

Ref.No.;SEPL/F-5/14-15/ 391.

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

Dated: 21 /5/2014

Subject: Six Monthly compliance Report on status of Environmental Safeguards of 97MWTashiding 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 and Corporate Social Responsibilities as Annexure B and Monthly Progress report of the project as Annexure C.

This is for your kind information.

Thanking You.

Yours faithfully,

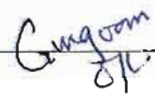


(C.L. Thakur)
Sr. Vice president
Shiga Energy Pvt. Ltd.

- 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 Sr.Vice-President, Shiga Energy Pvt.Ltd. Yangtey, Gyalshing, West Sikkim, Contact no;8348691932 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 24/9/2011

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 Municipal approved area.

(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/ dairy farming to be supplied to the Company.
(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 and we are in touch with the Fishery Department Government of Sikkim for implementation.
(viii)	The Proposed site is about 5Km away from the buffer Zone of Khangchendzonga 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.	Our construction phase has just started. 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 most 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 health checkup is conducted at project sites. We are also taking help from State Health Department.

(iii)	All the labourers to be engaged for construction works should be thoroughly examined by health personal and adequately treated before issuing them work permit.	Labourers engaged at construction work are examined by MBBS Doctor and treated before issuing the work permit. Regular health checkup is carried out at Project sites.
(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 are also taking plantation steps around the dumping yard.
(v)	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.
(vi)	Six monthly monitoring reports should be submitted to the Ministry and its Regional Office, Shillong for review.	Proposal for constituting monitoring committee is already submitted to Additional Director, MoEF, New Delhi for 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 are committed to 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.	There is no change in scope of the project. However, 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 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.	Agreed.
10.	This clearance letter is valid for a period of 10 years from the date of issue of this for commencement of construction work	The construction work began since December, 2011.

11.	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.	Till date we had not received the suggestion /representation while processing the proposal. The Clearance letter already been uploaded in the company's website.
12.	The proponent should advertise in atleast two local newspaper 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 the 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 .	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 :11 th August 2010 and 12 th August 2010, informing that project has been accorded environmental clearance . The clearance letter is available with SPCB and at MOeF website.
13.	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.	We are submitting six monthly compliance report as stipulated in Hard and soft copy to the concerned officials.
14.	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.	Agreed

ANNEXURE- B
ENVIRONMENTAL ACTIVITIES AND CORPORATE
SOCIAL RESPONSIBILITY

New Year Eve Cultural Ceremony

To mark the New Year Eve, Shiga Energy Pvt. Ltd organized a cultural program at Kabirthing, West Sikkim District, Geyzing.

Company had the honor of celebrating and welcoming the New Year with Local fellow citizens, members of Zilla Panchayat, Gram Panchayat, Employees of the project and the Project Welfare Committee. The celebration took place with bonfire & rocking musical night with Local Band "JOJO BAND" of Sakyong, West Sikkim.

The celebration came to end with a message of co-operation, brotherhood and promises of a prosperous tomorrow. Shiga Energy Pvt. Ltd thanked everyone for their participation and making the event a success.



STATE LEVEL MUAI THAI CHAMPIONSHIP AT GEYZING, WEST SIKKIM

The State Level Muai Thai Championship was held at Geyzing West Sikkim from 11th December to 14th December 2013. The event was sponsored by M/s Shiga Energy Pvt. Limited with an aim of uplifting the Muai Thai Sports in Sikkim as well as to inculcate General Awareness of people in sports activities.



