

RAJASTHAN ELECTRICITY REGULATORY COMMISSION JAIPUR

Petition Nos. RERC 1059/17 and 1079/17

In the matter of approval of:

- (i) Investment Plan of Rajasthan Rajya Vidyut Prasaran Nigam Limited for FY 2017-18 (Petition No. 1059/17);
- (ii) ARR and determination of tariff for FY 2017-18 for recovery of Transmission and SLDC Charges and True up of ARR for FY 2015-16 of Rajasthan Rajya Vidyut Prasaran Nigam Limited (Petition No. 1079/17).

Coram: **Sh. Vishvanath Hiremath, Chairman**
 Sh. Vinod Pandya, Member
 Sh. Rajendra Prasad Barwar, Member

Petitioner : M/s Rajasthan Rajya Vidyut Prasaran Nigam Ltd. (RVPN)

Respondent(s) : 1. Jaipur Vidyut Vitran Nigam Ltd. (JVVNL)
 2. Ajmer Vidyut Vitran Nigam Ltd. (AVVNL)
 3. Jodhpur Vidyut Vitran Nigam Ltd. (JdVVNL)

Date of hearing : 26.04.2017

Date of Order : **26.05.2017**

ORDER

Section – 1: General

1.1 Rajasthan Rajya Vidyut Prasaran Nigam Ltd. (RVPN) has filed Petition No. RERC/1059/17 dated 24.01.2017 under Regulation no. 4 of RERC (Investment Approval) Regulations, 2006 for approval of Investment Plan for FY 2017-18.

1.2 RVPN has also filed Petition No. RERC/1079/17 dated 31.01.2017 for approval of ARR for FY 2017-18 and for True-up for FY 2015-16 under Section 62 read with Section 64 of Electricity Act, 2003 and Regulation 6 &8 of Tariff Regulations 2014 with the following prayers:

- (1) Determine cumulative surplus/deficit on Truing-up of Annual Revenue Requirement for FY 2015-16 based on Audited Accounts of RVPN for FY 2015-16 for carry forward to ARR for FY 2017-18 under Regulation 8(6) of RERC Tariff Regulations, 2014;
- (2) To impart directions to Discoms for payment of incentive for FY 2015-16;
- (3) Approve revenue requirements for FY 2017-18 based on the information furnished in the petition and attached formats;
- (4) Approve firm recovery of fixed monthly transmission charges from Discoms on the basis of % allocation and for Open Access Consumers on the basis of actual capacity in Rs/kW/ Month and Paisa/kWh as the case may be;
- (5) Approve the tariff for recovery of transmission charges for Collective Power Exchange Transactions and charges for inter-State short term open access customer on per kWh basis for FY 2017-18;
- (6) Approve the revenue requirement for SLDC function by RVPN for FY 2017-18;
- (7) Approve SLDC Charges for FY 2017-18 and recovery of same from Discoms and other long term users and Open Access Consumers on monthly basis;
- (8) Allow furnishing of additional data and information and/or modification of the information submitted;
- (9) And pass such other and further orders as are deemed fit and proper in the facts and circumstances of the case.

1.3 The Commission conveyed the data gaps found in the Petitions to RVPN on 27.02.2017, 07.03.2017 and 10.03.2017. RVPN in response has filed the reply vide its letters dated 14.03.2017, 17.03.2017 and 24.03.2017.

- 1.4 As required under Section 64 (2) of the Electricity Act, 2003, the Commission allowed RVPN to publish notices with salient features of the petition inviting comments/ suggestions from Stakeholders in the newspapers. RVPN accordingly had published the abridged petition in the following newspapers on the dates shown as under:

Table 1: Publication of Public Notices

Name of Newspaper	Date of Publication
Petition No. 1059/17	
Danik Bhaskar (Hindi)	23.02.2017
Rashtradoot (Hindi)	23.02.2017
Times of India (English)	24.02.2017
Petition No. 1079/17	
Rajasthan Patrika (Hindi)	02.03.2017
Danik Bhaskar (Hindi)	02.03.2017
Rashtradoot (Hindi)	02.03.2017
Danik Navjyoti (Hindi)	02.03.2017
Times of India (English)	03.03.2017

- 1.5 The petitions were also placed on the RVPN and Commission's website. The last date for submission of comments/suggestions on Petition No. 1059/17 was kept as 20.03.2017 and the last date for submission of comments/suggestions on Petition No. 1079/17 was 27.03.2017.
- 1.6 The comments/suggestions have been received on the petitions from the following Stakeholders:

Table 2: Comments/Suggestions received on the Petitions

Petition No.1059/17
(1) Sh. G.L. Sharma
(2) Sh. B.M. Sanadhya
(3) Discoms
Petition No.1079/2017
(1) Sh. G.L. Sharma
(2) The Rajasthan Textile Mills Association
(3) Sh. Shanti Prasad
(4) Discoms

- 1.7 As the approval of Investment Plan will have a direct impact on ARR and Tariff of RVPN, the Commission decided to take up the petition for approval of Investment Plan for FY 2017-18 along with ARR and Tariff Petition.
- 1.8 The public hearing in the matter was held on 26.04.2017.
- 1.9 During the public hearing, the Officers representing the Petitioner appeared and reiterated the submissions made in the Petitions and prayers made therein. The Stakeholders also presented their views on the Petitions. The list of Stakeholders and representatives of the Petitioner/ Respondents present during the hearings is enclosed to this order as **Annexure-1**. To facilitate references, the abbreviations used in this Order are placed at **Annexure-2**.
- 1.10 In exercise of the powers conferred under Sections 62, 64 and other provisions of the Electricity Act, 2003, read with RERC (Terms and Conditions for Determination of Tariff) Regulations, 2014, RERC (Investment Approval) Regulations, 2006 and other enabling Regulations, the Commission has carefully considered the submissions of the Petitioner and the suggestions/objections submitted by the various Stakeholders. The Commission has passed the following Order.
- 1.11 This Order has been structured in 7 sections, as under:

Sr. No.	Particulars	Page No.
Section 1:	General	1-4
Section 2:	Summary of Objections/Comments/Suggestions and RVPN's response on Investment Plan for FY 2017-18, Truing-up for FY 2015-16, ARR for Transmission and SLDC Function for FY 2017-18	5-28
Section 3:	Analysis of Truing-up of ARR for Transmission & SLDC function for FY 2015-16	29-48
Section 4:	Analysis of Investment Plan for FY 2017-18	49-51
Section 5:	Analysis of ARR for Transmission function for FY 2017-18	52-70
Section 6:	Analysis of ARR for SLDC function for FY 2017-18	71-77
Section 7:	Applicability	78
Annexure	Annexure 1, 2 and 3	79-84

Section – 2: Summary of Objections / Comments / Suggestions and RVPN's Response on Investment Plan for FY 2017-18, Truing-up for FY 2015-16 and ARR for Transmission and SLDC Function for FY 2017-18

A. Investment Plan for FY 2017-18

Stakeholders' Suggestions / Comments

(1) Details regarding ongoing schemes

- 2.1 The Petitioner mentioned that power evacuation schemes have been given priority to ensure that commissioning matches with the new generation capacity schedules. In the light of above, the Petitioner may submit detailed information such as, names, location, commissioning dates of new generating station along with the list of lines relevant to specific generating units.

RVPN's Response

- 2.2 RVPN submitted the updated position of forthcoming generation projects with their date of commissioning, as intimated by Generating Companies along with copies of their letters.
- 2.3 RVPN further submitted that the details of Associated Transmission System (ATS) for evacuation of power from generating units has already been mentioned in the Form No.-2 of the Petition.

(2) Ongoing schemes

Stakeholders' Suggestions / Comments

- 2.4 The Stakeholder submitted that the completed schemes, such as 765/400 kV, 2 x 1500 MVA transformer at Phagi (South Jaipur) GSS, 2 x 1500 MVA transformer at Anta (Baran) have passed the cut-off date as per Regulation 2(17) of RERC Tariff Regulations, 2014. These schemes should be deleted from the Investment Plan. The Petitioner should provide justification as to why it took so long (4 years) to complete these schemes resulting in an increase in interest during construction. The Stakeholder also referred to various other schemes like construction of terminal bays, small works like LLO of various lines, etc. taking around 3 to 4 years for completion, and sought clarification for such long period.
- 2.5 The Petitioner should clarify whether installation of additional 1 x 1500

MVA, 765/400 kV transformer at pooling station Anta (Baran) was in the original project report or not.

- 2.6 The Petitioner should clarify as to why various schemes, commissioned during or before the year 2015, are still shown as ongoing schemes. These schemes have already passed their cut off dates as per the provision of RERC Tariff Regulations, 2014.

RVPN's Response

- 2.7 RVPN submitted that in a project, some of the works, viz. additional transformers (as per plan) and miscellaneous balance electrical and civil works are to be executed as per system requirement. Hence, if one of the rated transformers at GSS and its associated line is completed, the said project is declared as commissioned. However, the project is treated as complete when all the works mentioned in the project report have been completed, and till then, it is required to keep the provisions in the Investment Plan for such schemes even after commissioning. Therefore, the date of commissioning of any project is not the cut-off date and some provision has been kept for the balance works (like additional transformers depending upon growth of load in the area, pending civil works, etc.) which are capital in nature and required to be included in the present Investment Plan.
- 2.8 The Petitioner further submitted that even after commissioning of the scheme, provisions are kept in the Investment Plan for one year for the balance works. After that, for subsequent two years, the provisions are kept under the head 'Carried Over Liabilities' (if required) for the expenditures on the balance works. Finally, in case the works remain incomplete even after three years, the provisions are kept under the 'Balance Work' head by reducing the provisions for the on-going schemes. Therefore, this has not caused additional increase in the Plan size.
- 2.9 765 kV GSS at Phagi (South Jaipur): Contract awarded to M/s L&T for ICT -1(1 x 1,500 MVA) & ICT-2 (1 x 1,500 MVA) dated 02.11.2011. Contracted supply date was 31.05.2013 and actual supply date was January 2014. There was delay in supply for which penalty @ 5% without Price Variation (approx. Rs. 4.00 Crore) has been recovered from the contractor.

- 2.10 765 kV GSS at Anta: Contract awarded to ALSTOM T&D for ICT-1 (1x 1,500 MVA), ICT-2 (1 x 1,500 MVA) and ICT-3 (1 x 1,500 MVA) dated 02.11.2011. Contractual supply date was 01.07.2013 and actual supply date was 03.04.2014 (for 2 Nos. ICTs) and 12.05.2014 (3rd ICT). There was delay in supply for which penalty @ 5% without Price Variation (approx. Rs. 5.40 crore) have been recovered from the contractor.
- 2.11 The justification for delay in the schemes is given in the petition under heading 'Statutory Clearances & completion period of schemes' in Form-1. However, completion period of aforesaid project has been extended due to some reasons viz RoW, contractual issues & court cases, etc.
- 2.12 The installation of additional 1 x 1,500 MVA, 765/400 kV transformer at pooling station Anta (Baran) was not the part of composite power evacuation system for Chhabra Super Critical TPS & Kalisindh TPS but the same was approved by BoD of RVPN on dt. 23.03.2010 with evacuation system of Kawai Super Critical TPS (2 x 660 MW).

(3) Loss reduction schemes

- 2.13 As regards schemes commissioned during or before the year 2015, being shown as ongoing schemes, RVPN submitted that the Form-2 sought information of Expenditure/Provision (revised) in any schemes which were On-going during previous FY 2016-17 (Col. 12), causing inclusion in Petition 2017-18 and cannot be deleted from the present Investment Plan Petition.

Stakeholders' Suggestions / Comments

- 2.14 As regards the loss reduction schemes to meet the requirement of Discoms by way of creation of new 132 kV substations near load centre of 33 kV network and creation of new 765 kV/400 kV/220 kV system, the Stakeholder has inquired whether the Discoms have made any request to RVPNL for creation of new 132 kV sub-stations, stating their load center of 33 KV network, specifying the location where such substations are required. The Stakeholder further submitted that if no such request has been made, RVPN should justify the basis for creation of the new substations. The Stakeholder also sought details such as how much load would be transferred to new substations from nearby substations, the

peak demand of such substation in the last 3 years, the current transmission loss of such substation, the expected transmission loss after installation of new substations.

- 2.15 The Petitioner should specify the transmission losses of Sangner-Chaksu line post and prior to its upgradation from 132 kV to 220 kV. The Petitioner should also provide loss reduction progress for various schemes already commissioned for loss reduction.

RVPN's Response

- 2.16 RVPN submitted that the 132 kV substations are being sanctioned/ created as per the requirement/ request of Discoms. A number of proposals have been sent by the Discoms for creation of new 132 kV substations in their area. These 132 kV substation proposals are prepared as per the loading conditions on 33 kV system and future load growth in the area and are supported by a detailed study based on the system technical parameters viz. Voltage Regulation, Demand Loss, Annual Energy Savings in the system after creation of substation.
- 2.17 765 kV, 400 kV & 220 kV substations are being sanctioned by RVPN as per the requirement of transmission system (without the request of Discoms) to strengthen the transmission system, reduce the loading of EHV transmission lines, increase the power supply reliability in the area. The Petitioner carries out continuous study of the system parameters and if the system parameters have reached to the limits prescribed by the Commission, a new substation is proposed. New 765 kV, 400 kV & 220 kV substations are also sanctioned/ created for the evacuation of power from the newly sanctioned/ created Thermal/ Solar/ Wind Power plants.
- 2.18 Saving in the transmission losses has also been mentioned in Form-2 (column 14 Remarks / Justification for the scheme) in the schemes, wherever these are applicable. RVPN further submitted that the intra State transmission losses at the end of FY 2015-16 were 3.89% and 3.80% (average) up to January, 2017. The target set at the end of FY 2017-18 shall be 3.65%. Therefore, the transmission losses are reducing in nature in the present and future scenario.

(4) Additional Capitalization

Stakeholders' Suggestions / Comments

2.19 The Stakeholder referred to the APTEL's judgment dated 23.3.2011 in Appeal No. 91 and 92, and submitted that the proposed provision, of Rs. 24 Crore for replacement of plant and machinery/equipment in transmission system, Rs. 2 Crore for replacement of old, obsolete and unserviceable PLCC equipments, Rs. 26 Crore in respect of old miscellaneous works, etc. should not be allowed as these are to be met from Operations and Maintenance expenses.

RVPN's Response

2.20 The Capital expenditure is being booked in case of replacement of plant & machinery/equipment in transmission system only in case of the followings:

- I. When expenditure is non-recurring in nature.
- II. The replacement is useful over a number of years.
- III. If the earning capacity is increased by replacement of plant, machinery and equipment.
- IV. Otherwise it shall be booked to revenue expenditure.

2.21 The replacement of old, obsolete and unserviceable PLCC equipments have been prepared/ approved for the modernization of the communication and PLCC protection equipments. The scheme includes purchase and installation of new PLCC equipments at various EHV GSSs of RVPN. The equipments to be installed have a service life of more than 1 year, therefore, expenditure on such equipments should be treated as capital expenditure and not as O&M related works.

2.22 RVPN further submitted that it has recently implemented the SAP-ERP solutions for proper accounting, monitoring of various on-going projects. As per the requirement of the SAP-ERP, no expenditure can be booked on capital works without creation of a project in SAP. There are number of projects on which some balance work is pending viz. construction of colony, roads, miscellaneous work in switch yard. These works are being carried out as per the various requirements in projects. Therefore, a separate provision has been made in SAP-ERP module to

cater the expenditure made on such works. This provision has been made by reducing the budget provisions of the various on-going projects in which slow work progress has been observed and hence there will be no effect on the Plan size. Further, these works are of capital in nature and cannot be treated as O&M works.

(5) Competitive Bidding

Stakeholders' Suggestions / Comments

2.23 The Petitioner should specify whether competitive bidding has been invited for all the works of construction of transmission lines and grid substations mentioned in the Investment Plan, in line with the provision of Tariff Policy 2016.

RVPN Response

2.24 RVPN submitted that it is executing various projects through competitive bidding viz., Turnkey projects, PPP projects, procurement of material and labour contracts, etc.

(6) Schemes for Evacuation of Power for New Solar and Wind Plants

Stakeholders' Suggestions / Comments

2.25 The Petitioner should submit details such as the load assessed, proposed date of commissioning, etc. of new wind and solar generators for which the new 765/400 kV evacuation system in the western and south-eastern Rajasthan is proposed.

2.26 The Stakeholder submitted that the proposed schemes at S. No. 32, is primarily for evacuation of power from proposed wind projects in Banswara and Pratapgarh, while there is no wind developer in these areas. The Commission should disallow the above schemes as the need for investment in power evacuation from proposed wind project does not arise in these areas.

