



भारत सरकार
पर्यावरण एवं वन मंत्रालय
GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT & FORESTS

BY SPEED POST

E-mail: sanchita@nic.in
sansom_2859@yahoo.co.in

Telefax: 011-24360488

F. No. J-12011/58/2007-IA-1

Date: 19th May 2011

To

The Deputy General Manager
Shongtong-Karcham Hydro-Electric Project
Himachal Pradesh Power Corporation Ltd
Kinfe/Bldg. Reckong Peo - 172 102
District Kinnaur
Himachal Pradesh

Subject: Shongtong-Karcham 402 MW Hydroelectric Power Project in
District Kinnaur of Himachal Pradesh by M/s Himachal Pradesh
Power Corporation Ltd. - Environmental Clearance regarding.

Sir,

-This has reference to your letter No. HPPCL/DGM/SKHEP/DB-10/09-1775-79, dated 22.8.2009 and subsequent letters dated 3.10.2009, 30.11.2009, 9.2.2010, 10.3.2011 and 19.3.2011 on the above mentioned subject.

2. It is noted that the project envisages construction of 22m high diversion barrage across river Satluj near village Powarl for generation of 402 MW hydropower. This is run-of-the-river scheme. The catchment area at barrage site is 47,968 sq. km. The total land requirement for the project is about 77,3326 ha out of which 63,5015 ha is forest land & 13,8311 ha is private land. Stage-I Forest Clearance has been accorded for diversion of 63,501 ha of forest land. An underground powerhouse is proposed on the left bank of the river near village Ralli with 3 units of 134 MW each. A total of 158 families are likely to be affected due to this project. The total cost of the project is Rs. 1507.30 Crores.

3. The above proposal was considered by the Expert Appraisal Committee for River Valley & Hydroelectric Power Projects in its meetings held on 14.9.2009, 15.12.2009 and 19.2.2010. The Public Hearing for the Project was conducted on 28th - 29th July, 2009.

Dy. General Manager
Shongtong-Karcham HEP,
HPPCL, Reckong Peo,
Dist. Kinnaur (H.P.) 172107

जहाँ है हृदयाली।
वहीं है खुशहाली।

पर्यावरण भवन, सी.जी.ओ. कॉम्प्लेक्स, लोदी रोड, नई दिल्ली - 110 003
PARYAVARAN BHAWAN, C.G.O. COMPLEX, LODHI ROAD, NEW DELHI - 110 003
Website: envfor.nic.in

4. After appraising the Project Proposal from environmental angle, the Ministry of Environment and Forests hereby accords environmental clearance as per the provisions of Environmental Impact Assessment Notification, 2006 and its subsequent amendment in 2009, subject to the following conditions:

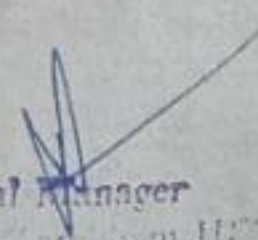
Part A: Specific Conditions

- (i) The following Catchment Area Treatment Plan, as proposed in the EIA/EMP Report shall be completed in 5 years-

Treatment Measures	I Year	II Year	III Year	IV Year	V Year	Total
A) Biological Measures						
Afforestation/ Gap Plantation (ha.)	81	80	80	80	80	401
Pasture Development (ha.)	476	475	470	470	470	2361
Nursery Development (nos.)	5	5	-	-	-	10
B) Engineering Measures						
Step Drain (Rmt)	57	57	57	57	57	285
Check Dams (nos.)	5	5	5	5	5	25

- (ii) The details of the land holding of project affected persons whose land is being acquired shall be submitted to this Ministry. The benefits for the land losing households will be as per the National Rehabilitation and Resettlement Policy, 2007 (NRRP, 2007) or as per the State Rehabilitation and Resettlement Policy, whichever is higher. Adequate publicity for the compensation package shall be given in the affected villages. All R&R issues shall be completed before commissioning of the Project.
- (iii) All commitments made during the public hearing shall be fulfilled completely.
- (iv) A scientific study from a reputed institute for deciding the minimum environmental flow to be released during the lean season should be undertaken. Till the study is completed, 20 % of the average flow of four consecutive leanest months of 90% dependable year shall be maintained as environmental flow. After the study is completed, whichever is higher figure shall be adopted.

- (v) The equipment likely to generate high noise levels during the construction period or otherwise shall meet the ambient noise standards as notified under the Noise Pollution (Regulation and Control) Rules, 2000, as amended in 2010 under Environment Protection Act (EPA), 1986.
- (vi) Consolidation and compilation of the muck shall be carried-out only in the designated muck dumping sites, approved by the State Pollution Control Board. As per the proposed muck disposal plan given in your EIA/EMP, about 3.57 Mm³ will be generated out of which 0.47 Mm³ will be reutilized for back filling and 1.05 Mm³ as construction material/protection works and remaining 2.04 Mm³ shall be disposed off at 8 designated disposal areas. This shall be strictly implemented. The dumping sites shall be at least 30 m horizontally away from the high flood level of the river.
- (vii) The proposed Compensatory Afforestation Programme on 128 ha of land with identified plant species @1500 plants per hectare shall be taken-up immediately. The allocated funds for this purpose shall not be diverted to any other purpose.
- (viii) Greenbelt development in 40 ha of land along the approach roads, residential areas, office complex, barrage site and other working areas with various native plant species shall be undertaken immediately. The allocated budget of Rs. 40 lakhs for this purpose shall not be diverted to any other purpose.
- (ix) The revised Fisheries Management Plan submitted vide letter no. HPPCL/ESMU-2/Shongtong/09-1658-61 dated 9th February, 2010 shall be undertaken in consultation with the Fisheries Department, Government of Himachal Pradesh. Breeding and hatching of indigenous fish i.e. Snow Trout will be carried out separately. The same shall also be followed in the proposed hatchery at Sangla with separate bays.
- (x) The proposed Wildlife Management & Development and Conservation of Biodiversity Plans at a cost of Rs. 764.50 lakhs shall be taken-up strictly as outlined in the EIA/EMP Report and implemented in consultation with the State Forest Department without any diversion of funds. A report of implementation shall be included in the sixth monthly compliance report to be submitted to the Ministry.
- (xi) About 1.5% of the total project cost shall be spent for the Local Area Development.
- (xii) Any other clearance from any other organization/department, if required, shall be obtained.


Dy. General Manager
State Pollution Control Board
HPPCL, Sangla
Distt. Kinnaur (H.P.) 176107

Part-B: General Conditions

- (i) Adequate arrangement for providing free fuel like kerosene/wood/LPG shall be made for the labour engaged in the construction work so that indiscriminate felling of trees is prevented.
- (ii) Medical facilities as well as recreational facilities shall also be provided to the labours.
- (iii) Labours to be engaged for construction work shall be thoroughly examined by health personnel and adequately treated before issuing them work permit.
- (iv) No fugitive dust emissions should be observed at the construction sites. Water sprinkling arrangements shall be made to suppress the fugitive emissions.
- (v) Potable drinking water and proper sanitary facilities shall be provided for the labour force and the local area people.
- (vi) Restoration of construction area including dumping sites shall be ensured by leveling, filling up of burrow pits, landscaping etc. The area shall be properly treated with suitable plantation.
- (vii) Separate financial provision shall be made in the total budget of the project for implementation of the above suggested safeguard measures. The same shall be informed to the Ministry.
- (viii) Environmental parameters shall be monitored and six monthly monitoring reports shall be submitted to the Regional Office of the Ministry and State Pollution Control Board for their review.
- (ix) A Multi-Disciplinary Committee (MDC) to monitor environmental safeguards during the construction shall be constituted by the Ministry on the suggestions of the Proponent. Six monthly monitoring report of this Committee shall be displayed on the web-site of the Proponent.
- (x) Videography of the project area shall be carried out to ascertain that no damage occurs to the houses of the villagers/local people and in case any damage occurs, the PP shall pay compensation for the damages.

5. The Project Proponent shall provide full cooperation and all required documents / data to the Officials of relevant Regional Office of MOEF who would be monitoring the implementation of environmental safeguards.

(52)

6. Besides the above stated conditions, the Project Proponent and Government of Himachal Pradesh shall also implement all other environmental safeguards, as proposed in the EIA/EMP report and other reports from time to time.

7. The environmental management plan shall be strictly adhered to and a sum of Rs. 84.891 Crores, the budgetary provisions for implementation of EMP shall not to be diverted for any other purpose.

8. Any change in the scope of the project shall be intimated to the Ministry and fresh approval if required, shall be taken from the Ministry.

9. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary and to take action including revoking of the clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time-bound and satisfactory manner.

10. This clearance letter is valid for a period of 10 years from the date of issue of this letter for commencement of construction work.

11. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/ Municipal Corporation, Urban local body and the local NGO, if any, from whom any suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.

12. The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearance and copies of clearance letters are available with the State Pollution Control Board / Committee and may also be seen at Website of the Ministry of Environment and Forests at <http://www.envfor.nic.in>.

13. After 5 years of the commissioning of the Project, a study shall be undertaken regarding impact of the project on the environment and downstream ecology. The study shall be undertaken by an independent agency, decided in consultation with the Ministry.

Dr. G. S. Chahal

MP,

11/11/07

Himachal Pradesh State Pollution Control Board

'Him Parivesh', Phase -III, New Shimla-171009, HP.

Form-XIII

(See Rule 22)



Application for Consent to Industry /Operate/Renewal the industrial plant/plants under Section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 .

Application for Consent to Establish or take any step to establish any Industry , operation processes or any treatment and disposal system for discharge,under Section-25 or continuation or discharge under Section -26 of the Water (Prevention and Control of Pollution) Act, 1974.

RCTE for the period(01/04/2019-31/03/2020)

From
Shongtong Karchham HEP, M/s Shongtong Karchham HEP HPPCL-
Reckong Peo, Distt. KinnaurHPPCL Corporate Office, Tutikandi,
ShimlaR-Peo
City:Reckong Peo
Block:Kalpa
District:Kinnaur

Date:15/11/2019

Industry ID: 13343

Application No.: 1352272

To
The Member Secretary,
Himachal Pradesh Pollution Control Board,
Him Parivesh, Phase-III, New Shimla,
Shimla- 171009, HP.

