

RAJASTHAN ELECTRICITY REGULATORY COMMISSION

Petition No: RERC/1978/22

In the matter of approval of Investment Plan for Rajasthan Rajya Vidyut Prasaran Nigam Limited FY 2022-23.

Coram : **Dr. B.N. Sharma, Chairman**
Sh. Hemant Kumar Jain, Member
Dr. Rajesh Sharma, Member

Petitioner : Rajasthan Rajya Vidyut Prasaran Nigam Ltd.

Respondent :

- 1) Jaipur Vidyut Vitran Nigam Ltd.
- 2) Ajmer Vidyut Vitran Nigam Ltd.
- 3) Jodhpur Vidyut Vitran Nigam Ltd.
- 4) Rajasthan Rajya Vidyut Utpadan Nigam Ltd.

Date of hearing : 12.05.2022, 06.06.2022, 02.08.2022, 31.8.2022, 18.10.2022 and 10.11.2022

Present :

- 1) Sh. V. A. Kale, Representative for Petitioner.
- 2) Ms. Arushi Goyal, Advocate for Respondents
- 3) Sh. G. L. Sharma, Stakeholder

Date of Order : 01/12/2022.

ORDER

- 1.1 Rajasthan Rajya Vidyut Prasaran Nigam Ltd. (in short "RVPN"), a Transmission Licensee under Regulation 4 of the RERC (Investment Approval) Regulations, 2006, has filed a petition on 07.01.2022 for approval of Investment Plan for FY 2022-23. Further, RVPN revised their investment plan vide an interlocutory application submitted on 30.06.2022.
- 1.2 The Commission vide order dated 07.09.2022 revised threshold limit to 250 Cr. and accordingly, asked the petitioner to re-submit their investment proposal based on the revised threshold limit decided by the Commission. Accordingly, RVPN submitted their revised investment proposal for the FY 2022-23 on 21.09.2022.
- 1.3 As required under Section 64(2) of the Electricity Act, 2003, public notices with salient features of the petition inviting objections/ comments/ suggestions were published in the following newspapers on the dates mentioned:

Table 1:Details of Newspapers

Sr.No.	Name of News Paper	Date of publishing
(i)	Times of India Jaipur edition	04.02.2022
(ii)	Dainik Bhaskar	03.02.2022
(iii)	Rajasthan Patrika	03.02.2022

- 1.4 The petition was also placed on the websites of the Commission and the Petitioner. The objections/comments/suggestions were received from Shri G.L. Sharma & Rajasthan Urja Vikas Nigam Ltd (RUVNL) .
- 1.5 The Commission forwarded the objections/comments/suggestions of the stakeholder to RVPN for filing its reply.

- 1.6 The Commission vide letter dated 01.02.2022, 27.05.2022, 08.08.2022 and 06.09.2022 communicated some data gaps and deficiencies in the petition. The Petitioner furnished information vide its letter dated 24.03.2022, 23.06.2022, 26.08.2022, 21.09.2022 and 25.11.2022. The Petitioner also replied to the objections/comments/ suggestions made by the stakeholders vide its letter dated 29.04.2022 and 24.05.2022.
- 1.7 The public hearing in the matter were held on 12.05.2022, 06.06.2022, 02.08.2022, 31.8.2022, 18.10.2022 and 10.11.2022
- 1.8 In exercise of the powers conferred under Sections 64 and other provisions of Electricity Act 2003, read with RERC (Investment Approval) Regulations, 2006 and other enabling Regulations, the Commission, after carefully considering each of the submissions of the Petitioner and suggestions/objections submitted by the Stakeholders, has passed the following Order.
- 1.9 This order has been structured in following sections as given under:
- (1) Section 1: General
 - (2) Section 2: Summary of objections/comments/suggestions received from stakeholders and RVPN's response thereon
 - (3) Section 3: Analysis of Investment Plan for FY 2022-23.

**SECTION 2: Summary of objections/comments/suggestions received
form stakeholders and RVPN's response thereon**

Financing of the Investment Plan

Stakeholder's Comments/suggestions

- 2.1. The Stakeholder Sought the details of equity of Rs. 275 Cr. received from the State Government. The stakeholder further sought the details of fund tied-up with the financial institutions in respect of ongoing projects along with details of the disbursements. The stakeholder also sought the details of funds tied-up for financing the proposed schemes.
- 2.2. The stakeholder sought the following information in respect of PSDF funded scheme.
 - a. The details of amount received as grant from PSDF under each head of accounts.
 - b. The details of each project to be carried out with the tentative date of completion.

RVPN's Response

- 2.3. The Petitioner submitted that the Equity of Rs. 210 Cr has been approved by Government of Rajasthan (GoR), against proposed Equity of Rs. 275 Cr in its Budget Announcement dated 23.02.2022. The said equity shall be received in FY 2022-23. Copy of the same is submitted by the petitioner.
- 2.4. The petitioner submitted the details of funds tie up with financial institutions for the works proposed in the Investment Plan.

2.5. The Petitioner submitted the details in respect of PSDF funded schemes. The details as follows:

(Rs. in Cr)

Name of head	Total Grant in project	Total Grant received	1st instalment/ date of receipt	2nd instalment/ date of receipt
Deferred Revenue on Account of Grant towards Cost of Capital Assets	92.50	26.85	9.26/ 27.03.2019	17.59/ 12.03.2020

2.6. Further, the Petitioner stated that the grant (50%) from PSDF has been provided on the whole project, not for specific components of the project. Further, the Petitioner submitted the copy of work order in respect of project of RE integration under STNAM projects.

Stakeholder's Comments/suggestions

2.7. The Stakeholder submitted that in respect of Investment Plan for the FY 2021-22, the actual expenditure upto Nov. 2021 was less than 50% of the approved amount. The stakeholder sought detailed justification for the same.

2.8. The stakeholder further submitted that the proposed expenditure of Rs.233.36 Cr. against deposit works has no relevance with the Investment Plan expenditure.

