

Ref.No;SEPL/F-5/13-14/344.

To,
The Joint Director,
North-Eastern Regional office,
Ministry of Environment & Forest,
Government of India.

Dated: 17/12/2013

Subject: Six Monthly compliance Report on status of Environmental Safeguards of 97MW Tashiding Hydro Electric Project.

Dear Sir,


This has reference to Environmental Clearance of 97MW Tashiding hydro Hydro Electric Project vide MoEF letter No.J-12011/66/2006-IA-I dated 29.07.2010 following are clarified for your kind perusal.

1. As per the Stage I Clearance the following amount is deposited to the Forest Env. & Wildlife management Deptt. Government of Sikkim, Gangtok.
 - i) **Compensatory afforestation:** Rs, 28,43,900=00
 - ii) **Net Present Value:** Rs, 32,18,774=00
 - iii) **CAT Plan:** Rs 63,48,000=00
 - iv) **Biodiversity Conservation & Management Plan:** Rs,88,40,000=00
2. Public Notification Published as per the Para 12 of the Environmental Clearance.
We have advertised in two Local Newspaper widely circulated in the region around the Project "Himali Bela" in Nepali and "Sikkim Express" in English and Sikkim Herald classified the Government of Sikkim paper dated; 11th August 2010 and 12th August 2010, informing that Project has been accorded environmental clearance.
3. Six Monthly compliance on the status of the 97 MW Tashiding Hydro Electric Project to the stipulated environmental conditions is enclosed as annexure-A, Environmental activities as Annexure B, Corporate Social Responsibilities as Annexure C and Monthly Progress report of the project as Annexure D.

This is for your kind information.

Thanking You.

Yours faithfully,


(C.L. Thakur)
Sr. Vice president
For, Shiga Energy Pvt. Ltd.

- Copy to: 1) Additional Director, MoEF New Delhi, for kind information.
2) Central Pollution Control Board, Govt. of India, for kind information.
3) CCF-cum -Nodal Officer (FCA) Gangtok, for kind information.
4) Member Secretary, State pollution Control Board Gangtok, for kind information.

Site Office

Yangtey, Near Tashigang Resort, Gyezing, West Sikkim - 737111
Tel : +91-03595-250055 Fax: +91-03595-250044

**97MW TASHIDING HYDRO ELECTRIC PROJECT
DATA SHEET**

Sl.No.	Particulars	Details
1.	Project Type	Run- of- River Scheme
2.	Name of the Project	97MW Tashiding Hydro Electric Project
3.	Clearance Letter i) Environmental Clearance ii) Forest Clearance.	No.J-12011/66/2006-IA-I dated 29.7.2010 MoEF GOI vide letter No.3-SKB 007/2010-SHI/1693-94 dated 16 th Sept.2011. Forest Env.& wildlife Management Deptt GOS vide Letter No.1368/FCA/FEWMD 955-57 Dated 24/9/2011
4.	LOCATION:	
	District	West District
	State	Sikkim
	Latitude	27°20'28"N
	Longitude	88°13'59"E
5.	Address for Correspondence	
	a) Address of concerned Project Head(with pin code, Telephone/Fax)	Shri. P.B.Praveen Kumar, Director Shiga Energy Pvt.Ltd. Rabdenling, Annex-II, Adjoining Hotel Royal Plaza Upper Shyari, Gangtok, East Sikkim. e-mail:praveenpb@yahoo.com Telephone:03592-280709 Fax:03592-280703
	b) Address of Project Incharge site office (With Pin code, Telephone/Fax)	Mr.C.L.Thakur Vice-President, Shiga Energy Pvt.Ltd. Yangtey, Gyalshing, West Sikkim, Telephone:03595-250055 Fax-03595-250044 e-mail:cl.thakur@dansenergy.com
6.	Break up of the Project Area	
	a) Forest Land Total	4.3492Ha(Surface 2.7840Ha+Underground :1.5652Ha) in West Sikkim,
7.	Break-up of the Project affected Population.	Project affected families:30 Landless affected families: Nil
8.	Financial Details	
	a) Project cost as originally planned.	494.44Crores.
9.	Forest Land requirement	
	a.The Status of approval for diversion of forest land for non forestry use,	The Ministry of Environment & Forest Government of India vides its letter No.3-SKB 007/2010-SHI/1693-94 dated 2 nd May 2008 Forest Env.& wildlife Management Deptt GOS vide Letter No.1368/FCA/FEWMD 955-57

Dated 124/9/2011

Annexure-A
Compliance Status on Environmental Clearance.