Sir,

I / we hereby apply for Consent/ Renewal of Consent under Section-25 of Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) to establish or take any step to establish any Health Care Facility/CBWTF/Research Lab or operation or process or a treatment and disposal system or any extension or addition to bring into use any new altered outlet for discharge of sewage / trade effluent* to continue to discharge sewage /trade effluent * from land/ premises owned byShongtong Karchham HEP

The other relevant details are below:

Dy. General Manager
Shongtong Karchham HEP,
HPPCL, Reckong Peo,

Distt. Kinnaur (This is computer generated document from OCMMS by HPSPCB)

Sr. Manager (R&R)
Shongtong-Karchham HEP,
HPPCL, Reckong-Peo,
Distt. Kinnaur H.P., 172107

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1.	Full name of the Industry	Shongtong Karchham HEP											
2.	Nationality of the applicant	Indian											
3.	Type of Industry	State Government											
4.	Full Address of the Industry with PIN Code:	Name of applicant: Sharma Address: New HPPCL Building District: Kinnaur Block: Kalpa											
5.	Details of Establishment etc.:												
	(a) Approximate date of proposed Establishment :	Month : January Year : 2013											
	(b) Expected date of commencement of date of Operation :	Month : January Year : January											
6.	Total number of employee expected to be Employed	: 80											
7.	Details of license/registrations, if any obtained under the provisions of Industrial Development Regulation Act, 1951.	Registration No. : U40101HP2006SGC030591 Registration Add. : U40101HP2006SGC030591 Registration Date : 2013											
8.	Name of the person authorised to sign this form (the original authorization except in the case of individual proprietor concern is to be enclosed)	Er. T N Negi											
9.	List of raw materials with monthly consumption rate (MT/month)												
	<table border="1"><thead><tr><th>Raw Materials</th><th>Quantity</th><th>Unit</th></tr></thead><tbody><tr><td>387.39 Cumecs of De-silted water is drawn from river satluj for generation of 450 MW of Electricity</td><td>1004114880</td><td>K.L./Month</td></tr></tbody></table>	Raw Materials	Quantity	Unit	387.39 Cumecs of De-silted water is drawn from river satluj for generation of 450 MW of Electricity	1004114880	K.L./Month						
Raw Materials	Quantity	Unit											
387.39 Cumecs of De-silted water is drawn from river satluj for generation of 450 MW of Electricity	1004114880	K.L./Month											
10.	List of products with monthly production rate (MT/month)												
	<table border="1"><thead><tr><th>Name of Products</th><th>Quantity</th><th>Unit</th><th>Intermediate Product</th><th>Principal Use</th></tr></thead><tbody><tr><td>Electricity generated</td><td>1735</td><td>Millions/Year</td><td>1735 Million Unit of electricity</td><td>To strengthening the Northern grid</td></tr></tbody></table>	Name of Products	Quantity	Unit	Intermediate Product	Principal Use	Electricity generated	1735	Millions/Year	1735 Million Unit of electricity	To strengthening the Northern grid		
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Electricity generated	1735	Millions/Year	1735 Million Unit of electricity	To strengthening the Northern grid									
11.	List of By Product Details												
	<table border="1"><thead><tr><th>Name of By Products</th><th>Unit</th><th>Installed Capacity</th><th>Average Production</th></tr></thead><tbody><tr><td>Di-silted water From TRT is to be feed to the main River</td><td>K.L./Year</td><td></td><td></td></tr></tbody></table>	Name of By Products	Unit	Installed Capacity	Average Production	Di-silted water From TRT is to be feed to the main River	K.L./Year						
Name of By Products	Unit	Installed Capacity	Average Production										
Di-silted water From TRT is to be feed to the main River	K.L./Year												
	(c) License/Registration of Annual Capacity of the Industry, Operation or process etc. :	46429.0											
	Expansion Cost												
12.	Source of Water and Consumption Detail :												
	Usage												

Dy. General Manager
Shongtong Karchham HEP,
HPPCL, Neckong-Peo,
Distt. Kinnaur H.P., 172107

Sr. Manager (R&R)
Shongtong Karchham HEP,
HPPCL, Neckong-Peo,
Distt. Kinnaur H.P., 172107

"This is computer generated document from OCMMS by HPSPCB"

17. All other conditions including standard conditions applicable to the proposals under Forest (Conservation) Act, 1980 and under different rules regulations and guidelines including Environmental Clearance and rehabilitation shall be complied with before transfer of forest land

Yours faithfully,

(Shiv Pal Singh)
Sr. Assistant Inspector General of Forests

Copy to:-

1. The Principal Chief Conservator of Forests, Himachal Pradesh, Shimla.
2. The Nodal Officer (FCA), Forest Department, Himachal Pradesh, Shimla.
3. The Conservator of Forests (Central), Northern Regional Office, Chandigarh.
4. User Agency.
5. Monitoring Cell of FC Section.
6. Guard File.

Shiv 14/6/12
(Shiv Pal Singh)
Sr. Assistant Inspector General of Forests

[Signature]
Dy. General Manager
Shimla - Yarchham HEP,
HEPCL, Reckong Poo,
Distt. Kinnaur (H. P.) 172107

[Signature]
Sr. Manager (R&D)
Shimla - Yarchham HEP,
HEPCL, Reckong Poo,
Distt. Kinnaur (H. P.) 172107

13.	Whether permission for construction has been taken from the Competent Authority (enclose copy).		Yes
14.	(a) Effluent Currently Discharged or Expected		
	Type of Effluent	Capacity(KLD)	Quantity(KLD)
	(c) What monitoring arrangement is currently existing or proposed to be created?		
15.	Process of treatment (if industry has any treatment plant for industrial, domestic or combined effluent).		
	Description	Quantity(in KLD)	Method of Treatment
			Method of Disposal
16.	Water Emission Discharge		
	Installed	Capacity	Method of Disposal
			Unit
17.	Please indicate whether storm water drains are kept separate from industrial/domestic effluent drains.		
18.	Please indicate expected composition of the effluent. In case of operational Industry actual composition of the effluent is to be indicated and latest analysis report to be attached.		
19.	(a) Are facilities available with the applicant for carrying out the test of waste water		
	Test of Waste Water	Existing	Proposed
20.	I/we further declare that the information furnished above is correct to the best of my/ our knowledge.		
	I/we hereby submit that in case of change either of the point of discharge or the quantity of discharge or its quantity, a fresh application for CONSENT shall be made and until such CONSENT is granted no change shall be brought into use.		
	I/we hereby agree to submit to the Himachal Pradesh State Pollution Control Board an application for Renewal of Consent one month in advance of the date of expiry of the consented period for outlet/ discharge if, to be continued thereafter.		
	I / we undertake to furnish any other information within one month of its being called for by the Himachal Pradesh State Pollution Control Board.		
	I/we, enclose herewith Bank Draft No. 000213 Date 13/03/2019 for Rs 280000.0 (Rupees) in favour of the Environmental Engineer/ Assistant Environmental Engineer / Regional Officer , Himachal Pradesh State Pollution Control Board,..... payable at under section-25 of the Act as per the Fee Schedule attached.		

Dy. C. Manager
Shongrang Marchhem HEP,
HPPCB, Panchkula-Peo,
Distt. Kurukshetra (H. P.) 172107

Sr. Manager (R&R)
Shongrang Marchhem HEP,
HPPCB, Panchkula-Peo,
Distt. Kurukshetra H.P., 172107

Yours faithfully,
Signature :
Name of the application :
Designation :
Address :

PUC

Recd. Post

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No. FFE-B-E-(2)-10/2012

Government of Himachal Pradesh
Department of Forest.

From

The Principal Secretary (Forest) to the
Government of Himachal Pradesh.

To

The Assistant Inspector General of Forests,
Government of India, Ministry of Environment and Forests,
F.C. Division
Paryasharan Bhawan, CGO Complex,
Lodhi Road, New Delhi-110003.

Dated, Shimla-2 the

6-3-2014.

Subject:

Revised CAT Plan of Shongtong Karchham HEP (402MW)
under Kinnaur Forest Division Rampur Forest Circle.

Sir,

I am directed to refer to this department letter of even no. dated 23-08-2012 on the subject cited above and to enclose a copy (in original) of revised CAT Plan, from Rs. 544.00 Lakh to Rs. 6040.00 Lakh, of 402 MW Shongtong Karchham Hydro Electric Project, Lakh within the jurisdiction of Kinnaur Forest Division of Rampur Forest Circle duly approved by the State Government for further action at your end please.

Yours faithfully,

(Prakash Nandi)
Under Secretary (Forests) to the
Government of Himachal Pradesh
0172-2380818, 94184-55573

Dated Shimla-2, the: 6-3-2014

In Ist. No. As above.

Copy is forwarded to:-

1. Ch. of Conservator of Forest (Hd. F.F.P.) with this letter No. 11/3/14
2. AIP No. 2010 Shongtong Karchham HEP dated 20.07.14 for information

Dy. General Manager
Shongtong Karchham HEP,
HPPCL, Reckong-Peeo,
Distt. Kinnaur (H. P.) 172107

(Prakash Nandi)
Under Secretary (Forests) to the
Government of Himachal Pradesh
0172-2380818, 94184-55573

Sr. Manager (R&R)
Shongtong Karchham HEP
HPPCL, Reckong-Peeo,
Distt. Kinnaur H.P., 172107

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72/8/14

7.1 INTRODUCTION

The landscape and restoration plan targets towards overall improvement in the condition of the area. The landscape plan provides benefits to improve beautification and its utility. All the activities are aimed at restoring the areas where scars would be formed. The restoration would prevent soil erosion enhance forest cover and stabilize degraded areas.

7.2 RESTORATION PLAN FOR QUARRY SITE AND BORROW AREA

A project of this magnitude would require significant amount of construction material. The details are given in Table-7.1.

TABLE-7.1 Detail of Construction Material Required

S. No.	Material	Unit	Quantity
1.	Coarse aggregate	lac m ³	2.97
2.	Fine aggregate	lac m ³	1.50
3.	Cement	MT	14,000
4.	Structural steel	MT	6,200
5.	Reinforcement steel	MT	20,323
6.	High Tensile steel	MT	12,824

The sand required for the project is proposed to be taken from Satluj river bank. An aggregate manufacturing equipment sand processing plant will be located at quarry site near village Powari, the site is away from habitation. The impervious material required for cofferdam will be met locally. The material for riprap is available on the river banks at site.

The cement will be transported from ACC Barmana and Ambuja cement factories. The steel transported from Jalandhar by road. The quarrying operations are semi-mechanized in nature. Normally, in a hilly terrain like Himachal Pradesh, quarrying is normally done by cutting a face of the hill. A permanent scar is likely to be left, once quarrying activities are over. With the passage of time, the rock from the exposed face of the quarry under the action of wind and other erosion forces, get slowly weathered and after some time, they become a potential source of landslide. Thus it is necessary to implement appropriate slope stabilization measures to prevent the possibility of soil erosion and landslides in the quarry sites.

Similarly, the proposed project would require significant amount of fine material, which can be met either by crushing the aggregates or by excavation from borrow areas. In the proposed project, large quantity of fines shall be required, which would entail excavation from borrow pits. Normally, such sites are left untreated after excavation of the construction material. The pit so created impedes the natural drainage, increases the potential for soil erosion and stores rain water and runoff. These pools of water can serve as habitats for proliferation of mosquitoes, which can lead to increased incidence of vector-borne diseases.

7.3 RESTORATION PLAN FOR QUARRY SITE AND BORROW AREA

The following biological and engineering measures are suggested for the restoration of quarry site:

- Garland drains around quarry site to capture the runoff and divert the same to the nearest natural drain.
- Construction of concrete guards check the soil erosion of the area.
- The pit formed after excavation be filled with small rocks, sand and farmyard manure.
- Grass slabs will be placed to stabilize and to check the surface runoff of water and loose soil.