RVPN's Response

2.9. The Petitioner submitted that the expenditure of Rs, 475.09 Cr (without IDC) has been taken place up to February, 2022. The main reasons for less expenditure during FY 2021-22 was the impact of Corona pandemic &

other issues of contractors resulted in slow progress projects, supply of material, RoW issues, projects in GIB arc area etc. However, the Petitioner stated that the best efforts are being made by them to achieve financial targets by March, 2022. Further, the Petitioner submitted Supporting documents for slow progress by contractors.

- 2.10. The Petitioner submitted that the detail of deposit works are as per requirement of Form-2.

Stakeholder's Comments/suggestions

- 2.11. The stakeholder submitted that the claim amounting to Rs. 2 Cr. towards institutional Strengthening is not admissible, as the Hon'ble Commission has already disallowed the same in order dated 22.11.2021.

RVPN's Response

- 2.12. The Petitioner submitted that a Review petition in respect of order dt. 22.11.2021 has been filed on dt. 24.12.2021. The decision on the matter is awaited. The Petitioner has provided the copy of the replies submitted vide letter no. 1296 dated 24.03.2022 in respect of Data Gaps raised by the Commission regarding Institutional Strengthening.

Stakeholder's Comments/suggestions

- 2.13. The Stakeholder submitted that the schemes under load despatch, SCADA & communication works are related to SLDC. Therefore, it is not admissible as part of RVPNL's Investment Plan. SLDC may file a separate investment proposal for the same. The stakeholder further sought the Project wise actual expenses of GFA addition for the FY 2019-20 and FY 2020-21. The stakeholder sought the DPR/project report in respect of the proposed expenditure along with the separate petition.

RVPN's Response

- 2.14. The Petitioner stated that a separate company for SLDC is not yet established therefore, SLDC working as a part of RVPN only. However, the income – expenditure is separately maintained and being allowed by the Commission.
- 2.15. The Petitioner submitted the details of proposed investment viz-a-viz actual expenditure and statement of income-expenditure for FY 2019-20 & 2020-21.

Stakeholder's Comments/suggestions

- 2.16. The Stakeholder submitted that in case of installation of 3 x 500 MVA 765/400 kV power transformer at Phagi, 1X500 MVA spare transformer has been used. This has resulted in increase the cost of GFA and also O&M Expenses. The stakeholder further submitted that the Hon'ble APTEL also disallowed capital expenditure towards spare excitation transformer and generator rotor in their order dated 07.12.2017 in appeal No. 122, 136 & 146 of 2013. Therefore, the stakeholder requested the Hon'ble Commission not to allow the capital investment for installation of spare transformer.

RVPN's Response

- 2.17. The Petitioner submitted that as per regulation 16 (8) (d) of Regulations, 2019 (Terms and Condition for determination of Tariff), initial spares shall be capitalised as a percentage of the Plant and Machinery cost up to cut-off date, subject to the ceiling limit for transmission Substation (4%). The petitioner submitted the details of the operation of Transformer bank, capacity and use of spare transformer in the 765kV switchyard as below:

- (a) In 765kV network, the single phase 1x500MVA Transformer is used for formation of 3-phase bank of 3x500MVA with total capacity of 1500 MVA each.
- (b) For (N-1) criteria, the Transformer bank should be readily available i.e. in operation so that once any bank of 1500 MVA out on fault the other two banks caters the system conditions.
- (c) The spare 1x500MVA Transformer is installed in switchyard in such a formation that it can be put in any 3 Nos. Transformer bank in case any of Single phase 1x500 MVA Transformer becomes faulty/ burn. This is not an automatic process but it takes a manual intervention and requires 4-5 hours to make necessary change over and make necessary connections.

2.18. The petitioner further submitted that in view of the above , the purpose and function of complete live 3 phase transformer bank and spare 1x500 MVA Transformer is completely different and the formation used and investment made by RVPN is justified and is as per notional practice adopted by all other leading utilities having 765kV Transmission sub-stations.

2.19. Further, the Petitioner submitted that the APTEL decision as referred by respondent is not related to a Transmission System.

2.20. The Petitioner submitted that the scheme at S.No. 1(page 12) of instant petition does not have link with already existing spare 1x500 MVA transformer. The Petitioner submitted the copy of DPR of the scheme [S.No. 1(page 12)] of Installation of 3x500MVA, 765/400KV transformer at 765KV Phagi, which is also approved by TSPCC in its 12th meeting held on dated 16.11.2018.

Stakeholder's Comments/suggestions

- 2.21. The stakeholder sought the reasons and the approval of TSPCC in respect of the scheme for upgradation of existing 132KV S/c Jodhpur-CHB-Soorsagar line to 220 KV D/C Narobase Towers. Further, reason for charging it on 132 kV in spite of upgradation to 220 kV is also sought.

RVPN's Response

- 2.22. The Petitioner submitted that this project was an integrated project of the scheme of Jodhpur city EHV network strengthening scheme-I. This scheme was formed for System Strengthening & Load Catering scheme to reduce transmission losses (271.69 LU) and for meeting increasing load of Jodhpur City.
- 2.23. Further, The Petitioner submitted that the proposed line is in dense urban area and therefore with small foot print and high-capacity corridor for existing and future load requirement is being created on 220kV level. This will cater to present need on 132kV level and as per load growth in city will be made operational at 220kV level with 220kV S/S, it will obviate RoW issues & difficulties in laying EHV lines in density populated urban area.
- 2.24. Furthermore, the Petitioner stated that the said project was approved by TSPCC in its 2nd meeting dated 22.06.2010 (Copy enclosed with the instant petition at Annexure-2). The line has been commissioned on 10.03.2022 and delayed due to delay in commissioning of 220KV NPH (Jodhpur) which is commissioned on 26.02.2022.

