

**BEFORE THE HIMACHAL PRADESH ELECTRICITY
REGULATORY COMMISSION SHIMLA**

Miscellaneous Application No: 283 of 2025

Instituted on: 05.04.2025

Heard on: 01.07.2025

Decided on: 18.07.2025

CORAM:

**DEVENDRA KUMAR SHARMA
CHAIRMAN.**

**YASHWANT SINGH CHOGAL
MEMBER (Law).**

**SHASHI KANT JOSHI
MEMBER .**

In the matter of:-

The HP State Electricity Board Limited.
through Chief Engineer (System Operation),
Vidyut Bhawan, Shimla, H.P.-171004.

.....Petitioner

Versus

The HP State Load Despatch Center.
Totu, Shimla, H.P.-171011.

.....Respondent No. 1

The HP Power Transmission Corporation Limited.
Tutikandi, Shimla, H.P.-171005.

.....Respondent No. 2

The HP Power Corporation Limited.
Himfed Building, BCS, New Shimla, H.P.-171009.

.....Respondent No. 3

The HIMURJA.
SDA Complex Kasumpti, H.P.-171009.

.....Respondent No. 4

The Directorate of Energy,
Government of Himachal Pradesh,
2nd Floor, MC Parking Building, Tutikandi
Shimla, H.P.-171005.

.....Respondent No. 5

**Petition under the provisions of Section 86 (1) (i) of the Electricity Act,
2003, read with Regulations 56 & 59 of HPERC (Conduct of Business)**

Regulations, 2024 for the approval of the “Resource Adequacy Plan (RAP) for a 10-year horizon (Long-term Distribution Licensee Resource Adequacy Plan (LT-DRAP)) to meet peak and electrical energy requirement at optimal cost.

Present:-

Sh. Kamlesh Saklani, Authorised Representative for the Petitioner.

Sh. Surinder Saklani, Advocate for the Respondent No. 1.

Sh. Vikas Chauhan, Ld. Counsel for the Respondent No. 2.

Sh. Navdeep Sood, AGM (SoP) for the Respondent No. 3.

None for the Respondent No. 4.

Sh. Shanti Swaroop, Legal Consultant for the Respondent No. 5.

ORDER

This Petition has been filed by the Himachal Pradesh State Electricity Board Limited (hereinafter referred to as the “HPSEBL/ Petitioner”) under Section 86 (1) (i) of the Electricity Act, 2003, seeking approval of Resource Adequacy Plan (RAP) for a 10-year horizon (Long-term Distribution Licensee Resource Adequacy Plan (LT-DRAP)) to meet peak electrical energy requirement at optimal cost to the system.

2. The Ministry of Power, Government of India notified Electricity (Amendment) Rules, 2022 vide Notification No. G.S.R. 911(E) dated

29.12.2022. As per Rule 16 of Electricity (Amendment) Rules, the Ministry of Power, in consultation with Central Electricity Authority (CEA), has issued the guidelines for Resource Adequacy for the Indian electricity sector which shall be followed by all institutions and stakeholders.

3. As per the Petition, the Resource Adequacy Plan has been designed to ensure that generation capacity is added at a pace matching the growth in power demand and at the same time is slightly ahead of the demand so that on account of the shortage of electricity, growth of the State is not slowed down.

4. As per the HPSEBL, it is mandated to supply 24 X 7 reliable power to its consumers and duty bound to tie up sufficient capacity to meet the demand. Compliance to the Resource adequacy norms and Guidelines shall ensure that the DISCOM ties up sufficient capacity to meet the demand of the area it is licensed to serve and avoiding over reliance on the electricity market.

5. In the Petition, the HPSEBL has shared future demand projections along with existing capacity and planned capacity. The future planned capacity, proposed by HPSEBL, is mostly Renewable

Energy (RE) power portfolio. The upcoming HPPCL Hydro/Solar projects have also been added up in capacity addition plan as agreed in the minutes of meeting dated 29.06.2022 (Annexure-R2). However, no Power Purchase Agreements (PPAs) for these projects have been signed till date. The study conducted by the CEA on the inputs of HPSEBL is in alignment with RPO trajectory notified by Ministry of Power and National Resource Adequacy Framework. The report has been annexed as Annexure-III.

