

Kadamparai Pumped Storage Hydro Power Plant

June 2, 2026 • vajiramandravi.com



Kadamparai Pumped Storage Hydro Power Plant Latest News

Kadamparai Pumped Storage Hydro Power Plant, Tamil Nadu's only facility with reversible two-way turbines, is struggling to stay operational as it is beyond its design life, functioning at just 25% capacity.

About Kadamparai Pumped Storage Hydro Power Plant

- It is a **400 MW** hydropower project located in the **Kadamparai river basin in Tamil Nadu**.
- **Commissioned in 1987**, it was the **state's first pumped storage unit** and remains **unique** for its **ability to operate in both generator and motor modes**.
- **When the grid needs power, water is released from the upper dam at Kadamparai to the Lower Aliyar Dam**, driving the **turbines to generate electricity**.
- **During the night**, with wind and solar creating surplus power in the grid, the same **turbines reverse into pump mode** and **act as motors** and **push water back from the lower dam to the upper dam**, effectively **storing energy** for the next demand cycle.
- The Kadamparai Dam has a storage capacity of 1,080 mcft, while the Lower Aliyar Dam holds 937 mcft.

- Using a minimum of 4 mcft from the upper dam, each unit can produce 100 MW (1 lakh units) per hour.
- With four units, the plant's installed capacity is 400 MW per hour.

Source: NIE

Source: <https://vajiramandravi.com/current-affairs/kadamparai-pumped-storage-hydro-power-plant/>

© Vajiram & Ravi. For personal use only.