

**OFFICE OF THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS
(HEAD OF FOREST FORCE), MAHARASHTRA STATE, NAGPUR**

ADDITIONAL PRINCIPAL CHIEF CONSERVATOR OF FORESTS AND NODAL OFFICER, MAHARASHTRA STATE, NAGPUR,
First Floor, 'B' Wing, Van Bhavan, Civil Lines, Nagpur-440001.

Tel no. (0712) 2530166, 2556916, Fax no. (0712) 2550675 E-mail- apccfnodal@mahaforest.gov.in

Sub:- Proposal for diversion of 243.74 ha. (Shahapur division 181.45 ha. and West Nashik Division 62.29 ha.) Forest land for Bhavali Pumped Storage Project (1500 MW) Village Kothale & Kalbhode in Tal. Shahapur, Dist. Thane & Village Jamunde, Tal. Igatpuri, Dist. Nashik in the State of Maharashtra (FP/MH/HYD/153240/2022)

No.: Desk-17/Nodal/S1/PID-153240/Thane/**357** /25-26
Nagpur – 440 001, Dated :- **19/5/2025**

To,
The Additional Chief Secretary (Forests),
Revenue and Forest Department,
Mantralaya, Mumbai -32

Shri. Lalit Parab, Authorized Signatory, JSW Energy PSP Limited, Mumbai has submitted a proposal for diversion of 243.74 ha. Forest land under Parivesh-I Proposal Number FP/MH/HYD/153240/2022 on 31/12/2022 through Form-A (Part-I) on the Parivesh Portal. The utility of the project is the project will provide cheap energy option to the State of Maharashtra and Government of India, which in-turn would be able to provide real time, affordable and clean energy for domestic, agriculture and industrial use. The project will generate permanent & temporary employment opportunities for the local people. The project will provide ample opportunities of career development to the people, having different skills and expertise from all over the country. The project will be contributing for the socio-economic development of the local area (**file No.1, P/31 to 34**). Project note is submitted by the User Agency (**file No.1, P/44 to 60**). The User Agency has submitted a justification for locating the project in forest land through the Project Note (**file No.1, P/67 to 68**).

The project site was inspected by the Deputy Conservator of Forests, Shahapur & West Nashik Divisions along with User Agency on 23/12/2024 & 24/01/2025. The Site Inspection Report is enclosed on (**file No.1, P/31 to 34 & file No.2, P/196 to 198**) and the Photographs of Site Inspection is enclosed on (**file No.2 P/199**). The Site Inspection report of Chief Conservator of Forests (T), Thane & Nashik and Site Inspection Report the Additional Principal Chief Conservator of Forests & Nodal Officer are enclosed on (**file No.1, P/41, file No.202 & office file P/36**)

2.0 Justification of Site Specificity:- (file No.1, P/3)

The Pumped Storage Project is essentially a site specific project because it requires a particular type of topographical and geological conditions. The sites of elevation variance are required to construct reservoirs of desired capacity. Reservoir location should compulsorily

fulfill the geo-technical criteria needed for establishing the pumped storage project. Since this project requires water as a means to store energy, the project has to be in close proximity of the water source. For this project, initially, the proposed site was identified by the Government of Maharashtra. The Government of Maharashtra has entered into an agreement with JSW Group by signing the Memorandum of Understanding for setting up of the extant project. (file no.1, P/93/2 to 93/3).

3. Forest land involved (file No.2 P/9 to 11)

Sl. No.	Purpose	Village	Tehsil	District	Survey No.	Gut No.	Area (in ha.)	Legal Status
1	Lower Dam & Reservoir	Kothale	Shahapur	Thane	40	25	9.080	Protected Forest
2	Lower Dam & Reservoir				51	24	0.600	Protected Forest
3	TRC				53pt	23	35.240	Reserved Forest
4	TRT (Underground)				53pt	23	1.640	Reserved Forest
5	Approach Road				53pt	23	4.200	Reserved Forest
6	HRT (underground)				53pt	23	20.932	Reserved Forest
7	Power House (Underground)				53pt	23	4.500	Reserved Forest
8	ADIT/MAT (underground)				53pt	23	2.000	Reserved Forest
9	Cable & Ventilation				53pt	23	0.230	Reserved Forest
10	Dumping Area and Job Facilities				53pt	23	0.084	Reserved Forest
11	Service Corridor				53pt	23	27.030	Reserved Forest
12	Lower Dam & Reservoir	Kalbhonde	Shahapur	Thane	--	62, 66/2, 66/1, 67/4, 71/1, 71/7, 71/6, 71/2, 70/3, 72/3, 72/2, 70/2, 70/1, 73/2, 72/1, 73/1, 86	36.180	Private Forest (Deemed RF)
12	ADIT/MAT (underground)				--	86	0.760	Private Forest (Deemed RF)
13	Dumping Area and Job facilities				--	86, 75/1, 75/2, 75/3, 75/4, 75/5, 75/6,	13.880	Private Forest (Deemed RF)