Sl.No	Stipulated Conditions	Compliance Status
Part –A: Specific Conditions		
(i)	Catchment area treatment plans as has been proposed should be completed in 3 years.	We have already deposited the CAT amount of Rs. 63, 48, 000=00 in the CAMPA fund and work will be carried out by the State Forest Department.
(ii)	Five dumping site have been identified for dumping 380858m ³ of excavated material. For retaining the dumped /unused material for subsequent stabilization along the hill slopes and along the stretch of the road sausage-cum-retaining walls shall be developed. These need to be built prior to the dumping of muck at these sites. These walls would range from 70 to 290m length at the proposed dumping site.	Muck dumping is being carried out in approved muck dumping sites. Sausage cum retaining walls have been developed as proposed
(iii)	It should be ensured that the dumping yards blend with the natural landscape by developing the sites with gentle slopes, bunds, terraced and water ponds, patches of greenery in and around them.	After the completion of the construction work we will convert the dumping sites into natural vegetation parks and recreational centre.
(iv)	For maintaining environmental flow in the river two cumec water should be released during lean season.	We will comply as per the MoEF norms.
(v)	The scheme of disposal of solid waste should cover the integrated project area including from labour colony during construction Phase. Solid waste from the labour camps shall be collected in beans/Masonry Vats and the same shall be dumped or disposed to nearby municipal landfills/authorized dump sites. No dumping of solid waste is allowed near any water body or a stream to exclude any health hazard problems to the society.	The solid waste is collected in bins and then dumped into the pit which does not fall near any water body or a stream to exclude any health hazards problem to the community. We are in touch with central Govt. organization for converting these solid wastes from the labour camp into Biogas for its useful purpose.

(vi)	Jobs should be provided to atleast 1 member of all the 30 affected families as per their skills.	We have already provided jobs to atleast one member of all the affected families as per their skills and also contract works are being allocated to the affected families and we are further encouraging them to produce organic vegetables and developed poultry farming.
(vii)	Fishery Management Plan as proposed in the EMP should be implemented in totality.	We will implement the Fishery Management plan as proposed in the EMP together with the Fisheries Department, Govt. of Sikkim.
(vii)	The proposed site is about 5km away from the buffer zone of Kanchendzonga Biosphere Reserve as per Supreme Court order clearance from NBWL may be obtained (if required)	Not Applicable
(ix)	The Proponent should carry out a study on post construction period during O&M stage in between 3 to 5 years after commissioning of the project to examine the actual environmental impact of the project on its surrounding compare to what was planned initially. The study should be conducted by a reputed institute/consultant.	Between 3 to 5 years after the commissioning of the project we will carry out a study on post construction period during O&M stage to examine the actual environmental impact of the project on its surrounding compared to what was planned initially by a reputed institute/consultant.

Part-B: General Conditions

Sl.No.	Stipulated Conditions	Compliance status
(i)	Adequate free fuel arrangement should be made for the labour force engaged in the construction work at project cost so that indiscriminate felling of trees is prevented.	Sufficient free fuel (only LPG) has been provided by the company for labourers engaged in the project. As such food is provided to the employees at the Company's mess where LPG is used as fuel.
(ii)	Fuel depot may be opened at the site to provide the fuel (kerosene/wood/LPG). Medical facilities as well as recreational facilities should also be provided to the labourers.	The fuel Depot (LPG) has been established at site. We have employed two nurses and an ambulance has been provided to meet the emergency needs for project employees and also the public residing within the project site. Routine HIV Test programmes and medical camps are also conducted at the site.
(iii)	All the labourers to be engaged for construction	Labourers engaged at construction