Stakeholder's Comments/suggestions

- 2.25. The stakeholder submitted that the Hon'ble APTEL decided vide order in Appeal No. 145 dated 23.05.2012 that the construction, operation & maintenance of dedicated transmission line is to be done by the

generating company. Accordingly, LILO of existing 220 kV S/C GTPS (Dholpur)-Bharatpur line was to be constructed and maintained by the generating Company. Therefore, the stakeholder requested the Hon'ble commission not to allow any investment to the transmission utility in this regard.

RVPN's Response

- 2.26. The Petitioner submitted that the Hon'ble APTEL order dated 25.03.2012 under reference is for the private generator who is opting for Intra State open access or open access generator, therefore Sec. 10 of Electricity Act., 2003 allowed construction of dedicated transmission line by generator or to be constructed by STU as per request of generator as deposit works.
- 2.27. The Petitioner stated that the Dholpur (GTPS) is not an open access generator. It is owned by RVUNL (generating company) which has PPA with Discom of Rajasthan. Therefore, the transmission system is constructed by RVPN under Section 39 & 40 of Electricity Act., 2003. The existing 220kV S/C GTPS (Dholpurer) - Bharatpur line is a power evacuation line and is the capital assets of RVPN. LILO of this line to other S/S (220KV Saipau) of RVPN will not alter any existing evacuation system.
- 2.28. Further, The Petitioner submitted that this scheme was also approved by TSPCC in its 13th meeting dated 25.11.2019. The detailed MoM of 13th TSPCC meeting is enclosed with instant petition.

Stakeholder's Comments/suggestions

- 2.29. The stakeholder submitted that 1X 500 MVA at 400 KV GSS has been stated as commissioned 23.03.2021 and second was commissioned on 7.5.2021. Further, during the FY 2022-23, provision has been shown for Rs. 1

Cr in respect of the same. The stakeholder sought the details of the scope of original work and capital cost in Hard cost and IDC of this scheme.

RVPN's Response

- 2.30. The Petitioner submitted that all works of the project has been completed. Erection bill of civil works & etc. are pending for payment for which Provision of Rs. 100 lacs have been kept as per Regulation 4(7), Regulations (Investment Approval), 2006, wherein expenditure on the works is allowable for the specified period of 2 years after the commissioning year. The Petitioner submitted the copy of relevant Para of Regulation 4(7).
- 2.31. The Petitioner stated that the total expenditure of the project as on date is Rs. 2566.66 lacs without IDC against the total project cost of Rs. 3912.70 lacs (including IDC of Rs. 834.20 lacs).

Stakeholder's Comments/suggestions

- 2.32. The stakeholder submitted that the 400 kV D/C Suratgarh TPS- Babai line is already commissioned, but the issue of evacuation of power is yet to be resolved. The stakeholder sought details/clarification in respect of the same.

RVPN's Response

- 2.33. The Petitioner submitted that the work of 400 D/C Suratgarh TPS-Babai (Jhunjhunu) line is standstill since from December, 2019 after notice for termination of contract was issued. The Petitioner submitted the copy of counter affidavit (s) filled by respondent (RVPNL). Further, The Petitioner stated that the hearing for vacation of stay order against termination was held on 17.03.2022 in NCLT, Hyderabad and next date for hearing is 16.04.2022.

- 2.34. The Petitioner submitted the chronological status of the projects/ present action plan.
- 2.35. The Petitioner stated that the STPS Unit-7 (660MW) & Unit-8 (660MW) commissioned on dated 01.12.2020 & dated. 07.10.2021 respectively. Process of procurement of balance material has been initiated. Letter of Intent for completion of balance erection work on Single Source Procurement (SSP) mode has been issued on dated 24.03.2022 with Erection Contractor. The line is likely to be commissioned in FY 2022-23.

Stakeholder's Comments/suggestions

- 2.36. The stakeholder sought details of load, date of operation and source of load for utilisation of LILO of 220kV S/C Sikar.

RVPN's Response

- 2.37. The Petitioner submitted that the scheme of LILO of 220kV S/C Sikar-Dhod line at 400kV PGCIL Sikar for utilisation of 2x220kV feeder bays at 400kV GSS PGCIL Sikar was sanctioned on 17.07.2019 and same was revised on 19.11.2019 (mentioned in 13th TSPCC meeting, The Petitioner submitted the copy of complete load study / cost estimate of original scheme.

Stakeholder's Comments/suggestions

- 2.38. The stakeholder submitted that the 220/132kV, 2x160 MVA GSS at NPH Jodhpur was started in 2012-13 and 220 kV D/C overhead line from 220 kV GSS Basni to 220 kV GSS at NPH Jodhpur, started in 2016-17. Expenditures were incurred on these schemes but the same still not completed yet due to ROW issue. Therefore, the stakeholder sought clarification on the same along with details of efforts made to obtained ROW.

RVPN's Response

2.39. The Petitioner submitted that the 220 kV/132 kV GSS at NPH (Jodhpur)(Upgradation) has been commissioned on dated 26.02.2022 with associated 220kV D/C Basni (Jodhpur)-NPH (Jodhpur) line. However, The Petitioner submitted the reason for delay in commissioning of the scheme as follows:

- (a) Construction of GSS taken place timely but could not put in the system due to delay in associated line.
- (b) Associated line work order placed in FY 2017-18 and was scheduled to be commissioned on 28.02.2019.
- (c) Associated Line was delayed on account of Contractor, RoW issue with AllMS, line passing through densely populated area etc.
- (d) The Petitioner submitted the copy of supporting documents for delay on account of contractor.
- (e) The Petitioner submitted that the Suratgarh Super Critical TPS (2x660MW) project is also considerably delayed. SSCTPS Unit-7 (660MW) & Unit-8 (660MW) commissioned on dated. 01.12.2020 & dated. 06.10.2021 respectively. Further, The Petitioner submitted the copy of mail received from RVUNL.

