data for the projections of ensuing years.



- 2.1.6 Based on the above, considering that the control period has ended and in compliance with the Hon'ble Commission directive, TANGEDCO is now filing the Petition for final trueing up of FY 2016-17, FY 2017-18, FY 2018-19, 2019-20 and 2020-21 based on audited annual accounts. The approved figures considered for FY 2016-17 to FY 2018-19 are in line with Tariff Order dated 11th August, 2017. TANGEDCO has also filed its Petition for Annual performance review of FY 2021-22 and Determination of ARR from FY 2022-23 to FY 2026-27. TANGEDCO request the Hon'ble Commission to approve the True-up and the ARR filed by TANGEDCO.

2.2 Data/Information for ARR

- 2.2.1 This petition contains the trueing-up of the ARR of FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21 figures which are based upon the audited annual accounts submitted to the Hon'ble Commission.
- 2.2.2 The ARR indicated in the given petition, is exclusive of Foreign Exchange Rate Variation (if applicable), any statutory taxes, levies, duties, cess, filing fees or any other kind of imposition(s) and/ or other surcharges etc. whatsoever imposed/ charged by any Government (Central/State) and/ or any other local bodies/authorities/regulatory authorities in relation to generation and distribution of electricity, environmental protection, and/ or in respect of any of its installation associated with the Generation and Distribution system and the same shall be allowed to be claimed by the Applicant in future as and when such claims are made.

2.3 Regulatory Framework

- 2.3.1 TANGEDCO has considered the norms as specified by TNERC Tariff Regulations 2005, TNERC MYT Regulations, 2009 and its subsequent amendment. However, certain deviations have been considered with justifications for the purpose of this petition and it is requested to approve the same.

2.4 Summary of Assumptions

- 2.4.1 TANGEDCO in its present petition has projected its aggregate revenue requirements based on the following premise:
- The projections of ARR of FY 2022-23 to FY 2026-27 is done based on past performance and expected growth in each of the cost element and revenue for the ensuing year. The APR for FY 2021-22 is based on the provisional data.
 - Escalation Factors have been considered for projecting certain expenses on a realistic basis.
 - The figures mentioned in each of the Tables are the amount in Rs. Crore unless otherwise specified.
 - TANGEDCO submits that there has been no cost of generation (variable as well as fixed) considered for own wind generating stations, i.e., Tirunelveli Wind and Udumalpet. However, the net-generation due to these windmills has been considered in Energy Availability.
 - The T&D loss calculated for the entire control period is without consideration of wheeling units during the respective years.