

JSW/PSP-Bhavali/FCLand2025/07

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Energy PSP Two Limited Regd. Office: JSW Centre, Bandra Kurla Complex, Bandra (East), Mumbai – 400 051,

CIN: U40106MH2021PLC367136

Phone: 022-4286 1000 Fax: 022-4286 3000

Date - 08/Oct/2025

To, The Dy. Conservator of Forest Shahpur Division Shahpur

<u>Sub</u>:- Submission of Replies/Clarifications to shortcoming issued on 02/Sep/2025 By MOEF&CC Regarding Forest Clearance Proposal of JSW Energy PSP Two Ltd. For Diversion of 243.74 ha. Forest land (Reserved Forest, Protected Forest and Private Forest) For Bhavali Pump Storage Project (1500 MW) In Thane & Nashik District in the State of Maharashtra (Online Proposal NO. FP/MH/HYD/153240/2022).

- Ref. 1. कक्ष-13(3)/20/जमीन / 1765 /2025-26 Dated 18/09/2025
- 2. No.:Desk-17/FCA-SI/PID-153240/Thane/1322/24-25 Nagpur-440 001, Dated: 04/09/2025
  - 3. क्रमांक कक्ष-13(3)/20/जमीन / 1765 /2025-26

## Dear Sir/Madam,

Please find the attached replies/clarification of shortcoming raised by the Ministry of Environment, Forest and Climate Change (MoEF&CC) dated 02/09/2025. The relevant annexures corresponding to each shortcoming have been indicated in the reply and a separate set of annexures is enclosed herewith.

Kindly acknowledge the attached Annexures

Yours Sincerely, M/s JSW Energy PSP TWO LIMITED

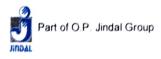
Authorized Signatory

Lalit Parab

DGM – Projects.

Cc - 1. Chief Conservator of Forest (T), Thane

2. APPCCF-cum-Nodal Officer, Govt. of Maharashtra, Nagpur.





JSW/PSP-Bhavali/FCLand2025/08

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Date - 08/Oct/2025

To, The Dy. Conservator of Forest West Nashik Division Nashik

<u>Sub</u>:- Submission of Replies/Clarifications to EDS issued on 02/Sep/2025 By MOEF&CC Regarding Forest Clearance Proposal of JSW Energy PSP Two Ltd. For Diversion of 243.74 ha. Forest land (Reserved Forest, Protected Forest and Private Forest) For Bhavali Pump Storage Project (1500 MW) In Thane & Nashik District in the State of Maharashtra (Online Proposal NO. FP/MH/HYD/153240/2022).

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- 2. No.:Desk-17/FCA-SI/PID-153240/Thane/1322/24-25 Nagpur-440 001, Dated: 04/09/2025
  - 3. जा.क्र.कक्ष-३/जमिन/कॅम्पा/ 1279 / सन २०२५-२ Dated 24/09/2025

## Dear Sir/Madam,

Please find the attached replies/clarification of shortcoming raised by the Ministry of Environment, Forest and Climate Change (MoEF&CC) dated 02/09/2025. The relevant annexures corresponding to each shortcoming have been indicated in the reply and a separate set of annexures is enclosed herewith.

Kindly acknowledge the attached Annexures

Yours Sincerely,

M/s JSW Energy PSP TWO LIMITED

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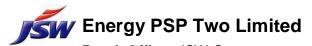
DGM - Projects.