Stakeholder's Comments/suggestions

2.40. The stakeholder submitted that the upgradation of 400 kV GSS Kankani to 765 kV GSS is stated to be for evacuating bulk power from western Rajasthan to Load centre and to have adequate transmission capacity for evacuation of additional expected 5000 MW of RE Generation by 2023. Therefore, the stakeholder sought the details of sources of

generation from western Rajasthan. Further, the stakeholder also sought the details of the expected 5000 MW RE Generation and approval of the RERC for the same.

RVPN's Response

- 2.41. The Petitioner submitted the details of sources of RE injection, quantum of RE load as existing at present and balance to be commissioned in Western Rajasthan along with executive summary.

Stakeholder's Comments/suggestions

- 2.42. The stakeholder submitted in respect of the scheme named "1x500MVA Transformer in place of 315MVA transformer at Kalisindh TPS" "220kV D/C Kalisindh TPS - Jhalawar line" and "220kV S/C Kalisindh TPS - Bhawani Mandi line" that these works are part of dedicated line of kalisindh TPS and creation and maintenance of these line are on part of generating company. Therefore, the stakeholder requested the Hon'ble commission not to allow any investment by RVPN in this regard.

RVPN's Response

- 2.43. The Petitioner submitted that the issue of N-1 Non-compliance of evacuation transmission system including 315 MVA, 400/220 KV ICT at Kalisindh TPS has been raised in different meetings of CEA/ NRPC/NRLDC. Further, The Petitioner stated that to obviate these transmission constraints in the joint meeting of RVUN & RVPN it has been decided to replace 315 MVA ICT at KaTPS by 500 MVA ICT to meet local load at Jhalawad & Bhawanimandi region. The Petitioner submitted the supporting documents in respect of justification of replacement of 315 MVA, 400/220 KV ICT by 500 MVA, 400/220 KV ICT and an additional 200KV interconnection at Kalisindh.

Stakeholder's Comments/suggestions

- 2.44. The stakeholder sought the details of present MVA capacity at Bhadla, Ramgarh & Jaisalmer, current load at each GSS along with justification for proposing additional capacity.

RVPN's Response

- 2.45. The Petitioner submitted the details of present MVA capacity and quantum of load for above mentioned GSSs.
- 2.46. Further, the Petitioner provided the justification of the above schemes as follows: "The scheme is formed for Network expansion and transmission system strengthening to harness the potential of additional expected Renewable Energy (RE) in Western Rajasthan." The Petitioner submitted the relevant part of DPR of the scheme related to the addition of transformers at GSSs.

Stakeholder's Comments/suggestions

- 2.47. The stakeholder submitted that the 220/132kV, 1x160MVA transformer has been charged on 08.03.2020 from LV Side, i.e charged on 132 KV instead on 220 KV voltage. Such charging on L.V. does not serve any purpose. Therefore, the stakeholder requested the Hon'ble Commission not to allow any kind of GFA addition, loan & O&M expenses in respect of the scheme. Further, the stakeholder requested the Hon'ble Commission to recover O&M expenses already allowed to the petitioner for the same.

RVPN's Response

- 2.48. The Petitioner submitted that the charging of transformer from LV side is a procedure of commissioning test. Therefore, it has no connection with capitalisation/ GFA addition.

- (a) Any asset is capitalized only when it is charged on rated voltage level. Since the transformer under discussion has not been charged till filing of petition (i.e 31.12.2021) and also has not been capitalized / included in Gross Fixed Asset (GFA) in FY 20, FY21, FY22.
- (b) Capacity of this transformer has not been included in total capacity for claim of O&M expenses in ARR for FY 19-20, 20-21, 21-22 (proposed year for commissioning). This transformer is now commissioned on rated 220kV voltage on dated 26.02.2022 (Copy of commissioning report is submitted by the Petitioner). Therefore, shall be capitalized accordingly and qualified for claim for O&M expenses in successive FYs.

2.49. The scheme is briefed for justification in Col. No. 13 of Form-2, at Page.no. 14, So.No.5. Whereas, Page no. 183, S.No.5 , Col. 15 illustrated the reason for time overrun of the scheme and showing the progress status as well. There is no intention for not showing the charging date at Page no.14.

Stakeholder's Comments/suggestions

- 2.50. The stakeholder submitted that each ongoing scheme should be grouped as one by including each GSS, connecting lines, LLOs, Bays etc. Further, all relevant details regarding cost, scheduled dates, actual expenditures, reasons of delay, including Debt-Equity is required to be submitted. The stakeholder further submitted that similar details are also required to be submitted for new schemes proposed to be taken up during the FY 2022-23.
- 2.51. The Stakeholder submitted that the revised Investment Plan includes schemes costing more than Rs.250 Cr. The stakeholder has further stated that several schemes have been split and the same should have been proposed as single scheme. The stakeholder has sought the justification for splitting the schemes and proposing schemes above Rs. 250 Cr. in the

investment plan in spite of the decision of the Hon'ble Commission for executing such works under TBCB mode.

- 2.52. The Stakeholder submitted that in case of schemes pertaining to augmentation of capacities at various GSS, the details of present capacity with date of installation of the transformer, present load, expected load with sources thereof and plan to utilise the removed transformers and accumulated depreciation thereon are required to be submitted by the petitioner. The stakeholder further sought the justification of new GSS/new lines taken as single scheme.
- 2.53. The stakeholder submitted that the petitioner has not provided the justification of new lines & GSS and instead has stated that the DPRs have been submitted to the Hon'ble Commission. The Stakeholder further submitted that all the required details should be provided to the stakeholders, other wise the very purpose of the public hearing is defeated and also the requirement of Electricity, 2003 is also not complied.
- 2.54. The stakeholder submitted that the transmission system is stated to be developed to meet the requirement of solar energy. However, out of sanctioned capacity of 5908 MW only 514 MW is commissioned. Hence, the transmission system expanded has remained idle and the cost has unnecessarily been passed on the DISCOMs and in turn to consumers.
- 2.55. The stakeholder submitted that the petitioner has proposed schemes in FY 2022-23 based on the request of the DISCOMs made during the year 2018 & 2012. The stakeholder requested the Commission to peruse the matter.
- 2.56. The stakeholder submitted that no reply has been provided in respect of the question raised by the Hon'ble Commission regarding not executing the works being part of 400kV Sangod GSS.

