



# TAMIL NADU ELECTRICITY REGULATORY COMMISSION

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## Determination of Aggregate Revenue Requirement (ARR) for FY 2017-18 and FY 2018-19 and SLDC Charges for FY 2017-18

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Order in T.P. No. 3 of 2017 dated 11-08-2017

(effective from 11-08-2017)



**TAMIL NADU ELECTRICITY REGULATORY COMMISSION**

(Constituted under Section 82(1) of Electricity Act, 2003)

(Central Act 36 of 2003)

PRESENT

Thiru. S. Akshayakumar – Chairman

Thiru. G. Rajagopal – Member

Dr. T. Prabhakara Rao - Member

**Order in T.P. No. 3 of 2017 dated 11-08-2017**

**In the matter of: Determination of ARR for FY 2017-18 and FY 2018-19 and  
SLDC Charges for FY 2017-18**

In exercise of powers conferred by sub-section (3) of Section 32 and Clauses (a), (c) and (g) of sub-section (1) of Section 86 of the Electricity Act 2003 (Central Act 36 of 2003) and all other powers hereunto enabling in that behalf and after considering the views of the State Advisory Committee meeting held on July 20, 2017 and after considering suggestions and objections received from the public during the public hearings held on July 25, 2017, July 28, 2017 and August 2, 2017, as per sub-section (3) of Section 64 of the said Act, the Tamil Nadu Electricity Regulatory Commission (Commission) hereby passes this Order for Aggregate Revenue Requirement (ARR) for FY 2017-18 and FY 2018-19 and SLDC Charges for FY 2017-18.

This Order shall take effect on and from August 11, 2017.

Sd/-  
(Dr. T. Prabhakara Rao)  
Member

Sd/-  
(G. Rajagopal)  
Member

Sd/-  
(S. Akshayakumar)  
Chairman

(By Order of the Commission)

Sd/-  
(S. Chinnarajalu)  
Secretary, TNERC

### **LIST OF ABBREVIATIONS**

A&G	Administration and General Expenses
AC	Annual Charges
AMC	Annual Maintenance Contract
APERC	Andhra Pradesh Electricity Regulatory Commission
APTEL	Appellate Tribunal for Electricity
ARR	Aggregate Revenue Requirement
CAG	Comptroller & Auditor General of India
CERC	Central Electricity Regulatory Commission
CSS	Cross Subsidy Surcharge
DERC	Delhi Electricity Regulatory Commission
EA	Electricity Act
EMS	Energy Management System
FMS	Financial Management System
FY	Financial Year
GERC	Gujarat Electricity Regulatory Commission
GFA	Gross Fixed Assets
G.O.	Government Order
GoTN	Government of Tamil Nadu
HT	High Tension
IoWC	Interest on Working Capital
IWPA	Indian Wind Power Association
kWh	kilo-Watt hour
LTOA	Long-Term Open Access
MERC	Maharashtra Electricity Regulatory Commission
MTOA	Medium-Term Open Access
MW	Mega-Watt

MYT	Multi-Year Tariff
O&M	Operation & Maintenance
P&C	Protection & Communication
R&M	Repairs & Maintenance
RLDC	Regional Load Despatch Centre
RoE	Return on Equity
SCADA	Supervisory Control and Data Acquisition
SERC	State Electricity Regulatory Commission
SLDC	State Load Despatch Centre
STOA	Short Term Open Access
STU	State Transmission Utility
TANGEDCO	Tamil Nadu Generation and Distribution Corporation Ltd.
TANTRANSCO	Tamil Nadu Transmission Corporation Ltd.
TASMA	Tamil Nadu Spinning Mills Association
TECA	Tamil Nadu Electricity Consumers' Association
TNEB	Tamil Nadu Electricity Board
TNERC	Tamil Nadu Electricity Regulatory Commission
TO	Tariff Order
TP	Tariff Policy
UDAY	Ujwal DISCOM Assurance Yojana
ULDC	Unified Load Despatch & Communication
WEG	Wind Energy Generator

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# 1 INTRODUCTION

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## 1.1 Preamble

- 1.1.1 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 or Commission) vide G.O.Ms. No.58, Energy (A1) Department, dated March 17, 1999.
- 1.1.2 The Commission issued its first Tariff Order under Section 29 of the Electricity Regulatory Commissions Act, 1998, on 15-03-2003 based on the Petition filed by the erstwhile Tamil Nadu Electricity Board (TNEB) on September 25, 2002.
- 1.1.3 The Electricity Regulatory Commissions Act, 1998 was repealed and the Electricity Act, 2003 (Central Act 36 of 2003) (hereinafter referred as “the EA, 2003” or “the Act”) was enacted with effect from June 10, 2003.
- 1.1.4 The Commission notified the Tamil Nadu Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2005 (herein after called Tariff Regulations) on August 3, 2005 under Section 61 read with Section 181 of the Act.
- 1.1.5 The Commission issued its first Order (Order No. 2 of 2006) on Transmission Charges, Wheeling Charges, Cross Subsidy Surcharge (CSS) and Additional Surcharge on May 15, 2006, based on the Petition filed by the erstwhile TNEB on September 26, 2005 under Section 42 of the Act.
- 1.1.6 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 February 11, 2009.
- 1.1.7 Subsequently, TNEB filed an Application for determination of Aggregate Revenue Requirement (ARR) with Tariff for all functions on January 18, 2010, which was admitted by the Commission after initial scrutiny on February 9, 2010. The Commission issued its second Retail Tariff Order (Order No. 3 of 2010) on July 31, 2010, in which the annual Transmission Charges were also determined.
- 1.1.8 The erstwhile TNEB was formed as a statutory body by GoTN on July 1, 1957 under the Electricity (Supply) Act, 1948. TNEB was primarily responsible for generation, transmission, distribution and supply of electricity in the State of Tamil Nadu.

- 1.1.9 GoTN, vide G.O (Ms) No. 114 Energy Department, dated October 8, 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. (hereinafter referred as TANTRANSCO or the Petitioner)) and Tamil Nadu Generation and Distribution Corporation Ltd. (hereinafter referred as TANGEDCO) with the stipulation that the aforementioned Companies shall be fully owned by the Government.
- 1.1.10 TANTRANSCO was incorporated on June 15, 2009 and started functioning as such with effect from November 1, 2010. Post restructuring, TANTRANSCO was provided with the function of transmission of electricity in the State of Tamil Nadu. Being STU, TANTRANSCO has been vested with the functions of State Load Dispatch Centre till further orders of the GoTN from the date of transfer.
- 1.1.11 Subsequent to the filing of Tariff Petition by TANTRANSCO for determination of Intra-State Transmission Tariff for 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 March 30, 2012.
- 1.1.12 TANTRANSCO filed its Application before the Commission for determination of Intra-State Transmission Tariff for FY 2013-14. Based on the Petition and after considering views of the State Advisory Committee and the public, the Commission passed the third Order on June 20, 2013 and directed TANTRANSCO to file a separate Petition for SLDC's ARR in accordance with the Tariff Regulations.
- 1.1.13 Subsequently, in the event of TANTRANSCO not filing the ARR and Tariff Petition for FY 2014-15, 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, the fourth Order of the Commission on determination of Intra-State Transmission Tariff and other related Charges was passed on December 11, 2014. The Commission reiterated the direction to TANTRANSCO to file a separate Petition for approval of SLDC's ARR in accordance with the Tariff Regulations in this Tariff Order also.
- 1.1.14 TANTRANSCO filed a Petition for True-up for the period from FY 2011-12 to FY 2015-16 and approval of Aggregate Revenue Requirement (ARR) for the Control Period from FY 2016-17 to FY 2018-19 and determination of Intra-State Transmission Tariff for FY 2017-18. Thereafter, SLDC filed the Petition for determination of ARR for SLDC for FY 2017-18 and 2018-19.



1.1.15 The Commission has reviewed the data available thoroughly and hereby passes the **first** Order on determination of ARR of SLDC for FY 2017-18 and FY 2018-19 and SLDC Charges for FY 2017-18.

## **1.2 Petition Filing**

1.2.1 The Control Period is from FY 2016-17 to FY 2018-19. SLDC submitted that since the Annual Accounts for FY 2016-17 is under preparation, the provisional figures for 2016-17 have been submitted and same have been considered as the base figures for projection of ARR for FY 2017-18 and FY 2018-19. Therefore, SLDC requested the Commission to consider FY 2017-18 and FY 2018-19 as the Control Period for SLDC, Chennai.

1.2.2 SLDC filed the Petition before the Commission on May 29, 2017 for determination of Aggregate Revenue Requirement (ARR) for FY 2017-18 and FY 2018-19 based on the actuals for FY 2016-17. The Commission admitted the Petition on June 13, 2017.

1.2.3 SLDC also submitted that the segregation of accounts between TANTRANSO and SLDC is still under process and it is taking efforts to maintain separate accounts from FY 2017-18 onwards. Therefore, the ARR submitted is on provisional basis and in certain cases, assumptions have been made applicable for projection purposes.

1.2.4 SLDC also requested the Commission to revise the Income from Scheduling and Operating Charges projected in the TANTRANSO Petition filed on January 28, 2017 in line with the ARR projected for FY 2017-18 and FY 2018-19 in the present Petition.

