Form for seeking prior approval under section 2 of the proposals by the State Governments and other authorities

> PART – I (to be filled up by user agency)

1. Project Details:-

i) Short narrative of the proposal and project / scheme for which the forest land is required

Background

State Government of Arunachal Pradesh decided to develop Etalin HEP in the Private Sector / Joint Sector on Build, Own, Operate and Transfer (BOOT) basis. Hydro Power Development Corporation of Arunachal Pradesh Limited (HPDCAPL), a public sector undertaking set up by the State Govt. of Arunachal Pradesh for development of Hydro Power Projects in the State was alloted the project by State Govt. of Arunachal Pradesh for its implementation under Joint Venture (JV) with Jindal Power Limited (JPL). Accordingly, a Memorandum of Agreement (MoA) to develop the project was executed between Government of Arunachal Pradesh, HPDCAPL and JPL on 01st December 2008 followed with the JV agreement between HPDCAPL & JPL on 08th December 2008. Etalin Hydro Electric Power Company Limited (EHEPCL) was formed as a joint venture company for development / implementation of the Project.

Justification of the Project

The capacity addition requirement during 12th plan on All-India basis is 75,785 MW comprising of 9,204 MW from Hydro sector. The likely Hydro capacity addition of 9,204 MW during 12th plan includes 4,177 MW in North East Region (NER) and Sikkim (2,810 MW capacity addition in NER and 1367 MW in Sikkim). This includes 2,710 MW for Arunachal Pradesh. Also, the capacity addition requirement during 13th plan is 93,456 MW; comprising of 12, 006 MW from Hydro sector.

Arunachal Pradesh state plans to harness its enormous natural resources like forests and hydro power and exploit its mineral wealth to usher in an era of economic development.

Considering the Projected Hydro capacity addition programmes during 12th plan (9,204 MW) & 13th plan (12,006 MW) (Source: CEA), new schemes have to be taken up immediately and implemented to derive timely benefits. The most important source of power development in the north-eastern region is Arunachal Pradesh and other sister states.

Considering the growth of peak demand and anticipated addition of generating capacity in the state, the region and the country, and also from the current status of development of hydro power potential of Arunachal Pradesh, it is pragmatic that earnest efforts are made for developing the hydro power sector of the state. Implementation of Etalin Hydroelectric Project of 3097MW capacity would contribute significantly towards meeting this objective.

The project is viable not only due to the reasonable tariff of Rs $4.91 - 1^{st}$ year tariff & Rs 4.32 - tariff for 35 years but also because the Project is run of the river scheme and affects no other projects or catchments. The project has the support of the local populace and has no major environmental issues. In addition, it has remarkably favourable geological conditions for the region.

Type of the Project

Etalin HEP is proposed to be developed as a combination of two "run-of-the-river" schemes having diurnal storage which are being developed purely for hydroelectric power generation purpose. The Project envisages construction of concrete gravity dams on Tangon and Dri rivers and diverting the water through two separate waterway systems to utilize the available head in a common underground powerhouse located just upstream of the confluence of Dri and Tangon rivers. Heights of dams, as envisaged for diversion of Dri and Tangon rivers, are 101.5m and 80 m respectively. The Installed Capacity for the scheme proposed on Dri limb is 1861.60 MW, comprising of a small hydro scheme of 19.60 MW at the toe of the dam on Dri River and six units of 307 MW each in the common underground powerhouse. The Installed Capacity for the scheme proposed at the toe of the dam on Tangon River and four units of 307 MW each in the common underground powerhouse. The total Installed Capacity of the project is 3097 MW. Energy generation from the project in 90% dependable year with 95% machine availability is estimated to be 12,991.52 MU.

The salient features of the Project are briefed hereunder;

Salient Features

General	Market Contractor Market			
Location	Dibang Valley District			
River/ Water Source	Dri & Tangon			
Type of Development	Run of River (ROR)			
Hydrology				
	Dri Limb	Tangon Limb		
At 90% Dependable Year Annual Inflow (m ³)	8375	5335		
Catchment Area (km ²)	3685 sq km	2573 sq km		
SALIENT FEATURES				
Dam Type	Concrete Gravity	Concrete Gravity		
Length at top / Height (m)	213.7m/ 101.5m	184.1m/ 80m		
FRL/ MDDL (m)	El 1045m/ El 1039m	El 1050m/ El 1040m		
Gross Storage at FRL (Mcum.)	21.97 MCM	6.15 MCM		
Gross Storage at MDDL (Mcum.)	17.37 MCM	3.21 MCM		
Live Storage (Mcum.)	4.6 MCM	2.94 MCM		
Intake				
(a) Gate No. & Size	2 Nos. & 7.0m x 7.5m	3 Nos. & 6.0 x 5.75m		
(b) Desilting Arrangement: No., Size (m)	-	3 Nos., 18.5m (W) x 26.5m (H) x 350m		
Headrace Tunnel				
ricaulace luillei				
Length (m)/ Dia.(m)/ Shape	10722m/ 11.3m/ Circular	13045m / 9.7m/ Circular		
Length (m)/ Dia.(m)/ Shape Surge Shaft	10722m/ 11.3m/ Circular	13045m / 9.7m/ Circular		
Length (m)/ Dia.(m)/ Shape Surge Shaft Type	10722m/ 11.3m/ Circular Restricted orifice type	13045m / 9.7m/ Circular Restricted orifice type		
Length (m)/ Dia.(m)/ Shape Surge Shaft Type No./ Dia./ Height (m)	10722m/ 11.3m/ Circular Restricted orifice type 1No./ 26.0m/ 132m	13045m / 9.7m/ Circular Restricted orifice type 1No./ 21.0m/ 137m		
Length (m)/ Dia.(m)/ Shape Surge Shaft Type No./ Dia./ Height (m) Pressure Shaft	10722m/ 11.3m/ Circular Restricted orifice type 1No./ 26.0m/ 132m	13045m / 9.7m/ Circular Restricted orifice type 1No./ 21.0m/ 137m		
Length (m)/ Dia.(m)/ Shape Surge Shaft Type No./ Dia./ Height (m) Pressure Shaft No./Length (m)/ Dia. (m)	10722m/ 11.3m/ Circular Restricted orifice type 1No./ 26.0m/ 132m 3Nos./ 49.2, 26.6, 49.2m/ 5.6m	13045m / 9.7m/ Circular Restricted orifice type 1No./ 21.0m/ 137m 2Nos./ 46m each, / 5.6m		
Length (m)/ Dia.(m)/ Shape Surge Shaft Type No./ Dia./ Height (m) Pressure Shaft No./Length (m)/ Dia. (m) Unit Pressure Shaft	10722m/ 11.3m/ Circular Restricted orifice type 1No./ 26.0m/ 132m 3Nos./ 49.2, 26.6, 49.2m/ 5.6m	13045m / 9.7m/ Circular Restricted orifice type 1No./ 21.0m/ 137m 2Nos./ 46m each, / 5.6m		
Length (m)/ Dia.(m)/ Shape Surge Shaft Type No./ Dia./ Height (m) Pressure Shaft No./Length (m)/ Dia. (m) Unit Pressure Shaft No./Length (m)/ Dia. (m)	10722m/ 11.3m/ Circular Restricted orifice type 1No./ 26.0m/ 132m 3Nos./ 49.2, 26.6, 49.2m/ 5.6m 6Nos./ 512m each/ 4.0m	13045m / 9.7m/ Circular Restricted orifice type 1No./ 21.0m/ 137m 2Nos./ 46m each, / 5.6m 4Nos./ 512m each/ 4.0m		
Length (m)/ Dia.(m)/ Shape Surge Shaft Type No./ Dia./ Height (m) Pressure Shaft No./Length (m)/ Dia. (m) Unit Pressure Shaft No./Length (m)/ Dia. (m) Main Power House	10722m/ 11.3m/ Circular Restricted orifice type 1No./ 26.0m/ 132m 3Nos./ 49.2, 26.6, 49.2m/ 5.6m 6Nos./ 512m each/ 4.0m	13045m / 9.7m/ Circular Restricted orifice type 1No./ 21.0m/ 137m 2Nos./ 46m each, / 5.6m 4Nos./ 512m each/ 4.0m		
Length (m)/ Dia.(m)/ Shape Surge Shaft Type No./ Dia./ Height (m) Pressure Shaft No./Length (m)/ Dia. (m) Unit Pressure Shaft No./Length (m)/ Dia. (m) Main Power House Size	10722m/ 11.3m/ Circular Restricted orifice type 1No./ 26.0m/ 132m 3Nos./ 49.2, 26.6, 49.2m/ 5.6m 6Nos./ 512m each/ 4.0m 352m (L) / 23.5m (W) / 59.83m	13045m / 9.7m/ Circular Restricted orifice type 1No./ 21.0m/ 137m 2Nos./ 46m each, / 5.6m 4Nos./ 512m each/ 4.0m (H)		
Length (m)/ Dia.(m)/ Shape Surge Shaft Type No./ Dia./ Height (m) Pressure Shaft No./Length (m)/ Dia. (m) Unit Pressure Shaft No./Length (m)/ Dia. (m) Main Power House Size Tail race Channel/ Tunnel	10722m/ 11.3m/ Circular Restricted orifice type 1No./ 26.0m/ 132m 3Nos./ 49.2, 26.6, 49.2m/ 5.6m 6Nos./ 512m each/ 4.0m 352m (L) / 23.5m (W) / 59.83m	13045m / 9.7m/ Circular Restricted orifice type 1No./ 21.0m/ 137m 2Nos./ 46m each, / 5.6m 4Nos./ 512m each/ 4.0m (H)		