Cc - 1. Chief Conservator of Forest (T), Nashik

2. APPCCF-cum-Nodal Officer, Govt. of Maharashtra, Nagpur.







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## Following are information asked by the MOEF&CC and our comments:

|    | Observation / Shortcoming  | Clarification & req. Doc Annexures                                       |
|----|--|--|
| 1. | The component wise breakup provided by the State   | Component wise breakup has been updated in Form                          |
|    | Govt. vide letter dated 05.08.2025 is different from   | A (Part-I) in FC Application on the portal.                              |
|    | the component wise breakup uploaded in the part-1  |  |
|    | of the application form by the project proponent. The  | Attached as an Annexure-1. Component wise                                |
|    | State shall examine the matter and ensure that the correct component wise breakup is uploaded in the | breakup.   |
|    | portal.  |  |
|    | portui   |  |
| 2  | As per component, wise breakup uploaded on the   | We would like to submit the following details for                        |
|    | portal an area of 44.9 ha is proposed for Dumping  | consideration:   |
|    | area/job facilities 1&2 and an area of 4.8 ha is for   | Expert Appraisal Committee (River valley and                             |
|    | working space, which are non-site-specific activities.   | Hydroelectric projects) in its agenda meeting held on                    |
|    | The state shall explore and locate such facilities over  | 31.08.2024 sought sub- committee to visit the site                       |
|    | non forest land.   | 1. During the site visit, the Expert                                     |
|    |  | Appraisal Committee (EAC), MoEF&CC noted that the proposed muck disposal |
|    |  | sites were appropriately selected. The                                   |
|    |  | Committee specifically recommended                                       |
|    |  | that "the relocation of muck disposal                                    |
|    |  | site may not be insisted upon while                                      |
|    |  | considering the proposal for clearance,                                  |
|    |  | since the sites were found to be properly                                |
|    |  | selected and ecologically better   |
|    |  | alternatives were not available in                                       |
|    |  | nearby areas. Any relocation at this stage may lead to adverse           |
|    |  | environmental consequences".   |
|    |  | (Attached as an Annexure-2.1)  |
|    |  | 2. The earmarked muck disposal sites fall                                |
|    |  | in areas with very low vegetation  |
|    |  | density, thereby minimizing adverse                                      |
|    |  | impact on forest ecology.  |
|    |  | 3. Suitable non-forest land or private land                              |
|    |  | is not available in proximity of the                                     |





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project area, making relocation to nonforest areas practically unfeasible.

- 4. An approved comprehensive Muck Management Plan has been prepared and submitted. This includes robust engineering measures (retaining walls, gabion structures, slope stabilization, drainage arrangements) and biological measures (multi-layered plantations, grass slips, native shrubs and tree species, soil enrichment) to ensure environmental protection, slope stability, and long-term ecological restoration of dumping sites. (Attached as an Annexure-2.2).
- 5. Further there are ample examples in case of Hydro projects where the complete project components including Muck Dumping sites and facility areas are located within the forest area.

(Attached as an Annexure-2.3).

**6.** W.r.t Working space of 4.8 Ha:

The same has to be located in close proximity to the main project working area since there is no private land available nearby Lower reservoir and moving this project facility outside the forest area will exponentially increase men, material & heavy machinery movement causing pollution.

The location is carefully planned keeping in view timely completion of the project and maintaining high productivity of all resources.

During the EAC subcommittee site visit, the overall project layout including individual project components were reviewed and found to be correctly selected ensuring minimum impact on





