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# NORTH EASTERN ELECTRIC POWER CORPORATION LTD.

(A GOVT. OF INDIA ENTERPRISE)

## KOPILI HYDRO ELECTRIC PLANT

OFFICE OF THE HEAD OF PROJECT

UMRONGSO, DIMA HASAO, ASSAM.

Tel. 03670-288222, Fax: 03670-288240



NO. NEEPCO/KHEP/HOP/T-27/2019-20/

937

Dated : 06.11.2019

To

✓ The Chief Conservator of Forest (Central),  
Ministry of Environment and Forest (Govt. of India),  
North Eastern Regional Office, Law – U- Sib, Lumbatngen,  
Near MTC Workshop, Shillong – 793021.  
Web site: mofero.shillong@gov.in

Sub : Submission of Six Monthly monitoring Report on Environment compliance  
for Kopili Hydro Electric Project Stage – I (Extension) and Stage – II.

Dear Sir,

Kindly enclosed herewith the six monthly monitoring report on the compliance to  
environment safeguard for KHEP Stage – I (Extension) and Stage – II for the period  
**1<sup>st</sup> April'2019 to 30<sup>st</sup> September'2019** as per the specified format (Hard and soft copy).

This is for favour of your kind information and further needful action please.

Thanking you.

Encl : As stated above.

Yours faithfully

Head of Plant,  
KHEP, NEEPCO Ltd.

Umrongso, Dima Hasao, Assam

Memo No. NEEPCO/KHEP/HOP/T-27/2019-20/

Date : 06.11.2019

Copy to:-

1. The ED (O&M), NEEPCO, Shillong for kind information.
2. The CGM (C), CP, NEEPCO, Shillong for kind information.
3. The CGM (E/M), Environment and R&R wing, NEEPCO, Shillong for kind information along with a copy of the report.
4. The GM (C), NEEPCO, KHEP for information please.

Head of Plant,  
KHEP, NEEPCO Ltd.

Umrongso, Dima Hasao, Assam

**ANNEXURE - I**


**KOPILI HYDRO ELECTRIC PROJECT, STAGE – I Extn, (2 x 50 MW)**  
**MONITORING REPORT ON THE IMPLEMENTATION OF CONDITIONS OF**  
**ENVIRONMENTAL CLEARANCE AS ON SEPTEMBER'2019**


**PART-I**  
**(DATA SHEET)**

1	Project type	River-valley
2	Name of the project	Kopili Hydro Electric Project, 1 <sup>st</sup> Stage Extension
3	Clearance letter/OM No. & date	Environmental clearance no: J-11016/67/82-IA-I dated 2 <sup>nd</sup> March 1993.
4	Location	District – Dima Hasao. State – Assam Latitude/ Longitude: 25° 32' N 92° 41' E
5	Address of correspondence (a) address of concerned Project Chief Engineer	The Head of Project Kopili Hydro Electric Project NEEPCO Ltd., Umrangso PIN-788931 Tel:03670-288222 FAX-03670-288240
6	Salient features (a) of the project (b) of the Environment management plan	Already submitted.
7	Break up of the project area (a) Submergence area (forest & non-forest) (b) others	No new acquisition of land for reservoir after Stage-I, KHEP.
8	Break up of project effected population with enumeration of those losing houses/dwelling units only, agricultural land and land less labourers/artisans (a) Adivasis (b) Others	NIL NIL
9	(a) Project as originally planned and subsequent revised estimates and the year of prime reference  (b) Allocation made for environmental management plans (c) Benefit cost ratio/internal rate of	Original estimated cost Rs.111.00 Crores (including IDC of Rs.9.03 Crores) sanctioned vide letter no:22/17/88-D(T&N) dated 14.05.93 of MOP, GOI Revised cost Rs.134.48 Crores (including IDC Rs.3.53 Crores) sanctioned vide letter no 6/4/96-Hydel-11 dated 27.07.99 of MOP, GOI.  Rs.603 lakh Debt:Equity ratio:1:1 Debt portion covered by govt loan @13.5%pa and