Since the quarry site is in the submergence area thus, the River Bed Mining (RBM) material will replenish itself annually in monsoon season. Since no gangue or mine spoil will be generated (RBM has 100% utilization rate) therefore there is no need for disposal. The quarried material will be stacked at leveled dumping site. As per Muck Management Plan, excess capacity for dumping is available. Figure 1.1, gives the pectoral view of submergence area and Table 1.1, in Chapter 1, gives detail of trees required to be cut in submergence area, Table 7.2 gives details of availability of raw material for construction.

Dy. General Manager
Shorotong Jarchham HEP,
H.P.C.L., Reckong Poo,
Distt. Kinnaur (H.P.) 172107

Sr. Manager (R&R)
Shorotong Jarchham HEP,
H.P.C.L., Reckong Poo,
Distt. Kinnaur H.P., 172107

TABLE 7.2: Detail of availability of aggregate per year construction site quantities of raw material (Coarse/Fine)

Site No.	Name of Site	Quantity (cubic meters)
1	25 m D/S of Drift to Desanding chamber	24,241.00
2	25 m U/S of Drift to Desanding chamber	17,622.75
3	At Barrage	8,891.25
4	At Barrage	39,337.50
5	Near Stone Crusher at Powari	30,137.25
6	U/S of Discharge site	9,975.00
7	U/S of Discharge site	17,672.00
8	Near Tangling Jhula	9,265.00
	TOTAL	157,141.75 say (157,142.00)

Since all the sites are in river bed thus they will replenish themselves every year. So for the 5½ years of construction phase it will come out to be = $157,142 \times 5 \frac{1}{2}$
 = 864279.625 cubic meters
 = 8.6 lakh cubic meters

In case the required material fell short of demand then HPPCL will use its already existing quarry of Kashang Project at Jangi.

The necessary NOCs/approval from the mining department and other approvals for use of quarry sites will be taken after acquisition of land.

At the present level of investigations a tentative provision of Rs. 105 lakh can be earmarked for quarry and borrow slope stabilization. The details are given in Table-7.3.

TABLE-7.3: Cost estimate for restoration of borrow area

S. No.	Activities/purpose	Cost (Rs. lakh)
1	Filling up the land with soil	10.0
2	Cost of green manure	4.0
3	Cost of sapling (10,000 saplings/ ha) @ Rs.5.00 per sapling	0.5
4	Cost of fertilizers and pesticides	4.0
5	Fencing with RCC pillars and barbed wire	3.0
6	Maintenance activities including cleaning of weeds @ Rs.50,000 for 5 years	2.5
7	Digging of pits	1.0
8	Construction of garland drain	20.0
9	Bench terracing	50.0
	Total	105.0

7.4 LANDSCAPING AND RESTORATION PLAN

Area for landscaping: The working areas of barrage site, power house complex colony area have been selected for beautification of the project area after construction is over.

The reservoir created due to the construction of barrage may be a local point of tourist attraction. This could be used for sport fishing, so there is a need to construction of benches for sitting, development of resting sheds and footpath. The beautification would be carried out by developing flowering beds for plantation ornamental plant and flower garden.

There would be sufficient open space in power house complex and colony area. Forested area in the power house complex would provide aesthetic view and add to natural seismic beauty. The beautification in the colony area would be carried out by development of flowering beds for plantation of ornamental plant, creepers, flower garden and a small park, construction of benches for sitting, resting sheds, walk way and fountain. A provision of Rs.50 lakh has been earmarked for landscaping and beautification of the area.

7.5 BUDGET

A total provision of (105.0 + 50.0) Rs. 155.0 lakh, (has been earmarked) for restoration of quarry and borrow area, reclamation of construction sites, landscaping and beautification.

Dy. General Manager
 Shongtong Janglam HEP,
 HPPCL, Reckong Poo,
 Distt. Khamti (H. P.) 172107

St. Manager (R&R)
 Shongtong Janglam HEP,
 HPPCL, Reckong Poo,
 Distt. Khamti H.P., 172107

RESTORATION AND LANDSCAPING OF CONSTRUCTION SITES

7.1 INTRODUCTION

The landscape and restoration plan targets towards overall improvement in the condition of the area. The landscape plan provides benefits to improve beautification and its utility. All the activities are aimed at restoring the areas where scars would be formed. The restoration would prevent soil erosion enhance forest cover and stabilize degraded areas.

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6.	High Tensile steel	MT	12,824

The sand required for the project is proposed to be taken from Satluj river bank. An aggregate manufacturing equipment sand processing plant will be located at quarry site near village Powari, the site is away from habitation. The impervious material required for cofferdam will be met locally. The material for riprap is available on the river banks at site.

The cement will be transported from ACC Barmana and Ambuja cement factories. The steel transported from Jalandhar by road. The quarrying operations are semi-mechanized in nature. Normally, in a hilly terrain like Himachal Pradesh, quarrying is normally done by cutting a face of the hill. A permanent scar is likely to be left, once quarrying activities are over. With the passage of time, the rock from the exposed face of the quarry under the action of wind and other erosion forces, get slowly weathered and after some time, they become a potential source of landslide. Thus it is necessary to implement appropriate slope stabilization measures to prevent the possibility of soil erosion and landslides in the quarry sites.

Similarly, the proposed project would require significant amount of fine material, which can be met either by crushing the aggregates or by excavation from borrow areas. In the proposed project, large quantity of fines shall be required, which would entail excavation from borrow pits. Normally, such sites are left untreated after excavation of the construction material. The pit so created impedes the natural drainage, increases the potential for soil erosion and stores rain water and runoff. These pools of water can serve as habitats for proliferation of mosquitoes, which can lead to increased incidence of vector-borne diseases.

7.3 RESTORATION PLAN FOR QUARRY SITE AND BORROW AREA

The following biological and engineering measures are suggested for the restoration of quarry site.

- Garland drains around quarry site to capture the runoff and divert the same to the nearest natural drain.
- Construction of concrete guards check the soil erosion of the area.
- The pit formed after excavation be filled with small rocks, sand and farmyard manure.
- Grass slabs will be placed to stabilize and to check the surface runoff of water and loose soil.

Since the quarry site is in the submergence area thus, the River Bed Mining (RBM) material will replenish itself annually in monsoon season. Since no gangue or mine spoil will be generated

Dy. General Manager
Shonit Singh
HTPCL, Rong Peo,
Distt. Kangra (H. P.) 172107

St. Manager (RBM)
Shonit Singh
HTPCL, Rong Peo,
Distt. Kangra (H. P.) 172107

(RBM has 100% utilization rate) there is no need for disposal. The quarried material will be stacked at leveled dumping site. Muck Management Plan, excess capacity for dumping is available. Figure 1.1, gives the view of submergence area and Table 1.1, in Chapter 1, gives detail of trees required to be cut in submergence area, Table 7.2 gives details of availability of raw material for construction.

TABLE 7.2: Detail of availability of adequate quantities of raw material (Coarse/Fine aggregate) per year construction of SKHEP

Site No.	Name of Quarry Site	Quantity (cubic meters)
1.	25 m D/S of Drift to Desanding chamber	24,241.00
2.	25 m U/S of Drift to Desanding chamber	17,622.75
3.	At Barrage	8,891.25
4.	At Barrage	39,337.50
5.	Near Stone Crusher at Powari	30,137.25
6.	U/S of Discharge site	9,975.00
7.	U/S of Discharge site	17,672.00
8.	Near Tangling Jhula	9,265.00
	TOTAL	157,141.75 say (157,142.00)

Since all the sites are in river bed thus they will replenish themselves every year. So for the 5½ years of construction phase it will come out to be = $157,142 \times 5 \frac{1}{2}$

= 864279.625 cubic meters

= 8.6 lakh cubic meters

In case the required material fell short of demand then HPPCL will use its already existing quarry of Kashang Project at Jangi.

The necessary NOCs/approval from the mining department and other approvals for use of quarry sites will be taken after acquisition of land.

At the present level of investigations a tentative provision of Rs. 105 lakh can be earmarked for quarry and borrow slope stabilization. The details are given in Table-7.3.

TABLE-7.3: Cost estimate for restoration of borrow area

S. No.	Activities/purpose	Cost (Rs. lakh)
1.	Filling up the land with soil	10.0
2.	Cost of green manure	4.0
3.	Cost of sapling (10,000 saplings/ ha) @ Rs.5.00 per sapling	0.5
4.	Cost of fertilizers and pesticides	4.0
5.	Fencing with RCC pillars and barbed wire	3.0
6.	Maintenance activities including cleaning of weeds @ Rs.50,000 for 5 years	2.5
7.	Digging of pits	1.0
8.	Construction of garland drain	20.0

Dy. General Manager
Shangtung Katchham HEP,
HPPCL, Reckong Poo,
Distt. Kinnaur (H. P.) 172107

St. Manoj (H. P.)
Shangtung Katchham HEP,
HPPCL, Reckong Poo,
Distt. Kinnaur (H. P.) 172107

S. No.	Activities/purpose	Cost (Rs. lakh)
9.	Bench terracing	50.0
	Total	105.0

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7.4 LANDSCAPING AND RESTORATION PLAN

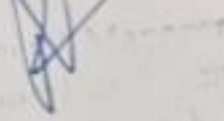
Area for landscaping: The working areas of barrage site, power house complex colony area have been selected for beautification of the project area after construction is over.

The reservoir created due to the construction of barrage may be a local point of tourist attraction. This could be used for sport fishing, so there is a need to construction of benches for sitting, development of resting sheds and footpath. The beautification would be carried out by developing flowering beds for plantation ornamental plant and flower garden.

There would be sufficient open space in power house complex and colony area. Forested area in the power house complex would provide aesthetic view and add to natural seismic beauty. The beautification in the colony area would be carried out by development of flowering beds for plantation of ornamental plant, creepers, flower garden and a small park, construction of benches for sitting, resting sheds, walk way and fountain. A provision of Rs.50 lakh has been earmarked for landscaping and beautification of the area.

7.5 BUDGET

A total provision of (105.0 + 50.0) Rs. 155.0 lakh, (has been earmarked) for restoration of quarry and borrow area, reclamation of construction sites, landscaping and beautification.

By 
 Dy. General Manager
 Shri. HEP,
 HEPCL,
 Dist. 172107



Kmd. M. - Er Ms Chandhok
A-22

Fax No 223857

①

No MPP-F(2)-5/2005-II
Government of Himachal Pradesh,
Department of MPP & Power

The Pr. Secretary (Power) to the
Government of Himachal Pradesh.

The Chairman-cum-Managing Director,
Himachal Pradesh Power Corporation Ltd.,
Himrus Building,
Shimla-171001.

6th January 2007

Dated, Shimla-2
Allotment of Hydro Electric Projects to Himachal Pradesh Power
Corporation Ltd. (HPPCL).

