

TAMIL NADU ELECTRICITY REGULATORY COMMISSION

Suo-Motu Determination of Transmission Tariff and other related charges

SMT – Order No. 8 of 2014 Date of Order - 11-12-2014 (effective from 12-12-2014)



TAMIL NADU ELECTRICITY REGULATORY COMMISSION

(Constituted under section 82(1) of the Electricity Act, 2003)

(Central Act 36 of 2003)

PRESENT: Thiru S. Akshayakumar - Chairman

Thiru S. Nagalsamy - Member Thiru G. Rajagopal - Member

SM T - Order No. 8 of 2014 Date of Order : 11-12-2014

In the matter of: Determination of Intra-State Transmission Tariff and other related charges in the State of Tamil Nadu on suo motu basis.

In exercise of the powers conferred by clauses (b) of sub-section (1) of section 62 and clause (a) of sub-section (1) of section 86 of the Electricity Act, 2003 (Central Act 36 of 2003) read with sub-regulation (1) of Regulation 16 of the Tamil Nadu Electricity Regulatory Commission- Conduct of Business Regulations 2004 and sub-regulation (8) of Regulation 6 of the Tamil Nadu Electricity Regulatory Commission (Terms and Conditions for the Determination of Tariff) Regulations 2005 and in compliance with the Order dated 11-11-2011 of the Hon'ble Appellate Tribunal for Electricity, New Delhi in O.P. No. 1 of 2011 and all other powers hereunto enabling in that behalf and after considering the views of the State Advisory Committee meeting held on 13-10-2014 and the suggestions and objections received from the public during the public hearings held on 24-10-2014, 28-10-2014 and 31-10-2014, the Tamil Nadu Electricity Regulatory Commission, hereby, passes this order for transmission tariff in the State of Tamil Nadu.

Thiru S. Nagalsamy, Member disagreed with this order and issued a separate order which is attached as a dissenting order.

This order is passed with majority as per sub-section (3) of Section 92 of the Electricity Act, 2003.

This Order shall take effect from 12-12-2014 .The Tamil Nadu Transmission Corporation Ltd, the Transmission Licensee shall take immediate steps to implement the order. This order is subject to the outcome of the Writ Petition No.29175 of 2014 and M.P. No. 1 of 2014 in the said WP pending in the Hon'ble High Court of Madras.

This Order may be amended, reviewed or modified, as the case may be, in accordance with the provisions of the Electricity Act, 2003 and the Regulations/Rules made thereunder or as per any law or the Regulations or the Rules for the time being in force, if so required.

Sd/-G. Rajagopal Member Sd/-S. Nagalsamy Member Sd/-S. Akshayakumar Chairman

TABLE OF CONTENT

LIST OF ABBREVIATIONS	5
A1: INTRODUCTION	ε
Preamble	6
Tariff Filing	7
Procedure Adopted	8
Transfer scheme	10
Brief Note on Public Hearing	
Applicability of Order	
LAYOUT OF THE ORDER	
A2: STAKEHOLDER'S COMMENTS, TANTRANSCO'S REPLY AND COMMISSION'S VIEW	
A3: PROVISIONAL TRUE-UP FOR FY 2011-12 AND FY 2012-13 AND ANNUAL PERFORMANCE REVIEW FOR FY 2013-14	
Transmission Loss and Energy Balance	41
FIXED EXPENSES	
Operation and Maintenance Expenses	
Employee Expenses	
Repair and Maintenance Expenses	
Administrative and General Expenses	
Segregation of accounts	
Capital Expenditure and capitalization	
Depreciation	
Interest on long term loans and other financing charges	
Return on Equity	
· ·	
Interest on Working Capital	
Other Debits	
Prior Period Expenses	
Incentive	
Insurance	
Other income	
ARR DETERMINED BY THE COMMISSION FOR THE PERIOD FY 2011-12 TO FY 2013-14	
REVENUE FROM TRANSMISSION CHARGES	
REVENUE GAP FOR THE PERIOD FY 2011-12 TO FY 2013-14	62
A4: AGGREGATE REVENUE REQUIREMENT FOR FY 2014-15	63
Transmission Loss and Energy Balance	63
Transmission Loss	63
Energy Balance	63
FIXED EXPENSES	64
Operation and Maintenance Expenses	64
Employee Expenses	
Repair and Maintenance Expenses	
Administrative and General Expenses	
Capital Expenditure and capitalization	
Depreciation	
Interest on long term loans and other financing charges	
Return on Equity	
Interest on Working Capital	
Other Debits	
Incentive	
Insurance	
Other income	
AND APPROVED BY THE COMMISSION FOR ET 2014-13	/t

A5: ESTIMATION OF REVENUE GAP AND TARIFF DETERMINATION FOR FY 2014-15	77
REVENUE TO BE COVERED FROM TRANSMISSION CHARGES IN FY 2014-15	77
DETERMINATION OF TRANSMISSION CHARGES	
Allotted Transmission Capacity	78
LTOA Transmission Charges	
STOA Transmission Charges	83
Other Charges	83
Scheduling and System Operation Charges	83
Reactive Energy Charges	84
SUMMARY OF DIRECTIVES	85
A6: DISSENTING ORDER OF THIRU. S. NAGALSAMY, MEMBER	

List of Abbreviations

Abbreviation	Description
A & G	Administration and General Expenses
ABC	Aerial Bunched Cables
APTEL	Appellate Tribunal for Electricity
ARR	Aggregate Revenue Requirement
CAGR	Compounded Annual Growth Rate
CERC	Central Electricity Regulatory Commission
CGS	Central Generating Station
COS	Cost of Supply
СРР	Captive Power Plant
CSD	Consumer Security Deposit
CWIP	Capital Work in Progress
DA	Dearness Allowance
EA	Electricity Act
FRP	Financial Restructuring Plan
FY	Financial Year
GFA	Gross Fixed Assets
G.O.	Government Order
GPF	General Provident Fund
GoTN	Government of Tamil Nadu
HT	High Tension
HVDS	High Voltage Distribution System
kWh	Kilo-watt Hour
LT	Low Tension
LTOA	Long Term Open Access
MU	Million Units
MW	Mega-watt
MYT	Multi-Year Tariff
O & M	Operation & Maintenance
PLF	Plant Load Factor
R & M	Repair & Maintenance
O & M	Operation & Maintenance
RoE	Return on Equity
SLDC	State Load Despatch Centre
STOA	Short Term Open Access
T&D	Transmission & Distribution
TANGEDCO	Tamil Nadu Generation and Distribution Corporation Ltd.
TANTRANSCO	Tamil Nadu Transmission Corporation Ltd.
TNEB	Tamil Nadu Electricity Board
TNERC	Tamil Nadu Electricity Regulatory Commission
ТО	Tariff Order
TP	Tariff Policy

A1: INTRODUCTION

Preamble

- 1.1 Consequent to the enactment of the Electricity Regulatory Commissions Act 1998 (Central Act 14 of 1998), the Government of Tamil Nadu (GoTN) constituted the Tamil Nadu Electricity Regulatory Commission (TNERC) vide G.O.Ms.No.58, Energy (A1) Department, dated 17-03-1999.
- 1.2 The Commission issued its first tariff order under Section 29 of the Electricity Regulatory Commission Act, 1998, on 15-03-2003 based on the petition filed by the Tamil Nadu Electricity Board (TNEB) on 25-09-2002.
- 1.3 Electricity Regulatory Commission Act, 1998 was repealed and the Electricity Act 2003 (Central Act 36 of 2003) (hereinafter called Act) was enacted with effect from 10-06-2003.
- 1.4 The Commission notified the Tamil Nadu Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations 2005 (herein after called Tariff Regulations) on 03-08-2005 under Section 61 read with Section 181 of the Act.
- 1.5 The Commission issued **first** order (Order No. 2 of 2006) on Transmission charges, Wheeling charges, Cross Subsidy surcharge and Additional surcharge on15-05-2006, based on the petition filed by TNEB on 26-09-2005 under Section 42 of the Act.
- 1.6 The Commission notified the TNERC (Terms and Conditions for Determination of Tariff for Intra state Transmission / Distribution of Electricity under MYT Framework) Regulations, 2009 (herein after called MYT Regulations) on 11-02-2009.
- 1.7 Subsequently, TNEB filed an application for determination of tariff with Aggregate Revenue Requirement (ARR) for all functions on 18-01-2010, which was admitted by the Commission after initial scrutiny on 09-02-2010. The Commission issued its second Retail Tariff Order (Order No 3 of 2010) on 31.07.2010 which also decided the annual transmission charges.
- 1.8 TNEB was formed as a statutory body by the Government of Tamil Nadu (GoTN) on 01-07-1957 under the Electricity (Supply) Act 1948. The Board was primarily responsible for generation, transmission, distribution and supply of electricity in the State of Tamil Nadu.
- 1.9 Government of Tamil Nadu, in G.O (Ms) No 114 Energy Dept, dated 08-10-2008 accorded in principle approval for the re-organisation of TNEB by establishment of a holding company, namely TNEB Ltd and two subsidiary companies, namely Tamil Nadu Transmission Corporation Ltd (TANTRANSCO) and Tamil Nadu Generation and Distribution Corporation Ltd (TANGEDCO) with the stipulation that the aforementioned companies shall be fully owned by the Government.
- 1.10 Tamil Nadu Transmission Corporation Ltd. (TANTRANSCO) was incorporated on 15-06-2009 and started functioning as such with effect from 1-11-2010.

- 1.11 Subsequent to the filing of tariff petitions by TANTRANSCO for determination of tariff for Intra-State Transmission tariff for the year FY 2012-13, the Commission scrutinised and reviewed the same. After a thorough review the **second** Order (Order. No. 2 of 2012) of the Commission on Intra-State Transmission tariff and other related charges was passed on 30-03-2012.
- 1.12 Tamil Nadu Transmission Corporation Ltd. (TANTRANSCO) last year filed its application before the Commission for determination of tariff for Intra-State Transmission tariff for the year FY 2013-14. Based on this petition and after considering views of the State Advisory Committee and the public, Tamil Nadu Electricity Regulatory Commission passed the **third** Order on 20-06-2013.
- 1.13 Subsequently in the event of The Tamil Nadu Transmission Corporation Ltd. (TANTRANSCO) not filing the ARR and Tariff petition for FY 2014-15 before the Commission, the Commission initiated suo-motu proceedings for tariff determination in accordance with section-64 of the Act. After a thorough review of the available information, this the **fourth** Order of the Commission on determination of Intra-State Transmission Tariff and Other Related Charges is passed.

Tariff Filing

- 1.14 As per provisions of Section 64 of the Electricity Act 2003, it is incumbent upon the Licensee to make an application to the State Regulatory Commission for determination of tariff in such manner as may be determined by Regulations framed by the Commission. Regulation 5 of the Tamil Nadu Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2005 lays down that licensee is required to file tariff application on or before 30th November each year, with the Commission, the relevant extract is reproduced below:
 - "(1) The Distribution / Transmission licensee shall file the Aggregate Revenue Requirement (ARR) on or before 30th November of 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."
- 1.15 Accordingly TANTRANSCO was expected to file a petition for the final true up and approval of ARR for 2011-12, provisional true up for 2012-13, APR for 2013-14 and ARR and Tariff petition for 2014-15 by 30th November 2013. However the petition has not been filed by TANTRANSCO.
- 1.16 However TANTRANSCO has filed the petition formats for transmission business with the Commission in the month of October. The Commission would like to place on record that it does not accept this data submission by the utility in lieu of the ARR and tariff petition to be filed by it. These numbers shall be filed by TANTRANSCO along with the petition for final true-up of ARR for FY 2011-12 to FY 2013-14, within the stipulated timelines as per regulations.

Procedure Adopted

1.17 Hon'ble APTEL vide it's judgement dated 11th November, 2011 in the matter OP No. 1 of 2011, has directed the State Commissions that

"In the event of delay in filing of the ARR, truing-up and Annual Performance Review, one month beyond the scheduled date of submission of the petition, the State Commission must initiate suo-motu proceedings for tariff determination in accordance with Section 64 of the Act read with clause 8.1 (7) of the Tariff Policy."

1.18 TNERC Tariff Regulations 2005 under Regulation 6 stipulates that

"(8) In case the licensee does not initiate tariff filings in time, the Commission shall initiate tariff determination and regulatory scrutiny on suo motu basis."

Considering the directives of the Hon'ble APTEL, the National Tariff Policy and in exercise of the powers vested in it under the Section 62 and Section 64 of the Electricity Act, 2003 (Act) and the Tariff Regulations 2005, TNERC decided to take up the matter of Determination of ARR and Tariff for 2014-15 by initiating suo-motu proceedings.

- 1.19 Under such circumstances TNERC has decided to proceed with the suo-motu determination of ARR and Tariff for FY 2014-15 on the basis of information available from TANTRANSCO's submissions to the Commission. With the available information with the Commission, the following decisions have been taken by the Commission:
 - a. The 2011-12 and 2012-13 expenses will be provisionally trued up based on the audited accounts.
 - b. The APR for 2013-14 and ARR for FY 2014-15 will be taken up based on available information and audited accounts for FY 2011-12 and 2012-13 and annual statement of accounts for FY 2013-14.
- 1.20 The Commission issued the public notice containing the provisionally determined Aggregate Revenue Requirement and the transmission charges for FY 2014-15 in newspapers on 23-09-2014 and 24-09-2014. The summary of the ARR containing the salient features of all the ARR items was made available on the website of the Commission. The written objections/suggestions/views from stakeholders were invited by 23-10-2014.
- 1.21 Commission has published the public notice in the following newspapers on September 23, 2014 and September 24, 2014.
 - 23-09-2014 (Evening Edition)
 - a) Trinity Mirror (English Evening Edition)
 - b) News Today (English Evening Edition)
 - c) Malai Murasu (Tamil Evening Edition)
 - d) Makkal Kural (Tamil Evening Edition)

24-09-2014 (Morning Edition)

- a) The New Indian Express (English Daily);
- b) The Deccan Chronicle (English Daily);
- c) Daily Thanthi (Tamil Daily)
- d) Dinamani (Tamil Daily)
- 1.22 The list of stakeholders who have submitted objections/suggestions/views regarding the petition in response to the public notice are detailed in Annexure III and Objections/suggestions/views are included in Chapter A2.
- 1.23 The Commission conducted public hearing at the following places on the dates noted against each:

Date	Place	Venue	Time
24.10.2014 Friday	Chennai	Tamil Isai Sangam, Rajah Annamalai Mandram Near High Court, 5, Esplanade Road, Chennai 600 108.	10.30 AM to 1.30 PM & 2.30 PM to 5.30 PM
28.10.2014 Tirunelveli Tuesday		Dr. APJ Abdul Kalam Auditorium, Francis Xavier Engineering College, 103 G2 North Bypass Road, Vannarpettai, Tirunelveli 627 003.	10.30 AM to 1.30 PM & 2.30 PM to 5.30 PM
31.10.2014 Erode Ne		Malligai Arangam, Old No.267, New No.14, Veerapathira Street, Near Bus stand & V.O.C. Park Play Ground, Erode 638 003.	10.30 AM to 1.30 PM & 2.30 PM to 5.30 PM

1.24 The list of participants in each public hearing is attached as Annexure IV to this Order. The views / comments / objections raised by the participants are discussed in Chapter A2.

The Electricity Act, 2003, Tariff Policy (TP) and Regulations

Section-62 (1) of Act states as under:

Noction-6	111.
Section-62	(1).

1.	The Appropriate	Commission	shall	determine	the tarif	fin	accordance	e with	provisions	of th	is Ac
	for										

a.;

- b. transmission of electricity;
- c. wheeling of electricity;

Tamil Nadu Electricity Regulatory Commission	Page 9
	December 2014

1.25 In the State of Tamil Nadu, Tamil Nadu Electricity Regulatory Commission in exercise of powers vested in it under the Electricity Act, 2003 (Act) passes the Tariff Orders.

Transfer scheme

- 1.26 The proposal for Assets Transfer and Employee transfer called as Tamil Nadu Electricity Board (Reorganization and Reforms) Transfer Scheme 2010 was notified by the Government of Tamil Nadu vide G.O. (Ms).No.100 Energy (B2) Department dated 19th Oct 2010 with the effective date of implementation as 1st Nov 2010. Based on the above notification TNEB has been re-organized from 1st Nov 2010.
- 1.27 This Transfer Scheme is provisional and addresses various issues like transfer of assets, revaluation of assets and partly addresses the issue of accumulated losses. This Transfer Scheme envisages deployment of staff of the erstwhile TNEB to TANGEDCO and TANTRANSCO. The Commission in its earlier Tariff Order No. 3 of 2010 dated 31-07-2010 had suggested in line with the National Electricity Policy (para 5.4.3) and Tariff Policy that the accumulated losses should not be passed on to the successor entities and financial restructuring has to be resorted to clean up the Balance Sheet of the successor companies and allow them to start on a clean slate so that the successor entities could start performing better. The statutory advices that have been sent to the Government of Tamil Nadu in this regard are appended as Annexure V.
- 1.28 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. The same has been appended as Annexure VI. Through the provisional transfer scheme notified on 2nd January 2012, TANTRANSCO was allocated opening long term loans of Rs. 11,720.29 Crs.
- 1.29 This Transfer Scheme is also provisional and is subject to revision. The transactions for 7 months i.e. from 1st April 2010 to 30th October, 2010 do not get reflected in the opening balance sheet of the TANTRANSCO as specified in the Transfer Scheme.

Impact of Provisional Balance Sheet:

- a) According to Rule 9 (1) of Transfer Scheme, 2010 issued on 19th October 2010, the transfer of assets and liabilities under the scheme is provisional and will be made final upon the expiry of 12 months from the effective date of transfer.
- b) The date was extended through notification dated 3rd January 2012 for additional one year i.e. upto 31st October 2012 for final transfer of assets and liabilities to successor entities of erstwhile TNEB.
- c) The date was further extended for 6 months i.e. up to 30.04.2013 for final transfer of assets and liabilities to successor entities of erstwhile TNEB by GoTN through G.O.Ms (23) dated 8th March 2013 (Annexure VII).

- d) TANGEDCO and TANTRANSCO again sought for an extension for another six months i.e. upto 31st October 2013 for final transfer of assets and liabilities to successor entities of erstwhile TNEB and the same has been approved by GoTN through G.O.Ms (106) dated 5th December 2013 (Annexure VIII).
- e) TANGEDCO and TANTRANSCO has now sought for an extension for another six months i.e. upto 30.04.2014 for final transfer of assets and liabilities to successor entities of erstwhile TNEB and the same has been approved by GoTN through G.O.Ms (35) dated 13th May 2014 (Annexure IX).
- f) Further through the G.O. Ms. No. 36 dated 13th May 2014 the State Government on hearing the proposal of the TANGEDCO has extended the timeline for final transfer of personnel from Board to TANGEDCO to 31st October 2014 (Annexure X).
- g) TANGEDCO through Lr.No SE/PLG/EE/GP/AEE4/F.Transfer Scheme/D 275/2014, dated 05.11.2014 has requested to extend the provisional period upto 30.04.2015 for final transfer of assets and liabilities and to extend the provisional period upto 31.10.2015 for transfer of personnel from erstwhile TNEB to successor entities by issuing necessary amendments (Annexure XI).
- h) In the absence of availability of opening balances based on the final Notification of Government of Tamil Nadu, as per transfer scheme, TANTRANSCO has considered the opening balance as per the provisional transfer scheme notified on 2nd January 2012.
- 1.30 Hence, Commission is of the view that once the final transfer scheme is notified by the State Government, the impact due to revision in the opening balance of Fixed Assets, Loan and Equity and O&M expenses may have to be revisited and accounted during the tariff determination process of the concerned year.

Cut – off date of 1st November 2010

- 1.31 TNEB was unbundled on 1.11.2010. Consequently it started functioning as two separate entities namely TANGEDCO and TANTRANSCO. While TANGEDCO was made responsible for generation and distribution, TANTRANSCO was made responsible for transmission activities within the State.
- 1.32 The Commission in its Tariff Orders issued on 31st July 2010, 30th March 2012 as well as 20th June 2013 had indicated that the accumulated losses upto the date of unbundling will have to be dealt with in accordance with the National Electricity Policy and Tariff Policy. The Commission had also clearly indicated that any losses incurred after 1.11.2010 only are being dealt with in various Tariff Orders subsequent to unbundling.

Brief Note on Public Hearing

1.33 The Commission has noted the various views expressed by stake holders both in the written comments submitted by them to the Commission as well as the concerns expressed during the Public Hearings held at Chennai on 24th Oct 2014, Tirunelveli on 28th Oct 2014 and Erode on 31st Oct 2014.

1.34 Various suggestions and objections that were raised on the TANTRANSCO's ARR and Tariff Summary after the issuance of the Public Notice, both in writing as well as during the Public Hearing, along with TANTRANSCO's reply and the Commission's view have been detailed in Chapter A2 of this Order.

Applicability of Order

1.35 This Order will come into effect from 12th December, 2014. The Intrastate Transmission Tariff and other related charges contained in this order will be valid till the issue of the next order. TANTRANSCO shall file necessary petition in accordance with the Regulations in a timely manner to enable the Commission to pass the next Tariff Order in time.

Layout of the Order

- 1.36 This Order is organised into six Chapters:
 - (a) Chapter A1 provides details of the tariff setting process and the approach of the Order;
 - (b) Chapter A2 provides a brief of the Public Hearing process, including the details of comments of various stakeholders, the Licensee's response and views of the Commission thereon;
 - (c) Chapter A3 provide details/ analysis of the provisional true up for FY 2011-12 and FY 2012-13 and annual performance review for FY 2013-14;
 - (d) Chapter A4 provides analysis of the petition for determination of the Aggregate Revenue Requirement for FY 2014-15;
 - (e) Chapter A5 provides details of determination of Intra-State Transmission Tariff and other related charges
 - (f) Chapter A6 provides details of the Directives of the Commission for compliance of TANTRANSCO.
- 1.37 The Order contains the following Annexures, which are an integral part of the Tariff Order.
 - (a) Annexure I Copies of letters written to TANTRANSCO directing them to file the Tariff Petition for FY 2014-15
 - (b) Annexure II The list of participants at the State Advisory Committee
 - (c) Annexure III The list of stakeholders who have submitted written objections/suggestions/views in response to the public notice.
 - (d) Annexure IV The list of participants at each public hearing.
 - (e) Annexure V Copy of the statutory advices given by the Commission sent to the Government of Tamil Nadu.

