

Dated: 17/12/2013

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Ref.No:JLHEP/F-5/13-14/743.

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

## <u>Subject: Six Monthly compliance Report on status of Environmental Safeguards of 96MW Jorethang Loop Hydro Electric Project.</u>

Dear Sir.

This has reference to Environmental Clearance to 96MW Jorethang Loop Hydro Electric Project vide MoEF letter No.J-12011/19/2006-IA-I dated 26.07.2006; followings 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 60, 67,914=00 vide cheque No.000052 HDFC Bank dated 13/03/2008
  - ii) Net Present Value: Rs 2, 24, 35,420=00 vide cheque No.000053 HDFC Bank dated 13/03/2008
  - iii) Crop Compensation: Rs 53, 94,370=00 vide cheque No.000054 HDFC Bank dated 13/03/2008
  - iv) CAT Plan: Rs 1, 36, 96,000=00 vide cheque No.000055 HDFC Bank dated 13/03/2008.
  - v) Biodiversity Conservation & Management Plan: Rs 50, 48,000=00 vide cheque No.000056 HDFC Bank dated 13/03/2008.
- 2. Six Monthly compliance on the status of the Jorethang Loop 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,

(Krishna Gurung)

Sr.A.G.M

For, DANS Energy Pvt. Ltd.

Copy to:

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

# 96MW JORETHANG LOOP HYDRO ELECTRIC PROJECT DANS ENERGY Pvt. Ltd.

## **DATA SHEET**

Sl. No.	Particulars	Details
1.	Project Type	Run- of- River Scheme
2.	Name of the Project	Jorethang Loop Hydro Electric Project
3.	i) Environmental Clearance ii) Forest Clearance	No.J-12011/19/2006-IA-I dated 26.7.2006  MoEF GOI vide letter No.3-SK-C047/2006-SHI/496-97 dated 02.05.2008  Forest Env.& wildlife Management Deptt . GOS vide Letter No.281(986)/FCA/FEWMD Dated 12.5.2008
4.	LOCATION:	
	District	South & West District
	State	Sikkim
	Latitude	27°09'37"N
	Longitude	88°17'47"E
5.	Address for Correspondence	
	a)Address of concerned Project Head(with pin code, Telephone/Fax)  b)Address of Project Incharge site office (With Pin code, Telephone/Fax	Shri. P.B.Praveen Kumar (Director), Dans Energy Pvt.Ltd. Rabdenling, annex-II, adjoining Royal Plaza, Upper Shyari, Gangtok. Telefax: 03592-280703 e-mail: praveenpb@dansenergy.com Mr. C.L. Thakur (Vice President), Housing Colony, Jorethang, South Sikkim, Telephone:03595-276658 Fax-03595-276408, e-mail: cl.thakur@dansenergy.com

6	Breakup of the Project Area	
	a) Forest Land Total	32.0506Ha (Surface:29.5433Ha+Underground:2.5073 Ha)
	South District	25.7406 Ha in South Sikkim
	West District	6.3100Ha in West Sikkim
7.	Break-up of the Project	Project affected families: 7
	affected Population.	Landless affected families: Nil
8.	Financial Details	
	a) Project cost as originally planned.	475.00 Crores.
·9.	Forest Land Requirement	
	The Status of approval diversion of forest land for non forestry use.	The Ministry of Environment & Forest Government of India vides its letter No.3-SK-C047/2006-SHI/496-97 dated 2nd May 2008 Forest Management Deptt. Government of Sikkim vide letter No.281 (986)/FCA/FEWMD dated 12/5/2008 has approved diversion of 32.0506Ha (Surface:29.5433Ha+Underground:2.5073Ha)

## Annexure-A

## Compliance Status on Environmental Clearance.

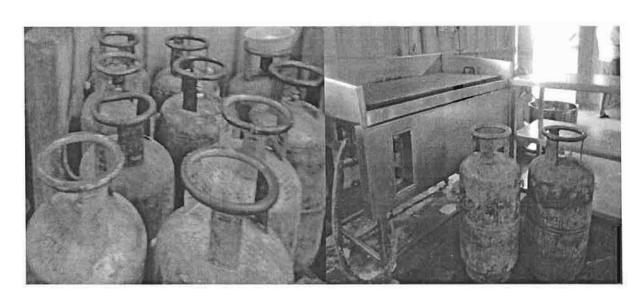
Part -A: Specific Conditions

Sl.No.	Stipulated Conditions	Compliance Status
(i)	Controlled blasting with very low charge and mild explosives should be used under close supervision. The quantity of explosive per delay to be used should be informed within one month from the date of issue of this letter.	Blasting is carried out under the supervision of Sikkim police. A fortnightly blasting report is also submitted to the District Collector & Superintendent of Police.
(ii)	Catchment Area Treatment Plan as has been proposed should be completed in Five Years.	We have deposited Rs. 1, 36, 96,000/- with State Forest Department Govt. of Sikkim Gangtok, for implementation of Catchment Area Treatment Plan. So far we have received an investment plan of Rs. 60 Lacs from the Department of Forests and Environment, Government of Sikkim.