	<p>return and the year of assessment.</p> <p>(d) Whether (c) includes cost of environmental management</p> <p>(e) Actual expenditure incurred on the project so far</p> <p>(f) Actual expenditure incurred on environmental management so far</p>	<p>propose return on equity @16%.</p> <p>Yes</p> <p>Rs.127 Crores</p> <p>Rs.467.00 lakh</p>
10	<p>Forest land requirement</p> <p>(a) The status of approval for diversion of forest land for non forestry use</p> <p>(b) The status of compensatory afforestation.</p> <p>(c) The status of clear felling</p> <p>(d) Comment on viability and sustainability of compensatory afforestation program in the light of field experience so far</p>	<p>Approval accorded for diversion of 3686.85 Ha of forest land for construction of the project (Stage-I) vide MOE&amp;F letter no:8-192/91-FC Dtd 02-04-93</p> <p>Against estimated amount of Rs.12.91 Crores an amount of Rs.4.303 Crores has already been released to the Forest Department, Assam during the period 2002-03 and 2003-04. Another 7.14 Crores released during 2008-09. As such, total 11.403 Crores has already been released.</p> <p>NIL</p> <p>The Forest Department of Assam and Soil Conservation Department of Meghalaya are responsible for execution of the schemes.</p>
11	The state of clear felling in non-forest areas (such as submergence areas of reservoir, approach)	NIL
12	Status of construction	Project started in 1994 and commissioned in 1997-98.
13	Reason for delay (if the project is yet to start)	NA
14	<p>Date of site visit</p> <p>(a) Date on which the project was monitored by the regional office on previous occasion, if any.</p> <p>(b) Date of site visit for this monitoring report.</p>	<p>Visited on 8<sup>th</sup> &amp; 9<sup>th</sup> August/07</p> <p>Visited on 28<sup>th</sup> &amp; 29<sup>th</sup> June/08</p> <p>Visited on 19.12.2017 to 23.12.2017</p>
15	Public appreciation & public complaint on this project.	NIL

  
 देवतोष भट्टाचार्य / Debotosh Bhattacharjee  
 मुख्य महाप्रबंधक (ई/एम) / Chief General Manager (E/M)  
 खेप नीपको लि. उमरांगसो  
 KHEP, NEEPCO LTD. UMRANGSO

  
 उप प्रबंधक (सी) / Dy. Manager (C)  
 महाप्रबंधक (सी) का कार्यालय / O/o the G.M. (C)  
 खेप, नीपको लि., उमरांगसो, असम  
 KHEP, NEEPCO Ltd., Umrangso, Assam

**ANNEXURE - II**

**KOPILI HYDRO ELECTRIC PROJECT STAGE-I Extn., (2 X 50 MW)**  
**REPORT ON THE IMPLEMENTAION STATUS OF CONDITIONS OF ENVIRONMENTAL CLEARANCE AS ON SEPTEMBER 2019.**

**PART – II**

1. Project Type : River Valley
2. Name of the Project : Kopili Hydroelectric Project Stage – I Extension (2X50 MW)
3. Clearance Letter and date : J-11016/67/82-IA.1 dt. 02-03-1993
4. Location:
  - a) District : Dima Hasao
  - b) State : Assam
  - c) Latitude / Longitude : 25°30' N 92°41' E
5. Address of Correspondence : The Head of Project, KHEP, NEEPCO Ltd.,  
Umrongso, Dima Hasao, Assam  
Pin – 788931  
Phone: 03670-288222, FAX: 03670-288240
6. Date of Monitoring : 19.12.2017 to 23.12.2017


SI No.	Stipulation	Status of Compliance
1	Considering that the upper catchment of Kopili river has been exposed to increasing intensity of human interference due to various developmental activities and creation of network of roads and that it happens to be the habitat of diverse flora and fauna, NEEPCO should undertake rapid survey of Project impact area <u>to identify and demarcate all areas rich in biological diversity for total protection.</u>	Complied.
2	Even through, the area is rich in germplasm of many plants of economic importance; no detailed report on the survey of flora of kopili river has been documented so far. The project authorities should, therefore initiate surveys for bio-diversity in the catchment through competent agencies.	Complied.