- (f) Annexure VI Copy of the second provisional transfer scheme as notified by the State Government vide G.O. (Ms.) No.2, Energy (B2) Department, dated 2nd January 2012.
- (g) Annexure VII G.O.Ms (23) dated 8th March 2013, allowing extension for 6 months i.e. up to 30.04.2013 for final transfer of assets and liabilities to successor entities of erstwhile TNEB.
- (h) Annexure VIII G.O.Ms (106) dated 5th December 2013 approving second extension for another six months i.e. upto 31st October 2013 for final transfer of assets and liabilities to successor entities.
- (i) Annexure IX G.O.Ms (35) dated 13th May 2014 approving third extension i.e. upto 30.04.2014 for final transfer of assets and liabilities to successor entities.
- (j) Annexure X G.O. Ms. No. (36) dated 13th May 2014, approving fourth extension i.e. upto 31st October 2014 for final transfer personnel to successor entities.
- (k) Annexure XI TANGEDCO Lr.No SE/PLG/EE/GP/AEE4/F.Transfer Scheme/D 275/2014, dated 05.11.2014 requesting to extend the provisional period upto 30.04.2015 for final transfer of assets and liabilities and to extend the provisional period upto 31.10.2015 for transfer of personnel from erstwhile TNEB to successor entities
- 1.38 The broad approach adopted in this order is given below:
 - The Commission has taken into consideration the second provisional transfer scheme as 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.
 - The Commission has referred to the audited accounts of TANTRANSCO for FY 2011-12 for provisional truing up of the expenses of the utility. The Commission has undertaken a review of the various performance parameters as well as the controllable cost factors. Based on the assessment the Commission has arrived at the allowable ARR and revenue recovered by the utility.
 - The same exercise has been undertaken for the provisional true-up for FY 2012-13 based on the audited accounts and the ARR and revenue recovered for the year have been arrived at.
 - For the FY 2013-14, based on the information available in TANTRANSCO's submission to the Commission, annual statement of accounts and based on provisions of the Tariff regulation as well as trend in the approved costs in the previous two years, the ARR and revenue recovered have been arrived at.
 - For the FY 2014-15, Commission has extended the rationale adopted for allowing/ disallowing various controllable components of the ARR, to project the ARR and determine transmission tariff for FY 2014-15.

A2: STAKEHOLDER'S COMMENTS, TANTRANSCO'S REPLY AND COMMISSION'S VIEW

- 2.1 The following section summarizes the key views/ objections/ suggestions and requests made by stakeholders on the basis of the public notice issued by the Commission on 23.09.2014. These include submissions received in writing as well as submissions received and observations made at the public hearings held by the Commission at three venues. The Commission to accommodate maximum responses to the public notice had also extended the timeline for submission of written comments by a week to 31.10.2014.
- 2.2 In this section the Commission has appropriately addressed the specific views/ objections/ suggestions made by stakeholder groups. All comments received from the stakeholders by the Commission have been provided to TANTRANSCO, soliciting their responses. The responses so received have been included as TANTRANSCO's reply. Therefore each view has been considered by the Commission and appropriately dealt with in this Order.

Stakeholder's Comments

Suo-motu tariff determination, undue delay in process and matter of non-filing of tariff petition

- As per the regulations of the Hon'ble Commission and judgment of the Hon'ble ATE in OP No. 1 of 2011, in the absence of a timely petition from the utility, the Hon'ble Commission is supposed to commence the suo motu exercise if there is a delay by the utility of a month in this regulatory requirement. But the Hon'ble Commission has delayed in following this directive of the Hon'ble ATE.
- Any tariff approved by the Hon'ble Commission can be made applicable only from the date of notification of the appropriate orders of the Hon'ble Commission. Going by the delay already incurred, this can reasonably be expected to occur towards the end of December. A mere 3 months of applicability for the revised tariff, when the gap/surplus approved is for the entire year will result in continuing gap or surplus for the year, when APR is done for FY15.
- 2.5 It is submitted that the practical approach should be to roll this exercise into the one for FY16 and issue the Order as applicable from 1st April 2015 onwards, as it provides clarity and tariff certainty for a financial year for all stakeholders.
- 2.6 Public hearing this year has been scheduled at Chennai, Tirunelveli and Erode. The Commission has not notified the reasons for changing the venues to smaller towns such as Erode and Tirunelveli instead of Coimbatore, Trichy and Madurai where industrial concentration is high and the accessibility to attend such Public Hearings by the stakeholders and Public is better.

- 2.7 The non-filing of petition on time by the licensee seems to be merely an attempt to avoid exposing its own data inadequacies and non-compliance of directives and regulations. As a result of the suo-motu nature of proceedings, a lot of information on financial performance, technical performance and other details regarding the licensee's performance are kept out of the purview of scrutiny of stakeholders. TNERC must impose penalties on the licensee so that there will be sufficient disincentive in the future to prevent the licensee from failing in its duty of filing of tariff petition on time.
- 2.8 Stakeholders have proposed the following penal actions for the above mentioned non-compliance:
 - a. Return on Equity may be disallowed for TANTRANSCO for FY 2014-15 both at the tariff determination stage and also during performance review and true-up
 - b. Incentive for transmission availability be disallowed for TANTRANSCO for FY 2014-15 during the stages of performance review and true-up.

Absence of reliable and adequate data and information

- 2.9 The Hon'ble ATE in its judgement on Appeal No. 257 of 2012 dated 9th April 2013 has directed the Hon'ble Commission to publish all relevant information supplied by the licensees towards determination of tariff:
 - "9.12 Thus, we do not find any reason to set aside the impugned order only because the clarifications furnished by the licensee on the queries raised by the Commission in the process of prudence check were not put in public domain in this case.
 - 9.13 Having decided the issue in this Appeal, we want to give certain directions to the State Commission on this issue for future.
 - 9.14 In order to avoid any controversy in future and for maintaining complete transparency in tariff determination process, the State Commission may consider to review and amend its Regulations so as to put any information furnished by the licensee or generating company to the State Commission subsequent to filing of the petition on its website, in view of the fact that justice is not only to be done but also appears to be done."
- 2.10 The Hon'ble Commission's Tariff Regulation 2-A also require that all documents submitted by the licensees towards tariff determination shall be hosted in the website of the Commission.
- 2.11 Limited information has been made available by the Hon'ble Commission for the perusal of stakeholders, and that too in a summarized format. This is also a violation of section 86(3) of the Act which mandates that the Commissions exercise transparency in the exercise of its vast powers.
- 2.12 The summary of ARR published by the Hon'ble TNERC does not contain certain important and necessary information which are crucial for review of tariff proposal. In the absence of required data and justifications, we are severely constrained in providing meaningful inputs to the regulatory process.

Tamil Nadu Electricity Regulatory Commission

Transfer Scheme

- 2.13 Electricity Act 2003, explicitly mandates in Section 131(5) (a) that the transfer scheme shall be determined in a way that promotes the profitability and viability of the resulting entity, ensures economic efficiency, encourages competition and protects consumer interests. Clearly, the transfer scheme notified for TNEB violates the mandatory provisions of the Electricity Act 2003 governing reorganization of SEBs.
- 2.14 In their previous petitions, the successor entities had claimed and the Hon'ble Commission has accepted that as per Section 131(3) (b) of the Electricity Act, 2003 the transfer scheme is binding even on the Hon'ble State Commission adjudicating on the tariff for successor entities.
- 2.15 It is humbly submitted that this binding nature of the transfer scheme on the Hon'ble Commission, vis-a-vis the vast powers vested in the Hon'ble Commission by the entirety of the Electricity Act 2003, is misconceived. A reading of the Section 131(3) (b) of Electricity Act 2003 will reveal that Section 131(3) (b) is not a restrictive clause as far as other sections of the Act are concerned.
- 2.16 As per preamble and Section 61 (d) of the Act, the Regulatory Commission has to safeguard the consumer's interest and ensure that the tariffs are reasonable. Thus Commission must scrutinize the transfer scheme for approving ARR and tariff setting.
- 2.17 Even if the Commission accepts the balance sheet prepared as per transfer scheme it is still not necessary that all the costs as per balance sheet needs to be passed on to the consumers. It is totally upon the Hon'ble Commission to decide how much of those costs are required to be passed on to the consumers through tariff. This has also been clearly upheld by the ATE in its order on Appeal No. 4-13-14-23-25-26-35-54-55 of 2005 dated 26th May 2006.
- 2.18 Further, referring to Section 86(1)(f), Section 94 and Section 95 of the Electricity Act, 2003, the Hon'ble Commission is a quasi-judicial body, which cannot under any circumstances be called a third party. Even in cases at any judicial body, involving the Government of India or any State Government, such judicial body is never considered as a third party. Therefore, the stance of the utility and the Hon'ble Commission that the Hon'ble Commission is merely a third party is beyond comprehension.
- 2.19 The transfer scheme, including the balance sheet prepared under the transfer scheme, should not be viewed as sacrosanct for the purposes of cost approval and tariff determination, which are statutory functions of the Hon'ble Commission. Hence, Hon'ble Commission is urged to re-examine its stance at this juncture, since significant, unwarranted, inefficient cost is being loaded on to the utility and passed on to consumers due to this error.

Inflated asset base and impact on ARR

- Hon'ble Commission notified the TNERC (Terms and Conditions of Tariff) Regulations 2005 dated 24th June 2005, which defined the regulatory framework within which all stakeholders have to operate. The licensee has not followed said regulations by not filing petition for a gap for 7 years till 2010. In the absence of compliance to regulatory requirements by the licensee, the Hon'ble TNERC should have initiated suo-motu exercise in line with the regulatory requirements, however this did not happen.
- 2.21 Therefore the licensee as well as the Hon'ble Commission was in violation of the regulatory framework notified by the Commission itself, which has been held to be an untenable position by the Hon'ble ATE in its order on Appeal No 84 of 2006 dated 29th August 2006.
- 2.22 This means that the regulatory scrutiny of utility operations was not done and tariff was not set to ensure recovery of prudent cost, resulting in significant operational losses which according to the accounting statements available are to the tune of Rs. 17414 Crs upto FY 09 alone. This has formed the basis for first transfer scheme.
- 2.23 The losses have led to borrowings for capital expenditure being diverted to cover revenue deficit and debt repayments as recognised by the Hon'ble Commission in its last tariff order. Despite this, these costs were loaded onto customers through tariff in FY13 through the order dated 30th March 2012 and through tariff in FY 14 through the order dated 20th June 2013.
- 2.24 Capital expenditure in a year has been estimated by the following formula:

Capex for the year = (Closing CWIP – Opening CWIP + Capitalisation) – (Closing reserves – Opening reserves)

2.25 Reserves can be increased only in a situation where the utility is making a profit and a portion of the profit is transferred to specific or general reserves. Therefore the adjustment to reserves seen in the balance sheet of TNEB can only have been a revaluation reserve, which clearly implies that there was no corresponding capital expenditure. Further P&L of the corresponding years explicitly states that there was no apportionment to reserves, further validating the assumption. The impact from diversion is as given below:

Parameter	FY 07	FY 08	FY 09
Capex for the year	1604	1932	2403
Capital grants received	319	527	436
Equity infusion	175	490	1171
SD from consumers	406	481	372
Borrowing requirement	704	434	425
Actual capital borrowing	1237	3184	6505
Excess capital borrowing	533	2750	6080
Cumulative Excess	533	3283	9363

- 2.26 Looking at the consolidated balance sheet of the unbundled entities, it is apparent that Rs. 13345 Crs are generic loans, clearly showing there has been no associated capital expenditure. The total deficit shown for the years FY06-FY09 in the P&L of TNEB is Rs. 13831 Crs a figure reasonable close to the diverted funds value.
- 2.27 Hon'ble Commission in its last tariff order, while acknowledging the problem, chose to allow full interest on debt, stating that it has to abide by the values stated in the opening balance sheet, due to provisions of Section 131 (3(b)).
- 2.28 In its order on Appeal No. 4-13-23-25-26-35-54-55 of 2005 dated 26th May 2006, the Hon'ble ATE has dealt with issue of diversion of funds from capital account to revenue account. In its judgement ATE has clearly stated that in any matter that related to tariff, the jurisdiction of Regulatory Commission is complete. Relevant portion is given below:
 - 128. It seems that the Commission felt that these mistakes cannot be corrected as the State government is insulated from its directions relating to tariff issues. This perception cannot be countenanced in law as otherwise tariff cannot be determined according to the parameters and factors laid down in Section 61 of the Act of 2003. The Commission is required to determine the tariff by seeking guidance from factors which would encourage economical use of the resources and optimum investments and at the same time safeguard the interests of the consumers and recover the cost of electricity in a reasonable manner etc. (see Section 61 particularly 61(c), (d) and (g).
- 2.29 Further extracts of the same order, which are highly relevant in this instance are quoted below:

51.	The que	estior	ı is, if the Co	mmission i	n exercis	e of	its s	tatutory p	ower d	oes	not	cure
and	allow	the	established	inequities	created	by	the	apportio	nment	of i	the	cost
			stained wit	th illegality	and harn	n the	e cor	ısumers				

- 59. Though the Commission was of the confirmed opinion that the State had wrongly allocated...... that it had no jurisdiction to interfere with the allocation of the cost of the RSD project, imposed by the Government on the Board.
- 2.30 Any matter which has an impact on tariff is firmly within the jurisdiction of the Hon'ble Commission, and there can be absolutely no hedge or limitation on this authority of the Hon'ble Commission by the Government of Tamil Nadu

- 2.31 Request the Hon'ble Commission to disregard the opening balance sheet values of debt, which we have clearly shown to be excessive and availed solely to fund revenue deficit and conduct an exercise to determine prudent capital debt load that can be allowed for the base year and for the first and second control period. Also request that the Hon'ble Commission conduct a detailed exercise, based on published accounts of TNEB till FY 10, to determine the true extent of mix up of capital & revenue accounts and disallow all borrowings utilised to fund revenue deficits, as it is the responsibility of GoTN to clean up the balance sheets of unbundled utilities through a FRP.
- 2.32 Subsequently interest should be allowed only on debt and allowable capital expenditure in line with the requirements of Regulation 21 of TNERC (Terms and Conditions of Tariff) Regulations 2005, which specifies the capital structure and treatment of variances from recommended capital structure.
- 2.33 It is submitted that in the absence of this decision being taken by the Hon'ble TNERC, the impact of this undue debt burden will be felt for years to come, as the depreciation allowable remains low due to the fact that asset base has been inflated by inflating the value of land, which is a non-depreciable asset. Therefore, the cash flow required to repay and retire this debt will not be available.
- 2.34 This can already be seen whereby the actual interest on debt is in excess of Rs.1500 Crs for FY15, but the Commission has capitalized a significant portion of that to avoid the tariff shock to consumers if the full amount is passed through in tariff.
- 2.35 However, the regulatory principle behind capitalizing the interest on debt is not clear as no explanation has been provided by the Hon'ble Commission. It is pointed out that once capitalized, this interest remains in the capital base of the utility as equity and debt. Whilst the debt will eventually get paid off, the equity remains and the will keep earning the utility RoE in perpetuity and is therefore a grievous error, which compounds the earlier error.
- 2.36 It is requested to determine the correct regulatory capital base to be allowed as at the date of opening balance sheet, apportion it appropriately into debt and equity, consider the movement of debt and equity positions as assets get capitalized and allow RoE and interest on debt only the appropriate regulatory rate base.
- 2.37 It is further requested that this issue may not be linked to the disallowance of return on equity as has been the practice of the Hon'ble Commission in the past years. RoE upto unbundling is to be disallowed as there was no actual infusion of equity, as capital expenditure borrowings were diverted for revenue expenditure. Therefore the disallowance of RoE up to unbundling, though required does not negate the requirement of assessing prudent interest costs that are to be allowed in ARR with respect to the actual capital expenditure that were incurred. Generic loans taken to fund revenue deficits will still need to be disallowed while calculating interest charges.

Employee expenses

- 2.38 The Commission has escalated employee expenses, except DA, at 5.72% and the DA has been allowed considering average actual CAGR of DA Rates in past years. This has resulted in an effective annual escalation of more than 12% in employee expenses against the 5.72% mandated under the Tariff Regulations.
- 2.39 TANTRANSCO must provide information on the performance improvements achieved by its employees to deserve the pay increase.
- 2.40 It is also requested that employee expenses approved for FY 11 be taken as the base, and be escalated only by the percentage allowed under the Regulations, rather than allowing DA as a pass through component.

Capital expenditure and capitalization

- 2.41 The status of compliance to directives issued by the Hon'ble Commission in last year tariff order is sought. In case the compliance is pending, then the basis for approving capital expenditure and capitalization plans, which have significant impact on the RoE, debt and depreciation allowable for recovery through tariff is questioned.
- 2.42 APTEL in its judgement to Appeal No.197 of 2013 dated 18th October 2014 directed the Commission to true up/provisionally true up the capitalization for FY 2013-14 immediately and the short fall if any should be accounted for while determining the tariff for the FY 2015-16, with carrying cost on the impact of the variation on this account on the ARR. Also Commission shall approve the Capital Investment Plan of TANTRANSCO for FY 2014-15 and FY2015-16 after submission of the same by the TANTRANSCO in the requisite formats to the State Commission for approval and consider the same in the tariff for the FY 2015-16.
- 2.43 It is also requested that as the licensee has not complied to mandatory regulatory requirements of filing of capital investment plan, and the history of poor performance of the utility in terms of capital expenditure which even the Hon'ble ATE has confirmed, only a token of capital expenditure of Rs.1000 Crores and token capitalization of Rs.500 crore shall be approved for FY2014-15. In the absence of strict measures, the licensee would only continue its non-compliance of directives of the Hon'ble Commission in this regard in the upcoming years also.
- 2.44 The Commission has not considered the capitalization of expenses for deduction from the fixed costs, which in the previous 2 years amount to Rs.85 crores. This needs to be considered as a deduction for FY2013-14.
- 2.45 Rs.85 lakhs of capitalization of expenses have been reduced from the O & M expenses for 2013-14 and it is requested to consider the actual capitalization of expenses and RoE of Rs.105.10 Crores.

Depreciation

- 2.46 Raised questions on the adoption of rate of depreciation in respect of the Fixed Assets and wanted to know that in the absence of the Fixed Asset Register and voltage-wise asset values how depreciation has been determined by the Commission.
- 2.47 It is submitted that to protect the interests of the consumers, and to ensure that excessive depreciation is not being approved merely because of the lack of data, only 85% of the estimated depreciation be approved on a provisional basis, till such year when the Hon'ble Commission is provided with all the relevant information.
- 2.48 TANTRANSCO's own performance in the past does not support the claim of capitalization of Rs.4500 Crores in a year for FY 2015. Therefore, only a token capital expenditure of Rs.1000 Crores and a token capitalization of Rs.500 crore shall be approved for FY 2015. Therefore the average increase in GFA in FY15 will be only Rs.250 Crores which corresponds to an additional depreciation of only Rs.13 crore in FY15 in comparison to the depreciation approved for FY14.
- 2.49 The depreciation that has been estimated as follows:

Table 1: Estimated Depreciation (INR Crores)

Details	FY12	FY13	FY14	FY15
TNERC Proposal	297	302	316	538
Estimate	253	257	268	281

2.50 An increase as high as 70% has been made in depreciation i.e. from Rs.315.62 crores in 2013-14 to Rs.537.66 crores in 2014-15. The increase is due to higher rate of depreciation and higher capitalization.

Interest on loan

- 2.51 Interest on loan has significant importance, as interest on debt constitutes 34% of total cost to be recovered from consumers, despite significant capitalization of interests.
- 2.52 Calculation of interest has been done taking into account the loans availed to fill up revenue deficits during the past periods even when TANTRANSCO was not in existence and therefore, such interests should not to be considered as true costs.

Return on equity

2.53 Regulation 21 of the Hon'ble Commission's tariff regulations determines the capital structure on which RoE can be allowed. Regulation 21 is as mentioned below:

"Regulation 21- Debt-Equity Ratio

For the purpose of determination of tariff, debt-equity ratio as on the date of commercial operation of Generating Station and transmission projects, sub-station, distribution lines or capacity expanded after the notification of these Regulations shall be 70:30. Where equity employed is more than 30% the amount of equity shall be limited to 30% and the balance amount shall be considered as loans, advanced at the weighted average rate of interest and for weighted average tenor of the long term debt component of the investment.

Provided that in case of a Generating Company or other licensees, where actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of return on equity in tariff computation."

- 2.54 As per the Hon'ble Commission's regulations, DE ratio of 70:30 is taken as on date of commercial operation. As per accounting policy, an asset can be capitalized on the balance sheet only when it is put to use commercial operation, in this context. Therefore, the equity addition considered for FY12 has to be 30% of the capitalization for the year and there should be a check to see that actual equity infusion has taken place.
- 2.55 The Hon'ble Commission has taken an approach of not considering any equity in the capital structure for FY12. For subsequent years, the equity infusion is considered on the basis of actual capital expenditure, which is an error in methodology itself.
- 2.56 It is submitted that the RoE can be allowed only on capitalization, as that is the approach mandated by the regulations of the Hon'ble Commission. This is also the approach followed by regulators around the country. Further, simple logic dictates that this is the correct approach, as an investor starts to see a return on equity invested ONLY after the asset is put to use.
- 2.57 Capitalization to be considered by the Commission and the equity that can be allowed, assuming equity addition at 30% of capitalization as proposed is as shown below:

Table 2: Estimated return on equity based on capitalization (INR Crores)

Details	FY12	FY13	FY14	FY15
Capex	1,045	1,412	3,783	2,907
Capitalization	174	434	303	500
Opening equity	-	52	182	273
Addition during year	52	130	91	150
Closing equity	52	182	273	423
Average equity	26	117	228	348
RoE	4	16	32	49

2.58 The excess RoE allowed by the Commission in FY 12, FY 13 and FY 14 under the current approach of considering equity at 30% of capex instead of capitalization must be disallowed.

- 2.59 During FY 2013-14, the provision for RoE has been increased to Rs.207.32 crores from Rs.92.39 crores in the previous year 2012-13, when addition to fixed assets (capitalization) during FY2013-14 was only Rs.302.67 crores. RoE is to be provided as a fixed cost in respect of Equity infused for capitalized assets and ROE should not be considered on the Capital infused for Capital Work in progress as the asset has not been put into use beneficial use and the cost should not be added to ARR resulting in a higher ARR. This is the principle of Accounting Standards and is practiced by TANTRANSCO for accounting the interest on loans. TANTRANSCO capitalizes interest incurred on fixed assets under construction and not put to beneficial use and does not charge to P & L Account. In the same analogy, The RoE in respect of equity infused for assets under construction also needs to be notionally added to the Work in Progress and not consider in the ARR.
- 2.60 RoE has not been worked out considering the tariff fixation guidelines.