Length (m)		544m
Dam-toe Power House	Dri	Tangon
ERL (m) / MDDL (m)	EL 1045m/ EL 1039m	EL 1050m/ EL 1040m
Intake Structure		EI. 103011/ EI. 104011
Gate No. & Size	1 No. & 4 675m (H) x 2.8m	1 No 8 (01m (H) x
Gate NO. & GIZE	(M)	$1 \text{ NO. } \approx 4.01111 (\Pi) \times 2.4 \text{ m} (\Lambda I)$
Penstock		2.4111 (00)
No /Length (m)/ Dia (m)	1 No / 108 6m/ 2.8m	1 No / 68 5m/ 2 4m
Size of Surface Powerbouse	$20m(1) \times 20m(M) \times 40.7m$	$19m (M) \times 32m (L) \times$
	(H)	36 35m (H)
Tail Duct		
No. Type & Shape Size	1 No / Rectangular/ 5 5m (W)	1 No / Rectangular/ 4m
Length (m)	x 3.5m (H)/ 39.7m (L)	$(W) \times 3m (H)/27.9m (L)$
Generating Plant and Machin	erv (Main Powerhouse)	
Turbine		
No./Type	6 Nos. / Vertical Francis	4 Nos / Vertical Francis
Rated Output (MW)	311.68 MW	311.68 MW
Rated Head (m)	420 m	420 m
Gross Head (m)	447 m	442 m
Max. / Min. Net Head (m)	446.90 m / 413.40 m	441.90 m / 415.90 m
Design Discharge/Unit	80.05 m ³ /sec	80.05 m ³ /sec
(Cumecs)		
Generator		
No./Type	6 Nos. /Semi Umbrella	4 Nos. /Semi Umbrella
Rated Output (MW)	307 MW	307 MW
Generating Plant and Machin	ery (Dam-toe Powerhouse)	
Turbine		
No./Type	1 No./ Vertical Francis	1 No./ Vertical Francis
Rated Output (MW)	20 MW	7.55 MW
Rated Head (m)	72.5 m	43 m
Max. / Min. Gross Head (m)	77.8 m / 71.0 m	49 m / 38.5 m
Design Discharge/Unit	30.64 m ³ /sec	19.52 m³/sec
(Cumecs)		
Generator		
No./Type	1 No./ Suspended Type	1 No./ Suspended Type
Rated Output (MW)	19.6 MW	7.4 MW

Project Location / Access

The project is located in Dibang Valley district of Arunachal Pradesh, a large, sparsely populated state situated in the North-Eastern part of India. Anini, the headquarter of Dibang Valley district is around 240 km from Roing, an important town in the area and district headquarter of Lower Dibang Valley district. Roing is at about 110 km from Tinsukia, the nearest railhead to the project. The nearest airport is at Dibrugarh, about 60 km from Tinsukia. The project derives its name from Etalin village, which is located near the confluence of Dri and Tangon rivers, around 185 km from Roing. The diversion structure on Dri limb is located near Eron village, around 22 km from Etalin, along Etalin-Anini road. The diversion structure on Tangon limb is located near Avonli village, which is 17 km from Etalin along Etalin-Maliney road. The underground powerhouse is located near the Etalin village.

Figure-1 shows the location of the Project on the map of Arunachal Pradesh and Access route to project is shown in Figure-2.



Figure – 1



Figure – 2

Ecological and Environmental Aspects

A detailed Environment Impact Assessment (EIA) study as per Terms of Reference approved by MoEF, GOI has been conducted for studying the different effects of the construction of dam on physical, biological and social environments and EIA report is under finalization. Based upon the Environmental impacts, Environmental Management Plan (EMP) report is also under finalization.

The environmental impacts of the Etalin Project are generally low. The social impacts are restricted to a total of 265 families (from eighteen affected villages), who are expected to lose some land. Out of these 265 affected families, there would be physical displacement of about 95 families who are expected to lose their houses. The local populace is generally in favour of the project and a range of appropriate compensatory measures are proposed to mitigate the effects of the project.

Clean Development Mechanism (CDM)

This project is expected to lead to measurable emission reductions and promote sustainable development of the host country. The project is, therefore, likely to fulfill the CDM requirement criteria and would qualify as a large scale CDM project activity (>15MW).

This project has a potential to generate net power 12837.08 MU which results in equivalent emission reductions of approximately 11,591,887 tonnes of carbon dioxide equivalent, annually i.e. this project has an estimated CER potential of approximately 11,591,887 tCO₂.