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|   | 1   | Environment & forest.   |
|---|---|---|
| 3 | As per DSS Analysis of the KML files provided by the  | Updated KML file will be submitted in Form A (Part-I)   |
|   | State Govt., the total software calculated area in the  | opuated RME file will be subfilitted in Form A (Fart-i)   |
|   | project is 309 Ha., which includes, forest and non-   | N.A.  |
|   | forest land. Further, for an area of 13.814 Ha, the   |   |
|   | details are not provided along with the KML file.   |   |
|   | Accordingly, the State Government shall provide the   |   |
|   | component wise correct KML files for the project  |   |
|   | area.   |   |
| 4 | The State government has recommended the proposal with condition that User Agency shall obtain wildlife clearance and/or ensure compliance of mitigation measures, if required or suggested by the PCCF (Wildlife). Accordingly, the State Government is requested to submit the comments of the PCCF (Wild Life)/CWLW. | Wildlife Conservation Plan for the project area has already been prepared by Project proponent. The same duly approved by PCCF(WL)/CWLW, Maharashtra on 29.11.24 along with No Objection Certificate (NoC) with certified map, confirming that no Wildlife Sanctuary, National Park, or Eco-Sensitive Zone (ESZ) falls within or adjacent to the project area. The Harishchandra Gad Wildlife Sanctuary and its ESZ is located 2.21 Kms and only 12.5 meters away respectively from the boundary of the project. Accordingly, no separate wildlife clearance is required, and the approved Conservation Plan along with PCCF (Wildlife)'s NoC ensures compliance with the condition imposed by the State Government. State Forest Department (Nodal Officer), SG, MoEF&CC In view of above, PCCF (Wildlife)/CWLW's comments can be submitted to SG for submission to MoEF&CC.  Additionally, The particular of the Project as submitted by DCF Shahpur and DCF West Nashik point no 11, state that vide letter dated 23/05/2022 of MoEF&CC (Wildlife Division), If the project area is falling within conservation reserve, it does not require consideration by the standing committee of NBWL as per Ministry's Guidelines dated 06/05/2022 |
|   |   | Attached as an Annexure   |
|   |   | Annexure-4.1_WLCP Approval & Certified Map.   |
|   |   | Conservation plan approval Bhavali PSP  |





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|   |   | Annexure-4.2_Revised Wildlife Conservation & Bio Diversity Management Plan Approved by PCCF (WL) & Chief Wildlife Warden as recommended by CCF Nashik.  Annexure-4.3_Particulars of project_DCF Shahapur along with the guidelines Ministry's Guidelines dated 06/05/2022  |
|---|---|--|
| 5 | It has been submitted by the DFO Shahapur and West Nasik that recently the Government of Maharashtra has declared Gut. No. 42 of Village Jamunde, Tehsillgatpuri, District- Nashik as part of Igatpuri Conservation Reserve as per notification dated 22.11.2022. The state shall intimate whether the requisite conservation reserve management committee has been formed and whether the requisite approvals as applicable have been obtained or not? | As on date, the Conservation Reserve Management Committee for the subject area is yet to be formed/notified by the State Government.  Hence, the comments of Conservation Reserve Management Committee cannot be obtained.   |
| 6 | The Harishchandra Gad Wildlife Sanctuary and its ESZ is located 2.21 Kms and only 12.5 meters away respectively from the closest point on the boundary of the project. State Government shall ensure that the proposed area is actually outside the boundary of ESZ. A detailed report in this regard shall be submitted.   | The PCCF (Wildlife)/CWLW, Maharashtra has approved the Wildlife Conservation Plan and issued a No Objection Certificate (Vide letter Email no. Room-23(2)/WL/survey/Sr.no.163/4366/2024-25dated 29/11/2024) confirming that the project does not fall within any Sanctuary, National Park, or ESZ.  The APCCF WL West, Mumbai has confirmed after site visit by DCF Wildlife Nashik that the project area is outside 12.5 meter away from ESZ.  The DCF West Nashik clarified in the particular of the project that No project area falls within any protected Area. And the Kalsubai Harishchandra Gad WLS and its ESZ is located 2.21 kms and 12.5 m away respectively form the close point on the boundary of the project. site visit report that the Project nearest point is outside the notified boundary of the Sanctuary and its ESZ.  Attached as an Annexure – 6 |
|   |   | Annexure 6.1 - PCCF wildlife letter  |