Part-B: General Conditions

	Part-B: General Conditions	
Sl.No.	Stipulated Conditions	Compliance status
(i)	Adequate free fuel arrangement should be made	Sufficient free fuel (kerosene Oil & LPG) has been
	for the labour force engaged in the construction	arranged for the labour forces engaged in the construction
	work at project cost so that indiscriminate felling	work. A mess has been set up to cut down the usage of
	of trees is prevented.	fuel. Also, the fuel used in the mess is LPG. (Photo
		attached)
(ii)	Fuel depot may be opened at the site to provide	The fuel Depot has been opened at Chisopani, Jorethang.
	the fuel (kerosene/wood/LPG).Medical facilities	We have established a medical clinic at the barrage site
	as well as recreational facilities should also be	with two doctors and a nurse to provide medical facilities
	provided to the labourers.	to the labourers. (Photo attached)
(iii)	All the labourers to be engaged for construction	Labourers engaged at construction work were examined
	works should be thoroughly examined by health	by MBBS Doctors and treated before issuing them work
	personal and adequately treated before issuing	permit. Thereafter, the regular checkup is continued at
	them work permit.	site. We have also started HIV Test program at site for the
(3)	Destauration of Construction and including	labourers.
(iv)	Restoration of Construction area including dumping site of excavated materials should be	The dumping area at barrage area has been cleaned up by using the material to fill "cut n cover" portion and right
	ensured by leveling, filling up of burrow pits,	bank of barrage and remaining points are being taken care
	landscaping etc. The area should be properly	at appropriate time. Plantation programmes are also
	treated with suitable plantation.	conducted at site.
(v)	Financial provision should be made in the total	Yes, we have kept aside a financial provision to
(*)	budget of the project for implementation of the	implement the above mentioned safeguard measures and
	above suggested safeguard measures.	have already started the implementation of Environmental
		activities.
(vi)	A Multidisciplinary committee should be	We had constituted the Multidisciplinary Committee with
	constituted with representative from various	approval letter from MoEF, New Delhi vide letter No.J-
	disciplines of forestry, ecology, wildlife, soil	12011/19/2006-IA-A dated 12.7.2010 and latest site visit
	conservation, NGO etc, to oversee the effective	and meeting of the Multidisciplinary Committee took

	implementation of the safeguard measures.	place in January'2013.
(vii)	Six monthly monitoring reports should be submitted to the Ministry and its Regional Office, Shillong for review.	We have been submitting the Six monthly monitoring reports to the Ministry and its Regional Office, Shillong for review, and uploading the report at company website: www.dansenergy.com
4.	Officials from Regional Office MoEF, Shillong who would be monitoring the implementation of environmental safeguards should be given full Cooperation facilities and documents/Data by the project proponents during their inspection.	We have given full cooperation and will continue to do so by providing facilities and documents/data during the inspection by the officials from Regional Office MOEF, Shillong.
5.	The responsibility of implementation of environmental safeguards rests fully with the DANS Energy Pvt.Ltd. & Govt. of Sikkim.	We have been strictly complying with all the conditions set for the safeguards of the environment with the cooperation of Forest Env. & Wildlife Management Department, Government of Sikkim.
6.	In case of change in the Scope of the Project, Project would require a fresh appraisal.	No change in the scope of the project has been made till date.
7.	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 suggested safeguard measures in a time bound and satisfactory manner.	We agree.
8.	This clearance letter is valid for a period of five years from the date of issue of this for commencement of construction work.	Construction work was duly started in time.
9.	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.	Till date we have not received the suggestion / representation while processing the proposal. However, we will mark the concerned authorities a copy if the need arises.
10.	State Pollution Control Board / Committee should display a copy of the clearance letter at the Regional Officer, District Industries Center and Collector's office / Tehsildar's office for 30 days.	State Pollution Control Board has already displayed a copy of the clearance letter at the SPCB Office, District Industries Center, and Collector's Office for 30 days.
11.	The project proponent should advertise within seven days atleast 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 environment clearance.	circulated in the region around the Project "Hamro Prajashakti" in Nepali and "NOW" in English dated: 2nd August 2006, informing that Project has been accorded environmental clearance.