						74			
14	Working Space	Kalbhonde	Shahapur	Thane		86, 77/1, 77/2	4.800	Private Forest (Deemed RF)	
15	Approach Road				--	68/16, 68/14, 68/12, 68/13, 68/6, 68/1, 68/3, 70/4, 67/3, 71/3, 71/5, 69/3, 70/2, 70/3, 86, 78/1,2, 3 73/1, 76, 77/1, 77/2, 80/2	18.230	Private Forest (Deemed RF)	
(A) Total Forest Area (Shahapur Forest Division)							181.45		
1	Upper Dam & Reservoir	Jamunde	Igatpuri	Nashik	--	42	58.42	Reserved Forest	
2	Approach Road to Upper Dam				--	42	0.77	Reserved Forest	
3	HRT (Underground)				--	42	2.18	Reserved Forest	
4	Saddle Dam				--	42	0.11	Reserved Forest	
5	Service Corridor				--	42	0.81	Reserved Forest	
(B) Total Forest Area (West Nashik Forest Division)							62.29		
Grand Total (A)+ (B)							243.74		

The project's land requirement (in ha.) is detailed below:- (file No.1, P/3)

Sr.No.	Particulars (Nature of land involved)	Grand Total (in ha.)
1	Protected Forest	9.6800
2	Reserved Forest	160.21
3	Private Forest (Deemed RF)	73.85
A	Total Forest Land (A)	243.74
B	Non-Forest Land (B)	31.08
	Total Land (A+B)	274.82

The proposed area is not included in the area of any National Park/Wildlife Sanctuary/Kalsubai Harishchandra Gad Wildlife Sanctuary, but part of Igatpuri Conservation Reserve (file No.1, P/18, file No.2, P/17). The Area Statement signed by the Deputy Conservator of Forests, West Nashik Forest Division and the User Agency is enclosed on (file No.2 P/9 to 11). The Deputy Conservator of Forests, Shahapur and West Nashik have

certified that no suitable alternate non forest land is available for the purpose of project and demand for the forest land is bare minimum (file No.1, P/16 & file No.2, P/15)

4. Flora & Fauna

In the Site Inspection report of the Deputy Conservator of Forests, Shahapur and West Nashik the land proposed for diversion has been put under Eco-Value Class-I, with the density of vegetation is 0.1 to <0.7 and 0.5. (file No.1, P/31 to 34 & file No.2, P/196 to 198). It has been reported that presence of wild animals like hyena, wolf, jackal, leopard, angulates like Nilgai, Four Horned antelopes, spotted Deer, Barking Deer, hares, wild boar, porcupine & birds such as bee eater, grey hornbill, sunbirds and numerous species of avifauna in the forest as well as in the revenue areas is not uncommon. (file No.1, P/37 to 39/01, file No.2, P/200 to 200A). As per the enumeration, the felling of 63881 trees is involved in the project. The number of trees to be felled below 60 cm and above 60 cm girth is 56173 and 7708 respectively. The trees species which are commonly noticed in the proposed area are Saag, Khair, Supreme Species and Other Species etc, The girth with tree enumeration details are as follows:- (office file P/27,17,24,11& file No.1, online Part-II, P/39/3& file No.2, P/29 to 32)

(Tree Girth in cm)												
Division	Range	Below 30 cm	31-45 cm	46-60 cm	61-75 cm	76-90 cm	91-105 cm	106-120 cm	121-150 cm	Above 150cm	Actual Felling up to FRL-4	Total involved tress in the project
Shahapur	Washala	25110	13547	3906	2243	1201	722	371	410	178	47688	50673
	Dolkhamb	4899	2021	1705	663	385	120	39	126	0	9958	10881
West Nashik	Igatpuri	2400	1916	669	345	224	166	98	170	247	6235	7546
Total		32409	17484	6280	3251	1810	1008	508	706	425	63881	69100

The proposed area is not included in the area of any National Park/Wildlife Sanctuary/Kalsubai Harishchandra Gad Wildlife Sanctuary, but part of Igatpuri Conservation Reserve (file No.1, P/18, file No.2, P/17). The Kalsubai Harishchandra Gad Wildlife Sanctuary and its ESZ is located 2.21 Kms and 12.5 m. away respectively from the closest point on the boundary of the project. The area of the project falls within the notified area of Igatpuri Conservation Reserve. (file No.1, P/19, file No.2, P/18, P/196 to 198).