## **1.3 Procedure Adopted**

1.3.1 Regulation 7 (2) of the Tariff Regulations specifies as under:

*“The applicant shall publish, for the information of public, the contents of the application in an abridged form in English and Tamil newspapers having wide circulation and as per the direction of the Commission in this regard. The copies of Petition and documents filed with the Commission shall also be made available at a nominal price, besides hosting them in the website.”*

- 1.3.2 SLDC published the copy of the Petition on their website. The written suggestions/objections/comments from the stakeholders were invited by July 14, 2017.
- 1.3.3 The Commission has provided sufficient time to Stakeholders for submission of written comments and suggestions on the Petition filed by SLDC. The last date for submission of written comments and suggestions was July 14, 2017.
- 1.3.4 The Petition was placed before the State Advisory Committee on July 20, 2017. The list of Members who attended the State Advisory Committee meeting is placed as **Annexure I**.
- 1.3.5 The list of stakeholders who have submitted objections/suggestions/views regarding the Petition in response to the Public Notice is placed as **Annexure II** and the issue-wise summary of objections/suggestions/views along with SLDC's Replies and the Commission's ruling on each issue, are included in Chapter 2.
- 1.3.6 The Commission conducted the Public Hearing at the following places on the dates noted against each:

Date	Day	Place	Venue
July 25, 2017	Tuesday	Chennai	Vani Mahal, 103, G. N. Chetty Street, T. Nagar, Chennai – 600 017.
July 28, 2017	Friday	Madurai	Tamil Nadu Chamber of Commerce and Industry, 178-B, Kamarajar Salai, Madurai – 625 009.
August 2, 2017	Wednesday	Coimbatore	S. N. R. College Auditorium, Nava India Bus Stop, Avinashi Road, Coimbatore- 641 006.

- 1.3.7 The list of participants in each public hearing, is placed as **Annexure III** to this Order. The objections/suggestions/views raised by the participants are discussed in Chapter 2.

## 1.4 Transfer Scheme

- 1.4.1 The proposal for Assets Transfer and Employee transfer called as Tamil Nadu Electricity Board (Reorganization and Reforms) Transfer Scheme, 2010 was notified by GoTN vide G.O. (Ms) No.100 Energy (B2) Department dated October 19, 2010

with the effective date of implementation as November 1, 2010. Based on the above notification, TNEB was re-organized with effect from November 1, 2010.

1.4.2 As per the Transfer Scheme the Provisional period for transfer of Assets was 1 year and for transfer of employees was 3 years. From November 1, 2010 onwards, all the employees of the erstwhile TNEB stood transferred to and absorbed in TANGEDCO on a provisional basis and assigned to the services of the relevant transferee, viz., TANTRANSCO and TNEB Ltd., on deputation on “as-is-where-is” basis until further notice for permanent absorption into respective entities.

1.4.3 At the time of issue of Suo-Motu Tariff Order dated December 11, 2014, the Transfer Scheme was not finalised. Therefore, the Commission had stated the following regarding the provisional Transfer Scheme:

*“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. The Commission has also issued a statutory advice with regard to the establishment of a separate Generating Company and establishment of four Distribution Companies so that the performance of these companies can be improved and efficiently monitored, which will enable proper investments and growth of the individual company. This document is appended as Annexure VI.*

*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 VII.*

*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 TANGEDCO as specified in the Transfer Scheme.”*

- 1.4.4 GoTN vide the Gazette Notification G.O. (Ms) No. 49 dated August 13, 2015, issued the final Transfer Scheme.

*“In the Government order first read above, Government have notified the Tamil Nadu Electricity (Re-organisation and Reforms) Transfer Scheme, 2010. The erstwhile Tamil Nadu Electricity Board has been reorganized with effect from 01.11.2010, as per the provisions of the Electricity Act, 2003. In the above transfer scheme, the assets and liabilities were segregated based on the available unaudited balance sheet of erstwhile Tamil Nadu Electricity Board as on 31.03.2009 instead of balance sheet as on 31.10.2010 which was not ready at that time and stated that this shall be provisional for a period of one year from the respective date of transfer as per the clause 9(1) of the said scheme (i.e., upto 31.10.2011).*

*(2) Now, the Chairman and Managing Director, Tamil Nadu Generation and Distribution Corporation Limited has stated that as the audited balance sheet as on 31.10.2010 is ready, it is essential to issue notification for the final amendment to the earlier transfer scheme notified in Government Order 2nd read above for giving effect to the transfer of assets and liabilities to successor entities of erstwhile Tamil Nadu Electricity Board as on 01.11.2010.*

*(3) Amendment to the existing Tamil Nadu Electricity (Reorganisation and Reforms) Transfer Scheme, 2010 notified in G.O.Ms.No.100, dated 19.10.2010, subsequently amended in G.O.(Ms.) No.2, Energy (B2) Department, dated 02.01.2012 by issuing Notification for giving effect to transfer of assets and liabilities to successor entities of erstwhile Tamil Nadu Electricity Board Limited as on 01.11.2010 be issued.*

*(4) The Notification appended to this order will be published in the Tamil Nadu Government Gazette, Extraordinary, dated 13.08.2015.”*

- 1.4.5 The transfer value of the Fixed Assets forming part of Schedules A, B and C of the respective Transferees have been done at book values, excluding the land, buildings, plant and machineries, lines, cables and network, which are revalued based on the guideline value resulting into Revaluation Reserve of Rs. 7164 Crore for TANTRANSKO.
- 1.4.6 Post restructuring, TANTRANSKO as per the Notification was provided with the function of transmission of electricity in the State of Tamil Nadu. TANTRANSKO has been vested with the State Load Despatch functions till further orders of the State Government from the date of transfer.
- 1.4.7 As per Section 31(1) of the Act, the State Government shall establish a State Load Despatch Centre (SLDC). Section 31(2) also provides that the said SLDC shall be operated by a Government company / authority / corporation constituted by or under

any State Act and that until such company /authority / corporation is notified by the State Government, the State Transmission Utility (STU) shall operate the SLDC.

- 1.4.8 The Load Dispatch Centre of Tamil Nadu is divided into three control areas, viz., Chennai, Madurai and Erode and the area Load Despatch Centres in each area takes care of the operation of the respective area.
- 1.4.9 SLDC is functioning at Chennai with three Sub-Load Despatch Centres at Chennai, Erode and Madurai carrying out the grid management and taking care of the overall reliability, security, economy and efficiency of the power system function for smooth evacuation of power from generating stations to the consumers.

## **1.5 Brief Note on Public Hearing**

- 1.5.1 The Commission has noted the various views expressed by stakeholders both in the written comments submitted to the Commission as well as the concerns expressed during the Public Hearings.
- 1.5.2 Various suggestions and objections that were raised on the SLDC's Petition on SLDC Charges after the issuance of the Public Notice, both in writing as well as during the Public Hearing, and the Commission's views have been detailed in Chapter 2 of this Order.

## **1.6 Applicability of Order**

1.6.1 This Order will come into effect on and from August 11, 2017. The SLDC Charges determined in this Order will be valid until issue of the next Order.

## **1.7 Layout of the Order**

1.7.1 This Order is organized into following Chapters:

- (a) **Chapter 1** provides details of the tariff setting process and the approach of the Order;
- (b) **Chapter 2** provides a brief of the Public Hearing process, including the details of comments of various stakeholders and views of the Commission thereon;
- (c) **Chapter 3** provide details/analysis of the ARR of SLDC for FY 2016-17 to FY 2018-19;
- (d) **Chapter 4** provides details of determination of SLDC Charges for FY 2017-18.

1.7.2 The Order contains the following Annexures, which are an integral part of the Tariff Order.

- (a) **Annexure I-** The list of participants at the State Advisory Committee
- (b) **Annexure II-** The list of stakeholders who have submitted written objections/ suggestions/ views in response to the Public Notice.
- (c) **Annexure III-** The list of participants at each Public Hearing.

## **2 STAKEHOLDERS' COMMENTS, SLDC'S REPLY AND COMMISSION'S VIEW**

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### **2.1 Background**

- 2.1.1 The following Section summarizes the key views/objections/suggestions and requests made by stakeholders. 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.
- 2.1.2 In this Section, the Commission has addressed the specific views/ objections/ suggestions made by stakeholders on each issue. The general comments also list specific requests made by stakeholders like Indian Wind Power Association (IWPA), Tamil Nadu Spinning Mills Association (TASMA) and Tamil Nadu Electricity Consumers' Association (TECA) to which the Commission has responded. All comments received from the stakeholders have been provided to SLDC, Chennai for responding. The responses so received have been included under the relevant heads. Therefore, each view has been considered by the Commission and appropriately addressed in this Order.