Subject

Sir,

I am directed to refer to the subject cited above and to say that
the following Hydro Electric Projects shall be executed by the Himachal Pradesh
Power Corporation Ltd.:-

1. Shongtong Karchham (402 MW) HEP.
2. Chirgaon Majhgaon (46 MW) HEP.
3. Dhamwari Sunda (70 MW) HEP (subject to the final outcome of the Arbitration)
4. Sainj (100 MW) HEP.
5. Lohri (700 MW) HEP
6. Bharmour (46 MW) HEP
7. Harsar (60 MW) HEP.

Besides above, the Clause xxvii of Chapter -V of Hydro Power
Policy, 2006 provides as under:-

"There are good number of Projects which are yet to be
identified. The HPC/ HPSEB shall identify such Projects. The Government of
Himachal Pradesh reserves the right either to allot these Projects upto 25.00
MW to HPC & HPSEB or offer it to the IPPs and above 25 MW to HPC & IPPs.
However, for Projects upto 25.00 MW, preference shall be given to Sonofide
Himachalis. The developer shall have to prepare PPRs/ DPRs and develop them
as per agreed terms & conditions of Hydro Power Policy."

There are a number of HEPs which have been identified by the
Independent Power Producers, the list of which is enclosed. Besides these, there may
be other HEPs for which identification is to be made.

You are, therefore, requested kindly to take immediate necessary
action in the matter.

TOP PRIORITY please

Attended

Dy. General Manager Principal Secretary
Shongtong Karchham HEP,
Bharmour Reckong Poo,
Distt. Kinnaur (H. P.) 172107

Addl. Superintending Engineer
Investigation Division
Bharmour Reckong Poo,
Distt. Kinnaur (H. P.) 172107

Sr. Manager (R&P)
Shongtong Karchham HEP,
Bharmour Reckong Poo,
Distt. Kinnaur H.P., 172107

No. WLM/NOC
H.P. Forest Department

Dated Sarahan, the

To: - CCF WL (S) Shimla

From: - DCF WL Sarahan

Subject: -

Diversion of 7.3722 ha. of Addl. Forest land in favour of Himachal Pradesh Power Corporation Ltd. for the construction of Shongtong-Karchham HEP 450 MW due to enhancement in the existing capacity of HEP 402 to 450 MW and due to change in the river course during flood within the jurisdiction of Kinnaur Forest Division Distt. Kinnaur, HP.

Memo: -

In this regard, it is submitted that as requested by the user agency vide their letter No. HPPCL/SM (R&R)- SKHEP/Env-VI/2019 dated 26.02.2021 (Copy enclosed as Annexure-I) a joint inspection of the proposed project site within the boundaries of proposed ESZ of Lippa-Asrang WLS & sanctuary area was conducted by the field staff of Sangla WL Range and project representative on 20.05.2021

2. As per the joint inspection report the Co-ordinates of the weir site of the above project & aerial distance with reference to the boundaries of WLS and ESZ of Lippa-Asrang Wildlife Sanctuaries were recorded. The aerial distance shows that the project site falls outside the boundary of the Lippa-Asrang Wildlife Sanctuary and its proposed eco sensitive zone.

S. No.	Particulars	Lat/Long	Aerial Distance (in kms)	Remarks
1	Start of Trench Wear	N=31°02'54" E=078°30'19"	-	-
2	Aerial distance of Trench Wear from Lippa-Asrang WLS.	N=31°40'32.796" E=078°18'4.795"	13.41 Km	Enclosed as Annexure-II
3	Aerial distance of trench wear from proposed ESZ of Lippa-Asrang WLS.	N=31°44'20.237" E=078°17'16.060"	12.98 Km	Enclosed as Annexure-III

3. In addition to above, as per User Agency there is no requirement of animal passage plan for the construction of above mentioned project. as Project components of above mentioned SHEP are very far away from Sanctuary area and proposed ESZ of Lippa Asrang WLS. and as such it will not affect movement of wildlife of the Sanctuary area. Also, construction of the above project will not adversely impact the Wildlife of the Sanctuary area.

This is for favour of information and further necessary action please.

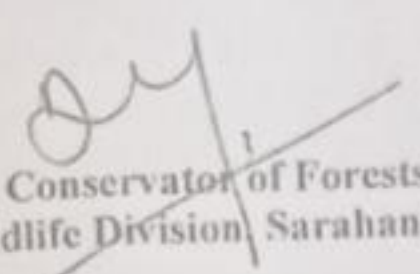
Encl: As above.


Dy. General Manager
Shongtong-Karchham HEP,
HPPCL, Reekong Poo,
Distt. Kinnaur (H. P.) 172107

Dy. Conservator of Forests,
Wildlife Division, Sarahan

Endst. No. WLM/NOC 640 Dated Sarahan, the 28/07/2021

Copy is forwarded to Sr. Manager (R&R), Shongtong Karchham HEP,
HPPCL, Reckong Peo Distt. Kinnaur, H.P. for information please.


Dy. Conservator of Forests,
Wildlife Division, Sarahan.


Dy. General Manager
Shongtong Karchham HEP,
HPPCL, Reckong Peo,
Distt. Kinnaur (H. P.) 172107

CERTIFICATE

It is certified that the land comprising Khasra No. [unclear] where the Shongtong Karchham Hydro Electric Project (1 MW) on Sotang river near Village Powari Tehsil [unclear] District [unclear] to be constructed does not fall within 10 Kms. [unclear] of the [unclear] Chhutkul (W.L.) Sanctuary, as per Preliminary report submitted by the Executive Engineer, Investigation Division, HPSEB, Reckong Poo District, Kinnaur, H.P.

Attended.

Divisional Forest Officer,
Wildlife Division
Varanasi H.P.

2/2/05

Additional Sr. Manager (R&R) near
Investigation Division
Shongtong Karchham HEP,
H.P. [unclear] Reckong Poo,
DIST. KINNAUR (H.P.) 172107

Dy. General Manager
Shongtong Karchham HEP,
H.P. [unclear] Reckong Poo,
Dist. Kinnaur (H. P.) 172107

No.SDK-29(MC)/- 2617
Office of the Sub-Divisional Magistrate
Kalpa at Reckong Peo, Distt. Kinnaur, H.P.

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To

The General Manager,
STKEP, HPPCL Reckong Peo,
District Kinnaur, H.P.

Dated: Peo-172107 the 21st November, 2019.

Sub:

Diversion of 7.3722 Hectare of Addl. Forest Land in favour of HPPCL
for the construction of Shongthong-Karchham HEP 450MW

Sir,

Please refer to your letter No. HPPCL/GM-STKHEP/AFL/2019-5317-
18 dated 19.11.2019 on the subject cited above.

In this context, requisition information as desired by you vide your
letter under reference is as under:-

Sr.No.	Name of village	Village code	Population
1.	Shударang	004201	1789
2.	Tangling	006001	495
3.	Powari	006701	448+222=1165
4.	Barang	005801	1202

Yours faithfully,

Harsh Aravender Singh HPAS
Sub-Divisional Magistrate
Kalpa at Reckong Peo, H.P.

Dy. General Manager
Shongthong-Karchham HEP,
HPPCL, Reckong Peo,
Distt. Kinnaur (H. P.) 172107

Sr. Manager (T & R)
Shongthong-Karchham HEP,
HPPCL, Reckong Peo,
Distt. Kinnaur H.P., 172107

IR-IV-V-24(DRA)/

1057127

Dated:- 06/04/17

Inescapability Certificate

As per report of SDM Kalpa vide letter No. SDK-07-II (OK)/09-396 dated 09.03.2017. Certified that the under mentioned land is inescapable for the purpose of which the land proposed to be acquired by the General Manager, Shongtong-Karchham HEP (450MW), HPPCL, Reckong-Peo. It is further certified that there is no water resources, religious places, public path etc. within the limits of the land proposed to be acquired.

Sr. No	Name of Distt.	Tehsil	Name of Mauja	Khasra No.	Area in Hect.
1.	Kinnaur	Kalpa	Up-Mohal Rang	724/576/2/1, 571/2/1, 561/1, 568, 569	03-50-65
2.	Kinnaur	Kalpa	Up-Mohal Usaring	3/2	0-29-60
3.	Kinnaur	Kalpa	Up-Mohal Tangling	21/1, 2/1, 2/2, 1/1, 838/1, 840/1	04-92-96
4.	Kinnaur	Kalpa	Up-Mohal Powari	854/823/1, 810/2	0-69-96
				Total=	09-43-17

Deputy Commissioner,
Kinnaur District at Reckong-Peo
Reckong-Peo-172107

Dy. General Manager
Shongtong-Karchham HEP,
HPPCL, Reckong-Peo,
Distt. Kinnaur (H.P.) 172107

Sr. Manager (R&R)
Shongtong-Karchham HEP,
HPPCL, Reckong-Peo,
Distt. Kinnaur (H.P.) 172107

Scanned by CamScanner

JOINT INSPECTION & DEMARCATION REPORT

We the undersigned have jointly inspected & Demarcated 7.37.22 hectare of Forest land on dated 22.08.2019 & 23.08.19 falling in Kalpa Range under Kinnaur Forest Division, Reckong Poo Distt. Kinnaur to be diverted as additional land for construction of Shongtong Karchham HEP. Falling in Sub Mohal Rang, Usaring, Tangling & Powadi. The Project required 7.37.22 Hect. of Additional Forest land for Intake tunnel, Diversion Tunnel Outlet, Silt Flushing Tunnel's Outlet, Portal, Dumping, Approach roads to Portal & it's working are in Tehsil Kalpa Distt. Kinnaur (H.P.).

The detail of land is as under:

Sr. No.	Purposed/ Component	Sub-mahal	Khasra No.	Area of Forest Land in (hect.)	Classification of land	Remarks
5.	Dumping area adjacent to the existing Dumping area No. 3 on Right bank of River Sutlu near Shongtong bridge	Rang	561/1	0-21-91	Charagah Drakhtan	Surface activity
5			568	0-84-09	Charagah Drakhtan	
6.			569	0-35-70	Charagah Drakhtan	
		Sub-Total	03 kila	1-44-70		
7.	Dumping Area near Aditi on left bank of Sutlu River	Usaring	3/2	0-29-60	Charagah Drakhtan	Surface activity
		Sub-Total	01 kila	0-29-60		
8	Aditi Portal on left bank of river Sutlu including its working area	Tangling	21/1	0-38-33	Charagah Drakhtan	Surface activity
9	Dumped area on left bank of river Sutlu near Aditi below existing H.P.W.D. road Shongtong to Purnah.	Tangling	2/1	1-10-45	Charagah Drakhtan	Surface activity
10	Dumping Area on left bank of river Sutlu near Aditi below existing H.P.W.D. road Shongtong to Purnah U/S of proposed Aditi Silt Flushing	Tangling	2/2	2-08-19	Charagah Drakhtan	Surface activity
		Tangling	1/3	0-15-73	Charagah Drakhtan	Surface

Dy. General Manager
Shongtong Karchham HEP,
H.P. - Tangling Poo,
Distt. Kinnaur (H. P.) 172107

11	Tunnel's outlet					
12	Portal and approach road	Tongling	838/1	0-35-86	Charagah Drakhtoon	Surface activities
13	Portal & its working area	Tongling	840/1	0-34-36	Charagah Drakhtoon	
		Sub-Total	06 kila	04-92-96		
14	Intake tunnels & Diversion Tunnel outlet & its working areas in between existing HPPWD road and vertical cliff.	Powari	854/823/1	0-58-36	Charagah Drakhtoon	Surface activities
15	Approach road to R&M site of Powari on left bank of river Sutlej	Powari	810/2	0-13-60	Charagah Drakhtoon	Surface activity
		Sub-Total	02 kila	0-69-96		
		G-Total	14 Kila	07-37-22		

Joint inspection & Demarcation team has examined all the alternatives with a view to avoid/minimize the use of forest land, we have come to the conclusion that the above mentioned land is the minimum requirement of the proposed project and is inescapable.

