



# MOU

## 2006-2007

### MEMORANDUM OF UNDERSTANDING

Between

Ministry of Power  
Government of India

and

National Hydroelectric Power  
Corporation Ltd.



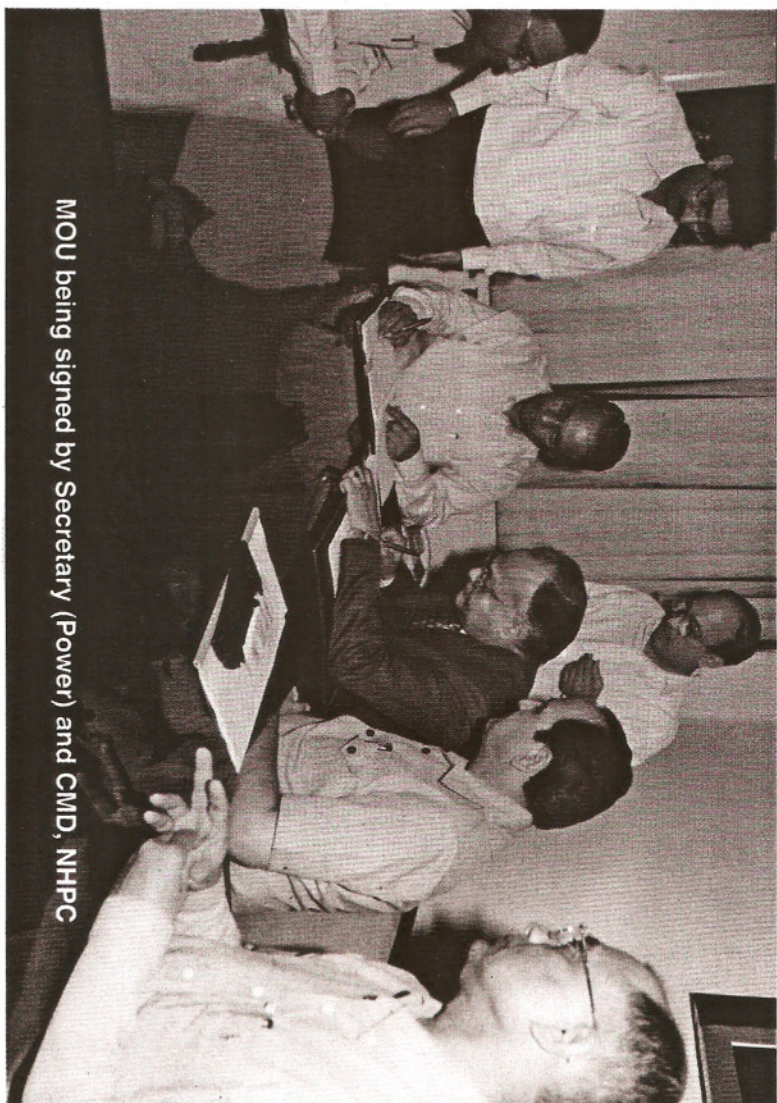






**MEMORANDUM OF UNDERSTANDING**  
**between**  
**MINISTRY OF POWER**  
**Government of India**  
**and**  
**NATIONAL HYDROELECTRIC POWER CORPORATION LIMITED**  
**for**  
**(2006-2007)**

- Part I** : Mission/Vision and Objectives  
**Part II** : Exercise of enhanced Autonomy and Delegation of Financial Powers  
**Part III** : Performance Evaluation Parameters and Targets  
**Part IV** : Commitments/Assistance from the Government  
**Part V** : Action Plan for implementation and monitoring of the MOU



MOU being signed by Secretary (Power) and CMD, NHPC



## Part I : MISSION / VISION AND OBJECTIVES

### Vision

A world class, diversified & transnational organization for sustainable development of hydro power and water resources with strong environment conscience.

### Mission

- To achieve international standards of excellence in all aspects of hydro power and diversified business.
- To execute and operate projects in a cost effective, environment friendly and socio-economically responsive manner.
- To foster competent, trained and multi-disciplinary human capital.
- To continually develop state-of-the-art technologies through innovative R&D and adopt best practices.
- To adopt the best practices of corporate governance and institutionalize value based management for a strong corporate identity.
- To maximize creation of wealth through generation of internal funds and effective management of resources.

### Objectives

- Development of vast hydro potential at faster pace and optimum cost eliminating time and cost over-run.
- Completion of all on going projects within stipulated time frame.