### **2.2 General and Procedural Issues**

#### **Stakeholder Comments**

- 2.2.1 The Commission directed SLDC to file a separate Petition for approval of ARR in 2013 itself and has repeated the same direction in its SMT Order No. 8 of 2014. TANTRANSCO has violated the directives of the Commission by filing a combined Petition in January 2017. The data on category-wise SLDC Charges collected by SLDC should be furnished for public comments before approving the ARR.
- 2.2.2 SLDC should be operated only by a separate Government Company or by an Entity established by the State Government as per the Provisions under Sections 31(1) and 31(2) of the Act. Hence, the Commission should direct GoTN under the powers vested under Sections 86 (1)(k) and 86(2)(iii) to constitute SLDC into a separate department under the control of GoTN as one of the main objectives of the Act is to ensure the independent functioning of SLDC.
- 2.2.3 SLDC's ARR is meaningful and legally valid only if its accounts are segregated and audited separately. Thus, SLDC should be directed to segregate its accounts, get it

audited and submit to the Commission before November 30<sup>th</sup> of the Year. The Commission should have issued a Suo-Motu Tariff Order in the case of failure of SLDC to submit the ARR before the stipulated time period. SLDC has violated the provisions under Regulation 5 of the Tariff Regulations, without a delay condonation Petition.

- 2.2.4 The Commission has the authority to fix Suo-Motu Tariff without a Petition from the Utility under Section 64 of the Act and Clause 8.1 (7) of the Tariff Policy. Non-issuance of Tariff Order for the past 2.5 years is a violation of the above-mentioned provisions by the Commission.
- 2.2.5 Public Hearings should be held as per the Conduct of Business Regulations and the Act. The Commission should provide the consumers an opportunity to provide more facts in the Public Hearing and follow the Principles of Natural Justice before providing approval on Tariff Petitions filed.

#### **SLDC's Reply**

- 2.2.6 SLDC has submitted that the Commission in its Suo-motu Tariff Order dated December 11, 2014 under Clause 1.35 has stipulated that:

*“1.35. This order will come into effect from 12th December 2014. The Interstate Transmission Tariff and other related charges contained in this order will be valid till the issue of the next order”*

- 2.2.7 SLDC submitted that it had filed the Petition for approval of the ARR for SLDC on May 29, 2017 before the Commission.
- 2.2.8 SLDC submitted that Public Hearings for SLDC's Petition were held in three locations at Chennai, Madurai and Coimbatore on July 25, 2017, July 28, 2017 and August 2, 2017 respectively.

#### **Commission's Views**

- 2.2.9 SLDC has filed the separate Petition for approval of ARR for FY 2017-18 and FY 2018-19 and determination of SLDC Charges for FY 2017-18 after repeated directives of the Commission. The Commission expresses its displeasure over the delay in filing of separate ARR Petition by SLDC. Moreover, filing a separate Petition for approval of ARR and determination of SLDC Charges is the first step towards financial independence of SLDC from TANTRANSCO.



- 2.2.10 For projecting the SLDC's ARR for FY 2016-17, the Commission has to consider the actual values for FY 2015-16 as baseline values based on audited accounts. Further, SLDC has submitted that preparation of separate Accounts for SLDC for FY 2017-18 is in progress. The Commission asked SLDC to submit the provisional Balance Sheet for FY 2016-17, however, the same has not been submitted. In the absence of data, the Commission has considered FY 2016-17 data as submitted by SLDC on provisional basis.
- 2.2.11 The Commission is of view that sufficient time has been provided for submission of written comments and suggestions till July 14, 2017. The Commission has held the Public Hearing at three locations in the State, and has considered all the comments and suggestions received in writing as well as orally during the Public Hearing, while analysing SLDC's Petition and issuing this Tariff Order.

## **2.3 Determination of Tariff and System Operation Charges**

### **Stakeholder Comments**

- 2.3.1 The total Allotted Capacity of transmission should be considered for arriving at the SLDC Charges rather than the arbitrary charge of Rs. 2000 per day. The formula followed by CERC or other SERCs like MERC, DERC, GERC and APERC to determine SLDC Charges may be adopted by the Commission.
- 2.3.2 In other States, the Distribution Licensee, who is allotted the maximum capacity, bears the maximum SLDC Charges. On the other hand, in Tamil Nadu, TANGEDCO, handling 7500 MW conventional power pays Rs. 2000 per day, a conventional power station of 500 MW also pays the same Charges, while a 3 MW Wind Energy Generator with 1 MW at three different locations pays Rs. 2400 per day, which is highly discriminatory.
- 2.3.3 The System Operation Charges collected from Wind Energy Generators (WEGs) alone, at 40% of that applicable for conventional generators, is higher than the ARR filed in the SLDC Petition. Since only one schedule is made for all WEG's, the collection of System Operation Charges for individual WEGs is not consistent with the procedure followed for TANGEDCO stations. Hence, the System Operation Charges collected from WEGs should be reduced.
- 2.3.4 SLDC has estimated an ARR of Rs. 43.06 Crore and Rs. 47.69 Crore for FY 2017-18 and FY 2018-19, respectively. However, the ARR Petition filed by

TANTRANSCO showed a recovery of Rs. 133.57 Crore for FY 2017-18 and Rs. 148.93 Crore for FY 2018-19 from System Operation Charges, which is a gross under estimation of the actual recovery. The WEGs alone contribute more than Rs. 175 Crore of revenue from System Operation Charges. Hence, the Commission should drastically reduce the System Operation Charges considering the realistic revenue recovered from the wind sector.

- 2.3.5 The SLDC Charges should be adjusted while determining the ARR of TANTRANSCO.

### **SLDC's Reply**

- 2.3.6 As regards the methodology for determination of SLDC Charges, SLDC submitted that the Commission shall determine the appropriate SLDC Charges.
- 2.3.7 SLDC submitted that the ARR submitted is provisional and shall be trued up subsequently. In Para 4.1.3 of the Petition, SLDC has requested the Commission to revise the submission made in TANTRANSCO's ARR Petition with respect to Scheduling Charges and System Operation Charges for FY 2017-18 and FY 2018-19, as per the present Petition filed by SLDC.

### **Commission's Views**

- 2.3.8 The Commission has approved the ARR for SLDC for FY 2017-18 and FY 2018-19, as elaborated in Chapter 3 of this Order. The SLDC Charges have been designed in such a manner that the approved ARR is recovered through the Charges levied. The Commission has discussed the methodology followed for determination of Scheduling Charges and System Operation Charges in detail in Chapter 4 of this Order. The revenue corresponding to the SLDC Charges has been reduced from the ARR of TANTRANSCO, while determining the Transmission Charges.

## **2.4 Other ARR Related Issues**

### **Stakeholder Comments**

- 2.4.1 The Commission should undertake a prudence check of the estimates submitted by SLDC for FY 2016-17, which are provisional figures.
- 2.4.2 The Employee Expenses have been over-estimated, as the impact of 7<sup>th</sup> Pay

Commission is in addition to the annual escalation of 5.72%, and hence, should be verified.

- 2.4.3 The Capitalisation of Rs. 19.07 Crore for FY 2017-18 is higher than the Capital Expenditure of Rs. 14 Crore during the same period. The expenditure of Rs. 5.07 Crore towards ULDC/SCADA upgradation should also be verified.
- 2.4.4 The actual loan details should be furnished instead of assuming normative 70% of the GFA as loans. The interest rate should be reduced below 12% as the implementation of UDAY scheme shall lead to reduction in interest rates.
- 2.4.5 Interest on Working Capital should be disallowed as there is no need for working capital for operation of SLDC.
- 2.4.6 RoE should be claimed only based on the actual equity infusion for projects to be commissioned in FY 2017-18 and FY 2018-19. The equity infused for projects under construction should not be considered for ARR.

#### **SLDC's Reply**

- 2.4.7 As regards the comment on over-estimation of Employee Expenses, SLDC submitted that it has been considered Employee Expenses as per the Tariff Regulations as amended from time to time.
- 2.4.8 As regards the comment on Capital Expenditure and Capitalisation, SLDC submitted that the Capital Expenditure and Capitalisation proposed are only estimates based on the values of the particular assets to be commissioned during the respective year.
- 2.4.9 SLDC submitted that the Interest on Loans proposed are provisional values as the accounts of SLDC are under transition. Hence, as per the provisions of Tariff Policy, the capitalisation is bifurcated into loans and equity in the ratio of 70:30. SLDC has considered the average interest rate of 12% as the UDAY scheme has no impact on the interest rates of SLDC.
- 2.4.10 SLDC submitted that working capital is the fund required to match the timing difference between recovery of revenue and incurrence of expenditure. Hence, the interest on working capital is a legitimate expense required for a business to operate on a day-to-day basis and it has accordingly claimed interest on working capital in line with the Tariff Regulations.
- 2.4.11 As regards the comment on Return on Equity, SLDC submitted that since the ARR is provisional, the Return on Equity has been considered as per the Tariff

Regulations.

**Commission's Views**

- 2.4.12 The provisioning of employee expenses against proposed implementation of 7<sup>th</sup> Pay Commission has not been considered by the Commission, and shall be considered at the time of True-up in the subsequent Tariff Petitions, based on actual implementation. The Commission's approach for determining the ARR for SLDC for FY 2017-18 and FY 2018-19, has been elaborated in Chapter 3 of this Order.