Range Forest Officer
Range Forest Officer
Kinnaur Range
Distt. Kinnaur (HP)

Tehsildar Kinnaur
Distt. Kinnaur (H. P.)

Junior Officer (R&R)
STKHEP, HPPCL
Reckong Peo, Kinnaur

Mining Officer
Kinnaur at Reckong Peo
Distt. Kinnaur (HP)

Divisional Forest Officer,
Kinnaur, at Reckong Peo
Distt. Kinnaur (HP)

Sub Divisional Magistrate,
Kinnaur at Reckong Peo
Reckong Peo, Kinnaur

Dy. Manager (E&R)
STKHEP, HPPCL
R/ Peo Kinnaur

Dy. General Manager
Shimla-Karchham HEP,
HPPCL, Reckong Peo,
Distt. Kinnaur (H. P.) 172107

Dy. General Manager
Kinnaur HEP,
HPPCL, Reckong Peo,
Distt. Kinnaur (H. P.) 172107

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भारत सरकार
केन्द्रीय विद्युत प्राधिकार
सचिव का कार्यालय
सर्वोच्च न्यायालय भवन
नया दिल्ली-110006



प्राधिकार संख्या: 100/2006

No. 2/HPP/2006/CEA/07-PAC/5066-93

Dated 14th August 2006

OFFICE MEMORANDUM

Subject: Shongtong Karcham Hydro Electric Project (x150-450 MW) in Himachal Pradesh by M/s. Himachal Pradesh Power Corporation Limited (HPPCL) at an estimated cost of Rs. 2807.83 Crores including IDC of Rs. 465.74 Crores at July, 2011 Price Level - Issue of Concurrence

M/s. Kinner Kashish Power Corporation Limited (KKPCL) had submitted Detailed Project Report (DPR) of the generation scheme of Shongtong Karcham Hydro Electric Project (402 MW) in Himachal Pradesh vide letter dated 27.10.2007. Meanwhile M/s. Himachal Pradesh Power Corporation Limited (HPPCL) also submitted Detailed Project Report (DPR) of the generation scheme of Shongtong Karcham Hydro Electric Project (402 MW) vide their letter No. HPPCL/DC/SHONGTONG-KARCHAM/DPR/02-156, dated 30.10.2007. Subsequently DPR submitted by M/s. KKPCL was withdrawn vide their letter dated 02.11.2007. The presentation of the scheme was made by M/s. HPPCL on 27.11.2007 to appraisal groups of CEA, CWC & GSI. The DPR was returned on 18.12.2007 due to inadequate geological explorations, updation of hydrology, confirmation of levels of upstream & downstream projects from State Govt., updation of cost estimates etc.

M/s. HPPCL again submitted revised DPR of Shongtong Karcham HEP (450 MW) vide their letter No. HPPCL/CP/Shongtong Karcham/ Vol VI/2010-16375 dated 9.11.2010. The DPR was returned on 31.3.2011 due to non submission of reply to comments of CEA, CWC & GSI regarding resolution of various issues of Project. However, M/s. HPPCL was advised to interact with CEA, CWC & GSI on various key issues and get them resolved. DPR of Shongtong Karcham HEP was taken under examination in November 2011, after resolution of most of the outstanding issues of CEA, CWC and GSI.

The proposal for establishment of Shongtong Karcham Hydro Electric Project (450-450 MW) in Kinnaur District of the State of Himachal Pradesh proposed by M/s. HPPCL was considered in the 313th Meeting of CEA held on 27.4.2012 based on the Agenda note circulated vide CEA letter No. V/106/313th/2006-PAC/2376-2403, dated 26.4.2012 and in Authority meeting held on 13.7.2012 at Sewa Bhawan, R.R. Puram, New Delhi-110006. M/s. HPPCL submitted the updated DPR after incorporating the suggestions/modifications indicated by CEA, CWC & GSI during the entire process and changes in project features and project cost as approved in the Authority meeting held on 13.7.2012.

2. In exercise of the powers vested with the Authority under Section 8 of the Electricity Act, 2003, the Central Electricity Authority accords Concurrence to the aforesaid scheme at an estimated

Dy. General Manager
Shongtong Karcham HEP,
HPPCL, Himachal Pco.,
Ludhiana-141 001 P.H. Dept.

cost of Rs. 2807.83 Crores including IDC of Rs. 465.74 Crores at July, 2011 Price Level with the following stipulations:-

(i) the cost of the scheme shall not exceed the above cost except on account of:-

- (a) Change in rates of Indian taxes and duties and additional taxes and duties levied, if any, subsequent to issue of this O.M.
- (b) Change in Indian Law resulting in change in cost.
- (c) Variation in actual interest rate.

(ii) Interest During Construction (IDC) shall be as per actuals but not exceeding the amount as indicated at *Annex-I* except for variation in actual interest rate(s) and the pro-rata variation in land cost, as stated in clause 2 (i) (a) & (b) of this O.M.

3. The abstract of Project Cost approved by C.A., is furnished at *Annex-I, IA and IB*. The summary of tentative Financial Package, as submitted by M/s. HPPCL and considered by C.A., and the salient features of the scheme are given in *Annex- II & III* respectively.

4. This Concurrence is subject to fulfilment of the following conditions:-

i) The following conditions/circumstances shall not be a re-opener of the Project Cost Concurrence:-

- (a) Non-acquisition of land
- (b) Non-finalisation of power purchase agreement.

ii) M/s HPPCL shall incorporate the suggestions/ observations of Central Water Commission (CWC) (*Annex - IV*) on Hydrology, Hydel Civil Design, BCD, Foundation Engineering & Seismic Design, Inter-State aspects and Central Soil & Material Research Station (CSMRS) etc. during the detailed design stage.

iii) M/s HPPCL shall collect site specific short interval rainfall-runoff data for the project catchment for at least 4-5 flood events for the development of catchment response function and review the design flood at the construction stage.

iv) Suggestions of GSI (as given at *Annex - I & IA*) and furnished as comments from time to time shall be followed. Cost for changes required subsequent to investigations shall be absorbed by the company. Report on additional investigations completed shall be submitted by M/s HPPCL.

v) Site specific seismic studies for design earthquake parameters shall be got approved from the National Committee on Seismic Design Parameters (NCSDP).

vi) Govt. of HP have confirmed FRL and FWT of Shonglong Karcham HEP as 19.0 m and 18.10 m respectively vide letter No. HP/DOE/CE (Energy)/HPPCL/Misc/2010/5904-07 dated 19.05.2011. As such responsibility of correctness of levels of Shonglong Karcham HEP lies with the Govt. of HP and M/s HPPCL.

vii) M/s HPPCL shall carry out Physical Numerical Model Studies during detailed design stage as agreed by them.

viii) M/s HPPCL shall carry out Petrographic examination of coarse and fine aggregate samples for all potential quarries for knowing the presence of reactive materials and all other tests suggested by CSMRS at pre-construction stage.

Dy. Genl. Manager
Shonglong Karcham HEP,
HPPCL, Raskong Pao,
Dist. Kinnaur (H. P.) 172107

- ix) As per decision taken in Authority Meeting No. 25/2002, dated 29.02.2002, M/s HPPCL being a State Public Sector Organization, quantities involved in Civil and Engineering structures have not been examined in CEA/CWC. A certificate in regard of correctness of quantities of civil works has been furnished by M/s HPPCL vide letters dated 17.07.2011 (*Annex-IV*) & dated 29.6.2012 (*Annex-III*). Hence, the correctness of quantities of civil works shall be the responsibility of M/s HPPCL.
- x) Under the cost of civil works, total provision under the head "B-1 and" has been made as Rs 67.38 crores at July, 2011 P.F.
- xi) Environmental clearance (for 450 MW) and Forest clearance (for 402 MW) have been accorded by Ministry of Environment & Forest (MOEF). A provision of Rs 402.78 crores has been kept in cost estimates of civil works under the sub-head 'Environment and Ecology'. Forest clearance for 450 MW shall be obtained by M/s HPPCL.
- xii) Suitable rehabilitation and re-settlement plan shall be prepared by HPPCL and submitted to MOEF for obtaining their clearance. A provision of Rs 3.93 Crores in cost estimates of Civil works has been made for R&R Plan at July, 2011 P.F.
- xiii) If any impact on wild life is observed, M/s HPPCL would obtain clearance from National Board of Wild Life.
- xiv) As the Scheduled Tribe population is getting affected, clearance under Forest Rights Act from Ministry of Social Justice & Empowerment / Tribal Affairs shall be obtained by M/s HPPCL.
- xv) M/s HPPCL shall comply with the guidelines for participation of foreign Companies in tender work packages of Hydro electric Projects in sensitive areas, issued by Ministry of Power vide No. 7/1/2002 DO(NHPC) (Vol. II), dated 03.09.09 appended at *Annex-III*.
- xvi) M/s HPPCL shall take appropriate precautions to avert flooding of power house by adopting measures listed at *Annex-III*.
- xvii) Fly ash and fly ash based products shall be used in the construction of various works, infrastructure facilities etc to the extent possible in accordance with MOEF notification dated 14.09.1999 and its amendment dated 27.08.2003 and 03.11.2009 and further revision/amendment, if any. The construction material surveys shall include the required investigations for use of Fly Ash and Fly Ash based products in various works, infrastructure facilities etc, and their feasibility shall be ascertained by M/s HPPCL. In case, fly ash proposed to be used is based on imported coal, the fly ash shall be tested for radio activity before incorporating in the project.
- xviii) M/s HPPCL shall deploy modern tools/ software for construction monitoring of the project by establishing IT based monitoring systems and linking the same to CEA network.
- xix) M/s. HPPCL shall identify additional quarry sites for meeting the shortfall of construction material before taking up the construction of the project. The suitability of the material of new quarry sites shall also be established.
- xx) M/s. HPPCL shall submit the updated Final DPR to the State Govt. Appropriate Electricity Regulatory Commission and Central Transmission Utility Board submitted to CEA.
- xxi) Information in respect of tying up of essential inputs/statutory clearances, results of investigations/ studies shall be submitted to CEA/CWC/CST on receipt of same from time to time.