Incentive

- 2.61 It is requested that the Hon'ble Commission should allow incentive on post facto basis, only after certification of transmission availability for the corresponding year by the State Load Dispatch Centre (SLDC).
- 2.62 The Hon'ble ATE in its judgment on Appeal No. 197 of 2013 & I.A. No. 273 of 2013 dated 18th October 2014 in the matter of Tamil Nadu Power Producers Association vs. TNERC has also held that incentive shall be allowed only on post facto basis. APTEL has directed the Hon'ble Commission to provide necessary relief to the users of the transmission system on account of excess recovery of revenue on account of incentive in the transmission tariff during FY2013-14 and FY2014-15 with carrying cost.
- 2.63 Stakeholders have proposed that the incentive for FY 2013-14 may be disallowed and it may be allowed only when the licensee files the true-up petition.
- 2.64 Stakeholders have requested that the incentive of Rs. 38 crores proposed for FY 2014-15 may be disallowed from the ARR, and a further deduction of Rs. 23 crores along with carrying cost may be made towards the incentive approved for FY 2013-14.

Other Income

- 2.65 For FY 2014-15, the Hon'ble Commission has proposed Rs. 106 Crores towards "Revenue from STOA and Other Income" which is same value as that approved in the last tariff order.
- 2.66 From the data submitted by TANTRANSCO, the actual "Other Income" is much higher than that in last year tariff order. (The data for FY2013-14 Q4 is taken as average of that of Q2 and Q3).

Table 3: Estimate of Other Income (INR Crores)

Details	FY14Q1	FY14Q2	FY14Q3	FY14Q4 (Est.)	Total
Revenue from STOA Charges	26	5	4	5	40
Scheduling and System Operation and other Charges	25	20	21	21	87
Total Other Income	51	26	25	25	126

Tamil Nadu Electricity Regulatory Commission	Page 23
	December 2014

- 2.67 Therefore, for FY 2013-14 and FY 2014-15, the Hon'ble Commission is requested to consider a total "Other Income" of Rs. 126 crores.
- 2.68 TANTRANSCO is collecting Rs.1, 82,200 per MW as O & M Charges for maintenance of Substation from WEGs and CPPS and this revenue is also to be considered while arriving at the total revenue. A total of 9270 MW in Wind and CPP are paying these charges to TANTRANSCO and this revenue amounts to Rs.168.89 crore per annum.
- 2.69 The Summary of Income and Expenses based on Audited Accounts of 2010-11, 2011-12 and 2012-13 and provisional Accounts for 2013-14 as determined by Hon'ble Commission is as follows:

Table 4: Estimated return on equity based on capitalization (INR Crores)

Description	For 3 quarters (as uploaded in the website)	4 th quarter (same as third quarter)	Total income for 2013- 14 from Transmission Charges
Income from Transmission charges	1514.82	373.93	1888.75
O & M revenue paid for SS at Rs/182200 per MW for 9270 MW – wind 7327MW and CPP 910 MW+970MW+63.5 MW (others) as given in SLDC daily statement.			168.89
Total Revenue for 2013-14			2057.64

2.70 Based on the volume traded in the exchange during last financial year as per SLDC daily statement, the transmission charges revenue from exchange transactions alone at the old rate of Rs.1973 per MW per day works out to Rs.46.8 crore.

Revenue Gap and True-up of past expenses

2.71 A carrying cost at 12% to estimate the total revenue surplus as on FY 2013-14 to be Rs. 522 crores against the Hon'ble Commission's estimate of Rs. 367 crores.

Table 5: Estimate of revenue gap ending FY14 (INR crores)

Details	2011-12	2012-13	2013-14	Total
Net ARR	1,991	2,090	1,916	
Revenue	1,707	3,076	1,634	
Revenue Gap/(Surplus)	284	(986)	282	(420)
Revenue Gap/(Surplus) with Carrying Cost @12%	399	(1237)	316	(522)

2.72 The Hon'ble Commission has considered revenue from transmission charges as Rs.1634 Crores for FY 2013-14. Whereas, the figure is expected to be higher, as per the information made available by TANTRANSCO for the first 3 quarters of FY 2013-14.

Table 6: Estimate of revenue from transmission charges for FY 2013-14 (INR crores)

Details	FY14 Q1	FY14 Q2	FY14 Q3	FY14 Q4 (Estt.)	Total
From TANGEDCO	686	282	284	283	1,537
From LTOA consumers	20	74	65	69	228
Total Revenue	706	356	`349	353	1,765

2.73 The revenue surplus will increase further to Rs.668 crores, if the revenue from transmission charges is assessed based on TANTRANSCO's own data.

Table 7: Estimate of revenue gap ending FY14 based on actual revenue collected by TANTRANSCO (INR crores)

Details	2011-12	2012-13	2013-14	Total
Net ARR	1,991	2,090	1,916	
Revenue	1,707	3,076	1,765	
Revenue Gap/(Surplus)	284	(986)	152	(551)
Revenue Gap/(Surplus) with Carrying Cost @12%	399	(1237)	170	(668)

- 2.74 It is humbly submitted that as approved ARR for FY 2011-12, FY2012-13 and FY 2013-14 are revised in the proposed ARR summary, these expenses will have to be trued up with respect to the corresponding ARR approved in the previous tariff order, with the impact of total deviation being passed on to the revenue requirement of FY 2014-15.
- 2.75 A comparison between ARR proposed in the summary and the ARR approved in previous tariff order is shown below:

Table 8: Excess ARR approved in previous years (INR Crores)

Particulars	2011-12	2012-13	2013-14	Total
ARR as per summary	1991	2090	1916	
ARR approved in previous tariff order dated 20th June 2013	1987	2007	2376	
Difference	4	83	(460)	(373)
Difference with carrying cost @ 12%	6	104	(515)	(405)

- 2.76 Therefore, the excess ARR of Rs.373 Crores approved in the previous year along with carrying cost may be adjusted in the total revenue requirement for FY 2014-15.
- 2.77 The estimated revenue requirement adjusted for the surplus of Rs. 405 crores is given in the table below:

Table 9: Excess ARR approved in previous years (INR Crores)

Particulars	Amount (Rs. Cr.)
Revenue Requirement for FY 2014-15	2100
Revenue Gap ending FY 2014	(405)
Total Revenue Requirement	1695

Calculation of transmission tariff

- 2.78 According to the judgment of the Hon'ble ATE in Appeal No.102 of 2012, dated 4th February 2013, the Hon'ble Commission is required to determine transmission charges on per MW per day basis on the basis of sum of transmission capacity allotted to all long term open access customers of the Intra-state transmission system, which includes the distribution licensee as well.
- 2.79 The judgment of the Hon'ble ATE in Appeal No. 91 of 2012, dated 23rd November 2012 clearly states how transmission capacity should be calculated for use in calculating transmission charges, we fail to understand the methodology used by the Hon'ble Commission wherein the concessions provided to renewable energy sources are considered in estimating the total allotted capacity.
- 2.80 This is resulting in conventional generation being made to pay a tariff higher than what is required and runs contrary to the directives of the Hon'ble ATE and the provisions of Section 62(3), which mandates that the Commission shall not show undue preference to any consumer. It is humbly submitted that such "cross subsidy" in transmission tariff is no-where envisaged in the Act itself. If renewable sources are to be given any discount in their transmission tariff, the burden of the same shall be on the Government which may encourage the renewable sources by providing a tariff subsidy on their transmission charge, rather than merely passing on the burden to the rest of the consumers who will then be made to pay transmission charges for more than their capacity allocation which will also be a violation of the judgement of Hon'ble APTEL in Appeal No.91 of 2012 dated 23rd November 2012.
- 2.81 If proper practice as laid out by the Hon'ble ATE is followed, the transmission charges will come down from Rs.3136/MW/day to Rs.2551/MW/day for the same amount of revenue requirement.

Table 10: Estimate of transmission charge based on methodology specified by ATE

		TNERC Proposal	Estimate
Wind (Non REC)	MW	6,576	6,576
Biomass (Non REC)	MW	13	13
Cogeneration (Non REC)	MW	637	637
Others	MW	15332	15332
Wind (Non REC)	%	40%	100%
Biomass (Non REC)	%	40%	100%
Cogeneration (Non REC)	%	40%	100%
Others	%	40%	100%
Total	MW	18,351	22,558
ARR	Rs. Crore	2,100	2,100
Transmission Charge	Rs./MW/Day	3,136	2,551

Scheduling and system operating charges

- 2.82 The proposed methodology of charging the scheduling and system operation charges on Rs/Day basis violates the provisions of TNERC Tariff Regulations 2005 which mandates that such charges be determined based on the total energy of transactions.
- 2.83 Stakeholders have further stated that the scheduling and system operation charges are wrongly charged which leads to TANGEDCO which is the main beneficiary of SLDC paying only negligible charges, whereas the LTOA and STOA consumers are made to share the bulk of such charges, as shown below.

Table 11: Scheduling and system operation charges collected from TANGEDCO and other consumers (INR Crores)

	FY14 Q1	FY14Q2	FY14Q3
From TANGEDCO	0.02	0.02	0.02
From LTOA Consumers	10.55	11.27	12.10
From STOA Consumers	13.96	8.33	7.42
Total	24.53	19.62	19.54

- 2.84 It is requested to correct the anomaly in manner of billing of scheduling and system operation charges so that the same is brought in line with the Regulations, and to ensure that the charges be proportional to the energy usage by various consumers including TANGEDCO.
- 2.85 The reactive power charges are not applicable to generating stations as per Indian Electricity Grid Code 2010, TNERC Grid Code 2005 and TNERC Order No.2 of 2013. TNERC Orders issued during 2005, 2006 and 2012 are silent on collection of reactive power charges, TANGEDCO is pressing the generators to pay for the reactive charges by the generators indicating the Hon'ble TNERC Distribution Code 2004.
- 2.86 APTEL had repeatedly held that a generator cannot be treated as a consumer as contemplated under section 43 of the Electricity Act 2003 merely because such generator is availing electricity supply to start their generator whenever there is an outage of the generating set. As per IEGC 2010 the generating stations connected to the Grid shall generate/absorb reactive power as per the instructions of LDC within the capability limits of the respective generating units without sacrificing the active generation required at that time. No payments shall be made to the generating companies for such VArh generation/Absorption. In the Hon'ble Commission's order dated 20-6-2013, the generating stations have been exempted from the payment of charges for VArh. This may also be clearly and specifically mentioned in the Transmission Tariff for the ensuing period FY 2014-15.

Reactive energy charges

- 2.87 The Commission has exempted the generating stations from payment of charges for VArh in the ensuing order as well. The relevant section from the tariff order is reproduced below:
- 2.88 Clause 6.6 (2) of Indian Electricity Grid Code, 2010 notified on April 28, 2010, provides the charges applicable for reactive energy exchange.

6.6 Reactive Power and Voltage Control

"(2) The charge for VArh shall be at the rate of 10 paise/kVArh w.e.f. 1.4.2010, and this will be applicable between the Regional Entity, except Generating Stations, and the regional pool account for VAr interchanges. This rate shall be escalated at 0.5paise/kVArh per year thereafter, unless otherwise revised by the Commission."

Revenue from TANGEDCO towards transmission charges

- 2.89 In table 30 of the ARR summary for TANGEDCO, Rs.2259 crore is approved in the ARR for 2014-15 towards "Annual Transmission Charges payable to TANTRANSCO". This seems to be grossly inflated as in the ARR summary for TANTRANSCO (Table 12) the total revenue requirement of TANTRANSCO for 2014-15 is only Rs.2100 Crores.
- 2.90 Further, considering the capacity allocated to TANGEDCO and the proposed transmission charge of 3,136 Rs./MW/Day, the transmission charges payable by TANGEDCO to TANTRANSCO is estimated to be only 1,829 Rs. Cr.

Particulars	Unit	
Wind (Non REC)	MW	2406
Biomass (Non REC)	MW	13
Cogeneration (Non REC)	MW	637
Others	MW	14628
Wind (Non REC) concessional Charge	%	40%
Biomass (Non REC) Concessional Charge	%	50%
Cogeneration (Non REC) Concessional Charge	%	60%
Others concessional charge	%	100%
Total Effective Allotted Capacity	%	15,979
Transmission Charge	Rs./MW/Day	3,136
Transmission Charge	Rs. Crore	1,829

TANTRANSCO's Reply

- 2.91 Hon'ble TNERC is the competent authority to determine the tariff within the meaning of section 62 and 64 of the Electricity Act 2003 and the Regulation framed by it.
- 2.92 As per TNERC's (Determination of Tariff) Regulations, all miscellaneous revenue including the O & M charges received from WEG and CPPs for maintenance of substation will be considered as other income and deducted from the Gross Annual Revenue Requirement and the Net ARR alone will be taken into consideration while determining the transmission tariff.
- 2.93 In the issue of Capital expenditure and capitalization, the direction of the Hon'ble APTEL in its order dated 18-10-2014 in Appeal No. 197 of 2013 will be complied by TANTRANSCO within the stipulated time as directed in the order.
- 2.94 In respect of the installed capacity, that has been mentioned from the public domain and projected in the suo motu proceedings of the TNERC will be subjected for prudence check by the Commission.

2.95 The determination of transmission charges considering the installed capacity is as per the Regulations and has to be charged on MW basis only.

Commission's view

Matter of Suo-motu proceedings

- 2.96 It is important to understand the underlying provisions of Tariff Policy instead of giving a plain vanilla reading of the guidelines. The tariff policy envisages that the tariff determination process is a timely and a continuous process.
- 2.97 Commission also would like to draw attention to the same APTEL order on OP No. 1 of 2011 dated 11th November 2011. Interestingly this Commission raised similar queries to the APTEL with reference to the same matter of tariff revision. The question as aptly summarised and framed by Hon'ble APTEL in its Order was:
 - 17. (i)Whether the State Regulatory Commissions have the jurisdiction to suo-motu initiate proceedings for determination of tariff under section 62, 64 and 86 of the Electricity Act, 2003 in the absence of the Tariff application to be filed by the Utilities under Section 64 of the Act?

.....

- 20. (i) Whether the State Commissions can initiate suo-motu proceedings for determination of tariff?
- (ii) If so, can the State Commissions determine the tariff without such filing of tariff application by the Utilities?
- 2.98 Discussing the queries Hon'ble ATE made some important observations and remarks on the same queries:
 - (22)If there is any lack of diligence on the part of the utility which led to the delay, then the State Commissions have to intervene and to play a proactive role in accordance with the Regulations framed and the Statutory policy issued for the tariff determination in time.
 - (41) The Hon'ble Supreme Court has held that the Regulations framed by the Commissions are binding as a delegated legislation on the Commissions and as such the Regulatory Commissions are obliged to determine tariff in exercise of the powers in accordance with these Regulations.
 - (43) It is settled position of law that the procedures as provided under section 64 of the Act are to be considered as handmaid of justice which cannot be read in a manner to frustrate the letter and spirit of the underlying statutory provisions and substantive rights related to regular, cost reflective tariff determination and the statements of objects and reasons read with Section 62 of the Electricity Act. Further, as held by the Hon'ble Supreme Court as well as this Tribunal in various decisions that the quasi-judicial authorities (like the State Electricity Regulatory Commissions) are vested with more liberal powers to adopt more flexible processes to fulfil their statutory objectives with purposeful efficiency.

- 2.99 And APTEL has ruled on the matter as follows:
 - 44. In view of the ratio laid down in these decisions, the contention of these three State Commissions that the only option available with the Commission is merely to ask the licensee to comply with the provision of the Act and to file the tariff petition under section 64 and nothing more is wholly misconceived and misplaced. Therefore, we are to conclude that the State Commissions can initiate suo-motu proceedings and collect the data and information and give suitable directions and then to determine the tariff even in the absence of the application filed by the utilities by exercising the powers under the provisions of the Act as well as the tariff regulations.
- 2.100 The important section of this decision is "even in absence of application" the Commission can determine tariff by collecting data and information and the second most important observation in (43) above is that *quasi-judicial authorities* (like State Electricity Regulatory Commissions) are vested with more liberal powers to adopt more flexible processes to fulfil their statutory objectives with purposeful efficiency. This Commission would like to reiterate that the procedures of Section 64 are not be read in a manner that frustrates the letter and spirit of the underlying statutory provisions. The above ruling also makes it amply clear that this Commission has got the jurisdiction to suo-motu determine the tariff in the absence of tariff application filed by the Utilities. The Commission would now like to state that
 - TNERC had followed Tariff Regulations 2005 which provides the Commission powers to initiate tariff determination on Suo-motu basis, which followed the National Tariff Policy which are in consonance with the provisions of the Electricity Act, 2003.
 - Suo-motu tariff determination initiated by the TNERC as it is, is not violative of section 64 of the Electricity Act.
 - TNERC can undertake tariff determination even when the tariff application is not filed by the Utilities before the Commission. Regulatory Commissions should not restrict themselves merely to ask the Utilities to comply with the provisions of the Act and to file a tariff petition and nothing more.
- 2.101 With TANTRANSCO not filing any petition the Commission decided to go ahead with the information already available submitted by TANTRANSCO under compliance to directives issued in the previous order.
- 2.102 It is also important to understand that suo-motu tariff determination is not an easy process by any measure. A large amount of data is required for determination of tariff and without a tariff petition by the licensee The Commission had to put in significant efforts to collect and collate the necessary data.
- 2.103 The process of tariff determination is time bound in nature. Depending upon the time availability and other requirements every year, the places of Public Hearing will be decided by the Commission. Conducting of Public Hearing in all district headquarters is not feasible. The places of Public Hearing and time of the public hearing are published well in advance in two leading English and two Tamil daily Newspapers which have a wide coverage to reach the public.

2.104 The details of tariff have been published as Public Notice in English and Tamil Newspapers. Further, the English and Tamil version of the Public Notice, Summary and data used for determination of tariff is also hosted in the Commission's website.

Clarity on applicability of the order and matter of non-filing of tariff petition

- 2.105 Commission would like to draw attention to the provisions of National Tariff Policy which clearly states that any revenue gap on account of delay in filing petition should be on account of licensee. The relevant extracts from the Tariff Policy is reproduced below:
 - "5) At the beginning of the control period when the "actual" costs form the basis for future projections, there may be a large uncovered gap between required tariffs and the tariffs that are presently applicable. The gap should be fully met through tariff charges and through alternative means that could inter-alia include financial restructuring and transition financing.
 - 6) Incumbent licensees should have the option of filing for separate revenue requirements and tariffs for an area where the State Commission has issued multiple distribution licenses, pursuant to the provisions of Section 14 of the Act read with para 5.4.7 of the National Electricity Policy.
 - 7) Appropriate Commissions should initiate tariff determination and regulatory scrutiny on a suo motu basis in case the licensee does not initiate filings in time. It is desirable that requisite tariff changes come into effect from the date of commencement of each financial year and any gap on account of delay in filing should be on account of licensee."

Absence of reliable and adequate data and information

- 2.106 The Commission has issued an abridged version in various newspapers; however a detailed summary of various items of ARR viz. Revenue from transmission charges, miscellaneous income, Equity, Depreciation, O&M expenses, Interest on long term loans, RoE, Scheduling and System Operation Charges, Reactive Energy Charges, etc. were all provided in the Summary document hosted in the website of the Commission.
- 2.107 Post issuance of public notice, the Commission had uploaded the Annual reports of FY 2011-12 and FY 2012-13, Quarterly return received in respect of LTOA and STOA transmission charges, scheduling and system operation charges and Reactive Energy Charges received for FY 2013-14 upto 3rd quarter were all hosted on the Commission's website.

Transfer scheme

- 2.108 The Transfer scheme dated 19-10-2010 is a provisional Transfer Scheme, addresses various issues like transfer of assets, revaluation of assets and partly address the accumulated losses. This Transfer Scheme also envisages deployment of staff of the erstwhile TNEB in the TANGEDCO and TANTRANSCO. The Commission in its earlier Tariff Order No. 3 of 2010 dated 31-07-2010 had suggested in line with the National Electricity Policy (para 5.4.3) and Tariff Policy that the accumulated losses should not be passed on to the successor entities and financial restructuring has to be resorted to clean up the Balance Sheet of the successor companies and allow them to start on a clean slate so that the successor entities can start performing better.
- 2.109 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. The same has been appended as Annexure VI.
- 2.110 This Transfer Scheme is also provisional and is subject to revision. The transactions for 7 months i.e. from 1st April 2010 to 30th October, 2010 do not get reflected in the opening balance sheet of the TANTRANSCO as specified in the Transfer Scheme
- 2.111 In the absence of availability of opening balances based on the final Notification of GoTN, as per transfer scheme, TANTRANSCO in the last tariff petition has considered the opening balance as per the provisional transfer scheme notified on 2nd January 2012. Hence, Commission is of the view that once the final transfer scheme is notified by the State Government, the impact due to revision in the opening balance of Fixed Assets, Loan and Equity may have to be revisited and accounted during the tariff determination process of the concerned year.

Inflated asset base and impact on ARR

2.112 Commission would like to state here that it is taking all necessary steps to ensure that the ATE judgement in OP No.1 of 2011 is followed and hence has undertaken the current suo-motu tariff determination process in the absence of the ARR and tariff petition being filed by the utility.

- 2.113 With regard to the accumulated losses, the Commission in Order No. 3 dated 31-07-2010 and Order No.1 dated 30-03-2012 had extensively discussed the reasons for the accumulated losses of the utility. The gap up to the unbundling of the TNEB on 1-11-2010 is Rs. 17207.30 Crore. The Commission had expressed a view earlier that the accumulated losses up to the date of unbundling will have to be dealt with in accordance with Para 5.4.3 of the National Electricity Policy and Tariff Policy. The provisions of the National Electricity Policy and Tariff Policy envisages that the gap at the time of unbundling will have to be sorted out by financial restructuring and support from the Government rather than passing on the accumulated losses to the successor entities. The intention of the Tariff Policy is to allow the unbundled utilities to start on a clean slate. Accordingly, this Commission left the matter of the accumulated losses up to the date of unbundling for resolution by the Government of Tamil Nadu. Necessary statutory advice on accumulated losses prior to unbundling was given by the Commission to GoTN through letter dated 9th December 2010 and the same is reproduced in Annexure VI of this tariff order.
- 2.114 With regard to the approach adopted by the State Commission for treatment of allowing interest on opening loans has already been accepted by the Tribunal in its judgment in Appeal No. 102 of 2012. The State Commission has considered the opening balance of loans as on 01.11.2010 based on the Provisional Transfer Scheme notified as on 02.01.2012. The relevant extracts of the APTEL order are reproduced below:
 - "31. We find that the transmission tariff of the Tamil Nadu has not been revised since the year 2005-06 and has been revised now after a lapse of 7 years. Similarly, the distribution tariff in the Tamil Nadu has also been revised after a long time and tariff order was issued only after the restructuring of the Electricity Board. The long gap in determination of tariff has resulted in revenue gap and excess borrowings and diversion of capital funds to revenue account. Even though the State Commission has deviated from its Regulations, the State Commission has now given a calculation, according to which, if the Regulations are followed and Return on Equity is allowed as per the Regulations, it will only result in increase in ARR and tariff and there will not be any reduction in tariff as sought by the Appellant. The State Commission has also stated that adjustment will be made after finalization of the balance sheet and the restructuring of the loans as per the recommendations of the committees appointed by the Government of India.