### 3 ARR FOR FY 2017-18 AND FY 2018-19

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#### 3.1 Background

3.1.1 SLDC, in its Petition has sought approval for ARR for FY 2017-18 and FY 2018-19 based on the actuals of FY 2016-17. In this Section, the Commission has analysed all the elements of expenses for FY 2017-18 and FY 2018-19 and has determined the ARR for SLDC for FY 2017-18 and FY 2018-19.

#### 3.2 Overall approach of the Commission

3.2.1 The Commission has considered the ARR for FY 2016-17 as submitted by SLDC, on provisional basis. The Commission has determined the ARR for SLDC for the first time, for FY 2016-17 to FY 2018-19, by considering the provisional ARR for FY 2016-17 as baseline values. **The Commission directs SLDC to maintain separate Trial Balance, Accounts, Asset Registers, etc., for SLDC and submit such Trial Balance/Balance Sheet for SLDC separately at the time of filing of next Tariff Petition.**

3.2.2 The Commission would like to clarify that FY 2016-17 data has been used only for the purpose of projecting ARR for FY 2017-18 and FY 2018-19. However, True-up shall be done for TANTRANSCO for FY 2016-17. From FY 2017-18 onwards, the true-up shall be done separately for TANTRANSCO and SLDC.

3.2.3 For projecting the ARR for SLDC, the approach adopted for TANTRANSCO has been considered since, SLDC is presently a part of TANTRANSCO.

#### 3.3 Fixed Expenses

3.3.1 In this Section, fixed expenses for FY 2017-18 and FY 2018-19 have been 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 Loan
- iv) Interest on Working Capital
- v) Return on Equity
- vi) Other debits and Prior Period Items

### 3.4 Operation and Maintenance (O&M) Expenses

#### SLDC's Submission

- 3.4.1 SLDC submitted that the provisional O&M Expenses for FY 2016-17 have been considered as the base and the O&M expenses for FY 2017-18 and FY 2018-19 have been projected by escalating the O&M expenses of FY 2016-17. O&M expenses comprise Employee Expenses, A&G Expenses and R&M Expenses. TANTRANSCO further submitted that it has considered the Commission approved escalation rate of 5.72% for escalating the O&M expenses, in accordance with the Tariff Regulations.
- 3.4.2 SLDC submitted that the functioning of communication and SCADA network of the Protection and Communication (P&C) Wing for the real-time operation of SLDC and Sub-LDCs was vital even though it is common for TANGEDCO and TANTRANSCO. Hence, SLDC submitted that the entire equipment cost of SCADA and communication system and one third of Establishment and Administrative Cost pertaining to the executives of P&C Wing from Chennai, Madurai, Coimbatore and Trichy has been considered while projecting the ARR of SLDC for FY 2017-18 and FY 2018-19.

#### *Employee Expenses*

- 3.4.3 SLDC submitted that the Employee Expenses consists of Basic Salary, Dearness Allowance, Bonuses, Medical expense reimbursement, Terminal Benefits, etc. It has considered the provisional impact of 7<sup>th</sup> Pay Commission to be 15% and has considered a provision of 15% of the salaries and the gratuity as the additional liability on account of the anticipated salary revision recommendations in FY 2017-18 and FY 2018-19 in equal proportion. SLDC further submitted that the arrears of previous years have also been considered in FY 2017-18. SLDC requested the Commission to approve the Employee Expenses as shown in the Table below:

**Table 3.4-1: Employee Expenses for FY 2016-17 to FY 2018-19 as submitted by SLDC (Rs. Crore)**

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Salaries	7.77	8.22	8.69
Dearness allowance	10.07	10.65	11.26
Over-time wages	0.03	0.03	0.04

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Other Allowance (shift, conveyance, ABT, etc)	0.97	1.02	1.08
Bonus	0.14	0.15	0.15
Other Staff Cost	0.00	0.00	0.00
Reimbursement of Medical Expenses	0.01	0.01	0.02
Leave Travel Concession	0.00	0.00	0.00
Encashment of Earned Leave	0.91	0.96	1.01
Staff Welfare Expenses	0.00	0.00	0.00
Terminal Benefits	0.77	0.82	0.86
Sub- Total	<b>20.69</b>	<b>21.87</b>	<b>23.12</b>
Additional Liability on account of 7th Pay Commission	0.00	1.42	1.42
Arrears of 7th Pay Commission	0.00	1.34	1.34
<b>Employee Expenses – Total</b>	<b>20.69</b>	<b>24.62</b>	<b>25.87</b>

#### *Administrative and General Expenses*

- 3.4.4 SLDC submitted that Administration and General (A&G) Expenses consists of expenses pertaining to Rent, Rates, Taxes, Telephone and Postage, Printing and Stationary, Training and Certification programme of operators and executives, professional charges, communication system, gardening, meeting expenditure, etc. The A&G expenses projected for FY 2017-18 and FY 2018-19 are in line with the Tariff Regulations with escalation of 5.72% p.a. on provisional A&G Expenses for FY 2016-17, as submitted in the Table below:

**Table 3.4-2: A&G Expenses for FY 2016-17 to FY 2018-19 as submitted by SLDC (Rs. Crore)**

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Rent, Rates & Taxes	0.02	0.02	0.02
Telephone, Postage & Telegrams	0.12	0.13	0.14
Conveyance & Travel	1.18	1.25	1.32
Insurance	0.00	0.00	0.00
Fees & Subscriptions	0.01	0.01	0.01
Books & Periodicals	0.00	0.00	0.00
Printing & Stationery	0.02	0.02	0.02
Advertisement Expenses	0.00	0.00	0.00

<b>Particulars</b>	<b>FY 2016-17</b>	<b>FY 2017-18</b>	<b>FY 2018-19</b>
Office Meeting Expense	0.18	0.19	0.20
Miscellaneous Expenses	0.11	0.11	0.12
Legal Charges	0.20	0.21	0.22
Training Expense	0.12	0.13	0.14
Watch and Ward Expense	0.00	0.00	0.00
<b>A&amp;G – Total</b>	<b>1.96</b>	<b>2.07</b>	<b>2.19</b>

### *Repairs and Maintenance Expenses*

3.4.5 SLDC submitted that R&M expenses are incurred in Facility Management System (FMS), Website charges, AMC charges for SCADA/EMS equipment, IT equipment, civil work maintenance of office building and quarters, etc. For projecting R&M expenses for FY 2017-18 and FY 2018-19, the escalation of 5.72% has been considered over the provisional R&M Expenses for FY 2016-17, which is in line with the Tariff Regulations. The R&M expenses for FY 2016-17 to FY 2018-19, as submitted by TANTRANSCO is shown in the Table below:

**Table 3.4-3: R&M Expenses for FY 2016-17 to FY 2018-19 as submitted by SLDC (Rs. Crore)**

<b>Particulars</b>	<b>FY 2016-17</b>	<b>FY 2017-18</b>	<b>FY 2018-19</b>
Plant & Machinery	0.56	0.59	0.62
Buildings	0.06	0.07	0.07
Civil Works	0.16	0.17	0.18
Hydraulic Works	0.00	0.00	0.00
Lines, Cables Networks & DTR Repair	0.07	0.07	0.07
Vehicles	0.00	0.00	0.00
Furniture & Fixtures	0.05	0.05	0.05
Office Equipment	0.08	0.09	0.09
<b>R&amp;M Cost – Total</b>	<b>0.98</b>	<b>1.03</b>	<b>1.09</b>

3.4.6 SLDC submitted the break-up of O&M expenses for FY 2017-18 and FY 2018-19 based on the provisional values of FY 2016-17, as given in the Table below:



**Table 3.4-4: O&M Expenses for FY 2016-17 to FY 2018-19 as submitted by SLDC (Rs. Crore)**

<b>Particulars</b>	<b>FY 2016-17</b>	<b>FY 2017-18</b>	<b>FY 2018-19</b>
Employee Expenses	20.69	24.62	25.87
A&G Expense	1.96	2.07	2.19
R&M Expense	0.98	1.03	1.09
<b>Total O&amp;M Expense</b>	<b>23.62</b>	<b>27.72</b>	<b>29.15</b>

### **Commission’s View**

3.4.7 Regulation 25 of the Tariff Regulations specifies as under:

*“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.*
- ...”*

3.4.8 As SLDC’s ARR has not been determined separately in the past, data regarding actual O&M expenses of SLDC for the past five years is not available. As stated earlier, in the absence of data, the Commission has considered SLDC’s submission for FY 2016-17 as base data.

3.4.9 For projecting Employee Expenses, A&G Expenses and R&M Expenses for FY 2017-18 and FY 2018-19, the Commission has considered an escalation of 5.72% over the base data of FY 2016-17. The Commission has not considered impact of additional liability on account of 7<sup>th</sup> Pay Commission and arrears of 7<sup>th</sup> Pay Commission for FY 2016-17. The same may be considered by the Commission based on actual details submitted by the Petitioner substantiated with the

documentary evidences and audited accounts, at the time of true-up for the respective year.

