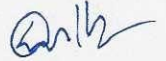


Status of Environment Clearance

MOEF&CC vide its letter No.J- 12011/08/2020-IA-I dated 05.08.2020 has conveyed the accord of a fresh TOR in the name of NHPC for carrying out EIA &EMP Study of Dugar HEP. Further, MOEF&CC vide its letter No.J- 12011/08/2020-IA-I dated 08.02.2021 has conveyed the amendment in TOR for revised installed capacity from 449 MW to 500 MW. EIA /EMP Study is under progress. Environmental Clearance (EC) application will be submitted after completion of EIA/EMP Study and Conducting Public Hearing.



**General Manager
Dugar HE Project.**

महाप्रबंधक
General Manager
डुगर जल विद्युत परियोजना
Dugar Hydro Electric Project
नगवाई, जिला मण्डी (हि.प्र.)-175121
Nagwain, Distt. Mandi (H.P.)-175121



F. No. J-12011/08/2020-IA.I
Government of India
Ministry of Environment, Forests and Climate Change
(IA Division)

2nd Floor, Vayu Block,
 Indira Paryavaran Bhawan,
 Jor Bagh Road, Aliganj,
 New Delhi-110 003.

Dated: 08th February, 2021

To,
 The Executive Director (EDM)
NHPC Ltd.
 NHPC Office Complex, Sector-33,
 Faridabad - 121 003, Haryana

Sub: Dugar Hydroelectric Project in Chamba District of Himachal Pradesh - Amendment of ToR - reg.

Sir,
 This is with reference to your Proposal No. IA/HP/RIV/184065/2020 & letter No. NHPC/ Env.&EDM/2015/8260 dated 11.11.2020 on the above mentioned subject.

2. The said proposal was appraised by the Environment Appraisal Committee (EAC) for River Valley and Hydro Electric Power Projects (RV&HEP) in its 4th meeting held on 02.12.2020. The comments and observations of EAC may be seen in the minutes of the meeting, available on the Ministry's website.

3. Project proponent (PP) informed that Dugar Hydro Electric Project is located in Pangri valley of Chamba district of Himachal Pradesh is a run-of-river scheme for utilizing the flow of Chenab River to harness the head created by constructing a 128 m high (from deepest foundation) concrete gravity dam near Luj village with FRL of EL 2114.00 m a.s.l. To harness the environmental flow during lean season, non-lean non-monsoon season and monsoon season, auxiliary plant of total 88 MW are housed in the power house cavern. Therefore, the total capacity of plant shall be 500MW (Main plant 412 MW + Aux. Plant 88 MW). The catchment and submergence area at Dam site are 7823 km² and 160.45 ha, respectively. The updated DPR of Project has been submitted by NHPC to CEA on 25.11.2020.

4. Project Proponent informed that earlier, the project was accorded ToR vide dated 05.08.2020 with 449 MW installed capacity. During examination of the revised DPR Chapter on Power Potential Studies, the installed capacity has changed from earlier vetted 449 MW (main plant 380 MW + Aux. Plant 69 MW) to 500 MW (Main Plant 412, Aux. Plant 88MW). There is no change in other important project parameters like Dam height, FRL, Submergence area, total land requirement etc. Therefore, Project Proponent requested for an amendment in ToR granted vide Ministry letter dated 05.08.2020.

5. The comparative statement with reference to earlier proposal and revised proposal is as under:

[Handwritten Signature]

Sl No	Details	Original	Revised
1.	Proposal for fresh TOR to Dugar Hydroelectric Project in Himachal Pradesh submitted by NHPC Limited.	449MW(Main Plant 380 MW +69 MW)	500MW (Main Plant 412 MW + Aux. Plant 88 MW)
2.	There is no change in other important project parameters like Dam Height, FRL, Submergence area etc.		