......

- 33. In view of above, we do not want to interfere with the findings of the State Commission regarding the treatment given to the interest on loan in the impugned order."
- 2.115 The approach adopted by the Commission for treatment of interest on long term loans and interest expense capitalized is the same as adopted in its last tariff order. The reason for allowing Interest during construction as interest capitalized is to neutralise the impact of generic loans on the overall interest expenses. Further Return on equity is allowed on the actual equity as per the audited and annual statement of accounts, and for the future years will be trued up as and when the accounts are available. This would have been the approach even if return on the capitalized assets was being considered.

2.116 With regard to depreciation, the Commission is of the view that revaluation of assets should not result in tariff increase. Hence, Commission has not considered the revaluation reserve in the opening GFA while estimating the depreciation. Commission does not see merit in the argument as proposed by the stakeholder.

Employee expenses

- 2.117 The APTEL's judgement to Appeal No.197 of 2013 dated 18th October 2014 agrees with the Commission's approach of escalating all items of employee expenses, except DA, at 4%. The extracts of the judgement are reproduced below:
 - "22. According to learned counsel for the State Commission, Dearness Allowance linked to All India Consumer Price Index (AICPI) is provided to the employees in order to mitigate the impact of inflation. Hence, increase in employee costs to the extent of DA variation has only been allowed as a pass through in tariff in accordance with the Commission's Regulations while all other expenses were escalated at 4% only. The cost on account of inflation has been considered as uncontrollable in the Regulations.
 - 23. Let us examine the 2005 Tariff Regulations. The relevant clauses are reproduced below:
 - "14. Multiyear Tariff (1) The Commission may implement multi-year tariff for the Transmission and Distribution licensees for a period to be notified by the Commission. (2) The Commission may determine Tariff and revenue for the base year, after proper evaluation and verification of the submission made by the licensee. (3) The Commission may seek expert consultation in the process to determine allowable costs of the licensees for each of the years of the control period. (4) The control period shall be the subsequent years following the previous year. (5) All the uncontrollable costs shall be allowed as pass through in tariff and the uncontrollable costs will include the following:
 - (a) Cost of fuel; (b) Costs on account of inflation; (c) Taxes and duties; and (d) Variation in power purchase unit cost from base line level including on account of hydro-thermal mix in case of force majeure and adverse natural events like drought. (6) The Operation and Maintenance cost shall be controllable cost and be based on escalation indices or other mode determined during determination of tariff for the base year."

"25. Operation and Maintenance Expenses

(1) The operation and maintenance expenses shall be derived on the basis of actual operation and maintenance expenses for the past five years previous to current year based on the audited Annual Accounts excluding abnormal operation and maintenance expenses, if any, after prudence check by the Commission. The Commission may, if considered necessary engage Consultant /Auditors in the process of prudence check for correctness. (2) The average of such normative operation and maintenance expenses after prudence check shall be escalated at the rate of 4% per annum to arrive at operation and maintenance expenses for current year i.e. base year and ensuing year. (3) The base operation and maintenance expenses so determined shall be escalated further at the rate of 4% per annum to arrive at permissible operation and maintenance expenses for the relevant years of tariff period."

- 24. Let us examine the Multi Year Tariff Regulations, 2009. The relevant provisions are as under: "3(viii) Mechanism of pass through of approved gains or losses on account of uncontrollable factors. As stipulated in Regulation 14 of Tariff Regulations, the following constitute uncontrollable costs.
- *a)* Cost of fuel;
- b) Costs on account of inflation;
- c) Taxes and duties and
- d) Variation in power purchase unit cost from base line level including variation on account of hydro- thermal mix in case of force majeure and adverse natural events like draught.

The licensee shall file application for revision on account of such variation for Commission's consideration and orders".

"9) Operation and Maintenance (O&M) The Operation and Maintenance expenses include the following: Repairs & maintenance costs Employee-related costs and Administrative & general expenses The O&M expenses shall be derived on the basis of actual expenses for the past five years previous to base year based on the audited Annual Accounts, after prudence check by the Commission.

The O&M expenses so arrived for the base year may be escalated by four per cent per annum for every year of the control period. The licensee may also propose indexation for estimating the O&M expenses. O&M expenses are a controllable cost and the licensee cannot recover the cost in excess of norms. The licensee shall share the gains on account of savings with the beneficiaries as provided in regulation 3 (ix)."

..

We agree with the State Commission that DA increase is based on the All India Consumer Price Index to mitigate the impact of inflation on the employees. TANGEDCO has proposed DA increase in line with the State Government policy in this regard.

35. The State Commission has estimated the employees expenses for the base year (2012-13), taking into account the impact of DA. The MYT Regulation provides that the licensee can also suggest the escalation factor which the State Commission can consider. Accordingly, we do not find any infirmity in the State Commission considering the DA enhancement in the employees expenses. The expenses on account of D.A increase allowed to TANTRANSCO is a prudent cost to compensate the employees for inflation. The Regulation provides for allowing costs on account of inflation as uncontrollable costs. Accordingly, we decide this issue as against the Appellant."

Capital expenditure and capitalization

- 2.118 The Commission has taken cognisance of the APTEL's judgement to Appeal No.197 of 2013 dated 18th October 2014 and shall approve the capital investment plan and account for the shortfall if any in capex and capitalization while determining tariff for FY 2015-16 along with impact of carrying cost.
- 2.119 With regard to the basis for approving capital expenditure and capitalization by the Commission without the utility filing the capex plan. The Commission would like to state that this is a suo-motu process of tariff determination and hence the Commission has provisionally accepted the estimated capex and capitalization as submitted by the utility. Any variation in capital expenditure and capitalization due to prudence verification based on the data submitted by the TANTRANSCO as per the specified format and finalization of transfer scheme will be addressed during the next tariff order.
- 2.120 The Commission has considered capitalization of expenses under each head of fixed cost for FY 2011-12 to FY 2013-14.

Depreciation

2.121 The Commission has found merit in the stakeholder comments in respect of calculation of depreciation. The stakeholder comments highlight that the Hon'ble CERC regulations on depreciation includes the condition that asset values have to be provided according to vintage and higher depreciation rates are allowable only on assets less than 12 years old. Hence Commission has considered this point to be just and has reverted back to the depreciation rates as was applicable prior to the amendment.

Interest on loan

- 2.122 The opening balance of loans as on 1st November 2010 is based on the provisional transfer scheme notified as on 2nd January 2012. During the review last year, TANTRANSCO submitted to the Commission that it has borrowed loans to fund its capital expenditure and also to meet debt obligations of the opening loans allocated to it through provisional transfer scheme.
- 2.123 It is pertinent to mention that Commission will be guided by the transfer scheme and hence in this order Commission is accepting the opening loans allocated to TANTRANSCO through transfer scheme.

Section 131 of Electricity Act 2003: "Vesting of Property of Board in State Government" states as under:

"131. (1) With effect from the date on which a transfer scheme, prepared by the State Government to give effect to the objects and purposes of this Act, is published or such further date as may be stipulated by the State Government (hereafter in this Part referred to as the effective date), any property, interest in property, rights and liabilities which immediately before the effective date belonged to the State Electricity Board (hereafter

referred to as the Board) shall vest in the State Government on such terms as may be agreed between the State Government and the Board.

(2) Any property, interest in property, rights and liabilities vested in the State Government under sub-section (1) shall be re-vested by the State Government in a Government company or in a company or companies, in accordance with the transfer scheme so published along with such other property, interest in property, rights and liabilities of the State Government as may be stipulated in such scheme, on such terms and conditions as may be agreed between the State Government and such company or companies being State Transmission Utility or generating company or transmission licensee or distribution licensee, as the case may be:

Provided that the transfer value of any assets transferred hereunder shall be determined, as far as may be, based on the revenue potential of such assets at such terms and conditions as may be agreed between the State Government and the State Transmission Utility or generating company or transmission licensee or distribution licensee, as the case may be.

- (3) Notwithstanding anything contained in this section, where,-
- (a) the transfer scheme involves the transfer of any property or rights to any person or undertaking not wholly owned by the State Government, the scheme shall give effect to the transfer only for fair value to be paid by the transferee to the State Government;
- (b) a transaction of any description is effected in pursuance of a transfer scheme, it shall be binding on all persons including third parties and even if such persons or third parties have not consented to it." Emphasis Supplied
- c. The Appellate Tribunal for Electricity (APTEL) in its order on Appeal No 102 of 2012 dated 4th February 2013 has not accepted the claim of the appellant challenging the Commission's approach of allowing interest on loans more than the gross block, according to transfer scheme. Hence, Commission is accepting the opening loans as on November 2010 as per provisional transfer scheme. The relevant extracts of the APTEL order are reproduced below:

"31. We find that the transmission tariff of the Tamil Nadu has not been revised since the year 2005-06 and has been revised now after a lapse of 7 years. Similarly, the distribution tariff in the Tamil Nadu has also been revised after a long time and tariff order was issued only after the restructuring of the Electricity Board. The long gap in determination of tariff has resulted in revenue gap and excess borrowings and diversion of capital funds to revenue account. Even though the State Commission has deviated from its Regulations, the State Commission has now given a calculation, according to which, if the Regulations are followed and Return on Equity is allowed as per the Regulations, it will only result in increase in ARR and tariff and there will not be any reduction in tariff as sought by the Appellant. The State Commission has also stated that adjustment will be made after finalization of the balance sheet and the restructuring of the loans as per the recommendations of the committees appointed by the Government of India.

.....

- 33. In view of above, we do not want to interfere with the findings of the State Commission regarding the treatment given to the interest on loan in the impugned order."
- 2.124 In last year Tariff Order, it was clarified that though the borrowings for the first seven months have not been reflected in the audited accounts, the utilities are meeting the debt obligations with respect to those borrowings. Based on the details of borrowings submitted by TANTRANSCO Commission had provisionally considered the same to arrive at the revised loan profile and average interest expenses. On finalization of the transfer scheme, the loan profile would be reviewed and any impact on interest on loans due to finalization of transfer scheme would be addressed during the next tariff order.
- 2.125 Also Commission in its tariff order dated 20th June 2013 had observed that source of funds for capital assets were higher than actually required for funding the capital expenditure. In addition the fact that the excess fund available during the year was more than the equity infused in that year clearly indicates that the equity had not contributed in the creation of capital assets and had been diverted towards revenue account since FY 2002-03.
- 2.126 Thus Commission was of the view that entire equity base allocated to TANTRANSCO as on 1st Nov 2010 had been diverted for funding the revenue expenditure prior to unbundling. Hence, Commission considered the opening equity base as on 1st Nov 2010 as zero.

Return on equity

2.127 Commission has allowed return on equity for FY 2011-12 to FY 2013-14 based on actual equity as per the books of accounts and for the future years will be trued up as and when the accounts are available. This would have been the approach even if return on the capitalized assets was being considered and hence will be neutralized in the year the asset is getting capitalized.

Incentive

2.128 The Commission has taken into cognisance the direction of the Hon'ble APTEL its judgment on Appeal No. 197 of 2013 & I.A. No. 273 of 2013 dated 18th October 2014 and has deducted the carrying cost at 11% on account of excess recovery in ARR for FY 2013-14 allowed in the last tariff order vis-à-vis the incentive calculated in this tariff order taking the actual transmission availability into consideration. Further the Commission has also not allowed incentive for FY 2014-15 as it shall be allowed on a post facto basis, once data on actual availability is made available by TANTRANSCO.

Other Income

2.129 The Commission has accounted for the O & M Charges collected for maintenance of Substation from WEGs and CPPS under the sub head of "charges received from short term OA consumers" in other income.

Revenue Gap and True-up of past expenses

- 2.130 For FY 2012-13, the Commission observed that there were discrepancies in the total revenue booked in the accounts of TANTRANSCO and expenses shown by TANGEDCO in this regard. Hence, the Commission is relying on the total revenue for TANTRANSCO as approved by it in its last tariff order. For determining the revenue for FY 2013-14, the Commission has considered the tariff as determined by it and applicable upto June 20th, 2014 and the corresponding allotted transmission capacity and tariff applicable from June 20th, 2014 onwards and the applicable transmission allotted capacity for estimation of revenue to accrue to the utility for FY 2013-14. Hence pending any correction/ justification from the utility, the Commission has relied on this approach.
- 2.131 Thus based on actual revenue accrued to the utility based on the tariff determined by the Commission, the true up of past years has been taken up which will automatically give effect to the under or over determination of ARR in the past years.

Calculation of transmission tariff

2.132 The Commission in the matter of determination of transmission charges for users of the Transmission system would like to state that, the ARR of the transmission utility should be fully recovered through tariff. The Concession provided to renewable energy sources cannot be taken as a shortfall in recovery. Given that the renewable energy generators in the state constitute close to one third of the allotted transmission capacity, it is unreasonable to even anticipate that the transmission utility forgo one third of its ARR. The calculation by the Commission is commensurate with the regulation; where in, the full ARR of the transmission utility shall be recovered from all users and the concession applicable only to the renewable energy sources.

Scheduling and system operating charges

2.133 The Scheduling and system operation charges followed by the Commission are in line with CERC norms and hence have been maintained at the same levels as approved in its last tariff order.

Reactive energy charges

- 2.134 The Commission has exempted the generating stations from payment of charges for kVArh in the ensuing order as well. The relevant section from the tariff order is reproduced below:
- 2.135 Clause 6.6 (2) of Indian Electricity Grid Code, 2010 notified on April 28, 2010, provides the charges applicable for reactive energy exchange.

6.6 Reactive Power and Voltage Control

"(2) The charge for VArh shall be at the rate of 10 paise/kVArh w.e.f. 1.4.2010, and this will be applicable between the Regional Entity, except Generating Stations, and the regional pool account for VAr interchanges. This rate shall be escalated at 0.5paise/kVArh per year thereafter, unless otherwise revised by the Commission."

Revenue from TANGEDCO towards transmission charges

- 2.136 Commission has considered the point of stakeholder's in this regard and has revised the transmission charges applicable to TANGEDCO considering approved ARR of TANTRANSCO adjusted for the consolidated revenue gap ending FY 2013-14.
- 2.137 The intrastate transmission charge payable by TANGEDCO approved by the Commission for FY 2014-15 is Rs. 1,692 Crores.

A3: PROVISIONAL TRUE-UP FOR FY 2011-12 AND FY 2012-13 AND ANNUAL PERFORMANCE REVIEW FOR FY 2013-14

- 3.1 The Commission has decided to provisionally true-up all the elements of revenue and expenses for FY 2011-12 and FY 2012-13 based on the information available in Audited Accounts. In the absence of complete information, prudence check is not possible and hence any adjustments if required shall be made in the next Tariff Order. The Annual Performance Review for FY 2013-14 has been done based on the available information and Audited Accounts of FY 2011-12 and FY 2012-13.
- 3.2 This chapter summarizes the procedure adopted by the Commission for determining the revenue and expenditure for the purpose of true-up of FY 2011-12, FY 2012-13 and Annual Performance Review for FY 2013-14.

Transmission Loss and Energy Balance

Transmission Loss

3.3 In the last tariff order, Commission has accepted the submission of TANTRANSCO and has approved the following transmission losses.

Table 12: Transmission losses approved by the Commission in its last tariff order

Voltage	FY 2011-12	FY 2012-13	FY 2013-14
230 KV	0.76%	0.80%	0.80%
110 KV	1.94%	1.90%	1.90%
66 KV	0.00%	0.00%	0.00%
Total	2.70%	2.70%	2.70%

3.4 Commission is of the view that the intra-state transmission losses proposed by TANTRANSCO last year were lower than that of other similar states such as Andhra Pradesh, Karnataka, Rajasthan and Maharashtra. Also in the absence of specific submission from TANTRASCO on the actual loss levels, Commission considers transmission losses as approved by it in the last tariff order.

Energy Balance

3.5 Commission has arrived at the energy requirement at transmission periphery considering the approved sales and losses as per Suo-Motu order on distribution losses dated 4th June 2013. In addition, the Commission has adopted an approach which is different than that followed in its last order. Commission is not treating the distribution loss and transmission loss separately and is estimating the total energy loss at the prescribed percentage to arrive at the total energy requirement. This departure from the approach followed in the last order has been adopted because, the segregation of losses at various voltage levels does not allow for the recovery of the total stipulated loss percentage for that year. The energy balance and energy required by at transmission periphery for FY 2011-12 to FY 2013-14 are tabulated below.

Table 13: Energy balance in the transmission system arrived by the Commission

Parameter	Units	2011-12	2012-13	2013-14
Energy input at Transmission Periphery	MU	65,174	62,222	70,849
Total Sales (230kV and 110 kV)	MU	3,572	3,427	3,921
Total Transmission loss %	%	2.70%	2.70%	2.70%
Total Losses (230kV and 110 kV)	MU	742	692	770
Energy Input at Distribution Periphery	MU	60,860	58,103	66,158

- 3.6 Commission gives the following directions to TANTRANSCO with respect to transmission loss and energy balance.
 - a) To install energy accounting and audit meters as specified in applicable CEA regulations, at all the interface points at distribution periphery, 400 kV, 230 kV and 110 kV voltages.
 - b) To maintain a transparent energy accounting system based on boundary meter readings which will help to arrive at monthly energy losses in the transmission system.
 - c) Based on the installed interface meters, TANTRANSCO needs to carry out scientific study and arrive at actual transmission losses before filing of next tariff Petition.
 - d) To file the energy balance in transmission system information to the Commission.

Fixed Expenses

- 3.7 In this section expenses related to fixed cost for the period FY 2011-12 to FY 2013-14 will be reviewed and approved by the Commission. The fixed expenses are broadly divided into the following heads:
 - i. Operation and Maintenance Expenses
 - ii. Depreciation
 - iii. Interest on long term loans
 - iv. Return on Equity
 - v. Interest on working capital loans
 - vi. Other debits
 - vii. Incentives

Operation and Maintenance Expenses

- 3.8 The Commission has determined the operational expenses for the period FY 2011-12 to FY 2013-14 based on the expenses as approved in the last tariff order as well as the Tariff regulations as elaborated in the section below.
- 3.9 It is pertinent to mention that in the process of the approval of the expenses the Commission will be guided by following regulations

Regulation – 14 of TNERC Tariff Regulations

- "14. Multiyear tariff
- (5) All the uncontrollable costs shall be allowed as pass through in tariff and the uncontrollable costs will include the following:
 - (a) Cost of fuel;
 - (b) Costs on account of inflation;
 - (c) Taxes and duties; and
 - (d) Variation in power purchase unit cost from base line level including on account of hydro-thermal mix in case of force majeure and adverse natural events like drought
- (6) The Operation and Maintenance cost shall be **controllable cost** and be based on escalation indices or other mode determined during determination of tariff for the base year.

Regulation-25 of TNERC Tariff Regulations (applicable upto FY 2013-14):

- "25. Operation and Maintenance Expenses
 - 1. The operation and maintenance expenses shall be derived on the basis of actual operation and maintenance expenses for the past five years previous to current year based on the audited Annual Accounts excluding abnormal operation and maintenance expenses, if any, after prudence check by the Commission. The Commission may, if considered necessary engage Consultant / Auditors in the process of prudence check for correctness.
 - 2. The average of such normative operation and maintenance expenses after prudence check shall be escalated at the rate of 4% per annum to arrive at operation and maintenance expenses for current year i.e. base year and ensuing year.
 - 3. The base operation and maintenance expenses so determined shall be escalated further at the rate of 4% per annum to arrive at permissible operation and maintenance expenses for the relevant years of tariff period.

,,

Regulation-25 of Amended TNERC Tariff Regulations as per Notification No.TNERC / TR /5/2-11 dated 13 -03-2014(Applicable from 09-04-2014 onwards):

"25. Operation and Maintenance Expenses

- 1. The operation and maintenance expenses shall be derived on the basis of actual operation and maintenance expenses for the past five years previous to current year based on the audited Annual Accounts excluding abnormal operation and maintenance expenses, if any, after prudence check by the Commission. The Commission may, if considered necessary engage Consultant / Auditors in the process of prudence check for correctness.
- 2. The average of such normative operation and maintenance expenses after prudence check shall be escalated at the rate of 5.72% per annum to arrive at operation and maintenance expenses for current year i.e. base year and ensuing year.
- 3. The base operation and maintenance expenses so determined shall be escalated further at the rate of 5.72% per annum to arrive at permissible operation and maintenance expenses for the relevant years of tariff period.

,,

3.10 In the following paragraphs each component of O&M expenses has been discussed in detail along with the expenses approved by the Commission.

Employee Expenses

- 3.11 The Commission has considered the employee expenses as approved in its last Tariff Order passed in June 2013 for FY 2011-12 and FY 2012-13.
- 3.12 Commission in its last tariff order have bifurcated the terminal benefits based on the employee ratio of 6:1 (TANGEDCO to TANTRANSCO) in consultation with TANGEDCO and TANTRANSCO officials. Since no segregation of pensioner's liability has been finalized yet in the provisional transfer scheme, the terminal benefits re-estimated for FY 2011-12 based on employee ratio of 6:1 has been escalated at 4% to arrive at terminal benefits for FY 2012-13.
- 3.13 Commission in accordance with its regulations has escalated employee expenses, except DA of FY2012-13 at 4% to arrive at employee expenses of FY2013-14.
- 3.14 As per the TNERC regulations, only, the increase in costs due to inflation is required to be passed through in tariff. Hence, DA percentage notified by the GoTN is depended on inflation and hence increase in employee costs to the extent of DA variation should be allowed as a pass through in tariff. Therefore, the DA rates as notified by GoTN have been used for estimating the dearness allowance instead of taking an escalation of 4% as per TNERC regulations. The DA rate applicable for FY 2013-14 is given is tabulated below.

Table 14: Estimation of average DA rate applicable for FY 2013-14

Year	Eff. Date	Rate of DA	Months	Avg Rate
	1/1/2013	80%	3	
2013-14	1/7/2013	90%	6	90%
	1/1/2014	100%	3	

- 3.15 For FY 2011-12 and FY 2012-13 the employee expenses capitalised are considered as per Last year tariff order. However for FY 2013-14, Commission has relied on the average employee capitalization of 9% based on historical data.
- 3.16 Based on the above approach and methodology, the employee costs approved by the Commission is tabulated below:

Table 15: Employee expenses approved by the Commission - (Rs. Cr.)

