



SJVN Limited

(A Joint Venture of Govt. of India & Govt. of Himachal Pradesh)
(A Mini Ratna and Schedule 'A' Company)

CIN- L40101HP1988G01008409

website- sjvn.nic.in

Sunni Dam Hydro Electric Project

(An IS/ISO9001:2008 certified Project)

Village Bithal, P.O. Smathla, Teh.Kumarsain, Distt. Shimla – 172030

e-mail: envqcsafetyllep@gmail.com; Phone no.: 01782- 222807, Fax:01782-222277

No.: SJVN/SDHEP/Env/FC/2018- 1582

Dated: 31/07/18

To

The Nodal Officer-cum-APCCF (FCA),
O/o Pr. CCF, (HoFF),
H.P.Forest Department, Talland,
Shimla, Himachal Pradesh.

Sub: Diversion of 389.0090 ha of forest land in favour of SJVN Ltd. for the development of Sunni Dam HEP on Satluj River within the jurisdiction of Shimla, Kotgarh and Karsog Forest Divisions in district Shimla and Mandi of HP.

Sir,

This has reference to online application for diversion of forest land for Sunni Dam HEP submitted by this office to Nodal Officer-cum-CCF(FCA), O/o Pr.CCF, H.P.(HoFF) on 27/12/2017. After examining the application, some observations were raised by your office vide letter No. Ft.48-3705/2017(FCA), dated 02/01/2018 (copy enclosed).

The point wise reply for the same is as under:

Sr. No.	Observations	Reply
1	Against column No. B-2.4, in component wise breakup, colony site has also been proposed over forest land Under para-4.5 of chapter 4 of GoI guidelines, GoI does not consider residential colony over forest land, hence this component is required to be deleted from forest land.	The area for colony site on forest land as was proposed earlier i.e. 2.0605 ha. has now been deleted.
2	There is difference in the area of patches of KML file uploaded against column No. C (i), in respect of Shimla and Karsog Forest Divisions. The total of the patches of Shimla Forest Division comes to 158.0064 ha instead of 158.6864 ha and the total of the patches of Karsog Forest Division comes to 191.8027 ha instead of 194.9972 ha. Necessary correction is required to be made in the area of patches.	The difference in the area of patches of KML files uploaded in respect of Shimla and Karsog Forest Divisions is due to underground/ Notional area of 0.6800 ha. & 3.1945 ha respectively taken for underground tunnel works. The surface area is the same as taken in KML files i.e. 158.0064 ha & 191.8027 ha respectively.
3	Against column C (iv), instead of uploading the digital of the proposed sites the map on toposheet has been	As required, the digital map prepared by AGiSAC, Shimla has now been uploaded.

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Er. R. C. Negi
Head of Project

	found uploaded. Against this column, digital map as per requirement of Gol is required to be uploaded.	
4	Against column No. D, no details of alternatives examined have been found uploaded.	The details of alternatives examined have now been uploaded.
5	Against column No. K (i), 'Yes' has been mentioned. But instead of uploading the requisite certificate alongwith all the proceedings of SDM level, District level and Van Adhikar Samities level, an undertaking has been found uploaded.	The undertaking is in accordance with the clarification contained in the Minutes of Meeting held on 08 & 09/11/2017 under chairmanship of Member (Hydro), CEA at Sr.No. 9, which is as under:-"The representative of MoEF&CC mentioned that now compliance to FRA-2006 is not a pre-condition for stage-I Forest Clearance (FC-I). Therefore the developers may process for FC-I in parallel with FRA activities."
6	Against column No. L (i) to (iii) instead of replying in Yes or No. Not applicable has been mentioned.	PCCF (HoFF) Shimla has been requested to identify the land for compensatory afforestation vide letter No. SJVN/Sunni Dam/Env/FCA/2018-1500-07, dated 16/06/2018. Copy of letter uploaded against additional information detail.
7	Against column No. M (i) installed power generation capacity of the Project (in MW: 355 MW has been mentioned, whereas the project has been proposed for 210 MW.	The project was earlier proposed for 355 MW. However, now the installed power generation capacity of the project has been proposed for 382 MW as per guidelines of CEA (Central Electricity Authority).
8	The certificate of DC concerned that no alternative suitable non forest land is available for the project in question has not been found uploaded against additional information detail.	These certificates as obtained from DC Shimla & DC Mandi have now been uploaded against additional information detail.
9	NOCs from IPH/HPPWD/Fishry/Gram Panchayat/WL are also required to be uploaded.	All these certificates as obtained from various agencies have now been uploaded against additional information detail except the following: i) SE, I&PH circle Sundernagar has issued the NOC whereas EE, I&PH Division Matyana and EE, I&PH Division Sunni have agreed to issue the NOCs. ii) NOC from EE, HPPWD Kumarsain is under advance stage and is expected to be issued soon.
10	Status of Implementation Agreement /TEC is required to be intimated.	The project has already been awarded by GoHP to SJVN Ltd vide letter No. HPDOE/CE(energy)/JaisiHEP-2017-11213-215, dated 23/01/2017. Further GoHP has agreed to allocate the project to SJVN on standalone basis vide letter No. HPDOE/CE(energy)/LuhriHEP/Vol-II-4649-80, dated 29/08/2017. The consent letters are uploaded against additional information detail. CEA (Central Electricity Authority) vide letter No. NR/201/53/2018-HPA-1/488-490, dated 18/06/2018 has finalized the power potential as 382 MW. Accordingly, DPR is under finalization to obtain TEC. Copy uploaded against additional information detail.