RVPN Response

2.27 RVPN submitted that the quantum of load assessed for which transmission system for evacuation has been proposed was 18,603 MW, which is lower than the 18th EPS (i.e. 19,692MW). The same load has been considered for design of power evacuation system for Wind/Solar for complete State. RVPN further submitted that load is decided

on the basis of EPS and recorded peak load and past trend of load growth.

- 2.28 Regarding transmission evacuation for wind and solar plant, the Petitioner submitted that RE projects are commissioned in phased manner, after commissioning of new transmission system in the area.
- 2.29 The Petitioner submitted that since Wind Power plants have not been installed by the developers in the Banswara District, therefore, proposed 400 kV GSS Banswara with ATS has been dropped. However, as 230 MW of Wind Power plants have been installed by the developers in the Pratapgarh District, therefore, 220 kV GSS Pratapgarh along with ATS is being constructed.

(7) Evacuation of power from yet to be commissioned schemes

Stakeholders' Suggestions / Comments

- 2.30 The Petitioners should justify the schemes for evacuation of power from unit 7 and 8 of Suratgarh Super Critical Thermal Power station, and Banswara Super Critical Thermal Power station, as these units are yet to be commissioned and these schemes have unnecessarily burdened with interest, depreciation, working capital, operation and maintenance, etc. the Commission should disallow such idle investments.

RVPN Response

- 2.31 As regards, evacuation of power from Suratgarh Super Critical TPS, RVPN submitted that as per status received from RVUN, Suratgarh Super Critical TPS-Unit 7 (1 x 660 MW) is to be commissioned by April 2017 and Unit 8 (1 x 660 MW) by June 2018. However, Suratgarh Super Critical TPS -Unit 7 (1 x 660 MW) has not been commissioned yet.
- 2.32 In view of the said condition, when there would be no generation from Suratgarh Super Critical TPS, then the associated transmission system would also be delayed, but the anticipated load growth or energy requirement of the State would continue to increase and thus it would be difficult to meet the load and also to maintain the technical parameters within the permissible limits. The above scenario would also affect the redundancy of transmission system in Rajasthan and the stability would also deteriorate. Therefore, in order to obviate such a

precarious situation, it was considered to de-link the proposed 400 kV D/C Suratgarh Super Critical TPS- Babai (on Quad Moose) line along with 400 kV GSS at Babai from the Approved Evacuation System. However the load flow studies indicate that the availability of this line along with 400 kV GSS at Babai would be beneficial, even in the event of delay in the commissioning of 2 x 660 MW units at Suratgarh Super Critical TPS, as this transmission line and GSS would be partly carrying generation from the existing 5 x 250 MW units of Suratgarh TPS, strengthen and improve the redundancy in the existing evacuation system of Suratgarh.

- 2.33 As regards, Banswara Super Critical TPS, the evacuation system for Banswara Super Critical TPS has been dropped on 7.1.2016. 400 kV D/C Ajmer - Bhiwara - Chittorgarh line along with 400 kV GSS at Chittorgarh are essential in order to include 400/220 kV GSS at Bhiwara in the ring and enhance the reliability of power supply under outage of important 400 kV or 220 kV lines in that area. 400 kV D/C Ajmer - Bhiwara - Chittorgarh line would also strengthen the power evacuation system of Kalisindh TPS, Kawai Super Critical TPS & Chhabra TPS. Accordingly, aforesaid transmission system has been delinked from the Banswara SCTPS and preponed. Accordingly, 220 kV inter-connections at these 400/220 kV GSS would also be required for dispersal of power up to load centres.

(8) Cost of Completed Schemes

Stakeholders' Suggestions / Comments

- 2.34 The Petitioner should provide the total cost as on their date of commissioning in two parts i.e., the hard cost and the interest during construction, for all the completed schemes.

RVPN's Response

- 2.35 RVPN submitted that it is very difficult to give the exact data of projects viz. actual start date, actual completion date, hard cost expenditure & IDC in the conventional accounting system because many expenditures on already completed project are being settled at a later stage. To cater this problem RVPN is implementing an accounting software SAP-ERP. After implementation of this, the exact accounting

details could be provided in future.

(9) Training of Employees and Technical Investigation Reports

Stakeholders' Suggestions / Comments

- 2.36 The Petitioner has not included any scheme for providing proper training to the employees in the Investment Plan, as per the provisions of CEA (Measures Relating to Safety and Electricity Supply) Regulations, 2010. The Petitioner should also take initiative for providing proper infrastructure and working environment to all its employees. The Stakeholder further submitted that provision should be made for investments for protection and maintenance of RVPN's property.
- 2.37 The Petitioner should provide reports for the failure/damage of 400 kV transformers, fatal accidents during FY 2015-16 and FY 2016-17 along with investment/preventive measures that have been taken to address such issues.

RVPN's Response

- 2.38 Training to the staff is being given regularly.
- 2.39 No 400 kV Transformer has been damaged during FY 2015-16 and 2016-17.

(10) Capital Investment

Stakeholders' Suggestions / Comments

- 2.40 The Stakeholder submitted that the Investment Plan of Rs. 2,680 Crore seems unjustified, considering the fact that the actual average annual investment in the last 4 years was around 1850 Crore. The Stakeholder further added that the proposed addition of 7,129 MVA transformation capacity, when the peak demand is lower than that of FY 2016-17 also needs justification, and accordingly requested the Commission to approve an Investment Plan capped at 75% of the Investment Plan proposed by the Petitioner for FY 2017-18.
- 2.41 The Stakeholder submitted the actual investment for FY 2015-16 and the anticipated investment for FY 2016-17 are considerably lower than the values earlier petitioned for FY 2015-16 and FY 2016-17, considering the same Commission shall consider a reduced investment for the purpose of determination of tariff, any changes in this regards may be

considered while truing up.

RVPN's Response

2.42 RVPN submitted that the Investment Plan cover various schemes for overall system strengthening, considering the future requirement. It is not limited to meeting peak requirement. The schemes proposed in the Investment Plan mainly cover following requirements: -

- i. System emanating from new generating stations.
- ii. Requirement of strengthening of existing transmission system.
- iii. Requirement received from Discoms.

2.43 RVPN has reduced the Investment Plan from Rs. 2,680 Crore to Rs. 2,032.54 Crore for FY 2017-18.

(11) Others

Stakeholders' Suggestions / Comments

2.44 The Petitioner should state the location and purpose of installation of 1 x 160 MVA transformer mentioned at S. No. 18, Page 8, along with the load assessment details for the same. The Petitioner should also provide similar details for schemes mentioned at S. No. 19(ii).

2.45 The Commission should disallow the proposed provision of Rs. 40 Crore for substations and lines in respect carried over liabilities of closed Schemes. These schemes were commissioned in the last 3 years, while as per the Regulation 17(1) of Tariff Regulations, schemes commissioned in the last 1 years are to be consider under this provision.

2.46 The Stakeholder submitted that schemes financed by ADB/ KfW should be taken up only if such schemes are required and not only because of availability of loan at the lower interest rates. The Stakeholder further submitted that the slow progress of such schemes has also increased the interest element and hence such schemes may be deleted.

RVPN's Response

2.47 The scheme at S. No. 18 i.e. 400kV GSS at Ramgarh consists of 400/220 kV, 3 x 500 MVA transformers, 220/132 kV, 3 x 160 MVA transformers and 132/33kV, 2 x 40/50 MVA transformers. It is relevant to mention that works at S. No. 18 (i) i.e. 400 kV works are proposed under ADB funding

and 220 kV works are under-other RVPN funding. Hence, both are shown separately but it is one scheme at the same place to evacuate power. Similar status may be treated for schemes at S.No.19 (i) & 19(ii) as above.

2.48 RVPN submitted that the works covered under the head carried over liabilities are balance Civil & Electrical works of the substation & lines commissioned in the last 3 years. These works are of capital in nature, therefore, could not be treated as O&M works.

2.49 As regards schemes financed by ADB/ Kfw, RVPN submitted that such schemes are based on requirement given by the RREC. Further, the delay in the progress/process in the scheme is due to some field problem.

B. True up of FY 2015-16

(1) Annual Accounts

Stakeholders' Suggestions / Comments

2.50 The Petitioner has submitted two Annual Accounts i.e., standalone accounts and consolidated accounts. The Stakeholder submitted that the figures submitted in consolidated accounts should always be higher than the figures submitted in standalone accounts. However, in the present petition, the Stakeholder has noted several figures of standalone accounts higher than figures as mentioned in the consolidated accounts. The Stakeholder has highlighted the example of 'Other Income', 'Segment total' and 'Administrative and Other Expenses'. The Stakeholder sought justification of these differences from RVPN.

RVPN's Response

2.51 RVPN submitted that the Standalone Financial Statements have been prepared combining three segments of RVPN i.e. Transmission, SLDC and Generation. Consolidated Financial Statements combine RVPN and its five Subsidiary Companies and have been prepared as per methodology given in Accounting Standard. The amount of Rs. 1,77,89,944 is interest Income from subsidiary companies which has been adjusted in the interest income in Consolidated Financial Statements.

2.52 Consolidated Financial Statements combine RVPN and its five Subsidiary Companies and have been prepared as per methodology given in Accounting Standard. Various common items of Income and Expenditure are adjusted at the time of preparation of Consolidated Financial Statements. The Standalone Financial Statements and the Consolidated Financial Statements of RVPN for 2015-16 have been prepared correctly as per Accounting Standards and the same has been audited by the Statutory Auditors and AG.

(2) Operation and Maintenance Expenses

Stakeholders' Suggestions / Comments

2.53 The Stakeholder submitted that apart from 'Repairs & Maintenance Expenses' and 'Less Capitalized of O&M', no other figures are shown in the annual accounts. The Petitioner should submit item-wise details of actual Operation and Maintenance Expenses as shown in Table - 1 on Page 3 of the Petition. The Stakeholder further submitted that O&M expenses as per annual accounts is Rs. 780.36 Crore, while normative expenses claimed as per Petition is Rs. 836.98 Crore. Therefore, since there is a surplus of Rs. 56.12 Crore to this account, the Commission may direct RVPN to pay Rs. 56.12 Crore to two trusts out of the normative O&M expenses and balance of recognised expenses, i.e. Rs.31.76 Crore to be paid during FY 2017-18. The Stakeholder also sought information on the amount remitted to pension and gratuity trusts in FY 2016-17 and proposed to be remitted in FY 2017-18.

RVPN's Response

2.54 In its reply RVPN has submitted the detailed breakup of actual O&M expense at Annexure -3. Further, regarding deposit of excess amount of O&M expenses in terminal benefit trusts, the RVPN has submitted that the action will be taken as per the order of the Commission. RVPN has informed that it has deposited an amount of Rs. 172 Crore during FY 2016-17 and the balance amount will be deposited in FY 2017-18.

(3) Gross Assets

Stakeholders' Suggestions / Comments

2.55 The Stakeholder submitted that the Petitioner has not supplied the information of gross assets as per Regulation 22 (4) of Tariff Regulations, 2014.

RVPN's Response

2.56 RVPN submitted that it has provided the required information in a CD.

(4) Depreciation

Stakeholders' Suggestions / Comments

2.57 The Petitioner has mentioned that there has been increase in depreciation due to new methodology as per RERC Regulations, 2014, however, the Petitioner has not pointed out the methodology, which has increased the depreciation. The Stakeholder submitted that, as far as depreciation is concerned, the Tariff Regulations of 2004 and 2014 are similar. Therefore, the Petitioner should substantiate as to how there is an increase in depreciation due to Tariff Regulations, 2014.

RVPN's Response

2.58 RVPN submitted that post financial year 2014-15 and onwards, the depreciation has been calculated at the rates/useful life and methodology, notified vide RERC (Terms and Conditions for Determination of Tariff) Regulations 2014. Prior to 2014-15, the depreciation had been charged as notified by the Forum of Regulators dated 23.06.2006 in pursuance to Para 5.3(c) of the Tariff Policy issued by the Ministry of Power, Gol dated 06.01.2006 duly adopted by RERC.

(5) Interest on Loan

Stakeholders' Suggestions / Comments

2.59 The Stakeholder submitted that Interest on loan is to be allowed only on normative loan. The Stakeholder further submitted that the Petitioner has given advances of Rs. 57.89 Crore to its five subsidiaries, which should be deducted from the normative loan amount. Further, interest charges capitalized are to be reduced from gross interest charges for computation of net interest charges to be allowed. Also, no interest on any short term loan (other than working capital) is admissible to the Petitioner.

2.60 The Stakeholder has further submitted that the Petitioner has calculated interest charges, for FY 2015-16 by considering opening balance of loan as Rs. 8,732.79 Crore, while as per true up for FY 2014-15 the closing balance of loan for FY 2014-15 is Rs. 6,350.59 Crore. Since the true up

has already been carried out for FY 2014-15, the opening balance of loan for FY 2015-16 shall be taken as Rs. 6,350.59 Crore, which will result in reduction in interest charges. This incorrect calculation of opening balance has also increased the interest charges for FY 2017-18.

RVPN's Response

2.61 RVPN submitted that it has taken loan on the cheapest available interest rate. Weighted Average rate has been calculated @9.63%.on 30.09.2016. Loans have been taken for specific projects. These companies are wholly owned subsidiary companies of RVPN and they have been incorporated for development of EHV transmission lines and GSS, therefore, it may be considered that the expenditure of these subsidiary companies have been met from own sources. RVPN is following the direction issued by RERC. Short term loan is working capital loan which is allowed on normative basis.

(6) Bad Debt

Stakeholders' Suggestions / Comments

2.62 The Petitioner has claimed other expenses of Rs. 324.97 Crore for FY 2015-16, consisting of 324.29 Crore of bad debts from AVVNL, which is against the provisions of RERC Tariff Regulation 2014 (only 0.25% of receivables are allowed to be claimed as provisioning for bad debt/write-offs), as well as against the ruling of the Commission in the true-up of FY 2014-15. The Petitioner has not submitted any reasons for such deviation from the norms stipulated under the regulations, therefore this bad debt shall not be considered as expenses.

RVPN's Response

2.63 RVPN submitted that it has claimed bad debts as per the provision under RERC Tariff Regulations, 2014.

(7) Insurance charges

Stakeholders' Suggestions / Comments

2.64 The insurance charges of Rs. 0.32 Crore claimed by the Petitioner, appear to be insurance charges towards vehicles and not in respect of assets, therefore, should not be admitted.

RVPN's Response

2.65 RVPN submitted that vehicles are used in development of transmission system in the Rajasthan. Therefore, actual expenses have been claimed.

(8) Other Items

Stakeholders' Suggestions / Comments

2.66 The Petitioner has claimed Rs. 22.25 Crore towards 'Other Items' in the schedule 33 of the Accounts. However, these expenditures consist of Rs. 7.84 Crore of 'Prior Period Expenses' towards operating expense. The Petitioner has not stated how such amount has been arrived upon, further since the Commission has already finalized the true –up of all past period up to FY-2014-15, there cannot be any prior period expenses. Hence there is no admissibility for any amount of Prior Period expenses.

RVPN's Response

2.67 RVPN submitted that the prior period operating expenses and depreciation have been shown in the financial statements for the FY 2015-16 due to less booking in earlier year(s) as per Accounting Standards. Consequently, the same have not been claimed earlier in ARR. So the same should be allowed in ARR of 2017-18.

(9) Equity and Revenue

Stakeholders' Suggestions / Comments

2.68 The Stakeholder sought information about opening balance of equity and date-wise equity infused during the year

2.69 In respect of revenue, the Petitioner shall submit information such as

- (a) The actual transmission capacity handled for each Discom during FY 2015-16;
- (b) The capacity handled in respect of each long term and short term Open Access Consumers along with the amount received;
- (c) The necessary transmission charges recovered from various agencies such as power stations of central agencies (Anta, RAPP) etc., other than Discoms whose power is also transmitted through

its network, along with the account head where it has been accounted.

- 2.70 In respect of transmission charges, the amount of revenue received by the Petitioner and stated as paid by Discoms does not match and there is a big difference of Rs. 3,277.34 Crore. The Petitioner should provide detailed justification for such differences and mention where this excess amount has been accounted for.