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|   |   | Annexure 6.2 -APCCF WL West Mumbai Letter Annexure 6.3-DCF Shahapur and West Nashik, Particular copy Annexure 6.4 -Revised PCCF (WL) approval letter attached Annexure 6.5 -Certified Map mentioning The Project Boundary located outside the ESZ. Annexure 6.6- DFO Wildlife Nashik letter to APCCF WL Nagpur  |
|---|---|---|
| 7 | DFO West Nasik recommended that in the case of land that were allotted prior to 1980, lying in the project area, the user agency shall not utilize/acquire said land parcel without a separate/additional diversion proposal. However, no details of such areas has been provided. A detailed report shall be submitted in this regard. Accordingly, the State Government shall ensure that entire forest land is included in the proposal and a comprehensive proposal is submitted. | The Area allotted prior 1980 consist Gut no 37-41 at Jamunde Village is already excluded from project area. And respective undertaking also submitted to DCF West Nashik by user Agency.  Attached as an Annexure – 7. Undertaking of the not acquisition of land under Gut no 37-41.   |
| 8 | The CCF, Nashik in his recommendations recommended that a Wildlife Management and Mitigation Plan must be prepared and implemented in accordance with the guidelines and approval of the Chief Wildlife Warden (CWW), Maharashtra. State Government is requested to provide comments on the same.   | The required Wildlife Management and Mitigation Plan has been prepared and approved by Chief Wildlife Warden (CWW), Maharashtra on 29.11.2024 and Revised Wildlife Conservation & Bio Diversity Management Plan Dated 16.09.2025, Approved by PCCF (WL) & Chief Wildlife Warden as recommended by CCF Nashik had uploaded on Parivesh portal Part 1.  Attached as an Annexures- |
|   |   | Annexure-4.1- WLCP Approval & Certified Map. Conservation plan approval Bhavali PSP  Annexure-4.2_Revised Wildlife Conservation & Bio Diversity Management Plan Dated 16.09.2025, Approved by PCCF (WL) & Chief Wildlife Warden as  |
| 9 | The CCF Nashik further recommends that a scientifically designed Catchment Area Treatment (CAT) Plan shall be implemented to prevent soil   | recommended by CCF Nashik.  The required Catchment Area Treatment Plan has been prepared by Project proponent and approved by APCCF & Nodal Officer Nagpur, Maharashtra on  |





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| 10 | erosion, enhance water retention, and promote vegetative regeneration in the catchment area. However, the copy of the plan approved by the competent authority for the entire area has not been submitted.  The CCF Nashik, has recommended that a detailed study regarding the suitability and safety of tunnel   | 26.05.2025. The same has been uploaded on in FC application on Parivesh.  Attached as an Annexure – 9. CAT Plan copy signed by Nodal Officer.  The overall project design has been concurred by the central agencies, including, suitability/safety of   |
|----|--|--|
|    | construction must be conducted by a national-level institute of repute, specializing in hydro-geological and tunnel engineering. State Govt. shall provide the details/comments in this regard.  | tunnels, approved by Geological Survey of India (GSI) and Central Water Commission (CWC). DPR concurrence accorded by Central Electricity Authority (CEA) vide letter dtd. 24.09.2024 (Attached as an Annexure_10.1)   |
|    |  | Further as recommended by CCF Nashik, the detailed study for tunnel construction has been carried out by Central Institute of Mining & Fuel Research (CIMFR), CSIR, Bilaspur on 19.05.2025 for safe execution of tunnels. The Report is appended as (Attached as an Annexure_10.2).  |
| 11 | State Government has mentioned in its covering letter that felling of 69100 trees is involved in the proposal. However, in online Part- II, enumeration of 1,78,677 trees in Shahapur Division and 20,704 trees in West Nashik Division has been submitted. Exact number of trees to be felled needs to be submitted along with tree enumeration list at FRL-2 and FRL-4 meters. | As per Part II, III, IV and V, the exact number of trees to be felled is 63,881, while the total number of trees involved is 69,100.  Accordingly, the data has been prepared earlier and recommended by the State Government.  Shahapur Forest Division  Total trees involve up to FRL=61554  Total trees involve up to FRL-2=59477  Total trees involve up to FRL-4= 57646 ( To be Felled)  West Nashik Forest Division  Total trees involve up to FRL=7546  Total trees involve up to FRL-2=6923  Total trees involve up to FRL-4= 6235 (To be Felled)  Therefore the total numbers of trees involved in project area (Shahapur and West Nashik Forest Division)= 61554+7546 = 69100. |
|    |  | And the total numbers of trees to be felled upto FRL-4 in the project area (Shahapur and West Nashik Forest Division)= 57646+6235 = 63881  |





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Further, the State Government shall provide a copy of approval of the National Dam Safety Authority (NDSA) on the recommendations made by the State Dam Safety Organization (SDSO) and submit the same as applicable.