6. Project Proponent made the detailed presentation before the EAC in its 4th meeting held on 02.12.2020 for ToR amendment proposal. EAC after detailed deliberations on the information submitted and as presented, **recommended the proposal for an amendment** in the granted ToR i.e. change in the installation capacity from earlier vetted 449 MW (main plant 380MW + Aux. Plant 69 MW) to 500MW (Main Plant 412, Aux. Plant 88MW).
7. Above proposal was again referred to EAC in its 6th meeting held on 20.01.2021 for deliberation in terms of recommendation of the Chenab River basin study. EAC recommended the proposal for amendment (change in installation capacity from 449 MW to 500 MW only) however, the EIA study should be undertaken in accordance with recommendations of the Chenab river basin study and the project parameters/salient features of the project such as Dam height, FRL, Submergence area, total land requirement, e-flow etc. as discussed/deliberated during the Chenab river basin study should remain unchanged.
8. Based on the recommendation of the EAC, Ministry of Environment, Forest and Climate Change, hereby accords an amendment in the Terms of Reference (ToR) to the proposed revised proposal for Dugar Hydroelectric Project (500 MW) in Chamba, Himachal Pradesh.
9. Also, you are advised to prepare the EIA/EMP report following Terms of Reference granted vide Ministry letter dated 5.08.2020 and shall be submitted to the Ministry within the ToR validity period. *"The EIA study should be undertaken in accordance with recommendations of the Chenab river basin study and the project parameters/salient features of the project such as Dam height, FRL, Submergence area, total land requirement, e-flow etc. as discussed/deliberated during the Chenab river basin study should remain unchanged".*
10. Further, Ministry in suppression of OM dated 1st May 2018 regarding CER has issued an another OM dated 30.09.2020 (enclosed). In this regard, it is advised that issues raised during Public hearing and activities proposed to address such issues shall be made part of EMP.
11. This issue with the approval of the Competent Authority.

Yours faithfully,

[Signature]
8.2.2021

(Yogendra Pal Singh)

Scientist 'E' Email:

- yogendra78@nic.in

Telefax: - 011-24695365

Copy to:

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi - 110 001.
2. The Secretary, Ministry of Water Resources, RD & GR, Shram Shakti Bhawan, Rafi Marg, New Delhi - 110 001.
3. The Special Secretary, (Power) Department of Power, Government of Himachal Pradesh.
4. The Secretary, Department of Environment, Government of Himachal Pradesh, Forest Secretariat, Shimla.
5. The Chief Engineer, Project Appraisal Directorate, Central Electricity Authority, Sewa Bhawan, R. K. Puram, New Delhi - 110 066.
6. The DDG, Regional office, Ministry of Environment, Forests & Climate Change, Bays No.- 24-25, Sect-31A, Dakshin Marg, Chandigarh - 162 022.
7. The Member Secretary, Himachal Pradesh Pollution Control Board, Phase-III, Him Parivesh, New Shimla - 171 009.
8. Guard File/NIC Cell - uploading in MoEF&CC's website.

Y. P. Singh
D. 2. 2021
(Yogendra Pal Singh)
Scientist 'E'

No. J-12011/08/2020-IA-I
Government of India
Ministry of Environment, Forest & Climate Change
(IA.I Division)

Indira Paryavaran Bhawan
 3rd Floor, Vayu Wing
 Jor Bagh Road
 New Delhi-110 003

Dated: 05th August, 2020

To
 The Executive Director (EDM)
 NHPC LIMITED
 NHPC OFFICE COMPLEX,
 SECTOR-33, FARIDABAD,
 HARYANA-121003

Sub: Dugar Hydroelectric Project (449 MW) in Chamba District of Himachal Pradesh, NHPC Ltd – Terms of Reference-regarding

Sir,

This has reference to your online Proposal No. IA/HP/RIV/155974/2020 and letter no S. NH/Paryavaran&/215/8108 Dated 02.06.2020 submitted to the Ministry for ToR to the project cited in the subject.

2. The above referred proposal was considered by the Expert Appraisal Committee (EAC) for River Valley & Hydroelectric projects in its 33rd meeting held on 24.06.2020 under Schedule 1 (c) of the EIA Notification 2006 and as amended thereof. The comments and observations of EAC on the project may be seen in the Minutes of the meeting which are available on the web-site of this Ministry.

3. Project Proponent (PP) informed that in 2011, Government of Himachal Pradesh had allotted the Dugar HEP to M/S Dugar Hydropower Limited (a JV of Tata Power & SN Power). In 2012, MOEF&CC had accorded TOR to M/S DHPL for conducting EIA&EMP. In 2017, the validity of TOR was extended for the 5th year, which has expired on 31.12.2017. Draft EIA & EMP Report was prepared by M/s DHPL but Public hearing could not be conducted. In Sept 2017, Govt. of H.P cancelled the allotment of Project. NHPC entered into an MoU with Govt. of HP on 25/09/2019 to execute Dugar HEP. NHPC has taken over the DPR and other investigation data from M/S Dugar HPL (a JV of Tata Power & SN Power). As the earlier TOR has expired, a fresh TOR is requested in the name of NHPC Limited.