RVPN's Response

- 2.71 RVPN submitted the opening balance of equity during FY 2015-16 and date-wise equity infused during the year.
- 2.72 RVPN submitted that the details of transmission capacity handled for each Discom, are available in TTU-12. RVPN has also submitted the information regarding short term and long term open access as sought by the Stakeholder.
- 2.73 RVPN further submitted that the amount recovered in FY 2015-16 is Rs. 147.07 Crore against the arrear bills of Rs.128.52 Crore w.e.f. July 2011 to March 2015 & bill of Rs. 37.48 Crore for FY 2015-16 from PGCIL under account head No. 61.452 for the yearly transmission charges of ISTS lines of RVPN as per CERC order dt. 18.03.2015 in Petition No.213/TT/2013 and as per NRPC order dated 08.06.2011.
- 2.74 As regards, transmission and SLDC charges RVPN submitted that revenue has been booked correctly as per the order of RERC in the financial statements of RVPN for FY 2015-16 and the same has been audited by the Statutory Auditor and AG.

(10) Capital Expenditure and Capitalization

Stakeholders' Suggestions / Comments

- 2.75 The Petitioner has capitalized an amount of Rs. 3.23 Crore, Rs. 0.53 Crore and Rs. 0.21 Crore in respect of office equipment, furniture and fixtures, and vehicles respectively. The Commission should disallow this capitalization.
- 2.76 The Petitioner shall provide detailed information regarding additional capitalization of relevant assets, such as buildings, plant and machinery, transmission line assets etc., information such as cost, date

of commissioning, location and purpose shall be provided.

RVPN's Response

- 2.77 RVPN submitted that the office equipment, furniture and fixture and vehicles are capitalised as per the Accounting Standards because these are having useful life of more than one year and they are also used in support of Transmission Network in Rajasthan.
- 2.78 As regards, detailed information regarding additional Capitalization of relevant assets, RVPN submitted that the detailed information is available in the Fixed Assets Register, which has been submitted in CD.

(11) Augmentation and commissioning of 220 kV and 132 kV lines

Stakeholders' Suggestions / Comments

- 2.79 In respect of augmentation of 710 MVA capacity of 220 kV and 1040 MVA of 132kV, the Petitioner shall specify:
- a. The depreciation along with the accumulated depreciation value of removed /replaced assets on the date of removal.
 - b. Whether the augmentation is done through new assets or through repaired ones of earlier removed assets.
 - c. In respect of removed assets, whether they have completed their useful life or not. The period during which these assets have remained in operation.
 - d. Whether these assets have been removed from the total gross assets.
 - e. Information related to commissioning of various 220 KV lines and 132 KV lines was sought.
 - f. The Petitioner shall also mention if these lines are included in the Investment Plan or not.

RVPN's Response

- 2.80 RVPN submitted that the augmentation programme is generally taken by adding new capacity/by shifting existing transformer from one substation to another substation.
- 2.81 As regards, date of commissioning of 220kV and 132 kV lines RVPN has

submitted the required information.

(12) Compliance of Directions

Stakeholders' Suggestions / Comments

- 2.82 The Stakeholder submitted that the reply given by the Petitioner to the Direction given by the Commission to deposit Rs. 381 Crore in pension and leave encashment trust is not justified. The Petitioner in compliance to the above direction has stated that the sum would be deposited in FY 2016-17 subject to availability of funds. Since, FY 2016-17 has already ended, the Petitioner should categorically state as to whether the amount has been deposited or not.
- 2.83 The Stakeholder submitted that as per the direction of the Commission, a summary of category wise assets, rates and respective depreciation, segregated in less than 12-year period and more than 12-year period etc., has to be appended in the petition. In compliance to the above direction, the Petitioner has stated that the information has been provided in CD to the Commission. This reply is not sufficient, as such information shall also be provided in public domain.

RVPN's Response

- 2.84 RVPN submitted that it has deposited Rs. 172 Crore in pension and leave encashment trust during FY 2016-17.
- 2.85 RVPN submitted that the depreciation for the FY 2015-16 has been charged as per methodology notified vide Rajasthan Electricity Regulatory Commission (Terms and Conditions for determination of Tariff) Regulations, 2014. Accordingly, Fixed Assets Register having all the details has also been prepared. The same has already been submitted to Commission in CD.

(13) Transmission and SLDC charges

Stakeholders' Suggestions / Comments

- 2.86 The Petitioner has incorrectly filled the From No. TTU-12. As per the Commission's Order dated 14.08.2015 the rate of transmission charges is specified as Rs./KW/Month, hence the power transmitted should have been in KW. The Petitioner shall provide the correct figure accordingly in this form.

- 2.87 The Petitioner shall state whether any SLDC charges are being recovered from agencies other than Discoms along with the amount recovered if any.
- 2.88 The Petitioner shall submit the certificate from SLDC about availability of transmission system.

RVPN's Response

- 2.89 RVPN submitted that in form TTU -12, Column 3 may be read as MW and Column 4 as Rs. /KW/Month.
- 2.90 RVPN has submitted the abstract of SLDC charges recovered from agencies other than Discoms as Rs. 9,96,49,387/-.
- 2.91 RVPN has submitted the percentage system availability in Standard of Performance of RVPN for the FY 2015-16 as submitted to RERC as follows: -

Table 3: Standard of Performance for RVPN for FY 2015-16

Level Achieved by RVPN during the year 2015-2016 (01.04.2015-24.02.2016)		
132 kV	33 kV	11 kV
99.85	99.66	99.69
Level Achieved by RVPN during the year 2015-2016 (25.02.2016 to 31.03.2016)		
132 kV	33 kV	11 kV
99.77	99.80	99.78

C. ARR and Tariff Determination for FY 17-18

(1) Energy Requirement

Stakeholders' Suggestions / Comments

- 2.92 The Petitioner has stated that the Discoms have intimated the projections of energy requirement for FY 2017-18, while no document has been submitted by the Petitioner to substantiate the same. In this regard, Petitioner should provide copy of communication received from each Discom. The Petitioner should also provide Discom-wise peak demand for FY 2017-18.
- 2.93 The auxiliary losses of various generating stations are on a lower side, which has raised the quantum of the power flow on transmission system, which seems on a higher side. The auxiliary losses shall not be

taken lower than the normative auxiliary losses prescribed by the respective Commission.

RVPN's Response

2.94 RVPN submitted that it had made efforts for getting the information on energy requirement as well as peak demand from Discoms, but the same was not made available, therefore, it has considered last year's data.

2.95 RVPN submitted that the apprehension of the Stakeholder that the auxiliary losses shall not be less than normative as prescribed by Commission is not correct. Actual auxiliary losses can be more or less than the normative prescribed losses.

(2) Commissioning status of transmission lines

Stakeholders' Suggestions / Comments

2.96 The Stakeholder submitted that the completion and commissioning status of 440 kV, 220 kV and 132 kV lines up to 31.10.2016 is substantially lower than the targets. From the above it seems that around 40% of work may get mature in FY 2017-18. Therefore, the Commission shall consider the projection of lines and substations, as 40% of Petitioner's proposal.

RVPN's Response

2.97 RVPN submitted that the targets in case of 220 kV and 132 kV lines have nearly been achieved and are slightly short of the target, due to RoW & Court case, etc. In case of 400KV line, only one line namely 400KV D/C Suratgarh-Babai (480 Ckt-km), could not be completed due to contractual issue but is likely to be commissioned by July, 2017. From the above position, approx. 74% (Overall) of work would get matured during FY 2017-18.

(3) Transmission Losses

Stakeholders' Suggestions / Comments

2.98 The Stakeholder suggested that since the actual transmission losses for FY 2015-16 were 3.89%, as against 4.15% approved by the Commission, it would be prudent to fix a lower transmission loss targets of 3.75%, instead of 4.11% as proposed by the Petitioner. The Stakeholder further

submitted that, since the Petitioner has proposed various schemes for loss reduction, along with the various ongoing schemes taken up during FY 2016-17, it should justify the projection of transmission losses at 4.11% for FY 2017-18, despite various ongoing installation of new transmission system along with the upgradation of existing transmission system. The Stakeholder also submitted that, the Petitioner's proposal for higher transmission losses of 4.11% for FY 2017-18, owing to the backing down of generation is not backed by any system studies.

RVPN's Response

2.99 RVPN submitted that the transmission losses in a system depend on the flow of power, which changes from time to time on account of various factors such as seasonal load and generation and also backing down of generating plants and getting power through Power Exchange, etc. However, all the measures have been taken from time to time to reduce the losses.

(4) Interest and Finance Charges

Stakeholders' Suggestions / Comments

2.100 The Commission may critically examine the interest and finance charges amounting to Rs. 998 Crore. The interest charges have been calculated on an average loan of Rs. 11,428 Crore, which seems quite high.

RVPN's Response

2.101 RVPN submitted that the interest has been calculated on actual outstanding loan, which is to be allowed. RVPN has taken a loan on the cheapest interest rate available. The weighted average rate has been calculated at 9.63% as on 30.09.2016.

(5) Insurance

Stakeholders' Suggestions / Comments

2.102 The Petitioner has not done any insurance in respect of fixed assets, therefore, the Commission shall not allow anything under this head.

RVPN's Response

2.103 RVPN submitted that the insurance charges may be allowed on actual insurance paid during FY 2015-16.

(6) Revenue

Stakeholders' Suggestions / Comments

2.104 The Stakeholder submitted that the projection of revenue from short-term open access consumers seems on a lower side, considering FY 2015-16, and this revenue may not be less than 375.00 Crore.

RVPN's Response

2.105 The amount is projected on the basis of last year's figure and actual amount received from STOA will be adjusted at the time of Truing-up.

(7) Transmission supply agreement

Stakeholders' Suggestions / Comments

2.106 The Petitioner has not submitted the signed Transmission Supply Agreement (TSA) as the DISCOMs are avoiding signing the TSA, which is not in line with the direction given by the Commission in the previous Orders. They requested the Commission to direct the DISCOMs to execute TSA, and the transmission tariff should be determined on the basis of the TSA.

2.107 The Stakeholder submitted that in the absence of Transmission Supply Agreement (TSA), the generation capacity and power purchases shall be considered for determination of transmission charges. The Stakeholder further submitted that the argument given by the Petitioner that the fixed charges based on contracted/allotted capacity might result in undercharging /overcharging, is quite vague, as TSA will be for long and medium term and the overcharging/ undercharging due to execution/termination of TSA will be considered in truing up. The Stakeholder also suggested that the Petitioner has misinterpreted the capacity put to use, which is nothing but the contracted capacity.

2.108 The Stakeholder referred to the Commission's Order in Petition Nos. 604/16, 848/16 and 868/16 and suggested that if wheeling charges are based on energy injected at Discom's system, on similar grounds transmission charges shall be determined on the basis of energy

injected at the RVPN system, i.e., energy drawal by Discoms plus transmission losses (82,273 MUs + 4.11%) instead of energy drawal of 82,273 MUs only. The Stakeholder further submitted that if the transmission charges are to be determined based of energy drawal only, then the billing of transmission charges should be based on energy supplied from EHV GSS of RVPN.

RVPN's Response

2.109 RVPN is constantly persuing Discoms for executing TSA but the same is not being executed by Discoms. RVPN has not received any comments on this issue from the Discoms.

2.110 RVPN stated that the Commission may take decision whether peak demand or contracted capacity is to be considered.

As regards, determination of transmission charges on the basis of energy drawal, the Commission may take a view in the matter.

(8) Investment in Transmission system

Stakeholders' Suggestions / Comments

2.111 The Petitioner should clearly mention the equity percentage for the proposed investment in the transmission system for FY 2017-18 to be financed by equity provided by the Government.

RVPN's Response

2.112 RVPN submitted that the State Government has provided the equity in totality and the Average Rate works out to be 10-12%.

(9) Other Matters

Stakeholders' Suggestions / Comments

2.113 The Petitioner has not stated the present position in respect of ARR determination of BBMB plants. The Petitioner should also state whether the matter in respect of Chambal complex has been put before CERC or not.

RVPN's Response

2.114 RVPN submitted that, BBMB has filed the petition in CERC on 14.12.2016 for Generation Tariff & Transmission Tariff for the period 01.04.2014 To 31.03.2019. As regards Chambal complex. Petition for approval of

Generation Tariff for shared Hydro projects of Rajasthan & MP installed in Rajasthan, namely Rana Pratap Sagar & Jawahar Sagar HPS, has been filed in CERC on dt. 29.03.2017. Decision of the CERC in the matter is pending.

Commission's Views on Issues Raised by Stakeholders

2.115 The Commission has taken note of all the comments/suggestions/observations of the Stakeholders both in writing as well as during the course of hearing and RVPN's responses to them. The Commission has attempted to capture all the comments/suggestions/observations. However, in case any comment/suggestion/observation is not specifically elaborated, it does not mean that the same has not been considered. The Commission has considered all the issues raised by the Stakeholders and RVPN's response on these issues while carrying out the detailed analysis of Investment Plan for FY 2017-18, True Up petition for FY 2015-16, ARR and Tariff for FY 2017-18 in accordance with applicable RERC Regulations as detailed in the subsequent Sections of the Order.

Section – 3: Analysis of Truing-up of ARR for Transmission and SLDC Function for FY 2015-16

- 3.1 RVPN has submitted the Petition for Truing-up of ARR for FY 2015-16 for Transmission and SLDC functions on the basis of Audited Accounts for FY 2015-16.
- 3.2 The Commission observes that RVPN has submitted Annual Accounts for SLDC function duly certified by its statutory auditor for the purpose of Truing up. Further, RVPN has submitted the segregated statement for all the three functions, i.e., Transmission, SLDC and Shared Generation Projects and the Commission has considered the RVPN submissions.
- 3.3 The Commission is of the view that Audited Annual Accounts form an important basis for the purpose of verification of the expenses / income for the financial year under consideration. Therefore, the Commission has relied on the information provided under the various schedules of the Audited Annual Accounts of RVPN of FY 2015-16 and information furnished in the various replies for the purpose of Truing-up of the ARR for Transmission function and SLDC function.
- 3.4 The Commission observes that RVPN in its true up Petition and in the forms for variation analysis submitted with the Petition has quantified the variation for each cost component and also provided reasons for such variation.

Transmission Function

Operation and Maintenance (O&M) Expenses:

- 3.5 RVPN has submitted computation of normative O&M expenses as Rs. 836.98 Crore. The actual O&M expenses incurred by RVPN as per audited accounts are Rs. 814.52 Crore as under:

Table 4: Break-up of Actual O&M Expense of Transmission for FY 2015-16 (Rs. Crore)

S. No.	Particulars	Audited Accounts FY 2015-16	Remarks
1	Repairs & Maintenance	47.49	
2	Employee Costs		

S. No.	Particulars	Audited Accounts FY 2015-16	Remarks
A	Employee cost of current year	417.03	
B	Provision due to actuarial valuation liability for leave encashment & Pension	453.56	Creation of this provision is in compliance of accounting standard AS 15, which is mandatory
C	Total Employee Cost	870.59	
3	Administration & Other Expenses	98.49	
4	Less: Capitalizations of O&M Expenses	202.05	
5	Net O&M Expense (1+2+3-4)	814.52	

3.6 RERC Tariff Regulations, 2014 do not provide for any sharing of gain/loss on account of variation in actual vs. normative O&M Expenses. Accordingly, RVPN has claimed normative O&M expenses as Rs. 836.98 Crore. The detailed working of normative O&M expenses as per Regulation 65 of Tariff Regulations, 2014 as submitted by the Petitioner are as under:

Table 5: Normative O&M Expenses submitted by the Petitioner for FY 2015-16

Particular	Circuit Basis (Ckt km)				MVA Basis	Feeder bay basis				Total
	765 kV	400kV	220kV	132kV		765 kV	400 kV	220 kV	132 kV	
Opening Balance	425.50	3,278.37	13,211.83	15,598.22	63,379	12	71	660	2,350	
Addition during FY 2015-16	-	350.30	512.73	581.91	4,658	10	12	31	102	
Deletion during FY 2015-16	-	-	-	-	-	-	-	-	-	
Closing Balance	425.50	3,628.67	13,724.56	16,180.13	68,037	22	83	691	2,452	
Average during the Year	425.50	3,453.52	13,468.19	15,889.17	65,708	17	77	676	2,401	
Rates for FY 2015-16 (Rs. Lakh / ckt-km / MVA / Bay)	1.66	1.05	0.41	0.24	0.646	97.32	64.88	9.04	6.14	
Normative O&M Cost for FY 2015-16 (Rs. Crore)	7.07	36.19	55.60	38.68	424.47	16.54	49.95	61.06	147.40	836.98

3.7 The Commission has considered the computations and approved the

O&M expenses submitted by the Petitioner for Truing up of FY 2015-16 as Rs. 836.98 Crore, as the same are in line with the norms stipulated under the Regulations:

Table 6: Approved O&M Expenses for FY 2015-16 (Rs. Crore)

Particulars	Approved in Tariff Order	As per Petition	Approved for Truing Up
O&M Expenses	830.31	836.98	836.98

3.8 It is observed from Table 4 that RVPN has made a provision of Rs. 453.56 Crore towards actuarial valuation liability for Leave Encashment & Pension. Thus, actual O&M expenses incurred as per audited accounts are Rs. 360.96 Crore only (Rs. 814.52 Crore – Rs. 453.56 Crore). The Commission has approved normative O&M expenses amounting to Rs. 836.98 Crore, Therefore, RVPN has sufficient funds amounting to Rs. 476.02 Crore (Rs. 836.98 Crore – Rs. 360.96 Crore), as compared to the provision of Rs 453.56 Crore. Accordingly, RVPN is directed to deposit the amount as per provision made in the audited accounts for FY 2015-16 within 3 months and intimate the details of such payment made to the Commission. This is in addition to the regular contribution to be made in Pension/Gratuity/Leave Encashment Trust Fund, which is already covered in O&M expenses.