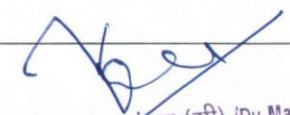
देवोताप भट्टाचार्य/Debotap Bhattacharjee  
मुख्य महाप्रबंधक (ई/एम)/Chief General Manager (E/M)  
खोप नीपको लि. उमरंगसो  
KHEP NEEPCO Ltd.

उप प्रबंधक (सी) /Dy. Manager (C)  
महाप्रबंधक (सी) का कार्यालय / O/o the G.M. (C)  
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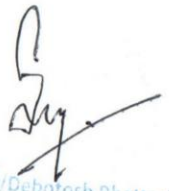



3	A phased programme for Catchment Treatment should be evolved and implemented by taking into consideration the reports already prepared by North Eastern Council and other Govt. agencies. The catchment area treatment programme should be completed prior to completion of the project work covering all the critically degraded areas.	The catchment of the project is spread in two states viz. Assam and Meghalaya. In Assam, the work of CAT was executed through N.C Hills Autonomous Dist. Council and the work is completed. However, in Meghalaya, the work of CAT was executed through Soil Conservation Department, Meghalaya. However, due to some demands by the local people which the Soil Conservation Deptt. could not agree, they had discontinued the work. Again, the matter is being taken up with the Soil Conservation Department, Meghalaya in line with the monitoring report of MOEF and CC, North Eastern Region (NER) office, Shillong, Meghalaya.
4.	A plant resource center should be set up with representative species of regional flora through creation of botanical gardens in the sites in project colony, dam sites etc.	Complied.
5	Continuous monitoring of silt inflow at the project site and along the tributaries should be undertaken through creation of a network of silt monitoring stations to identify critical areas requiring priority treatment along with the project.	Complied
6	Details of Nurseries and mobilization of work force to handle afforestation programme be worked out and submitted to the Ministry.	Complied.
7	Inventory of aquatic fauna in the region should be prepared along with feeding habits and breeding cycles.	Complied.
8	Adequate free fuel arrangements should be made to the labour force employed during construction of the project to avoid destruction to the vegetation cover in the neighbouring areas	Complied.
9	Restoration of construction area should be ensured to the extent possible by leveling, filling of pits and landscaping etc.	Complied.

  
 देवोतुष भट्टाचार्य/Debotosh Bhattacharjee  
 मुख्य महाप्रबंधक (ई/एम)/Chief General Manager (E/M)  
 खेप, नीपको लि., उमरांगसो  
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 KHEP, NEEPCO LTD. Umrangso, Assam

10	The Ministry should be informed every six months of the follow up action taken on the recommendations and the project should be initiated only after ensuring that all arrangements to execute the above recommendations have been made as an integral part of the project.	Complied. Arrangements are made to complete the follow up actions.
11	Item-wise financial allocation with yearly requirement should be made in the project budget for implementation of the safeguard	Complied. Budget provision is available.
12	A Multi Disciplinary Committee should be constituted to ensure effective implementation of the safeguard	Multi-Disciplinary Committee was constituted and the last meeting was held on 10.03.1998. Due to lapse of time, documents related to formation of the Multi-Disciplinary Committee are not available. As such, the matter was discussed with the officials of MOEF and CC, NER, Shillong, Meghalaya during the visit to the Kopili H.E.Plant in the Month of December, 2017 and action is being taken up for reconstituting the Multi – Disciplinary committee in order to arrange meetings etc.
13	Implementation of these and any other safeguards that shall be stipulated latter in this regard will be implemented among others under provisions of the Environment (Protection) Act, 1986	Consent to operate for the year 2019 – 20 has already been received.