LPG DEPOT FOR THE LABOURERS



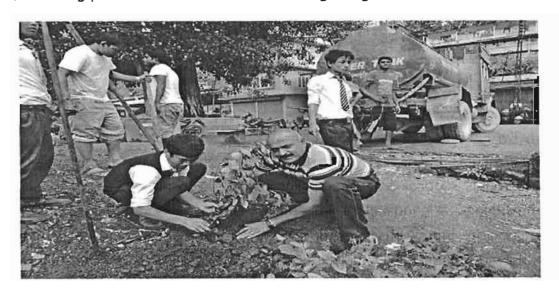
DISPENSARY FOR THE LABOURERS'

#### **ANNEXURE-B**

#### **ENVIRONMENTAL ACTIVITIES**

#### **WORLD ENVIRONMENT DAY, 2013**

On the eve of "Environment Day dated 5<sup>th</sup> day of June 2013 M/s. Dans Energy Pvt.Ltd., in coordination with forest environments & Wild Life Management Department South Sikkim and with the support of of Majhitar Village including school children's, Majhitar Scholl Teachers, Defence Personnel's, and Police Personnel's implemented the plantation at Majhitar Village and surroundings areas in and arounf project areas. We have planted more than 500 saplings in variety of plants like including of Herbs, Fruits Plants, flowering plants etc in 9 hours with a small get together.





#### NAPIER GRASS PLANTATION AT BHARI KHOLA DUMPING YARD

We started the plantations of Napier Grass collecting from Karfectar Area (Govt. Concern) engaged is husbandry and collected various other plants from Forest Department for our dumping area keeping in view of Environment Friendly at Bari Khola near Adit 1 (Jorethang) we have done the plantation on dumping area collecting fertile soil.





#### **PARYAVARAN MAHOTSAV**

Paryavaran Mahotsav was observed in Jorethang on 30<sup>th</sup> June 13' in co-ordination with S.P.C.B, Area MLA, Nagar Panchayats, and Officers from District Office, Forest Deptt., and DANS Energy Pvt.Ltd. and the private companies operating within Jorethang with a huge participation of local people.



On this auspicious event the main motive was cleanliness drive at Jorethnag, where all of the participants joined hands in cleaning the town, targeting two main locations i.e Municipal public toilet & Public health centre this programme was a huge success.





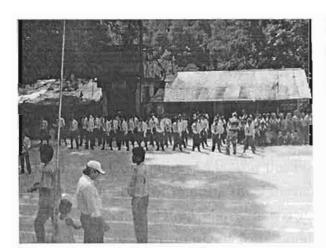


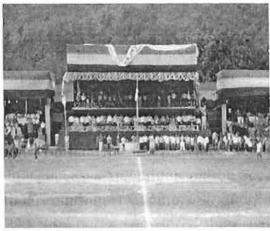


## ANNEXURE-C Corporate Social Responsibilities

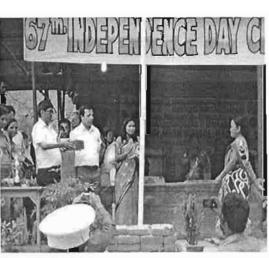
#### INDEPENDENCE DAY CELEBRATION

DANS Energy Pvt. Ltd actively participated in the 67th Independence Day Celebration held in various Schools and local areas at Jorethang. On the occasion a Football Tournament was organized at Borbote Primary School at Jorethang, West Sikkim. In line with its initiative to inculcate sports culture among students in Sikkim, the Company sponsored the Football Tournament and provided necessary financial support for making the Tournament a success. At Majitar, on the occasion of Independence Day, many activities like Painting, Dancing, Singing, Quiz competitions were organized for students. DANS Energy sponsored the prizes for these events.





