

Rajasthan Electricity Regulatory Commission, Jaipur

Petition No. RERC/2172/2023

In the matter of Petition filed under Section 86 (1) (b) and other applicable provisions of the Electricity Act, 2003 seeking approval for tie up of 1000MW/6000 MWh per day (continuous discharge of 4 hours) on long term basis from Pump Storage based energy storage solution located anywhere in India, connected to CTU and approval of bidding documents as well for meeting the requirement of Jaipur Vidyut Vitaran Nigam Limited, Ajmer Vidyut Vitaran Nigam Limited and Jodhpur Vidyut Vitaran Nigam Limited..

Coram:

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

Petitioner: Rajasthan Urja Vikas & IT Service Limited

Date of hearing : 04.10.2023, 02.01.2024, 06.02.2024, 07.03.2024, 27.03.2024

Present : Sh. Bipin Gupta, Advocate for Petitioner.
Sh. Naveen Kumar for Greenko Energies.
Sh. D. S. Agarwal , Stakeholder.
Sh. Y. K. Bolia, Stakeholder.
Sh. Sanjay Parida for JSW Neo Energy.

Order Date:

16.07.2024

Order

1. The Petitioner, Rajasthan Urja Vikas & IT Service Limited on behalf of Distribution Licensees of Rajasthan i.e. Jaipur Vidhyut Vitran Nigam Limited, Ajmer Vidhyut Vitran Nigam Limited, and Jodhpur Vidhyut Vitran Nigam Limited, has filed the petition to initiate a bidding process for tie up of 1000MW/6000MWh per day (continuous discharge of 4 hours) on long term basis from Pump Storage based Energy Storage Solution located anywhere in India, connected to CTU for meeting the requirement of said Distribution Licensees.
2. The petitioner submitted that the Government of Rajasthan on 06.10.2022 has accorded its approval for procurement of power on long term basis through tariff based competitive bidding process from 1500 MW wind-solar hybrid projects with required storage system to have flexibility in scheduling energy from storage as per requirement to meet the demand of the state and RPO.
3. The petitioner further submitted that the Energy assessment committee of the State of Rajasthan in its 20th meeting held on 07.01.2022 has shown a deficit of energy in peak hours. Board of RUVNITL in its 57th meeting held on 17.08.2023 resolved to initiate a separate tender process to tie-up of 1000 MW ESS from pump Storage hydro Projects with specified discharge hours on daily basis for flexibility to schedule as per requirement.
4. The petitioner also submitted that since there is neither standard bidding document available nor there are any standard bidding guidelines available for tie up of storage capacity from PSP, therefore, the petitioner has approached the Commission seeking approval of bidding documents.
5. The petitioner has prayed to :

- a) seek approval for tie up of 1000 MW/6000MWh per day (continuous discharge of 4 hours) from Pump Storage based energy storage solution located anywhere in India, connected to CTU and
 - b) approve the bidding documents for meeting the requirement of Jaipur Vidyut Vitaran Nigam Limited, Ajmer Vidyut Vitaran Nigam Limited and Jodhpur Vidyut Vitaran Nigam Limited
 - c) Since, there has not been much development on Pumped Hydro Projects and only two bid process have been concluded in the country so far, this is the first ever attempt by RUVNL to float the bid for standalone ESS therefore it is requested that Petitioner may be allowed to make changes /modification in the bid document based on the suggestions received from the prospective bidders, system experts and on account of any guidelines/ notifications/ advisory/ directives, etc issued by Competent Authority during the course of Bidding Process.
6. The matter was heard on 04.10.2023, 02.01.2024, 06.02.2024, 07.03.2023 and on 27.03.2024. During hearing on 07.03.2024, the Commission in view of importance of the matter for energy security of the state and in the interest of time, directed the Petitioner to issue a notice seeking Request for Proposal (RfP) for selection of Developers for said project, within 4 days of this order and it was also directed to incorporate the comments/suggestion received from the stakeholders till date and acceptable to RUVITL in the RfP.
7. Subsequently, Chief Engineer RUVITL vide his letter dated 12.03.2024 elaborated the events happened subsequent to initiation of bid process and requested to extend the timeline to initiate the NIT as directed by the Commission vide RoP dated 07.03.2024 till finalization of the State Policy &

RA plan for the State. The contents of the letter is reproduced hereunder:

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No. RUVITL/CE/SE(PPYF/D- Dated – 12.03.2024

The Secretary,
Rajasthan Electricity Regulatory Commission,
Vidhyut Viniyamak Bhawan, Sahakar Marg,
Near State Motor Garage, Jaipur

Sub:- Regarding approval of procurement of 1000 MW/6000 MWh ESS from Pumped Storage Plant connected to STU & bidding document.

Ref:-RoP dated 07.03.2024.