5. Compensatory Afforestation (CA) (file No.1, P/27/3)

The Divisional Forest Officer Ratnagiri (Chiplun) has inspected an area of 245.735 ha. as below:-

Sr.No.	Village	Survey No.	Area (in ha.)
1	Choravane, Tal. Khed, Dist.Ratnagiri	71,72,73,74,75,91,92,93,94,95,96,97,98, 101,102,103,104,113,114	245.735
Total Area			245.735

Of Village Choravane, Tal. Khed, Dist. Ratnagiri to be transferred to the Forest Department as alternate land for compensatory afforestation in lieu of diversion of 243.74 ha. forest land under Van (Sanrakshan Evam Samvardhan), Adhinyam, 1980 for 1500 MW Bhavali Pump Storage Project purpose at Village Kothale, Kalbhonde, Tal. Shahapur, Dist. Thane and Village Jamunde, Tal. Igatpuri, Dist. Nashik proposed by JSW Energy PSP Ltd. is suitable for forest management purpose. The area is free from encroachment. The area is at moderate slopes with dense tree growth and covered by bushes and climbers with 0.5 density. The area is included in the proposed Eco-Sensitive Zone of Western Ghat of Maharashtra. The land is acceptable for compensatory afforestation as per the guidelines issued by Government of India, dated 21/08/2023. The Compensatory Afforestation Scheme for 30.00 ha. and Protection plan of land is proposed in 245.7350 ha. Non-forest which is enclosed on (file No.1, P/30/01 to 30/19)

6. Net Present Value (NPV)

The Deputy Conservator of Forests, Shahapur & West Nashik have calculated the Net Present Value for the area to be diverted as Rs.23,70,68,757/- & Rs.8,94,90,174/- (file No.1, P/24, office file P/3)

7. No violation

The Deputy Conservator of Forests, Shahapur & West Nashik have has certified that the proposed work has not yet been started in forest land as well as non-forest land and the provisions of Van (Sanrakshan Evam Samvardhan) Adhinyam, 1980 and or guidelines under it have been violated (file No.1, P/21 & file No.2, P/20)

8. Maps & KML file

Toposheet maps, Geo Digital maps/ DGPS maps, Village map and other maps illustrating the forest land involved in this project have been submitted (file No.1, P/94/1 to 94/7 & file No.2, P/ 287/3 to 287/11) Additionally, a KML file in CD showing the area involved in this project has been attached to the file.

Maps illustrating the Non forest area proposed for compensatory afforestation are included on (file No.1, P/95/1 to 95/3). Additionally, a KML file in CD showing the area proposed for compensatory afforestation has been attached to the proposal file.

9. Others

The Deputy Conservator of Forests, Shahapur & West Nashik have certified that the proposed project is not likely to affect any monument sites of cultural, historical, religious archaeological or recreational importance. (file No.1,P/20 and file No.2, P/19)

10. The User Agency has submitted the following undertakings/documents:-

- 10.1 The User Agency has submitted an undertaking to defray the cost of Net Present Value. (file No.1, P/71).

- 10.2 The User Agency has submitted an undertaking to defray the cost of Compensatory Afforestation (**file No.1, P/72**).
- 10.3 The User Agency has submitted the certificates for area of 181.45 ha. by the Collector, Thane under Schedule Tribes and Other Traditional Forest Dweller's (Recognition of Forest Rights) Act, 2006 issued vide letter No. RB/Desk.IV/T.II/FRA/NoC/CR-15/2023, dated 03/03/2025 in prescribed format (Form-II) as per Government of India latest guidelines dated 05/07/2013. A copy of the same is enclosed **file No.1,P/93/113-01 to 08**
- 10.4 The User Agency has submitted an undertaking regarding the necessary certificate of the District Collector under the FRA-2006 if any will be taken prior to the final approval of the project (**office file P/30**)
- 10.5 The Cost Benefit Analysis report is enclosed on **file No.1, P/78 to 83**. The C.B ratio is **9.89:1**
- 10.6 The User Agency has submitted copy of the Catchment Area Treatment Plan which is enclosed on **file No.1,P/88/01 to 88/21**
- 10.7 The User Agency has submitted copy of the Muck Management Plan which is enclosed on **file No.1, P/90 to 90/13**.
- 10.8 The User Agency has submitted undertaking regarding the Environmental Clearance and mentioned that the copy of the Environment Clearance shall be provided to the Forest Department as and when granted Stage-I approval by the MoEF&CC, New Delhi which is enclosed **office file P/32**.
- 10.9 The User Agency has submitted the approved copy of the Wildlife Conservation & Biodiversity Management, Plan which is enclosed on **file No.1, P/93/10 to 93/107**
11. (i) **Recommendation of the Deputy Conservator of Forests, Shahapur Forest Division, Shahapur:- (file No.1, Part-II, P/37-P/39/01)**