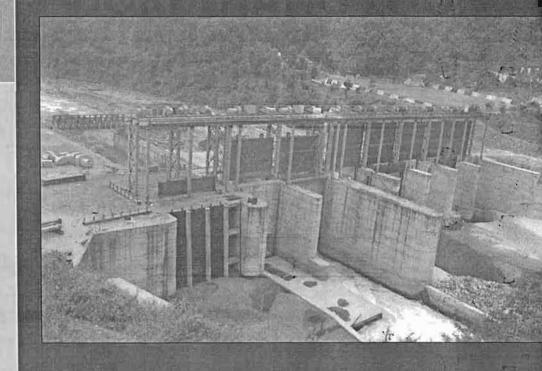




October 2013

# JORETHANG LOOP HEP (96 MW), SIKKIM

MONTHLY PROGRESS REPORT



DANS ENERGY PVT LTD

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- 1.2. Contractor's Mobilization and Facilities
- 1.3. Planning
- 1.4. Head Race Tunnel
- 1.5. Power Intake and Cut & Cover Conduit
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Annex – I Schematic Representation of Progress

#### 1. EXECUTIVE SUMMARY

Owner : DANS Energy Pvt. Ltd
Civil and HM Works Contractor : SEW Infrastructure Ltd

Electro-Mechanical Contractor : Alstom India Ltd
Design Consultant : SMEC India Pvt. Ltd
Owner's Engineer : Energy Infratech Pvt. Ltd

In HRT, total progress at Face-1 at the end of the month was 1876.20. A cavity had developed at this face at the end of September 2013. After filling the cavity with backfill concrete and grout, rehabilitation works are now in progress and face excavation is expected to restart in the first week of November 2013.

Total progress at Face-2 at the end of the month was 1597.20m. Disturbed and crushed rock mass with no inherent strength was encountered at this face leading to high deformation of the primary rock support. Excavation from this face was stopped in order to carry out benching excavation and placing of leveling concrete between RD 1476 and RD 1373. It is expected to re-start face excavation in the first week of November 2013.

32.00m of tunnel was excavated at Face-3 during this month making a total progress of 1761.10m.

34.90m of tunnel was excavated at Face-4 during this month making a total progress of 1231.10m.

211.92m is balance to be excavated between Face-1 and Face-2 and 186.35m is balance between Face-3 and Face-4.

An agreement has been signed with Geoconsult (Austria) in Sep 2013 and a team was employed by the Owner to assist in excavation between Face 1 and Face 2 which is passing through squeezing rock (fault zone). 2 Practical Advisors have been posted at site and they are providing full time (24 x 7) execution guidance to Contractor's staff for the balance tunnel excavation.

Both the gantries for tunnel lining overt concreting are available at site. Each set consists of a traveler and two 18m long skin forms. 108m of kicker wall forms are also stored at site. The mock erection of one gantry in barrage area was completed during the current month.

In Barrage, civil works are completed. Both Under Sluice service gates are erected and dogged on the dogging beam. Erection of all five service spillway gates has been completed.

Power Intake service gates were erected and tested and are in closed position. The trash racks are installed in three out of four openings to the Power Intake.

In Surge Shaft, lining up to El-366.00 (55m) was completed. Chipping of gate grooves was also completed.

The structural civil works in powerhouse are completed inclusive of roof installation. Some concrete finishing works, scaffolding dismantling and cleaning operations are balance in the upper floors of the powerhouse.

In Pressure Shaft, erection and concreting of 19 no's bottom horizontal ferrules (6m dia.) is completed out of 40 ferrules.

Erection and welding testing works of 10th branch ferrule (4.25m dia.) is completed towards Unit-2. The erection and welding of two ferrules (4.25m dia.) towards Unit-1 was completed.

The erection and concreting of 43 no's top horizontal ferrules (6m. dia.) is completed out of 58 ferrules. Another 6 no's ferrules erection and welding works are under progress.

In Drop Shaft, 3.60m were excavated and supported till the end of the month reaching El-257.40 and around 6.0m is balance to be excavated.

In Tail Race Channel, all works were completed.

The state highway between Melli and Jorethang is being enlarged and the hillside slope is cut at a very steep angle. This including the daily monsoon rain has led to interruptions to traffic and traffic jams are hampering the movement at project site. Cut trees are frequently hampering the power supply at site.

#### 2. Project Status

#### 2.1. Clearances

DEPL has obtained all clearances, which are required for construction of the Jorethang Loop HEP.

#### 2.2. Financial Closure

The financial closure for the Project was achieved in the month of March 2010.

#### 3. PROGRESS OF WORK AT SITE

#### 3.1. Infrastructure Works

Maintenance and repairing of access roads to barrage, powerhouse and Adit 2 is continuing on all access roads and all the access roads are operational.

