



भारत सरकार
Govt. of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
जल विद्युत परियोजना मूल्यांकन प्रभाग
Hydro Project Appraisal Division

OFFICE MEMORANDUM

Subject: Accord of Concurrence to Bhavali Off-stream Open Loop Pumped Storage Project, 1500 MW (5 x 250 MW + 2 x 125 MW) in Maharashtra by M/s. JSW Energy PSP Two Limited under Section 8 of the Electricity Act, 2003 - regarding.

Detailed Project Report (DPR) of the Bhavali Off-stream Open Loop Pumped Storage Project, 1500 MW (5 x 250 MW + 2 x 125 MW) in Maharashtra by M/s. JSW Energy PSP Two Limited was uploaded in the DPR Approval Process Monitoring System (DAPMS) portal of CEA on 05.09.2024 for concurrence, as per Guidelines for Acceptance, Examination and Concurrence of Detailed Project Reports for Pumped Storage Schemes Version 3.0

2. Undersigned is directed to convey the decision of Authority taken in the meeting held on 06.09.2024, to accord concurrence to Bhavali Off-stream Open Loop Pumped Storage Project (PSP) in exercise of the powers conferred upon the Authority under Section 8 of the Electricity Act, 2003.
3. The undertaking by M/s. JSW Energy PSP Two Limited is attached at **Annex-I**. The salient features of the scheme are given in **Annex-II**.
4. This concurrence is subject to fulfilment of the following conditions: -
 - i. M/s. JSW Energy PSP Two Limited shall comply with the suggestions/ observations of Central Water Commission (CWC) as given in **Annex-III**.
 - ii. M/s. JSW Energy PSP Two Limited shall comply with the suggestions/ observations of Central Electricity Authority (CEA) as given in **Annex-IV**.
 - iii. M/s. JSW Energy PSP Two Limited shall comply with the suggestions/ observations of Geological Survey of India as given in **Annex- V**.
 - iv. M/s. JSW Energy PSP Two Limited shall comply with the suggestions/ observations of CSMRS as given in **Annex-VI**.

- v. M/s. JSW Energy PSP Two Limited shall make provisions to install the instruments (list attached at **Annex-VII**) in appropriate number at suitable locations in project as per relevant IS codes in consultation with CWC. Further, it is to mention that the list of instruments attached at **Annex-VII** is not exhaustive and may be modified by CEA in future. M/s. JSW Energy PSP Two Limited shall be responsible for installing adequate instrumentation in the project to ensure safety and monitor project health effectively.
- vi. M/s. JSW Energy PSP Two Limited shall communicate results of explorations/ investigations from time to time for appraisal of CEA/ CWC/ GSI/ CSMRS regularly.
- vii. Examination of Cost Estimates of Pumped Storage Projects is exempted from Concurrence Process. However, additional chapters as per Guidelines for Formulation of Detailed Project Reports for Pumped Storage Schemes Version 3.0, shall be submitted by M/s. JSW Energy PSP Two Limited to the Authority within 60 days from date of uploading the DPR on CEA portal so as to ascertain the project cost in accordance with the limit specified by the Central government from time to time. It will not be vetted by CEA/CWC.
- viii. M/s. JSW Energy PSP Two Limited shall use the NCSDP approved parameters for design purposes.
- ix. In case geological surprises in works of the project are met, M/s. JSW Energy PSP Two Limited shall systematically maintain a record of geological surprises and treatment provided. The same may be immediately brought to the knowledge of Standing Committee for matters pertaining to Geological Uncertainties/ Surprises and Natural Disaster Events faced in the Hydroelectric Projects constituted vide OM date 23.10.2023 (**Annex-VIII**).
- x. M/s. JSW Energy PSP Two Limited shall obtain Environment and Forest clearance from MoEF&CC and shall submit a copy to CEA.
- xi. M/s. JSW Energy PSP Two Limited shall obtain Clearance from National Board of Wildlife and shall submit a copy to CEA, if applicable.
- xii. M/s. JSW Energy PSP Two Limited shall obtain Land availability certificate before actual start of the project and shall submit a copy to CEA.
- xiii. M/s. JSW Energy PSP Two Limited shall obtain NoC from Ministry of Defence and shall submit a copy to CEA, if applicable.
- xiv. If Scheduled Tribe population is getting affected at project site, clearance under Forest Right Act/ Ministry of Social Justice & Empowerment/ State Government shall be obtained by M/s. JSW Energy PSP Two Limited and shall submit the same to CEA.
- xv. Suitable R&R plan shall be prepared by M/s. JSW Energy PSP Two Limited and submitted to MoEF&CC for obtaining their clearance.
- xvi. M/s. JSW Energy PSP Two Limited shall set up a sound and scientific safety management system which shall include:

- Establishing procedures to identify hazards that could give rise to the potential of injury, health impairment or death and measures to control impact of such hazards.
 - Setting up an Early Warning System to deal with hazardous events such as Glacial Lake and Landslide Outburst Floods, Earthquakes, cloudburst, Flash Floods, Avalanches, Dam Break event, etc.
 - Establishing Standard Operating Procedure to deal with these hazardous events.
- xvii. M/s. JSW Energy PSP Two Limited shall obtain clearance from Ministry of Home Affairs regarding participation of foreign companies in tender works packages and shall comply with the conditioned stipulated therein.
- xviii. M/s. JSW Energy PSP Two Limited shall take measures for averting the flooding of the powerhouse as per conditions contained in **Annex-IX** and appropriate preventive measures of Disaster Management in case of Dam failure or sudden release of water as per conditions contained in **Annex-X**.
- xix. M/s. JSW Energy PSP Two Limited shall comply with the “Guidelines for participation of foreign Companies in tender work packages of Hydroelectric Projects in sensitive areas, 2009” as issued by Ministry of Power vide letter no. 7/1/2002-DO (NHPC Limited) [Vol.II] dated 03.09.2009 (**Annex-XI**).
- xx. M/s. JSW Energy PSP Two Limited shall deploy modern tools / software for construction monitoring of the project by establishing IT based monitoring systems and linking the same to CEA network.
- xxi. M/s. JSW Energy PSP Two Limited shall ensure availability of adequate quantities of rock/sand from quarries/excavated muck/burrow areas to meet the requirement of coarse & fine aggregates for both wearing & non-wearing surfaces.
- xxii. Fly ash and fly ash based products shall be used in the construction of various works to the extent possible in accordance with MoEF&CC (Erstwhile MoEF) notification dated 14.09.1999 and its amendment dated 27.08.2003 and as revised on 06.11.2008. Construction material surveys shall include the required investigations for use of fly ash and fly ash based products in various works, infrastructure facilities etc. and their feasibility shall be ascertained by M/s. JSW Energy PSP Two Limited.
- xxiii. Information in respect of tying up essential inputs/statutory clearances, results of investigations/ studies shall be submitted by M/s. JSW Energy PSP Two Limited to CEA/CWC/GSI/CSMRS on receipt of same from time to time.
- xxiv. The broad technical aspects of the project proposal in the project report have been scrutinized in CEA in consultation with CWC, GSI and other concerned agencies. The scrutiny is based on the data, assessment and certificates presented in the report and information/clarifications received as compliances to the observations on the assumption that the data and information furnished

are accurate and have been collected reliably by the project authorities from dependable sources and/or after carrying out detailed surveys and investigations as presented in the report.

- xxv. M/s. JSW Energy PSP Two Limited shall comply strictly the “Public Procurement (Preference to make in India) Order, 2017 (PPP-MII Order)” issued by Department of Industrial Policy and Promotion, Ministry of Commerce & Industry, Govt. of India vide its letter no. P-45021/2/2017-B.E.-II dated 15.06.17. **(Copy enclosed Annex-XII).**
- xxvi. M/s. JSW Energy PSP Two Limited shall register units of the project in e-gen portal and map data on PM Gati Shakti Portal.
- xxvii. M/s. JSW Energy PSP Two Limited shall strictly comply with the provisions mentioned in Central Electricity Authority regulations for “Safety requirements for construction, operation and maintenance of electrical plants and electrical lines, 2011” and amendment thereof, if any.
- xxviii. M/s. JSW Energy PSP Two Limited shall strictly comply with the provisions mentioned in Central Electricity Authority regulations for “Measures relating to Safety and Electric Supply, 2010” and amendment thereof, if any.
- xxix. M/s. JSW Energy PSP Two Limited shall approach CTU to seek connectivity as per CERC Regulations.
- xxx. M/s. JSW Energy PSP Two Limited shall submit the updated DPR to the State Govt., Appropriate Electricity Regulatory Commission, Central Transmission Utility and co-basin States within seven days from the date of issue this Office Memorandum.

5. Developer has informed that project is scheduled to be completed in 46 months from zero date, i.e., 01.03.2025.

6. Concurrence is subject to compliance by M/s. JSW Energy PSP Two Limited of various policies/ guidelines etc. issued by Govt. of India from time to time.

7. Monthly Status Report of compliance of the conditions stipulated in para 4 of this Concurrence letter shall be submitted by M/s. JSW Energy PSP Two Limited to HPA division, CEA.