Dy. General Manager
Shri Ram Natchham HEP,
Bhadrachalam, Nellore Dist.,
Andhra Pradesh (H. P.) 172107

- xxii) Concurrence is subject to compliance by M/s HPPCL of various policies/guidelines issued by Govt. of India from time to time.
- xxiii) Broad technical aspects of the project proposal in the project report have been submitted in CEA in consultation with CWC, GSI and other concerned agencies. The scrutiny is based on the data, assessment and certificates presented in the report and information/clarifications received as compliances to the observations on the assumption that the data and information furnished are accurate and have been collected reliably by the project authorities from dependable sources and/or after carrying out detailed surveys and investigations as presented in the report.
- xxiv) M/s HPPCL shall obtain clearance on International aspect from Ministry of Water Resources / CWC.
- xxv) M/s HPPCL shall obtain the clearance from Ministry of Defence for the project.
- xxvi) Any modification, necessitated to be carried out by M/s HPPCL in project design parameters being presently concurred by CEA, shall be got approved by CEA in advance with full justification before implementation at project site.
- xxvii) The hydro machine shall be capable to run on synchronous condenser mode.
- xxviii) The current rating of 400 kV switchyard and XI PE cable shall be adequate for handling 3000 MW power at 400 kV.
- xxix) The rated short circuit current capacity for switchyard at 400 kV bus shall be 50 kA for one second.

5. The cost of the project cleared by the Authority is indicative. The tariff of the project shall be regulated by the appropriate Electricity Regulatory Commission.

6. Commissioning schedule of the generating units from zero date i.e. 1st June, 2017 shall be as follows:

Unit - 1	: 56 th Month
Unit - 2	: 57 th Month
Unit - 3	: 58 th Month

7. Monthly Status Report of compliance of the conditions stipulated under para 4 of this Concurrence letter shall be submitted to Secretary, CEA.

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

9. Monthly status of the project from the date of Concurrence to Financial closure shall be furnished to Secretary, CEA as per the proforma enclosed at Annex-IX.

10. In case the time gap between the Concurrence of the scheme by CEA and the actual start of main works by M/s HPPCL is three years or more, a fresh Concurrence of CEA is required to be obtained by M/s HPPCL before the start of actual work.

Dr. Gopal K. Manager
 Deputy Engineer (H.P.)
 Dept. Kinnaur (H.P.)

Revalidation of concurrence can also be considered, in case the reason for not starting the work is beyond the control of developer. However, proposal of revalidation shall be submitted three months before the expiry of validity of concurrence which is 3 years from the date of issue of the O.M.

11. The Authority reserves the right to revoke this concurrence, if the conditions stipulated in this Office Memorandum are not complied with to the satisfaction of the Authority.

Encls: Annexes I, IA, IB, II, III, IV, V, VI, VII, VIII & IX.

17/11/2021
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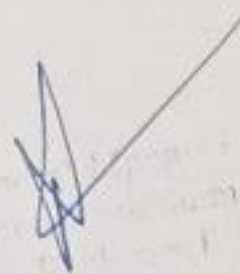
1. Managing Director, Himachal Pradesh Power Corporation Limited, United Bhawan, Panna (Below Old MLA Quarters), Shimla, Himachal Pradesh - 171 005.
2. Secretary, Ministry of Power, Govt. of India, Shram Shakti Bhawan, Rafi Marg, New Delhi - 110119.
3. Secretary, Ministry of Environment & Forests, Government of India, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi - 110003.
4. Chairman, Central Electricity Regulatory Commission, 3rd & 4th Floor, Chanderlok Building, 36, Janpath, New Delhi - 110001.
5. Chairman, Central Water Commission, Sewa Bhawan, R.K. Puram, New Delhi - 110006.
6. Chairperson, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi.
7. Chairman, HP Electricity Regulatory Commission, Keonthal Commercial Complex, KHALINI, Shimla - 171 002.
8. Chairman-cum-Managing Director, Power Grid Corporation of India Limited, Sakdanth, Plot No.2, Sector 29, Gurgaon - 122001 (Haryana).
9. Chairperson HP Power Transmission Corpn. Ltd. Barowalia House, Khatim, Shimla - 171002.
10. Secretary (Department of Power), Government of Himachal Pradesh, Secretariat, Shimla, Himachal Pradesh - 171 002.
11. Adviser (Energy), Planning Commission, Vojana Bhawan, New Delhi - 110001.
12. Member (D&R), Central Water Commission, Sewa Bhawan, R. K. Puram, New Delhi - 110606.


Dy. General Manager
Shongton, Karchham I.T.P.,
HPCL, Reckong Por,
Dist. Kinnaur (H. P.) 172107

**Shongtong Karcham Hydro Electric Project (3x150-450 MW) - Himachal Pradesh by
M/s Himachal Pradesh Power Corporation Limited (HPPCL)**

Estimated Cost at July, 2011 Price Level

S.No.	Description	Total (Rs. Cro.)
1	Civil works	1720.16
2	Electro-Mechanical Works	621.95
3	Total Hard Cost	2342.09
4	IDC	465.74
	Total Cost	2807.83


 Dy. General Manager
 Shongtong-Karcham HEP,
 HPPCL, Reckong Poo,
 Distt. Kinnaur (H. P.) 172107


 Dy. General Manager
 Shongtong-Karcham HEP,
 HPPCL, Reckong Poo,
 Distt. Kinnaur (H. P.) 172107

OFFICE ORDER

144

HPSEB is pleased to accord Techno Economic Clearance (TEC) to SHONGTONG KARCHAM HEP (402 MW) in Satluj basin in Distt Kinnaur of Himachal Pradesh at an estimated cost (at bus bar) of Rs.2415.53 crore (Rupees Two thousand four hundred fifteen crore & fifty three lac only at December, 2005 price level including Escalation, IDC and LADA charges @ 1.5 % with the stipulation that

- 1) The complete cost of the scheme shall not exceed the above cost except on account of the following
 - a) Interest During Construction (IDC) shall be as per actuals not exceeding the amount as indicated at Annex-I unless revised by HPSEB while according concurrence under section 31 of Electricity (supply) Act, 1948 repealed by Electricity Act, 2003 after review of financial package
 - b) Change in rates of Indian taxes/ duties such as excise duty, sales tax/ VAT, custom duty and levy of any other taxes/duties subsequent to issue of Techno-Economic Clearance (TEC).
 - c) Change in Indian law resulting in change in cost.
 - d) The abstract of the estimated cost approved by HPSEB is furnished at Annex-I, Summary of Financial package as considered by HPSEB is at Annex-II and the Salient Features of Scheme are at Annex-III.
- 2) The Techno Economic Clearance (TEC) is subject to the fulfillment of the following conditions:
 - a) Completed cost/techno economic clearance shall not be re-opened due to the following
 - a) Non-acquisition of land
 - b) Non-finalisation of Power Purchase Agreement (PPA)
 - c) Delay in financial closure
 - b) The final financial arrangement shall not be inferior to the financing arrangement projected in the Detailed Project Report (DPR) for TEC
 - c) Tariff shall be decided by the Central/State Electricity Regulatory Commission
 - d) The public issue expenses, if any, shall be reconsidered at the time of approval of completion cost based on documentary proof and in accordance with Security Exchange Board of India (SEBI) guidelines regarding regulation of public issue expenses

Dy. General Manager
Shongtong-Karcham HEP,
H.P., Reckong Poo,
Distt. Kinnaur (H. P.) 172107

Sr. Manager (R&T)
Shongtong-Karcham HEP,
H.P., Reckong Poo,
Distt. Kinnaur H.P., 172107

vi) fulfillment of conditions stipulated in Central Electricity Authority (CEA) and Central Water Commission (CWC) guidelines in respect of civil work at the stage of detailed design/execution.

vii) The Technical Feasibility Clearance (TFC) is subject to clearances of project by MOF & L from environmental and forest angle. The statutory clearances as per Annexure IV shall be obtained before execution/implementation of the project.

viii) Implementing agency/ Project Authority shall enter into an agreement with beneficiary states for absorbing power generated from the project.

ix) Implementing Agency/Project authority shall obtain the forest clearance for the Power evacuation line before commencement of the construction work.

x) Implementing Agency/Project authority shall construct the Power evacuation line matching with the commissioning of the generation units.

xi) No additional cost shall be allowed due to Resettlement & Rehabilitation (R&R) Plan.

xii) Normal operation life of the hydro power plant shall be as provisions of the sixth schedule of the Electricity (Supply) Act, 1948 repealed by Electricity Act 2003.

xiii) The TFC is based on the reports and data furnished in the DPR and it is presumed that information furnished is accurate. The scrutiny does not cover the examination of the detailed design and working drawings of work components in regard to the structural, hydraulic and mechanical performance and safety which shall be ensured by the implementing Agency/Project Authority.

xiv) Final Financial package shall be approved by the HPSEB.


3) The Project shall be completed within 72 (seventy two) months from the date of start of the Project.

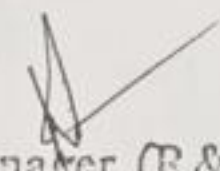
4.4) Monthly Progress Report of the Project shall be submitted to Monitoring Cell of HPSEB. Three (3) copies of the semi-annual physical progress report of the scheme and expenditure actually incurred, duly certified by statutory auditors shall be submitted to the HPSEB till the Commercial Operation of the plant.

4.5) Final financial package and interest related to that shall be submitted to HPSEB.

4.6) Start-up dates of the Project from the period of TFC to financial closure investment decision shall be furnished to HPSEB.

4.7) The completion cost of the scheme shall be submitted to HPSEB for approval as soon as possible after the commercial operation date (COD) of the plant, but not later than three (3) months from the COD of the plant.


Dy. General Manager
Shongtong-Karchham HEP,
H. P. C. Reckong Peo,
Dist. Khamti (H. P.) 72107.


Sr. Manager (R&R)
Shongtong-Karchham H. P.
H. P. C. Reckong-Peo
Dist. Khamti H.P., 72107

The submission of the IPSEP to the scheme under Section 31 of the Electricity (Supply) Act, 1948 repealed by Electricity Act, 2003, shall be considered by the Board - on submission of the Technical Package and the up of balance inputs/clarances by the implementing Agency/Project Authority within a period of six months from the date of issue of TEC.

8. In case the time gap between the issue of TEC and actual start of work on the Project is three years or more, a fresh Techno-Economic Clearance shall be obtained from HPSEB before start of actual work.
9. The HPSEB reserves the right to revoke the Techno-Economic Clearance if the conditions stipulated in the TEC are not complied with to the satisfaction of the HPSEB.
10. The implementing Agency/Project Authority shall have to obtain clearance from CERC/HPERC as per provision in the Electricity Act, 2003.