#### 3.2. Contractor's Mobilization and Facilities

An additional batching plant has been procured for concreting of the tunnel lining. The batching plant installation is in final stage at Adit 1 along with a godown for cement storage. Commissioning of the batching plant is scheduled in the next month.

#### 3.3. Planning

All Civil Construction Drawings were released for construction to the Civil Contractor.

All shop drawings for the hydro mechanical works at Barrage and Powerhouse were approved and released for fabrication to the HM Contractor.

#### 4. PROGRESS OF CIVIL WORKS DURING THE MONTH

#### 4.1. Head Race Tunnel

#### a) HRT Face 1

The excavation face at the end of October 2013 is at RD 1876.20m. As the excavation of the HRT from this face has also entered the weak rock (weak Carbonaceous shale), a cavity has developed at this face at the end of September 2013.

After filling the cavity with backfill concrete and grout, rehabilitation works are now in progress by replacing the 12 lattice girders deformed during the cavity development with new one of larger diameter. Two layers of wiremesh between 3 layers of shotcrete are placed both in overt and invert. Long self-drilling grouted anchor bolts are installed in overt and invert. To cater the important ingress of seepage long drain holes are drilled. Pipe forepoling was replaced by a combination of SN bolts (32mm dia) and grouted SD bolts.

The face excavation is expected to restart in the first week of November 2013.

#### b) HRT Face 2

The excavation face at the end of October 2013 is at RD 1597.20m. Disturbed and crushed rock mass with no inherent strength was encountered at this face leading to high deformation of the primary rock support. The primary support has to be replaced with new supports, longer bolts and completion of invert support consisting of two layers of wiremesh between three layers of shotcrete and 6m long SD grouted bolts starting from RD 1590.20 to face RD 1597.20.

Excavation from this face was stopped in order to carry out benching excavation and placing of leveling concrete between RD 1476 and RD 1373.

After arrival of the Geoconsult team on site, preparations are made to re-start face excavation. Road and ventilation improvements were carried out as well as reconnection of water and power supply to the face.

It is expected to re-start face excavation in the first week of November 2013.

#### c) HRT Face 3

32.00m of HRT was excavated at this face making a total progress of 1763.10m.

#### d) HRT Face 4

34.90m of HRT was excavated at this face making a total progress of 1231.10m.

211.92m is balance to be excavated between faces 1 and 2 and 186.35m between faces 3 and 4.

Two sets of gantries for tunnel lining overt concreting were delivered on Site. Each set consists of a traveler and two 18m long skin forms. 108m of kicker wall forms are also stored on Site. The mock erection of one gantry in barrage area was completed during the current month.

#### 4.2. Power Intake and Cut & Cover Conduit:

The Power Intake and Cut & Cover structures are completed, with the exception of the connection block at the portal of the Inlet Tunnel. This block will be concreted after all excavation and concreting activities of the HRT from this face are completed.

#### 4.3. Barrage phase I:

The following works are the only remaining to be completed in barrage phase I structure:

- Installation of trash racks panels is completed in three openings of the Power Intake with one more opening to be completed.
- Some repair and finishing of concrete.

#### 4.4. Barrage phase II:

Civil Works which were carried out in the current month:

- Backfilling was done to close the gap between the training wall and right bank.
- Chipping of spillway grooves was completed and all five spillway service gates and stoplog lowered.

The following works are the only remaining to be completed in barrage phase Il structure:

- Testing of the five spillway service gates
- Some concrete finishing and repair works.

#### 4.5. Surge Shaft:

Last lift of lining was concreted in July 2012 in Surge Shaft completing lining up to El. 366.00 (55m). Chipping of gate grooves was completed.

Balance works:

Concreting of Surge Shaft bottom slab and installation of Surge Shaft gate.

#### 4.6. Power House:

The structural Civil Works in powerhouse are completed inclusive of roof installation. Some concrete finishing works, scaffolding dismantling and cleaning operations are balance in the upper floors of the powerhouse.

The following works are balance to isolate the machine hall floor:

- Brick works as well as inside and outside plastering of the walls between El 276.00 and El 280.00 and above the EOT beam (El 285.50);
- Installation of glass panels between the El 280.00 beam and the EOT beam (El 285.50).

The formwork and reinforcement works are still in progress for the elevator shaft with the outer wall completed up to El 272.00 and the inner wall up to El 274.65.

#### 4.7. Pressure Shaft:

The bottom horizontal tunnel (80.10m) excavation was completed on February 2013.

#### a) Bottom horizontal Shaft

The erection and concerting of 19 no's bottom horizontal ferrules (6m. dia) is completed out of 40 ferrules.