MUAI THAI CHAMPIONSHIP

ENVIRONMENT MITIGATION AND SOCIAL WELFARE ACTIVITIES

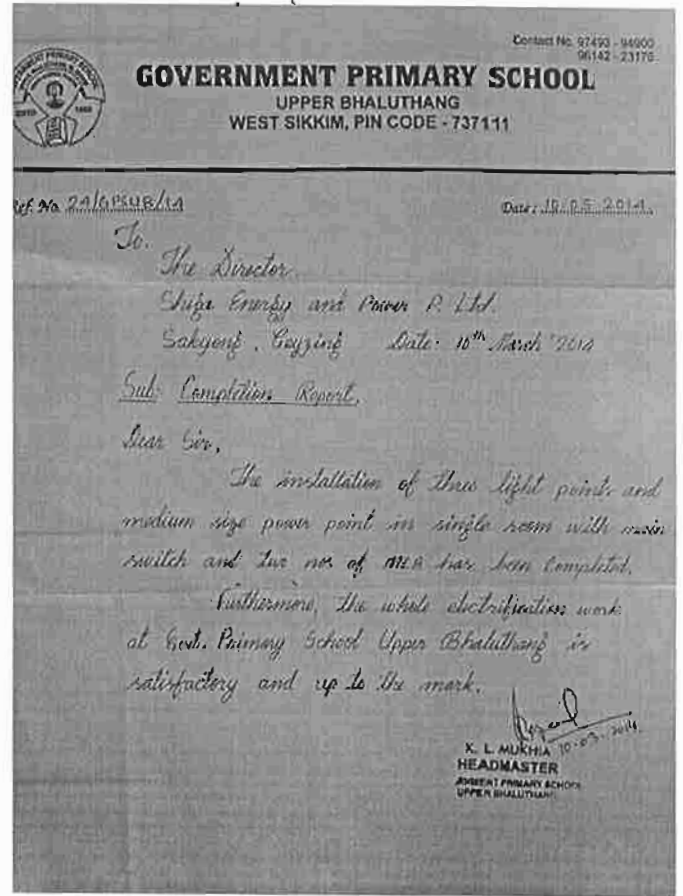
- **GREEN BOARDS TO RAMETY PRIMARY SCHOOL (EDUCATION)**
Shiga Energy Pvt. Ltd provided two nos. green boards to Ramety Primary School, which falls in the project area. The company officials handed over the same in presence of School children and In-charge of the institution.
- **PARTICIPATION OF COMPANY ON COMMUNITY PURAN (RELIGIOUS)**
Shiga Energy Pvt. Ltd took active participation on community religious program at Geyzing Bazar west Sikkim, held w.e.f, 14th to 20th March 2014. On the occasion the committees extend their heartiest blessings to Company for active participation.
- **BASIC ELECTRIFICATION AT UPPER BHALUTHANG PRIMARY `SCHOOL BUILDING (EDUCATION)**
In response to the request made by the local citizen and SMC of Upper Bhaluthang Primary School, Shiga Energy Pvt. Ltd installed basic electrification of school i.e. installation of three lights points in single room with main switch and two nos. of MCB boxes. The main aim of the scheme is to provide e-education to school children.



Community Religious Program



Green Boards to Ramtey School



Electrification completion report

Progress Report Annex-C

APRIL 2014

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-2 and Face-3 was completed in the month of Nov.2013

Under Ground excavation of HRT-Face-4 of 87.90m length is completed during the month making total progress of excavation to 994.50m.

Under Ground excavation of HRT-Face-5 of 74.40m length is completed during the month making total progress of excavation to 331.70m.

Power House open excavation along with slope protection was completed in the month of Feb.2014. Reinforcement binding in dewatering sump, Unit-1, Unit-2 and Hill side and River side is under progress during the month. 1st stage concreting in dewatering sump from EL.676.00m to El.679.00m, Unit-1 and Unit-2 from El.678.10 to El.679.00m, Hill side from El.680.25 to El.683.00 and River side from El.680.25 to El.681.25m is completed during the month making total progress of concrete to 642.50cum.

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 total progress is 1151.20m.

3.1.2 HRT-Face-2:

Under Ground excavation of HRT-Face-2 was completed in the month of Nov.2013 making total progress of excavation to 765.00m.

3.1.3 HRT-Face-3:

Under Ground excavation of HRT-Face-3 was completed in the month of Nov.2013 making total progress of excavation to 1181.48m.

Mud mat concreting of HRT-Face-3 completed for a length of 110m.

3.1.4 HRT-Face-4:

Under Ground excavation of HRT-Face-4 of 87.90m length is completed during the month making total progress of excavation to 994.50m.