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4. PP submitted that Dugar HEP is located on Chenab River near Killar village in Chamba district of Himachal Pradesh. The latitude and longitude of project site are N 33°07'05" and E 76°21' 20.7" respectively. The Dugar Hydro Electric Project (449 MW) is envisaged as a run-of-river scheme for utilizing the flows of Chenab River to harness the head created by constructing a 128 m high (from deepest foundation) dam and Length of Dam at Top is 210.65 m near Luj village with Full Reservoir Level (FRL) and Minimum Draw Down Level (MDDL) as 2114.00 m a.s.l. and 2102.35 m a.s.l., respectively.

5. The main components of the project are: A 128 m high concrete gravity dam (from the deepest foundation level); 2 nos. main intakes and 1 no. intake for auxiliary units located at the left bank; 2 nos. pressure tunnels/shafts and 1 no. pressure tunnel/shaft for auxiliary units; Underground Power house cavern housing 4 no. main units of 95 MW each and 2 nos. unit of 34.5 MW for auxiliary plant; 1 no. main TRT having tailrace surge chamber located downstream of power house cavern and 1 no. TRT for auxiliary units. The tail race tunnel, located on the left bank of the Chenab River, is discharging back into Chenab River at a distance of about 780 m downstream of dam axis with normal tail water level as 2015.00 m a.s.l. (under normal operating condition).

6. Total capacity of plant shall be 449 MW (380 + 69 MW). The catchment area of Project at Dam site: 7823 km². The total land requirement for Dugar HEP is estimated as 223.63 ha. Out of which 11.79 ha is private land and remaining 211.84 ha is forest land. The submergence area will cover 160.45 ha which is completely forest land. CIA study of Chenab basin was recommended by EAC during July 2016 and approved by MoEF&CC in March 2018. All the recommendation w.r.t. to Dugar HEP, including that on environment flow, will be adopted in Project design.

7. PP informed that total forest land required for the project is 211.842 ha, application for diversion of forest land was submitted on 31/12/2014. State Secretary, HP has recommended the case on 16/11/2016. Due to cancellation of the project, forest diversion proposal got stalled and shall be reinitiated shortly. As the project is located on Chenab River, this shall be governed by the relevant provisions of the Indus Water Treaty (IWT).

8. EAC in the 33rd meeting deliberated on the information submitted (Form 1, PFR, kml file, etc.) and as presented in the meeting and observed that project is located on Chenab River near Killar village in Chamba district of Himachal Pradesh and shall be governed by the relevant provisions of the Indus Water Treaty (IWT). EAC also observed that as per DSS analysis of kml file, the instant project is not located within 10 km distance from any wildlife sanctuary, national park.

9. EAC further observed that the earlier developer had projected cost of the project as Rs. 3390.74 Cr. at completion level in the DPR submitted in Central Electricity Authority (CEA) which was considered for concurrence in 341st meeting of the Authority held on 20.12.2016, while NHPC has projected project cost of as Rs 5415.60 Cr at present day price level. Reasons for such drastic increase in the cost may be justified in the proposal of final EC. EAC after

SK

detailed deliberation on the information submitted and as presented, **recommended** for grant of Standard ToR to the proposed project with some Additional ToRs.

10. Based on recommendations of the EAC, the Ministry of Environment Forest & Climate Change hereby accords a fresh Terms of Reference (TOR) as per the Standard ToR (Hydro projects) for activities at the proposed site as per the provisions of the Environmental Impact Assessment Notification, 2006 and as amended time to time along with the following additional ToR for preparation of EIA/EMP report:

Standard ToR

The EIA/EMP report should contain the information in accordance with provisions & stipulations as given in the **Standard ToR for hydro projects** (Please visit the following link to download the Standard ToR:

<http://environmentclearance.nic.in/writereaddata/standardtorreference.pdf>.

Additional ToR

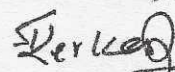
- i. Land acquired for the project shall be suitably compensated in accordance with the law of the land with the prevailing guidelines. Private land shall be acquired as per provisions of Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.
- ii. The project involves diversion of about 211.842 ha of forestland. Forest clearance shall be obtained as per the prevailing norms of Forest (Conservation) Act, 1980.
- iii. Application to obtain prior approval of Central Government under the Forest (Conservation) Act, 1980 for diversion of forest land required should be submitted as soon as the actual extent of forest land required for the project is known, and in any case, within six months of issuance of this letter.
- iv. Funds allocation for Corporate Environment Responsibility (CER) shall be made as per O.M. No. 22-65/2017-IA.III dated 01.05.2018 for various activities therein.
- v. The details of funds allocation and activities for CER shall be incorporated in EIA/EMP report.
- vi. Consolidated EIA/EMP report is to be submitted as per the generic structure (Appendix III & IIIA) given in the EIA Notification, 2006.
- vii. The EIA report should clearly mention activity wise EMP and CER cost details and should earmarked clear break-up of the capital and recurring cost along with the timeline for incurring the capital cost.
- viii. Conservation plan for the Scheduled I species, if any, in the project study area shall be prepared and submitted to the Competent Authority for approval.