The proposal is recommended for acceptance on following grounds:

- 1. Demand for the power is on steady rise with an average annual rate of 8-9% in the country. The project aims at augmentation of present installed capacity of hydro power in the country by 1500 MW. The Government of Maharashtra has executed Memorandum of Understanding with the project proponent for development of the extant project.*
- 2. The Hydro Energy Project is an established, proven and cost effective technology for clean and cheap electricity. Demand for the power is on steady rise in the State of Maharashtra. The project has potential to bridge the gap between demand and supply of electricity in Maharashtra.*

3. *The project will generate significant employment opportunities for the people of Maharashtra for the decades together and will create infrastructure facilities to accelerate socio-economic development of the region.*
4. *The project is site specific and requirement of Forest Land is assessed to barest minimum & unavoidable for the project. Hence, recommended for acceptance.*

(ii) Recommendation of the Deputy Conservator of Forests, West Nashik Forest Division, Nashik:- (file No.2, Part-II, P/200 to 200A)

'The project involves construction of tunnel work as one of the component which may necessitate stability studies from national level institution. Also 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. Considering the above, project is recommended for approval (62.29 ha.)'

12. (i) Recommendation of the Chief Conservator of Forests (T), Thane (file No.1, P/40)

The Chief Conservator of Forests (T.), Thane on 05/05/2025 has recommended for acceptance this proposal for diversion of 243.74 ha. (Shahapur division 181.45 ha. and West Nashik Division 62.29 ha.) Forest land for Bhavali Pumped Storage Project (1500 MW) Village Kothale & Kalbhode in Tal. Shahapur, Dist. Thane & Village Jamunde, Tal. Igatpuri, Dist. Nashik in the State of Maharashtra.

(ii) Recommendation of the Chief Conservator of Forests (T), Nashik (file No.2, P/201)

This project is recommended subjected to the following conditions:-

- 1) *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.*
- 2) *A scientifically designated Catchment Area Treatment (CAT) Plan shall be implemented to prevent soil erosion, enhance water retention, and promote vegetative regeneration in the catchment area.*
- 3) *The User Agency must ensure strict compliance with the provisions of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, along with its applicable Rules.*
- 4) *A detailed study regarding the suitability and safety of tunnel construction must be conducted by a national-level institute of repute, specializing in hydro-geological and tunnel engineering.*
- 5) *It must be ensured that access to nearby agricultural fields, water resources, and human habitations is not obstructed during either the construction or operational phases of the project.*

6) *The User Agency shall take all possible measures to minimize tree felling wherever feasible.*

13. Considering the importance and requirement of the project, the proposal may be considered under Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980, subject to the following conditions:-

- i) The legal status of the land shall remain unchanged.
- ii) The User Agency shall pay the cost of CA & NPV.
- iii) The forest land shall not be used for any purpose other than specified in the proposal.
- iv) The layout plan of the proposal shall not be changed without prior approval of the Central Government.
- v) All other conditions as may be mandatory under relevant Acts, Rules and Guidelines shall be complied by the User Agency.
- vi) All necessary approvals required for the project as per the prevailing laws of the land would be obtained by the User Agency
- vii) Any breach of the conditions by the User Agency will be treated as violation of the provisions of the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980.

14. Recommendation

On the basis of above facts and subject to above mentioned conditions, the proposal for diversion of 243.74 ha. (Shahapur division 181.45 ha. and West Nashik Division 62.29 ha.) Forest land for Bhavali Pumped Storage Project (1500 MW) Village Kothale & Kalbhode in Tal. Shahapur, Dist. Thane & Village Jamunde, Tal. Igatpuri, Dist. Nashik in the State of Maharashtra is being recommended for approval.

Encl. :- Proposal 2 copies

 19/5/25

(Naresh Zurmure)
Addl. Principal Chief Conservator of Forests
& Nodal Officer

Copy to the Chief Conservator of Forests (T), Thane & Nashik for information.
Copy to the Deputy Conservator of Forests, Shahapur & West Nashik for information.
Copy to the Shri. Lalit Parab, Authorized Signatory, JSW Energy PSP Limited, Mumbai for information.