3.1.5 HRT-Face-5:

Under Ground excavation of HRT-Face-5 of 74.4m length is completed during the month making total progress of excavation to 331.70m.

3.1.6 HRT-Face-6:

Under Ground excavation of HRT-Face-6 total progress is 87.8m.

3.2 Intake Site:

3.3 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)

3.4 Surge Shaft

Surface preparation for Adit to Surge shaft has been completed.

3.5 Power House area:

- **Excavation and Slope protection works**

Power House open excavation along with slope protection was completed in the month of Feb.2014. Earth mat laying and Mud mat concrete at various Elevations El.676.00, El.680.25, El.681.60, El.682.50, and El.683.00 and El.684.10 (175.5cum) in the Power House Pit was completed in the month of April 2014.

- **1st Stage Concreting**

Reinforcement binding in dewatering sump from El.676.00m to El.683.50m, Unit-1 and Unit-2 from El.678.10 to El.684.95m/ El.683.45m, Hill side from El.680.25 to El.683.00m and River Side at El.680.25m is under progress during the month. 1st stage concreting in dewatering sump from EL.676.00m to El.679.00m, Unit-1 and Unit-2 from El.678.10 to El.679.00m, Hill side from El.680.25 to El.683.00 and River side from El.680.25 to El.681.25m is completed during the month making total progress of concrete 642.50cum

- **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. 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
 12. Powerhouse balancing pipe and turbine drainage embedded pipes General Arrangement drawings
 13. Powerhouse cooling water, drainage and dewatering and fire protection water embedded pipes General Arrangement drawings
 14. Buried main earth mat and electrodes drawings of Power House, Tail race channel and switchyard area
- 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
3. MDCC request for Draft tube embedded parts – lot 1 (first part) Unit-1 and Unit-2
4. MDCC request for Draft tube embedded parts – lot 1 (second part) 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.

5. 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. Transmission service agreement (TSA) has been signed with Power Grid Corporation Limited (PGCIL) on 30th January, 2014. Switchyard and Transmission line works will start at a later stage.

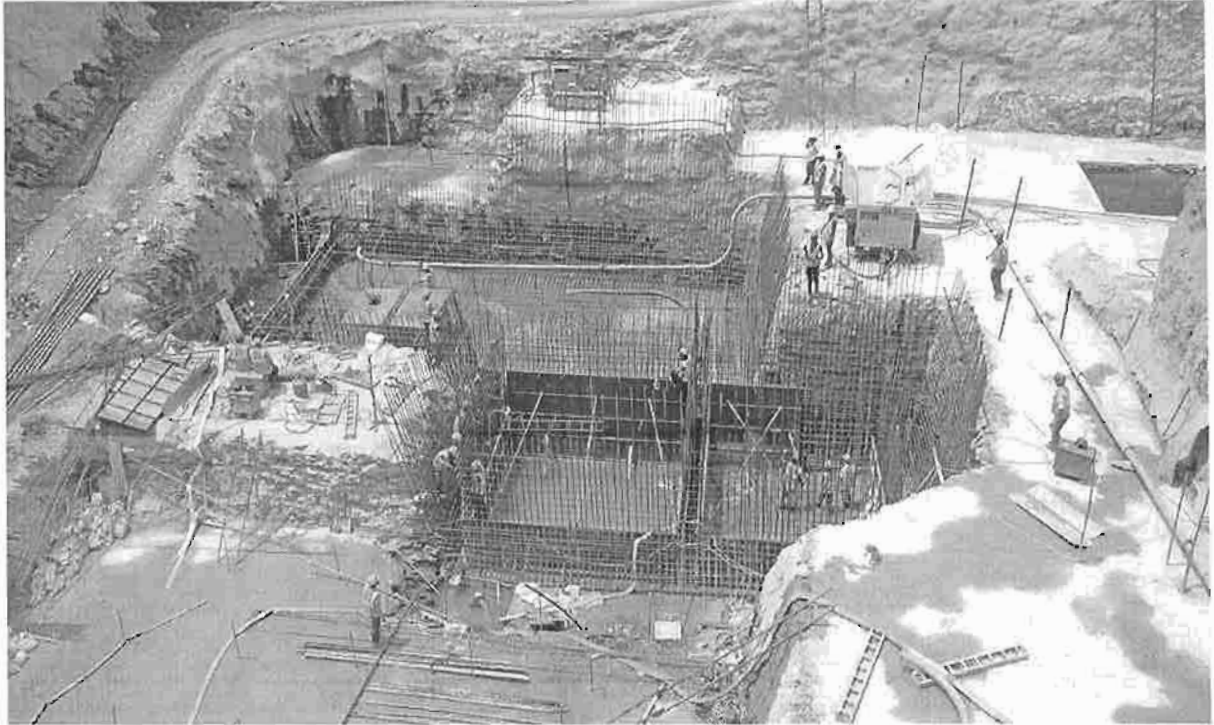
6. PROGRESS PHOTOGRAPHS:



Reinforcement Binding of Unit-1 under progress



Concrete pouring in dewatering sum under progress



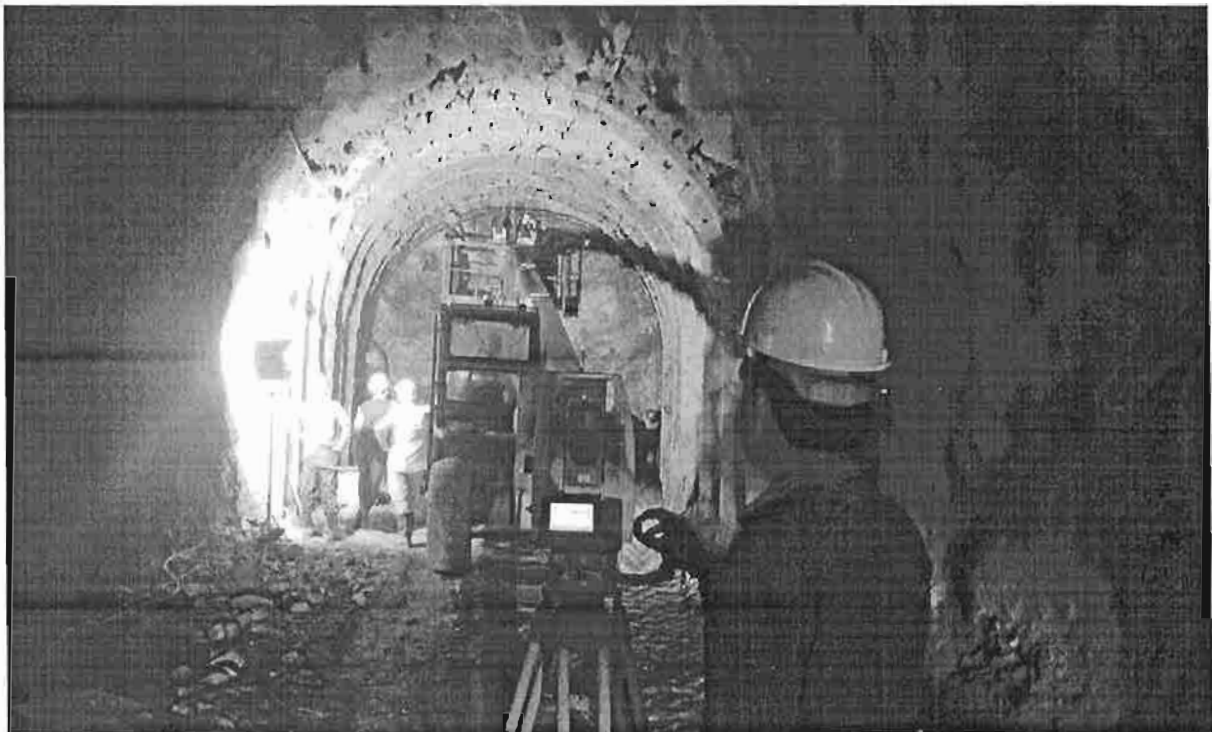
Concreting of Unit-1 raft under progress



Concreting of Unit-2 raft under progress



View of Power House reinforcement Binding



View of Face-4: Lattice Girder Erection under progress



View of Face-5: Face drilling under progress