With Regards,

DA: As Above.

Yours Faithfully,

(Er. R.L.Negi)
Head of Project,
SJVN Ltd., SDHEP, Bithal.

[Handwritten signatures]

No.Ft.48-3705/2017(FCA)
H.P.Forest Department.

Dated Shimla-1, the **02 JAN 2018**

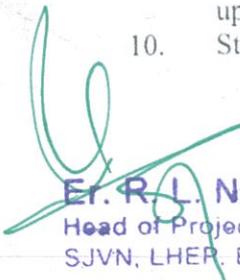
From: Nodal Officer-cum-CCF (FCA)
O/O Pr. CCF, H P (HoFF)

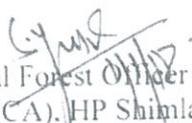
To: Head of Project,
Luhri Hydro Electric Project,SJVN Ltd.
SJVN Ltd. Bithal,Distt Shimla.

Subject:- **Diversion of 391.0695 ha of forest land in favour of Luhri Hydro Electric Project,SJVN Ltd., Shimla,for the construction of Sunni Dam Project,(210 MW) within the jurisdiction of Shimla,Kotgarh, Karsog Forest Divisions distt Shimla & Mandi, HP**

Memo:-
Completed: The following shortcoming has been noticed in the proposal, which may be

1. Against column No.B-2.4. in component wise breakup, colony site has also been proposed over forest land.Under para 4.5 of chapter 4 of GoI guidelines, GoI does not consider residential colony over forest land, hence this component is required to be deleted from forest land.
2. There is difference in the area of patches of KML file uploaded against column No.C(i), in respect of Shimla and Karsog Forest Divisions.The total of the patches of Shimla Forest Division comes to 158.0064 ha instead of 158.6864 ha and the total of the patches of Karsog Forest division comes to 191.8027 ha instead of 194.9972 ha.Necessary correction is required to be made in the area of patches.
3. Against column C(iv), instead of uploading the digital of the proposed sites the map on toposheet has been found uploaded. Against this column, digital map as per requirement of GoI is required to be uploaded.
4. Against column No.D, no details of alternatives examined have been found uploaded.
5. Against column No.K(i), 'Yes' has been mentioned.But instead of uploading the requisite certificate alongwith all the proceedings of SDM laval, District level and Van Adhikar samities level, an undertaking has been found uploaded.
6. Against column No.L(i) to (iii) instead of replying in Yes or No. Not applicable has been mentioned.
7. Against column No.M(i). Installed power generation capacity of the Project(in MW): 355 MW has been mentiond, whereas the project has been proposed for 210 MW.
8. The certificate of DC concerned that no alternative suitable non forest land is available for the project in question has not been found uploaded against additional information detail.
9. NOCs from IPH/HPPWD/Fishry/Gram Panchyat /WL are also required to be uploaded.
10. Status of Implementation Agreement/TEC is required to be intimated.