- 3.4.10 The O&M expenses approved by the Commission for FY 2017-18 and FY 2018-19 are shown in the Table below:

**Table 3.4-5: Approved O&M Expenses for FY 2017-18 and FY 2018-19 (Rs. Crore)**

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Employee Cost	20.69	21.87	23.12
A&G Expense	1.96	2.07	2.19
R&M Expense	0.98	1.03	1.09
<b>Total O&amp;M Expense</b>	<b>23.62</b>	<b>24.97</b>	<b>26.40</b>

### 3.5 Capital Expenditure and Capitalisation

#### SLDC's Submission

- 3.5.1 Regulation 17(5) of the Tariff Regulations and Regulation 3(v) of the MYT Regulations specify that the Licensee shall get the Capital Investment Plan approved by the Commission before filing of Application for approval of ARR and Tariff.
- 3.5.2 Considering the present status wherein SLDC is filing the Petition for the first time, Capital Expenditure and Capitalisation submitted for approval of the Commission are given in the Table below:

**Table 3.5-1: Capital Expenditure and Capitalisation as submitted by SLDC (Rs. Crore)**

Particulars	Capital Expenditure		Capitalisation	
	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
ULDC SCADA Upgradation	14.00	0.00	19.07	0.00
Modernization of SLDC	0.21	0.00	0.21	0.00
IT Infra & ABT Mechanism	3.99	9.58	0.00	13.58
Power System Development Funding	0.00	0.86	0.00	0.86
RE Management Centre	0.00	2.74	0.00	2.74
Modernization of Sub-LDC	0.00	0.18	0.00	0.18
SCADA Communication	0.08	0.00	0.08	0.00
<b>Total</b>	<b>18.29</b>	<b>13.37</b>	<b>19.36</b>	<b>17.36</b>

### Commission's View

- 3.5.3 The Petitioner stated that it has submitted the provisional scheme-wise details to the Commission. The Commission has considered the capital expenditure and capitalisation for FY 2017-18 and FY 2018-19 as shown in the following Table:

**Table 3.5-2: Approved Capital Expenditure and Capitalisation for FY 2017-18 and FY 2018-19 (Rs. Crore)**

Particulars	Petition		Approved by the Commission	
	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
Capital Expenditure	18.29	13.37	18.29	13.37
Capitalisation	19.36	17.36	19.36	17.36

### 3.6 GFA and Depreciation

#### SLDC's Submission

- 3.6.1 SLDC submitted that the depreciation rates considered in the Petition are in accordance with the rates specified in the Tariff Regulations (as amended in April 2014). The Depreciation has been calculated on the opening balance of the Gross Fixed Assets (GFA) and on an average basis on the addition of assets during the year. The opening GFA for FY 2016-17 to FY 2018-19 and Depreciation as submitted by SLDC are as follows:

**Table 3.6-1: Depreciation as submitted by SLDC (Rs. Crore)**

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Opening GFA	65.87	66.16	85.52
Closing GFA	66.16	85.52	102.88
Average GFA	66.01	75.84	94.20
<b>Depreciation during the Year</b>	<b>4.00</b>	<b>4.63</b>	<b>6.37</b>
<b>Rate of Depreciation</b>	<b>6.06%</b>	<b>6.11%</b>	<b>6.77%</b>

#### Commission's View

- 3.6.2 In the absence of separate Balance Sheet for SLDC, the opening GFA for FY 2016-17 has been considered as submitted by SLDC in its Petition. The addition of GFA during the year has been considered equivalent to capitalisation approved in this Order. For computation of depreciation, the Commission has considered the asset

class-wise rate of depreciation specified in the Tariff Regulations. While SLDC has computed Depreciation on average GFA, the Commission has computed the Depreciation on Opening GFA in accordance with the approach adopted for TANTRANSOCO.

- 3.6.3 The depreciation approved by the Commission for FY 2017-18 and FY 2018-19 is shown in the table below:

**Table 3.6-2: Approved Depreciation for FY 2017-18 and FY 2018-19 (Rs. Crore)**

<b>Particulars</b>	<b>FY 2016-17</b>	<b>FY 2017-18</b>	<b>FY 2018-19</b>
Opening GFA	65.87	66.16	85.52
Addition of GFA during the year	0.29	19.36	17.36
Closing GFA	66.16	85.52	102.88
<b>Depreciation during the year</b>	<b>3.98</b>	<b>4.01</b>	<b>5.26</b>

### 3.7 Interest and Finance Charges

#### SLDC's Submission

- 3.7.1 SLDC submitted that interest on loan has been claimed in the Petition on normative basis in line with the Tariff Regulations corresponding to long-term loans.
- 3.7.2 For determination of interest expenses, the following approach has been considered:
- i. Opening loan has been considered as 70% of the opening GFA of that year.
  - ii. Loan addition has been considered as 70% of the capital expenditure.
  - iii. Repayment has been considered equal to depreciation.
  - iv. Average interest rate of 12% on average loan has been considered to arrive at interest on loan for all the three years.
- 3.7.3 The interest calculation for FY 2016-17 to FY 2018-19 as submitted by SLDC is given in the Table below:

**Table 3.7-1: Interest Expenses as submitted by SLDC (Rs. Crore)**

<b>Particulars</b>	<b>FY 2016-17</b>	<b>FY 2017-18</b>	<b>FY 2018-19</b>
Opening Loan balance for the year	46.11	45.86	54.03
Loan addition during the year	3.75	12.80	9.36
Repayment during the year	4.00	4.63	6.37
Closing Loan balance for the year	45.86	54.03	57.01

<b>Particulars</b>	<b>FY 2016-17</b>	<b>FY 2017-18</b>	<b>FY 2018-19</b>
Average Loan balance	45.98	49.95	55.52
<b>Average rate of Interest</b>	<b>12%</b>	<b>12%</b>	<b>12%</b>
<b>Interest on Loan</b>	<b>5.52</b>	<b>5.99</b>	<b>6.66</b>

### Commission's View

3.7.4 For computation of Interest and Finance Charges, the Commission has adopted the following approach:

- a) The opening loan balance for FY 2016-17 has been considered as submitted by SLDC.
- b) The normative debt:equity ratio for financing the capital expenditure has been considered as 70:30 and accordingly, the addition of loan during the year has been considered equivalent to debt corresponding to approved capital expenditure for that year.
- c) The depreciation approved in this Order has been considered as normative repayment.
- d) Interest charges have been computed on average loan balance during the year.
- e) Rate of interest has been considered as approved for TANTRANSCO, however, the actual rate of interest shall be considered at the time of true-up for the respective year.

3.7.5 The Interest and Finance charges as submitted by SLDC and approved by the Commission for FY 2017-18 and FY 2018-19 are shown below:

**Table 3.7-2: Approved Interest Expense for FY 2017-18 and FY 2018-19 (Rs. Crore)**

<b>Particulars</b>	<b>FY 2016-17</b>	<b>FY 2017-18</b>	<b>FY 2018-19</b>
Opening Loan balance for the year	46.11	45.88	54.67
Loan addition during the year	3.75	12.80	9.36
Repayment during the year	3.98	4.01	5.26
Closing Loan balance for the year	45.88	54.67	58.77
Average rate of Interest	10.94%	11.05%	10.69%
<b>Interest on Loan</b>	<b>5.03</b>	<b>5.55</b>	<b>6.06</b>

### 3.8 Interest on Working Capital (IoWC)

#### SLDC's Submission

- 3.8.1 SLDC submitted that IoWC has been claimed in the Petition on the normative basis, and revenue has been considered for 2 months based on the total ARR to be recovered in the ensuing year.
- 3.8.2 Further, as per the Tariff Regulations, rate of interest on working capital has been considered on normative basis as equal to the short-term Prime Lending Rate of State Bank of India as on 01<sup>st</sup> April of the relevant year.
- 3.8.3 The normative IoWC as submitted by SLDC is shown in the following Table:

**Table 3.8-1: Interest on Working Capital as submitted by TANTRANSCO (Rs. Crore)**

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
O&M Expenses	1.97	2.31	2.43
Maintenance Spares	0.03	0.03	0.04
Receivables	6.19	7.18	7.95
Total Working Capital	8.19	9.52	10.41
<b>Rate of Interest on Working Capital</b>	<b>14.05%</b>	<b>14.05%</b>	<b>14.05%</b>
<b>Total interest on Working Capital</b>	<b>1.15</b>	<b>1.34</b>	<b>1.46</b>

#### Commission's View

- 3.8.4 Regulation 26 of the Tariff Regulations specifies as under:

*“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 short term rate of interest on working capital shall be on*

*normative basis and shall be equivalent to the primary lending rate of State Bank of India as on 1st April of the relevant year.”*

3.8.5 The Commission has computed the normative IoWC in accordance with the Tariff Regulations. However, maintenance spares have been considered at 1% of the opening GFA for the respective year. The Commission has considered rate of interest of 14.05% equivalent to State Bank of India Prime Lending Rate as on the date of Petition filed by SLDC.