PART -IV

**(To be filled by Nodal Officer or Principal Chief Conservator of Forests
(Head of Forest Force)**

(Detailed opinion and specific recommendation of the State Forest Department for acceptance or otherwise of the proposal with remarks)

Sub.- Proposal for diversion of 243.74 ha. (Shahapur division 181.45 ha. and West Nashik Division 62.29 ha.) Forest land for Bhavali Pumped Storage Project (1500 MW) Village Kothale & Kalbhode in Tal. Shahapur, Dist. Thane & Village Jamunde, Tal. Igatpuri, Dist. Nashik in the State of Maharashtra (FP/MH/HYD/153240/2022). The details of land proposed for diversion is as under-

Sl. No.	Purpose	Village	Tehsil	District	Survey No.	Gut No.	Area (in ha.)	Legal Status
1	Lower Dam & Reservoir	Kothale	Shahapur	Thane	40	25	9.080	Protected Forest
2	Lower Dam & Reservoir				51	24	0.600	Protected Forest
					53pt	23	35.240	Reserved Forest
3	TRC				53pt	23	1.640	Reserved Forest
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7	Power House (Underground)				53pt	23	2.000	Reserved Forest
8	ADIT/MAT (underground)				53pt	23	0.230	Reserved Forest
9	Cable & Ventilation				53pt	23	0.084	Reserved Forest
10	Dumping Area and Job Facilities				53pt	23	27.030	Reserved Forest
11	Service Corridor	53pt	23	2.064	Reserved Forest			
12	Lower Dam & Reservoir	Kalbhonde	Shahapur	Thane	--	62, 66/2, 66/1, 67/4, 71/1, 71/7, 71/6, 71/2, 70/3, 72/3, 72/2, 70/2, 70/1, 73/2, 72/1, 73/1,	36.180	Private Forest (Deemed RF)

						86		
12	ADIT/MAT (underground)				--	86	0.760	Private Forest (Deemed RF)
13	Dumping Area and Job facilities				--	86, 75/1, 75/2, 75/3, 75/4, 75/5, 75/6, 74	13.880	Private Forest (Deemed RF)
14	Working Space	Kalbhonde	Shahapur	Thane		86, 77/1, 77/2	4.800	Private Forest (Deemed RF)
15	Approach Road				--	68/16, 68/14, 68/12, 68/13, 68/6, 68/1, 68/3, 70/4, 67/3, 71/3, 71/5, 69/3, 70/2, 70/3, 86, 78/1,2, 3 73/1, 76, 77/1, 77/2, 80/2	18.230	Private Forest (Deemed RF)
(A) Total Forest Area (Shahapur Forest Division)							181.45	
1	Upper Dam & Reservoir	Jamunde	Igatpuri	Nashik	--	42	58.42	Reserved Forest
2	Approach Road to Upper Dam				--	42	0.77	Reserved Forest
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4	Saddle Dam				--	42	0.11	Reserved Forest
5	Service Corridor				--	42	0.81	Reserved Forest
(B) Total Forest Area (West Nashik Forest Division)							62.29	
Grand Total (A)+ (B)							243.74	

The project's land requirement (in ha.) is detailed below:-

Sr.No.	Particulars (Nature of land involved)	Grand Total (in ha.)
1	Protected Forest	9.6800
2	Reserved Forest	160.21
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A	Total Forest Land (A)	243.74
B	Non-Forest Land (B)	31.08
	Total Land (A+B)	274.82

Specific recommendation of Principal Chief Conservator of Forests (HoFF) Maharashtra State, Nagpur is attached on page no.

Naresh Zurmure
12/05/25

(Naresh Zurmure)
Additional Principal Chief Conservator of Forests
& Nodal Officer

Date: /05 /2025
Place: Nagpur

Name of the Proposal:- Proposal for diversion of 243.74 ha. (Shahapur division 181.45 ha. and West Nashik Division 62.29 ha.) Forest land for Bhavali Pumped Storage Project (1500 MW) Village Kothale & Kalbhode in Tal.Shahapur, Dist. Thane & Village Jamunde, Tal. Igatpuri, Dist. Nashik in the State of Maharashtra (FP/MH/HYD/153240/2022)

Specific Recommendation of Principal Chief Conservator of Forests, Maharashtra State (Head of Forest Force) Maharashtra State, Nagpur with regards to acceptance or otherwise of the proposal supported by reasons.

1. Brief Description:-

Shri. Lalit Parab, Authorized Signatory, JSW Energy PSP Limited, Mumbai has submitted a proposal for diversion of 243.74 ha. Forest land under Parivesh-I Proposal Number FP/MH/HYD/153240/2022 on 31/12/2022 through Form-A (Part-I) on the Parivesh Portal. The utility of the project is the project will provide cheap energy option to the State of Maharashtra and Government of India, which in-turn would be able to provide real time, affordable and clean energy for domestic, agriculture and industrial use. The project will generate permanent & temporary employment opportunities for the local people. The project will provide ample opportunities of career development to the people, having different skills and expertise from all over the country. The project will be contributing for the socio-economic development of the local area (file No.1,P/31 to 34). Project note is submitted by the User Agency (file No.1, P/44 to 60). The User Agency has submitted a justification for locating the project in forest land through the Project Note (file No.1, P/67 to 68).