R/Sir,

This is in reference to the Hon'ble Commission RoP dated 07.03.2024 wherein it has been directed to issue a notice seeking Request for proposal (RFP) for selection of Developers for Rajasthan State STU connected 1000 MW Hydro Pumped Storage Plant based Energy Storage solution, within 4 days of this order incorporating the comments/suggestion received from the stakeholders till date and acceptable in the RfP.

In this context, it is submitted that subsequent to the decision taken for initiation of bid process for Energy Storage Solution (ESS), following events happened:

1. Ministry of Power, Gol on 28th June 2023 issued guidelines for Resource Adequacy Planning Framework. As per these guidelines, each distribution licensee is required to tie up sufficient capacity which shall be a judicious mix of long/medium and short term contracts to ensure security of supply to their consumers at least cost. RUVITL is in process to finalize the RA Plan for Rajasthan which is likely to be completed in the month of March 2024. The resource adequacy plan may suggest optimal source to meet out the deficit in future.
2. Besides above, it is submitted that Rajasthan Renewable Energy Corporation Ltd, State nodal agency for promotion of generation of electricity from RE sources is under process to prepare the policy for development of Pump Storage Plants in the State which is likely to finalize in the coming months.

In view of the above, it is requested to extend the timeline to initiate the NIT as directed by the Hon'ble Commission till finalization of the State Policy & RA plan for the State so that bidding document may be

prepared in consonance with the provisions of Policy, including the comments/suggestion of stakeholders."

8. Further, vide ROP dated 27.03.2024 the Commission sought clarification from the petitioner in respect of following points:

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1. The petitioner may intimate the Resource Adequacy Plan status, which was to be completed by March, 2024.
2. Clarify that whether the recent NITs issued by the petitioner in respect of thermal/solar power procurement are part of their Resource Adequacy Plan.
3. Requirement of storage and PSP is seen world wide solution for high RE Scenario. Whether Petitioner has prepared any long term plan for storage and whether any time frame is envisaged for the same.
4. Take up the matter with RRECL to finalise the policy for developments of Pumped Storage Plant in the State and report the same to the Commission in next hearing.

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9. In response of the above, the Petitioner submitted that:

- i. The committee constituted to prepare the Resource Adequacy Plan for Rajasthan has recommended to adopt the Resource Adequacy Plan prepared by CEA for the state, the same has been prepared based on the energy projected in the 20th EPS.
- ii. The tenders floated by the petitioner for solar/thermal project will form the part of the Resource Adequacy Plan.
- iii. The petitioner has not prepared any long-term plan till date for storage. At present, contracted capacity for storage is 100 MW from 1000 MW PSP of THDC India Ltd which is under the execution and another 490 MW solar with storage (assured supply for six hours as decided by the petitioner on day ahead basis) executed with SECI is expected to be commissioned in FY-2025-2026. The preparation of

Resource Adequacy (RA) Plan has to be approved by RERC for the purpose of long-term planning to execute the capacity requirement along with the storage and they would be seeking directions of the Commission.

- iv. A meeting was convened by RRECL with all stake-holders on 21/02/2024 to finalize the Pump Storage guidelines wherein various stake-holders participated and made suggestions and raised questions. RRECL is in the process of finalizing guidelines while taking into account the suggestions of the all stake-holders.
10. After due consideration of the submissions and clarifications by the petitioner, the Commission observes that for managing intermittency of the RE Power being injected in the Grid and to manage grid stability, Energy Storage based solution like Pump Storage, is one of the most suitable option and more emphasis should be put by the RE rich states like Rajasthan. Needless to say that RUVITL took a commendable and progressive step by planning to tie up for 1000 MW Pump Storage Power but at the same time it is also important to execute it in time bound manner.
11. The Commission further observes that the petitioner has submitted that the Committee constituted to prepare the Resource Adequacy Plan (RAP) for Rajasthan has recommended to adopt the RAP prepared by CEA for the State. The petitioner further submitted that preparation of RAP has to be approved by the Commission for the purpose of long-term planning to execute the capacity requirement along with the storage. Further, RUVITL wants to extend the timeline to initiate the NIT till finalization of the State Policy for development of PSP plants & RA plan for the state so that bidding document may be prepared in consonance with the provisions of the Policy, including the comments/suggestions of stakeholders.

12. After careful consideration of the submissions made on behalf of the petitioner, the Commission directs that until Regulations/Guidelines regarding RAP being finalized by the Commission, the petitioner shall prepare RAP according to the guidelines of CEA and submit to the Commission for approval.
13. Further, in view of the specific request from the petitioner to extend the timeline till finalization of RAP & State Policy for storage, the Commission deems it appropriate to dispose the petition with liberty to the petitioner to approach the Commission once the RA plan and the State Policy for development of PSP plants is finalized.
14. The petition is disposed in above terms with no order as to cost.

(Dr. Rajesh Sharma)
Member

(Hemant Kumar Jain)
Member

(Dr. B. N. Sharma)
Chairman