Capitalization:

3.9 The Commission in its Order dated 14.08.2015, approved a capitalisation of Rs. 1,663.63Crore for FY 2015-16. RVPN has submitted that actual asset capitalized in FY 2015-16 as Rs. 1,509.13 Crore.

3.10 The Commission has considered asset capitalized during FY 2015-16 and approved the same as per audited account. The details of Capitalisation approved is as follows:

Table 7: Approved Capitalisation for FY 2015-16 (Rs. Crore)

Particular	Approved for Truing Up
Capitalisation	1,509.13
Deduction during year	5.74
Consumer Contribution	13.45
Net Capitalisation	1,489.94

Source of Funding:

3.11 The Commission has observed that the Equity component added by the Petitioner during the FY 2015-16 exceeds the normative percentage of 30%, as mentioned in the Regulation 19 of RERC (Terms and Conditions of Tariff) Regulations, 2014. The relevant extract of Regulation 19 of Tariff Regulations, 2014 is reproduced as under:

"...Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan. Where actual equity employed is less than 30%, the actual equity shall be considered."

3.12 Therefore, in line with the above said provision of Tariff Regulations, for the purpose of computation of tariff, the Commission decided to limit the Equity component to 30% only and the additional portion of Equity has been considered as normative Debt. Accordingly, the Debt and Equity components for FY 2015-16, as submitted by the Petitioner and approved by the Commission is summarised as below:

Table 8: Debt-Equity for FY 2015-16 (Rs. Crore)

Particular	Petitioned	Approved for Truing Up
Net Capitalisation	1,489.94	1,489.94
Debt	952.79	1,042.96
Equity	537.16	446.98
Debt Ratio (%)	63.95%	70.00%
Equity Ratio (%)	36.05%	30.00%

Depreciation:

3.13 RVPN has claimed Rs. 655.23 Crore as depreciation charges for the purpose of Truing up. The Commission observes that the average rate of depreciation worked out from the Petitioner's submission is 4.68%. The Commission finds that in the Order dated 14.08.2015, the average rate of depreciation considered was 3.33% for FY 2015-16.

3.14 In response to Commission's specific query seeking segregated summary of depreciation separately on fixed assets for less than 12 years, more than 12 years and remaining fixed assets which have

reached the accumulated depreciation of 90% has not been submitted, RVPN has responded by stating that depreciation has been calculated at the rates/useful life and methodology notified vide RERC (Terms and Conditions for Determination of Tariff) Regulations, 2014. RVPN submitted detailed circle wise fixed asset register but the details segregating separately for fixed assets for less than 12 years, more than 12 years and remaining fixed assets which have reached the accumulated depreciation of 90 % has not been submitted.

- 3.15 The Commission observes that substantial increase in the depreciation expenses amounting to Rs. 162.22 Crore as compared to the Order dated 14.08.2015, even when the actual fixed assets base is lower than what was determined in the Order dated 14.08.2015, cannot be attributed to change in depreciation rates alone, as submitted by the Petitioner.
- 3.16 The Commission also analysed the depreciation amount by applying Tariff Regulations, 2014, depreciation rates on the average balances of GFA for FY 2015-16 and found that the total depreciation amount works out to Rs. 715.35 Crore as against Rs. 655.23 Crore claimed by the Petitioner. This would necessarily mean that, almost all the fixed assets forming part of the GFA of FY 2015-16 are less than 12 years old and very insignificant component of Asset Base (GFA) pertains to the asset category with useful life exceeding 12 year and/or depreciated up to 90%, which is unlikely in case of RVPN.
- 3.17 The Commission considers that the allowance for depreciation should be in line with provisions of RERC Tariff Regulations, 2014. For the assets with useful life exceeding 12 years, the rate of depreciation will have to be spread over balance useful life as per Regulations. Thus, rate of depreciation for such asset cannot be charged at normal rate (say 5.28%) but will have to be considered at lower rate (say, 1.16%) spread over balance useful life. Further, the depreciation cannot be allowed in case the assets wherein accumulated depreciation has reached 90%. Thus, computation of depreciation in accordance with provisions specified under the Regulations would require detailed information about asset-wise break-up of GFA, accumulated depreciation, date of commissioning, completed useful life, balance useful life, etc.

- 3.18 However, in the absence of such information, allowing depreciation as claimed by Petitioner would also not be appropriate since it amounts to acknowledging that no Asset has completed useful life of 12 years. This will lead to allowing excess depreciation than what is allowable as per provisions of Tariff Regulations, 2014.
- 3.19 Hence, based on the available information, the Commission has recomputed the depreciation on the average balance of GFA for FY 2015-16, less balances of GFA for FY 2003-04 (12 years prior to FY 2015-16) at the depreciation rates as per Annexure 1 of the Tariff Regulation, 2014, for estimating asset base less than 12 years old. On the average balance of GFA as on FY 2003-04, the Commission has computed depreciation at a lower rate considering balance depreciation spread over the useful life of the respective asset class. The depreciation amount by applying this methodology works out to Rs. 611.41 Crore, which is 4.36% of the average balance of GFA for FY 2015-16.
- 3.20 Accordingly, the Commission approves the allowable depreciation amount for FY 2015-16 as Rs. 611.41 Crore. The Commission is of the view that, the Petitioner should provide relevant information as per the stipulated regulatory provisions of the Tariff Regulations, 2014, i.e., summary of category-wise assets, rates and their respective depreciation amount, segregated into less than 12 years old, more than 12 years old and remaining assets that have reached the accumulated depreciation of 90% as per norms while filing Petition in future. Therefore, the depreciation charges approved by the Commission for Truing Up of FY 2015-16 are as under:

Table 9: Depreciation Charges approved by the Commission for Truing up of FY 2015-16 (Rs. Crore)

Particulars	Approved in Tariff Order	As per Petition	Approved for Truing Up
Depreciation	493.01	655.23	611.41

Interest and Finance Charges:

- 3.21 RVPN has claimed Rs. 713.91 Crore as interest and finance charges excluding interest on working capital requirement, as against the

interest and finance charges of Rs. 899.72 Crore as approved in the Tariff Order for FY 2015-16 dated 14.08.2015.

- 3.22 The Commission has computed the normative interest and finance charges as per Regulation 21 of Tariff Regulation, 2014. As regards opening loan for FY 2015-16, the Commission has considered the closing long-term loan approved in the true-up for FY 2014-15.
- 3.23 Based on the information submitted by the Petitioner, the share of debt-equity component has been worked out in Table 8 as 63.95% : 36.05%. However, in accordance with provisions of Regulation 19, the Commission has considered normative debt as 70%: 30% for the purpose of computation of interest on long terms loans and return on equity for truing up purpose for FY 2015-16. Furthermore, the portion of capitalization financed through consumer contributions has been separated, as the depreciation and interest thereon would not be charged to the consumer contribution.
- 3.24 The allowable depreciation for the FY 2015-16, has been considered as normative loan repayment. Based on the interest amounts and loan balances as per Audited Accounts of FY 2015-16, average interest rate has been computed to be 10.86% in accordance with the submission of the Petitioner. The Commission has considered other finance charge for FY 2015-16 as per Audited Accounts.
- 3.25 Considering the above, the net interest and finance charges on long term loans are as under:

Table 10: Approved Interest on Long Term Loans for FY 2015-16 (Rs. Crore)

Particular	Reference	Approved for True Up
Opening Loan Balance	A	6,350.69
Capitalisation during the year as per Order dtd 27.10.16	B	1,509.13
Deductions during the year	C	5.74
Consumer Contribution	D	13.45
Net Capitalisation during the year	E=B-C-D	1,489.94
Loan Addition (1-Equity%)	F=Ex(1-Equity%)	1,042.96
Less: Repayment (Depreciation	G	611.41

Particular	Reference	Approved for True Up
allowable for the FY)		
Closing Loan Balance	H=A+F-G	6,782.24
Average Loan	I = Average (A,H)	6,566.46
Weighted Average Rate of Interest	J	10.86%
Interest on Long Term Loans	K=I xJ	713.12
Other Finance Charges	L	35.48
Total Interest of Long Term Loans	M=K+L	748.60

3.26 The Commission has not further deducted the interest capitalized from the Interest on Loan, similar to that by the Petitioner, as the above computation is on the Net Capitalisation amount as against the Petitioner's computation on actual loan drawals and therefore, there is no need for further deduction of capitalized interest from interest on normative loan component worked out on the already capitalized fixed assets.

3.27 As the total Interest on Long Term Loans is based on Audited Accounts of RVPN for FY 2015-16, the Commission has reduced the amount of interest and finance charges pertaining to operations for SLDC and Partnership functions. Therefore, the net interest and finance charges approved by the Commission are shown in the table below:

Table 11: Net Interest and Finance Charges Allocated to the Transmission Function for FY 2015-16 (Rs. Crore)

Particulars	Derivation	Amount
Total Interest on Long Term Loans	A	748.60
SLDC Interest Charges	B	0.32
Partnership Interest Charges	C	5.74
Net Transmission Interest and Finance Charges	D = (A-B-C)	742.54

Interest on Working Capital:

3.28 As per audited accounts, RVPN has indicated actual interest on working capital as Rs. 15.88 Crore as against Rs. 54.02 Crore approved

in Tariff Order for FY 2015-16 dated 14.08.2015. RVPN in its True-Up Petition has submitted the normative interest on working capital as Rs. 32.09 Crore.

3.29 Regulation 27 of the Tariff Regulations, 2014 stipulates that:

“27. Interest charges on working capital

(1) The amount of normative working capital shall cover:

....

2. Transmission

(i) Operation and maintenance expenses for one month; plus

(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 65; plus

(iii) Receivables equivalent to one and a half (1½) months of transmission charges calculated on target availability level;

Less

Amount held as security deposits from Users except security deposits held in the form of Bank Guarantees;

.....

3.30 *(2) Rate of interest on working capital to be computed shall be on normative basis and shall be 250 basis points higher than the average Base Rate of State Bank of India prevalent during first six months of the year previous to the relevant year. The interest on working capital shall be computed on normative basis notwithstanding that the generating company or licensee has not taken working capital loan from any outside agency. The variation in the interest amount on account of actual vis-a-vis normative interest rate on normative working capital shall be shared in the ration of 50:50 between the generating company/licensee and the beneficiary.”* Accordingly, for the purpose of calculating interest on working capital, the Commission has considered weighted average SBI base rate of 10.00% prevalent during first six months of FY 2014-15 plus 250 basis points, in lines with the Tariff Regulations, 2014. The weighted average rate of interest thus works out to 12.50% and the same has been considered for computation of Interest on Working Capital for Trueing-Up of FY 2015-16.

3.31 Regulation 27(2) of the Tariff Regulations, 2014, stipulates sharing of variation in interest rate and not the interest amount. However, the

Petitioner has neither submitted the weighted average interest rate paid on working capital loan availed during the financial year, nor it has worked out the difference in interest amount on account of actual vis-a-vis the normative interest rate to be shared as per Tariff Regulations, 2014. Instead, the Petitioner has claimed sharing of difference in actual interest paid vis-a-vis normative interest as per Tariff Regulations, 2009.

3.32 However, the Commission has derived actual rate of interest for working capital from the details provided in audited accounts for short term loans which works out to 12.36% and accordingly sharing of gain on interest on working capital has been computed in accordance with Regulation 27(2).

3.33 The Normative interest on working capital is as under:

Table 12: Normative Interest on Working Capital approved by the Commission (Rs. Crore)

S. No.	Particulars	Approved in Tariff Order	As per Petition	Approved
1	O&M Expenses (1 Month)	69.19	69.75	69.75
2	Maintenance Spares (15% of O&M Expenses)	124.55	125.55	125.55
3	Receivables on Target Availability (1.5 Months)	309.78	260.19	260.96
4	Less: Amount held as Security Deposit	71.34	69.11	69.11
5	Total Working Capital	432.18	386.37	387.15
6	Normative Interest Rate	12.50%	12.50%	12.50%
7	Interest Amount at Normative Interest Rate	54.02	48.30	48.39

3.34 The Petitioner has worked out Interest on Working Capital as per Tariff Regulations as Rs. 32.09 Crore. The computation of interest on working capital, after sharing of gain/(losses) on account of variation, as approved by the Commission for Truing up is summarized as under:

Table 13: Interest on Working Capital approved by the Commission for Truing up of FY 2015-16 (Rs. Crore)

Particulars	Normative	Actual	Gain/ (Loss)	50% Sharing	Net Entitlement
Approved Interest Rate for Truing up (%)	12.50%	12.36%	0.14%	0.07%	
Approved amount for Truing up (Rs. Crore)	48.39	47.87	0.52	0.26	48.13

Return on Equity:

3.35 RVPN submitted that the actual Return on Equity works out to Rs. 284.52 Crore for FY 2015-16 vis-a-vis the approved RoE of Rs. 271.70 Crore vide Tariff Order dated 14.08.2015.

3.36 As regards opening equity for FY 2015-16, the Commission has considered closing equity in pursuance to True-up of FY 2014-15 as per Commission's Order dated 27.10.2016 and Capitalisation & Equity for FY 2015-16 as discussed in succeeding paras. The Commission observed that the Petitioner has claimed RoE at 8.00%, instead of 15.50% approved in the Tariff Regulations, 2014. Therefore, in accordance with the Tariff Regulations, 2014 and the matter regarding debt-equity ratio already discussed in detail under the head 'Interest and Finance Charges', the Commission has computed RoE for FY 2015-16 as Rs. 259.44 Crore and the same has been approved for Truing Up of FY 2015-16.

3.37 The Return on Equity as approved by the Commission is as under:

Table 14: Return on Equity approved by the Commission for Truing up of FY 2015-16 (Rs. Crore)

S.No.	Particulars	Approved in Tariff Order	As per Petition	Approved for True Up
1	Equity at the beginning of the year	3,196.28	3,287.93	3,019.52
2	Capitalisation during the year	1,663.63	1,509.14	1,509.13
3	Deduction during the year	0.00	5.74	5.74
4	Less: Consumer Contribution	188.21	13.45	13.45

S.No.	Particulars	Approved in Tariff Order	As per Petition	Approved for True Up
5	Net Capitalisation	1,475.42	1,489.95	1,489.94
6	Equity portion of Capitalisation	399.87	537.16	446.98
7	Equity at the end of the year	3,596.15	3,825.09	3,466.50
8	Average Equity	3,396.22	3,556.51	3,243.01
9	Total Return of Equity	271.70	284.52	259.44

Income Tax Provision:

3.38 The Petitioner has made a provision towards Income Tax amounting to Rs. 18.88 Crore in the audited accounts for FY 2015-16, which the Commission has accepted.

Other Income and Expenses:

3.39 The Petitioner has claimed an amount of Rs. 22.25 Crore as Other Expenses for FY 2015-16, which includes Miscellaneous losses and write-offs amounting to Rs. 0.23 Crore, Bad Debts Written off amounting to Rs. 3.09 Crore and Net Prior Period Credit/Charges as Rs. 18.93 Crore.

3.40 Pursuant to Regulation 26 of the Tariff Regulations, 2014, provision for bad debts may be up to 0.25% of the receivables. The relevant proviso is reproduced herein as under:

“26. Bad and doubtful debts

The Commission may consider a provision for writing off of bad and doubtful debts up to 0.25% of receivables subject to writing off of bad and doubtful debts in the previous year in accordance with the procedure laid down by the Licensee or Generating Company.”

3.41 The amount of closing balance of Receivables as per Audited accounts of FY 2015-16 is Rs. 1,236.35 Crore. Therefore, the allowable bad and doubtful debts, in accordance with Regulation 26 mentioned above works out to Rs. 3.09 Crore.