Etalin HEP qualifies as CDM project activity as the emission reductions achieved by this project activity is real, measurable and additional. The implementation of this project will contribute to meet the power and energy demand in the NEWNE grid and will displace electricity that would otherwise have to be produced through the construction of fossil fuel based thermal power plants.

The project once registered with CDM Board of UNFCCC will share CDM revenues towards local development measures as per MoEF guidelines. The construction and operation of this project (with CDM mechanism), in addition to emission reductions, would lead to overall sustainable development by making a direct as well as indirect contribution to the local region.

ii) Map showing the required forest land, boundary of adjoining forest on a 1:50,000 scale map

Revised Map showing required land for acquisition superimposed over toposheet (in the scale 1:50,000) is enclosed at **Annex – I.** Also, Revised Infrastructure Layout Plan of the Project is enclosed at **Annex – II.**

iii) Cost of the Project

The 3097 MW Etalin Project is estimated to cost Rs. 25,296.95 Crores at December 2011 Price Level including Rs. 9,865.34 Crores on Civil & HM works, Rs. 3,566.65 Crores on E&M works, Rs. 52 Crores on Miscellaneous, Rs. 5348.77 Crores on Price Escalation during construction and Rs. 6464.19 Crores on IDC & Financing Charges. Levellised Tariff (with free power to state) has been worked out as Rs. 4.32 / kWh.

iv) Justification for locating the project in forest area

Etalin Project is to be developed within the limits of levels provided by the State Government of Arunachal Pradesh. Developing and assessing various alternative schemes forms one of the first activities during the preparation of the DPR. Various alternative studies have been carried out for arriving at the most optimal location & layout of the Project. While carrying out the detailed study of the project during DPR stage, two alternative sites of Dri & Tangon dams were proposed & studied. Alternative – II for Dri Dam & Tangon Dams were finally selected for carrying out further investigations. A comparative study of two alternatives for Dri & Tangon (for their selection / rejection) is briefed below:

Dri Alternatives:

<u>Demerits of Alternative – I:</u> (i) Location of Dam Axis was in curvature portion of the River which makes design & layout finalization (with energy dissipation arrangement) difficult. (ii) Width of the valley was inadequate for spillway layout inviting significant quantity of excavation for accommodating the spillway & (iii) Accommodation of Diversion Tunnels was difficult due to existing Inu Panu Pani Nallah on left bank.

<u>Merits of Alternative – II:</u> (i) Dam Axis falls in straight course of river section, (ii) Width of the valley is adequate to accommodate spillway in gorge portion & marginal rock excavation is involved & (iii) Overburden depth & Rock mass condition was found suitable for Dam & appurtenant structures.

Tangon Alternatives:

<u>Demerits of Alternative – I:</u> (i) Extensive terrace deposit found on left bank, (ii) Width of the River was large i.e., 170 m, (iii) 70 m thick overburden (RBM) encountered in river bed during drilling of Drill hole No. DH-T2 & (iv) Dam height was envisaged about 110 m from river bed.

<u>Merits of Alternative – II:</u> (i) Dam Axis falls in straight course of river section, (ii) Thickness of overburden was observed in ranges from 5.30 m to 39.60 m along the axis, (iii) Dam height was envisaged about 80 m from river bed & (iv) Rocks very well exposed on left bank & scantly on right bank.

Looking at the merits & demerits of the two alternatives of Dri & Tangon limbs (from technical view point), Alternative – II for Dri as well as Tangon were selected for carrying out further detailed investigations. After detailed Geological mapping, Geotechnical investigations, Topographical survey and Preliminary Engineering studies most optimum layout for the Project was finalized.

It is a well known fact that the State of Arunachal Pradesh has the second largest forest cover in the country. Out of the total geographical area of 83,743 Sq. Km, the forest cover accounts for 68,000 Sq. Km (approx.) making 81.20% of the State under forest cover. Thus, looking at the quantum of trees / shrubs available on either bank of Dri as well as Tangon Rivers & also since major portion of the State falls under Forest cover, it was assessed that both the alternatives (Dri & Tangon alternatives) fall under Forest area, regardless of ownership of land & technical feasibility of finalized layout.

v) Cost - Benefit Analysis

Available details have been filled up in the CB Analysis. The balance inputs shall be filled-up during the course of forest survey with the assistance of Forest Deptt. The complete Cost – Benefit analysis shall be submitted subsequently.

vi) Employment likely to be generated

At the time of peak construction work in the Project, it is estimated to engage 3000 persons as labour force and 800 persons as technical staff, resulting in direct employment generation. Efforts will be made to engage local labour force, as far as possible and rest will be engaged from outside.

Apart from the above, efforts shall be made to provide indirect employment opportunities by way of up gradation & assistance to existing schools (teachers), health care (doctors, nurses), etc. It is also proposed to offer necessary training facilities for development of entrepreneurship, technical and professional skills for self-employment in the trades like mason, bar-bender, carpentry, plumbing, etc.

As per Cl. 31 of the **Memorandum of Agreement (MoA)** signed between Government of Arunachal Pradesh, HPDCAPL and JPL for execution of Etalin HEP, the JV Company shall reserve the following category of posts against the Project to be filled up by the local tribal people, subject to the incumbents fulfilling the job requirements & considered suitable by the JV Company:

a)	Managerial / Professional Post	-	25%
b)	Ministerial / Clerical Post		2070
C)	Skilled Jobs	-	50%
d	Inskilled John		25%
4)	onskilled Jobs	-	75%

The Project(s) affected eligible candidates shall be given preference over others in various categories of posts / jobs. The Company shall give preference to the local Contractors fulfilling the eligibility criteria in the award of the work except for the specialized jobs. Subject to the job requirements & fulfillment of job criteria, willing technical & non-technical personal of the State Govt. may be taken on deputation by the JV Company on recommendation of the State Govt.

Also, in accordance with the **State Rehabilitation and Resettlement Policy, 2008** (Amended) formulated by the Government of Arunachal Pradesh, the Companies setting up hydropower projects shall reserve the aforesaid categories of posts against the project to be filled up by the local tribal people, subject to the incumbents fulfilling the job requirements.

The project affected eligible candidates will be given preference. Apart from this, wherever necessary, arrangement for imparting training to the affected persons shall be made so as to enable such persons to take on suitable jobs. Scholarships & other skill development opportunities shall be offered to the eligible persons from the affected families as per the

Criteria as may be fixed by the State Govt. Preference shall be given to willing landless labourers and unemployed affected persons while engaging labour in the project during the construction phase. The affected persons shall also be offered the necessary training facilities for development of entrepreneurship, technical and professional skill for self-employment.

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The reservation of project jobs to local people will be as per the Govt. directives issued from time to time.