Deut'enland		Last T.O.			Commission	
Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2011-12	FY 2012-13	FY 2013-14
Basic Salary	190.94	198.58	206.52	190.94	198.58	206.52
Overtime wages	3.14	3.27	3.40	3.14	3.27	3.40
Dearness Allowance	106.11	143.47	171.60	106.11	143.47	185.87
Other Allowances	14.96	15.56	16.19	14.96	15.56	16.19
Bonus & Exgratia	6.28	6.53	6.79	6.28	6.53	6.79
Sub Total	321.44	367.41	404.49	321.44	367.41	418.77
Terminal benefits	230.52	239.74	249.33	230.52	239.74	249.33
Other Expenses	24.77	25.76	26.79	24.77	25.76	26.79
Grand Total	576.72	632.91	680.61	576.72	632.91	694.88
Less: Capitalization	72.75	56.96	61.25	72.75	56.96	62.54
Net Employee Expenses	503.98	575.95	619.35	503.98	575.95	632.34

Repair and Maintenance Expenses

- 3.17 The Commission has considered the R&M expenses as approved in its last Tariff Order passed in June 2013 for the years FY 2011-12 and FY 2012-13. For FY 2013-14, Commission in accordance with its regulation has taken 4% escalation on the approved R&M expenses for FY 2012-13.
- 3.18 The capitalization for FY 2011-12 and FY 2012-13 is considered as per last year tariff order. However for FY 2013-14, Commission has considered an average of 3.30% of R&M expenses to be capitalized based on historical trend.
- 3.19 Based on the above approach, the R&M expenses approved by the Commission is tabulated below:

Table 16: R&M expenses approved by the Commission - (Rs. Cr.)

D		Last T.O			Commission	
Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2011-12	FY 2012-13	FY 2013-14
Plant & Machinery	3.73	3.88	4.03	3.73	3.88	4.03
Building	0.08	0.09	0.09	0.08	0.09	0.09
Civil Works	0.26	0.27	0.28	0.26	0.27	0.28
Hydraulic work	-	-	-	-	-	-
Lines & Cable network	3.45	3.59	3.74	3.45	3.59	3.74
Vehicles	0.37	0.38	0.40	0.37	0.38	0.40
Furniture & Fixtures	0.00	0.00	0.00	0.00	0.00	0.00
Office equipment	0.15	0.16	0.17	0.15	0.16	0.17
Grand Total	8.05	8.38	8.71	8.05	8.38	8.71
Less: Capitalization	1.34	0.28	0.29	1.34	0.28	0.29
Net R&M Expenses	6.71	8.10	8.42	6.71	8.10	8.42

Administrative and General Expenses

- 3.20 The Commission has considered the A&G expenses as approved in its last Tariff Order passed in June 2013 for the years FY 2011-12 and FY 2012-13. For FY 2013-14, Commission in accordance with its regulation has taken 4% escalation on the approved A&G expenses for FY 2012-13.
- 3.21 The capitalization for FY 2011-12 and FY 2012-13 is considered as per last year tariff order. However for FY 2013-14, Commission has considered an average of 22.49% of A&G expenses to be capitalized based on historical trend.
- 3.22 Based on the above approach, the A&G expenses approved by the Commission is tabulated below:

Table 17: A&G expenses approved by the Commission - (Rs. Cr.)

Doutionland		Last T.O			Commission	
Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2011-12	FY 2012-13	FY 2013-14
Gross A&G Expenses	17.40	19.45	20.23	17.40	19.45	20.23
Less: Capitalization	10.22	4.37	4.55	10.22	4.37	4.55
Net A&G Expenses	7.18	15.07	15.68	7.18	15.07	15.68

3.23 The summary of O&M expenses approved for FY 2011-12 to FY 2013-14 for TANTRANSCO is tabulated below.

Table 18: O&M expenses approved by the Commission (Rs. Cr.)

Particulars	Last T.O			Commission		
2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	
Tamil Nadu Electricity Regulatory Commission				Page 46	5	

December 2014

Particulars	Last T.O			Commission		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Employee Expenses	503.98	575.95	619.35	503.98	575.95	632.34
Repair and Maintenance Expenses	6.71	8.10	8.42	6.71	8.10	8.42
Administrative and General Expenses	7.18	15.07	15.68	7.18	15.07	15.68
Total	517.87	599.12	643.45	517.87	599.12	656.44

Segregation of accounts

- 3.24 In terms of the Transfer Scheme notification dated 02nd January 2012, the Government of Tamil Nadu had assigned the Assets and Liabilities (as on 31.03.2010) to TANTRANSCO on a Provisional basis and hence the transaction for 7 months i.e. from 1st April 2010 to 30th October 2010, does not get reflected in the opening balance sheet of the TANTRANSCO as specified in the Transfer Scheme.
- 3.25 As per last tariff order, the opening GFA as on November 2010 is considered equal to the closing GFA as on March 2010.
- 3.26 In addition, the opening GFA as on November 2010 includes the revaluation reserve of Rs. 2775.92 Crs. The summary of opening GFA as per provisional transfer scheme dated 2nd January 2012 is tabulated below:

Table 19: GFA of TANTRANSCO as on 1st Nov 2010 - based on provisional transfer scheme (Rs. Cr)

Particulars	Transmission
Before Revaluation	9456.43
Revaluation Reserve	2775.92
Including Revaluation	12232.35

- 3.27 Currently the revaluation of assets is still going on and the GFA as on Nov 2010 will be finalized only in the final transfer scheme. According to last tariff order, TANTRANSCO has clarified that revaluation reserve will not have any major impact in depreciation calculations as the increase in GFA was majorly due to revaluation of land.
- 3.28 Revaluation of assets is just a book adjustment that neither requires any fund nor generates additional cash flow. Hence, Commission is of the view that revaluation of assets should not lead to any tariff increase to the consumers and accordingly Commission is considering the GFA without revaluation reserve for the purpose of tariff determination.

Capital Expenditure and capitalization

3.29 Regulation 17 (5) of the Tariff Regulations, 2005 and Regulation 3 (v)of the Tariff Regulation under MYT framework specifies that the licensee shall get the capital investment plan approved by the Commission before filing of ARR and Application for determination of Tariff. However, TANTRANSCO has not complied with this provision.

Tamil Nadu Electricity Regulatory Commission	Page 47
	December 2014

- 3.30 The Commissions view and observations while approving the capital expenditure and capitalization in its last tariff order is given below:
 - (a) TANTRANSCO has filed the capitalization Petition for the first control period together with the Tariff Petition. There were many discrepancies in the capital expenditure and capitalization information filed in the Petition. The capital expenditure filed by TANTRANSCO was without any cost benefit analysis. In addition, TANTRANSCO has also not provided adequate information of sources of funding, broad details and physical quantum for the proposed capital expenditure during the first control period.
 - (b) In response to data-gaps and clarifications, TANTRANSCO has provided some information in support of capital expenditure and capitalization proposed. In order to verify the prudency of capital expenditure, Commission has developed suitable formats and has directed TANTRANSCO to submit the capital expenditure information in those formats. However, utility was able to provide only partial information in the required formats and informed the Commission during discussions that it is not possible for the utility to submit the details of all the schemes due to unavailability of scheme wise data.
 - (c) Even after repeated directions, Commission has observed that TANTRANSCO is not submitting the capital expenditure and capitalization information to the satisfaction of the Commission.
 - (d) Commission reiterates that the data quality and iteration that went through the capital expenditure and capitalization schedule along with its GFA schedule needed to be substantially improved. Commission directs TANTRANSCO to reconcile its accounts with respect to capital expenditure and prepare the voltage wise and scheme wise data as per the formats specified by the Commission. Commission also directs TANTRANSCO to file the progress of the capital expenditure and capitalization on quarterly basis.
 - (e) The capital investment plan requires further analysis and explanation from TANTRANSCO before cost proposed by it can be approved. Pending final approval, the Commission approves the Capital Expenditure submitted by the petitioner provisionally. Commission hereby directs the Transmission licensee to submit all its schemes within 90 days from issuance of the Order along with its cost benefit analysis. In the absence of compliance with this directive Commission may decide the capitalization and capital expenditure based on industry norms and information available.
- 3.31 The Appellate Tribunal for Electricity (APTEL) in its order on Appeal No 197 of 2013 dated 18th October 2014 has directed the State Commission to true up/provisionally true up the capitalization for FY 2013-14 immediately and the short fall if any should be accounted for while determining the tariff for the FY 2015-16, with carrying cost on the impact of the variation on this account on the ARR. The relevant extracts of the APTEL order are reproduced below:
 - "39. We find that the Regulation 17(5) of the Tariff Regulations, 2005 and Regulation 3 (v) of MYT Regulations, 2009 specifies that the licensee shall get the Capital Investment

Plan approved by the State Commission before filing of the ARR and application for determination of tariff. However, the State Commission has approved the capital expenditure without approval of the Capital Investment Plan contrary to the Regulations.

40. We also find that the State Commission has approved the capital expenditure and capitalization for the Control Period 2013-14 to 2015-16 as submitted by the TANTRANSCO without any prudence check and without considering the past performance of the TANTRANSCO.

...

The capital expenditure and capitalization for the second Control Period appears to be very optimistic considering the past performance of TANTRANSCO. We feel that the State Commission has erred in approving the capital expenditure/capitalization without considering the details of the capital Investment Plan and the past performance of TANTRANSCO.

- 41. We, therefore, direct the State Commission to true up/provisionally true up the capitalization for FY 2013-14 immediately and the short fall if any should be accounted for while determining the tariff for the FY 2015-16, with carrying cost on the impact of the variation on this account on the ARR. We direct TANTRANSCO to submit the actual accounts of capital expenditure and capitalization during FY 2013-14 by 30.11.2014 to the State Commission. TANTRANSCO shall also submit the application for Capital Investment Plan for FY 2014-15 and 2015-16 in the requisite formats to the State Commission for approval as per the Tariff Regulations by 30.11.2014, if not already done. The State Commission shall accordingly approve the Capital Investment Plan of TANTRANSCO for the FY 2014-15 and 2015-16 after following due process of law, if not already done, and consider the same while approving the tariff for the FY 2015-16."
- 3.32 The Commission has taken cognisance of the above APTEL directive and shall approve the capital investment plan and account for the shortfall if any in capex and capitalization while determining tariff for FY 2015-16 along with impact of carrying cost.
- 3.33 The Commission directs TANTRANSCO to comply with the above directive of the Hon'ble Appellate Tribunal.
- 3.34 In this order for FY 2010-11 to 2013-14, Commission has relied upon the capital expenditure and capitalization as per the audited accounts and annual statement of accounts of TANTRANSCO. The addition to gross fixed assets during a particular year is taken as the capitalization for that year. In public notice, the capex and capitalization for FY 2013-14 was taken as per budgeted estimates. But due to availability of annual statement of accounts post public notice, the same has been considered in this order.
- 3.35 The capital expenditure and capitalization considered in this order is tabulated below. Any variation in capital expenditure and capitalization due to prudence verification based on the data submitted by the TANTRANSCO as per the specified format and finalization of transfer scheme will be addressed during the next tariff order.

Table 20: Capital expenditure and capitalization considered by the Commission - in Rs. Crore

Parameter	FY 2011-12	FY 2012-13	FY 2013-14
Capital Expenditure	1044.60	1412.17	2204.55
Capitalization	173.53	433.50	1335.14

Depreciation

- 3.36 Commission has considered opening gross block for FY 2010-11 (5 months) in line with the provisional transfer scheme notified by the Government of Tamil Nadu vide notification dated 2nd January 2012.
- 3.37 Currently the revaluation of assets is still in process and the impact due to revaluation reserve can be addressed on finalization of transfer scheme. According to last tariff order, TANTRANSCO has clarified that there will not be any major change in depreciation due to change in opening GFA as the revaluation reserve majorly corresponds to land. However, Commission is of the view that revaluation of assets should not result in tariff increase. Hence, Commission has not considered the revaluation reserve in the opening GFA while estimating the depreciation.
- 3.38 Commission has considered the weighted average depreciation rate for the particular group of asset, arrived on the basis of depreciation rates as specified in the TNERC Tariff Regulations.
- 3.39 TNERC Tariff Regulations 2005 specifies following guidelines for calculation of depreciation:

24. Depreciation

For the purpose of tariff, depreciation shall be computed in the following manners:

- i. The value base for the purpose of depreciation shall be historical cost of the asset.
- ii. The depreciation shall be calculated at the rates as per the Annexure to these Regulations.
- iii. The residual value of assets shall be considered as 10% and depreciation shall be allowed upto maximum of 90% of the estimated cost of the Asset.
- iv. Land is not a depreciable asset and its cost shall be excluded from the capital cost while computing 90% of the historical cost of the asset.
- v. The historical cost of the asset shall include additional capitalization.
- vi. Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro-rata basis.
- vii. After the assets are fully depreciated the benefit of reduced tariff shall be made available to the consumer.
- 3.40 Commission has calculated depreciation considering the revised opening GFA without revaluation reserve, weighted average depreciation rates, and capitalization approved by the Commission in this order. The GFA considered for estimation of depreciation is tabulated below:

Table 21: Opening GFA considered for the calculations of Depreciation (Rs. Cr)

Asset	FY 2011-12	FY 2012-13	FY 2013-14
Land and Land Rights	90.96	90.96	90.96
Buildings	319.40	331.72	362.50
Hydraulic Works	2.24	2.24	2.24
Other Civil Works	116.51	119.11	125.61
Plant and Machinery	4,078.77	4,150.71	4,330.41
Lines, Cables Network etc	4,794.55	4,881.17	5,097.55
Vehicles	25.19	25.24	25.36
Furniture and Fixtures	20.78	20.77	20.77
Office Equipment	66.96	66.98	67.01
Capital Expenditure resulting in an asset not belonging to Board	0.06	0.06	0.06
Total	9,515.43	9,688.96	10,122.47

3.41 Based on above GFA, Depreciation approved by the Commission is tabulated below:

Table 22: Depreciation approved by the Commission (Rs. Cr)

Asset	FY 2011-12	Last T.O FY 2012-13	FY 2013-14	FY 2011-12	Commission FY 2012-13	FY 2013-14
Land and Land Rights	-	-	-	-	-	-
Buildings	5.66	5.77	8.08	5.66	5.88	6.42
Hydraulic Works	0.06	0.06	0.06	0.06	0.06	0.06
Other Civil Works	2.00	2.03	2.50	2.00	2.05	2.16
Plant and Machinery	143.01	144.29	171.06	143.01	145.53	151.83
Lines, Cables Network etc	137.24	138.50	164.81	137.24	139.72	145.91
Vehicles	4.53	4.54	4.63	4.53	4.54	4.56
Furniture and Fixtures	1.03	1.03	1.03	1.03	1.03	1.03
Office Equipment	3.64	3.64	3.65	3.64	3.64	3.64
Total	297.17	299.86	355.82	297.17	302.45	315.62

Interest on long term loans and other financing charges

- 3.42 As per norms specified in Tariff Regulations 2005, Commission has determined interest expenses corresponding to long term loans and interest on working capital separately.
- 3.43 The opening balance of loans as on 1st November 2010 is based on the provisional transfer scheme notified as on 2nd January 2012. During the review last year, TANTRANSCO submitted to the Commission that it has borrowed loans to fund its capital expenditure and also to meet debt obligations of the opening loans allocated to it through provisional transfer scheme.

3.44 It is pertinent to mention that Commission will be guided by the transfer scheme and hence in this order Commission is accepting the opening loans allocated to TANTRANSCO through transfer scheme.

Section 131 of Electricity Act 2003: "Vesting of Property of Board in State Government" states as under:

- "131. (1) With effect from the date on which a transfer scheme, prepared by the State Government to give effect to the objects and purposes of this Act, is published or such further date as may be stipulated by the State Government (hereafter in this Part referred to as the effective date), any property, interest in property, rights and liabilities which immediately before the effective date belonged to the State Electricity Board (hereafter referred to as the Board) shall vest in the State Government on such terms as may be agreed between the State Government and the Board.
- (2) Any property, interest in property, rights and liabilities vested in the State Government under sub-section (1) shall be re-vested by the State Government in a Government company or in a company or companies, in accordance with the transfer scheme so published along with such other property, interest in property, rights and liabilities of the State Government as may be stipulated in such scheme, on such terms and conditions as may be agreed between the State Government and such company or companies being State Transmission Utility or generating company or transmission licensee or distribution licensee, as the case may be:

Provided that the transfer value of any assets transferred hereunder shall be determined, as far as may be, based on the revenue potential of such assets at such terms and conditions as may be agreed between the State Government and the State Transmission Utility or generating company or transmission licensee or distribution licensee, as the case may be.

- (3) Notwithstanding anything contained in this section, where,-
- (a) the transfer scheme involves the transfer of any property or rights to any person or undertaking not wholly owned by the State Government, the scheme shall give effect to the transfer only for fair value to be paid by the transferee to the State Government;
- (b) a transaction of any description is effected in pursuance of a transfer scheme, it shall be binding on all persons including third parties and even if such persons or third parties have not consented to it." Emphasis Supplied

- 3.45 The Appellate Tribunal for Electricity (APTEL) in its order on Appeal No 102 of 2012 dated 4th February 2013 has not accepted the claim of the appellant challenging the Commission's approach of allowing interest on loans more than the gross block, according to transfer scheme. Hence, Commission is accepting the opening loans as on November 2010 as per provisional transfer scheme. The relevant extracts of the APTEL order are reproduced below:
 - "31. We find that the transmission tariff of the Tamil Nadu has not been revised since the year 2005-06 and has been revised now after a lapse of 7 years. Similarly, the distribution tariff in the Tamil Nadu has also been revised after a long time and tariff order was issued only after the restructuring of the Electricity Board. The long gap in determination of tariff has resulted in revenue gap and excess borrowings and diversion of capital funds to revenue account. Even though the State Commission has deviated from its Regulations, the State Commission has now given a calculation, according to which, if the Regulations are followed and Return on Equity is allowed as per the Regulations, it will only result in increase in ARR and tariff and there will not be any reduction in tariff as sought by the Appellant. The State Commission has also stated that adjustment will be made after finalization of the balance sheet and the restructuring of the loans as per the recommendations of the committees appointed by the Government of India.

......

- 33. In view of above, we do not want to interfere with the findings of the State Commission regarding the treatment given to the interest on loan in the impugned order."
- 3.46 In last year Tariff Order, it was clarified that though the borrowings for the first seven months have not been reflected in the audited accounts, the utilities are meeting the debt obligations with respect to those borrowings. Based on the details of borrowings submitted by TANTRANSCO Commission had provisionally considered the same to arrive at the revised loan profile and average interest expenses. On finalization of the transfer scheme, the loan profile would be reviewed and any impact on interest on loans due to finalization of transfer scheme would be addressed during the next tariff order.
- 3.47 As regards to repayment of existing loans and borrowings, Commission has considered the actuals as per audited and annual statement of accounts for FY 2011-12 to FY 2013-14.
- 3.48 Commission has considered the interest expenses for FY 2011-12 and FY 2012-13 as per the audited accounts. However, for FY 2013-14 Commission finds some discrepancies in the interest expense stated in the annual statements of accounts and further clarification is required before accepting the same. Thus Commission has determined interest expenses on long term loans based on the following approach:
 - i. Revised opening loans as on 1st November 2010 has been arrived considering the net addition during first seven months of FY 2010-11, based on information provided by TANTRANSCO.
 - ii. The repayment of existing loans is considered as per accounts.
 - iii. The repayment period of new loans borrowed is assumed to be 10 years
 - iv. The loan addition during the year is considered as per accounts.

- v. Average interest rate for FY 11, FY 12 and FY 13 is estimated based on interest expenses as per audited accounts and revised loan profile considering the borrowings during the first seven months of FY 11. Interest rate for FY 14 is assumed to be at 12% i.e. the average interest rate for FY 13.
- vi. Interest during construction (IDC) is approved based on capital works in progress.
- 3.49 The details of interest expenses approved by the Commission are tabulated below.

Table 23: Revised opening of loans – as on 1st Nov 2010 (Rs. Cr.)

Particulars	Value
Opening of loans as on 1 st November 2010 – As per provisional transfer scheme	11720.29
Net additions in loans during the first seven months of FY 11	1485.71
Revised opening loans as on 1 st November 2010	13206.00

Table 24: Interest on long term loans approved by the Commission (Rs. Cr.)

		Commission			
	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	
Opening Loans	13,206.00	13,938.70	11,641.91	9,739.43	
Loan Additions during the Year	1,080.14	1,026.78	699.43	2,370.58	
Repayment during the Year	347.44	3,323.57	2,601.91	1,286.16	
Closing Loans	13,938.70	11,641.91	9,739.43	10,823.85	
Average Loans	13,572.35	12,790.30	10,690.67	10,281.64	
Interest on Loan	336.40	1,367.89	1,297.18	1,247.55	
Less: IDC	49.85	240.95	271.69	455.46	
Net Interest on Loans	286.55	1126.94	1025.49	792.09	

3.50 TANTRANSCO in its audited accounts has included interest on GPF, guarantee and commitment charges under other finance charges. Commission is of the view that interest expenses on GPF cannot be allowed, as GPF reserve funds are not considered for funding of capital expenditure. However, Commission approves other interest as per annual statement of accounts for FY 2011-12 to FY 2013-14 and commitment charges for JICA loans have been taken as per last year submission. The other finance charges approved by the Commission are given below.

Table 25: Other finance charges approved by the Commission (Rs. Cr.)

Parameter	2011-12	2012-13	2013-14
Other finance charges	2.62	5.46	5.40

3.51 The overall interest and other finance charges determined by the Commission for the TANTRANSCO are given below.

Tamil Nadu Electricity Regulatory Commission	Page 54
	December 2014

Table 26: Interest and other finance charges approved by the Commission - in Rs. Crore

Parameter	2011-12	2012-13	2013-14
Interest on long term loans	1126.94	1025.49	792.09
Other finance charges	2.62	5.46	5.40
Total	1,129.56	1,030.94	797.49

Return on Equity

- 3.52 As per last tariff order Commission had directed TANTRANSCO to bifurcate the opening loans as on November 2010 into loans borrowed for funding capital projects, repayment of existing loans and funding the revenue expenditure. This was done in order to understand the extent to which long term loans and equity have been diverted.
- 3.53 Commission's view and observations while approving return on equity in its last tariff order are given below:
 - i. Based on TNEB audited accounts from FY 2002-03, Commission had estimated the excess funds available with utility for funding capital expenditure and whether there was any equity requirement for funding the capital expenditure.
 - ii. The excess funds with utility in the past years based on additions to equity, consumer contribution, long term loans and actual capital expenditure is tabulated below:

Table 27: Comparison of source of funds and actual capital expenditure (Rs. Cr)

	Capital	Source of funding				Excess
Year	Expenditure	Consumer Contribution	Equity	Long term loans	Total	Funds
FY 2003	1236	279	25	1621	1925	689
FY 2004	1561	408	200	2761	3369	1808
FY 2005	1272	391	85	2043	2519	1246
FY 2006	1570	428	25	2134	2587	1018
FY 2007	2094	319	175	3075	3569	1475
FY 2008	2333	527	490	4836	5853	3519
FY 2009	2706	436	1171	8552	10158	7452
FY 2010	4182	632	100	9953	10686	6504

- iii. From the above table, it can be observed that source of funds for capital assets are higher than actually required for funding the capital expenditure. In addition the fact that the excess fund available during the year is more than the equity infused in that year clearly indicates that the equity has not contributed in the creation of capital assets and has been diverted towards revenue account since FY 2002-03.
- iv. Based on the above submissions, Commission is of the view that entire equity base allocated to TANTRANSCO as on 1st Nov 2010 has been diverted for funding the

revenue expenditure prior to unbundling. Hence, Commission is considering the opening equity base as on 1st Nov 2010 as zero.