3.42 Furthermore, RVPN submitted that the Prior Period Expenditure/Credits amounting to Rs. 18.93 Crore considered for the FY 2015-16, is net of the

various heads of prior period revenue and prior period expenses namely interest income related to previous years, credit of other excess provision, debits of other income, short provision for power purchase in previous years, depreciation under- provided, interest & finance charges, administrative & general expenses, other charges related to previous years, etc.

- 3.43 The Commission has considered Other Income as submitted by RVPN (viz., Interest Income for prior period, Other excess provision in prior period, Other income related to prior period) and Other Expenses (viz., short provision for power purchase in previous years, depreciation under- provided, interest and financial charges and Other charges) on the basis of actuals as per the Audited Accounts of FY 2015-16. Operating expenses, employee cost, administrative & general expenses, being part of O&M expenses, which the Commission has been allowing on normative basis, have not been considered. Hence, Other Income and Expenses as approved for true up are as under:

Table 15: Other Income and Expenses for FY 2015-16 (Rs. Crore)

Particulars	Approved in Tariff Order	As per Petition	Approved for True up
Miscellaneous losses and write-offs		0.23	3.09
Bad debts written-off/provided for		3.09	
Net Prior period credit/charges		18.93	11.39
Total	25.00	22.25	14.48

Incentive for System Availability:

- 3.44 RVPN has claimed incentive amounting to Rs. 47.99 Crore for FY 2015-16 from Discoms and Open Access Consumers on achieving annual availability above the target availability of 98%, subject to maximum availability of 99.75% as per Standards of Performance of RVPN for the FY 2015-16 in accordance with Tariff Regulations, 2014. On reply of data gap for furnishing the calculation of incentive, the Petitioner has submitted the calculation of incentive amounting to Rs. 38.46 Crore. The incentive is admissible over and above the ARR and hence, the

Commission has not included the same in computing the ARR. The Commission approves the incentive for achieving system availability above the target availability for FY 2015-16 as under:

Table 16: Approved Incentive on achieving Availability above the Target Availability for FY 2015-16

Particulars	Actual	Ceiling Limit as per Regulation	Normative Target	Incentive (Rs. Crore)
Average System Availability	99.75%	99.75%	98.00%	37.28

3.45 The above incentive shall be paid to RVPN by Discoms and Long Term Open Access Customers.

RVPN's Revenue for FY 2015-16:

3.46 The Commission, in its Order dated 14.08.2015, had approved Net Transmission charges to be recovered from Discoms and Long-Term Open Access Customers amounting to Rs. 2,157.51 Crore (Rs. 138.10/ kW / Month x 13,019.42 MW).

3.47 The Petitioner has submitted that an amount of Rs. 2,151.30 Crore (Rs. 2,087.08 Crore from Discoms, Rs. 64.06 Crore from Long-Term Open Access Customers and Rs. 0.16 Crore towards Revenue Subsidy and Grant) towards Revenue from Transmission Charges. The Commission has considered the same as submitted by Petitioner.

3.48 Besides this, the Petitioner has also submitted Income from Short-Term Open Access as Rs. 301.36 Crore, which the Commission has considered.

Non-Tariff Income and Income from Other Business:

3.49 The Petitioner has submitted Non-Tariff Income and Income from Other Business amounting to Rs. 117.93 Crore and Rs. 63.39 Crore respectively. Therefore, after considering the figures from the audited accounts for FY 2015-16, the Commission has approved Non-Tariff Income of Rs. 117.93 Crore. Regarding Income from Other Business, the Commission noted that the Petitioner has mentioned that an amount of Rs. 38.46 Crore towards incentive from Discoms has been included in Income from

Other Business. The Commission has already mentioned that the incentive is admissible over and above the ARR and hence, the same should not be considered as part of Revenue or Income while computing the ARR. Therefore, the Commission has decided to approve an amount of Rs. 24.93 Crore as Income from Other Business, after considering Rs. 38.46 Crore as Incentive.

True-up of Transmission Function of RVPN for FY 2015-16

3.50 Based on the above analysis and data provided by RVPN, truing up of Transmission function for FY 2015-16 is summarized as under:

Table 17: Summary of True-up of Transmission Function for FY 2015-16 (Rs. Crore)

S. No.	Particulars	Approved in Tariff Order	As per Petition	Approved after True Up
Expenditure				
1	Operation & Maintenance Expenses	830.31	836.98	836.98
2	Depreciation	493.01	655.23	611.41
3	Interest on Long-term Loans	899.72	713.91	742.54
4	Interest on Working Capital	54.02	32.09	48.13
5	Insurance Charges	0.48	0.32	0.32
6	Other Expenses	25.00	22.25	14.48
7	Total Revenue Expenditure	2,302.54	2,260.78	2,253.86
8	Return on Equity	271.70	284.52	259.44
9	Income tax provision	0.00	18.88	18.88
10	Total Expenditure	2,574.24	2,564.18	2,532.18
11	Less: Non-Tariff Income	95.00	117.93	117.93
12	Less: Income from short/ medium term open access	1.00	301.36	301.36
13	Less: Income from Other Business (Miscellaneous Income)		63.39	24.93
14	Aggregate Revenue Requirement	2,478.23	2,081.50	2,087.96
15	Truing up for FY 2013-14 –Surplus	320.73		320.73
16	Net Aggregate Revenue Requirement	2157.50	2,081.50	1,767.23

S. No.	Particulars	Approved in Tariff Order	As per Petition	Approved after True Up
17	Revenue from Discoms		2,087.08	2,087.08
18	Revenue from Long-Term Open Access		64.06	64.06
19	Revenue Subsidy & Grant		0.16	0.16
20	Total Revenue		2,151.30	2,151.30
21	Surplus / (Gap) = Total Revenue – Total Expenditure		69.80	384.07

3.51 After considering the revenue from Transmission Tariff, Open Access and Other Income, the Commission has approved a Surplus of Rs. 384.07 Crore, as against a Surplus of Rs. 69.80 Crore claimed by the Petitioner, on account of Truing-up of Transmission function for FY 2015-16. The Commission directs to refund the surplus amount to Discoms before next filing of ARR.

SLDC Function

RLDC Fee and Charges:

3.52 RVPN has submitted SLDC Operational Expenses, which is the payment made to NRLDC on account of operation and recovery of annualized fixed charges as Rs. 9.10 Crore. Pursuant to the SLDC audited account statement for FY 2015-16, the Commission observes that the submission made by RVPN is as per the audited accounts. Accordingly, the Commission approves RLDC Fee and Charges as Rs. 9.10 Crore.

Table 18: RLDC Fee and Charges approved by the Commission for Truing up of FY 2015-16 (Rs. Crore)

Particulars	Approved in Tariff Order	As per Petition (audited)	Approved in True Up
RLDC Fee and Charges	18.14	9.10	9.10

Interest on Working Capital:

3.53 RVPN has claimed a normative entitlement of Interest on Working Capital as Rs. 0.364 Crore. The Commission has computed the normative interest on working capital at the weighted average rate of

interest of 12.50% in accordance with Regulation 27(2) of the Tariff Regulations, 2014.

3.54 The computation of normative interest on working capital by the Commission is as under:

Table 19: Normative Interest on Working Capital approved by the Commission (Rs. Crore)

Particulars	Reference	Approved
O&M Expenses (1 month)	A	0.88
Maintenance Spares	B=O&M Expenses x15%	1.58
Receivables	C= One and a half months of SLDC charges	2.45
Less: Amount held as security deposits	D	0.30
Total Working Capital	E=A+B+C-D	4.60
Interest Rate	F	12.50%
Interest on Working Capital	G=E x F	0.58

3.55 Regulation 27(2) of the Tariff Regulations, 2014 stipulates that:

“Rate of interest on working capital to be computed shall be on normative basis and shall be 250 basis points higher than the average. Base rate of State Bank of India prevalent during first six months of the year previous to the relevant year. The interest on working capital shall be computed on normative basis notwithstanding that the generating company or licensee has not taken working capital loan from any outside agency. The variation in the interest amount on account of actual vis-a-vis normative interest rate on normative working capital shall be shared in the ratio of 50:50 between the generating company/licensee and the beneficiary”

3.56 Regulation 27(2) of the Tariff Regulations, 2014, stipulates sharing of variation in interest rate and not the interest amount. However, the Petitioner has neither submitted the weighted average interest rate paid on working capital loan availed during the financial year, nor it has worked out the difference in interest amount on account of actual vis-a-vis the normative interest rate to be shared as per Tariff

Regulations, 2014. Instead, the Petitioner has claimed sharing of difference in actual interest paid vis-a-vis normative interest as per Tariff Regulations, 2009.

3.57 However, the Commission has derived actual rate of interest for working capital from the details provided in audited accounts of RVPN for short term loans which works out to 12.36% and accordingly sharing of gain on interest on working capital has been computed in accordance with Regulation 27(2).

3.58 The actual interest on working capital submitted by RVPN is Nil. As emerges from above table, normative Interest on Working Capital computed by the Commission is Rs. 0.58 Crore. The Commission has considered amount held as security deposit from users as per audited accounts as Rs. 0.30 Crore vis-à-vis Nil as considered by Petitioner. Therefore, in view of provision at para 27(2) of the Tariff Regulation 2014 as above, normative interest on working capital is allowed as under:

Table 20: SLDC True Up of Interest on Working Capital for FY 2015-16 (Rs. Crore)

Particulars	Normative	Actual	Gain/ (Loss)	50% Sharing	Net Entitlement
Approved Interest Rate for Trueing up (%)	12.50%	12.36%	0.14%	0.07%	
Approved amount for Trueing up (Rs. Crore)	0.58	0.57	0.01	0.003	0.57

Return on Equity:

3.59 RVPN has submitted Rs. 0.09 Crore as Return on Equity for True Up of FY 2015-16, which has been approved by the Commission.

Table 21: Return on Equity approved by the Commission for True up of FY 2015-16 for SLDC function (Rs. Crore)

Particulars	Approved in True Up
Equity at the beginning of the year	1.07
Equity Addition during the year	0.00
Equity at the end of the year	1.07
Average Equity	1.07
Total Return on Equity @ 8%	0.09

Depreciation:

- 3.60 RVPN has submitted Rs. 0.80 Crore as depreciation amount for True Up of FY 2015-16 vis-a-vis Rs. 2.33 Crore as approved in the Tariff Order dated 14.08.2015.
- 3.61 Pursuant to the audited accounts of SLDC submitted by RVPN, the Commission approves Rs. 0.80 Crore as the depreciation amount for SLDC function in its true up of FY 2015-16.

Table 22: Depreciation approved by the Commission for True up of FY 2015-16 for SLDC function (Rs. Crore)

Particulars	Approved in Tariff Order	As per Petition	Approved in True Up
Depreciation	2.33	0.80	0.80

Operation & Maintenance:

- 3.62 RVPN submitted Rs. 10.50 Crore as O&M expenses incurred for SLDC function for true up of FY 2015-16 against Rs. 12.67 Crore as approved in the Tariff Order dated 14.08.2015. RVPN submitted that it has considered employee expenses, administration and general expenses, repair and maintenance expenses as a part of O&M expenses.
- 3.63 Keeping in view the submission made by RVPN and pursuant to the SLDC audited accounts for FY 2015-16, the Commission approves the O&M expenses for SLDC function as Rs. 10.50 Crore for true up of FY 2015-16.

Table 23: O&M Expenses approved by the Commission for True Up of 2015-16 SLDC Function (Rs. Crore)

Particulars	Approved in Tariff Order	As per Petition	Approved in True Up
O&M Expenses	12.67	10.50	10.50

Revenue from Discoms for SLDC Charges:

- 3.64 The Commission, in its Order dated 14.08.2015, had approved Net SLDC charges to be recovered from Discoms and Open Access amounting to Rs. 17.65 Crore (Rs1.13/kW/Month x 13,019.42 MW). The Petitioner has submitted Revenue of Rs. 27.04 Crore from Discoms and Open Access

Customers and the Commission has considered the same.

3.65 Based on the above analysis, Audited Accounts and data provided by RVPN, Truing up of SLDC function for FY 2015-16 is summarized as under:

Table 24: Summary True-up of SLDC Function for FY 2015-16 (Rs. Crore)

S.No.	Particulars	Approved in Tariff Order	As per Petition	Approved in True Up
Expenses				
1	Operating Expenses			
a	Employee Expenses	10.75	9.28	9.28
b	Administrative and General Expenses	1.75	1.07	1.07
c	Repair and Maintenance Expenses	0.17	0.15	0.15
d	Interest on Working Capital	0.93	0.36	0.57
e	RLDC Fee and Charges	18.14	9.10	9.10
2	Capital expense components			
a	Depreciation	2.33	0.80	0.80
b	Interest and finance charges on term loan	3.02	0.32	0.32
c	Return on equity	1.01	0.09	0.09
d	Income Tax provision	-	-	-
	Total Revenue Expenditure	38.10	21.17	21.38
3	Less: Non-Tariff income	1.55	1.81	1.81
4	Less: Income from other business	0.51	-	-
5	Aggregate Revenue Requirement	36.04	19.37	19.57
6	Truing up for FY 2013-14 – Surplus	18.38	-	18.38
7	Net Aggregate Revenue Requirement	17.65	-	1.19
8	Revenue from Discoms and Open Access for SLDC Charges	-	27.04	27.04
9	Prior period Credit	-	-	-
10	Total Revenue	-	27.04	27.04
11	Surplus / (Gap)	-	7.68	25.85

3.66 The Surplus on account of Truing-up of SLDC function for FY 2015-16 as approved by the Commission is Rs. 25.85 Crore as against Rs. 7.68 Crore as submitted by Petitioner. The Commission directs to refund the surplus amount to Discoms before next filing of ARR.

Section – 4: Analysis of Investment Plan for FY 2017-18

Proposed Plan and Commission's Approval:

4.1 RVPN has submitted the Investment Plan for FY 2017-18 for approval of the Commission as under:

Table 25: Details of the Investment Plan submitted (Rs. Crore)

Sl. No.	Head	Outlay (Tentative)
1	Generation (Shared Generating Projects)	20
2	Transmission Works including SLDC function	2,680
	Total	2,700

4.2 The Commission has analysed the actual investments made by the Petitioner in transmission works including SLDC function vis-à-vis plan approved for last 3 years and Capitalisation booked in the Audited Accounts as under:

Table 26: Approved and Actual Investment for last 3 years (Rs. Crore)

S. No.	Description	FY 2013-14	FY 2014-15	FY 2015-16	Average of Last 3 FYs
1	Approved in Investment Plan Order	2,150	1,539	2,025	1,905
2	Actual investment done	1,627	1,776	2,080	1,828
3	Capitalisation as per Audited Accounts	2,077	1,086	1,509	1,557

4.3 Thus, the actual average investment per year over the last three years, i.e., FY 2013-14 to FY 2015-16 has been Rs. 1,828 Crore as against Rs. 2,680 Crore projected by RVPN for FY 2017-18. In the light of the actual average investments vis-a-vis amount approved by the Commission in past three years, actual Capitalisation booked in Audited Accounts, and the concerns expressed by the Stakeholders, the Commission considers to allow investment as discussed in the subsequent paras.

4.4 Subsequent to the public hearing held on 26.04.2017, the Petitioner vide its letter dated 28.04.2017, submitted that due to reduction in the solar

and wind connectivity with the RVPN system, schemes amounting to Rs. 473.60 Crore proposed in Investment Plan for FY 2017-18, are under review and hence may be reduced from the plan. Further, the Petitioner also submitted that it is planning to defer the construction of 5 numbers 220 kV substations viz. Pokaran, Kolayat, PS-1 (Bajju), Chatrail and Undoo, due to reduction in solar connectivity, which has resulted in reduction in the Investment Plan for FY 2017-18 by Rs. 173.86 Crore. Therefore, the Petitioner submitted an overall reduction of Rs. 647.46 Crore in the Investment Plan for FY 2017-18 and therefore, the revised Investment Plan for FY 2017-18 is shown as under:

Table 27: Revised Investment Plan for FY 2017-18 (Rs. Crore)

Sl. No.	Head	Outlay (Tentative)
1	Original Investment Plan for Transmission Works including SLDC function	2,680.00
2	Less: Reduction in Schemes due to review/deferment of solar and wind projects	647.46
	Revised Investment Plan	2,032.54

4.5 The Commission observed that the Petitioner has revised its Investment Plan from Rs. 2,680 Crore to Rs. 2,032.54 Crore, which is comparable to the average investment made by the Petitioner, during last three years, i.e. Rs. 1,828 Crore and maximum investment of Rs. 2,080 Crore in FY 2015-16. Considering these facts, the Commission approves the investment of Rs. 2,032.54 Crore for FY 2017-18. Further, RVPN should ensure due diligence in prioritising the schemes while making investment.