3.8.6 The IoWC as submitted by SLDC and approved by the Commission for FY 2017-18 and FY 2018-19 is shown below:

**Table 3.8-2: Approved IoWC for FY 2017-18 and FY 2018-19 (Rs. Crore)**

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
O&M Expenses	1.97	2.08	2.20
Maintenance Spares	0.66	0.66	0.86
Receivables	6.12	6.54	7.20
<b>Total Working Capital</b>	<b>8.75</b>	<b>9.28</b>	<b>10.25</b>
Rate of Interest on Working Capital	14.05%	14.05%	14.05%
<b>Interest on Working Capital</b>	<b>1.23</b>	<b>1.30</b>	<b>1.44</b>

### 3.9 Return on Equity (RoE)

#### SLDC's Submission

3.9.1 SLDC has calculated RoE for FY 2016-17 to FY 2018-19 on the basis of average equity for the corresponding year considering infusion of equity at 30% of the total Capital Expenditure of the respective year, which is in line with the Tariff Regulations. The Rate of Return on Equity has been taken at 14%.

3.9.2 The RoE for FY 2016-17 to FY 2018-19 as submitted by SLDC is shown in the Table below:

**Table 3.9-1: Return on Equity as submitted by SLDC (Rs. Crore)**

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Opening Equity	19.76	21.37	26.86
Additions during the year	1.61	5.49	4.00
Closing Equity	21.37	26.86	30.86

<b>Particulars</b>	<b>FY 2016-17</b>	<b>FY 2017-18</b>	<b>FY 2018-19</b>
Average Equity	20.56	24.11	28.86
<b>Return on Equity @ 14%</b>	<b>2.88</b>	<b>3.38</b>	<b>4.04</b>

### **Commission's View**

- 3.9.3 The Commission has considered the opening equity for FY 2016-17 as submitted by SLDC. The equity addition during the year has been considered equivalent to equity amount computed at 30% of Capital expenditure during the year.
- 3.9.4 The Commission has computed the RoE at 14% on average equity during the year. The RoE submitted by SLDC and approved by the Commission for FY 2017-18 and FY 2018-19 is shown below:

**Table 3.9-2: Approved RoE for FY 2017-18 and FY 2018-19 (Rs. Crore)**

<b>Particulars</b>	<b>FY 2016-17</b>	<b>FY 2017-18</b>	<b>FY 2018-19</b>
Opening Equity	19.76	21.37	26.85
Additions during the year	1.61	5.49	4.01
Closing Equity	21.37	26.85	30.86
Average Equity	20.56	24.11	28.86
<b>Return on Equity @ 14%</b>	<b>2.88</b>	<b>3.38</b>	<b>4.04</b>

### **3.10 Other Debits and Prior Period Items**

- 3.10.1 SLDC has not been considered Other Debits and Prior Period items. SLDC submitted that it reserves the right to claim the same at the time of true-up of the respective financial year in the next Petition.

#### **Commission's View**

- 3.10.2 The Commission has not considered any amount pertaining to Other Debits and Prior Period items.

### **3.11 Aggregate Revenue Requirement**

- 3.11.1 Based on the above component-wise submission made by SLDC and approval by the Commission, the ARR for FY 2017-18 and FY 2018-19 is summarised in the following Table:



**Table 3.11-1: Approved ARR for SLDC for FY 2017-18 and FY 2018-19 (Rs. Crore)**

Particulars	Petition			Approved by the Commission		
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2016-17	FY 2017-18	FY 2018-19
Operation & Maintenance Expenses	23.62	27.72	29.15	23.62	24.97	26.40
<i>Employee Cost</i>	20.69	24.62	25.87	20.69	21.87	23.12
<i>R&amp;M Expenses</i>	0.98	1.03	1.09	0.98	1.03	1.09
<i>A&amp;G Expenses</i>	1.96	2.07	2.19	1.96	2.07	2.19
Depreciation	4.00	4.63	6.37	3.98	4.01	5.26
Interest Charges	5.52	5.99	6.66	5.03	5.55	6.06
Interest on Working Capital	1.15	1.34	1.46	1.23	1.30	1.44
Return on Equity	2.88	3.38	4.04	2.88	3.38	4.04
<b>Net ARR</b>	<b>37.16</b>	<b>43.06</b>	<b>47.69</b>	<b>36.74</b>	<b>39.21</b>	<b>43.20</b>

## 4 DETERMINATION OF SLDC CHARGES

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### 4.1 Determination of SLDC Charges for FY 2017-18

4.1.1 The Commission in the Tariff Order dated March 30, 2012, had determined composite Scheduling and System Operation Charges of Rs. 2000 per day for Long-Term as well as Short-Term Open Access Users. The relevant paragraphs from the earlier Order are reproduced below:

*“5.20.2 The Commission in its Order No. 2 dated May 15, 2006 fixed composite Scheduling and System Operation Charges on the basis of charges specified by CERC and Other Commissions which are as under:*

*a. Long Term Open Access Consumers-Rs. 1000 per day or part thereof*

*b. Short Term Open Access Consumers- Rs. 500 per day per transaction.*

*Section-17 of CERC (Open Access in Inter-state Transmission) Regulations, 2008 states as under:*

*“Operating Charges*

*17 (1) Operating charges at the rate of Rs. 2,000 /- per day or part of the day for each bilateral transaction for each of the Regional Load Despatch Centre involved and at the rate of Rs. 2,000 /- per day or part of the day for each State Load Despatch Centre involved shall be payable by the applicant*

*....”*

*Accordingly the Commission has considered the composite Scheduling and System Operating Charges of Rs. 2000 per day for long term as well as short term open access customers.”*

4.1.2 At the admissibility hearing held on June 13, 2017, the Commission asked SLDC to submit its proposal with respect to Scheduling and System Operation Charges. However, SLDC has not submitted any proposal for Scheduling and System Operating Charges for FY 2017-18.

4.1.3 As per prevailing structure, Scheduling and System Operating Charges are composite on per day basis. The Commission is of the view that since Scheduling and System Operations are two distinct activities, the Charges should also be separate.

4.1.4 The Commission has referred to the approach adopted by Central Electricity

Regulatory Commission (CERC) for determination of RLDC Charges. CERC specifies the determination of separate charges for System Operation and market operation (Scheduling). Regulation 14 of CERC (Fees and Charges of Regional Load Despatch Centre and other related matters) Regulations, 2015, specifies as under:

***“14. Annual Charges (AC): The annual charges shall comprise annual system operation charges corresponding to the expenditure of system operation function and annual market operation charges corresponding to the expenditure of market operation function. The annual charges shall be segregated into annual system operation charges and annual market operation charges in the ratio of 70:30...***

***15. System Operation Charges: The System operation charges shall be derived separately for the inter-State transmission licensees, generating stations, sellers and distribution licensees and buyers as under:***

***(a)The System Operation Charges for inter-state transmission licensees shall be determined on the basis of 10% of annual system operation charges and shall be worked out on the basis of the ckt-km of the lines owned by inter-state transmission licensees;***

***(b)The System Operation Charges for the inter-state Generating station and sellers shall be determined on the basis of 45% of annual system operation charges and shall be worked out on the basis of installed capacity in case of the generating station and long term and/or medium term contracted capacity in case of sellers;***

***(c)The System Operation Charges for the distribution licensees and buyers shall be determined on the basis of 45% of annual system operation charges and shall be worked out on the basis of aggregate allocated capacity and contracted capacities in case of distribution licensee and long term and/or medium term contracted capacity in case of buyer;***

***16. Market Operation Charges: The Market operation charges shall be worked out on the basis of aggregated capacities for scheduling by generating stations and sellers, distribution licensee and buyers.” (emphasis added)***

4.1.5 Even though the CERC (Fees and Charges of Regional Load Despatch Centre and other related matters) Regulations, 2015, specifies the mechanism for computation of Scheduling Charges and System Operation Charges, the same cannot be adopted by the Commission in its present form, as CERC Regulations are meant for RLDCs

where modalities of operation are different compared to any particular State. Therefore, the Commission has adopted these Regulations only to the extent of segregation of Net ARR into System Operation Charges and Scheduling Charges. Accordingly, the Commission has segregated the approved ARR in the ratio of 70:30 between System Operation and Scheduling.

4.1.6 The Commission has determined the Scheduling Charges in terms of Rs. per day and System Operation Charges in terms of Rs. per MW per Day.

4.1.7 The Commission has computed the Scheduling Charges for FY 2017-18 as under:

- (a) The Net amount recoverable from Scheduling Charges has been considered at 30% of Net ARR.
- (b) The number of transactions per day has been considered as 2000.
- (c) Based on Net amount recoverable and projected number of transactions per year, the Scheduling Charges have been determined for FY 2017-18 as shown in the following Table:

**Table 4.1-1: Approved Scheduling Charges for FY 2017-18**

<b>Particulars</b>	<b>Unit</b>	<b>FY 2017-18</b>
Net Recoverable amount @30% of Net ARR	Rs. Crore	11.76
Number of transactions per day	Nos.	2,000
Number of Days	Nos.	365
Scheduling Charges	Rs./day	<b>161.15, say Rs. 160/day</b>

4.1.8 The Commission has computed the System Operation Charges for FY 2017-18 as under:

- (a) The Net amount recoverable from System Operation Charges has been considered at 70% of the Net ARR.
- (b) The allotted capacity for TANGEDCO and Long Term Open Access Consumers has been considered same as approved by the Commission in the MYT Order of TANTRANSCO.
- (c) The System Operation Charges have been determined along the same lines as determination of Transmission Charges. The Commission through Order No. 2 of 2017 dated March 28, 2017 and Order No. 3 of 2016, 4 of 2016 & 5 of 2016

dated March 31, 2016 on procurement of power from Renewable Energy sources has provided concessional System Operation Charges, with the view to promote Renewable Energy sources in accordance with Section 86 (1) (e) of the Act.