- 3.54 For the subsequent years, Commission has observed that TANTRANSCO is not in revenue deficit and hence it has not borrowed any loans during FY 2011-12 and FY 2012-13 for funding the revenue expenditure. In view of this Commission is allowing the actual equity inflow for FY 2011-12, FY 2012-13 and for FY 2013-14. In public notice, the equity inflow that was allowed for FY 2013-14 was at 30% of the allowed capital expenditure. However due to availability of annual statement of accounts for FY 2013-14 post public notice, the actual equity inflow has been considered.
- 3.55 On the equity profile arrived, Commission has allowed 14% RoE on average equity for the year in accordance to its regulations. The equity profile and return on equity approved by the Commission is tabulated below.

Table 28: Return	on Equity a	pproved by th	e Commission	(Rs. Cr.)
------------------	-------------	---------------	--------------	-----------

Danamatan		Commission	
Parameter	FY 2011-12	FY 2012-13	FY 2013-14
Equity at the beginning	-	406.46	913.37
Addition during the year	406.46	506.91	168.97
Total Equity	406.46	913.37	1,082.34
Average Equity	203.23	659.92	997.86
Return on Equity	28.45	92.39	139.70

Interest on Working Capital

- 3.56 Commission has estimated working capital based on norms specified in the TNERC Tariff Regulations, 2005 and approves the interest on working capital based on relevant guidelines reproduced below:
- 3.57 "26. Working Capital
 - (d) For Transmission System
 - (i) Operation and Maintenance expenses for one month
 - (ii) Maintenance spares @ 1% of the historical cost of the transmission asset escalated at 6% per annum from the date of commencement of operation;
 - (iii) Receivables equivalent to two months transmission charges calculated on target availability level.

27. Interest on Working Capital

The rate of interest on working capital shall be on normative basis and shall be equivalent to the short term primary lending rate of State Bank of India as on 1st April of the relevant year."

3.58 Commission has estimated the working capital requirement for maintenance spare by considering GFA without revaluation reserve and approved transmission charges.

Tamil Nadu Electricity Regulatory Commission	Page 56
	December 2014

3.59 Commission has considered the interest rates as approved in its last Tariff Order. The working capital requirement and interest on working capital approved by the Commission for TANTRANSCO is given below.

Table 29: Interest on working capital approved by the Commission (Rs. Cr.)

Davamatar	Commission			
Parameter	FY 2011-12	FY 2012-13	FY 2013-14	
O & M expenses	43.16	49.93	54.70	
Maintenance Spares	95.15	96.89	101.22	
Receivables	284.51	512.67	269.38	
Total Working Capital Requirement	422.82	659.48	425.31	
Interest on Working Capital	54.97	97.27	61.46	

Other Debits

3.60 Commission has considered the other debits as approved in its last Tariff Order. The other debit includes material costs variance and miscellaneous losses written off. In last year's petition for FY 2011-12 and FY 2012-13, TANTRANSCO had proposed extraordinary items of Rs 2.28 Crs and Rs. 2.50 Crs respectively but since adequate reasons were not provided for this expense it was disallowed by the Commission. The other debits as approved by the Commission are tabulated below:

Table 30: Other Debits approved by the Commission (Rs. Cr)

D		Last T.O		Commission		
Parameter	FY 2011-12	FY 2012-13	FY 2013-14	FY 2011-12	FY 2012-13	FY 2013-14
Other debits	0.39	0.43	0.48	0.39	0.43	0.48

Prior Period Expenses

- 3.61 In its last petition, TANTRANSCO had claimed a prior period expense of Rs. 1.56 Cr in FY 2011-12 based on provisional accounts and submitted that the items covered under the Prior Period Charges had been missed out in the previous audited accounts and hence is not claimed earlier. In view of this Commission had provisionally accepted the prior-period expenses for TANTRANSCO for FY 2011-12.
- 3.62 In the absence of any further information on Prior Period Expenses, Commission considers the prior period expenses as approved in the last Tariff Order.

Incentive

3.63 Commission has determined incentive in accordance to TNERC Tariff Regulations 2005, which entitles the transmission licensee for an incentive at 1% of equity for each percentage point of increase in annual availability beyond the target availability i.e. 98%.

"63. Incentive

The Transmission licensee shall be entitled to incentive @ 1% of equity for each percentage point of increase in annual availability beyond the target availability prescribed under regulation 58 (b) in accordance with the following formula.

Incentive = Equity x (Annual Availability achieved - Target availability) / 100

The incentive shall be shared by the long term customers in the ratio of their average allotted capacity."

- 3.64 Commission has considered transmission availability for FY 2011-12 and FY 2012-13 as approved in its last Tariff Order. For FY 2013-14, the transmission availability is considered as per the actuals submitted by TANTRANSCO. However for calculation of incentive, Commission has considered the revised average equity determined as per Table 17.
- 3.65 The APTEL judgement dated 18th October 2014 on Appeal No. 197 of 2013 in matter of allowance of incentive directs the State Commission to provide necessary relief to the users of the transmission system on account of excess recovery of revenue on account of incentive in the transmission tariff during FY 2013-14 and FY 2014-15 with carrying cost in the ARR and tariff for FY 2015-16. The relevant extracts of the APTEL order are reproduced below:

"The incentive is to be allowed if the annual availability achieved is in excess of the Target Availability. The actual annual availability will be known only at the end of the Financial Year. The incentive is also be recovered from the long term customers only in the ratio of the average allotted capacity. The incentive is also not included in the component of transmission tariff as specified in Regulation 59.

- 57. Therefore, the State Commission was not correct in allowing incentive on the projected availability for the second Control Period i.e. FY 2013-14 to FY 2015-16. This is contrary to the Regulations. The incentive is to be determined post facto after annual availability achieved is computed after the completion of the Financial Year. The finding of the State Commission in this regard is set aside. The State Commission is, therefore, directed to provide necessary relief to the users of the transmission system on account of excess recovery of revenue on account of incentive in the transmission tariff during FY 2013-14 and FY 2014-15 with carrying cost in the ARR and tariff for FY 2015-16. The ARR for the FY 2015-16 shall also be corrected by the State Commission for the incentive incorrectly provided for higher availability in the impugned order."
- 3.66 The Commission taking into cognisance the direction of the Hon'ble APTEL has deducted the carrying cost at 11% on account of excess recovery in ARR for FY 2013-14 allowed in the last tariff order vis-à-vis the incentive calculated in this tariff order taking the actual transmission availability into consideration. Further the Commission has also not allowed incentive for FY 2014-15 as it shall be allowed on a post facto basis, once data on actual availability is made available by TANTRANSCO.
- 3.67 The incentive approved by the Commission is given below.

Table 31: Incentive approved by the Commission

Particulars	Commission			
raruculars	FY 2011-12	FY 2012-13	FY 2013-14	
Average Equity (Rs. Cr.)	203.23	659.92	997.86	
Annual Availability achieved	99.54%	99.54%	98.95%	
Target Availability	98.00%	98.00%	98.00%	
Incentive (Rs. Cr)	3.13	10.17	9.48	
Less: carrying cost adjustment due to excess recovery	-	-	1.54	
Total(Rs. Cr.	3.13	10.17	7.94	

Insurance

3.68 TNERC (Terms & Conditions for determination of tariff) Regulations, 2005 provides for a licensee to adopt practice of Self Insurance upto 0.5% of the capital cost.

"30. Insurance

The Generating Company and licensee may adopt the practice of Self Insurance and a provision upto 0.5% of the capital cost shall be allowed by the Commission in their revenue requirement. The reserves shall be utilised to replace the assets lost due to accident, fire, flood, cyclone and other force majeure conditions."

3.69 Commission has estimated the insurance after considering the capital cost without revaluation reserve and in accordance with its regulation at 0.5% of the capital costs. The self-insurance expenses approved by the Commission for FY 2013-14 is tabulated below:

Table 32: Self-insurance expenses approved by the Commission for the second control period (Rs. Cr.)

Davamatan	Commission			
Parameter	FY 2011-12	FY 2012-13	FY 2013-14	
Self-insurance expenses	-	-	46.50	

3.70 As per the terms and condition of tariff, tax on the income streams of the transmission licensee from its core business, shall be computed as an expense and shall be recovered from the beneficiaries

Other income

- 3.71 The other income includes interest on staff loans, income from investment, interest from banks, income from short term open access consumers in the form of operations and maintenance charges collected from Wind Energy Generators and Captive Power Producers, etc. For FY 2011-12, FY 2012-13 and FY 2013-14, Commission has accepted other income as per audited and annual statement of accounts.
- 3.72 The other income approved by the Commission is given below.

Tamil Nadu Electricity Regulatory Commission	Page 59
	December 2014

Table 33: Other income approved by the Commission (Rs. Cr.)

Parameter	Commission			
rarameter	FY 2011-12	FY 2012-13	FY 2013-14	
Interest on Staff Loans and Advances	0.71	0.76	0.75	
Delayed Payment Surcharges collected from Consumers	-	-	0.03	
Interest on Advances to Suppliers/Contractors	2.75	-	-	
Income from Trading	6.45	4.61	4.47	
Rebate on power purchase bills	-	-	0.03	
Income from Staff Welfare	0.02	0.02	0.01	
Charges received from Short term OA consumers	27.88	28.47	106.86	
Other Income	37.80	33.85	112.16	

ARR determined by the Commission for the period FY 2011-12 to FY 2013-14

3.73 The ARR determined by the Commission during the provisional true-up of FY 2011-12, FY 2012-13 and performance review exercise for FY 2013-14 is tabulated below:

Table 34: ARR determined for the period FY 2011-12 to FY 2013-14 (Rs. Cr.)

Particulars		Last T.O			Commission	
Farticulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2011-12	FY 2012-13	FY 2013-14
Depreciation	297.18	299.85	355.82	297.17	302.45	315.62
Interest on Loan Capital	1,118.91	1,019.19	1,124.25	1,129.56	1,030.94	797.49
Return on Equity	28.45	87.35	212.83	28.45	92.39	139.70
Operation and maintenance expenses	517.87	599.12	643.45	517.87	599.12	656.44
Interest on Working Capital	54.97	97.15	64.77	54.97	97.27	61.46
Other Debits	0.39	0.43	0.48	0.39	0.43	0.48
Income tax	-	-	-	-	-	-
Incentives	3.13	9.62	23.44	3.13	10.17	7.94
Insurance	-	-	56.65	-	-	46.50
Net Prior Period Expenses	1.56	-	-	1.56	-	-
Gross ARR	2,022.47	2,112.72	2,481.69	2,033.12	2,132.78	2,025.63
Less: Revenue from short term open access consumers	35.16	105.48	105.91	27.88	28.47	106.86
Less: Other Income				9.92	5.38	5.30
Net ARR	1,987.31	2,007.24	2,375.78	1,995.32	2,098.93	1913.47

Revenue from transmission charges

- 3.74 For FY 2011-12 Commission has considered the revenue from transmission charges as per audited accounts after statutory audit as this is the actual revenue received by the utility during the concerned years. FY 2012-13, Commission has considered revenue of Rs. 3076 Crs approved in its last Tariff Order.
- 3.75 However, for FY 2013-14 Commission has determined revenue based on revised Allotted Transmission Capacity arrived at by considering revised CoD of new plants as per Table 59. The revenue from transmission charges determined by the Commission is tabulated below.

Table 35: Revenue from transmission charges determined by the Commission (Rs. Cr.)

Parameter	FY 2011-12	FY 2012-13	FY 2013-14
Revenue from transmission charges	1707.06	3075.99	1616.28

Revenue Gap for the period FY 2011-12 to FY 2013-14

3.76 On the basis of ARR and revenue determined by the Commission, the Revenue Gap arrived by the Commission for the period FY 2011-12 to FY 2013-14 is tabulated below.

Table 36: Revenue gap approved by the Commission (Rs. Cr.)

Particulars	FY 2011-12	FY 2012-13	FY 2013-14
Net ARR	1,995.32	2,098.93	1,913.47
Revenue from Transmission Charges	1,707.06	3,075.99	1,616.28
Revenue Gap	288.26	(977.06)	297.20

A4: AGGREGATE REVENUE REQUIREMENT FOR FY 2014-15

4.1 This chapter deals with the determination of Aggregate Revenue Requirement for FY 2014-15. It summarizes the approach used by the Commission to project the various expense items in order to arrive at the ARR requirement.

Transmission Loss and Energy Balance

Transmission Loss

4.2 In the last tariff order, Commission has accepted the submission of TANTRANSCO and has approved the following transmission losses. Also in the absence of specific submission from TANTRASCO on the actual loss levels, Commission considers transmission losses as approved by it in the last tariff order.

Table 37: Transmission losses approved by the Commission for FY 2014-15

Voltage	FY 2014-15
230 KV	0.76%
110 KV	1.94%
66 KV	0.00%
Total	2.70%

Energy Balance

4.3 Commission has arrived at the energy requirement at transmission periphery considering the approved sales and losses as per Suo-Motu order on distribution losses dated 4th June 2013. In addition, the Commission has adopted an approach which is different than that followed in its last order. Commission is not treating the distribution loss and transmission loss separately and is estimating the total energy loss at the prescribed percentage to arrive at the total energy requirement. This approach has been adopted because, the segregation of losses at various voltage levels does not allow for the recovery of the total stipulated loss percentage for that year. The energy balance and energy required by at transmission periphery for FY 2014-15 is tabulated below.

Table 38: Energy balance in the transmission system arrived by the Commission

Parameter	Units	2014-15
Energy input at Transmission Periphery	MU	77,234
Total Sales (230kV and 110 kV)	MU	4,295
Total Transmission loss %	%	2.70%
Total Losses (230kV and 110 kV)	MU	818
Energy Input at Distribution Periphery	MU	72,121

4.4 Commission gives the following directions to TANTRANSCO with respect to transmission loss and energy balance.

- a) To install energy accounting and audit meters as specified in applicable CEA regulations, at all the interface points at distribution periphery, 400 kV, 230 kV and 110 kV voltages.
- b) To maintain a transparent energy accounting system based on boundary meter readings which will help to arrive at monthly energy losses in the transmission system.
- c) Based on the installed interface meters, TANTRANSCO needs to carry out scientific study and arrive at actual transmission losses before filing of next tariff Petition.
- d) To file the energy balance in transmission system information to the Commission.

Fixed Expenses

4.5 In this section expenses related to fixed cost for FY 2014-15 will be determined by the Commission.

Operation and Maintenance Expenses

4.6 In the process of the approval of O&M expenses the Commission is guided by following regulations

Regulation-25 of Amended TNERC Tariff Regulations as per Notification No.TNERC / TR /5/2-11 dated 13 -03-2014(Applicable from 09-04-2014 onwards):

- "25. Operation and Maintenance Expenses
 - 1. The operation and maintenance expenses shall be derived on the basis of actual operation and maintenance expenses for the past five years previous to current year based on the audited Annual Accounts excluding abnormal operation and maintenance expenses, if any, after prudence check by the Commission. The Commission may, if considered necessary engage Consultant / Auditors in the process of prudence check for correctness.
 - 2. The average of such normative operation and maintenance expenses after prudence check shall be escalated at the rate of 5.72% per annum to arrive at operation and maintenance expenses for current year i.e. base year and ensuing year.
 - 3. The base operation and maintenance expenses so determined shall be escalated further at the rate of 5.72% per annum to arrive at permissible operation and maintenance expenses for the relevant years of tariff period.

,,

4.7 As per the Regulation the actual expenses incurred in the past five years shall be considered for projecting the O&M expenses. However considering the fact that power utilities have been unbundled from Nov 1st, 2010 and that TANTRANSCO is currently maintaining separate accounts, Commission is of the view that it is not appropriate to project the expenses for FY 2014-15 based on the actual expenses incurred prior to unbundling of power utilities. Hence in this order Commission projects the O&M expenses based on the provisional accounts for FY 2011-12.

4.8 In following paragraphs each component of O&M expenses will be discussed in detail and Commissions approval for the same will be accorded.

Employee Expenses

- 4.9 Commission has arrived at the employee expenses for FY 2013-14 during the performance review exercise considering the expenses approved in last Tariff Order for FY 2012-13 as base. For projecting the employee expenses for FY 2014-15 Commission has considered the employee expenses approved for FY 2013-14 as base.
- 4.10 Commission in accordance with its regulation has escalated the approved employee expenses for FY 2013-14 at 5.72% on all components except for DA for arriving at the employee expenses for FY 2014-15.
- 4.11 DA has been compiled based on the revisions duly declared by the Government of Tamil Nadu during the respective years. For FY 2014-15, DA rates have been escalated at 22.8% which is the CAGR of actual DA rates for the period FY 2010-11 to FY 2013-14.
- 4.12 For capitalization of expenses Commission has relied on average employee capitalization of 9% based on historical data.
- 4.13 Based on the above approach and methodology, the employee costs approved by the Commission are tabulated below:

Table 39: Employee expenses approved by Commission - (Rs. Cr.)

Destination.	FY 2014-15			
Particulars	Last T.O	Commission		
Basic Salary	214.78	218.34		
Overtime wages	3.53	3.59		
Dearness Allowance	205.23	241.31		
Other Allowances	16.83	17.11		
Bonus & Exgratia	7.06	7.18		
Sub Total	447.44	487.53		
Terminal benefits	259.30	263.59		
Other Expenses	27.86	28.32		
Grand Total	734.60	779.44		
Less: Capitalization	66.11	70.15		
Net Employee Expenses	668.49	709.29		

Repair and Maintenance Expenses

- 4.14 Similar to projection of employee expense, the approved R&M expenses for FY 2013-14 is escalated by 5.72% in accordance with Commission's regulation for arriving at the gross R&M expenses for FY 2014-15. With regards to R&M expenses capitalized, based on historical trend Commission has considered 3.30% for R&M expenses capitalization during FY 2014-15.
- 4.15 Based on the above approach, the R&M expenses approved by the Commission are tabulated below:

Table 40: R&M expenses approved by Commission (Rs. Cr.)

Particulars	FY 2014-15			
Particulars	Last T.O	Commission		
Plant & Machinery	4.19	4.26		
Building	0.09	0.10		
Civil Works	0.30	0.30		
Hydraulic work	-	-		
Lines & Cable network	3.89	3.95		
Vehicles	0.41	0.42		
Furniture & Fixtures	0.00	0.00		
Office equipment	0.17	0.18		
Grand Total	9.06	9.21		
Less: Capitalization	0.30	0.30		
Net R&M Expenses	8.76	8.91		

Administrative and General Expenses

- 4.16 The approved A&G expenses for FY 2013-14 are escalated by 5.72% in accordance with Commission's regulation for arriving at the gross A&G expenses for FY 2014-15. With regard to A&G expenses capitalized, based on historical trend Commission has considered 22.49% for A&G expenses capitalization during FY 2014-15.
- 4.17 Based on the above approach, the A&G expenses approved by the Commission are tabulated below:

Table 41: A&G expenses approved by the Commission (Rs. Cr.)

Particulars	FY 2014-15	
i ai ticulai s	Last T.O	Commission
Gross A&G Expenses	21.03	21.38
Less: Capitalization	4.73	4.81
Net A&G Expenses	16.30	16.57

Tamil Nadu Electricity Regulatory Commission	Page 66
	December 2014

4.18 The summary of O&M expenses approved for FY 2014-15 for TANTRANSCO is tabulated below.

Table 42: O&M expenses approved by the Commission (Rs. Cr.)

Particulars	FY 2014-15	
	Last T.O	Commission
R&M expenses	8.76	8.91
Employee Costs	668.49	709.29
A&G Expenses	16.30	16.57
Total	693.55	734.77

Capital Expenditure and capitalization

- 4.19 Regulation 17 (5) of the Tariff Regulations, 2005 and Regulation 3 (v)of the Tariff Regulation under MYT framework specifies that the licensee shall get the capital investment plan approved by the Commission before filing ARR and Application for determination of Tariff. However, TANTRANSCO has not complied with this provision and has also not filed its petition.
- 4.20 As per the APTEL's judgement on Appeal No 197 of 2013 dated 18th October 2014 reproduced in Chapter A3 the Commission has relooked at the approach for considering capex and capitalization and would require the capital investment plan to be submitted by TANTRANSCO pending which it has considered the tentative capital expenditure and capitalisation of transmission schemes data submitted by TANTRANSCO for FY 2014-15.
- 4.21 TANTRANSCO has submitted provisional details of capital expenditure and capitalization for FY 2014-15 to the Commission but there is no adequate information on sources of funding, broad details and physical quantum of the proposed capital expenditure.
- 4.22 Thus Commission directs TANTRANSCO to reconcile its accounts with respect to capital expenditure and submit the scheme wise information in the requisite formats. Commission also directs TANTRANSCO to file the progress of the capital expenditure and capitalisation on a quarterly basis.
- 4.23 The capital expenditure and capitalization considered in this order is tabulated below. Any variation in capital expenditure and capitalization due to prudence verification based on the data submitted by the TANTRANSCO and finalization of transfer scheme will be addressed during the next tariff order.

Table 43: Capital expenditure and capitalization as submitted by TANTRANSCO and provisionally approved by the Commission for FY 2014-15 (Rs. Cr.)