Table 28: Approved Investment Plan for FY 2017-18 (Rs. Crore)

Particulars	Proposed in Petition	Revised	Approved
Transmission Works including SLDC function	2,680.00	2,032.54	2,032.54

4.6 As regards the Investment Plan for shared generation projects, the Commission in its Order dated 11.12.2013, while approving RVPN's Investment Plan for FY 2013-14, has clarified that the shared generation projects in which the ownership belongs to various states fall under the purview of Central Electricity Regulatory Commission. Therefore, the Commission in this Order has not examined the Investment Plan for shared generation projects.

Section – 5: Analysis of ARR for Transmission Function for FY 2017-18

Transmission System Capacity

RVPN's Projections:

- 5.1 RVPN has projected a total capacity of 13,078 MW to be handled by its transmission system during FY 2017-18. Out of this, 12,528 MW has been allocated for the three Discoms and 550 MW for long term open access customers.
- 5.2 RVPN, in the Petition, submitted energy requirement of Discoms for FY 2017-18 as 78,513 MU and for open access consumers as 3,760 MU. Thus, RVPN has projected total energy to be handled by its transmission system during FY 2017-18 as 82,273 MU. RVPN has also submitted the status of year-wise energy flow approved in Tariff Orders and actual energy flow during FY 2014-15 to FY 2015-16 in the RVPN system as under:

Table 29: Actual energy transmission on RVPN System as Submitted by RVPN (MU)

Energy Estimates	FY 2013-14	FY 2014-15	FY 2015-16
Energy Transmitted on system in RVPN as per ARR	54,615	66,895	73,810
Actual Energy in RVPN system	60,475	67,442	71,389

Commission's Analysis:

- 5.3 The Commission observes that as per Tariff Regulations, 2014, the capacity contracted/agreed with Transmission System Users shall form the basis for determination of Transmission Tariff. However, RVPN has not yet entered into TSA with Discoms to ascertain the contracted capacity. Hence, the Commission considers it appropriate to approve the transmission capacity and energy to be handled as proposed by RVPN during FY 2017-18 as under:

Table 30: Approved Transmission Capacity and Energy Handled for FY 2017-18

Particulars	Reference	As per Petition	Approved by Commission
Transmission Capacity (Discoms) (MW)	A	12,528	12,528

Particulars	Reference	As per Petition	Approved by Commission
Transmission Capacity (Long Term Open Access) (MW)	B	550	550
Total Transmission Capacity (MW)	C=A+B	13,078	13,078
Energy Handled by RVPN (MU)		82,273	82,273

Transmission Losses

RVPN's Projections:

5.4 As against its actual transmission losses for FY 2015-16 as 3.89%, RVPN has projected transmission losses at 4.11% for FY 2017-18, stating that owing to backing down of various generation units in the State, the losses are expected to increase. RVPN has also submitted the transmission losses for preceding two years, i.e., for FY 2015-16 and FY 2016-17 as under:

Table 31: Transmission Losses as submitted by RVPN

Year	Intra State Transmission Loss specified in ARR Order (%)	Actual Intra State Transmission Loss (%)
FY 2015-16	4.15%	3.89%
FY 2016-17	4.11%	4.11%

Commission's Analysis:

5.5 The Commission opines that, with a significant amount of investments made by the petitioner in system augmentation and improvement, and also being able to achieve actual transmission loss levels of 3.89% in FY 2015-16, the projected transmission loss levels at 4.11% are on the higher side. Therefore, the Commission has considered it appropriate to approve the transmission losses of 3.89% for FY 2017-18 as achieved in FY 2015-16.

Capitalization

5.6 The Investment Plan Petition furnished by RVPN proposes works of Rs. 2,660 Crore to be executed in FY 2017-18. However, subsequently the Petitioner submitted that schemes amounting to Rs. 647.46 Crore, were decided to be dropped or kept under review, owing to delay in

upcoming wind and solar plants. Therefore, the revised Investment Plan for FY 2017-18 worked out to Rs. 2,032.54 Crore, including Rs. 20 Crore pertaining to SLDC function.

- 5.7 The progress of asset addition by RVPN during the previous three financial years as per audited accounts reveals that the Gross Fixed Assets (GFA) addition for Transmission function has been as follows:

Table 32: Asset capitalization (Rs. Crore)

Particulars	FY 2013-14	FY 2014-15	FY 2015-16	Average of Last 3 FYs
Approved in Investment Plan Order	2,150	1,539	2,025	1,905
Actual investment undertaken	1,627	1,776	2,080	1,828
Actual Capitalisation (as per Audited Accounts)	2,076	1,086	1,509	1,557

- 5.8 It can be seen from the above table that during FY 2013-14 to FY 2015-16, the actual asset capitalization has been lower than that approved by the Commission in the respective Tariff Orders. Therefore, the Commission has considered average of capitalization during FY 2013-14 to FY 2015-16 to project capitalization for FY 2017-18, which works out to Rs. 1,557 Crore. The Commission has approved asset capitalization for FY 2017-18 as under:

Table 33: Asset Capitalization approved for FY 2017-18 (Rs. Crore)

Particulars	FY 2017-18
Capitalisation	1,557

- 5.9 Considering all these aspects and Investment Plan approved for FY 2017-18, the Commission approves capitalization of Rs. 1,557 Crore, which is approximately 77% of the approved Investment Plan of Rs. 2,013 Crore for Transmission function (Total Investment Plan approved Rs. 2,033 Crore Less Rs. 20 Crore of Investment Plan for SLDC Function).

Transmission Network Expansion for FY 2017-18

RVPN's Projections:

5.10 The following table summarizes the physical transmission network to be put to use during FY 2017-18 as projected by RVPN in its Petition.

Table 34: Physical Transmission Network to be put to use during FY 2017-18 as projected by RVPN in its Petition

S. No.	Particulars	Unit	FY 2017-18 (Projected)
1	Addition of new Transmission Lines		
A	765kV Lines	ckt-km	0
B	400kV Lines	ckt-km	1,160
C	220kV Lines	ckt-km	628
D	132kV Lines	ckt-km	329
2	Addition of new Sub-Stations		
A	765kV Sub-Station (Nos/MVA)	Nos.	- / -
B	400kV Sub-Station (Nos/MVA)	Nos.	2/2130
C	220kV Sub-Station (Nos/MVA)	Nos.	8/1020
D	132kV Sub-Station (Nos/MVA)	Nos.	16/400
3	Addition of Transformer Capacity		
A	Addition of new Transformer Capacity	MVA	3,550
B	Augmentation of Transformer Capacity	MVA	1,500
C	Total Addition of Transformer Capacity	MVA	5,050
4	No. of Feeder Bays added		
A	765kV	Nos.	0
B	400kV	Nos.	45
C	220kV	Nos.	76
D	132kV	Nos.	128

Commission's Analysis:

5.11 The Commission observes that RVPN has projected the details about physical asset addition in terms of transmission line (ckt-km), MVA capacity, and number of bays for FY 2017-18 on the basis of proposed

capitalization during the year. The Commission has therefore, computed pro-rata addition to physical assets on the basis of approved capitalization vis-à-vis that projected by RVPN.

Operation and Maintenance (O&M) Expenses

RVPN's Projection:

5.12 In the Tariff Regulations, 2014, norms for operation and maintenance (O&M) expense have been specified on the basis of ckt-km, MVA capacity, and feeder bay for different voltage levels. As already discussed in Section- 4, the Petitioner submitted an overall reduction of Rs. 647.46 Crore in the Investment Plan for FY 2017-18, which would also lead to lower physical network asset addition in FY 2017-18 and hence reduction in the projected O&M expenses for FY 2017-18 also. The Commission has analysed the net physical network assets addition in terms of ckt-km, MVA capacity and feeder bays during FY 2017-18, which is summarised as below:

Table 35: Physical Transmission Network to be put to use during FY 2017-18 for computation of O&M expenses as projected by RVPN

S. No.	Particular	FY 2017-18 (Projected)*
1	Circuit Basis	
A	Op. Balance of ckt-km	
	765 kV	425.50
	400 kV	4,468.67
	220 kV	14,392.56
	132 kV	16,731.13
B	Addition of ckt-km during year	
	765 kV	-
	400 kV	1,160
	220 kV*	254
	132 kV*	205
2	MVA Basis	
a	Op. Balance of MVA Capacity	73,086.50
b	Addition of MVA Capacity during year*	6,480.00

S. No.	Particular	FY 2017-18 (Projected)*
3	Feeder bay basis	
a	Op. Balance of Feeder bay	
	765 kV	22
	400 kV	114
	220 kV	752
	132 kV	2,556
b	Addition of Feeder bay during year	
	765 kV	-
	400 kV	45
	220 kV*	68
	132 kV*	126

**Revised based on dropped Schemes*

5.13 On the basis of above physical network capacity addition, RVPN has projected following operation and maintenance expense for FY 2017-18:

Table 36: Projected Operation and Maintenance Expenses by RVPN for FY 2017-18 (Rs. Crore)

Particulars	FY 2017-18 Projected	FY 2017-18 Revised*
O&M cost for transmission lines (ckt-km)	181.31	180.27
O&M cost for substation (MVA)	554.76	552.45
O&M cost for feeder bays (Nos)	383.44	382.97
Total O&M Expenses	1,119.51	1,115.68

**Revised based on dropped Schemes*

Commission's Analysis:

5.14 As the Commission has reduced the capitalization for FY 2017-18, there shall be proportionate reduction in physical asset addition.

5.15 Accordingly, considering the actual physical asset addition approved in the previous section of Truing-up for FY 2015-16, as base, and physical asset addition in FY 2016-17 as per Form T-2 of the Tariff Petition

submitted by RVPN and estimated addition in FY 2017-18 (net of impact of dropped schemes of Rs. 647.46 Crore), the Commission has approved the O&M expenses as under:

Table 37: Projected Operation and Maintenance Expenses approved by the Commission for FY 2017-18 (Rs. Crore)

Particulars	Approved
O&M cost for transmission lines (ckt-km)	178.54
O&M cost for substation (MVA)	547.14
O&M cost for feeder bays (Nos)	377.57
Total O&M Expenses	1,103.25

Depreciation

RVPN's Projections:

5.16 RVPN has projected Rs. 795.50 Crore as depreciation charges for FY 2017-18. RVPN submitted that depreciation has been charged based on the depreciation rates and methodology as specified in RERC Tariff Regulations, 2014. Furthermore, RVPN submitted in its Petition that the main reason for increase in depreciation during FY 2017-18 is estimated addition of Gross Fixed Assets in accordance with the Investment Plan undertaken by the Petitioner and new rates and methodology specified in Tariff Regulations 2014. Projection of RVPN for FY 2017-18 are presented in the table below:

Table 38: Depreciation Charges submitted by RVPN for FY 2017-18 (Rs. Crore)

Particulars	FY 2015-16 (Actual)	FY 2016-17 (Estimated)	FY 2017-18 (Projected)
Depreciation	655.23	738.55	795.50

Commission's Analysis:

5.17 For computing the depreciation for FY 2017-18, the Commission has considered the closing GFA of True-up Order for FY 2015-16 as opening GFA for FY 2016-17 and closing GFA of FY 2016-17 as opening GFA for FY 2017-18. Further, the Commission has approved the reduced capitalization for FY 2017-18. The average depreciation rate as per Petitioner's claim works out to 4.51%. Therefore, the Commission has

computed depreciation for FY 2017-18 as Rs. 772.71 Crore, by applying the same depreciation rate of 4.51% on the average GFA computed for FY 2017-18, which has been summarized as under:

Table 39: Depreciation Charges approved by the Commission for FY 2017-18 (Rs. Crore)

Particulars	As per Petition	Approved
Opening GFA as on 1st April, 2016 (closing GFA from the Petition for FY 2015-16)	14,741.75	14,788.28
Add: Addition during FY 2016-17	1,557.16	1,557.16
Closing GFA for FY 2016-17 (Opening GFA as on 1st April, 2017)	16,298.91	16,345.44
Add: Addition during FY 2017-18	2,660.00	1,557.00
Closing Balance of GFA for FY 2017-18	18,958.91	17,902.44
Average GFA for FY 2017-18	17,628.91	17,123.94
Depreciation Rate (%)	4.51%	4.51%
Depreciation	795.50	772.71

Interest and Finance Charges

RVPN's Projections:

5.18 RVPN has projected the interest and finance charges of Rs. 998.10 Crore for FY 2017-18.

Commission's Analysis:

5.19 The Commission has considered normative approach as per Regulation 19 of Tariff Regulations, 2014. As regards Opening loan for long-term loan pertaining to GFA for FY 2017-18, the Commission has considered closing long-term loan pertaining to GFA of FY 2015-16 as opening for FY 2016-17 and further, closing long-term loan pertaining to GFA of FY 2016-17 as opening loan for FY 2017-18.

5.20 As per Regulation 19 of Tariff Regulations, 2014 extracted below:

"...Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan. Where actual equity employed is less than 30%, the actual equity shall be considered."

5.21 As the equity addition percentage submitted by the Petitioner for FY 2017-18 is less than 30%, therefore, the Commission has considered

equity percentage of capitalisation as per the information submitted by the Petitioner for FY 2017-18 and remaining capitalisation as debt. Debt: Equity ratio as by the Petitioner for FY 2017-18 is shown as below:

Table 40: Debt: Equity Ratio as submitted by the Petitioner for FY 2017-18

Particulars	Projected	
	Rs. Crore	%
Debt	2,171.80	81.65%
Grant	200.20	7.53%
Equity	288.00	10.83%
Total Capital Expenditure/ Capitalisation	2,660.00	100.00%

5.22 However, based on the information submitted by the Petitioner in the ARR Formats as well as subsequent submissions, the Commission has considered the equity as Rs. 288.00 Crore and accordingly the debt has been computed and the revised Debt: Equity ratio for FY 2017-18 works as shown below:

Table 41: Debt: Equity Ratio as considered by the Commission for FY 2017-18

Particulars	Approved	
	Rs. Crore	%
Total Capitalisation	1,557.00	%
Less:		
Grant	133.34	
Consumer Contribution	16.01	
Net Capitalisation funded through Debt and Equity	1,407.65	100.00%
Debt	1,119.65	79.54%
Equity	288.00	20.46%

5.23 Hence, as per above table, 20.46% of the capitalisation approved has been considered to be financed through equity contribution and balance 79.54% has been considered to be financed through debt or loan. The portion of capitalisation financed through consumer contributions and grants has been excluded, as the interest and return on equity thereon would not be charged. Allowable depreciation for the financial year has been considered as normative loan repayment.

5.24 The Commission has considered the weighted average interest rate of 11.34%, as projected by the Petitioner, for estimating the interest charges for FY 2017-18.

5.25 RVPN submitted that the Finance Charges include the Guarantee charges, Commitment Charges, Stamp duty, Registration Fees, Legal Charges, etc. RVPN further submitted that taking into account these charges the Finance Charges for FY 2016-17 and FY 2017-18 have been projected at Rs. 80.00 Crore and Rs 85.00 Crore respectively. The increase in finance charges is mainly due to increase in guarantee charges from 0.50% (concessional rate) to 1.00% as conveyed by Energy Department vide their letter no. F.13 (27) energy/2013 dated 10th June, 2016. The Commission has observed that the actual finance charges incurred by the Petitioner in FY 2015-16 is Rs. 35.48 Crore. Therefore, for the time being the Commission has decided to approve the finance charges as Rs. 65 Crore only, as also approved in its Order dated 27.10.2016, which shall be tried up on actuals.

5.26 The following table summarises the long-term loans workings for FY 2016-17 and FY 2017-18, as submitted by the Petitioner as well as the normative loan workings done by the Commission for the purpose of computing interest on long-term loans for FY 2017-18.