(d) The System Operation Charges are computed as shown in the following Table:

**Table 4.1-2: Approved System Operations charges for FY 2017-18**

Particulars	Unit	Formula	FY 2017-18
Net recoverable amount @70% of Net ARR	Rs. Crore	A	27.45
<b>Allotted capacity</b>			
<i>Wind Energy</i>	<i>MW</i>	<i>B</i>	7,319
<i>Bio Mass Energy</i>	<i>MW</i>	<i>C</i>	218
<i>Co-Generation</i>	<i>MW</i>	<i>D</i>	659
<i>Solar</i>	<i>MW</i>	<i>E</i>	1,529
<i>Others</i>	<i>MW</i>	<i>F</i>	18,398
Total Allotted Capacity	MW	G	28,122
No. of Days	No.	H	365
<b>System Operation Charges</b>	<b>Rs./MW/Day</b>	$I=(A \times 10^7)/((40\% \times B+50\% \times C+60\% \times D+30\% \times E+F) \times H)$	<b>33.74</b>
<b>System Operation Charges for STOA</b>	<b>(Rs./MW/Hr)</b>	$J=(I \times 100\%)/24$	<b>1.41</b>

4.1.9 The SLDC Charges determined by the Commission for FY 2017-18 are summarised as shown in the following Table:

**Table 4.1-3: Approved SLDC charges for FY 2017-18**

Particulars	FY 2017-18
Scheduling Charges	Rs. 160 per day
System Operation Charges	Rs. 33.74 per MW per day for LTOA & MTOA
	Rs. 1.41 per MW per Hour for STOA

- 4.1.10 The above determined Scheduling Charges and System Operating Charges shall be payable by the Open Access Customers, i.e., the Applicant who applies for Open Access for the requisite capacity. The Scheduling Charges are applicable for LTOA, MTOA and STOA consumers. Further, the System Operation Charges in terms of Rs per MW per day and Rs per MW per hour shall be subject to a ceiling of Rs. 500 per day.
- 4.1.11 The above determined Scheduling and System Operation Charges shall be payable at concessional rates on procurement of power from Renewable Energy sources in view of the Order No. 2 of 2017 dated March 28, 2017 and Order No. 3 of 2016, 4 of 2016 and 5 of 2016 dated March 31, 2016.

## **4.2 Summary of Directives**

- 4.2.1 The Commission directs SLDC to maintain separate Trial Balance, Accounts, Asset Registers, etc., for SLDC and submit such Trial Balance/Balance Sheet for SLDC separately at the time of filing of next Tariff Petition.
- 4.2.2 The Commission directs SLDC to submit on a quarterly basis, the details of monthly revenue earned from Scheduling Charges and System Operation Charges, along with number of transactions, revenue computation, allotted capacity, etc.

**Sd/-**  
**(Dr. T. Prabhakara Rao)**  
**Member**

**Sd/-**  
**(G. Rajagopal)**  
**Member**

**Sd/-**  
**(S. Akshayakumar)**  
**Chairman**

**(By Order of the Commission)**

**Sd/-**  
**(S. Chinnarajalu)**  
**Secretary, TNERC**

## ANNEXURES

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### Annexure I- The list of participants at the State Advisory Committee

#### Members Present:

- i. Thiru. S. Akshaya Kumar, Chairman, TNERC
- ii. Thiru. G. Rajagopal, Member, TNERC
- iii. Dr. T. Prabhakara Rao, Member, TNERC
- iv. Dr. M. Saikumar, CMD, TNEB Ltd. & TANGEDCO Ltd. and Chairman, TANTRANSCO Ltd.
- v. Thiru Vikram Kapur, Principal Secretary to Govt., Energy Department (Represented by Tmt. N. Sumathi, Deputy Secretary to Govt., Energy Department, GoTN)
- vi. Thiru. N.K. Gupta, Chief Electrical Engineer, Southern Railways
- vii. Dr. A.S. Kandasamy, Member, SAC
- viii. Dr. G. Uma, Professor and Head, Dept. of Electrical and Electronics Engg., Anna University, Member, SAC
- ix. Thiru. K. Alagu, Vice-President, Tamil Nadu Chamber of Commerce and Industry, Member, SAC
- x. Dr. K. Selvaraj, Member, SAC
- xi. Thiru. C. Babu, President, Tamil Nadu Small & Tiny Industries Association (TANSTIA), Member, SAC
- xii. Thiru. M.R. Krishnan, Deputy Director, Consumers Association of India, Member, SAC
- xiii. Thiru. K.Kathirmathiyon, Secretary, Coimbatore Consumer Cause Member, SAC
- xiv. Thiru. P. Ravichandran, Chairman, CII (Tamil Nadu) (Represented by Thiru. K.P. Gopal, Convenor, MSME Confederation of Indian Industry (CII), Tamil Nadu

**Annexure II- The list of stakeholders who have submitted written objections/  
suggestions/ views**

List of stakeholders who have submitted written objections/suggestions

<b>Sl. No.</b>	<b>Name and Address</b>
1	Indian Wind Power Association, Door No. E, 6th Floor, Tower-1, Sakthi Towers, No.766, Anna Salai, Chennai – 600 002.
2	Tamil Nadu Spinning Mills Association (TASMA), No.2, Karur Road, Modern Nagar, Dindigul – 624 001.
3	Tamil Nadu Electricity Consumers' Association, 1st Floor, SIEMA Building, 8/4, Race Course, Coimbatore – 641 018.

List of stakeholders who have submitted written objections/suggestions submitted at Madurai Public Hearing

<b>Sl. No.</b>	<b>Name and Address</b>
1	Sai Regency Power Corporation Pvt. Ltd., 2nd Floor, Crown Court, No.128, Cathedral Road, Chennai-600 086.

List of stakeholders who have submitted written objections/suggestions submitted at Coimbatore Public Hearing

<b>Sl. No.</b>	<b>Name and Address</b>
1	Thiru K. Ilango, Secretary, Tamil Nadu Electricity Consumers' Association, 1st Floor, SIEMA Building, 8/4, Race Course, Coimbatore-641 018.



**Annexure III- The list of participants at each Public Hearing.**

**List of participants in the Public Hearing held at Chennai :**

<b>Sl. No.</b>	<b>Name and Address of the speakers</b>
1	Dr. A.C. Mohan, Secretary, Federation of Tamil Nadu Rice Mills owners & Dealers Association, No.491, GNT Road, Balaji Nagar, Puzhal , Chennai 61.
2	Thiru. V.S. Kumaran, 5-2/4, Lapoliare Street, Soorakkalpattu, Cuddalore 607 001 (Tamil Nadu Consumer Organisation)
3	Thiru. Thooyamurthy, Association of Transparency & Anti corruption, No.2, Alwar Nagar 1st Street, Ullagaram, Chennai 61
4	Thiru. C. Selvaraj, Federation of Anti Corruption Teams India, No.2, Vyasar Street, North Usman Road, T.Nagar, Chennai 17
5	Thiru. S. Nagalsamy, 15A, P.T. Rajan Salai, K.K. Nagar, Chennai 78.
6	Thiru. R. Sivakumar, Siva Sundar Consultant, Plot No.4 & 4A, Kiruba Nagar,(Via) Moorthy Nagar, Kathivedu, Chennai 66.
7	Thiru. D. Rajendran, Secretary, Vandimedu House Owner Association, 56, Virattikuppam Pattai, Vandimedu, Villupuram 605 602.
8	Thiru. K.N. Gunasekaran, No.3/34, Sothupakkam Salai, Red Hills, Chennai 92
9	Thiru. K. Kalyanasundaram, General Secretary, Tamil Nadu Electricity Board (Engineers Union), No.29, Lal Bahadur Shastri Street, Lakshmi Nagar, Madhuravoyal , Chennai 95.
10	Thiru. V. Ramarao, Peoples Awareness Association, Nanganallur, Chennai 61.
11	Thiru. D. Eswaramoorthy, General Manager, Tulsian point, Apex plaza 6th Floor, No.3, Nungambakkam High Road, Chennai - 34.
12	Thiru. S. Gandhi, Power Engineers Society of Tamil Nadu, 45, Balaguru Garden, Peelamedu, Coimbatore 04.
13	Thiru. A. Ponnambalam, Orient Green Power Company Ltd., Egmore, Chennai 8
14	Thiru. Shakeel Ahmed, Assistant Manager - BD, IEX (Indian Energy Exchange), 4th Floor, Plot No.7, TDI Centre, District Centre, Jasola, New Delhi 110 025.
15	Thiru.V. Ravichandran, Founder Chairman, Citizens Guardians, New No.1, Old No:2, Bank of India Colony, Near 8th Avenue, Ashok Nagar, Chennai – 83
16	Thiru.B. Sivagami Sundaram, F3- Aiswaryam Apartments, Saravana Bhava Nagar, 3rd Cross Street, Mudichur Road, Chennai – 63
17	Thiru.G.V. Nandha Kumar, 39, Subbiah Nagar, Iyyappanthangal, Chennai – 56
18	Thiru.S. Ragunathan, No.57, 2nd Cross Street, Brindhavan Nagar,

<b>Sl. No.</b>	<b>Name and Address of the speakers</b>
	Valasaravakkam, Chennai -87
19	Thiru.Anbu , The Pensioners Association
20	Thiru. T.R. Srinivasan, Old No.16/2 New No.41/2, Srinivasan Iyyar Street, West Mambalam, Chennai 33
21	Thiru.K.Vishnu Mohan Rao, Citizen consumer and civic Action Group, 9/5, 2nd Street, Padmanabha Nagar, Adyar, Chennai – 600 020.