The project site was inspected by the Deputy Conservator of Forests, Shahapur & West Nashik Divisions along with User Agency on 23/12/2024 & 24/01/2025. The Site Inspection Report is enclosed on (file No.1, P/31 to 34 & file No.2,P/196 to 198) and the Photographs of Site Inspection is enclosed on (file No.2 P/199). The Site Inspection report of Chief Conservator of Forests (T), Thane & Nashik and Site Inspection Report the Additional Principal Chief Conservator of Forests & Nodal Officer are enclosed on (file No.1,P/41, file No.202 & office file P/36)

2. Justification of Site Specificity:- (file No.1, P/3)

The Pumped Storage Project is essentially a site specific project because it requires a particular type of topographical and geological conditions. The sites of elevation variance are required to construct reservoirs of desired capacity. Reservoir location should compulsorily fulfill the geo-technical criteria needed for establishing the pumped storage project. Since this project requires water as a means to store energy, the project has to be in close proximity of the water source. For this project, initially, the proposed site was identified by the Government of Maharashtra. The Government of Maharashtra

has entered into an agreement with JSW Group by signing the Memorandum of Understanding for setting up of the extant project. (file no.1, P/93/2 to 93/3).

3. Forest land involved (file No.2 P/9 to 11)

Sl. No.	Purpose	Village	Tehsil	District	Survey No.	Gut No.	Area (in ha.)	Legal Status
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15	Approach Road				--	68/16,	18.230	Private Forest

						68/14, 68/12, 68/13, 68/6, 68/1, 68/3, 70/4, 67/3, 71/3, 71/5, 69/3, 70/2, 70/3, 86, 78/1,2, 3 73/1, 76, 77/1, 77/2, 80/2		(Deemed RF)
(A) Total Forest Area (Shahapur Forest Division)							181.45	
1	Upper Dam & Reservoir	Jamunde	Igatpuri	Nashik	--	42	58.42	Reserved Forest
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A	Total Forest Land (A)	243.74
B	Non-Forest Land (B)	31.08
	Total Land (A+B)	274.82

The proposed area is not included in the area of any National Park/Wildlife Sanctuary/Kalsubai Harishchandra Gad Wildlife Sanctuary, but part of Igatpuri Conservation Reserve (file No.1, P/18, file No.2, P/17). The Area Statement signed by the Deputy Conservator of Forests, West Nashik Forest Division and the User Agency is enclosed on (file No.2 P/9 to 11). The Deputy Conservator of Forests, Shahapur and West Nashik have certified that no suitable alternate non forest land is available for the purpose of project and demand for the forest land is bare minimum (file No.1, P/16 & file No.2, P/15)

4. Flora & Fauna

In the Site Inspection report of the Deputy Conservator of Forests, Shahapur and West Nashik the land proposed for diversion has been put under Eco-Value Class-I, with the density of vegetation is 0.1 to <0.7 and 0.5. (file No.1, P/31 to 34 & file No.2, P/196 to 198). It has been reported that presence of wild animals like hyena, wolf, jackal, leopard, angulates like Nilgai, Four Horned antelopes, spotted Deer, Barking Deer, hares, wild boar, porcupine & birds such as bee eater, grey hornbill, sunbirds and numerous species of avifauna in the forest as well as in the revenue areas is not uncommon. (file No.1, P/37 to 39/01, file No.2, P/200 to 200A). As per the enumeration, the felling of 63881 trees is involved in the project. The number of trees to be felled below 60 cm and above 60 cm girth is 56173 and 7708 respectively. The trees species which are commonly noticed in the proposed area are Saag, Khair, Supreme Species and Other Species etc, The girth with tree enumeration details are as follows:- (office file P/27,17,24,11& file No.1, online Part-II, P/39/3& file No.2, P/29 to 32)

(Tree Girth in cm)												
Division	Range	Below 30 cm	31-45 cm	46-60 cm	61-75 cm	76-90 cm	91-105 cm	106-120 cm	121-150 cm	Above 150cm	Actual Felling upto FRL-4	Total involved trees in the project
Shahapur	Washala	25110	13547	3906	2243	1201	722	371	410	178	47688	50673
	Dolkhamb	4899	2021	1705	663	385	120	39	126	0	9958	10881
West Nashik	Igatpuri	2400	1916	669	345	224	166	98	170	247	6235	7546
Total		32409	17484	6280	3251	1810	1008	508	706	425	63881	69100

The proposed area is not included in the area of any National Park/Wildlife Sanctuary/Kalsubai Harishchandra Gad Wildlife Sanctuary, but part of Igatpuri Conservation Reserve (file No.1, P/18, file No.2, P/17). The Kalsubai Harishchandra Gad Wildlife Sanctuary and its ESZ is located 2.21 Kms and 12.5 m. away respectively from the closest point on the boundary of the project. The area of the project falls within the notified area of Igatpuri Conservation Reserve. (file No.1, P/19, file No.2, P/18, P/196 to 198).