Er. R. L. Negi
Head of Project
SJVN, LHER, Bithal


Divisional Forest Officer (FCA),
o/o CCF (FCA), HP Shimla



SJVN Limited

(A Joint Venture of Govt. of India & Govt. of Himachal Pradesh)

(A Mini Ratna and Schedule 'A' Company)

CIN- L40101HP1988G01008409

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Sunni Dam Hydro Electric Project

(An IS/ISO9001:2008 certified Project)

Environment Department

Village Bithal, P.O. Samathala, Teh. Kumarsain, Distt. Shimla – 172030

e-mail: envqcsafetylhep@gmail.com; Phone no.: 01782- 222807, Fax: 01782-222277

No: SJVN/Sunni Dam/Env-FCA/2017-1500-07

Dated: 16-6-18

To

The Principal Chief Conservator of Forests (HoFF),
H.P. Forest Department, Forest Headquarters,
Talland Shimla, Shimla, Himachal Pradesh- 171002

Sub: Diversion of 391-06-95 ha of forest land in favour of SJVN Ltd. for the construction of Sunni Dam HEP in district Shimla and Mandi of HP- regarding identification of land for Compensatory Afforestation (CA)".

Sir,

SJVN Ltd., a Central Public Sector Undertaking is a joint venture of Govt. of India & Govt. of Himachal Pradesh, assigned with the tasks to execute, operate and maintain hydro-electric projects in Satluj River basin in H.P. and in other states. SJVN Ltd. has successfully commissioned the country's largest 1500 MW Nathpa Jhakri HEP and 412 MW Rampur HEP.

The proposed Sunni Dam HEP with an installed capacity of 373 MW has been allocated to SJVN Ltd. by GoHP vide letter No. HPDOE/CE (Energy)/Jaisi HEP/2017-11213-215 dated 23-01-2017 (Photocopy enclosed). The Project is proposed to be taken up for implementation on Satluj River near Khaira village and falls in district Shimla and Mandi of Himachal Pradesh.

It is to inform that the total forest land finalized for the project is 391.0695 Ha (158.6864 ha. in Shimla Forest Division (158.0064 open area+0.6800 underground/Notional Area) + 37.3859 ha. in Kotgarh Forest Division+ 194.9972 ha. (191.8027 open area+3.1945 underground/Notional Area) in Karsog Forest Division) & falls on left & right banks of River Satluj in District Shimla and District Kullu. The total land identified shall be utilized for various project components i.e. construction of underground Power House, dam, reservoir, diversion tunnel, job facilities, approach roads, bridge etc.

It is to inform that online application for diversion of forest land was submitted by this office on 27/12/2017. After examining the application, some observations were raised by the Nodal Officer-cum-CCF(FCA), O/o Pr.CCF, H.P.(HoFF) vide letter No. Ft.48-3705/2017(FCA) on 02/01/2018 (Copy enclosed). The same are being attended by this office.

Er. P. L. Negi
Head of Project
SJVN, LHEP, Bithal

In this connection, it is submitted that identification of land banks for Compensatory Afforestation (CA) is also a part for processing the case for diversion of forest land and need to be identified for further processing. The matter was discussed with all the concerned DFOs (i.e. DFO Shimla, Karsog & Kotgarh) and it has been given to understand that they may not be able to make the sufficient quantum of land available in their respective divisions for this purpose. Hence it is requested that the required land for Compensatory Afforestation (CA) may please be identified in other forest Circles/Divisions under your kind control along with the coordinates and other all necessary details may please be supplied so that the digital maps/ maps on SOI toposheets etc. of the same be got prepared by this office, which are necessarily required for processing the case for diversion of the forest land.

It is worthwhile to mention here that this project is of **National interest** to fulfil the increasing demand of electricity with tremendous opportunities for **generation of employment** as well as **development of the local area**.

An early action in the matter is highly solicited please.

With regards,

DA: As Above.

Yours Faithfully,

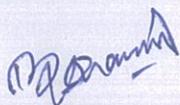

16/6/18
Addl. General Manager (Env.),
Sunni Dam Project,
SJVN Ltd., Bithal.

Copy to:

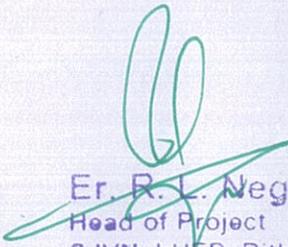
1. The CCF Rampur/ CCF Shimla/ CCF Mandi for information please.
2. The DFO Kotgarh/ DFO Shimla/ DFO Karsog for information please.