6. Though, report has considered additional 250 MW Coal based capacity but the HPSEBL has also submitted Long-term Distribution Licensee Resource Adequacy Plan (LT-DRAP) with a proposal for **transitioning from Thermal Power Generation proposed in the vetted CEA report to Nuclear Power of 500MW capacity**, so as to align with the goal of providing Green Energy to the consumers of the State.

7. The HPSEBL has submitted that Resource Adequacy Plan report is based on the firm sources of power tied up/ to be tied up. The Govt. of HP Free Power which should be provided to the HPSEBL for the consumption by the people of the State is not

available on firm basis and at present is being made available to the HPSEBL only in respect of those projects which are directly connected to the DISCOM network. However, it is not firm and has not been taken in the Resource Adequacy Plan and, therefore, unserved energy of the order of 6000 MUs by the end of FY 2034-35 has been projected in the report, It is further submitted that the Government of Himachal Pradesh equity power has also not been taken in the resource adequacy plan in view of the similar reason of firm availability from the Govt. It is prayed that the confirmation from Respondent No. 5 is required in order to consider the above power for implementation of RAP. It has been prayed to approve the vetted RAP(Annexure-3) as prepared by the CEA.

8. On notice, the Respondent No. 1, 2, 3 and 5 have filed separate replies.

9. The Respondent No. 1 in its reply has not objected to the averments made in the Petition.

10. The Respondent No. 2 in its reply has averred that RAP has been prepared by the CEA and relied upon the data supplied by the HPSEBL. The CEA has prepared same on the following basis:

“A single node for the purpose of study with all generating units and demand connected to the node. No transmission bottleneck has been considered for the study. Interstate ATC limit has also not been considered in the study.”

11. Further, the RAP as prepared by the CEA is based on the bulk power system analysis approach with following assumptions :-

- (i) A Single node system model has been adopted for the entire State
- (ii) All generating stations and demand centers have been treated as being connected to a single node.
- (iii) No transmission system (Inter-state or Intra-state) has been modeled for the purpose of study.
- (iv) Available transfer capability (ATC) limits for interstate transfer has also not been considered.

12. Thus, the RAP essentially addresses only the generation adequacy of the state at an aggregate level and does not take into account the constraints of actual transmission system. Since bulk power analysis is used for finalizing the Resource Adequacy i.e. Generation adequacy on a lump sum basis, the transmission constraints cannot be judged from this data and the transmission augmentation shall continue to happen on case to case basis on incremental basis as per present transmission planning criterion. Thus, the transmission system planning and augmentation shall continue to be undertaken by the HPPTCL, on case to case basis,

based on actual injection and drawl requirements, location of upcoming generation projects and grid reliability consideration. Further, in order to ensure minimal mismatch between future load demand and power transmission capacity of the intra state transmission system, it is important that planning and execution of schemes for strengthening of intra state transmission system with at least ten year horizon is ensured which requires timely preparation of schemes and execution and signing of advance transmission services agreement. The Petition lack such aspects. Further, it is important that intra state transmission system is handled by a single entity.

13. The Respondent No. 3/ HPPCL in its reply has submitted that the Resource Adequacy Plan of petitioner incorporates power procurement from the following upcoming hydro projects of the Respondent No. 3/ HPPCL:-

- (a) Shongtong Karchham HEP (450 MW)
- (b) Chanju-III HEP (48 MW)
- (c) Kashang Stage-II & III HEP (130 MW)
- (d) Deothal Chanju HEP (30.5 MW)

14. The Respondent No.3/ HPPCL has further submitted that they have communicated the tentative commissioning schedules of the above-mentioned hydro projects for the purpose of their inclusion in the RAP and other consequential planning:-

- i. Shongtong Karchham HEP (450 MW)
 - (a) Water availability date: 29.11.2026
 - (b) Unit-wise Commissioning Schedule:
 - 1. Unit-I: 01.12.2026 to 15.12.2026
 - 2. Unit-II: 16.12.2026 to 31.12.2026
 - 3. Unit-III: 01.01.2027 to 12.01.2027
- ii. Chanju-III HEP (48 MW)
 - (a) Water Availability Date: 13.07.2027
 - (b) Tentative Commissioning Date (All Units): 29.02.2028
- iii. Kashang Stage-II & III HEP (130 MW)
 - (a) Tentative Completion Date: 30.06.2026
- iv. Deothal Chanju HEP (30.5 MW)