**List of participants in the Public Hearing held at Madurai :**

<b>Sl. No.</b>	<b>Name and Address of the speakers</b>
1.	Thiru.,R.Kathiresan, State Chairman, Tamil Nadu Fish Farmers Welfare Association, No. 32 Sunnampukara Street, Orathanadu, Thanjavur – 614625.
2.	Thiru. Maanal Paramasivam, Joint Secretary, Tamil Nadu Fish Farmers Welfare Association, Orathanadu, Pudur, Thanjavur.
3.	Thiru. Dinesh Singh, Executive Member, Tamil Nadu Rice Mill Owners Association, Madurai.
4.	Thiru.M.Gunasekar, Proprietor, MSG Modern Rice Mill, MSG Agencies, 82 Koogaiyur Road, Chinnasalem - 606 201.
5.	Thiru.M.Rajendran, Sri Saravana Hitech Agro Foods, Chinnasalem, Villupuram District.
6.	Thiru. S.K.R. Ramesh, President, Madurai Screen Printers Association, Madurai.
7.	Thiru. Pichaiah (Fish Farmer), Kallidaikurichi, Tirunelveli District – 627 416.
8.	Thiru. R. Kumaresan, (Retd. Chief Engineer),Proprietor, Ranga Blue Metals, Thendral Nagar, Theni.
9.	Thiru. Jayaprakash, May-17 Movement, 45/C, New Ramnad Road, Thangavel Thevar Compound, Madurai – 9.
10.	Thiru. Sivakumar, May – 17 Movement, 3479 TNHB Mela Anuppanadi, Madurai – 9.
11.	Thiru. Karthik Babu, Madurai Spinners Association, Kapalur, Madurai – 8.
12.	Thiru. A.K. Ramesh, Secretary, Cluster Development, 159/5, 2 Renganayaki Ammal Street, Kamarajar Salai, Madurai – 9.
13.	Thiru. T.K. Chandra Mohan, No. 14, CSB Lane, Old Kuyavarpalayam Road, Madurai – 9.

**List of participants in the Public Hearing held at Coimbatore :**

<b>S. No.</b>	<b>Name &amp; address of the Speakers</b>
1	Thiru. S. Ravikumar, Coimbatore & Tirupur District Micro and cottage Entrepreneur Association, (COTMA), Coimbatore 641 006.
2	Thiru. P. Balasubrananiam, Powerloom Association, Avinashi, Tirupur District
3	Thiru. D. Balasundaram, Ex. President, Indian Chamber of commerce & Industry, Coimbatore 641 018.
4	Thiru. K. Elango, Secretary, Tamil Nadu Electricity Consumers Association, (TECA), Coimbatore 641 018.
5	Thiru. K. Kasturirangaiyan, Chairman, Indian Wind Power Association, Coimbatore 641 018.
6	Thiru. T.S.B. Selvam, Erode District Rice Mill Owners' Association, Elumathur, Erode 638 104.
7	Thiru. M. Ramasamy, President, Tirupur Rice Mill Owner Association, 165, Chenimalai Road, Coimbatore.
8	Dr. K. Selvaraj, Secretary General, The Southern India Mills Association, 41, Race Course, Coimbatore 641 018.
9	Thiru. S.K. Rangarajan, President, The South India Spinners Association, Flat No.103, A Block, 1st Floor, Raheja Avinashi Road, Coimbatore 641 018.
10	Thiru. S.P. Velliangiri, 120 D, Pioneer mill Road, Peelamedu, Coimbatore 641 004.
11	Thiru. M. Krishnasamy, Maniakaran Palayam, Ex- Councillor, Coimbatore.
12	Thiru. A. Manickam, President, TamilNadu Small Power and Manufacture Association, 130/38, Mettu Street, Amapet, Salem-636003.
13	Thiru. V. Sundaram, President, Coimbatore District Small Scale Industrial Association ,(CODISSIA) Hozur Road, Coimbatore-18.
14	Thiru. K. Kamaraj, Kaveri Power Trading Private Limited, The Lords, Ekkatuthangal, Chennai-32.
15	Thiru. P.P. Subramanian, P.P. Associates, Electrical Engineers & Contractors, 1st Floor, 33, Kalidass Road, Ram Nagar, Coimbatore - 641 009.
16	Thiru. A.D. Thirumoorthy, Consultant, 603, Pioneer Apartment, Coimbatore – 18
17	Dr. Manokaran, Cheif Engineer (Retired), 360 A, 1st Street, Gandhipuram, Coimbatore - 12.
18.	Thiru. Maniraj, Coimbatore Pumpset Manufacturers Association, (COPMA) Coimbatore 641 006
19	Thiru. K.C.M. Duraisamy, President, Tirupur Palladam Taluk Rice Mill

<b>S. No.</b>	<b>Name &amp; address of the Speakers</b>
	Owners' Association, Tirupur - 641 604.
20	Thiru. K. Eswaran, Sivabharathi Sintex India Private Ltd. Kurumbapalayam (Post), Coimbatore - 107.
21	Thiru. M. Murugan, Chief Executive Officer, MV Power Consultants & Engineers (P) Ltd., Old No.38/6A, New No.14, I st Floor, M.V. Power Complex, Alandhur Road, Saidapet, Chennai - 15.
22	Thiru. R. Selvam, C/o Selvam Textiles, 1/99, Old Post Office Road, Kangayampalayam - 641 401.
23	Thiru. C. Krishnasamy, Electrical Supervisor, Central Prison, Coimbatore - 18.
24	Thiru. S. Rama Subbu, Chief Electrical Distribution Engineer, Southern Railway, Chennai - 02.
25	Thiru. Arulmozhi, Secretary, Open End Spinning Mill Association, 67, CR Complex, Avinashi Road, Opposite SITRA, Civil Aerodrome Post, Coimbatore.
26	Thiru. N. Selvaraj, No.24, Nehru Avenue, Maniakaran Palayam, Coimbatore-06.
27	Thiru. N. Logu, Secretary, Coimbatore Consumer Voice, Opposite Medical College, Avinashi Road, Coimbatore - 14.
28	Thiru. K. Natarajan, 11-Mookambigai Nagar, 1st Street, Ganapathy, Coimbatore-06.
29	Thiru. N. Sundarajan, Ex- Assistant Engineer, TNEB No.232, Nethaji Road, Pappanayakanpalayam, Coimbatore-37.
30	Thiru. V. Arunachalam, Kovai Solar Power (P) Ltd, Kovai Tower, 2nd Floor, No.44, Dr. Balasundaram Road, Coimbatore - 641 018.
31	Thiru. M. Murugesan, General Secretary, Power Engineers Society of TamilNadu (PESOT), 74, Swarnambika Layout, Coimbatore-09.
32	Thiru. S. Nedunchezhiyan, Thiruvalluvar Illam, No.21, S.K.C. Road, Erode-01.
33	Thiru. Era. Velusamy, President, Tirupur District Job Work Power loom weavers Association, 2/391, Udumalai Road, P. Vadugapalayam, Palladam - 641 664.
34	Thiru. S. Sanjay Kondass, Managing Director, Kondass Automation Pvt. Ltd., 5B, Sri Alamelu Nagar, Kamaraj Road, Coimbatore-641 015.
35	Thiru. K.A. Mohammed Anoo, 10/11, Kasthuri Layout, Kalavai, Kuniamuthur, Coimbatore - 641 008. .
36	Thiru. K. Natrayan, 210/16, Udumalpet Road, Near Kumar weigh Bridge, Pollachi, Coimbatore.

<b>S. No.</b>	<b>Name &amp; address of the Speakers</b>
37	Thiru. R. Balasubramanian, General Secretary, Federation of Consumer Organisation, Tamilnadu & Puducherry - FECOT. Nava Bhavan Buildings, Brough Road, Erode - 638 001.
38	Thiru. C.M. Jayaraman, Citizens Voice, Coimbatore.
39	Thiru. R. Shantha Kumar, Member, Code Review Panel of TANGEDCO, No.81, West Venkatasamy Road, R.S. Puram, Coimbatore - 02.
40	Thiru. A. Ramachandran, 3/8, Cheran Residency, Karumathanpatti, Coimbatore-641 668.
41	Thiru. R. Govindharajan, General Secretary, TNEB Engineer's Union, K.K. Nagar, Chennai-78.