Works/Schemes	Capital Expenditure	Capitalization
New Projects		
765 KV Substations	20.00	0
400 KV Substations	1165.00	2096.69

Tamil Nadu Electricity Regulatory Commission	Page 67
	December 2014

230 KV Substations	222.70	998.06
110 KV Substations	305.73	236.70
JICA scheme	300.00	0
Power Evacuation/ Link lines		
400 KV Lines	160.00	160.00
230 KV Lines	170.00	170.00
110 KV Lines	2.00	2.00
Improvement of SS/Lines		
Substations	0	0
Lines	200.00	200.00
Enhancement / Additional Power Transformers	240.00	240.00
Others	122.00	422.00
Total Capital Expenditure	2907.43	4525.45

Depreciation

- 4.24 Commission has considered opening gross block in line with the provisional transfer scheme notified by the Government of Tamil Nadu vide notification dated 2nd January 2012 and without considering the revaluation reserve.
- 4.25 The Commission has found merit in the stakeholder comments raised on calculation of depreciation. The stakeholder comments highlight that the Hon'ble CERC regulations on depreciation includes the condition that asset values have to be provided according to vintage and higher depreciation rates are allowable only on assets less than 12 years old. Hence Commission has considered this point just and has reverted back to the depreciation rates as was applicable prior to the amendment.
- 4.26 TNERC tariff regulations 2005 specifies following guidelines for calculation of depreciation:

24. Depreciation

For the purpose of tariff, depreciation shall be computed in the following manners:

- i. The value base for the purpose of depreciation shall be historical cost of the asset.
- ii. The depreciation shall be calculated at the rates as per the Annexure to these Regulations.
- iii. The residual value of assets shall be considered as 10% and depreciation shall be allowed upto maximum of 90% of the estimated cost of the Asset.
- iv. Land is not a depreciable asset and its cost shall be excluded from the capital cost while computing 90% of the historical cost of the asset.
- v. The historical cost of the asset shall include additional capitalisation.

- vi. Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro-rata basis.
- vii. After the assets are fully depreciated the benefit of reduced tariff shall be made available to the consumer.
- 4.27 Commission has calculated depreciation considering the revised opening GFA without revaluation reserve, weighted average depreciation rates as per amended Tariff Regulations and capitalization approved by the Commission in this order. The GFA considered for estimation of depreciation is tabulated below:

Table 44: Opening GFA considered for the calculations of Depreciation (Rs. Cr)

Asset	FY 2014-15
Land and Land Rights	90.96
Buildings	457.30
Hydraulic Works	2.24
Other Civil Works	145.61
Plant and Machinery	4,883.86
Lines, Cables Network etc	5,763.97
Vehicles	25.74
Furniture and Fixtures	20.75
Office Equipment	67.12
Capital Expenditure resulting in an asset not belonging to Board	0.06
Total	11,457.61

4.28 Based on the above submissions, Depreciation approved by the Commission is tabulated below.

Table 45: Depreciation approved by the Commission (Rs. Cr)

Asset	FY 2014-15	
Asset	Last T.O	Commission
Land and Land Rights	-	-
Buildings	11.37	8.10
Hydraulic Works	0.06	0.06
Other Civil Works	3.17	2.50
Plant and Machinery	209.01	171.24
Lines, Cables Network etc	202.12	164.99
Vehicles	4.76	4.63
Furniture and Fixtures	1.03	1.03
Office Equipment	3.66	3.65
Total	435.18	356.20

Interest on long term loans and other financing charges

- 4.29 As per norms specified in Tariff Regulations 2005, Commission has determined interest expenses corresponding to long term loans and interest on working capital separately.
- 4.30 The opening balance of loans as on 1st November 2010 is based on the provisional transfer scheme notified as on 2nd January 2012. According to last year Tariff Order, TANTRANSCO has borrowed loans to fund its capital expenditure and also to meet debt obligations of the opening loans allocated to it through provisional transfer scheme.
- 4.31 In Chapter A3, Commission has discussed in detail the approach to be adopted for approving interest on long term loans and finance charges. Commission for the determination of interest expenses for FY 2014-15 has adopted the same approach along with the following assumptions:
 - i. Closing loans as on March 2014 as estimated by the Commission have been taken as base
 - ii. The repayment schedule of existing loans is considered as per last year Tariff Order
 - iii. The repayment period of new loans borrowed during FY 2014-15 is assumed to be 10 years
 - iv. The borrowings required for loan repayment will be estimated after taking into account the depreciation allowed during the year.
 - v. Loans required for the capital works will be arrived after considering the approved capital expenditure, equity and available grants and consumer contribution during the year.
 - vi. Interest rate for FY 2014-15 is assumed to be at 12% i.e. the average interest rate for FY 2013-14
 - vii. Interest during construction (IDC) is approved based on capital works in progress.
- 4.32 The details of borrowings and interest expenses approved by the Commission corresponding to capital expenditure and repayment of loans are given below.

Table 46: Borrowings approved for funding capital expenditure during FY 2014-15 (Rs. Cr.)

Particulars	2014-15
Capital Expenditure	2907.43
Less: Equity	872.23
Less: Consumer Contribution	18.07
Less: Grants	0.00
Loans required for funding capital expenditure	2017.13

Table 47: Total Borrowings approved for FY 2014-15 (Rs. Cr)

Parameter	2014-15
For Capital Expenditure	2017.13

New Loans requirement	3,312.87
Depreciation	356.20
For repayment of new loans (Borrowings from April 2012)	946.08
For repayment of existing loans (As on April 2012)*	705.87

^{*}Repayment of existing loans as on April 2012 considered based on Last Year Tariff Order

Table 48: Interest on long term loans approved by the Commission (Rs. Cr.)

Asset	FY 2014-15	
Asset	Last T.O	Commission
Opening Loans	15,425.10	10,823.85
Loan Additions during the Year	5,530.61	3,312.87
Repayment during the Year	2,029.49	1,651.95
Closing Loans	18,926.22	12,484.78
Average Loans	17,175.66	11,654.31
Interest on Loan	1,808.14	1,414.10
Less: IDC	377.75	410.04
Net Interest on Loans	1,430.39	1,004.07

- 4.33 The loan additions and repayments for FY 2013-14 have been considered as per annual statement of accounts which were made available post public notice. Hence, the opening loans for FY 2014-15 amounts to Rs. 10,823.85 crores which is lower than Rs. 12,055.76 crores considered during determination of interest on long term loans in public notice.
- 4.34 The average capital work in progress considered in this order is different than that taken in public notice due to capex and capitalization for FY 2013-14 being considered from annual statement of accounts made available post public notice.
- 4.35 Capital expenditure and Capitalization for FY 2014-15 has been considered as per the revised submission of TANTRANSCO. However, due to decrease in capital expenditure and capitalization for FY 2014-15 compared to that approved in June 2013 order, the interest on loans have decreased.
- 4.36 Commission is of the view that interest expenses on GPF cannot be allowed as GPF reserve funds are not considered for funding of capital expenditure. However, Commission approves other finance charges for guarantee and commitment expense by escalating FY 2012-13 numbers at 10% Y-o-Y similar to the approach followed in the last Tariff Order. The other finance charges approved by the Commission are given below.

Table 49: Other finance charges approved by the Commission (Rs. Cr.)

Parameter	2014-15	
	Last T.O	Commission
Other finance charges	3.93	5.24

4.37 The overall interest and other finance charges approved by the Commission for the TANTRANSCO for FY 2014-15 is given below.

Table 50: Interest and other finance charges approved for transmission business during the second control period (Rs. Cr.)

Parameter	2014-15		
r ar ameter	Last T.O	Commission	
Interest on long term loans	1,430.39	1,004.07	
Other finance charges	3.93	5.24	
Total	1,434.32	1,009.31	

Return on Equity

- 4.38 Commission in Chapter A3 has discussed in detail its stand on allowing return on equity. In accordance to the stand taken, Commission is allowing return on equity at 14% on the average equity arrived based on revised equity profile.
- 4.39 For the revised equity profile, Commission has taken the opening equity for FY 2014-15 as that approved for closing equity as on March 2014. In addition, Commission has taken equity inflow at 30% of the proposed capital expenditure.
- 4.40 Based on the above submissions, the return on equity approved by the Commission is given below.

Table 51: Return on Equity approved by the Commission (Rs. Cr.)

Parameter	FY 2014-15		
rarameter	Last T.O	Commission	
Equity at the beginning	2,199.15	1,082.34	
Addition during the year	1,688.10	872.23	
Closing Equity	3,887.25	1,954.57	
Average Equity	3,043.20	1,518.46	
Return on Equity	426.05	212.58	

Interest on Working Capital

4.41 Commission has estimated working capital based on norms specified in the TNERC Tariff Regulations, 2005 and approves the interest on working capital based on relevant guidelines reproduced below:

"26. Working Capital

(d) For Transmission System

(i) Operation and Maintenance expenses for one month

(ii) Maintenance spares @ 1% of the historical cost of the transmission asset escalated at 6% per annum from the date of commencement of operation; (iii) Receivables equivalent to two months transmission charges calculated on target availability level.

27. Interest on Working Capital

The rate of interest on working capital shall be on normative basis and shall be equivalent to the short term primary lending rate of State Bank of India as on 1st April of the relevant year."

- 4.42 Commission has estimated the working capital requirement for maintenance spares by considering GFA without revaluation reserve and has considered approved transmission charges.
- 4.43 Commission has considered the interest rates of 14.45% as per last year Tariff Order for calculation of interest on working capital. The working capital requirement and interest on working capital approved by the Commission for TANTRANSCO is given below.

Table 52: Interest on working capital approved by the Commission (Rs. Cr.)

Davamatau	FY 2014-15		
Parameter	Last T.O	Commission	
O & M expenses	57.80	61.23	
Maintenance Spares	140.56	114.58	
Receivables	518.80	379.68	
Total Working Capital Requirement	717.16	555.49	
Interest on Working Capital	103.63	80.27	

Other Debits

4.44 Commission has considered the other debits as approved in its last Tariff Order. The other debit includes material costs variance and miscellaneous losses written off. In last year's petition for FY 2014-15, TANTRANSCO had estimated extraordinary items at an escalation of Y-o-Y 10% on its submission of Rs. 2.50 Crs for FY 2012-13 but since adequate reasons were not provided for this expense it was disallowed by the Commission. The other debits as approved by the Commission are tabulated below:

Table 53: Other Debits approved by the Commission (Rs. Cr)

Davamatau	FY 2014-15		
Parameter	Last T.O	Commission	
Other Debits	0.52	0.52	

Incentive

4.45 TNERC Tariff Regulations 2005, which entitles the transmission licensee for an incentive at 1% of equity for each percentage point of increase in annual availability beyond the target availability i.e. 98%, is stated below.

"63. Incentive

The Transmission licensee shall be entitled to incentive @ 1% of equity for each percentage point of increase in annual availability beyond the target availability prescribed under regulation 58 (b) in accordance with the following formula.

Incentive = Equity x (Annual Availability achieved - Target availability) / 100

The incentive shall be shared by the long term customers in the ratio of their average allotted capacity."

- 4.46 The APTEL judgement dated 18th October 2014 on Appeal No. 197 of 2013 in matter of allowance of incentive is stated as below:
 - "57. Therefore, the State Commission was not correct in allowing incentive on the projected availability for the second Control Period i.e. FY 2013-14 to FY 2015-16. This is contrary to the Regulations. The incentive is to be determined post facto after annual availability achieved is computed after the completion of the Financial Year. The finding of the State Commission in this regard is set aside. The State Commission is, therefore, directed to provide necessary relief to the users of the transmission system on account of excess recovery of revenue on account of incentive in the transmission tariff during FY 2013-14 and FY 2014-15 with carrying cost in the ARR and tariff for FY 2015-16. The ARR for the FY 2015-16 shall also be corrected by the State Commission for the incentive incorrectly provided for higher availability in the impugned order."
- 4.47 The Commission taking into cognisance the direction of the Hon'ble APTEL has not approved any incentive for FY 2014-15.

Insurance

4.48 As per the terms of the amended Tariff Regulations dated April 9th 2014, the provision for insurance has been removed from FY 2014-15. Hence, Commission has not approved any insurance for FY 2014-15.

Other income

4.49 The other income includes interest on staff loans, income from investment, interest from banks, income from short term open access, etc. For FY 2011-12, FY 2012-13 and FY 2013-14, Commission has accepted other income as per audited and annual statement of accounts.

- 4.50 However for FY 2014-15, in the absence of information Commission has considered other income as that approved in last tariff order except for charges received from short term open access consumers. The short term OA charges of Rs. 106.86 Crores as per annual statement of accounts of FY 2013-14 has been taken for FY 2014-15 as well for the determination of net aggregate revenue requirement.
- 4.51 The other income determined by the Commission is given below.

Table 54: Other income approved by the Commission (Rs. Cr.)

Parameter	Commission		
r ar ameter	Last T.O.	Commission	
Interest on Staff Loans and Advances	0.92	0.92	
Delayed Payment Surcharges collected from Consumers	-	-	
Interest on Advances to Suppliers/Contractors	3.18	3.18	
Income from Trading	4.58	4.58	
Rebate on power purchase bills	-	-	
Income from Staff Welfare	0.02	0.02	
Charges received from Short term OA consumers	97.65	106.86	
Other Income	106.36	115.58	

ARR approved by the Commission for FY 2014-15

4.52 Based on the above submissions and analysis, the ARR approved by the Commission for FY 2014-15 is tabulated below:

Table 55: ARR approved by the Commission (Rs. Cr.)

D	FY	2014-15
Parameter	Last T.O	Commission
Depreciation	435.17	356.20
Interest on Loan Capital	1,434.32	1,009.31
Return on Equity	426.05	212.58
Operation and maintenance expenditure	693.55	734.77
Interest on Working Capital	103.63	80.27
Other Debits	0.52	0.52
Income tax	-	-
Incentives	46.92	-
Insurance	79.01	-
Gross ARR	3,219.18	2,393.65
Less: Other Income	106.36	115.58
Net ARR	3,112.82	2,278.08

A5: ESTIMATION OF REVENUE GAP AND TARIFF DETERMINATION FOR FY 2014-15

Revenue to be covered from transmission charges in FY 2014-15

5.1 Commission has arrived at the consolidated revenue gap as on March 2014 by considering the approved revenue gap for each year of the first control period in this order and allowing interest expenses at 11%. The consolidated revenue gap arrived at closing of FY 2014 is given below

Table 56: Revenue account for the period FY 2011-FY 2014 (Rs. Cr)

Parameter	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
Opening	0	90.01	405.52	(581.20)
Additions (Revenue gap approved by the Commission)	87.95	288.26	(977.06)*	297.20
Add: Interest Expenses	2.06	27.25	(9.66)	(50.36)
Closing	90.01	405.52	(581.20)	(334.36)
Average	45.01	247.77	(87.84)	(457.78)

^{*}Negative due to excess recovery in FY 2012-13

5.2 Considering the consolidated revenue gap as on March 2014, Commission has arrived at the revenue to be recovered in FY 2014-15 that is given in table below.

Table 57: Approved revenue to be collected from transmission charges in FY 2014-15 (Rs. Cr.)

Parameter	Value
Revenue requirement for FY 2014-15	2,278.08
Add: Consolidated revenue gap as on March 2014	(334.36)
Revenue to be recovered from transmission charges in FY 2014-15	1,943.72

Determination of transmission charges

- 5.3 TNERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 provides the guidelines for fixing of transmission charges. As per clause 59(1) of the regulation, the methodology for calculation of transmission charges is given below:
 - "......The annual transmission charges computed as per this regulation shall be total aggregate revenue requirement of the STU / Transmission licensee. The following shall be deducted from the total revenue requirement.
 - a. Transmission charges collected from the short term intra state open access consumers, captive power plant and generating stations using Non-Conventional

Energy Sources.

- b. Income from other business to the extent of portion to be passed on to the beneficiaries.
- c. Reactive Energy Charges and Transmission charges received from CTU for use of facilities of the licensee / STU.

Till such time a common transmission tariff is evolved to maintain consistency in transmission pricing framework in interstate and in the state transmission system the monthly transmission charges payable by the Distribution licensees and other long term intra state open access consumers shall be based on the capacity allocated to each beneficiaries as detailed below:

Where TC = Annual Transmission Charges

a = Total transmission charges by the short term open access consumers

b = Income from other business to the extent of portion to be passed on to the beneficiaries.

c = Reactive Energy Charges and Transmission charges received from CTU for use of facilities of the licensee / STU

CL = Allotted capacity to the long term transmission customers

SCL= Sum of allotted Transmission capacity to all the long term open access customers of the intra state transmission system.

5.4 In this order, Commission is determining the transmission charges applicable to LTOA in accordance with its regulations.

Allotted Transmission Capacity

5.5 As per the APTEL order dated 23rd November 2012 on Appeal No. 91 of 2012, the following procedure has been recommended for arriving at the allotted transmission capacity.

"For the wind energy generators, the allotted capacity shall be the installed capacity of the respective generators. On the other hand the transmission capacity allotted to TANGEDCO would be on the basis of sum of net capacity (Installed Capacity less auxiliary consumption) of own generating stations connected to the transmission system, capacity contracted from IPPs, share in Central Sector Stations, etc."

- 5.6 In order to arrive at the average allotted transmission capacity for FY 2014-15, Commission has considered the following assumptions:
 - a. Date of commissioning for new stations has been considered based on the revised submission of TANGEDCO.

- b. Average allotted capacity with respect to new generating stations has been arrived considering the CoD.
- c. Commission has considered power available from Case-1 and solar bidding as per last year Tariff Order.
- 5.7 The details of average allotted capacity considered by the Commission for the new generating stations are given below.

Table 58: Average allotted capacity estimated by the Commission for new generating stations (MW)

Name of the Plant	Allotted Capacity (MW)	FY 2013-14 (Upto June 20)	FY 2013-14 (after June 20)	FY 2014-15
Own Generating Stations				
North Chennai Stage II - Unit I	549	0	60	549
North Chennai Stage II - Unit II	549	0	0	504
Mettur State III	546	0	327	546
Ennore Expansion	604	0	0	0
Bhavani Barrage II	10	0	4	10
Bhavani Kattalai Barrage II	30	30	30	30
Periyar Vaigai I	7	7	7	7
CGS				
NTPC - Vallur Unit 1	324	324	324	324
NTPC - Vallur Unit 2	324	0	324	324
NTPC - Vallur Unit 3	324	0	0	216
Kudankulam Unit – I	462	0	296	462
Kudankulam Unit – II	463	0	96	463
NLC-TS-II Expansion Unit I	105	0	0	96
NLC-TS-II Expansion Unit II	105	0	0	60
NLC Tuticorin - Unit 1	177	0	0	118
NLC Tuticorin - Unit 2	177	0	0	73
Other Sources				
Case-1 Bidding	500	0	500	500
Cogeneration	45	0	45	45

Tamil Nadu Electricity Regulatory Commission

Page 79 December 2014

Plants	51	0	49	51
	42	0	36	42
	45	0	32	45
Solar	226	0	226	226
Total	5665	361	2356	4691

5.8 The allotted capacity, arrived by the Commission considering all the sources during FY 2014-15 is tabulated below.

Table 59: Allotted capacity estimated by Commission considering all the sources (MW)

FY 2013-14 (Upto	EN7.0010.11/.00	
June 20)	FY 2013-14 (after June 20)	FY 2014-15
3431	2331	2406
5	13	13
639	637	637
10725	12342	14619
14800	15231	17674
2927	4096	4171
35	0	0
0	0	0
148	704	704
3109	4800	4875
6358	6427	6576
40	13	13
639	545	637
10873	13046	15323
17909	20031	22549
	3431 5 639 10725 14800 2927 35 0 148 3109 6358 40 639 10873	3431 2331 5 13 639 637 10725 12342 14800 15231 2927 4096 35 0 0 0 148 704 3109 4800 6358 6427 40 13 639 545 10873 13046

LTOA Transmission Charges

- 5.9 Commission, in this section is determining the LTOA transmission charges based on allocated capacity in accordance with TNERC (Terms and Conditions for Determination of Tariff) Regulations, 2005
- 5.10 It is pertinent to mention that Commission through various orders issued on 31st July 2012 on procurement of power from renewable energy sources has provided concessional transmission charges. The relevant clauses of the above orders are reproduced below.

Order No 6 of 2012 dated 31st July 2012

"8.3.3 Commission in its order No. 1 of 2012 and 2 of 2012 has fixed Transmission Charges of Rs.6483/MW/day and wheeling charges of 23.27 paise/kWh. Now that the TNEB has been unbundled, charging a single charge in kind as transmission and wheeling charges is not implementable. Therefore it has been decided to fix transmission and wheeling charges in terms of rupees/paise as in the case of conventional power. As a promotional measure, under section 86(1) (e) of the Act, the Commission has decided to fix 40% of the transmission charges and 40% of the wheeling charges as applicable to the conventional power to the Wind power. Apart from these charges, the WEGs shall have to bear the actual line losses in kind as specified in the respective orders of the Commission and amended from time to time.

8.3.4 For the WEGs availing RECs, normal transmission charges, wheeling charges

8.3.4 For the WEGs availing RECs, normal transmission charges, wheeling charges and line losses shall apply."

Order No 7 of 2012 dated 31st July 2012

- "8.2.1.3. As a promotional measure under section 86 (1) (e) of the Electricity Act 2003, the Commission decides to adopt 60% of the transmission charges and 60% of wheeling charges of conventional power to the bagasse based co-generation plants. Apart from these charges, actual line losses as specified in the respective Orders of the Commission and as amended from time to time are also deductible in kind for the captive use and third party sale.
- 8.2.1.4. For generators who are availing Renewable Energy Certificates, normal transmission charges, wheeling charges and line losses will apply."

Order No 8 of 2012 dated 31^{st} July 2012

"8.2.1.6. As a promotional measure under section 86 (1) (e) of the Electricity Act 2003, the Commission decides to adopt 50% of the transmission and 50% of the wheeling charges of conventional power to the Non-conventional energy sources power. Apart from these charges, actual line losses in kind as specified in the respective Order of the Commission and as amended from time to time are also payable for the captive use and third party sale.

- 8.2.1.7. For generators who are availing Renewable Energy Certificate (REC), Normal Transmission Charges, Wheeling Charges and Line Losses will apply."
- 5.11 In last Tariff Order, Commission has determined the revenue recovered by TANTRANSCO during FY 2013-14(upto June 20, 2013) as 726 crores at applicable transmission charges of Rs.6483/MW/day. After considering the provisional estimate of revenue recovered upto June 20, 2013, Commission had arrived at the remaining revenue to be recovered for FY 2013-14. Based on the revised estimate, concessional transmission charges applicable for RE sources and allotted capacity, Commission had arrived at Rs. 1973/MW/Day as the LTOA charges applicable from June 21, 2013 in FY 2013-14.
- 5.12 The estimate of revenue recovered by TANTRANSCO during FY 2013-14 (after June 20, 2013) calculated by the Commission considering normal and concessional transmission charges and actual allotted transmission capacity is given in below table.

Table 60: Estimate of	f revenue recovered	from LTOA in	FV 2013_14 after	June 20
Table ov. Estimate (a revenue recovereu			

Source	Applicable transmission Charges (Rs./MW/Day)	Allocated Capacity (MW)	No of Days	Revenue from Transmission Charges (Rs. Cr.)
Wind (Non REC)	789	6427	283	144
Biomass (Non REC)	987	13	283	0
Cogeneration (Non REC)	1184	545	283	18
Other Sources	1973	13046	283	728
Sub Total		20031		891

5.13 Commission has estimated the provisional tariff applicable in FY 2014-15 considering the approved ARR and revenue gap till FY 2014. The detailed calculations for arriving at the Intra-state transmission tariffs for FY 2014-15 are given in the table below.