  
 देवांताप भट्टाचार्य/Debojyoti Shattacharjee  
 मुख्य महाप्रबंधक (ई/एम)/Chief General Manager (E/M)  
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 KHEP, NEEPCO Ltd., Umrangso, Assam



## Annexure - I

**KOPILI HYDRO ELECTRIC PROJECT, STAGE – II, (1 X 25 MW)**  
**MONITORING REPORT ON THE IMPLEMENTATION OF CONDITIONS OF**  
**ENVIRONMENTAL CLEARANCE AS ON SEPTEMBER”2019**

**PART-I**  
**(DATA SHEET)**

1	Project type	River-valley
2	Name of the project	Kopili Hydro Electric Project, Stage-II
3	Clearance letter/OM No. & date	(i)Forest clearance-No:F.8-192-91-FC Dated. 02.04.1993. (ii)Environmental clearance no: J-12011/3/98-IA-Dated 9.11.98.
4	Location	District – Dima Hasao State – Assam Latitude/ Longitude:25° 32' N 92° 41'E
5	Address of correspondence (a) address of concerned Project Chief Engineer	The Head of Project Kopili Hydro Electric Project NEEPCO Ltd., Umrangso PIN-788931 Tel:03670-288222 FAX-03670-288240
6	Salient features (a)of the project (b)of the Environment management plan	Already submitted.
7	Break up of the project area (a)Submergence area (forest & non-forest) (b)others	No new submergence area. Land has already been acquired for this project during Stage-I construction.
8	Break up of project effected population with enumeration of those losing houses/dwelling units only, agricultural land and land less labourers/artisans (a) Adivasis (b) Others	NIL NIL
9	Financial details (a)Project as originally planned and subsequent revised estimates and the year of prime reference  (b)Allocation made for environmental management plans with item wise and	Original estimated cost in 1997 Rs.63.30 Crores sanctioned estimated cost at Sept 1998 price level Rs.76.09 Crs.(Sanctioned vide L/no:6/3/97-Hydel-II Dtd.27.07.99 of MOP, GOI). Revised estimated cost at Feb'2004 price level Rs.95.02 Crores Plantation -Rs.8.54 lakh Env. & Ecology-16.0 Lacs. As per Annexure - III

Debotosh Bhattacharjee  
 Deputy General Manager (E/M)  
 NEPCO LTD. UMRANGSO

उप प्रबंधक (सी) / Dy. Manager (C)  
 कोपिली हाइड्रो इलेक्ट्रिक प्रोजेक्ट / O/o the G.M. (C)  
 खेप, नीपको लि., उमरंगसो, असम  
 KHEP, NEEPCO Ltd., Umrangso, Assam

## Annexure - I

	<p>year break up.</p> <p>(c)Benefit cost ratio/internal rate of return and the year of assessment.</p> <p>(d)Whether(c) includes cost of environmental management</p> <p>(e)Actual expenditure incurred on the project so far</p> <p>(f) Actual expenditure incurred on environmental management so far</p>	<p>Debt: Equity ratio:1:1</p> <p>Debt portion covered by govt loan @13.5%pa and proposed return on equity @16%. Commercial generation started from July, 2004.</p> <p>Yes</p> <p>Up to June'2004 Rs.85.76 Crores</p> <p>Expenditure incurred in restoration of construction area Rs.5.50 lakh</p>
10	<p>Forest land requirement</p> <p>(a)_The status of approval for diversion of forest land for non forestry use</p> <p>(b)The status of compensatory afforestation.</p> <p>(c)The status of clear felling</p> <p>(d) Comment on viability and sustainability of compensatory afforestation program in the light of field experience so far</p>	<p>Approval accorded for diversion of 3686.85 Ha of forest land for construction of the project(Stage-I)vide MOE&amp;F letter no:8-192/91-FC Dtd02-04-93</p> <p>Against estimated amount of Rs.12.91 Crores an amount of Rs.4.303 Crores has already been released to the Forest Department, Assam during the period 2002-03 and 2003-04. Another 7.14 Crores released during 2008-09. As such, total 11.403 Crores has already been released.</p> <p>NIL</p> <p>The Forest Department of Assam and Soil Conservation Department of Meghalaya are responsible for execution of the schemes.</p>
11	The status of clear felling in non-forest areas(such as submergence areas of reservoir, approach)	NIL
12	<p>Status of construction</p> <p>(a) Date of commencement</p> <p>(b) Date of completion</p>	<p>20.01.1999</p> <p>Project commissioned in Dec'2003</p> <p>Commercial generation started in July'2004.</p>
13	Reason for delay(if the project is yet to start)	NA
14	<p>Date of site visit</p> <p>(a) Date on which the project was monitored by the regional office on previous occasion, if any.</p> <p>(b) Date of site visit for this monitoring report.</p>	<p>Visited on 8<sup>th</sup> &amp; 9<sup>th</sup> August/07</p> <p>Visited on 28<sup>th</sup> &amp; 29<sup>th</sup> June/08</p> <p>Visited on 19.12.2017 to 23.12.2017</p>
15	Public appreciation & public complaint on this project.	NIL