8. Monthly Progress Report of the project shall be submitted to Hydro Project Monitoring (HPM) Division of CEA. Three (3) copies of half-yearly reports both on physical progress of the scheme and expenditure actually incurred, duly certified by statutory auditors shall be submitted to the Authority till the Commercial Operation Date of the plant. The project authorities shall give free accessibility to CEA officers and staff to have on the spot assessment of various aspects of the project.

9. Monthly status of the project from date of concurrence to date of Commercial Operation (COD) shall be furnished by M/s. JSW Energy PSP Two Limited to HPA division, CEA as per the proforma enclosed at **Annex –XIII**.

10. In case time gap between Concurrence accorded to the scheme by CEA and award of one of major civil packages (either of Dam/ Embankment/ HRT/ Powerhouse) by M/s. JSW Energy PSP Two Limited is three years or more, a fresh Concurrence of CEA shall be obtained by M/s JSW. Energy PSP Two Limited.

Revalidation of Concurrence can also be considered, in case, the reason for delay in award of one of major civil packages (either of Dam/Embankment/HRT/ Powerhouse) is beyond the control of developer. However, proposal for revalidation shall be submitted three months before the expiry of validity of the Concurrence, which is three years from the date of issue of this Concurrence Memorandum.

11. In case, changes are made in design parameters, during construction, due to site conditions or otherwise, the same shall be submitted to CEA under intimation to concerned appraising Organization (CWC/GSI/CSMRS) for their approval at the design stage itself, well before execution of work in the form of Memorandum of Changes (MoC). The execution of such changes shall remain suspended till approval of the Authority on MoC.

12. The Authority reserves the right to revoke the concurrence, if the conditions stipulated in the concurrence letter are not complied with to the satisfaction of the Authority.

This issues with the approval of the Competent Authority.

Signed by Jyoti Singh

Date: 24-09-2024 17:19:38

(Jyoti Singh)
Deputy Director

To,

1. Whole Time Director, M/s. JSW Energy PSP Two Limited , NTH Complex 4th Floor, A-2, Shaheed Jeet Singh Marg, Qutab Institutional Area, New Delhi 110016.
2. Secretary, MoEF&CC, Govt. of India, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi-110003.
3. Chairperson, Central Electricity Regulatory Commission, 3rd & 4th Floor, Chanderlok Building, 36, Janpath, New Delhi-110001.
4. Chairperson, Central Water Commission, Sewa Bhawan, R.K. Puram, New Delhi-110066.
5. Additional Chief Secretary to Government, Department of Energy, 3rd Floor, Main Building, Mantralay, Mumbai-32. (email: ministertanpure@gmail.com)
6. Chairman-cum-Managing Director, Power Grid Corporation of India Limited, Saudamini, Plot No.2, Sector 29, Gurgaon-122001 (Haryana).

7. Chairman, Central Transmission Utility of India Limited, Floors No. 5-10, Tower 1, Plot No. 16, IRCON International Tower, Institutional Area, Sector 32, Gurugram, Haryana - 122001
8. Adviser (Energy), NITI Aayog, Yojana Bhawan, New Delhi-110001.
9. Member (D&R), Central Water Commission, Sewa Bhawan, RK Puram, New Delhi-110066.
10. Joint Secretary (Hydro), Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi-110119.
11. Chief Engineer (HPA/ PSP&PA-I/ F&CA/ CD/ Legal/ HPP&I/ HETD&RM/ HPM), CEA, Sewa Bhawan, RK Puram, New Delhi-110066.
12. Chief Engineer Design (NW&S) & Nodal Officer for Single Window Clearance Cell, CWC, Sewa Bhawan (S), RK Puram, New Delhi-110066.
13. Director (LHIM & EPE Division), Geological Survey of India, A-II, Pushpa Bhawan, Madangir Road, New Delhi-110062.
14. Director, CSMRS, Olof Palme Marg, Hauz Khas, New Delhi-110016.
15. Director PA(N) & Nodal Officer for Single Window Clearance Cell, CWC, Sewa Bhawan(S), RK Puram, New Delhi-110066.
16. Director {Hydrology(S)/ CMDD (E&NE)/ Embankment (E&NE)/ HCD(E&NE)/ Gates Design (E&NE)/ FE&SA/ ISM-1/ CA-HWF/ CB&PM/ Instrumentation}, CWC, Sewa Bhawan (S), RK Puram, New Delhi-110066.

Copy to:

17. Chairperson, Central Electricity Authority, Sewa Bhawan, RK Puram, New Delhi-110066.
18. Member (Power System/ Hydro/ Planning/ Grid Operation & Distribution/ Thermal/ Economic & Commercial), CEA, Sewa Bhawan, RK Puram, New Delhi-110066.