	works should be thoroughly examined by health personal and adequately treated before issuing them work permit.	work were examined by MBBS Doctors and treated before issuing the work permit. Regular health checkup is continuing at various sites. HIV Test for all the migrant labourers has also already been conducted and would be conducted in every 6 months by the State AIDS Control Society.
(iv)	Restoration of Construction area including dumping site of excavated materials should be ensured by leveling, filling up of burrow pits, landscaping etc.The area should be properly treated with suitable plantation.	We have been complying with the guidelines that have been drawn and we will also take plantation steps once the dumping yard is filled.
(vi)	Financial provision should be made in the total budget of the project for implementation of the above suggested safeguard measures.	Yes, the financial provision for implementation of environmental safeguards has been kept.
(vii)	Six monthly monitoring reports should be submitted to the Ministry and its Regional Office, Shillong for review.	Proposal for monitoring committee is already submitted to Additional Director, MoEF, New Delhi in the making confirmation.
5.	Officials from Regional Office MoEF, Shillong who would be monitoring the implementation of environmental safeguards should be given full co-operation, facilities and documents/ data by project proponents during their inspection.	We have been providing full co-operation, facilities and documents/ data by project proponents during the inspection of the officials from MoEF, Shillong
6.	The responsibility of implementation of environmental safeguards rests fully with the M/s Shiga Energy Pvt.Ltd. & Govt. of Sikkim.	We will strictly comply with all the conditions set for the safeguards of environment with the cooperation of Forest Env. & Wildlife management Department, Government of Sikkim.
7.	The total amount of Rs.466.76 lakh kept in the budgetary provision for implementation of environmental management plan should be strictly adhered and not to be diverted for any other purpose.	We will fully implement the said budget for Environmental Management programme.
8.	In case of change in the scope of the project, project would require a fresh appraisal.	In case of any changes we will inform the concern department and take the fresh appraisal.
9.	The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary and take action including	We agree.

	<p>revoking of the clearance under the provision of the Environment (protection) Act,1986 to ensure effective implementation of the safeguard measures in a time bound and satisfactory manner.</p>	
10.	<p>This clearance letter is valid for a period of 10 years from the date of issue of this for commencement of construction work</p>	<p>The construction work began since December, 2011.</p>
11.	<p>A copy of the clearance letter will be marked to concerned Panchayat / local NGO, if any .from whom any suggestion / representation has been received while processing the proposal. The Clearance letter shall also be put on the website of the Company by the proponent.</p>	<p>Till date we had not received the suggestion /representation while processing the proposal. The Clearance letter already been uploaded in the company's website.</p>
12	<p>The proponent should advertise in atleast 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 letter are available with the State Pollution Control Board/ Committee and may also be seen in the website of the ministry of Environment and Forests at http://www.envfor.nic.in</p>	
13.	<p>The project proponent shall also submit Six monthly reports on the status of compliance of the stipulated EC conditions including result of monitored data (both in Hard copies as well as by e-mail) to the representative Regional office of MoEF, the respective Office of CPCB and the SPCB.</p>	<p>We will submit in Hard Copy and soft copy as well by e-mail to the concerned officials.</p>
14.	<p>Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act.1997.</p>	<p>We agree</p>

ANNEXURE -B

ENVIRONMENTAL ACTIVITIES

PARYAVARAN MAHOTSAV

The Government of Sikkim has declared Paryavaran Mahotsav w.e.f, 15th June to 30 June 2013. On the occasion Shiga Energy Pvt. Ltd, also perform an utsav at 97 MW Tashiding Hydro Electric Project Site by planting 1000 sapling of different species of plant, in and around project site. It was two day long programme the first day plantation drive and 2nd day for cleanliness drive at project site.



World Environment Day Activities

World Environment Day was observed at Tashiding Senior Secondary School, West Sikkim on 5th June 2013. Shri Dowcho Lepcha, honorable area MLA and Minister to the Government of Sikkim was the Chief Guest of the program. The highlights of the occasion were the Plantation drive and cleanliness drive carried out by M/s Shiga Energy Pvt. Ltd. along with school children and Youth Wing of Tashiding region. The event revolved around the theme, "Conservation of environment does not come by making big policy changes but by making small changes in our everyday lives".



MUCK DUMPING

Muck dumping is being carried out in approved muck dumping sites. Sausages cum retaining walls have been developed as proposed.



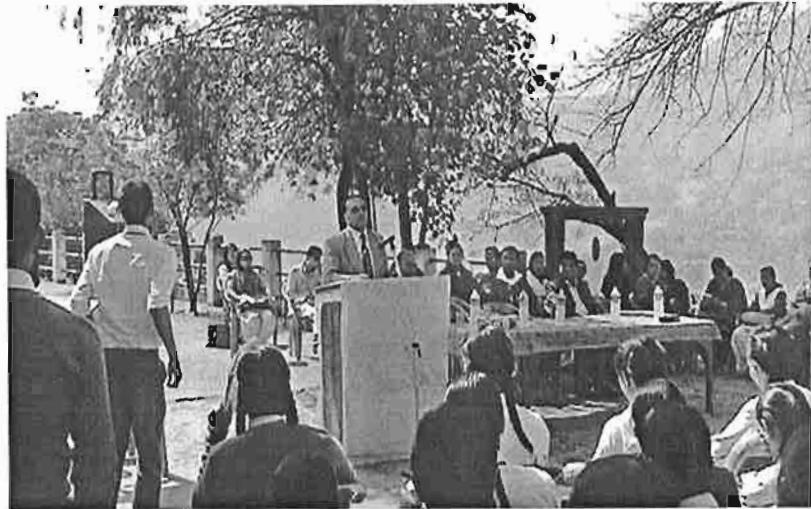
ANNEXURE- C **CORPORATE SOCIAL RESPONSIBILITY**