Erection and welding testing works of 10<sup>th</sup> branch ferrules (4.25m dia) completed towards Unit #2 and embedded in concrete.

The erection, welding and testing of two ferrules (4.25m dia) towards Unit#1 was also completed.

The erection of y-piece in between unit-1 and 2 is under progress.

#### b) Top horizontal Shaft

The erection and concreting of 43 no's top horizontal ferrules (6m. dia) is completed out of 58 ferrules. Another 6 no's ferrules erection and welding works are under progress.

#### c) Ferrule fabrication

Bending, alignment and welding of steel plates for balance ferrules fabrication is in progress in the fabrication shop.

#### 4.8. Drop Shaft;

3.60m were excavated and supported this month reaching El 257.40 with a total of 40.34m excavated so far and approximate 6m balance to be excavated.

#### 4.9. Tail Race Channel:

Tail Race channel works are completed. Dewatering of the tailrace channel is in progress (El 248.00) to allow installation of the guides and lowering of the draft tube gates.

#### 5. QUALITY CONTROL

The detail quality control report is given in Annexure – II.

#### 6. PROGRESS OF HYDROMECHANICAL WORKS

#### 6.1. Fabrication

- Barrage Area
- Fabrication of the surge shaft gate has been completed.

#### Power House Area

- Marking, cutting and rolling of plates for balance ferrule is in progress. So far, 35 nos, ferrules (6 m dia.) for bottom horizontal pressure shaft and 54 nos, ferrule (6

m dia) for top horizontal and 4 nos. ferrules for vertical shaft have been fabricated.

- Longitudinal welding of 'Y' piece shells (7 nos.) has been completed.
- Fabrication of the transition (downstream of surge shaft gate) is in progress.

#### 6.2. Erection

#### Barrage Area

- Trial lowering and testing of service gate and stoplog elements in the spillway gate grooves is in progress.

#### Power House Area

#### Penstock:

- Branch Ferrules (4.25 m dla.): Erection, alignment, welding & NDT of 22 nos. branch ferrule has been completed.
- Bottom Horizontal Ferrules (6 m. dia.): Erection, alignment, welding & NDT of 19 nos. ferrules have been completed.
- Top Horizontal Ferrules (6 m. dia.): Out of 58 ferrules, erection, alignment, welding and NDT of 49 nos. ferrules have been completed so far.
- **Bifurcation:** Erection and alignment of sickle plate has been completed while the welding of the same is in progress. Erection and alignment of 'Y' piece segments are in progress. Erection and alignment of 3 nos. segment has been done so far.

**Draft Tube Gate:** Erection and alignment of the balance side guides is in progress.

#### 7. PROGRESS OF ELECTRO-MECHANICAL WORK

The E&M works are progressing well. The detailed status of E&M works is given below:

- 1. Turbine, Governor and MIV: Manufacturing of almost all the components of Turbine, Governor and MIV like DT liner, DT cone, Stay Ring, Spiral Case, Distributor, Runner, Shaft, Bearings, etc. is completed and these have been received at site.
- 2. Generator and Excitation system: Almost all generator components like Stator, Rotor spider, Rotor laminations, Rotor poles, Shafts and lower and upper brackets, bearings, Excitation system etc. for both Unit I and II have been received at site.
- 3. Balance of Plant (BOP): 11KV switchgear panels, UAT & SST, 800KVA DG set, 220KV Circuit Breakers, Isolators, LA, Wave trap, CVT, Control & relay panels, Condition monitoring system, Protection system, Power & control cables, Cable trays, PLCC equipment, Inverter, LP compressor, Oil handling system, 163/30 T EOT crane, HVAC system material, GSU transformers, Cooling Water, Drainage & Dewatering valves,

pumps, 220 kv switchyard material and control room furniture have been received at site. Manufacturing of remaining BOP items is nearing completion.