N.O.O: Copy for kind information to:-

- 1) HOP, Sunni Dam Project, Bithal
- 2) AGM (Infra), Sunni Dam Project, Sunni.






Er. R. L. Negi
Head of Project
SJVN, LHEP, Bithal



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

विषय : Sunni Dam HEP (292 MW+ 90 MW=382 MW) - in H.P. - Examination of Power Potential Studies – Finalization of Installed Capacity- regarding.

Reference is invited to M/s SJVNL letter dated 24.04.2018 submitting therewith chapter of power potential studies of Sunni Dam HEP proposing the Installed Capacity of 382 MW (292 MW for Main Plant and 90 MW for Aux. Plant) based on inflow series of 44 years from 1972-73 to 2015-16 as cleared by CWC vide letter dated 20.07.2017 for examination.

The PPS Chapter has been examined and the proposed Installed Capacity of 382 MW (Main Plant as 292 MW and 90 MW of Aux. Plant) is found to be generally in order. The units of 90 MW proposed for utilization of environmental flows would remain operational on continuous basis depending upon the release of e-flows as prescribed by MoEF&CC.

Parameters considered in the studies for both the Plants are given below:

Sl. No.	Parameters	Main Plant	Auxiliary Plant
1	FRL (m)	712 m	712 m
2	MDDL (m)	709.5 m	709.5 m
3	TWL (Normal) (m)	651.2 m	651.2 m
4	Head Losses (m)	2.12 m (approved by CWC)	2.12 m (approved by CWC)
5	Live Storage	7.9 MCM	-
6	Net operating head	57.85 m	57.85 m
7	TG efficiency	92.6% (Approved by HE&TD)	92.6% (Approved by HE&TD)
8	Proposed Type of Turbine	Francis Turbine	Francis Turbine
9	90% dependable year	2001-02	2001-02
10	Riparian/ecological Flow:		Utilizing ecological Flow:
	i) Lean Period	21.12 cumecs	21.12 cumecs
	ii) Non-monsoon/ non-lean	72.38 cumecs	72.38 cumecs

Er. R. L. Negi
Head of Project
SJVNL, LHEP, Bithur

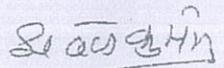
	iii) Monsoon period	171.27 cumecs	171.27 cumecs
11	Design Discharge	555.68 cumecs	171.27 cumecs
12	Annual Energy Benefit	1008.81 MU	407.11 MU
13	Design Energy Benefit	987.84 MU	393.93 MU
14	Monsoon Period	June to September	June to September
15	Lean Period	December to March	December to March
16	10-daily water flow series	1972-73 to 2015-16	

However, the installed capacity and energy benefits may be reviewed at detailed appraisal of DPR on account of following:

- i) Change in various operating levels (FRL, MDDL, TWL) etc, if any.
- ii) Change in Water Conductor System Losses, if any.
- iii) Consequential change in Design Head.
- iv) Change of Combined efficiency of TG, if any.
- v) Change in d/s environmental releases as per MOEF&CC stipulations.
- vi) Change of Layout Plan (Layout Plan is yet to be approved by CEA and CMDD & HCD Dte. of CWC)
- vii) Any other aspect, which is derived during, detailed examination of the projects.

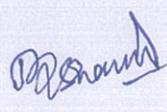
As per Power Potential studies, 4 Nos. of generating units of 73 MW each for Main Plant and 1 No. generating unit of 73 MW & 1 No. generating unit of 17 MW for Aux. Plant as proposed by the Developer may be considered. However, it may be pointed out that the number and size of units of the project may be optimally selected keeping in view the operational flexibility and transportation limitations at DPR stage for both the plants.

This issues with the approval of competent authority.


 18.6.18
 (श्रवण कुमार)
 निदेशक (एचपीए-1)
 ई-मेल: dirhpa3@gmail.com

निदेशक (पी.ए.सी.), केन्द्रीय विद्युत प्राधिकरण
 सं: एन.आर./201/53/2018-एचपीए-1/ 488 to 490 दिनांक: 18 .06.2018

- Copy to:
1. Chief Engineer (HPP&I Division), CEA
 2. Chairman cum Managing Director, M/s. SJVN Limited, Shanan Complex, Shimla- 171006, Himachal Pradesh,






E. R. L. Negi
 Head of Project
 SJVN, LHEP, Bithal