Programme on Stress Management and Psychological Problems

Shiga Energy Pvt. Ltd. organised a mental health and stress management programme at Sakyong Secondary School on 10th October, 2013 and Tashiding Sr. Sec. School, West Sikkim on 25th October, 2013. A total of 300 students and teachers of the respective Schools took part in the programme. The resource person of the programme was Dr. C.L.Pradhan (Neuro Psychiatrist) of STNM Hospital, Gangtok. He laid emphasise on the point that parents on their part will have to take care of the psychological aspect of their children right from their tender age. Proper care and upbringing will enable the parents to understand their children's psychological problems and hence act on time. He also informed that stress is harmful for an individual's mental health, so one needs to ensure, understand and control his/her psychological problems. A child needs a peaceful home environment to have a stable mental health. The session was an interactive one with participation coming from both students and teachers. Mr. Gopal Adhikari, representative of Shiga Energy Pvt. Ltd. and Mr. J.C.Kafley, teacher of the school also addressed the programme.



Programme at Sakyong Secondary School



Programme at Tashiding Sr. Sec. School

Participation in religious activities

A seven day long 'Srimad Bhagwat Mahapuran' was observed at Geyzing by the local communities for the betterment of the local region. Shiga Energy Pvt .Ltd. participated in this religious ceremony by providing meal to around 1000 devotees gathered on the occasion.



Sponsoring of Sound System to Kalzang Association of Tashiding

The officials of the Shiga Energy Pvt. Ltd handed over the Sound System to the President of Kalzang Association Tashiding.



OCTOBER
2013

97 MW TASHIDING HEP SIKKIM

MONTHLY PROGRESS REPORT



SHIGA ENERGY PVT LTD

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EXECUTIVE SUMMARY

Owner	: Shiga Energy Pvt Ltd
Civil and HM Works Contractor	: Bumi Geo Engineering Ltd
Electro-Mechanical Contractor	: Alstom India Ltd
Design Consultant	: Energy Infratech Pvt. Ltd

Under Ground excavation of HRT-Face-1 of 65.20m length is completed during the month making total progress of excavation to 1026.40m.

Under Ground excavation of HRT-Face-2 of 59.00m length is completed during the month making total progress of excavation to 692.50m.

Under Ground excavation of HRT-Face-3 of 72.50m length is completed during the month making total progress of excavation to 1101.30m.

1. PROJECT STATUS

1.1 Clearances

SEPL has obtained all clearances which are required for construction of the Tashiding HEP.

1.2 Financial Closure

The financial closure for the Project was achieved in the month of July 2011.

2. Infrastructure Works at Project Site

2.1 Infrastructure Works

Infrastructure works are almost completed, the detail of which is given below:

i. **Land Acquisition :**

The total land required for the project has been acquired.

ii. **Construction of Roads :**

The work for construction of access road is completed and regular maintenance is under progress.

iii. **Construction of Bridge near Adit-1 :**

Bridge erection work completed and is under operation.

iv. **Construction of Bridge near Barrage :**

Bridge erection work completed and is under operation.

v. **Construction of Magazine house :**

Construction of Magazine House is completed.

vi. **Construction Power :**

Transmission line network for Construction power has been charged and is under operation.

vii. **Miscellaneous :**

- Setting up SEPL's administrative and technical office at Project Site has been done.
- Works of labour quarters for the Civil Contractor is completed.

3. Progress of Works

3.1 Head Race Tunnel

Excavation of all the three Adits is completed.

3.1.1 HRT-Face-1:

Under Ground excavation of HRT-Face-1 of 65.20m length is completed during the month making total progress of excavation to 1026.40m.

3.1.2 HRT-Face-2:

Under Ground excavation of HRT-Face-2 of 59.00m length is completed during the month making total progress of excavation to 692.50m.

3.1.3 HRT-Face-3:

Under Ground excavation of HRT-Face-3 of 72.50m length is completed during the month making total progress of excavation to 1101.30m.