  
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 मुख्यालय भद्रबारी / Debotosh Bhattacharya  
 मुख्य महाप्रबन्धक (ई/एम) / Chief General Manager (E/M)  
 खेप नीपको लि. उमरांगसो  
 NEEPCO LTD. UMRANGSO

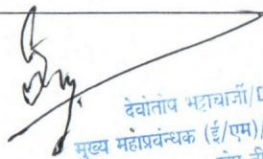


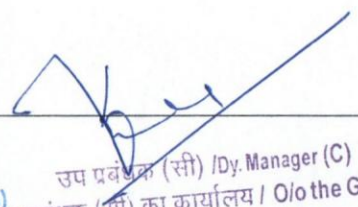
**ANNEXURE - II**

**KOPILI HYDRO ELECTRIC PROJECT, STAGE – II, (1 x 25 MW)**  
**MONITORING REPORT ON THE IMPLEMENTATION OF CONDITIONS OF ENVIRONMENTAL CLEARANCE AS ON SEPTEMBER'2019**  
**PART-II**

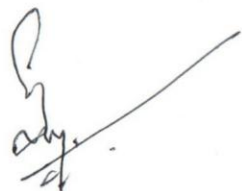
1. Project Type : River Valley  
2. Name of the Project : Kopili Hydroelectric Project Stage – II  
3. Clearance Letter and date : J-12011/3/98-ia-1A.1 dt. 09-11-1998  
4. Location:  
a) District : Dima Hasao  
b) State : Assam  
c) Latitude / Longitude : 25°30' N 92°41' E  
5. Address of Correspondence : The Head of Project, KHEP, NEEPCO Ltd.,  
Umrongso, Dima Hasao, Assam  
Pin – 788931  
Phone: 03670-288222, FAX: 03670-288240  
6. Date of Monitoring : 19.12.2017 to 23.12.2017

SL No	Stipulations	Status of compliance
1	Adequate free fuel arrangements should be made to the labour force engaged in the construction work at project cost so that indiscriminate felling of trees is prevented.	Complied.
2	All the labourers to be engaged for construction woks should be thoroughly examined by health personnel and adequately treated before issuing them work permit for the project.	Complied.

  
देवतोष भट्टाचार्य/Debotosh Bhattacharjee  
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महाप्रबंधक (सी) का कार्यालय / O/o the G.M. (C)  
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KHEP NEEPCO Ltd., Umrangso, Assam

3	Restoration of construction area including dumping site of excavated materials/at Dam site should be ensured by leveling, filling up borrow pits, landscaping etc. The area should be properly afforested with suitable plantation.	Complied. All construction areas i.e power House site, Tail Race site and Dumping areas have already been restored and plantation is done in phased manner as a continuous process.
4	Preventive actions proposed under the emergency action plan in Dam break analysis should be followed in toto.	Preliminary emergency action plan has already been prepared. Identification of source of materials and Tools and Equipments has been done. A map showing the probable submergence area in the down stream of the dam has also been prepared. Work order issued vide No. NEEPCO/KHEP/C & P (C)/F – 05/2012 – 2013/1186 dtd. 18.01.2013 to M/s Vignesh Enterprises, Jorhat, Assam. Field survey work has already been completed. Drawing submitted.
5	Six monthly monitoring reports should be submitted to the Ministry and its regional office at Shillong for review.	Complied.



देवतोष भट्टाचार्य/Debotosh Bhattacharjee  
मुख्य महाप्रबन्धक (ई/एम)/Chief General Manager (E/M)  
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