SECTION 3: Analysis of Investment Plan for FY 2022-23

Proposed plan and Commission's approval

- 3.1 RVPN has submitted the investment plan of Rs. 1375.00 Cr. for FY 2022-23 on 30.12.2021 for approval of the Commission.
- 3.2 RVPN later submitted an Interlocutory Application on 01.07.2022 revising the total proposed investment to Rs. 1500.00 Crore from earlier proposed Rs. 1375.00 Crore. RVPN submitted that the GOR has announced more schemes vide the budget announcement and accordingly, BOD/WTD of RVPN has approved more schemes of power evacuation, system strengthening & loss reduction based on load flow report.
- 3.3 The Commission vide order dated 07.09.2022 revised threshold limit for executing projects under TBCB mode from Rs. 100 Cr. to Rs. 250 Cr. and directed RVPN to re-submit their investment proposal accordingly. Therefore, RVPN vide data gap reply dated 21.09.2022 submitted their revised investment proposal of Rs. 1230.00 Cr. for the FY 2022-23.
- 3.4 The Investment Plan as proposed by the petitioner for the FY 2022-23 for approval of the Commission is shown in the table below:

Table 2: Details of Investment Plan submitted by the Petitioner (Rs. Crore)

SR. No.	Head	Outlay (Tentative)	No of Projects
1	Transmission Works claimed vide original Petition dated 30.12.2021	1,375.00	85
2	Transmission Works (Addition - IA Petition)	366.50	-
3	Transmission Works (Deferred - IA Petition)	241.50	-
4	Total claimed vide IA dated 30.06.2022 (Transmission Works)	1,500.00	116
5	Revised Claim vide data gap reply dated 21.09.2022	1,230.00	120

- 3.5 The Petitioner vide revised Investment Plan dated 21.09.2022 has proposed 120 numbers of schemes/projects and Capital Investment of Rs. 1230.00 Crore during FY 2022-23 for execution of transmission works like Power Evacuation schemes & new renewable energy resources in western Rajasthan, creation of new 400/220/132 kV Grid Sub Stations with associated transmission line for system strengthening, Load catering, Voltage Regulation, 132 kV Loss reduction schemes, Smart Transmission Network & Asset Management System (STNAMS), Smart Transmission Operation Management System (STOMS) and other allied works.
- 3.6 The above schemes are mainly proposed to be funded from Plan funds, i.e., Bonds, loan assistance from Nationalised Banks, Power Finance Corporation (PFC), National Bank for Agriculture and Rural Development (NABARD), HUDCO, National Capital Region Planning Board (NCRPB), Rural Electrification Corporation (REC) and State Government Equity etc. The deposit works are executed with funds of user's contribution.
- 3.7 The Petitioner further submitted that during FY- 2022-23, 491Ckt-km 400 kV, and 1 No. of 220 KV Substation with capacity of 160 MVA, 26 No. of 132 KV Substations with capacity of 750 MVA along with 56 Ckt-Km 220 KV and 571 Ckt-km 132 kV associated lines are targeted for commissioning. The Petitioner has also proposed augmentation of 2000 MVA for the FY 2022-23. The Petitioner further submitted that for completion of transmission schemes, construction of lines, allotment of lands, various statutory clearances like Right of way, Forest clearance, Power and Telecommunication Co-ordination Committee (PTCC) clearance, Railway crossing are required to be obtained from various departments. Considering the time taken for clearances by various departments, the completion period for 765 kV schemes is about 3-4 years, for 400 kV and 220 kV schemes it is about 2-3 years depending upon line length for

construction in the scheme and for 132 kV it is about 1-2 years. The Petitioner also submitted the scheme wise status of clearances required for the proposed capital expenditure schemes for FY 2022-23.

3.8 The detailed final Investment Plan along with no. of projects as proposed by the Petitioner for FY 2022-23 is shown in the table below:

Table 3: Investment Plan proposed by the Petitioner (Rs. Crore)

Sl. No.	Particulars	Claimed	
		No. of Projects	Investment during 2022-23
1	Ongoing schemes (765, 400, 220 and 132 KV)	53	345.57
2	New Schemes having project cost above 250 Cr. (765, 400, 220 and 132 KV)	9	42.50
3	New Schemes having project cost below 250 Cr. (765, 400, 220 and 132 KV)	43	243.71
4	Carried Over Liabilities	1	3.87
5	PSDF Funded Schemes		
5.1	Reactors & protection deficiency schemes	1	63.00
5.2	Smart Transmission Operation (STOMS) & Asset management System (STNAM), RE Integration schemes	1	95.00
5.3	Up-rating and Refurbishment of existing 132kV Lines using HTLS Conductor	5	10.10
6	Capacitor Bank, Augmentation, SCADA, SAP (IT)		
6.1	Smart Transmission Operation Management System (STOMS)	1	0.50
6.2	Capacitor banks (MVAR)	1	2.10
6.3	Augmentation (EAP & Plan)/(Upgradation)	1	315.00
6.4	Automation/ SCADA solutions	1	6.00
6.5	Development of SAP-ERP , IT infrastructure	1	70.65

7	Institutional Strengthening schemes	1	2.00
8	Renovation & Modernization of equipments, Items & Lines completed useful life	1	30.00
	Total Investment Plan	120	1,230.00

3.9 The Commission has further sought the details of Investment proposed under different schemes. The scheme wise details of the investment plan as proposed by the Petitioner for FY 2022-23 is explained in the subsequent paragraphs.