Purpose – wise break – up of the total land required

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Geo- cordinates	Total Area	River Area (cH)	nuore Ground (EH) SerA	Surtace Area (Ha)	S since of the Su		Total (Total	
62。21, 48,, E 58, 45, 8,, N	3.13	0	0	51.5 6	κατ (Rock Quarry)			
62° 52' 42" E 28° 42' 54" N	21.01	0	0	21.01	ϗϭϛ (ϗοϲϝ ϭnsιιλ)	2		
	2	0	0	2	Contractor / Owner site office and store	8		
	2.149	0	0	2.149	Dumping Yard, DMD-4 (a)	4		
	0.526	0	0	975.0	Dumping Yard, DMD-4 (b)			
	Ţ	0	0	τ	Labour Camp-5	S	£-AJ	
62。21, 56., E 58。 45, 57., N	\$75.2	0	5.374	0	DT -RB(Diversion Tunnel- Right Bank). 3 Nos (DRI LIMB).	9	20 .82)	
	£09'T	0	£09.1	0	DT -LB(Diversion Tunnel- Left Bank) 1 No(TRI LIMB)	L		
	5.39	1.185	0	302.1	DAM\ DAM Toe Power MAO Potfer DAM D\S	8		
	728.0	0	0	728.0	Intake Structure	6		
679'8	5	ד-אן ה	i (eəre beor	anibulox9) a	h Bherea for all componets H)	toT		
104.6	52	0	0	29.401	- AJ ni sərd Area In LA 1	στ		
62。20, 21,, E 58。 45, 4,, N	4.18	0	0	81.4	Exprosive facility areas and labour camps (Right Bank)	Ţ	C- 41	
58° 41' 37" 5	¢.4	0	0	p.p	Work Shop, Warehouse, Store &Parking Space-3 (Left Bank)	7	(56.53 (6.53	
3 (# 00, 00	02.02	0	0	02.02	Dumping area DMD 5 (Left bank)	ع ۱		

1									
	То	otal Area for all componen in L/	ts (excludi A-2 (Ha) =	ng road & bri	idge area)		29.28		
	4	Total Road & Bridge(PTB2) Area in LA -2	25.82	0	1.43	27.25			
			all the		and the second				
	1	Dumping Yard, DMD-3	3.927	0	0	3.927	28° 41' 39" N		
LA-3 (20.05	2	Dumping Yard, DMD-2	6.536	0	0	6.536	95° 50' 36" E		
Ha)	Т	otal Area for all componer (10.463					
	3	Total Road Area in LA - 3	9.587	0	0		9.587		
10.4	1	Labour camps	1	0	0	1	28° 40' 49" N 95° 50' 41" E		
(23.98)	Т	otal Area for all componer (1					
	2	Total Road Area in LA -4	22.98	0	0		22.98		
	1	Store/ work shop for package- B	1	0	0	1			
	2	Batching plant / main work shop	1.2	0	0	1.2	28° 41' 31" N 95° 50' 55" E		
LA-4A (67.74 Ha)	3	Contractors camp and owners camp office/residences	3.5	0	0	3.5	-		
		Total Area for all compo LA-4A (Ha) =	nents (excl	uding road ar	rea) in		5.7		
	4	Provision for Priority Road (Dri Limb)	62.04	0	0		62.04		
LA-5 (2.00 Ha)	1	Road Area	2.00	0	0	2.00	28° 39' 42" N 95° 51' 19" E		
	nin jakan						And Constants		
LA-6 (39.79	1	Batching Plant/ work shop	2.00	0	0	2.00	28° 39' 24" N		
Ha)	2	Labour Camp-4	1	0	0	1	95° 51' 0" E		

a a		3	Dumping Yard, DMD-6	10.88	0	0	10.88		
		Т	otal Area for all compone	nts (excludi (Ha) =	ng road area) in LA-6		13.88	
		4	Total Road Area in LA - 6	25.91	0	0	14	25.91	
	LA-6A (12.33 Ha)	1	Provision of facility area/explosive magazine and change in road alignment	12.13	0	0.2	12.33	28° 39' 35" N 95° 51' 35" E	
								二 年 世 月 :	
· · ·		1	Batching Plant	1.000	0	0	1.00		
		2	Dumping site	4.78	0	0	4.78		
\bigcirc	14-7	3	Aggregate crushing plant	1.5	0	0	1.5	28° 37' 35" N 95° 51' 28" E	
	(80.56 Ha)	4	Batching plant and aggregate stock piling	2	0	0	2		
		5	Batching plant and work shop	1.2	0	0	1.2	1	
		То	otal Area for all componer (nts (excludir Ha) =	ng road area)	in LA-7		10.48	
		2	Total Road Area in LA - 7	70.08	0	0		70.08	
-	LA-7A (6.38 Ha)	1	Provision of change in portal & alignment of road	6.32	0.0074	0.056	6.38	28° 37' 60" N 95° 51' 14" E	
\cap	LA-20 (83.32	1	DRI Reservoir, U/S Coffer Dam & Project Roads	60.777	0	21.771	82.548	28° 43' 18" N	
	Ha)	2	PQ-04 (SHOAL QUARRY)	0.772	0	0	0.772	95° 51' 46" E	
	14 204	iene.							
	(20.44 Ha)	1	existing road to be submerged &	4.86	0	0	4.86	28° 44' 37" N 95° 51' 35" E	
		2	provision of dumping yard u/s of dam	1.36	0	0	1.36	28° 44' 1" N 95° 51' 40" E	
		3		14.22	0	0	14.22	28° 43' 34" N 95° 51' 56" E	
	14 200		Dravisian ff						
	(9.32 Ha)	1	along Dri reservoir Additional land for	8.05 (Right Bank)	0	0	4.13	28° 43' 43" N 95° 51' 39" E	

	IOTa	ai Area (Ha)	454.994	6.984	24.642	4	186.62
							95° 51' 54" E
	2		1.76	0	0	1.76	28° 43' 1" N
(6.16 Ha)	1	road (Dri area)	4.4	0	0	4.4	28° 43' 10" N 95° 51' 56" E
LA-20C	2	Provision of priority	(Left Bank)	0	0	5.19	28° 44' 10" N 95° 51' 40" E
		road to Dam top	1.27		1		

Tangon Limb

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LA (Tota Area	al N	S Io.	Name of the Component	Surfac Area (Ha)	e Under Ground Area (Ha)	River Area (Ha)	Total Area (Ha)	Geo-cordinates of Centroid
	:	1	Owners temporary colony and office	2	0	0	2	28° 36' 46" N
LA-10 (11.31	2	2	Dumping Yard, PMD-2	7.551	0	0	7.551	95° 52' 60" E
на)	Тс	otal	Area for all compo		9.551			
Regentitiket	3		Total Road Area in LA -10	1.759	0	0		1.759
LA-10A								
(9.77 Ha)	1		Provision of Shoal Quarry PQ-02	9.77	0	0	9.77	28° 36' 56" N 95° 53' 24" F
LA-11 (41.38 Ha)	1		Road Area	41.38	0	0	41.38	28° 37' 3" N 95° 52' 55" E
	NOR LI MINIS						And and a second se	
LA-11A	1	P	rovision of Shoal Quarry PQ-03	12.20	0	0	12.20	
Ha)	2	ci a	Contractors olony and office nd facility areas	5	0	0	5	28° 36' 55" N 95° 53' 8" E
	n Italia Ultra	400		Jages Mars	anan Tana da		and the liter	
LA-12	1	pi	Batching Plant and aggregate rocessing plant	2.00	0	0	2.00	
(52.79 Ha)	2	La Co C	bour camps for Contractors lony-EM, HM & Civil PH Works	3.0	0	0	3.0	28° 37' 20" N 95° 53' 42" E