3.1.4 HRT-Face-4:

Underground excavation of HRT-Face -4 of 594.50m length is completed till date.

3.1.5 HRT-Face-5&6:

Underground excavation of HRT-Face -5 & 6 of 7.50m length is completed till date.

3.2 Intake Site:

Surface excavation and Portal development of Diversion Tunnel (DT) Inlet and Outlet portal is completed.

Under Ground excavation of Diversion Tunnel completed. (DT Length = 262m includes 90.60m length of HRT)

3.3 Surge Shaft

Surface preparation for Adit to Surge shaft has been completed.

3.4 Power House area:

- **Excavation and Slope protection works**

Reinforced cement concrete of pre excavation anchor beam at El. 732.00m is 89% completed. Cladding wall concreting of 95% has been completed from El.732 to El.722m. Surface Excavation work is 63% completed from El.712.00 to El.693.00m and El.722 to El.716.00m. Shotcreting work is 40% completed from El.712.00 towards

El.702.00m. SDA fixing work is 35% completed from El.732 to El.722 & from El.712 to El.695.00m.

- **Protection works along river side**

Wire crate fixing work has been completed and Back filling with due compaction has been completed to El 707.00 m.

4. Quality Control :

Quality control Lab truss and sheeting work is completed.

5. Electro-mechanical Work :

The contract for entire Electro Mechanical works was awarded to M/s ALSTOM Projects India Ltd on turnkey basis. Advance payment has been released to Alstom Projects India Ltd as per contract.

M/s ALSTOM Projects India Ltd has submitted the model test report and same has been accepted.

The following drawings/documents have been approved:

1. Francis turbine Material & Material Equivalence datasheet
2. Generator Material Equivalence datasheet
3. Design Memorandum of Grounding System
4. Inspection & Test Plan Turbine & Accessories
5. Francis Turbine Draft Tube Elbow & Liner Hydraulic Design
6. Francis turbine Draft Tube General Arrangement Drawing
7. Inspection and Testing plan of MIV –Spherical valve and Accessories
8. Inspection and Test Plan of governing system and OPU
9. Inspection and Test Plan of Generator package
10. Painting specification
11. MIV Spherical Valve material equivalence sheet

- MIV Design Memorandum has been reviewed and our observations have been sent to Alstom.
- Generator Design Memorandum has been reviewed and our observations have been sent to Alstom.
- Francis Turbine Design Memorandum has been reviewed and our observations have been sent to Alstom.
- Inspection and test plan of EOT crane has been reviewed and our observations have been sent to Alstom.
- GSU Transformer Design Memorandum has been reviewed and our observations have been sent to Alstom.
- PH Elevator Design Memorandum has been reviewed and our observations have been sent to Alstom.

Following Material Dispatch Clearance Certificate (MDCC) has been released:

1. Grounding System (Lot-1).

2. Draft Tube Elbow & Liner for Unit -1 and unit -2.

Inspection carried out

1. Draft tube Elbow & Liner (Part 1&2) of Unit 1 & Unit 2.

Status of E&M equipment at Alstom works:

1. Basic Design and Detailed design in respect of turbine, generator, MIV, governing equipment is under progress.
2. Draft Tube elbow /liner for unit 1 and Unit 2 and grounding system material (Lot-1) have been manufactured, Inspected and reached project site.
3. Review of manufacturing drawings for Lower Pit Liner, Upstream Sleeve, Spiral Case, Stay Ring, MIV Body, Downstream Sleeve, Upper Bracket sole plate, Generator Stator layout, Generator rotor Layout, Stator Sole plate, Francis Turbine Cross Section General layout, Grounding System Connection details and Generator lower guide bearing are under progress.
4. Design and Engineering of BOP items such as cooling water system ,drainage & dewatering System, 11 KV isolated phase bus duct, EOT crane, Fire-fighting system, Ultrasonic flow-meter, Cable & Cable Trays, Power house elevator, MIV Governing System Operating Sequence, Inspection and test plan of GSU Transformer and Governing system – Governor Panel, 240V AC UPS system, HVAC system is under progress.

6. Transmission System :

SEPL has signed the Long Term Access Agreement (LTAA) with Power Grid Corporation of India Limited (PGCIL) on 19th October, 2011 for evacuation of power. Switchyard and Transmission line works will start at a later stage.

7. PROGRESS PHOTOGRAPHS:



View of Face-1: Face Drilling under progress.



View of HRT Face-2: Shotcreting under progress.



View of HRT Face-3: Arrangement for Ventilation Duct fixing under progress.