As per section 8(1) of the Electricity Act, 2003, any generating company intending to set up a hydro generating station shall prepare and submit a scheme to the Central Electricity Authority (CEA) for its concurrence (Attached as an Annexure 12.1). Furthermore, as per Section 8(2) of the Electricity Act, 2003 the Authority shall, before concurring to any scheme submitted to it, ensure compliance with the prescribed norms regarding dam design and safety. Accordingly, the CEA had released the Guidelines for Formulation of Detailed Project Reports (DPR) for Pumped Storage Schemes, 2024 (Version 3.0) (Attached as an Annexure 12.2). The DPR of Bhavali Pumped Storage Project has been prepared in strict adherence to these guidelines. Dam safety aspects is examined by the Central Water Commission (CWC)/CEA, the same has been concurred by CEA vide letter dtd. 24.09.2024. (Attached as an Annexure 10.1)

Furthermore, Dam Safety Act, 2021, under Section 4(x), defines a "specified dam" as a dam constructed before or after the commencement of this Act (Attached as an Annexure 12.3). Therefore, there is no separate requirement for examination by the NDSA or SDSO at pre-construction stage. The same shall be taken up during operational phase.

Since both the dams are to be constructed afresh, the justification for the site specificity of the project is required to be provided. The State shall provide the complete details including KML files, forest and nonforest area involved, trees involved along with the reasons for the rejection of various alternatives.

## **Site-Specificity:**

The project location is site specific, selected site minimize forest land diversion, avoid critical wildlife habitats, and ensure optimal engineering feasibility for the construction of both dams and associated facilities. The Justification alongwith summary note regarding site selected attached with this EDS reply. Further, in the Parivesh 1.0 portal of MoEf&CC, there is no option for uploading the kml file.

Attached as an Annexure - 13.

13





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It has been mentioned that project is not located near any river/waterbody. The state shall give a detailed report as to how the requirement of water and electricity will be met.

It is submitted that the water for the one-time initial filling of the upper reservoir shall be sourced from the self-catchment of the lower reservoir and will be used cyclically for energy storage and discharge. Evaporation and seepage losses will be periodically recouped from the catchment of the lower reservoir, which is planned on Chornai Nala in the upper catchment of Bhatsa dam.

In response to the requirements for construction water and electricity:

- 1. The electricity requirement of the project will be met by the State Discom, Maharashtra State Electricity Distribution Company Limited (MSEDCL), as per the Power Purchase Agreement (PPA) executed with the Government of Maharashtra. Attached as an Annexure –14.1
- 2. The water required for the project will be sourced in accordance with the approval granted by the Water Resources Department, Government of Maharashtra. Attached as an Annexure –14.2

The state shall provide the details of the power evacuation plan and in case additional forest land is required for the same a consolidated proposal may be submitted for the entire forest area.

The project is being developed as per the Power Purchase Agreement (PPA) signed with the Government of Maharashtra, (Attached as an Annexure-14.1) wherein pumping power will be provided by the State and the generated power will be supplied back to the State. The power evacuation/connectivity plan is subject to approval by the State Government based on the ongoing load flow analysis.

Accordingly, alignment will be chosen in such as way that proposed line pass through non-forest land or





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| that bare-minimum Forest land is involved for transmission line.  |
|---|
| In case additional Forest land is required for power evacuation, a separate and consolidated forest diversion proposal shall be submitted as per the State Government's connectivity approval. It is further submitted that, since power evacuation falls under the <i>linear category</i> as per the Forest (Conservation) Act, 1980, the final approval of forest diversion will be accorded at the level of the State Government separately. |