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- ix. Pre-DPR Chapters viz., Hydrology and Layout Map and Power Potential Studies duly approved by CWC/CEA shall be submitted.
 - x. Dam break analysis, Disaster Management Plan and Fisheries Management Plan be prepared and submitted in the EIA/EMP report.
 - xi. Environmental matrix during construction and operational phase needs to be submitted.
 - xii. Both capital and recurring expenditure under EMP shall be submitted.
 - xiii. Impact of developmental activity/project on the wildlife habitat, if any, within 10 km of the project boundary shall be studied.
 - xiv. NOC from the earlier project proponent i.e. Dugar Hydroelectric Project Ltd. be obtained and submitted during appraisal of EIA/EMP
 - xv. The consultant engaged for preparation of EIA/EMP report has to be registered with Quality Council of India (QCI/ NABET) under the scheme of Accreditation & Registration of MoEF& CC. This is a pre-requisite.
 - xvi. Consultant shall include a "Certificate" in EIA/EMP report regarding portion of EIA/EMP prepared by them and data provided by other organization(s)/ laboratories including status of approval of such laboratories. Declaration by the Consultant that information submitted in the EIA/EMP is factually correct and shall be submitted along with EIA/EMP reports.
 - xvii. An undertaking as part of the EIA report from Project proponent, owning the contents (information and data) of the EIA report with the declaration about the contents of the EIA report pertaining to a project have not been copied from other EIA reports.
 - xviii. The draft EIA/EMP report prepared as per the Generic Structure (Appendix III of EIA Notification, 2006) incorporating information as per the Standard ToR, should be submitted to the State Pollution Control Board concerned for conducting Public Consultation, district wise, as per the provisions stipulated in EIA Notification, 2006. Public Hearing, which is a part of Public Consultation, shall be held district wise at the site or in its close proximity as prescribed in Appendix (IV) of EIA Notification, 2006. The draft EIA/EMP report is to be submitted to SPCB sufficient before the expiry of the ToR validity so that necessary amendments in EIA/EMP can be undertaken based on public hearing and the same is to be submitted to MoEF&CC before expiry of validity.
 - xix. All the tasks including conducting public hearing shall be done as per the provisions of EIA Notification, 2006 and as amended from time to time. Public hearing issues raised and compliance of the same shall be incorporated in the EIA/EMP report in the relevant chapter. Final EIA/EMP report should be submitted to the Ministry for Environmental Clearance only after incorporating these issues, before the expiry of validity of ToR.
- 4

- xx. As per Ministry's Notification 17.02.2020, the ToR will remain valid for a period of 5 years from the date of issue of this letter for submission of EIA/EMP report along with public consultation. The ToR will stand lapsed after completion of 5 years in case final EIA/EMP is not submitted.
- xxi. Baseline data and public consultation shall not be older than 3 years, at the time of submission of the proposal, for grant of Environmental Clearance.
- xxii. In case of any change in the scope of the project such as capacity enhancement, change in submergence, etc., fresh scoping clearance has to be obtained.
- xxiii. Details of the name and number of posts to be engaged by the project proponent for implementation and monitoring of environmental parameters be specified in the EIA report.
- xxiv. The EIA/ EMP report must contain an Index showing details of compliance of all ToR conditions. The Index will comprise of page No. etc., vide which compliance of a specific ToR is available. It may be noted that without this index, EIA/ EMP report will not be accepted.
- xxv. Appropriate Biodiversity Conservation and Management plan for the Native, Rare & Endangered floral and faunal species getting affected due to the project shall be prepared.
- xxvi. The PP should complete all the tasks as per the provisions of EIA Notification, 2006 and as amended time to time) and submit the application for final clearance within the stipulated time.

This has approval of the Competent Authority.

Yours faithfully,



(Dr. S. Kerketta)

Director

Telefax: 011-24695314

Copy to:

1. The Secretary, Ministry of Power, Sharm Shakti Bhawan, Rafi Marg, New Delhi-110001
2. The Secretary, Ministry of Water Resources, RD & GR, Sharm Shakti Bhawan, Rafi Marg, New Delhi-110003.
3. The Special Secretary (Power), Department of Power, Govt. of Himachal Pradesh