Π

To	Dumping Yard TMD-7 / PQ-02 Dtal Area for all comp	2 10.08				
To	otal Area for all com		7 0	0	10.08	7
		oonents (ex 12 (Ha) =	cluding ro	ad area) in L	A-	17.087
4	Total Road Area LA -12	in 35.703	3 0	0		35.703
				北北 北东		the first of the first of the
1	Site office and work shop	1	0	0	1	28° 38' 39" N 95° 55' 21" E
То	tal Area for all comp	4-	1.000			
2	Total Road Area i LA -13	n 7.330	0	0		7.330
				我我去 我们		
1	Provision of facility Area	1.50	0	0	1.50	28° 38' 35" N 95° 55' 19" E
	Main D					
1	Office and Residential Campus including school and hospital (Left Bank)	15.20	0	0	15.20	28° 37' 56" N 95° 56' 26" E
2	Road &Labour Camp	52.58	0	0	52.58	28° 38' 18" N 95° 56' 18" E
1	Main work shop and batching plants	2	0	0	2	
2	Labour camps for contractor (Right Bank)	1.2	0	0	1.2	28° 38' 10" N 95° 56' 3" E
3	Road Area	28.29	0	0	28.29	
	Total Area for all co in	mponents (LA-14 A (Ha	(excluding a) =	road area)		3.20
			and the second second			
	Additional Bridge to access Adit T2 & T3	5.50	0	0	5.50	28° 37' 60" N
	4 1 To 2 1 2 1 2 3	4Total Road Area LA -121Site office and work shopTotal Area for all comp2Total Road Area i LA -132Total Road Area i LA -131Provision of facility Area1Provision of facility Area1Adin Project Office and Residential Campus including school and hospital (Left Bank)2Road & Labour Camp1Main work shop and batching plants2Labour camps for contractor (Right Bank)3Total Area for all co in	4Total Road Area in LA -1235.70.1Site office and work shop11Site office and work shop1Total Area for all components (ex. 13 (Ha) =2Total Road Area in LA -137.3301Provision of facility Area1.501Provision of facility Area1.502Main Project Office and Residential Campus including school and hospital (Left Bank)15.202Road & Labour Camp52.581Main work shop and batching plants21Main work shop and batching plants1.22Labour camps for contractor (Right Bank)1.23Road Area 28.2928.294Additional Bridge to access Adit T2 & T35.50	4Total Road Area in LA -1235.70301Site office and work shop101Site office and work shop10Total Area for all components (excluding roat 13 (Ha) =102Total Road Area in LA -137.3001Provision of facility Area1.5001Provision of facility Area1.5001Main Project Office and Residential Campus including school and hospital (Left Bank)15.2002Road & Labour Camp52.5801Main work shop and batching plants201Main work shop and batching plants1.202Labour camps for contractor (Right Bank)1.203Road Area28.2903Total Area for all components (excluding in LA-14 A (Ha) =0	4Total Road Area in LA -1235.703001Site office and work shop100Total Area for all components (excluding road area) in L/ 13 (Ha) =102Total Road Area in LA -137.330001Provision of facility Area1.50001Provision of facility Area1.50001Residential Campus including school and hospital (Left Bank)15.20002Road & Labour Camp52.58001Main work shop and batching plants1.2002Labour camps for contractor (Right Bank)1.2003Road Area and Area28.29003Total Area for all components (excluding road area) in LA-14 A (Ha) =00	4Total Road Area in LA - 1235.703001Site office and work shop10011Site office and work shop10011Total Road Area in LA - 137.3300002Total Road Area in LA - 137.330001.501Provision of facility Area1.50001.501Provision of facility Area1.50001.501Campus including school and hospital (Left Bank)15.200015.202Road & Labour Campus52.580021Main work shop and batching plants20022Labour camps for contractor (Right Bank)1.2001.23Road Area28.290028.294Additional Bridge to access Adit T25.50005.50

×			2 Contractors 2 colony	1.49	0	0	1.49						
		1	Dumping Yard TMD-5	l, 13.5:	1 0	0	13.51						
		2	Dumping Yard TMD-4	, <u>3.958</u>	8 0	0	3.958	28° 38' 20" N 95° 57' 30" E					
		3	Batching Plant BM-3	1.000	0 0	0	1.000						
	LA-15	4	Labour Camp -:	2 1.000	0 0	0	1.00						
	(79.18 Ha)	5	Dumping Yard, TMD-6	6.50	0	0	6.50	28° 28' 22" N					
		6	Dumping Yard, TMD-7	9.67	0	0	9.67	95° 57' 34" E					
		7	Aggregate crushing plant	5.0	0	0	5.00						
		To	Iotal Area for all components (excluding road area) in LA-40.63815 (Ha) =40.638										
		6	Total Road Area i LA -15	n 38.542	0	0		38.542					
	-						A CONTRACT OF AND						
L	LA-15A (14.3 Ha)	1	Access to Adit T3 and explosive magazine	14.30	0	0	14.30	28° 38' 40" N 95° 57' 15" E					
	al and the		ALL'S HERRISON				Service of the servic						
		1	Adit T-1 portal re- located (Right Bank)	1	0.05	0	1.05						
L (2	A-16 23.27	2	Workshop and construction facility areas (Right Bank)	2	0	0	2	– 28° 38' 32" N 95° 58' 25" E					
	Ha)		Total Area for all c	omponents in LA-16 (H	s (excluding a) =	road area)		3.05					
		3	Total Road Area in LA -16	20.22	0	0		20.22					
Herein													
(1) (1)	4-17 6.24 Ha)	1	Shoal deposit	11.17	0	0	11.17	28° 38' 33" N 95° 58' 44" E					

	2	Additional In-situ rock quarry	5.07	0	0	5.07	28° 38' 28" N 95° 58' 45" E	
	1	Stone Crucher TAPP-2	2.00	0	0	2.00		
	2	Batching Plant BM-2	1.50	0	0	1.50		
LA-18 (57.65 Ha)	3	Contractor & Departmental Office Space-1	1.5	0	0	1.5	28° 39' 5" N 95° 59' 26" E	
	4	Store / workshop and construction facility areas	2	0	0	2		
	5	DAM/ DAM Toe Power House / D/S Coffer Dam	1.781	0	0.864	2.645		
	To	tal Area for all compo	onents (exc	luding road	& bridge		9.645	
	6	Total Road & Bridge (PTB1) Area in LA -18	48.005	a) = 0	0	48.005		
	Observe					Contraction of the local data		
÷	1	Batching plant	1.000	0	0	1.000		
	2	Dumping Yard, TMD-2 and batching plant	5.17	0	0	5.17	28° 39' 1" N 95° 59' 48" E	
LA-19	3	Workshop, Warehouse, Store & Parking Space-1	1.00	0	0	1.0		
(32.82 Ha)	4	Diversion Tunnel (Tangon) 3 Nos.	0	6.381	0	6.381		
	5	DAM/ DAM Toe Power House	0.311	0	0	0.311	-	
	Tota	l Area for all compon 1	ents (exclu 9 (Ha) =	ding road a	rea) in LA-		13.862	
	6	Total Road Area in LA -19	18.958	0	0		18.958	
in page								
LA-21 (36.12 Ha)	1	Tangon Reservoir, U/S Coffer Dam & Project Roads	25.188	0	10.932	36.12	28° 39' 31" N 96° 0' 26" E	