New Schemes

Petitioner's Submission

3.10 The Petitioner with regards to new schemes has proposed around 52 numbers of schemes/projects and capital Investment of Rs. 286.21 Crore under the head 'New Schemes'.

Commission's Analysis

3.11 The Commission with regards to the new schemes has gone through the submission of the Petitioner and has observed that Petitioner has proposed around 52 numbers of schemes/projects and capital Investment of Rs. 286.21 Crore under the head 'New Schemes' and has further segregated the New Schemes and classified as under: -

- (i) Schemes above Rs. 250 Crore
- (ii) Schemes below Rs. 250 Crore

(i) Schemes above Rs. 250 Crore

3.12 The National Tariff Policy, 2016 provides that the intra state transmission projects have to be developed through competitive bidding process for

the projects costing above a threshold limit, which shall be decided by the SERCs. Accordingly, the Commission on 28.08.2018 decided the threshold limit of Rs. 100.00 Crore or more, irrespective of voltage level for development of intra-state transmission projects through tariff based competitive bidding process.

3.13 Further, the petitioner filed a petition on 24.06.2022 for revision in threshold limit from Rs. 100 Crore to Rs. 250 Crore for development of intra-State transmission projects through TBCB process along with criteria and exemptions. The Commission revised the threshold limit of Rs. 100.00 Cr. to Rs. 250 Cr. without any exemptions and directed RVPN to re-submit their investment proposal for the FY 2022-23. RVPN vide data gap reply dated 21.09.2022 has submitted their revised investment proposal of Rs. 1230.00 Cr. for the FY 2022-23 which also included projects having estimated cost of Rs. 250 Cr. or above.

3.14 The Commission has observed that out of Rs. 286.21 Crore proposed under the head new schemes in the investment plan, Rs. 42.50 Crore are claimed for the schemes whose cost as per investment proposal are above Rs. 250 Crore as shown in the table below: -

Table 4: projects above Rs. 250 Crore (Rs. in Crore)

S.No.	Name of the Work/Project	Estimated Original/ Revised cost of scheme/Project (With IDC)	Revised Proposed 16.09.22
1	765/400 kV, 2x 1500 MVA, Substation by Upgrading 400 kV GSS Kankani to 765 kV GSS,	3114.03	8.00
2	400kV GSS at Hanumangarh (Distt. Hanumangarh) & associated lines	329	5.00
3	400 kV GSS at Dholpur alongwith associated lines	438	5.00
4	Scheme (PART-I) of 400 kV GSS Udaipur	706	6.00

	alongwith associated lines SCHEME (PART-II) of 220 kV GSS Dungarpur alongwith associated lines)		
5	765/400 kV Substation Jaisalmer (New Location) alongwith associated Lines	3060	8.00
6	STATCOM (Dynamic Compensation)		
6.1	(+/-) 300 MVAR STATCOM with 400 kV Terminal Bay at 400 kV GSS Bhadla	286	0.50
6.2	(+/-) 100 MVAR STATCOM with 220 kV Terminal Bay at 220 kV GSS Phalodi	209	0.50
6.3	(+/-) 100 MVAR STATCOM with 220 kV Terminal Bay at 220 kV GSS Tinwari	209	0.50
7	400 kV Bhadla (New)[Upgradable to 765 kV] with associated lines	1678	4
8	400 kV Bikaner (New)[Upgradable to 765 kV] with associated lines	699	4
9	Construction of 220 kV GSS Lohawat with ATS	255	1
	Total	10983	42.50

3.15 The Commission sought the justification for not opting TBCB mode for execution of the projects having estimated cost of above Rs. 250 Crore.

3.16 The Petitioner vide data gap reply dated 26.08.2022 submitted that the State Committee of Transmission (SCT) in their first meeting convened on dated 01.07.2022 has recommended these projects to be developed under RTM mode considering the urgency of RE evacuation, transmission requirements and availability of grants.

3.17 We observe that the Commission has fixed the threshold limit of Rs. 250 Crore without any exemption. Therefore, the Commission at this stage deems it appropriate to disallow the projects of Rs. 42.50 Crore proposed exceeding Rs. 250 Crore as detailed above). The Commission directs that the schemes above Rs. 250 Crore should be done through Tariff Based Competitive Bidding process only.

(ii) Schemes below Rs. 250 Crore

- 3.18 RVPN has claimed Rs. 243.71 Crore in respect of the schemes whose cost as per investment approval are below Rs. 250 Crore for FY 2022-23 under the head "New schemes".
- 3.19 The Commission observe that the Petitioner has claimed expenditure of Rs. 8.00 Crore for the scheme "Strengthening of 765kV suspension type towers of 765kV S/C Anta- Phagi lines (Ckt-I & Ckt-II)".
- 3.20 The Commission vide data gap 08.08.2022 had directed RVPN to provide the reasons and justification for not considering above works in O&M. RVPN vide reply Dt. 26.8.2022 submitted that the work is related to strengthening of existing 765 kV suspension tower due to modification/changes suggested by M/s Power grid due to change in design i.e., not replacement but installation of new tower member is a work of capital nature and hence not considered in O&M.
- 3.21 The Commission is of the view that the proposed schemes should be carried out as part of O&M expenses. Therefore, Commission deems it fit to disallow the investment of Rs. 8.00 Crore claimed by the petitioner under the above scheme.
- 3.22 We observe that RVPN has proposed around 18 and 15 numbers of 220 and 132 kV GSS respectively. The Commission has approved the expenditure of Rs. 235.71 Crore in respect of the new schemes below Rs. 250 Crore.

Ongoing Schemes

Petitioner's Submission

3.23 The Petitioner with regards to ongoing schemes has proposed around 53 numbers of schemes/projects and capital Investment of Rs. 345.57 Crore under the head 'Ongoing Schemes'.