5. Compensatory Afforestation (CA) (file No.1, P/27/3)

The Divisional Forest Officer Ratnagiri (Chiplun) has inspected an area of 245.735 ha. as below:-

Sr.No.	Village	Survey No.	Area (in ha.)
1	Choravane, Tal. Khed, Dist.Ratnagiri	71,72,73,74,75,91,92,93,94,95,96,97,98, 101,102,103,104,113,114	245.735
Total Area			245.735

Of Village Choravane, Tal. Khed, Dist. Ratnagiri to be transferred to the Forest Department as alternate land for compensatory afforestation in lieu of diversion of 243.74 ha. forest land under Van (Sanrakshan Evam Samvardhan), Adhiniyam, 1980 for 1500 MW Bhavali Pump Storage Project purpose at Village Kothale, Kalbhonde, Tal. Shahapur, Dist. Thane and Village Jamunde, Tal. Igatpuri, Dist. Nashik proposed by JSW Energy PSP Ltd. is suitable for forest management purpose. The area is free from encroachment. The area is at moderate slopes with dense tree growth and covered by bushes and climbers with 0.5 density. The area is included in the proposed Eco-Sensitive Zone of Western Ghat of Maharashtra. The land is acceptable for compensatory afforestation as per the guidelines issued by Government of India, dated 21/08/2023. The Compensatory Afforestation Scheme for 30.00 ha. and Protection plan of land is proposed in 245.7350 ha. Non-forest which is enclosed on **(file No.1, P/30/01 to 30/19)**

6. Net Present Value (NPV)

The Deputy Conservator of Forests, Shahapur & West Nashik have calculated the Net Present Value for the area to be diverted as Rs.23,70,68,757/- & Rs.8,94,90,174/- **(file No.1, P/24, office file P/3)**

7. No violation

The Deputy Conservator of Forests, Shahapur & West Nashik have certified that the proposed work has not yet been started in forest land as well as non-forest land and the provisions of Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 and or guidelines under it have been violated **(file No.1, P/21 & file No.2, P/20)**

8. Maps & KML file

Toposheet maps, Geo Digital maps/ DGPS maps, Village map and other maps illustrating the forest land involved in this project have been submitted **(file No.1, P/94/1 to 94/7 & file No.2, P/ 287/3 to 287/11)** Additionally, a KML file in CD showing the area involved in this project has been attached to the file.

Maps illustrating the Non forest area proposed for compensatory afforestation are included on **(file No.1, P/95/1 to 95/3)**. Additionally, a KML file in CD showing the area proposed for compensatory afforestation has been attached to the proposal file.

9. Others

The Deputy Conservator of Forests, Shahapur & West Nashik have certified that the proposed project is not likely to affect any monument sites of cultural, historical, religious archaeological or recreational importance. **(file No.1,P/20 and file No.2, P/19)**

10. The User Agency has submitted the following undertakings/documents:-

10.1 The User Agency has submitted an undertaking to defray the cost of Net Present Value. **(file No.1, P/71).**

- 10.2 The User Agency has submitted an undertaking to defray the cost of Compensatory Afforestation (**file No.1, P/72**).
- 10.3 The User Agency has submitted the certificates for area of 181.45 ha. by the Collector, Thane under Schedule Tribes and Other Traditional Forest Dweller's (Recognition of Forest Rights) Act, 2006 issued vide letter No. RB/Desk.IV/T.II/FRA/NoC/CR-15/2023, dated 03/03/2025 in prescribed format (Form-II) as per Government of India latest guidelines dated 05/07/2013. A copy of the same is enclosed **file No.1,P/93/113-01 to 08**
- 10.4 The User Agency has submitted an undertaking regarding the necessary certificate of the District Collector under the FRA-2006 if any will be taken prior to the final approval of the project (**office file P/30**)
- 10.5 The Cost Benefit Analysis report is enclosed on **file No.1, P/78 to 83**. The C.B ratio is **9.89:1**
- 10.6 The User Agency has submitted copy of the Catchment Area Treatment Plan which is enclosed on **file No.1,P/88/01 to 88/21**
- 10.7 The User Agency has submitted copy of the Muck Management Plan which is enclosed on **file No.1, P/90 to 90/13**.
- 10.8 The User Agency has submitted undertaking regarding the Environmental Clearance and mentioned that the copy of the Environment Clearance shall be provided to the Forest Department as and when granted Stage-I approval by the MoEF&CC, New Delhi which is enclosed **office file P/32**.
- 10.9 The User Agency has submitted the approved copy of the Wildlife Conservation & Biodiversity Management, Plan which is enclosed on **file No.1, P/93/10 to 93/107**
11. (i) **Recommendation of the Deputy Conservator of Forests, Shahapur Forest Division, Shahapur:- (file No.1, Part-II, P/37-P/39/01)**