-	LA-21A (6.89 Ha)	1	Provision of foot track along Tangon reservoir	6.23	0	0.66	6.89	28° 39' 31" N 96° 0' 48" E
	1	TOTAL	AREA (Ha)	496.123	6.431	12.456		515.01

Power House

LA (Total Area)	S No.	Name of the Component	Surface Area (Ha)	Under Ground Area (Ha)	River Area (Ha)	Total Area (Ha)	Geo-cordinates of Centroid
	1	Batching Plant BM-6	1	0	0	1	
	2	Batching Plant BM-7	1	0	0	1	
	3	Contractor & Departmental Office-2	1.5	0	0	1.5	
	4	PQ-01 (Shoal Quarry)	4.064	0	0	4.064	28° 36' 43" N 95° 51' 47" E
LA-8 (120.65 Ha)	5	Labour Camps	2.50	0	0	2.50	
naj	6	Power House	0	42.416	0	42.416	
	7	Main store/worksop and facility areas	3	0	0	3	
-	Total Area for all components (excluding road & bridge 55.4					55.48	
	8	Total Road & Bridge (PPB1) Area in LA -8	62.41) = 0	2.76		65.17
LA-9 (20.81	1	Dumping yard EM & HM Storage Workshop, Warehouse, store, Parking	17.186	0	0	17.186	28° 36' 20" N 95° 51' 30" E
Ha)	Total A	rea for all compo	nents (exc	luding road	& bridge	17.100	
		area) i	n LA-9 (Ha) =			17.180
	2	Total Road & Bridge (PPB1) Area in LA -9	3.624	0	0		3.624
1	TOTAL AR	EA (Ha)	96.284	42.416	2.76		141.46

Notional Area Detail:

Desilting Tangon Limb	0	6.39	0	6.39
HRT & AditsDri Limb	0	14.27	0	14.27
HRT & AditsTangon Limb	0	14.84	0	14.84
Total Notional area	0	35.5	0	35.5

Summary of Total Land Requirement:

Description	Surface Area (Ha)	Under Ground Area (Ha)	River Area (Ha)	Total Area (Ha)
Dri Limb	454.994	6.984	24.642	486.62
Tangon Limb	496.123	6.431	12.456	515.01
Notional Area	0	35,5	0	35.5
Power House	96.284	42.416	2.76	141.46
Grand Total	1047.401	91.331	39.858	1178.59

3. Details of displacement of people due to the project, if any

i) Number of families

Total No. of Project Affected Families - 265 (tentative)

No. of affected families under displacement - 95 (tentative)

ii) Number of Scheduled Castes / Scheduled Tribe Families

All the families are Scheduled Tribe families

iii) Rehabilitation plan

At the time of submission of application for diversion of forest land, no physical displacement was envisaged and R & R plan was accordingly submitted along with Part-I of Form-A. However during the course of detailed Socio-Economic survey by District Administration, there is an involuntary displacement of 95 families (tentative).The Rehabilitation & Resettlement plan is under finalization in consultation with District Administration.

4.) Whether clearance under Environment (Protection) Act, 1986 required

Yes, it is required

 Undertaking to bear the cost of raising and maintenance of compensatory afforestation and / or penal compensatory afforestation as well as cost for protection and regeneration of Safety Zone, etc. as per the scheme prepared by the State Government

Undertaking (already submitted along with proposal dated 10.11.2012).

- 6. Details of Certificates / documents enclosed as required under the instructions
- (a) MoA of Etalin HEP (already submitted along with proposal dated 10.11.2012).
- (b) JV Agreement between HPDCAPL & JPL (already submitted along with proposal dated 10.11.2012).
- (c) Map showing required land for acquisition superimposed over toposheet in 1:50,000 scale (Annex – I, 5 copies).
- (d) Infrastructure Layout Plan (Annex II, 5 copies).
- (e) Cost Benefit Analysis (Annex III, 5 copies).
- (f) R&R Plan (already submitted along with proposal dated 10.11.2012).
- (g) Undertaking for Compensatory Afforestation (already submitted along with proposal dated 10.11.2012).
- (h) Undertaking for NPV of Diverted Forest Land (already submitted along with proposal dated 10.11.2012).
- (i) Deptt. of Environment & Forest, Govt. of Arunachal Pradesh letter dated 16.03.2010 giving permission for carrying out field survey & investigation works for Etalin HEP by EHEPCL (already submitted along with proposal dated 10.11.2012).
- (j) MoEF, Gol letter dated 30th November 2009 according clearance for pre-construction activities in the proposed sites as per the provisions of EIA Notification' 2006 (already submitted along with proposal dated 10.11.2012).
- (k) One Set of DPR (Volume I) (as concurred by CEA is enclosed).

(Satish C. Sharma)

President & OEO (Hydro)

Encl. As above.

Address for Communication: Etalin Hydro Electric Power Company Limited, Jindal Centre, Tower – B, Floor – 5, Plot No. 2, Sector – 32, Gurgaon (Haryana) – 122001 Tel: 0124 – 6612000 Fax: 0124 – 6612525

Date: 25/03/2014 Place: Gurgaon (Haryana)

> State serial No. of Proposal 276 + 26/12/2012 (To be filled up by the Nodal Officer with date of receipt) rewsed in March 2014

SITE INSPECTION REPORT (as per Annexure – X of Handbook)

SI.No.	Description	Status	Reference
1	Legal status of the forest land	Un-classed State	Part-II : 7(V)
	proposed for diversion.	Forest	
2	Item-wise break-up details of the	Enclosed	Part-I (2)
	forest land proposed for diversion.		
3	Whether proposal involves any	Yes. Details	Part – I
	construction of buildings (including	enclosed by the	
	residential) or not. If yes, details	user agency.	
	thereof.		
4	Total cost of the project at present	Enclosed	Part-I : 1(iii)
	rates.		*
5	Wild Life :	Enclosed	Part-II : 7(X,XI)
	Whether forest area proposed for		
	diversion is important from wildlife		
	point of view or not.		
6	Vegetation:		Detail enclosed at
			Annexure - A
6.1	Total number of trees to be felled.	2,80,677 nos.	
6.2	Effect of removal of trees on the	Enclosed	Part-II : 7(Viii)
	general ecosystem in the area.		
6.3	Important species :	List enclosed	
	Number of trees to be felled of girth	1,38,823 nos.	Detail enclosed at
	below60cm.		Annexure - A
6.4	Number of trees to be felled of girth	1,41,854 nos.	Detail enclosed at
	above 60cm		Annexure - A