Commission's Analysis

3.24 The Commission has gone through the submission of the Petitioner and has observed that Petitioner has proposed around 53 numbers of schemes/projects and capital Investment of Rs. 345.57 Crore under the head 'Ongoing Schemes', which includes schemes for power evacuation from generating stations, System Strengthening, Voltage Regulation, Loss reduction schemes etc.

3.25 The Commission in order to have a fair estimation of expenditure involved in each scheme and justification/requirement for taking up such schemes directed the Petitioner vide data gaps to submit the DPR, project feasibility report of new schemes, Equity Contribution, actual physical target met by the petitioner.

3.26 The Petitioner vide its reply dated 24.03.2022, 23.06.2022, 26.08.2022 submitted the details including DPR, project feasibility report of new schemes.

3.27 Accordingly, the Commission has allowed the projected capital expenditure of Rs. 345.57 Crore for FY 2022-23 under the head "ongoing schemes". Further, the Commission shall carry out the prudence check of the actual capital expenditure of the completed schemes in the true up of respective year based on complete details submitted by the Petitioner.

The Commission directs the Petitioner to submit the complete details of the schemes completed in FY 2022-23 including the detailed reasons for cost over-run, time over-run and IDC incurred for each scheme separately in its Petition for truing up of ARR for FY 2022-23.

Carried Over liabilities

Petitioner's Submission

3.28 The Petitioner in its Investment Plan has claimed carried over liabilities of Rs. 3.87 Crore. The Petitioner has claimed the same as liabilities towards the schemes/works which were already completed.

Commission's Analysis:

3.29 With regards to Carried Over liabilities, the Petitioner had claimed Rs. 5.00 Crore in their original Petition for Investment approval for the FY 2022-23.

3.30 The RERC Investment Approval Regulations, 2006 stipulates as under:

"4(7) No expenditure will be incurred on any scheme after the period as specified below from the year of commissioning of all units/transformers/lines covered in the scheme:

- (a) Distribution Scheme 1 Years.*
- (b) Transmission Scheme 2 Years.*
- (c) Generation Scheme 3 Years."*

3.31 As per this regulation, an investment beyond two years of commissioning of transmission scheme is not allowed. The Commission vide data gaps directed the Petitioner to submit the details as below:

- o COD of all the schemes in respect of which claim has been made towards Carried Over liabilities;

- Justification of claiming Carried Over liabilities in respect of the schemes, for which COD is still pending.

3.32 The Petitioner vide data gap reply dated 24.03.2022 submitted the aforesaid details. Further, the Petitioner rectified the typographical errors in respect of the carried over liability claim and submitted revised amount of Rs. 3.87 Crore proposed to be investment under carried over liabilities.

3.33 Therefore, the Commission allows Rs. 3.87 Crore under the head of carried over liabilities. Further, the Commission directs the Petitioner to submit the complete details of these carried over liabilities as a part of its true up of ARR Petition.

PSDF Schemes

Petitioner's Submission

3.34 The Petitioner in its Investment Plan has claimed PSDF Schemes amounting to Rs. 168.10 Crore. The Petitioner has claimed the same for efficient and reliable operation of the transmission network.

Commission's Analysis

3.35 With regards to PSDF Scheme, the Petitioner has mainly proposed Investment of Rs. 60.00 Cr. towards Installation of 1x125 MVAR (400 kV) Bus Reactor at 400 kV GSS Jodhpur and 13x25 MVAR , 220 kV Bus Reactor each at 13 Nos (400KV & 220 KV) GSS, Rs. 1.00 Cr. towards Installation of 1x25 MVAR, 220 kV Bus type Shunt Reactor each at 400 KV GSS Akal, 220 kV Suratgarh and 220 kV GSS at Bikaner, Rs. 95.00 Crore towards implementation of Smart Transmission Network and Asset Management System (STNAM), implementation of RE Integration system. The petitioner has also proposed investment towards Up-rating & refurbishment of existing 132 KV lines using HTLS Conductor and other protection schemes.

- 3.36 The Petitioner has further submitted that the implementation of STNAM is intended to achieve the wide area monitoring and control of the transmission grid of Rajasthan along with implementation/enablement of smart grid initiative for reactive power management, predictive assessment of the grid stability/security and asset management.
- 3.37 The Commission vide data gaps directed the Petitioner to submit the details as below:
- (a) Total Cost of the Project;
 - (b) Cost incurred till date;
 - (c) Cost funded by Central Government;
 - (d) Cost born by RVPN.
- 3.38 Vide the reply of the data gap dated 24.03.2022, the Petitioner submitted the requisite details. Therefore, the Commission, has allowed the capital expenditure of Rs. 168.10 Crore as proposed by the Petitioner for FY 2022-23 under the head of PSDF funded schemes.

Installation of Capacitor Banks, Augmentation, SCADA System & SAP-ERP

Installation

Petitioner's Submission

- 3.39 The Petitioner has claimed expenditure of Rs. 315.00 Crore towards augmentation of the schemes, Rs. 70.65 Crore towards development of SAP-ERP System, Rs. 6.00 Cr. towards SCADA system & Rs. 0.50 Cr. towards STOMS projects.
- 3.40 The Petitioner further submitted the details of schemes as shown under;
- a) Augmentation – Augmentation of transformers, feeder bays is required to meet the increased demand. Augmentation of Bus coupler is required to improve the reliability of Power.

- b) Capacitor Installation –These are used for reactive power compensation to maintain Power Factor near to unity.
- c) Automation/ SCADA Solutions/RTU's/BCU's – SCADA system is installed to monitor the system parameters, which are used to operate the Grid to maintain the uninterrupted supply.

Commission’s Analysis

3.41 We observe that the Petitioner has claimed expenditure of Rs. 315.00 Crore towards augmentation of the schemes, Rs. 70.65 Crore towards development of SAP-ERP System, Rs. 6.00 Cr. towards SCADA system & Rs. 0.50 Cr. towards STOMS projects.