Table 42: Computation of Long-Term Loans (Rs. Crore)

Particulars	Reference	Petitioner's Submission		Commission	
		FY 2016-17 (Provisional)	FY 2017-18 (Projected)	FY 2016-17 (Estimated)	FY 2017-18 (Approved)
Opening Loan balance	A	9,563.93	10,690.85	6,782.24	7,407.57
Capitalisation during the year	B	-	-	1,557.16	1,557.00
Deductions during the year	C	-	-	-	-
Grant and Consumer Contribution	D	-	-	57.01	149.35
Net Capitalisation during the year	E=B-C-D	-	-	1,500.15	1,407.65
Loan Addition	F=E x Debt %	1,803.96	2,171.80	1,305.60	1,119.65
Less: Repayments (Depreciation allowable for that year)	G	677.04	695.37	680.27	772.71
Closing Loan Balance	H=A+F-G	10,690.85	12,167.28	7,407.57	7,754.51

5.27 The workings of interest on long-term loans for FY 2017-18 as submitted by the Petitioner and approved by the Commission is shown as under:

Table 43: Approved Consolidated Interest and Finance Charges for FY 2017-18 (Rs. Crore)

Particulars	Reference	Petitioner's submission	Approved by Commission
Opening Loan balance	A	10,690.85	7,407.57
Loan Addition	B	2,171.80	1,119.65
Less: Repayments (Depreciation allowable for that year)	C	695.37	772.71
Closing Loan Balance	D = A+B-C	12,167.28	7,754.51
Average Loan	E = Average (A,D)	11,429.07	7,581.04
Weighted average rate of interest	F	11.34%	11.34%
Interest on Long Term Loans	G = E x F	1,296.33	859.84
Other Finance Charges	H	85.00	65.00
Total Interest on Long Term Loan	I = G + H	1,381.33	924.84
Less: Interest Capitalised	J	383.23	-
Interest and Finance Charges (Net of Capitalisation)	K = I - J	998.10	924.84

5.28 As the net interest and finance charges computation cover consolidated working for transmission function, SLDC function and partnership generation projects, the Commission has allocated the interest and finance charges between Transmission and SLDC functions. For SLDC function the Commission has considered the interest and finance charge as approved in SLDC ARR for FY 2017-18, while for the partnership generation part, the interest and finance charge have been considered on the same level of FY 2015-16, i.e., Rs. 5.74 Crore as shown in the table below:

Table 44: Approved Interest and Finance Charges for FY 2017-18 (Rs. Crore)

Particulars	Reference	Approved
Total Interest and Finance Charges on Long Term Loans	A	924.84
SLDC Interest and Finance Charges	B	1.02
Partnership Projects Interest and Finance Charges	C	5.74
Net Transmission Interest and Finance Charges	D=A-B-C	918.08

Working Capital and Interest on Working Capital

RVPN's Projections:

5.29 RVPN has projected the interest on working capital as Rs. 58.97 Crore for FY 2017-18. RVPN has further submitted that working capital has been calculated as per norms and Interest rate has been considered at 11.80% for FY 2017-18 as per Tariff Regulations, 2014. RVPN has submitted that the increase in interest on working capital is due to increase in O&M Cost and Receivables for FY 2017-18.

Commission's Analysis:

5.30 The Commission has computed the interest on working capital in accordance with the provisions of Tariff Regulations, 2014. As regards interest rate, the Commission has considered SBI base rate of 9.30% existing during first six months of previous year plus 250 basis points as per Tariff Regulations, 2014. The average rate of interest thus works out to 11.80% for FY 2017-18. Accordingly, the Working capital requirement and interest on working capital as approved by the Commission for FY 2017-18 is as under:

Table 45: Approved Interest on Working Capital for FY 2017-18 (Rs. Crore)

Particulars	Reference	Petitioner's Submission	Approved by Commission
O&M Expenses (1 month)	A	93.29	91.94
Maintenance Spares	B=O&M Expenses*15%	167.93	165.49
Receivables on target Availability	C= One and a half months of transmission charges	322.19	313.14
Less: Amount held as security deposits	D	83.62	83.62
Total Working Capital	E = A+B+C-D	499.78	486.94
Interest Rate	F	11.80%	11.80%
Interest on Working Capital	G = ExF	58.97	57.46

Other Expenses

RVPN's Projections:

5.31 RVPN submitted the other expenses as Rs 27.75 Crore are on account of the miscellaneous expenses which are not recovered during the financial year. RVPN submitted that as the nature of expenses and

trend of which cannot be ascertained and hence, the expenses under other items have been kept same as for previous year.

Commission's Analysis:

5.32 Looking to the past experience, the Commissions approves the Other Expenses of Rs. 14.48 Crore same as approved for FY 2015-16.

Table 46: Approved Other Expenses for FY 2017-18 (Rs. Crore)

Particulars	Petitioner's Submission	Approved by Commission
Other Expenses	27.75	14.48

Return on Equity (RoE)

RVPN's Projections:

5.33 RVPN submitted that the Return on Equity for FY 2017-18 has been considered as 2.00% instead of 15.50% as per in the Tariff Regulations 2014. RVPN has submitted Rs. 84.42 Crore as RoE for FY 2017-18.

Commission's Analysis:

5.34 Tariff Regulations, 2014 stipulate RoE at the rate of 15.50%. Relevant extract from the Regulation is reproduced below:

"20. Return on Equity

...

(2) Return on equity shall be computed at the base rate of 15.5% for Generating Companies and Transmission Licensees, and at the base rate of 16% for distribution licensees."

5.35 The Petitioner has claimed return on equity @ 2.00% instead of 15.50% admissible as per Tariff Regulations, 2014. Accordingly, the Commission has approved the same rate of RoE as claimed by the Petitioner.

5.36 As regards opening equity for FY 2017-18, the Commission has considered closing equity in pursuance to True up for FY 2015-16 as opening equity for FY 2016-17 and equity addition of FY 2016-17 as informed by RVPN has been added to it to arrive at opening equity of FY 2017-18. The summarised workings are shown in the table below:

Table 47: Computation of Equity (Rs. Crore)

Particulars	Reference	Petitioner's submission		Commission	
		FY2016-17 (Provisional)	FY 2017-18 (Projected)	FY 2016-17 (Provisional)	FY 2017-18 (Projected)
Equity at the beginning of the year	A	3,825.09	4,077.09	3,466.50	3,661.05
Net Capitalisation	B	2,096.96	2,660.00	1,500.15	1,407.65
Equity portion of capitalisation	C = B x Equity %	252.00	288.00	194.55	288.00
Equity at the end of the year	D = A+C	4,077.09	4,365.09	3,661.05	3,949.05

5.37 The Commission approves Return on Equity for FY 2017-18 as Rs. 76.10 Crore vis-a-vis Rs. 84.42 Crore as claimed by RVPN. The same is shown as under:

Table 48: Approved Return on Equity for FY 2017-18 (Rs. Crore)

Particulars	Reference	Petitioner's submission	Approved by Commission
Equity at the beginning of the year	A	4,077.09	3,661.05
Equity portion of capitalisation	B	288.00	288.00
Equity at the end of the year	C = A+B	4,365.09	3,949.05
Average Equity	D = (A+C)/2	4,221.09	3,805.05
Rate of RoE considered	E	2.00%	2.00%
Total Return on Equity	F = D x E	84.42	76.10

Non-Tariff Income**RVPN's Projections:**

5.38 RVPN projected Rs. 137.50 Crore as Non-Tariff Income for FY 2017-18 on account of miscellaneous receipts, prior period income, differential interest subsidy on World Bank Loan, sale of scrap, Interest on loans and advances from employees, suppliers & Contractors, rebate for early payment, etc.

Commission's Analysis:

5.39 The Commission has considered the non-tariff income for FY 2017-18 as Rs. 137.50 Crore as submitted by RVPN.

Table 49: Approved Non-Tariff Income for FY 2017-18 (Rs Crore)

Particulars	Petitioner's Submission	Approved by Commission
Non-Tariff Income	137.50	137.50

Revenue from Short Term Open Access**RVPN's Projections:**

5.40 RVPN submitted that the revenue has been assessed assuming allocated open access capacity for future year. The recovery of transmission charges from collective power exchange transactions and Inter-State Short Term Open Access based on kWh energy is difficult to estimate accurately and included in total revenue from open access consumers.

Table 50: Revenue from Short Term Open Access Consumers (Rs. Crore)

Particulars	FY 2015-16		FY 2016-17		FY 2017-18
	RERC Order dt 14-8-2015	Actual	Approved	Estimated	Projected
Revenue from Open Access Consumers	1.00	364.75	131.79	300.00	300.00

Commission's Analysis:

5.41 Pursuant to the Petitioners submission for the true up tariff Petition, the Petitioner has submitted revenue from short-term open access and Income from Other Business during FY 2015-16 as Rs. 364.75 Crore. Now, the Petitioner has projected an amount of Rs. 300.00 Crore for FY 2016-17 and FY 2017-18. The Commission accordingly approves Revenue from short-term open access for FY 2017-18 as Rs. 300.00 Crore.

Aggregate Revenue Requirement**RVPN's Projections:**

5.42 RVPN considered a surplus of Rs. 69.80 Crore in True up of FY 2015-16 and has considered the same in its submission of ARR. Considering this surplus on account of true-up for FY 2015-16, RVPN has projected the

ARR of Rs. 2,577.51 Crore for transmission function for FY 2017-18.

Commission's Analysis:

5.43 Based upon the detailed analysis of various components as stipulated in the above paragraphs, the Commission approves the ARR for FY 2017-18 as under.

**Table 51: Approved Summary of ARR for Transmission Function for FY 2017-18
(Rs. Crore)**

S. No.	Particulars	Petitioner's Submission	Approved by Commission
1	Operation & Maintenance Expenses	1,119.51	1,103.25
2	Depreciation	795.50	772.71
3	Interest and finance charges on Long Term Loans	998.10	918.08
4	Interest on Working Capital & Financial Charges	58.97	57.46
5	Insurance charges	0.55	0.55
6	Other Item	27.75	14.48
7	Total Revenue Expenditure (1 to 6)	3,000.38	2,866.53
8	Return on Equity	84.42	76.10
9	Aggregate Revenue Requirement (7+8)	3,084.81	2,942.63
10	Less: Non-Tariff Income	137.50	137.50
11	Less: Revenue from Short Term Open Access	300.00	300.00
12	True up of FY 2015-16 Surplus / (Gap)	69.80	-*
13	Net Aggregate Revenue Requirement (9-10-11-12)	2,577.51	2,505.13

*The Commission has already specified the treatment of Surplus determined in Truing-up of FY 2015-16 in Para 3.51.

Incentive for System Availability

5.44 As incentive is admissible over and above the ARR upon demonstration of actual transmission system availability exceeding the normative transmission system availability at the end of the year, therefore, the effect of incentive has not been considered by the Commission in this ARR. The same may be considered at the time of truing up of FY 2017-18.

Transmission Tariff for FY 2017-18

RVPN's Projections:

5.45 RVPN has projected the transmission tariff for FY 2017-18 as follows:

Table 52: Projected Transmission Charges for FY 2017-18

Particulars	Petition
Revenue Requirement (Rs. Crore)	2,577.51
Less: Revenue from Inter State Transmission Lines (Rs. Crore)	37.98
Net Revenue Requirement from Transmission Tariff (Rs. Crore)	2,539.53
Transmission Capacity for Discoms (MW)	12,528.00
Transmission Capacity for Open Access (MW)	550.00
total transmission by RVPN, MW	13,078.00
Transmission Tariff (Rs./kW/Month)	161.82
Transmission Charges to be recovered from Discoms (Rs. Crore)	2,432.73
Revenue recovery from Long Term Open Access (Rs. Crore)	106.80

Commission's Analysis:

5.46 The Commission has specified transmission tariff in terms of network usage based upon projection of contracted/allotted capacity of 12,528 MW and 550 MW for Discoms and long term open access customers respectively, aggregating to 13,078 MW, as per the provisions of Regulation 66(1)(b) of the Tariff Regulations, 2014. The transmission tariff for Discoms and long term open access transactions works out as Rs. 157.21/kW/month. This tariff shall also be applicable for customers availing medium term open access.

5.47 The gross energy requirement of Discoms and long-term open access customers for FY 2017-18 has been shown as 78,513 MU and 3,760 MU respectively by the Petitioner. Considering the aggregate energy requirement of 82,273 MU and total transmission charges amounting to Rs. 2,467.15 Crore, the transmission tariff for use of State transmission system in inter-State short-term open access bilateral transactions and collective power exchange transactions are approved as 29.99

paise/kWh.

5.48 Accordingly, the approved transmission tariff for the FY 2017-18 is as under:

Table 53: Approved Transmission Tariff for FY 2017-18

Sr. No.	Particulars	Unit	Approved by Commission
1	Net Transmission charges to be recovered from Discoms and Long Term Open Access customers	Rs. Crore	2,505.13
2	Less: Revenue from Inter State transmission Lines	Rs. Crore	37.98
3	Net Revenue Requirement From Transmission Tariff	Rs. Crore	2,467.15
4	Approved Transmission capacity for Discoms	MW	12,528
5	Long Term Open Access customers	MW	550
6	Total Transmission Capacity	MW	13,078
7	Transmission Tariff for Discoms and Long Term Open Access customers	Rs./kW/Month	157.21
8	Transmission Tariff for Medium Term Open Access customers	Rs./kW/Month	157.21
9	Transmission Tariff for intra-state Short Term Open Access customers	Rs./kW/Day	5.17
10	Energy Requirement for Discoms in FY 2017-18	MU	78,513
11	Energy Requirement for Long Term Open Access customers in FY 2017-18	MU	3,760
12	Transmission tariff for use of State transmission system in inter-State Short Term Open Access bilateral transactions and collective power exchange transactions	paise/ kWh	29.99
13	Transmission Charges to be recovered from Discoms during FY 2017-18	Rs. Crore	2,363.39

Note: The State Government vide letter No. F.20 (6) Energy /2010 /Pt.2 dated 13.1.2015 has issued a policy directive to fix the transmission tariff of STU for Solar Power Projects to be commissioned during the period 01.04.2015 to 31.03.2018 or for a capacity of 2,000 MW, whichever is earlier, at a rate equal to 50% of normal transmission tariff (Rs. Per MW) as applicable to conventional power for a period of 25 years, for which no subsidy shall be provided by the

State Government. The Commission under Section 108 of Electricity Act, 2003 shall be guided by the policy directives issued by the State Government. Therefore, the Commission directs RVPN to charge the transmission tariff @ equal to 50% of the rate specified at Sr. No. 7, 8 & 9 above as the case may be for such solar power projects, which are covered under the above policy directive.

Section – 6: Analysis of ARR for SLDC Function for FY 2017-18

6.1 In order to ensure smooth real time system operations, the Electricity Act, 2003, provides for SLDC to be a separate entity, operated by a competent agency notified by the State Government. The State Transmission Utility will operate the SLDC till the time a separate entity is notified for this purpose. The GoR has entrusted RVPN with this responsibility in Rajasthan.

SLDC Capitalisation

6.2 RVPN has proposed capital investment and capitalisation of Rs. 20 Crore in its petition towards SLDC works for FY 2017-18. In its forms submitted along with Investment Plan Petition, RVPN has submitted this Investment Plan as 'Automation/ SCADA solutions, RTU's/ BCU's, related primary equipment up-gradation, communication interfaces/ channels (under ULDC, up-gradation of existing S/S)'. The Commission approves capitalisation of Rs. 20 Crore as submitted by RVPN

O&M Expenses

RVPN's Projections:

6.3 RVPN has projected the O&M expenses of Rs. 15.33 Crore for FY 2017-18 for SLDC function.

Commission's Analysis:

6.4 RVPN has submitted the O&M expenses as Rs.15.33 Crore, which includes Employee Expenses as Rs.13.01 Crore, Administrative and General Expenses as Rs. 2.12 Crore, Repair and Maintenance Expenses as Rs. 0.20 Crore for FY 2017-18. Pursuant to the Regulation 24(3) of Tariff Regulations, 2014, the O&M Expenses shall be escalated by 5.85% each year from the start of Control Period, i.e., FY 2014-15. The relevant extract is reproduced as under:

"24. Operation & Maintenance expenses

...

(2) Normative O&M expenses allowed at the commencement of the Control Period (i.e. FY 2014-15) under these Regulations shall be escalated at the rate of 5.85% per annum for each year of the Control Period.

..."

6.5 The Commission has approved O&M expenses as Rs. 10.50 Crore (Employee Expenses Rs. 9.28 Crore, Administrative & General Expenses Rs. 1.07 Crore and R&M Expenses Rs. 0.15 Crore) as per the SLDC Accounts statement while truing up for FY 2015-16. Hence, the Commission approves the O&M expenses as Rs. 11.77 Crore (Employee Expenses Rs. 10.40 Crore, Administrative & General Expenses Rs. 1.20 Crore and R&M Expenses Rs. 0.16 Crore) after escalating the O&M expenses approval in true up of FY 2015-16 @5.85% per annum which shall be subject to truing up of FY 2017-18.