Chief Engineer (P&T)
HPSEB Shimla-4

HPSEB (Recd) 401-Shongtong Marchham TEC-06-31853-74 Dated: 25/06/06

Copy of above is forwarded to the following for information, please:

1. The Additional Secretary (Power) to the Govt. of HP, Shimla-2
2. The Secretary, HPSEB, Shimla-4 alongwith copy of TEC as per recommendation by the WTMs of the Board by circulation.
3. The Addl Secretary cum P & T, Sr. PS/Sr. PS to the Chairman and Members of HPSEB for kind information of the Worthy Chairman/Members of the Board.
4. The CAO, HPSEB, Vidyut Bhawan, Shimla-4
5. The Chief Engineer (P&T), HPSEB, Shimla-4
6. The Chief Engineer (SI), HPSEB, Shimla-4.
7. The Chief Engineer (Projects), HPSEB, Shimla-2 for to be placed on file.
8. HPSEB CE (P&T) - Shongtong-Marchham/06-514-31853-74
9. The Deputy Chief Engineer (Contract) HPSEB, Vidyut Bhawan, Shimla-4
10. The A.O. (CFC) E&A Wing, HPSEB for to his DO no. HPSEB/E&A/06-110/06-0 dated 25/06.

Attested

Chief Engineer (E&A)
HPSEB Shimla-4

Addl. Superintending Engineer
Investigation Division,
HPCL, Reckong-Peo,
DIST. KINNAUR (H.P.)

My doc. TEC change - E&A Wing

Dy. General Manager
Shongtong-Marchham HEP,
HPPCL, Reckong-Peo,
Distt. Kinnaur (H.P.) 172107

Sr. Manager (T & R)
Shongtong-Marchham HEP,
HPPCL, Reckong-Peo,
Distt. Kinnaur H.P., 172107

Annexure-I

HIMACHAL PRADESH STATE ELECTRICITY BOARD

SHONGTONG-KARCHAM HEP(420MW)

ABSTRACT OF COST ESTIMATE

a) (Rs.Crore)

1. Civil Works	1165.00	Price level year Dec., 2005
2. Electro-mechanical works	504.20	
Sub Total (a)	1669.20 crore	
b) Escalation	130.74	
IOC	129.89	
Sub Total (b)	710.63	
Total (a+b)	2379.83	
c) LADA @ 1.5%	35.70	
TOTAL (a+b+c)	2415.53	

(Rupees two thousand four hundred fifteen crore and fifty three lakhs)

Dy. General Manager
Shongtong-Karcham HEP,
HPPCL, Shongtong Poo,
Distt. Kinnaur (H.P.) 172107

Sr. Manager (E&R)
Shongtong-Karcham HEP,
HPPCL, Shongtong Poo,
Distt. Kinnaur H.P., 172107

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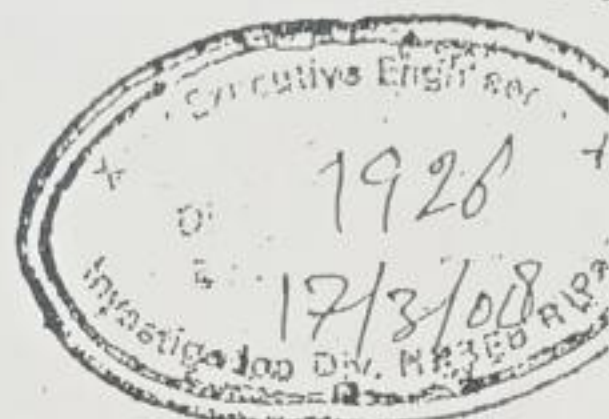
No. KNR-IPHD-PEO-WA-NOC/07
To

HIMACHAL PRADESH
I&PH DEPARTMENT.

14331-34

Dated: 17/3/08

The Superintending Engineer,
I&PH Circle R/Peo,
Distt. Kinnaur H.P.



Subject:

Forest Clearance of Shongthong Karcham (402 MW).

Enclosed kindly find herewith a copy of letter No. HPSEB/ISD/II/G-I/2006-57-58 Dated: 26-5-2006 along with site map of above proposed HEP as received from the Assistant Engineer, Investigation Sub-Division No. II HPSEB R/Peo for issuance of necessary NOC for above proposed project. In this regard it is submitted that the subject cited project is proposed to be constructed on the Bank of Satluj River and there is no WSS and FIS of this Department falling along the alignment of said project. But the NOC to the concerned Department can only be issued subject to the condition that any loss/ damage to the Departmental schemes in the vicinity of this area such as drying of source and damage due to blasting work during execution of tunnel, then the project construction company will be responsible for repair of such damages at their own cost. In view of the above facts the conditional NOC to the concerned company can be given subject to the fulfillment of above conditions by the company/ Department.

This is for favour of kind information and necessary action please.

DA: As Above.

Executive Engineer,
I&PH Division R/Peo,
Distt. Kinnaur H.P.

Copy to the Assistant Engineer, I&PH Sub-Division R/Peo w.r.t. his office letter NO. ISD-Peo-General/07-1049 Dated: 15-11-2007.

Copy to the Assistant Engineer, Investigation Sub-Division No. II HPSEB R/Peo w.r.t. his office letter No. referred to above for information.

Copy to Addl. SE - Investigation

Div. No. HPSEB R/Peo w.r.t. his office letter No. ISD-Peo-General/07-1049 for information.

Executive Engineer,
I&PH Division R/Peo,

Addl. Superintending Engineer
Investigation Division,
HPSEB Reckong Peo,
DISTT. KINNAUR (H. P.)

Sr. Member (R&R)
Shongthong-Karcham HEP,
HPPCL, Reckong-Peo,
Distt. Kinnaur H.P., 172107

S. Ken
Suptd-II
Suptd D/A
Steno
E. I, II
G. A.

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Himachal Pradesh
Public works Department

No.BHNR-B&R-WA-NOC/2007-08- 11699-701

Dated:- 28.1.08

To

The Superintending Engineer,
11th Circle, HP.PWD.,
HP.PWD.,Rampur.

1766
5/2/08

Subject:-

NOC/ Forest clearance of Shongthong Karchham Hydro
Electric Project (402 MW)

Sir,

In this connection it is intimated that the Add.
Superintending Engineer, Investigation Division HP.SEB. Reckong Peo applied for NOC
by this Department. The NOC is hereby recommended subject to the following
conditions:-

1. There exists the PWD road namely Shongthong Purbni road as marked in the index plan from Km. 0/0 to 3/120. The appropriate area which will be disturbed in the road comes to 21840 Sqm. The undertaking regarding any damages to this effect may be given by the HP Power Corporation.
2. There exists 9 Nos Neoza trees in the alignment of road which are in the papers of Public Works Department while conducting the joint inspection with the forest department the Public works department may also be intimated, the compensation of these trees if required shall be born by the HP Power Corporation.
3. Any Structure/ Component of road as mentioned above is damaged, the same shall be repaired by the HP Power Corporation.

This is for your kind information and necessary action.

DA:- Index plan.

Executive Engineer,
Karchham Division
HP.PWD Bhabanagar.

✓ Copy to the Add. Superintending Engineer, Investigation
Division HP.SEB. Reckong Peo for information and necessary action please.
Copy to the Assistant Engineer, Karchham Sub-Division
HP.PWD Tapri for information.

Sr. Men
Subd-1

Attended.

Sr. Manager (R & R)
Shongthong Karchham HEP,
HP.PWD, Reckong Peo,
Distt. Kinnault H.P. 172107

Executive Engineer,
Karchham Division
HP.PWD Bhabanagar

180
180

HIMACHAL PRADESH
PUBLIC WORKS DEPARTMENT
OFFICE ORDER

The Superintending Engineer Investigation Division HPSEB- Reekong Peo Distt. Kinnaur has applied for "No Objection Certificate" for construction of Shongthong-Karchham Hydro Electric Project (402 MW) being executed through Himachal Pradesh Power Corporation Limited which is a joint Venture of Govt. of Himachal Pradesh & HPSEB.

The "No Objection Certificate" is therefore issued in favour of above Corporation subject to fulfillment of following conditions:-

1. The corporation will not harm public property belonging to the state.
2. Traffic shall not be interrupted during the construction.
3. During construction any damages to the existing road/building or any other infrastructure will be born by the corporation at their own cost.
4. The safe guards for proper maintenance of road infrastructure in the jurisdiction of project area will be observed by the corporation and the corporation shall compensate the loss caused to Govt. property (Road building and Bridges) if any in full.
5. There exist 9 Nos Neoza trees in the alignment of road which are in the papers of Public Works Department while conducting the joint inspection with the forest department the PWD may also be intimated, the compensation of these trees if required shall be born by the HP. Power Corporation.

Executive Engineer,
Karchham Division.
HP.PWD Bhabanagar

Dated 13-5-08

NO.PW-BHNR-B&R-WA-NOC/2008-09 9/6-19
Copy to following for information and necessary action:-

1. The General Manager, Industrial Department Distt. Kinnaur at Reekong Peo w.r.t. a copy of DO No. Ind-A(F)10-9/2007 dated 12-3-2008 (Attached)
2. The Superintending Engineer, 11th Circle HP.PWD Rampur Bsr.
3. The Superintending Engineer, Investigation Division HPSEB- Reekong Peo w.r.t. his office letter No HPSEB/IDRP/DB-26/2007-1521-23 dated 5-11-2007.
4. The Assistant Engineer, Karchham Sub-Division HP.PWD Tapri for information and necessary action w.r.t. his office letter No. 1462 dated 4-1-2008

180/180
29/5/08
(A.E.)

Attached.

Sr. Manager (B&R)
Shongthong-Karchham HEP,
HP P. o. Reekong-Peo,
Distt. Kinnaur H.P.; 172107

Executive Engineer,
Karchham Division.
HP.PWD Bhabanagar

By General Manager
Shongthong-Karchham HEP,
HP P. o. Reekong-Peo,
Distt. Kinnaur H.P.; 172107

No.FSH-F (2)39/2006-ARC-A- 604
Directorate of Fisheries,
Himachal Pradesh.

From

The Director-cum-Warden of Fisheries,
Himachal Pradesh.

To



The Managing Director,
Himachal Pradesh Power Corporation Limited,
Chakkar, Shimla-4

Dated Bilaspur-174001 the. 15 JAN 2008

Subject: - No objection Certificate for Shongtong-Karchham, Hydro-
electric Project (402 MW).

Sir,

I invite a reference of your letter No. MD-HPPCL-Env./2008-2 dated 07.01.2008 regarding subject cited supra and to inform you that a conditional NOC to implement the captioned project is being issued on the following terms & conditions:-

- The Project proponent shall arrange joint field survey of the project site & allied riverine portions where project components are required to be installed in order to assess the estimated losses to aquatic bio-diversity.
- The project proponent shall make provisions at the weir/dam for the release of water downstream as per directions of State Govt. in order to maintain environmental flow of water.
- The project proponent shall make provisions of fish ladder in the proposed project to facilitate free passage of fish up stream and downstream as well.
- The project proponent shall pay for the losses to fish & fisheries of the concerned rivers/rivulets, estimated by the department of Fisheries and also fund the fishery development plan proposed by the department of Fisheries, H.P. before the initiation of construction activities.

By: General Manager
Shongtong-Karchham HEP,
H.P. Power Corp.,
Bilaspur (H.P.) 174001

This may be treated as Conditional No Objection Certificate.