3.42 Commission directed RVPN to provide DPRs in respect of these schemes. RVPN has submitted the DPRs of these schemes

3.43 Therefore, Commission approves the investment claimed by the petitioner under heads. The investment approved by the Commission under the head of Augmentation, Capacitor Banks, Automation/SCADA System and SAP-ERP Installation is as shown in the table below:

Table 5: Investment approved under head of Augmentation, Capacitor Banks, Automation/SCADA System, SAP-ERP Installation, STOMS (Rs. Crore)

Particulars	Claimed	Approved
Augmentation (EAP & Plan)/(Upgradation)	315.00	315.00
SAP	70.65	70.65
Automation/Scada Solutions	6.00	6.00
Installation of Capacitor Banks	2.10	2.10
Smart Transmission Operation Management System (STOMS)	0.50	0.50
Total	394.25	394.25

Renovation & Modernization of equipments, Items & Lines completed useful life

Petitioner's Submission

3.44 RVPN has proposed capital investment of Rs. 30 Crore towards Renovation & Modernization of equipment, items & Lines which have completed useful life. The details of the proposed schemes for Renovation & Modernization as below: -

- i. Substation equipment: CB/LA/CVT/Battery/Wave Trap equipment/ C&R Panel etc.
- ii. Lines: Refurbishment/ New, completed useful life more than 40 years etc.
- iii. Tool, Plant & Inventory
 - a. Mandatory Inventory of equipment/ Item as per CEA guidelines
 - b. Emergency Response System (ERS) as per CEA/MoP guidelines

Commission's Analysis

3.45 The Commission is of the view that the proposed schemes of Renovation & Modernization of equipment, items & Lines should be carried out as part of O&M expenses. In view of the above, Commission deems it fit to disallow the investment of Rs. 30 Crore claimed by the petitioner under the head Renovation & Modernization.

Institution Strengthening Works

Petitioner's Submission

3.46 The Petitioner has claimed expenditure of Rs. 2.00 Crore towards Institution Strengthening Works.

Commission’s Analysis

3.47 Commission sought the details of the expenditure to be incurred with regards to the institution strengthening works. The Petitioner submitted that expenditure under the head is to be incurred for Consultancy assignment for system strengthening and efficiency improvement and Corporate & Circle level training of the employees from all wings.

3.48 The proposed expenditure towards Consultancy assignment and training to the personnel under institutional strengthening is not in the nature of capital expenditure and does not qualify for approval in the Investment plan. In view of above, the Commission considers it appropriate to disallow the proposed expenditure of Rs. 2.00 Cr. as investment towards institutional strengthening. RVPN may carry out the proposed Consultancy assignment and training of the employees as part of the O&M activities.

3.49 Further, the Commission has also analysed the actual investments made by the Petitioner vis-à-vis plan approved for last 3 years as under:

Table 6: Approved and Actual investment for last 3 years (Rs. Crore)

Proposed	Approved	Actual	Proposed	Approved	Actual	Proposed	Approved	Actual	Proposed	Approved
FY 2018-19			FY 2019-20			FY 2020-21			FY 2021-22	
1,480	1,207	1,411	1,680	1,577	992	1,980	1,547	752	922	856

3.50 On actual investment for FY 2021-22, the Petitioner vide the reply of data gaps submitted that expenditure of Rs. 325.89 Crore (Without IDC) has been incurred upto sept. 21, for which the audited figures are yet to be furnished. The Commission observed that the actual investment made during FY 2020-21 is only around 48.63% of the Investment approved

during the year. Also, the average actual investment during last 3 years (FY 2018-19 to FY 2020-21) is around Rs. 1051.50 Crore.

3.51 In light of the above analysis, the Commission has approved investment plan for FY 2022-23 as shown in the table below:

Table 7: Approved investment plan for FY 2022-23 (Rs. Crore)

Sl. No.	Particulars	No. of Projects	Investment claimed for the FY 2022-23	Approved
1	Ongoing schemes (765, 400, 220 and 132 KV)	53	345.57	345.57
2	New Schemes having project cost above 250 Cr. (765, 400, 220 and 132 KV)	9	42.50	0.00
3	New Schemes (765, 400, 220 and 132 KV)	43	243.71	235.71
4	Carried Over Liabilities	1	3.87	3.87
5	PSDF Funded Schemes	1	63.00	63.00
6	Smart Transmission Operation (STOMS) & Asset management System (STNAM), RE Integration schemes	1	95.00	95.00
7	Up-rating and Refurbishment of existing 132kV Lines using HTLS Conductor	5	10.10	10.10
8	Smart Transmission Operation Management System (STOMS)	1	0.50	0.50
9	Capacitor banks (MVAR)	1	2.10	2.10
10	Augmentation (EAP & Plan)/(Upgradation)	1	315.00	315.00
11	Automation/ SCADA solutions	1	6.00	6.00
12	Development of SAP-ERP , IT infrastructure	1	70.65	70.65
13	Institutional Strengthening schemes	1	2.00	0.00

Sl. No.	Particulars	No. of Projects	Investment claimed for the FY 2022-23	Approved
14	Renovation & Modernization of equipment, Items & Lines completed useful life	1	30.00	0.00
15	Total Investment Plan	120	1,230.00	1,147.50

3.52 Accordingly, as against a total proposed Investment Plan of Rs. 1,230.00 Crore by the Petitioner, the Commission has approved an amount of Rs. 1,147.50 Crore, The Commission further directs that in case the actual/ tentative investment under any of the broad headings is likely to exceed the approved limits, the same may immediately be brought to the notice of the Commission with necessary information and justifications for prior approval. The Commission may consider approval of such additional investment based on the merits of the case, after prudence check.

3.53 Copy of this order may be sent to the Petitioner, Respondents, Objectors, CEA and Government of Rajasthan.

(Dr. Rajesh Sharma)
Member

(Sh. Hemant Kumar Jain)
Member

(Dr. B.N. Sharma)
Chairman