15. The Respondent No.3/ HPPCL has also submitted that as per Minutes of 86th BoD meeting (Item No. 86.32) held on 20.08.2024, it has been decided not to execute the Deothal Chanju HEP (30.5 MW) project in view of high cost and the limited time period for completion of the project with respect to the availability of AFD funds.

16. The Respondent No.3/ HPPCL has also submitted that they have conveyed their in-principle consent to the Petitioner to file Joint

Petitions before the Commission for approval of long term PPAs under Section 62 of the Electricity Act, 2003 for the useful life of the following hydro projects of HPPCL:-

- (a) Shongtong Karchham HEP (450 MW)
- (b) Chanju-II HEP (48 MW)
- (c) Kashang Stage-II & III HEP (130 MW)

17. The Respondent No.5/ Directorate of Energy (DoE), Government of HP (GoHP) has submitted that GoHP has entitlement of free and equity power aggregating to 1504 MW in various Central Sector, Joint Sector and Private Sector Hydro Electric projects executed in the State of Himachal Pradesh. Out of the total availability of 1504 MW, capacity aggregating to 186 MW is in respect of those Projects which are directly connected to the HPSEBL System and its power is being utilized by the HPSEBL throughout the year.

18. It is averred that capacity aggregating to 438 MW on account of equity participation of GoHP in SJVN projects is also being utilized by HPSEBL to provide 24x7 supply to its consumers. Further, a capacity aggregating to 880 MW is being traded by GoHP during the whole year in the open market as also at the platform of Power

Exchanges and some quantum of this power is being made available to HPSEBL as per their requirement after approval of the Government.

19. The Respondent No. 5/ Directorate of Energy, Government of HP has further submitted that GoHP vide notification No. MPP-F(2)-53/2002-XIII dated 2nd June, 2014 has reallocated 22% power (330 MW) available to Government of Himachal Pradesh on account of equity participation in Nathpa Jhakri Hydro Power Station (NJHPS) to Himachal Pradesh State Electricity Board Limited (HPSEB Ltd.) for the entire useful life of the project for making its long term power planning and to provide uninterrupted power supply to the consumers throughout the year. Further, the HPSEBL shall continue to avail free power entitlement of Govt. of Himachal Pradesh in respect of projects directly connected with the HPSEBL system for all times to come.

20. The Respondent No.5/ Directorate of Energy, Government of HP has also submitted that GoHP vide notification No. MPP-F(2)-53/202-XV dated 17th September, 2015 has reallocated 30% power (107.5 MW) available to Government of Himachal Pradesh on

account of equity participation in Rampur Hydro Power Station to the Himachal Pradesh Electricity Board Ltd. (HPSEB Ltd.) for the entire useful life of the project for making its long term power planning and to provide uninterrupted power supply to the consumers throughout the year.

21. The Respondent No.5/ Directorate of Energy, Government of HP has also submitted that HPSEBL has not considered 186 MW and 438 MW of power in its Resource Adequacy Plan, however, the same is being utilized by HPSEBL as per Government notifications. Further, as per the above said notification, the State Government by issue of separate orders may amend this reallocation and make such provision as may appear to be necessary for removing the difficulties arising in context to the consumer demand across the State in a judicious manner.

ANALYSIS BY THE COMMISSION

22. We have heard Sh. Kamlesh Saklani, Authorised Representative for the HPSEBL Sh. Surinder Saklani, Ld. Advocate for the Respondent No. 1, Sh. Vikas Chauhan, Ld. Advocate for the Respondent No. 2. Sh. Navdeep Sood, AGM for Respondent No. 3

and Sh. Shanti Swaroop, Legal Consultant for Respondent No. 5 and have perused the file with minute care.