	_			
Z	7	Background note on the proposal.	Enclosed	Part-I : 1(i)
_	8	Compensatory afforestation:		
	0	compensatory anorestation.		
		Whether land for compensatory	To be apprised by	
	8.1	afforestation is suitable from	the Divisional	
		plantation and management point of	Forest Officer,	
		view or not.	Tawang	· · · · ·
			Ū	
	8.2	Whether land for compensatory	-do-	
		afforestation is free from		
		encroachments/ other		
		encumbrances		
		encumbrances.		
	8.3	Whether land for compensatory	-do-	
		afforestation is important from		
		Religious/Archaeological point of		
		view.		
				×
	8.4	Land identified for raising	-do-	
		compensatory afforestation is in		
		how many patches, whether patches		
		are compact or not.		
	8.5	Man with details	da	
		indp with details.	-00-	
	8.6	Total financial outlay.	-do-	
			· .	
	9	Whether proposal involves violation	No	
		of Forest (Conservation) Act. 1980 or		
		not If yes a detailed report		
		inclusion yes, a detailed report on		
		violation including action taken		
		against the concerned officials.		
				1

10	Whether proposal involves	No	
	rehabilitation of displaced persons.		
	If yes, whether rehabilitation plan		
	has been prepared by the State		
	Government or not.		
	Detail be furnished specially if	-	
	rehabilitation plan would affect any		
	other forest area by trans-locating		
	outstees in and around the said		
	forest.		
11	Reclamation Plan: Details and	Environmental	
	financial allocation	Environmental	
		Management	
		Plan (EMP) being	
		prepared by the	
12	Dataila an actulue de la companya de	User Agency	
12	Details on catchment and commend	Plan submitted	
	area under the project. Catchment		
	area treatment plan to prevent		
	siltation of reservoir.		
13	Cost Benefit ratio.	Enclosed	Check List Serial No
			12
14	Recommendations of the Principal	-	
	Conservator of Forests/State		
	Government.		
15	Recommendations of the Regional	-	
	Chief Conservator of Forests along		
	with detail reasons.		
16	Regional Chief Conservator of	-	
	Forests shall give detailed comments		
	on whether there are any alternative		
	routes/alignments for locating the		

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-	project on the non-forest land.		
17	Utility of the project.	Enclosed	Part-I (iv)
	NumberofScheduleCastes/ScheduleTribestobebenefited by the project.	Enclosed	Part-I : 3(ii)
18	Whether land being diverted has any socio-cultural / religious value.	No	
18.1	Whether any sacred grove or very old grown trees/forests exists in the areas proposed for diversion.	No	
19	Situation w.r.t. any P.A.	-	
20	Any other information relating to the project.	-	

Date – 10/06/2014 Place – Anini

(ADUK PARON), DCF DIVISIONAL FOREST OFFICER ANINI SOCIAL FORESTRY DIVISION: ANINI

PART – II

M.°

(To be filled by the concerned Deputy Conservator of Forests)

State serial no. of proposal_____

7	Location of the project / scheme	Etalin, District - Dibang Valley, Arunachal Pradesh	
(i)	State / Union Territory	Arunachal Pradesh	
(ii)	District	Dibang Valley	
(iii)	Forest Division	Anini Social Forestry Division	
(iv)	Area of Forest land proposed for diversion	1165.66 Ha	
(v)	Legal status of Forest	Unclassed State Forest	
(vi)	Density of Vegetation	ForestAreaDensityType(Ha)Moderate1004.8490.6Dense	
-		Devoid of 69.480 0 vegetation / river body etc	
(vii)	Species-wise (scientific names) and diameter class-wise enumeration of trees To be enclosed. In case of irrigation / hydel projects enumeration at FRL, FRL-2 meter & FRL-4 meter also to be enclosed)	Enclosed as Annexure – A	
(viii)	Brief note on vulnerability of the forest area to erosion	Due to the presence of vegetation in the nearby areas, the vulnerability of the forest area to erosion will be minimum	
(ix)	Approximate distance of proposed site for diversion from boundary of forest	The distance of the proposed site from the boundary of the notified forest area (Dibang Wildlife Sanctuary) is around 12 KM.	
(x)	Whether forms part of National Park, Wildlife Sanctuary, Biosphere Reserve, Tiger Reserve, Elephant Corridor etc. (If so, the details of the area and comments of the Chief Wildlife Warden to be annexed.)	NO	
(xi)	Whether any rare/endangered/unique species of flora and fauna found in the area. If so details thereof.	Though it was not sighted during the inspection / enumeration period, the adjacent/fringe area's are the habitat of some of the rare/endangered/unique species of flora and fauna, and therefore, there presence is not ruled out. But the diversion will have a negligible impact on the species.	

(Xii)	Whether any protected archaeological/heritage site/defence establishment or any other important monument is located in the area. If so, the details thereof with NOC from competent authority, if required.	NO
8	Whether the requirement of forest land as proposed by the user agency in col.2 of Part -1 is unavoidable and barest minimum for the project. If no, recommended area item-wise with details of alternatives examined.	YES
9	Whether any work in violation of the Act has been carried out (Yes/NO). If Yes, details of the same including period of work done, action taken on erring officials. Whether work in violation is still in progress.	NO
10	Details of Compensatory Afforestation Scheme	
(i)	Details of non forest area / degraded forest area identified for compensatory afforestation, its distance from adjoining forest, number of patches, size of each patch.	Area identified at Tawang as per the letter of Chief Conservator of Forests,Western Arunachal Circle, Banderdewa vide his letter No. WAC/PS/2013/126-29 Dated 02/07/2013.Therefore the details will be submitted by the Divisional Forest Officer, Tawang Social Forestry Division. Copy of the letter of CCF, Banderdewa enclosed as Annexure – M .
(ii)	Map showing non – forest / degraded forest area identified for compensatory afforestation and adjoining forest boundaries.	-do-
(iii)	Detailed compensatory afforestation scheme including species to be planted, implementing agency, time schedule, cost structure etc.	-do-
(iv)	Total financial outlay for compensatory afforestation scheme.	-do-
(v)	Certificates from competent authority regarding suitability of area identified for compensatory afforestation and from management point of view. (To be signed by the concerned Deputy Conservator of Forests)	-do-
(11)	Site inspection of the DCF (to be enclosed) especially highlighting facts asked in col. 7 (xi, xii), 8 and 9 above.	Enclosed as Annexure – Q
(12)	Division / District profile	
(i)	Geographical area of the district	9655.52 Sq KM
(ii)	Forest area of the division	 Notified Forest area : 4216.215 Sq Km a)Dibang Wildlife Sanctuary : 4149 Sq Km b) Proposed Eya Ane RF : 302.5 Ha c) Proposed Echanli VFR : 4424 Ha d) Proposed Nulimbo VFR : 525 Ha e)Proposed Biyanli VFR : 1470 Ha 2.USF with community owned homestead/agriculture area 5439.305 Sq Km

	(iii)	Total forest land diverted since 1980 with number of cases	425.65 Ha with 5 (five) number of
2/			cases
3			-
	(iv)	Total compensatory afforestation stipulated in the district / division since 1980 on	81.80 Ha
		 (c) Forest land including penal compensatory afforestation, (d) Non-forest land 	
	(v)	Progress of compensatory afforestation as on 07/11/2013 on (c) Forest land (d) Non Forest Land	81.80 Ha
	13	Specific recommendations of the DCF for acceptance or otherwise of the proposal with reasons.	The project will bring lot of development in the area and also to whole of State of Arunachal Pradesh. Large number of people will get employment. Therefore
			the proposal may be 'Accepted'.