The proposal is recommended for acceptance on following grounds:

- 1. Demand for the power is on steady rise with an average annual rate of 8-9% in the country. The project aims at augmentation of present installed capacity of hydro power in the country by 1500 MW. The Government of Maharashtra has executed Memorandum of Understanding with the project proponent for development of the extant project.*
- 2. The Hydro Energy Project is an established, proven and cost effective technology for clean and cheap electricity. Demand for the power is on steady rise in the State of Maharashtra. The project has potential to bridge the gap between demand and supply of electricity in Maharashtra.*

3. *The project will generate significant employment opportunities for the people of Maharashtra for the decades together and will create infrastructure facilities to accelerate socio-economic development of the region.*
4. *The project is site specific and requirement of Forest Land is assessed to barest minimum & unavoidable for the project. Hence, recommended for acceptance.*

(ii) Recommendation of the Deputy Conservator of Forests, West Nashik Forest Division, Nashik:- (file No.2, Part-II, P/200 to 200A)

'The project involves construction of tunnel work as one of the component which may necessitate stability studies from national level institution. Also 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. Considering the above, project is recommended for approval (62.29 ha.)'

12. (i) Recommendation of the Chief Conservator of Forests (T), Thane (file No.1, P/40)

The Chief Conservator of Forests (T.), Thane on 05/05/2025 has recommended for acceptance this proposal for diversion of 243.74 ha. (Shahapur division 181.45 ha. and West Nashik Division 62.29 ha.) Forest land for Bhavali Pumped Storage Project (1500 MW) Village Kothale & Kalbhode in Tal. Shahapur, Dist. Thane & Village Jamunde, Tal. Igatpuri, Dist. Nashik in the State of Maharashtra.

(ii) Recommendation of the Chief Conservator of Forests (T), Nashik (file No.2, P/201)

This project is recommended subjected to the following conditions:-

- 1) *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.*
- 2) *A scientifically designated Catchment Area Treatment (CAT) Plan shall be implemented to prevent soil erosion, enhance water retention, and promote vegetative regeneration in the catchment area.*
- 3) *The User Agency must ensure strict compliance with the provisions of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, along with its applicable Rules.*
- 4) *A detailed study regarding the suitability and safety of tunnel construction must be conducted by a national-level institute of repute, specializing in hydro-geological and tunnel engineering.*
- 5) *It must be ensured that access to nearby agricultural fields, water resources, and human habitations is not obstructed during either the construction or operational phases of the project.*

6) *The User Agency shall take all possible measures to minimize tree felling wherever feasible.*

13. Considering the importance and requirement of the project, the proposal may be considered under Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980, subject to the following conditions:-

- i) The legal status of the land shall remain unchanged.
- ii) The User Agency shall pay the cost of CA & NPV.
- iii) The forest land shall not be used for any purpose other than specified in the proposal.
- iv) The layout plan of the proposal shall not be changed without prior approval of the Central Government.
- v) All other conditions as may be mandatory under relevant Acts, Rules and Guidelines shall be complied by the User Agency.
- vi) All necessary approvals required for the project as per the prevailing laws of the land would be obtained by the User Agency
- vii) Any breach of the conditions by the User Agency will be treated as violation of the provisions of the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980.

14. Recommendation

On the basis of above facts and subject to above mentioned conditions, the proposal for diversion of 243.74 ha. (Shahapur division 181.45 ha. and West Nashik Division 62.29 ha.) Forest land for Bhavali Pumped Storage Project (1500 MW) Village Kothale & Kalbhode in Tal. Shahapur, Dist. Thane & Village Jamunde, Tal. Igatpuri, Dist. Nashik in the State of Maharashtra is being recommended for approval.



(Shomita Biswas)
Principal Chief Conservator of Forests
(Head of Forest Force)
Maharashtra State, Nagpur