4. Erection, Testing & Commissioning: Earth mat and embedded pipes in 1st stage concrete has been completed. Erection and concrete of Draft tube for U-1 and U-2 is completed. Installation of Anchor pins & Base plates of Spiral case for U-1 & U-2 has been completed. Erection of Stayring, Spiral case segment of U-1 and U-2 has been completed. Hydraulic pressure testing of Spiral case of U-1 and U-2 was completed successfully and its concreting has been completed. Lower bracket foundation embedment sleeves and rotor foundation have been completed for both U-1 and U-2. The erection, testing and commissioning of EOT Crane rail covering the total Powerhouse area has been completed. Draft tube bulk head for U-1 and U-2 has been installed. Cable tray installation at MIV floor and Turbine floor has been completed. Cable separator and earthing flat installation in turbine floor (El.258.50M) is in progress. Bottom ring for U-1 has been installed and bottom ring has been shifted to service bay area and turbine preassembly is in progress. Governing system material like nitrogen cylinder pack, piston accumulator and power pack set for both U-1 and U-2 has been shifted to turbine floor and positioning has been completed. The process of stator assembly and rotor assembly is in progress at service bay area for U-1. Stator segments of U-2 in service bay area are undergoing cleaning.

#### 8. TRANSMISSION SYSTEM

DEPL has signed the Bulk Power Transmission Agreement (BPTA) with Powergrid Corporation of India Ltd (PGCIL) on 24th Feb 2010 for transmission of power. For the 220 kV Line from JLHEP switch yard to PGCIL substation at New Melli (Tokal), preliminary Survey & detailed Survey including preparation of profile drawings is completed. Necessary clearance from the Forest Department for forest land for the proposed transmission line has been received.

The Contract has been signed for both Supply and Service works to M/s Hythro Power Corporation Limited (HPCL) and the Contract for Civil Foundations of the towers has been signed with M/s Zaynun Engineering Pvt. Ltd. In line with the terms of the contract agreement, initial advance has also been released to the Contractors. Initial drawings of 220kV transmission line towers foundation, structure & accessories stands approved. Store space has been allotted and initial lot of towers and stub materials has been received at site.

#### 9. Social and Environmental Activities

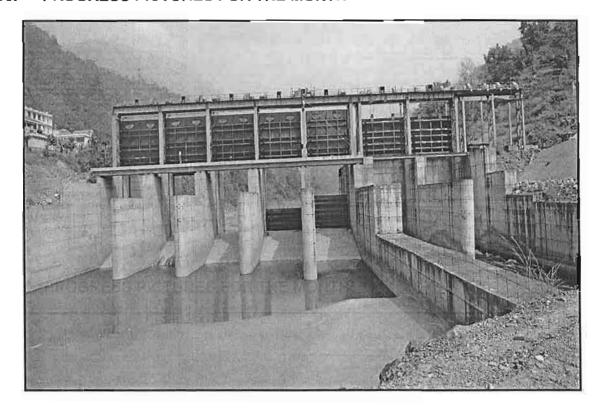
DANS Energy Pvt. Ltd. in its effort to improve medical facilities in the area provided Namchi District Hospital with medical equipment in the presence of the Chief Medical Officer (CMO). Several sets of Stethoscope, Drip stand, X-ray view box, BP instruments, Oxygen flow meter etc. were provided.