Table 54: Approved O&M Expenses for FY 2017-18 (Rs. Crore)

Particulars	As per Petition	Approved by Commission
O&M Expenses	15.33	11.77

Depreciation

RVPN's Projections:

6.6 RVPN has projected the depreciation charges of Rs. 2.68 Crore for FY 2017-18. RVPN further submitted that the depreciation charges have been computed as per the provisions of Tariff Regulations, 2014.

Commission's Analysis:

6.7 The Commission has considered capitalization for FY 2017-18 as Rs. 20 Crore as submitted by the Petitioner. For computing the depreciation, the Commission has considered the closing GFA of true-up for FY 2015-16 as opening GFA for FY 2016-17 and closing GFA for FY 2016-17 as opening GFA for FY 2017-18. Depreciation for FY 2017-18 has been computed on the basis of opening GFA of FY 2017-18 plus half of average addition during FY 2017-18 to arrive at GFA at the midpoint of the year. The Commission has considered the average depreciation rates of 4.51% submitted by RVPN for FY 2017-18. During FY 2016-17, Rs. 63,253 has been considered as addition to the Capitalisation as submitted by RVPN, in response to additional information required by the Commission. Accordingly, depreciation worked out for FY 2017-18 is as under:

Table 55: Approved Depreciation for FY 2017-18 (Rs. Crore)

Particulars	As per Petition	Approved by Commission
Depreciation	2.68	1.77

Interest and Finance Charges

RVPN's Projections:

6.8 RVPN has projected the interest and finance charges for FY 2017-18 as Rs. 2.96 Crore.

Commission's Analysis:

6.9 The Commission has considered capitalisation for FY 2017-18 as Rs. 20 Crore as submitted by RVPN and proportionate loan additions as Rs. 18 Crore. The Commission worked out interest on the weighted average interest rate of 10%, worked out on the basis of submissions of RVPN, Accordingly, the Commission has worked out and approved interest and finance charges for FY 2017-18 as under:

Table 56: Approved Interest and Finance Charges for FY 2017-18 (Rs. Crore)

Particulars	As per Petition	Approved by Commission
Total Interest and Finance Charges	2.96	1.02

Working Capital and Interest on Working Capital

RVPN's Projections:

6.10 RVPN has projected the interest on working capital as Rs. 0.93 Crore for FY 2017-18. RVPN has further submitted that working capital has been calculated as per norms and interest rate has been considered as 11.80% for FY 2017-18 as per Tariff Regulations, 2014.

Commission's Analysis:

6.11 The Commission has computed interest on working capital on the basis of revised parameters in accordance with the provisions of Tariff Regulations, 2014. As regards interest rate, the Commission has considered SBI base rate of 9.30% existing during first six months of FY 2015-16 plus 250 basis points as per Tariff Regulations, 2014. The Commission observed that the Petitioner has worked out the

Maintenance Spares component @ 20% of O&M Expenses. However, the Commission has considered Maintenance Spares @ 15% of O&M Expenses as per norms specified in the Tariff Regulations, 2014. Therefore, working capital requirement and interest on working capital for FY 2017-18 is as under:

Table 57: Approved Interest on Working Capital for FY 2017-18 (Rs. Crore)

Particulars	Reference	As per Petition	Approved by Commission
O&M Expenses (1 month)	A	1.28	0.98
Maintenance Spares	B	3.07	1.76
Receivables	C= One and a half months of SLDC charges	3.98	4.06
Less: Amount held as security deposits	D	0.40	0.40
Total Working Capital	E=A+B+C-D	7.92	6.41
Interest Rate	F	11.80%	11.80%
Interest on Working Capital	G=E*F	0.93	0.76

RLDC Fee & Charges

RVPN's Projections:

6.12 RVPN has projected the expenses on account of RLDC fee & charges of Rs. 19.05 Crore for FY 2017-18. RVPN also stated that it is paying NRLDC on account of operation and recovery of annualized fixed charges for the Unified Load Dispatch Centre (ULDC) scheme.

Commission's Analysis:

6.13 The Commission observes that the payment is made to NRLDC on account of operation and recovery of annualized fixed charges for the Unified Load Dispatch Centre (ULDC) scheme on which licensee has no control. Considering the projected expenses to be in line with the approved RLDC fee & charges for FY 2016-17, the Commission approves the expense for FY 2017-18 as under:

Table 58: Approved RLDC Fee & Charges for FY 2017-18 (Rs. Crore)

Particulars	As per Petition	Approved by Commission
RLDC Fee & Charges	19.05	19.05

Return on Equity

RVPN's Projections:

6.14 RVPN submitted that RoE for FY 2015-16 has been considered @ 8.00% and for FY 2017-18 @ 2.00% instead of 15.50% as per Tariff Regulations, 2014.

Commission's Analysis:

6.15 The Petitioner has claimed Rs. 0.08 Crore as return on equity. The Commission has approved return on equity as under:

Table 59: Approved Return on Equity for FY 2017-18 (Rs. Crore)

Particulars	Reference	FY 2016-17 (Estimated)	FY 2017-18 (Approved)
Equity at the beginning of the year	A	1.07	1.07
Capitalisation during the year	B	0.0063	20.00
Deduction during the year	C	-	-
Less: Consumer Contribution	D	-	-
Net Capitalisation	E = B-C-D	0.0063	20.00
Equity portion of capitalisation	F = E x Equity %	0.0006	2.00
Equity at the end of the year	G = A + F	1.07	3.07
Average Equity	H = (A+G)/2		2.07
RoE Considered	I		2.00%
Total Return on Equity	J = H x I		0.04

Aggregate Revenue Requirement (ARR) for SLDC

RVPN's Projections:

6.16 RVPN has projected the ARR of SLDC function for FY 2017-18 as under:

Table 60: Projected ARR of SLDC Business for FY 2017-18 (Rs. Crore)

S. No.	Particulars	As per Petition
1	Expenses	
a)	Operating Expenses	
i)	Employee expenses	13.01
ii)	Administrative and General Expenses	2.12
iii)	Repair and Maintenance Expenses	0.20
iv)	Interest on Working Capital	0.93
v)	RLDC Fee and Charges	19.05

S. No.	Particulars	As per Petition
b)	Capital expense components	
i)	Depreciation	2.68
ii)	Interest and finance charges on term loan	2.96
iii)	Return on equity	0.08
c)	Income Tax provision	-
2	Total Revenue Expenditure (a+b+c)	41.04
3	Less: Non-Tariff income	1.71
4	Less: Income from other business	0.21
5	True-up of FY 2015-16 Surplus/(Gap)	7.68
6	Aggregate Revenue Requirement	31.44

Commission's Analysis:

6.17 The Commission has considered the Non-tariff income of Rs. 1.71 Crore and the income from short-term open access consumers of Rs. 0.21 Crore as projected by the Petitioner.

6.18 Based on the detailed analysis of various components, the Commission approves the ARR for SLDC function for FY 2017-18 as follows:

Table 61: Approved Summary of ARR for SLDC Function for FY 2017-18 (Rs. Crore)

S. No.	Particulars	As per Petition	Approved
1	Expenses		
a)	Operating Expenses		
i)	Employee expenses	13.01	10.40
ii)	Administrative and General Expenses	2.12	1.20
iii)	Repair and Maintenance Expenses	0.20	0.16
iv)	Interest on Working Capital	0.93	0.76
v)	RLDC Fee and Charges	19.05	19.05
b)	Capital expense components		
i)	Depreciation	2.68	1.77
ii)	Interest and finance charges on term loan	2.96	1.02
iii)	Return on equity	0.08	0.04
c)	Income Tax provision	0.00	0.00

S. No.	Particulars	As per Petition	Approved
2	Total Revenue Expenditure (a+b+c)	41.04	34.40
3	Less: Non-Tariff income	1.71	1.71
4	Less: Income from other business	0.21	0.21
5	Truing up of FY 2015-16 Surplus / (Gap)	7.68	_*
6	Aggregate Revenue Requirement	31.44	32.48

**The Commission has already specified the treatment of Surplus determined in Truing-up of FY 2015-16 in Para 3.66.*

6.19 The recovery of SLDC expenses for FY 2017-18 shall be as under:

Table 62: Approved SLDC Expenses for FY 2017-18

Particulars	Approved by Commission
Net Revenue Requirement for SLDC Operations to be recovered from Discoms and Long Term Open Access Customers (Rs. Crore)	32.48
Contracted capacity for Discoms and Long Term Open Access Customers (MW)	13,078
SLDC Charges for Discoms and Long Term OA Transactions (Paise/kW/Month)	206.97
SLDC Charges for Medium Term OA Transactions (Paise/kW/Month)	206.97
SLDC Charges for Short Term OA Transactions (Paise/kW/Day)	6.80

Section -7: Applicability

- 7.1 The tariff determined vide this Order shall be effective from 1st April, 2017.
- 7.2 The transmission and SLDC charges as determined under this Order for Discoms would be shared amongst them in proportion to their contracted/allotted capacity for the FY 2017-18.
- 7.3 The Commission vide its Order dated 07.04.2017 had approved transmission tariff and SLDC Charges for FY 2017-18 on interim basis subject to adjustment when the transmission tariff and SLDC charges are determined. For long term and medium term open access customers and Discoms, the net surplus/shortfall based on final tariff approved by the Commission for FY 2017-18 in this Order and interim tariff for FY 2017-18 shall be adjusted/recovered in next three months from the date of this Order. However, in case of short term open access transactions, there shall be no retrospective adjustment of transmission and SLDC charges.
- 7.4 Copy of this Order may be sent to the Petitioner, Respondents, Objectors, CEA and Government of Rajasthan.

(Rajendra Prasad Barwar)

Member

(Vinod Pandya)

Member

(Vishvanath Hiremath)

Chairman

Annexure-1:**The list of Stakeholders and Representatives of the Petitioner/Respondents present during the hearing:**

1.	Shri R. C. Shivgan	SE(NPP&RA) – RVPN
2.	Shri S. C. Sharma	SE(P&P) – RVPN
3.	Shri S. T. Hussain	SE(RA)-Discoms
4.	Shri O. P. Bansal	EE (NPP&RA) – RVPN
5.	Shri A. K .Bissa	EE(P&P) – RVPN
6.	Shri Amit Mathur	AE (P&P) – RVPN
7.	Shri M. P. Sharma	A&N (P&P)-RVPN
8.	Shri. Manish Saxena	CAO – RVPN
9.	Shri Bhadur Singh	AO – RVPN
10.	Shri Nitesh Garg	AO - RVPN
11.	Shri Neeraj Garg	Jr. Accountant - RVPN
12.	Shri Roshanlal Surana	Consultant – RVPN
13.	Shri V. K. Gupta	Consultant – RVPN
14.	Shri D. S. Agarwal	Consultant, RTMA
15.	Shri. G. L. Sharma	Stakeholder
16.	Shri Lalit Chaturvedi	Idam Infra, Consultant to the Commission
17.	Shri Rahul Kaushik	Idam Infra, Consultant to the Commission

List of Abbreviations

A&G	Administrative and General
Act	Electricity Act, 2003
ADB	Asian Development Bank
APTEL	Appellate Tribunal For Electricity
ARR	Aggregate Revenue Requirement
AS	Accounting Standards
ATS	Associated Transmission System
AVVNL	Ajmer Vidyut Vitran Nigam Ltd
BCU	Bay Controller Unit
BoD	Board of Directors
BPC	Bid Processing Co-ordinator
BPTA	Bulk Power Transmission Agreement
CCOA	Chief Controller of Accounts
CD	Compact Disc
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
COD	Commercial Date of Operation
Ckt-km	Circuit Kilo-meter
C&AG	Comptroller and Auditor General
D/C	Double Circuit
Discom	Distribution Company
DPR	Detailed Project Report
EHV	Extra High Voltage
EPS	Electric Power Survey
FRP	Financial Restructuring Plan
FY	Financial Year
GFA	Gross Fixed Assets
GoI	Government of India
GoR	Government of Rajasthan
GSS	Grid Sub Station
GTPS	Gas Thermal Power Station
ICT	Inter-Connecting Transformer
IDC	Interest During Construction
InSTS	Inter State Transmission System
Investment Approval Regulation, 2006	RERC (Investment Approval) Regulations, 2006
JdVVNL	Jodhpur Vidyut Vitran Nigam Limited
JVVNL	Jaipur Vidyut Vitran Nigam Limited
kV	Kilo Volt
kWh	Kilo Watt Hour
LILO	Loop in Loop Out

LTOA	Long Term Open Access
MoP	Ministry of Power
MU	Million Units
MVA	Milion Volt Ampere
MW	Mega Watt
MYT	Multi Year Tariff
NRLDC	Northern Regional Load Despatch Center
OA	Open Access
O&M	Operation & Maintenance
PLCC	Power Line Carrier Communication
PLF	Plant Load Factor
PPP	Public Private Partnership
RERC	Rajasthan Electricity Regulatory Commission
RFQ	Request for Qualification
RoE	Return on Equity
RoW	Right of Way
R&M	Repairs & Maintenance
RTU	Remote Terminal Unit
RVPN	Rajasthan Rajya Vidyut Prasaran Nigam Limited
SLDC	State Load Dispatch Centre
STOA	Short Term Open Access
Tariff Regulation, 2009	RERC (Terms and Conditions for Determination of Tariff) Regulations, 2009
Tariff Regulation, 2014	RERC (Terms and Conditions for Determination of Tariff) Regulations, 2014
TPS	Thermal Power Station
TSA	Transmission Service Agreement
TSPCC	Transmission System Planning & Coordination Committee
ULDC	Unified Load Despatch Centre
WDV	Written Down Value

Annexure 3

Status of Compliance to Directions Issued by the Commission in Previous Orders:

Sr. No.	Ref. No. of tariff order dt. 27.10.2016	Commission's Observations / Directions	Further Action Taken by RVPN	Commission's Observations
1	Para 3.8	RVPN is required to deposit Rs. 381.90 Crore in Pension and Leave Encashment Trust in FY 2016-17 and to intimate the Commission.	RVPN submitted that it will deposit the amount of Rs. 381.90 crore to the trust during the FY 2016-17 subject to availability of fund. Subsequently, in response to stakeholder's query, RVPN submitted that it has deposited Rs. 172 Crore during the FY 2016-17.	The Commission has noted RVPN's response.
2	Para 3.18	The Commission has asked RVPN to provide category wise assets, rates and their respective depreciation amount segregated into less than 12 years old, more than 12-year-old and remaining assets which have reached the accumulated depreciation of 90% as per norms while filling the future petition.	RVPN stated that it has submitted the requisite Information for the FY 2015-16.	The information provided does not have the segregation of fixed assets for less than 12 years, more than 12 years and assets which have reached the accumulated depreciation of 90%. The Commission has reduced the depreciation from Rs. 655.23 Crore to Rs. 611.41 Crore for FY 2015-16.
3	Para 3.45	The Commission has asked RVPN to sought a refund of Rs. 235.29	RVPN has submitted that the Gratuity Trust	The Commission has noted the compliance.

Sr. No.	Ref. No. of tariff order dt. 27.10.2016	Commission's Observations / Directions	Further Action Taken by RVPN	Commission's Observations
		Crore from Gratuity Trust.	has refunded Rs. 220 Crore and the balance will be refunded shortly.	
4	Para 3.49	RVPN to submit year wise re-conciliation statement of accounting of terminal benefits Gratuity, Pension and Leave encashment duly certified by Chartered Accountant along with next ARR & tariff petition.	RVPN has submitted Certificate of reconciliation of terminal benefits dully certified by CA.	The Commission has noted the compliance.
5	Para 4.5	RVPN shall maintain scheme wise accounting and submit scheme wise completed cost showing IDC separately, indicating original cost, original and final date of commissioning of scheme costing above Rs 10 Crore with detailed reason for time and cost overrun etc.	RVPN has submitted that Accounting will be done through SAP module in future.	The Commission has noted RVPN's response.
6	Sr. No. 1 of Annex-3	The Commission directs the Petitioner to expedite the finalization of TSA with the Discoms and Long Term Open Access Consumers and produce the signed TSA alongwith petition for FY 2017-18.	The matter is pending with RUVN/Discoms.	The Commission has noted RVPN's response.

Sr. No.	Ref. No. of tariff order dt. 27.10.2016	Commission's Observations / Directions	Further Action Taken by RVPN	Commission's Observations
7	Sr. No. 2 of Annex-3	The Commission directs the petitioner to furnish the details of amount of Rs. 109.28 Crore deposited in the Trust as reported.	RVPN has deposited an amount of Rs. 100 Crore on 29.10.2015 and Rs. 9.28 Crore on 27.01.2016.	The Commission has noted the compliance.