23. The Commission has notified Himachal Pradesh Electricity Regulatory Commission (Framework for Resource Adequacy) Regulations, 2025 on 28th April 2025. Regulation 4 of above Regulations reads as under:-

“4. Resource Adequacy Framework.- (1) Resource Adequacy Framework shall comprise of planning of generation resources for reliably meeting the projected demand in compliance with specified reliability standards for serving the load with an optimum generation mix at least cost and in a secure manner.
 (2) Resource Adequacy Framework shall cover following steps:- (a) Demand assessment and forecasting; (b) Generation resource planning; (c) Procurement planning; and (d) Monitoring and compliance.
 (3) The time periods under the Long Term, Medium Term and Short Term for the purpose of Resource Adequacy Planning under these Regulations shall be as defined under sub-regulation (1) of Regulation 3 of these Regulations.
 (4) The Resource Adequacy exercise shall be planned, developed and prepared for a period of 10 (Ten) years on annual rolling basis.
 (5) The Distribution Licensee shall develop and prepare Long-Term Distribution Resource Adequacy Plan (LT-DRAP), Medium-Term Distribution Resource Adequacy Plan (MT- DRAP) and Short-Term Distribution Resource Adequacy Plan (ST-DRAP) in accordance with the conditions outlined under these Regulations.”

24. It is apparent from the report on Resource Adequacy Plan for Himachal Pradesh (FY 2024-25 to FY 2034-35) that the electrical energy requirement of the Himachal Pradesh as furnished by the

Petitioner and the projections available in the 20th Electric Power Survey (EPS) have been considered for the preparation of LT-DRAP. The peak demand projections of the Discom/ HPSEBL are as per 20th EPS projections. The Petitioner has projected future demand profile for the year 2034-35 using the demand profile for the year 2022-23 and 2023-24 as the base profile. The Petitioner has considered the actual solar and wind generation profiles and capacity Utilization Factor (CUF) as per National Electricity Plan 2023. The Petitioner has also considered the capital cost of candidate plants for Coal, Wind, Solar, Battery as also Pump Storage Plants (PSP) as per the National Electricity Plan, 2023. It has been proposed that the coal-based power contracts shall be limited to 250 MW so as to align with the state's future green initiatives.

25. A careful perusal of the Resource Adequacy Plan, as approved by the CEA on the proposal of the Petitioner shows that the Petitioner has by and large adhered to the Himachal Pradesh Electricity Regulatory Commission (Framework for Resource Adequacy) Regulations, 2025.

26. Though, the HPPTCL has claimed that the RAP addresses only the generation adequacy and does not take into account the constraints of actual transmission system and since bulk power analysis is used for finalizing the RAP i.e. generation adequacy on a lump sum basis, the transmission constraints cannot be judged from the data as considered. The sum and substance of the submissions of the HPPTCL is that in order to ensure minimal mismatch between future load demand and power transmission capacity of the intra state transmission system, it is important that planning and execution of schemes for strengthening of intra-state transmission system with at least ten year horizon is ensured which requires timely preparation of schemes and execution and signing of advance transmission services agreements but the Petition lacks such aspects. Further, it is important that intra state transmission system is handled by a single entity.

27. The submissions of the HPPTCL are not relevant at the stage for approval of LT-DRAP as the transmission network expansion shall be as per the requirements of DISCOM and future load centers of DISCOM and transmission system shall be designed and rolled

out as per transmission planning criteria. Since the Petition pertains to the approval of LT-DRAP, as such, the transmission resource adequacy/ planning is not the subject matter of the present Petition and Commission does not find it appropriate to issue any directions in this regard in the Petition to the present Petitioner.

28. The Respondent No.3/ HPPCL has submitted that they have conveyed its in-principle consent to the Petitioner to file joint petitions before the Commission for approval of long term PPAs under Section 62 of the Electricity Act, 2003 for the useful life of the following hydro projects of the HPPCL:

- (a) ShongtongKarchham HEP (450 MW)
- (b) Chanju-II HEP (48 MW)
- (c) Kashang Stage-II & III HEP (130 MW)

29. Significantly, the CEA has also considered Deothal-Chanju (30.5 MW) as part of the RAP but it is apparent from the submissions of the HPPCL that as per the Minutes of 86th BOD Meeting (Item No. 86.32) held on 20.08.2024, it has been decided not to execute the same in view of high cost and limited time period of completion of the Project with respect to the availability of AFD Funds. In view thereof, the Petitioner shall have to find out alternative source of power in lieu

of the power of Deothal-Chanju so as to maintain optimal mix from FY 2027-28 well in advance.