Date - 10/06/2014 Place - Anini

(ADUK PARON), DCF

(ADU&PARON)) DCF DIVISIONAL FOREST OFFICER ANINI SOCIAL FORESTRY DIVISION: ANINI

PART-III

(To be filled up by the concerned Chief Conservator of Forest)

14. Whether site, where the Forest land involved is located has been inspected by the concerned Chief Conservator of Forests (Yes/ No) if yes, the date of inspection & observations made in the Form of inspection note to be enclosed.	Yes, the site where the Forest land involved has been inspected by me on 22 nd & 23 rd November, 2013Detail of inspection and observation is enclosed herewith.
15. Whether the concerned Chief Conservator of Forests agree with the information given in the Part-B and recommendation of Deputy Conservator of Forests.	Yes, I do agree with the information given in the Part-B and recommendation of Deputy Conservator of Forests.
16. Specific recommendation of concerned Chief Conservator of Forests for acceptance or other wise of the proposal with detailed reasons.	It is felt that the Project proposal for diversion of Forest Land of 1165.66 Ha required for the construction of Etalin Hydro Electric Power Project (3097 MW) by M/s Etalin Hydro Electric Power Company Ltd. in Dibang Valley District, Arunachal Pradesh is urgently required for Socio-Economic Development of Arunachal Pradesh particularly in Dibang Valley District. Moreover though the project will be having power generation capacity of 3097 MW but destruction of forests as well as deterioration of Environment/Eco-System will be very less in comparison to other Mega Hydro Electric Power Project. No, any notified Forests/Wildlife /Sanctuary/National Park area will be affected if 1165.66 ha of land are diverted for the construction of 1165.66 ha of land for the construction of Etalin Hydro Electric Power Project by M/s Etalin Hydro Electric Power Company Ltd in Talo&Dri river basin of Dibang Valley District.

Date: 17-06-2014

Place: Tezu

Signature

Name: R.K.Deori, IFS

Degn: Chief Conservator of Forests

Eastern Arunachal Circle-Tezu

Inspection Note on Inspection of Site where the Forests Land involved diversion for the construction of Etalin Hydro Electric Power Project (3097 MW): The site where the forests land (Not notified forest but USF) involved in diversion of 1165.66 ha land has been inspected by me on 22nd& 23rd November,2013 along with the representative of M/s Etalin Hydro Electric Power Project Company Ltd and no violation of the provision of the FCA-1980 was noticed. The Project Area falls in Dibang Valley District. The entire project area is out side of the notified forest and the density of vegetation of the area observed 60 %. The area is mostly located along the valley of Talo&Dririvers of Dibang Valley District.

Total geographical area of Dibang Valley District / Anini Social Forestry Division is9655.52 SqKm;out of this following are the different category of land:

(a).Notified Forest:

n de

(i).Dibang Wildlife Sanctuary 4149Sq Km

(ii).Proposed RF/VRF 67.215 Sq.Km

(iii).Un-classed state forests and other community owned homestead/agriculture land 5439.305 Sq Km

Test checking in all plot of land required for diversion has been done where tree enumeration was carried out by FRO, Etalin. It is observed that the proposed diversion land is located mostly along the river bank and existing BRTF road with narrow strip. Moreover, there are many human habitant i.e.BRTF camps, local villages in this diversion land. As such existence of wildlife especially rare/endanger species are very rare. However, rare/endanger wildlife may be available in the periphery of the proposed diversion of land. The following are the main reported wildlife available in the area:

SNO	Zoological Name	Common
1	Callosciuruspygerythrus	Hoary-bellied Squirrel
2	Cuonalpinus	Indian Wild Dog
2	Felischaus	Jungle cat
3	Hylopetesalboniger	Particoloured Flying Squirrel
5	Macacaassamensis	Assam Macaque
6	Muntiacusmuntjak	Barking dear
7	Pantherapardus	Leopard
0	Prionailurusviverrinus	Fishing Cat
0	Sus scrofa	Wild Boar
10	Ursusthibetanus	Himalayan Black Bear
11	Harpestes Edwards	Common Mongoose

The wildlife sanctuary (i.e.Dibang Wildlife Sanctuary is also located more than 12 Km away from the proposed diversion land.

Regarding vegetation, there is no any rare/endangered species is available in this locality.

The composition of the vegetation is semi-evergreen forest and major species available in the proposed diversion area are as below:

S. No.	Species Name		
	Botanical Name	Vernacular Name	
1	Moruslaevigata	Bola	
2	Shoreaassamica	Mekai	
3	Juglansregia	Wildwalput	
4	Michaliachampaca	Champa Titasona	
5	Terminaliamyriocarpa	Hollock	
6	Acrocarpusfraxinifolia	Mandhani	
7	Albizialebbek	Siris	
8	Betulaalnoides	Birch	
9	Lagerstroemia parviflora	Sida, Amboke	
10	Pterospermumacerifolius	Hatipoila	
11	Toonaciliata	Jatipoma Poma	
12	Altingiaexcelsa	lutuli	
13	Bischofiajavanica	Urium	
14	Castanopsisindica	Hingori	
15	Kydiacalycina	Pichola	

Date: 17-06-2014

Place: Tezu

Signature d

Name: R.K.Deori, IFS

Degn: Chief Conservator of Forests

Eastern Arunachal Circle-Tezu

Full Title of the Project-ETALIN HYDROELECTRIC PROJECT- (3097MW) (REVISED IN MARCH 2014)

File No. : FOR. 279/CONS/2010

Date of Proposal: 25.6.2014

PART – IV

(To be filled in the Nodal Officer or Principal Chief Conservator Forests or Head of Forest Dept.)

17. Detailed opinion and specific recommendation of the State Forest Department for acceptance of otherwise of the proposal with remarks.

Reconectes for Altoral as project will be of Economic importance to the skle.

(while giving opinion, the adverse comments made by concerned Conservator of Forests or Deputy Conservator of Forests should be categorically reviewed and critically commented upon)

Date: 18 911

Place: Itanagar

18/5/15

Chief Conservator of Forests (Cons) & Alodal Officer (FCA), Govt. of Arunachal Pradesh, Itanagar Full Title of the Project: ETALIN HYDRO ELECTRIC PROJECT (3097MW) (REVISED IN MARCH 2014)

File No. : FOR. 279/CONS/2010

Date of Proposal: 28.6.2014

PART-V

(To be filled in by the Secretary in charge of Forest Department or by any other authorized officer of the State Govt. not below the rank of any Under Secretary)

18. Recommendation of the State Government (Adverse comments made by any officer or authority in Part-B or Part-C or Part-D above should be specifically commented upon)

decommende d

Date: 22-10-2014

Place: Itanagar

Principal Secy. (Env. & Forests) Govt. of Arunachal Pradesh, Itanagar

> Principal Secretary (Environment & Forests) Govt. of Arunachal Practicsh Itanagar.