In case of the violation or non adherence to any of the above terms, & conditions, this conditional NOC issued in the favour of captioned project shall be withdrawn without any further notice.

Yours faithfully,

Sr. Manager (R&R)
Shongtong-Karchham HEP
H.P. Power Corp.,
Bilaspur (H.P.) 174001

Endst No. As above-
Copy Forwarded to:-

Dated:-

1. The Secretary (Fisheries) to the Govt. of H.P., Shimla-2 for favour of information in compliance to the telephonic instructions dated 10.01.2008 regarding issuance of a conditional NOC to the above cited power project. It is, therefore, requested that the above named hydro power project may also be included for discussions in the New Agenda Items of the forthcoming meeting of the NOC committee for fisheries.
2. The Assistant Director of Fisheries, Shimla (H.P.) for information and necessary action. He is directed to prepare & submit the field survey report and a fisheries development plan to be funded by the above stated hydel project to this office for taking further action in the matter.

Attested.

Director-cum-Warden of Fisheries,
Himachal Pradesh

Addl. Superintending Engineer
Investigation Division,
H.P. & Reckong Peo,
DISTT. KINNAUR (H.P.)

Sr. Manager (R&R)
Shri. P. K. Archham HEP,
HP & Reckong-Peo,
Distt. Kinnaur H.P., 172107

Dy. General Manager
Shri. P. K. Archham HEP,
HP & Reckong-Peo,
Distt. Kinnaur (H.P.) 172107



HIMACHAL PRADESH POWER CORPORATION LTD.

(A State Government Undertaking)

New HIMFED Bhawan, Panjri, Below Old MLA Quarters,
Tulikandi, Shimla-171005 HP India

Phone 0177-3206511

Fax 0177-2633813

AUTHORIZATION

Himachal Pradesh Power Corporation Ltd (HPPCL), hereby authorizes following officers of the concerned project to sign and file applications seeking various clearances including clearance under Forest Conservation Act, 1980, Environment Protection Act, 1986, Air (Pollution & Control of Pollution) Act 1981, Water (Pollution & Control of Pollution) Act 1974, Mining Licensee, Explosive License etc.

I) Integrated Kashang (243 MW) HEP:

- i. Deputy General Manager, Integrated Kashang HEP, HPPCL, Reckong Peo.
- ii. Senior Manager, Kashang Construction Division No. I, HPPCL, Reckong Peo.

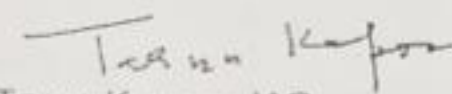
II) Shongtong - Karcham (402 MW) HEP

- i. Senior Manager, Division HPPCL, Reckong Peo.

III) Renuka Dam Project (40 MW):

- i. Deputy General Manager, Renuka Dam Project, HPPCL, Dadahu
- ii. Sr. Manager, Renuka Construction Division No. II, HPPCL, Dadahu

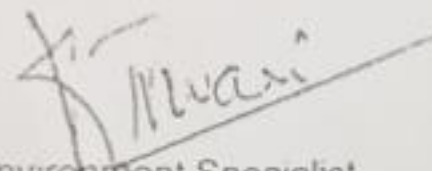
HPPCL further authorizes the above officers to sign and file various forms, reply to observations, file declarations, give undertakings and all other correspondence relating to clearances. In addition to above, Chief Environment Specialist and Chief Social, Rehabilitation & Resettlement Specialist HPPCL is also authorized in this behalf for all the above mentioned activities.

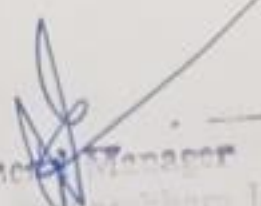

Tarun Kapoor, IAS,
Managing Director

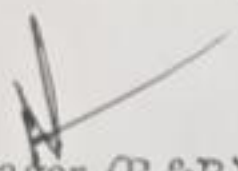
Endst. No. HPPCL/ESMU-Circulars/Vol I/08 - 56 dt 2.6.

Dated 17/7/08

Copy forwarded to the above mentioned Head of Projects and Chief Environment Specialist/Chief Social, Rehabilitation & Resettlement Specialist HPPCL for information and record.


Chief Environment Specialist


Dy. General Manager
Shongtong-Karcham HEP,
HPPCL, Reckong-Peo,
Distt. Kinnaur H.P., 172107


Sr. Manager (R&R)
Shongtong-Karcham HEP,
HPPCL, Reckong-Peo,
Distt. Kinnaur H.P., 172107

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No. Udyog-Bhu (Regd.) Patel St. Cr.-
Government of Himachal Pradesh
Department of Industries
Geological Wing
Dated, Shimla-171000

— 6641

5-11-2019

To

✓
The General Manager (HOP)
Shontong-Karcham H E Project,
Himachal Pradesh Power Corporation Ltd.
KC Complex, Reckong Poo,
Disstt. Kinnaur (H.P.)

Subject:

Shontong Karcham HEP-Lifting of RBM for de-silting of reservoir area
at Powari, Distt. Kinnaur.

Sir,

This is with reference to your office letter No. HPPCL/GM-STKHEP/mining/2019-4704-06 dated 19.10.2019, vide which you have requested to allow the Project Proponent to lift and stack RBM that will be generated during the course of de-silting of reservoir area of Project.

In this connection it is to inform that the de-silting of reservoir is a non mining activity and does not fall under the perview of this department. Moreover, if the said activity is a part of your Project Component for which all statutory permissions have been obtained, then this department has no objection unless the involvement of mining activity. However, it shall be ensured that except de-silting no mining activities of any kind takes place for which principal employees shall be responsible. Further, the material generated during such activity can be utilized for bonafide purpose with prior permission of this department as per provisions contained under Rule 33 of H.P. Minor Mineral Rule -2015. In such cases, on the written request of applicant for the utilization of material generated due to non-mining activities, the proposal shall be forwarded to the Committee constituted for this purpose and permission shall be accorded by this office as per the recommendation of the committee, on the payment of advance royalty.



Yours faithfully,

State Geologist
Himachal Pradesh
Dated: 2019

Endst no As above:-
Copy to:

1. The Deputy Commissioner of Kinnaur, Distt. Kinnaur, Himachal Pradesh for information please.
2. The Mining Officer Kinnaur for information & necessary action please.

Divisional Forest Officer
Kinnaur Forest Division
R/Poo

Sr. Manager (R&P)
Shontong-Karcham HEP,
H.P. Reckong Poo,
Distt. Kinnaur H.P., 172107

State Geologist
Himachal Pradesh

F. No. 8-78/2010-FC
Government of India
Ministry of Environment & Forests
(FC Division)

Paryavaran Bhawan,
C.G.O Complex, Lodhi Road,
New Delhi - 110510.
Dated: 14th November, 2012.

To

The Principal Secretary (Forests),
Government of Himachal Pradesh,
Shimla.

Sub: Diversion of 63.5015 ha of forest land for construction of 402 MW Shongtong-Karcham Hydro Electric Project in favour of Himachal Pradesh Power Corporation Limited (HPSEB) in Kinnaur Forest Division in Kinnaur district of Himachal Pradesh.

*Manager
(Env)
(6.11.12)*
Sir,

I am directed to refer to the State Government's letter no. Ft.48-1942/2009 (FCA) dated 04.09.2010 on the subject cited above seeking prior approval of the Central Government under the Forest (Conservation) Act, 1980. After careful consideration of the proposal by the Forest Advisory Committee constituted under section-3 of the said Act, in-principle approval was granted vide this Ministry's letter of even number dated 22.03.2011 subject to fulfillment of certain conditions. The State Government has furnished compliance report in respect of the conditions stipulated in the in-principle approval and has requested the Central Government to grant final approval.

2. In this connection, I am directed to say that on the basis of the compliance report furnished by the Nodal officer (FCA) of the State Government vide letter nos. Ft.48-1942/2009(FCA) dated 10.05.2011, Ft.48-1942/2004(FCA) dated 25.08.2012 and Ft.48-1942/2004(FCA) dated 16.10.2012, permission of the Central Government for diversion of 63.5015 ha of forest land for construction of 402 MW Shongtong-Karcham Hydro Electric Project in favour of Himachal Pradesh Power Corporation Limited (HPSEB) in Kinnaur Forest Division in Kinnaur district of Himachal Pradesh under the provisions of Section 2 of Forest (Conservation) Act, 1980 is hereby granted subject to fulfillment of the following conditions:

1. Legal Status of the diverted forest land shall remain unchanged.
2. The Compensatory Afforestation (CA) will be raised and maintained over double the area proposed for diversion in a degraded forest land (i.e. 128 ha) at the cost of User Agency.
3. The User Agency shall pay additional NPV, if so determined, as per the final decision of Hon'ble Supreme Court of India.

Sh

[Signature]
Dy. General Manager
Secretary, Kinnaur H.E.P.

Dist. Kinnaur, U.P. 171001

4. All the funds received from the User Agency under the project shall be transferred to Ad-hoc CAMPA pertaining to the State.
5. The State Government shall ensure that minimum flow of 15% is maintained at all time.
6. The user agency shall set up Ecological Monitoring Unit to monitor the impact of the project on flora and fauna of the area.
7. The user agency shall keep the effect of camping labourers on the flora and fauna during the construction phase of 48 months at minimum by providing alternate fuel for cooking and heating.
8. The entire reservoir created due to submergence shall be declared Reserve Forest under Indian Forest Act, 1927 within six months. However, regulated fishing shall be allowed. Nodal Officer shall submit compliance report in this regard.
9. Catchment Area Treatment Plan should be implemented at the project cost under the supervision of the State Government.
10. Green belt of adequate width shall be raised by the user agency around the reservoir at the cost of the project.
11. The user agency shall facilitate a basin level study on the impact of HEPs on the flora & fauna of the area as per the TOR submitted to MoEF.
12. The user agency shall carry out muck disposal at pre-designated sites in such a manner so as to avoid its rolling down.
13. The dumping area for muck disposal shall be stabilized and reclaimed by planting suitable species by the user agency at the cost of project under the supervision of State Forest Department. Retaining walls and terracing shall be carried out to hold the dumping material in place. Stabilization and reclamation of such dumping sites shall be completed before handing over the same to the State Forest Department in a time bound manner as per Plan.
14. The User agency will consult other organisations having experience in construction of roads in hilly areas such as BRO to avoid frequent road blockade due to land slides etc and shall provide breast walls and retaining walls wherever necessary.
15. The Forest Department shall regenerate equivalent amount of degraded forest area, in addition to the condition no. 1. As the user agency does not have qualified manpower and control on forest area to execute the same, they have paid for the same to the CF, Rampur. The Forest Department shall implement the same and submit a compliance report.
16. The User Agency shall submit annual self monitoring report indicating status of compliance to the conditions stipulated in the approval, to the State Government and the concerned Regional Office of the Ministry.

Shr

Sr. Manager (G&P)
SLD
Rampur
Dist. Engineer P., 172107