30. The Respondent No. 5/ Directorate of Energy, Government of HP has submitted that GoHP vide notification No. MPP-F(2)-53/2002-XIII dated 2nd June, 2014 has reallocated 22% power (330 MW), available to Government of Himachal Pradesh on account of equity participation in Nathpa Jhakri Hydro Power Station (NJHPS), to the Himachal Pradesh State Electricity Board Limited (HPSEB Ltd.) for the entire useful life of the project for making its long term power planning and to provide uninterrupted power supply to the consumers throughout the year. Further, the HPSEBL shall continue to avail free power entitlement of Govt. of Himachal Pradesh in respect of projects directly connected with HPSEBL system for all times to come.

31. The Respondent No.5/ Directorate of Energy, Government of HP has also submitted that GoHP vide notification No. MPP-F(2)-53/202-XV dated 17th September, 2015 has reallocated 30% power (107.5 MW), available to Government of Himachal Pradesh on account of equity participation in Rampur Hydro Power Station, to

the Himachal Pradesh Electricity Board Ltd. (HPSEB Ltd.) for the entire useful life of the project for making its long term power planning and to provide uninterrupted power supply to the consumers throughout the year.

32. The Respondent No.5/ Directorate of Energy, Government of HP has also submitted that HPSEBL has not considered 186 MW and 438 MW in its Resource Adequacy Plan, however, the same is being utilized by HPSEBL as per Government notifications. Further, as per the above said notification, the State Government by issue of separate orders may amend this reallocation and make such provision as may appear to be necessary for removing the difficulties arising in context to the consumer demand across the State in a judicious manner.

33. The DoE has annexed copy of notification No. MPP-F(2)-53/2002-XIII dated 2nd June, 2014 and MPP-F(2)-53/2002-XV dated 17.09.2015 which shows that the Government vide separate orders may amend the re-allocation and make such provision as may appear to be necessary for removing the difficulties arising in context to the consumer demand across the State in a judicious manner. The

aforesaid notifications nowhere show that the Government intends to withdraw the power and rather speak of removing the difficulties arising in the context to meet the consumers demand across the State in a judicious manner. Therefore, in our considered view, it would be appropriate and in the interest of the Consumers to consider 186 MW Power from the Projects which are directly connected to the HPSEBL system, 330 MW Power from Nathpa-Jhakri Equity Power and 107.5 MW Equity power from the Rampur HEP, in the RAP which is already being used by the HPSEBL. Accordingly said power is also considered for the purpose of RAP. However, the abrupt withdrawal thereof may result in purchasing costly power form the market.

34. In view of the above, it is in the interest of the HPSEBL and consumers of the State to approve the Long-term Distribution Licensee Resource Adequacy Plan (LT-DRAP) Annexure-III. The Petition is accordingly allowed with the following terms:-

(1) The Petitioner shall enter into the PPAs with HPPCL as early as possible in respect of Shongtong HEP, Chanju-III and Kashang- II and III, but not later than two months.

(2) The HPSEBL shall tie up alternate power in lieu of Deothal Chanju (30.5) MW.

(3) The petitioner shall also sign PPAs with other proposed developers with sufficient protective clauses that in case of non-implementation of proposed projects, the Petitioners shall be at liberty to source the power from alternate sources on long term basis to fulfill the requirements of Himachal Pradesh Electricity Regulatory Commission (Framework for Resource Adequacy) Regulations, 2025.

(4) The status of the above directives shall be placed before the commission within three months from the issue of this order.

35. The Petition accordingly succeeds and allowed in view of the above terms.

The file after needful be consigned to records.

Announced

18.07.2025

**-Sd-
(Shashi Kant Joshi)
Member**

**-Sd-
(Yashwant Singh Chogal)
Member (Law)**

**-Sd-
(Devendra Kumar Sharma)
Chairman**