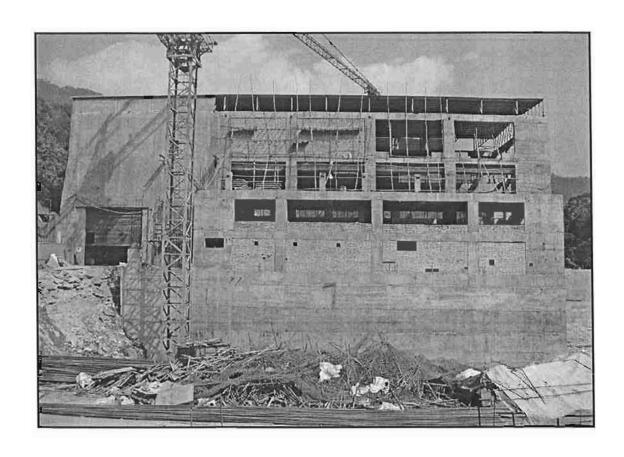


Medical Equipment being provided to Namchi District Hospital

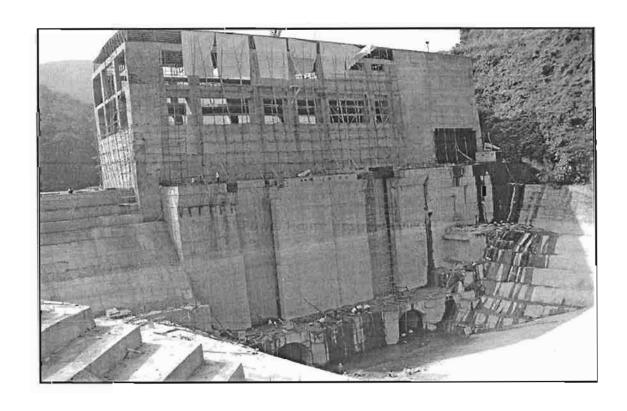
## 10. PROGRESS PICTURES FOR THE MONTH



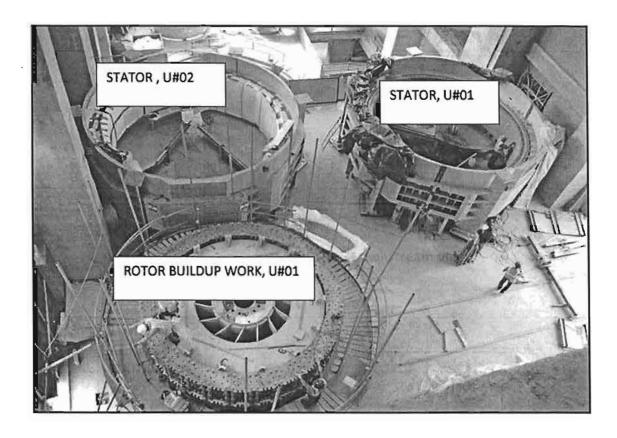
Barrage Phase-II Downstream view



Power House Upstream view



#### Power House and TRC - Downstream view

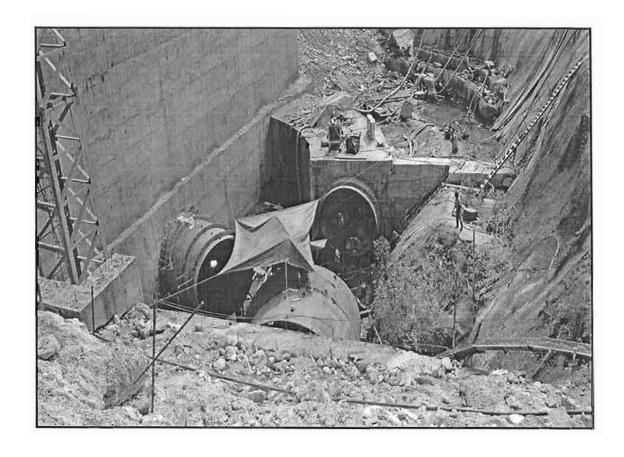


**Power House Service Bay** 

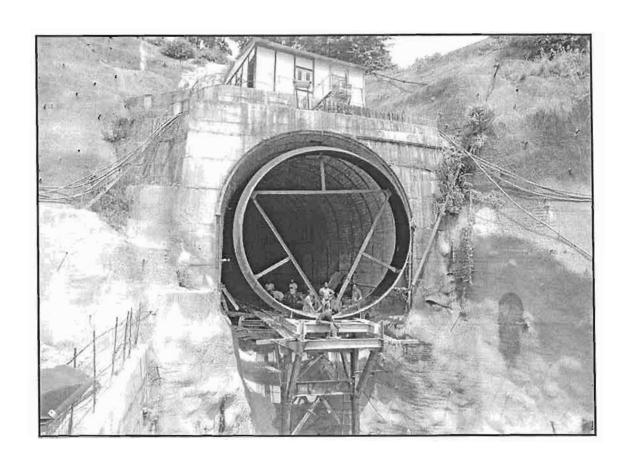




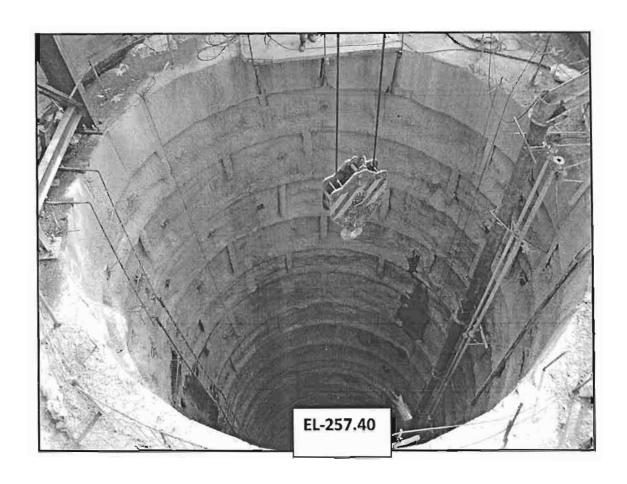
## Mock Erection of CIFA Gantry for HRT Lining



**Erection of Y-piece** 



Ferrules Erection in Top Horizontal Tunnel



Drop Shaft