Table 61: LTOA Charges applicable for FY 2014-15

Parameter	Formula	2014-15
Revenue Gap-ending FY 2014(Rs. Cr)	A	(334.36)
Net Revenue Requirement (Rs. Cr)	В	2,278.08
Total Revenue Requirement(Rs. Cr)	C=A+B	1,943.72
Allotted Capacity		
Wind (Non REC) – MW	D	6,576
Biomass (Non REC) – MW	Е	13
Cogeneration (Non REC) – MW	F	637
Others – MW	G	15,323
No of Days	Н	365

Tamil Nadu Electricity Regulatory Commission Page 82
December 2014

Transmission Charges Rs./MW/Day	$I = C \times 10^{7}$	2.002
	((Dx40%+Ex50%+Fx60%+G)xH)	2,903

- 5.14 TANTRANSCO shall bill the LTOA consumers including TANGEDCO considering the approved transmission charges of Rs. 2,903/MW/day for FY 2014-15 and allotted capacity. TANTRANSCO is also directed to file quarterly reports of month wise revenue collected from LTOA consumers.
- 5.15 Commission wants to highlight the fact that it has estimated the LTOA charges considering the CoD and allotted capacity submitted by TANGEDCO. Hence, any variation with respect to actual recovery for FY 2014-15 will be subsequently trued up in the next tariff order.

STOA Transmission Charges

5.16 Based on the net revenue requirement approved, the Commission has estimated the STOA charges of Rs 120.97/MW/hr for FY 2014-15 considering 100% of the approved transmission charges applicable to LTOA.

Table 62: STOA Charges approved by the Commission

Description	Formula	2014-15
Long term Open Access Charges (Rs./MW/day)	A	2,903
Transmission charges payable by Intra-State short-term OA customer and Inter-State OA customers using Intra-State network (in Rs / MW/hr)	B=(A* 100 %/ 24)	120.97

Other Charges

Scheduling and System Operation Charges

5.17 In its last tariff order, Commission has approved Scheduling and System Operating Charges of Rs. 2000 per day or part of the day for long term as well as short term open access customers and Commission had directed TANTRANSCO to submit the status of ring fencing of SLDC and submit a separate Petition for approval of its ARR along with transmission Petition from FY 2014-15 onwards in the time frame specified in the regulation.

- 5.18 Since TANTRANSCO has not filed any petition for FY 2014-15, Commission is maintaining status quo and is approving scheduling and system operation charges of Rs. 2000/day or part of day and also at the same time in line with APTEL's judgement on Appeal No. 197 dated 18th October 2014, TANTRANSCO should ensure filing of a separate petition with regard to approval of SLDC charges before the State Commission.
- 5.19 Commission directs TANTRANSCO to file separately the petition for SLDC charges along with transmission petition.

Reactive Energy Charges

- 5.20 As per regulation 62 (c) of the TNERC's Tariff Regulations 2005, the reactive energy charges would be a variable charge reflecting voltage related drawal of Reactive Power and Reactive Power drawal by beneficiaries are to be priced as follows:
 - a) The beneficiary pays for reactive power drawal when voltage at the metering point is below 97%
 - b) The beneficiary gets paid for reactive power (return) supply when voltage is below 97%
 - c) The beneficiary gets paid for reactive power drawal when voltage is above 103%
 - d) The beneficiary pays for reactive power (return) supply when voltage is above 103%
 - e) The charges for reactive energy shall be as decided by the Commission.
- 5.21 Clause 6.6 (2) of Indian Electricity Grid Code, 2010 notified on April 28, 2010, provides the charges applicable for reactive energy exchange.

6.6 Reactive Power and Voltage Control

- "(2) The charge for VArh shall be at the rate of 10 paise/kVArh w.e.f. 1.4.2010, and this will be applicable between the Regional Entity, except Generating Stations, and the regional pool account for VAr interchanges. This rate shall be escalated at 0.5paise/kVArh per year thereafter, unless otherwise revised by the Commission."
- 5.22 Hence in accordance to IEGC, Commission rules that a rate of charge for such reactive energy exchange for the applicable duration (injection or absorption) will be levied /compensated at the rate of 12.00 paise/kVArh for FY 2014-15 escalated at 0.5 paise/kVArh annually in subsequent years, unless otherwise revised by the Commission.

Summary of directives

5.23 The Commission directs that the

- i. TANTRANSCO to file its Tariff Petition on a timely basis every year, as per the TNERC Tariff Regulations.
- ii. TANTRANSCO to start maintaining regulatory accounts and file MYT Petition considering regulatory accounts.
- iii. SLDC to submit its petition separately for approval of its ARR and tariff in accordance with TNERC Tariff Regulations.
- iv. TANTRANSCO to file quarterly reports of month wise revenue collected from transmission charges, scheduling and system operation charges and reactive energy charges from LTOA consumers and STOA consumers.
- v. TANTRANSCO to file the actual transmission availability certified by SLDC on quarterly basis.
- vi. TANTRANSCO to reconcile its accounts with respect to capital expenditure and prepare the voltage wise scheme wise data as per the formats specified by the Commission.
- vii. TANTRANSCO to file the progress of the capital expenditure and capitalization on quarterly basis.

viii. With respect to transmission loss and energy accounting, TANTRANSCO

- To install appropriate energy meters with communication facilities at all the interface points at distribution periphery, 400 kV, 230 kV and 110 KV voltages
- b) To maintain a transparent energy accounting system based on boundary meter readings to arrive at monthly energy losses in the transmission system
- c) Based on the installed interface meters to carry out scientific study and arrive at actual transmission losses before filing of next tariff Petition.
- d) To file the energy balance in transmission system along with its tariff Petition.

Sd/-(G. Rajagopal) Member Sd/-(S. Akshayakumar) Chairman

(By Order of the Commission)

Sd/(S. GUNASEKARAN)
SECRETARY
Tamil Nadu Electricity
Regulatory Commission

A 6:

TAMILNADU ELECTRICITY REGULATORY COMMISSION CHENNAI-8

DISSENTING ORDER OF THIRU.S.NAGALSAMY, MEMBER Date of Order: 11-12-2014

- 1. At the outset, it is my duty to make it known to all the stakeholders, the criteria that I have applied to analyze this draft tariff order to concur or not with my respectful colleagues. I respect and uphold the law most, especially the section 61(d) of Electricity Act 2003 which says "safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner". At the same time I also value equally the merits of issues. My decision on this order is purely based on whether this order is consistent with the Electricity Act 2003, National Electricity Policy, Tariff Policy. Regulations made thereon and orders or directions issued by this Commission and Hon'ble Appellate Tribunal for Electricity (APTEL) and there is merit in final conclusion. Applying this criteria, I, as a Member of the Commission, have already approved two retail tariff orders of the Commission issued during the years 2012 and 2013 and hence I have enough experience and expertise to take an unbiased decision on this order. I have also reviewed the functioning of electricity sector in Tamil Nadu, Kerala and Karnataka as Principal Accountant General / Accountant General under the control of the Comptroller and Auditor General of India.
- 2. There are three important issues to be considered in approving this tariff order. They are (i) legal validity (ii) procedural conformity and (iii) the merit on each issues of the tariff order.

Firstly let me consider the legal validity of the order.

(A) <u>Legal Validity:</u>

(a) In this connection, the related provisions of the Electricity Act 2003 are reproduced below.

Section 64. (Procedure for tariff order): --- (1) An application for determination of tariff under section 62 shall be made by a generating company or licensee in such manner and accompanied by such fee, as may be determined by regulations.

- (2) Every applicant shall publish the application, in such abridged form and manner, as may be specified by the Appropriate Commission.
- (3) The Appropriate Commission shall, within one hundred and twenty days from receipt of an application under sub-section (1) and after considering all suggestions and objections received from the public,-
 - (a) issue a tariff order accepting the application with such modifications or such conditions as may be specified in that order;
 - (b) reject the application for reasons to be recorded in writing if such application is not in accordance with the provisions of this Act and the rules and regulations made thereunder or the provisions of any other law for the time being in force:

Provided that an applicant shall be given a reasonable opportunity of being heard before rejecting his application.

The words "An application for determination of tariff under section 62 shall be made by a generating company or licensee in such manner and accompanied by such fee, as may be determined by regulations" appearing in section 64(1) of the Act is very significant. As mandated by the Act, the TRANSCO should have filed a petition for determination of tariff for the financial year 2014-15. The licensee failed to file an application for determination of Tariff and there by the statutory requirement of the Act has been violated by the TANTRANSCO. Therefore this order suffers from the basic and statutory requirement of tariff application to be filed by the licensee.

Para 5 (ii) of TNERC's (Terms and Conditions for determination of tariff) Regulations 2005 says

"ARR shall be filed every year even when no application for determination of tariff is made"

The words "Shall be filed every year" is very important here. It is mandatory on the part of the TANTRANSCO to file the ARR, even if it fails to fill the tariff petition. Here again, TANTRANSCO failed to file the ARR for the year 2014-15 and thereby committed a serious violation of regulatory requirement under para 5(ii) of TNERC (Terms and Conditions of determination of tariff) Regulations 2005. Thus, this order suffers from the non-fulfillment of basic regulatory requirement of filing ARR for the year 2014-15.

b) Secondly, the Commission published the following provisions of the APTEL order and Commission's regulation in the newspapers for the information of stakeholders as the reasons for this suo-motu tariff order.

"Hon'ble APTEL vide its judgment dated 11th November, 2011 in the matter OP No. 1 of 2011, has directed the State Commissions that

"In the event of delay in filing of the ARR, truing-up and Annual Performance Review, one month beyond the scheduled date of submission of the petition, the State Commission must initiate suo-motu proceedings for tariff determination in accordance with Section 64 of the Act read with clause 8.1 (7) of the Tariff Policy."

TNERC Tariff Regulations 2005 under Regulation 6 stipulates that

"(8) In case the licensee does not initiate tariff filings in time, the Commission shall initiate tariff determination and regulatory scrutiny on suo motu basis.""

The APTEL order as well as the Commission's regulation specify that the Commission shall "initiate suo-motu proceedings" in case the licensee does not file tariff application in time. But the APTEL order clearly directs that the suo-motu proceedings **shall be initiated in accordance with Section 64 of the Act read with clause 8.1 (7) of the Tariff Policy.** Section 64 of the Act as stated in the beginning of this heading legal validity mandates filing of tariff application by the licensee. It is crystal clear that when the licensee fails to file the tariff petition and the Commission initiates the suo-motu proceedings, then licensee cannot escape from filing the tariff petition. Commission has to ensure the filing of the tariff petition before proceeding with tariff determination. Therefore this order suffers not only from the statutory requirement of filing of tariff petition by the licensee but also violates the APTEL's order. In result, the Commission has not followed its own legal procedure published for the information of stakeholders. Let me discuss the provision of tariff policy tagged in the said APTEL order later during my discussion on merit of the order.

(c) Now let me discuss the third important lapse of the Commission. The said APTEL order further clarifies that appropriate action should be taken by the Commission in case

the licensee has not filed the petition in time. The relevant portion of the Para 44 of the order is reproduced below.

"Therefore, we are to conclude that the State Commissions can initiate suo-moto proceedings and collect the data and information and give suitable directions and then to determine the tariff even in the absence of the application filed by the utilities by exercising the powers under the provisions of the Act as well as the tariff regulations.

Thus, the 1 question is answered accordingly."

The words " initiate suo-moto proceedings and collect the data and information and give suitable directions and then to determine the tariff" of the said APTEL order is very important. The APTEL did not just say determine the tariff suo-motu. It directed the Commission to initiate proceedings to collect the data and information and then determine the tariff. The APTEL's order has a great meaning and purpose. As for as transmission tariff is concerned, it requires large number of discrete data/parameters to be furnished by the licensee as specified in the regulation without which tariff cannot be decided. Only on that context, the APTEL has directed the Commission "to collect the data and information and then determine the tariff". Commission should have taken suo-motu action under section 142 on TANTRANSCO so as to make them to file ARR under para 5(ii) of Tariff Regulations and then proceeded with the suo-motu tariff order. Interestingly, the Commission's data provided in the newspapers for the information of stakeholders carried the title "determined/considered by the Commission". As stated above Commission needs large number of discrete parameters to be furnished by the licensee as per the Tariff Regulations 2005 to arrive at the abstract figures of ARR. Without such data it is not known how the Commission arrived at such abstract values. I have already expressed my dissatisfaction in hosting the arbitrary and abstract information/data. A copy of my file noting is enclosed as Annexure II. In fact all those formats should have been obtained from the TANTRANSCO and published by the Commission as requested by some of the stakeholders. Without providing the data to the stakeholders, the Commission failed to conduct the tariff determination process in a transparent manner as required by section 86(3) of the Act which is reproduced below.

(3) The State Commission shall ensure transparency while exercising its powers and discharging its functions.

For all the 9 letters of Commission written from 12.12.2013 to 4.6.2014, silence was the only reply from TANTRANSCO. These letters directed the licensee to file the ARR, tariff petition and also called for information / data to proceed with the suo-motu proceedings. But there was no response.

Since this order suffers from the prerequisites of transparency as required by the Act and collection of data from the licensee as directed by the APTEL, the draft order with the assumed data/determinants is purely arbitrary and it is not legally valid.

(d) Another direction given by the APTEL is about the powers of the Commission to collect such data from the Commission. Para 56 of the said order of the APTEL is reproduced below.

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. The various provisions such as Section 94, 128, 129, 130, 142 and 146 empower the State Commissions to secure discovery of all relevant materials and enforce directions. Similarly, the respective tariff regulations and conduct of business Regulations notified by the State Commissions have enough provisions to call for and collect information and to enforce directions. Therefore, the hands of the State Commission cannot assumed to be tied-up to prevent them from enforcing the statutory mechanism. There are decided cases by the Hon'ble Supreme Court as well as by this Tribunal in which it is held that the State Commissions have complete powers to impose conditions, to frame regulations and to issue directions as also to enforce them. The relevant decisions are as under:

The Commission miserably failed or refused to take action on the licensee. Though the undersigned specifically recommended taking action on the licensee under section 142 of the Electricity Act, 2003, it was not agreed by the Commission. Interestingly Hon'ble chairperson of the Commission was MD/TANTRANSCO(incharge) and was responsible for not filing the ARR before 30th November 2013 for TANTRANSCO. It might be the reason for not taking action under section 142 of Electricity Act 2003. Inspite of specific direction by the APTEL to take action to get the data, the tariff order prepared by my respectful colleagues in the Commission on assumed data is arbitrary and has no legal sanctity. A copy of my file noting where it was not agreed to take action on the TANTRANSCO under Section 142 of Electricity Act, 2003 is enclosed as Annexure I.

B. **Procedural Lapses**

Now let me present the procedural lapses as below. Section 64 of the Act specifies the procedure for determination of tariff. The procedural lapses as per the Act 2003 are:

- (a) Non filing of tariff application by the TANTRANSCO as per section 64 (1) of the Act.
- (b) As mandated by the section 64(2), the data (application) should have been published by the applicant. Since it is a suo-motu order, the Commission should have published the data after obtaining from the licensee. There are large numbers of discrete formats which provide data for transmission tariff determination. But the Commission has provided meagre information such as monthly open access charges collected by the licensee and the balance sheets of the TANTRANSCO. These are all abstract statements inadequate for prudent check and determination of tariff. TANTRANSCO has not sent any information from November 2013 to September 2014 in respect of tariff determination. The Annual Reports were informally obtained by the Commission. Even the scanty information were not hosted in the website along with the public notice and the summary of the tariff proposal on 23.9.2014. But, they were hosted in the website only on 24.10.2014 after a month when there was hardly a week to respond. Public hearing at Chennai was already over on 24.10.2014. Public did not get even the insufficient information well in time and thereby lost the opportunity to respond to the tariff proposal. The public hearings and the public response in the form of written submissions were incomplete to that extent.
- (c) In the original proposal as hosted in the website, the Commission reported a revenue requirement of Rs. 2,100.24 Crores. But in the final draft, the gap has been revised and reduced as Rs.1,943.72 Crores. It is not known what changes in the data or assumptions have justified the revised revenue gap.

(d) The APTEL in its order dated 09-04-2013 on appeal number 257 of 2012 has observed as below.

.....

However, in order to avoid any controversy in future in maintaining complete transparency and tariff determination process, the State Commission may consider to review and amend its Regulations so as to put any information furnished by the licensee or generating company to the State Commission subsequent to filing tariff petition on its website.

As directed by the APTEL, the Commission should have published the supporting data for the changed revenue gap for the information of the stakeholders and for maintaining the complete transparency. Since adequate data has not been published by the Commission for the information of the stakeholders, the function of the Commission has not been conducted on transparent manner as required by section 86(3) of the Act.

(e) Another important procedural flaw is the refusal in the Commission to take action under section 142 on TANTRANSCO to get the data and information as discussed supra.

Therefore the tariff determined on assumed data without following the procedure specified by the Act and directions issued by the APTEL is purely arbitrary and has no legal or procedural validity.

- 3. (a) (i) To consider the order on its merits, let me first consider the important provision of tariff policy which the APTEL has quoted in its order. The relevant clause 8.1(7) of tariff Policy is reproduced below.
 - 7) Appropriate Commissions should initiate tariff determination and regulatory scrutiny on a suo moto basis in case the licensee does not initiate filings in time. It is desirable that requisite tariff changes come into effect from the date of commencement of each financial year and any gap on account of delay in filing should be on account of licensee.

The words "any gap on account of delay in filing should be on account of licensee" are very significant. The licensee has neither filed the Tariff Application nor provided the data. Even if the data is available, the Commission has to do prudence check and it has to be validated. Without the data, the determination of the tariff can only be arbitrary. For the failure of the licensee, we cannot punish the consumers by raising the tariff arbitrarily. Raising the tariff assuming some parameter like inflation etc. for atleast one year will not serve its purpose. Because there is no guarantee that the TANTRANSCO will file the Tariff Petition next year for prudence check and true up. The TANTRANSCO and its erstwhile parent organization TNEB had a bad record of not filing the ARR/tariff petition for nine years out of the last 12 years. For the year 2015-16, the TANTRANSCO should have filed the tariff petition before 30-11-2014 but they have failed to file the petition within the stipulated time. Let us assume a situation where the licensee is not filing the tariff application or providing the data every year and the Commission is issuing suo-motu tariff order every year to comply with the APTEL's direction. Then the licensee will sit happily without filing a tariff petition or giving the data. There are large numbers of parameters essentially required to determine the tariff. Without such data retail tariff cannot be determined by the Commission. Therefore the first and the foremost duty of the Commission is to make the licensee to file tariff application so as to fulfill his statuary provisions as per section 64 of the Act.

(ii) Now the issues in front of the Commission is that the Licensee has refused to file data but suo-motu order has to be issued to comply with the APTEL's order. In this circumstances, the only option for the Commission is to issue a tariff order by reducing the tariff or at the best not increasing the tariff to the Consumers in accordance with clause 8.1.7 of the Tariff policy and as directed by the APTEL. The words "and any gap on account of delay in filing should be on account of licensee" appearing in clause 8.1.7 is important. Only such order will ultimately make the licensee to file ARR or tariff petition atleast next year. I cannot make the consumer to suffer for the statutory violation of the Licensee. There is a wrong interpretation of the words "and any gap on account of delay in filing should be on account of licensee" in some circles that it refers to the prospective effect of the Tariff order. It is an agreed fact that any order which will have financial

impact will take only prospective effect until otherwise there is a specific agreement between the parties to apply it retrospectively. Therefore till such time an order is approved by the Commission, **based on the tariff application filed by the licensee**, the gap is on the account of licensee. I believe this is the intention of the clause 8.1.7 of the tariff policy and as such the revenue gap of the licensee cannot be allowed to be recovered in this order. Hence there is no merit to revise open access charges by the Commission to cover the revenue gap of Rs. 1,944 Crores in the tariff order.

- (b) Hon'ble APTEL issued the following directions in appeal No 197 of 2013 & IA No. 273 of 2013
- (iv) Approval of the capital expenditure without approval of the Capital Investment Plan: We feel that the capital expenditure and capitalization for the second Control Period appears to be optimistic considering the past performance of TANTRANSCO. We, therefore, direct the State Commission to true up/provisionally true up the capitalization for FY 2013-14 immediately and the short fall, if any should be accounted for while determining the tariff for the FY 2015-16, with carrying cost on the impact of variation on this account on the ARR. We direct TANTRANSCO Appeal No. 197 of 2013 & IA No. 273 of 2013 to submit the actual accounts for capital expenditure and capitalization during FY 2013-14along with Capital Investment Plan for FY 2014-15 and 2015-16 in the requisite formats, if not already done. The State Commission shall accordingly approve the Capital Investment Plan of TANTRANSCO for the FY 2014-15 and 2015-16 after following due process of law and consider the same while approving the tariff for the FY 2015-16.
- (x) We do not find any merit in the contention of the Appellant to disallow System Operation and Scheduling Charges. We, however, direct the State Commission to take necessary action with regard to compliance of their direction for ring fencing of SLDC. The Respondent no. 1 is also directed to ensure filing of a separate petition with regard to approval of SLDC charges for FY 2015-16 before the State Commission at the earliest.
 - (i) The Capital Investment Plan has not yet been approved for the year 2014-15. Issuing tariff order without approved Capital Investment Plan is against the APTEL's direction.
 - (ii) With regard to System operation and scheduling charges, the TANTRANSCO/SLDC has again failed to file a separate petition for the SLDC charges. The SLDC not only violated the Commission's direction but also directions of the APTEL. The Commission has failed to take action as discussed

supra. The present Chairman of the Commission was the MD (incharge) of the

TANTRANSCO during the scheduled time of the filing.

(c) Finally I have not been provided with the data, reason and proof both for the

originally proposed revenue requirement of Rs. 2,100 Crores and the revised revenue

requirement of Rs.1,944 Crores. In my view both are arbitrary.

In light of the above, since the draft tariff order suffers from legal validity, procedure

conformity and issue based merits, I am not approving the tariff order in its present

form.

I understand that there is a court order restraining the Commission from issuing any

orders. However my colleagues in the Commission assured me that there is no

restriction to issue this tariff order. Following their assurance, I am issuing this separate

order.

Sd/-

S.NAGALSAMY

Member **TNERC**

Encl.: Annexure I

(By Order of the Commission)

Sd/-

(S. GUNASEKARAN)

SECRETARY

Tamil Nadu Electricity

Regulatory Commission

10