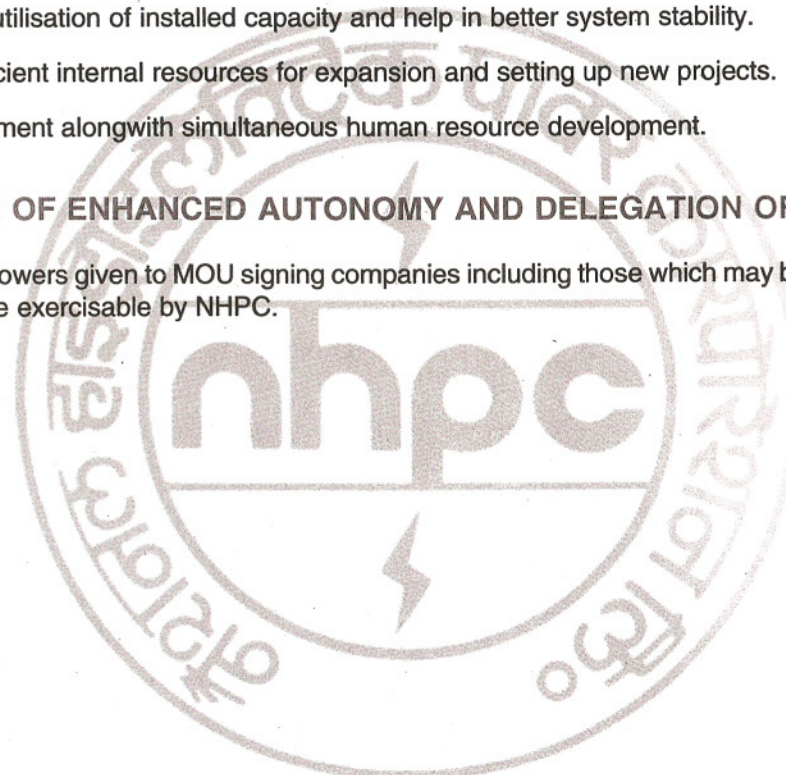




- Ensure maximum utilisation of installed capacity and help in better system stability.
- Generation of sufficient internal resources for expansion and setting up new projects.
- Corporate development alongwith simultaneous human resource development.

#### Part-II: EXERCISE OF ENHANCED AUTONOMY AND DELEGATION OF FINANCIAL POWERS

Enhanced delegation of powers given to MOU signing companies including those which may be extended to such companies during 2006-2007 shall be exercisable by NHPC.





### Part-III : PERFORMANCE EVALUATION PARAMETERS AND TARGETS

#### Performance Parameters & Their Weightages (Year 2006-2007)

Sl.No.	Performance Indicator	Unit	Wt.	Performance Rating					BE 2005-06	BE 2006-07
				1	2	3	4	5	PSE	PSE
Part-A I)	Static Financial Parameters									
(a)	Financial Performance Indicator									
i)	Gross Margin / Gross Block	%	2%	11.39	11.03	10.80	10.61	10.43	8.10	10.80
ii)	Net Profit / Net Worth*	%	10%	7.26	6.75	6.43	6.16	5.90	3.11	6.43
iii)	Gross Profit / Capital Employed	%	10%	7.25	6.85	6.57	6.34	6.12	4.76	6.57
(b)	Finacial indicator – Size									
i)	Gross Margin	Rs. Cr.	8%	1892.56	1833.04	1794.76	1763.76	1733.70	1338.50	1794.76
ii)	Gross sales	Rs. Cr.	4%	2117.72	2057.83	2019.27	1988.05	1957.77	1610.09	2019.27
(c)	Financial returns-Labour productivity & Total Factor Productivity									
i)	PBDIT / Total Employment	Rs. Lacs / Capita	7%	33.01	31.97	31.30	30.76	30.24	22.71	31.30
ii)	Added Value / Gross sales	%	9%	23.25	20.36	18.19	16.28	14.38	-7.72	18.19
II)	Dynamic Parameters									
i)	Quality Certification									
a)	ISO 9001 :2000	No. of locations	1%	3	2	1	-	-	2	1
b)	ISO 14001:2004	locations	1%	3	2	1	-	-	1	1





Sl.No.	Performance Indicator	Unit	Wt.	Performance Rating					BE 2005-06	BE 2006-07
				1	2	3	4	5	PSE	PSE
ii)	HRD									
a)	% of manpower to be trained	%	0.5%	60	45	40	35	30	20	40
b)	% investment of gross salary towards training and HRD activity	%	0.5%	2	1.8	1.6	1.4	1.2	1.5	1.6
iii)	R&D Activities	Nos.	2%	Details as per Annex.-I attached						
iv)	Energy Audit	Nos.	2%							
v)	Projects implementation	Nos.	28%	Details as per Annex.-II attached						
vi)	Preparation of DPR	Nos.	2%	5	4	3	2	1	8	3
vii)	Consultancy Assignments	Rs. in crores	1%	20	18	16	14	12	16	16
viii)	Award of Contract for ERP Software and Implementation		1%	Feb 07	Mar 07	-	-	-	-	Mar 07
PART-B										
I.	Specific Parameters									
1.	Generation**	MU	2%	13860	13200	12540	11913	11317	11726	12540
2.	Capacity Index	%	8%	96.5	94.8	92.0	89.2	86.5	91.2	92.0
3.	Recovery of Current dues	%	1%	97	95	93	91	89	92	93
			100%							



**Part-III : PERFORMANCE EVALUATION PARAMETERS AND TARGETS**

Gross Profit : Rs. 1171.78 Crores  
Net Worth : Rs. 10277.86 Crores

Net profit (after tax) : Rs. 660.40 Crores  
Capital Employed : Rs. 17842.73 Crores

(The generation targets are subject to availability of estimated water inflow and there being no load/transmission constraints. For the purpose of evaluation therefore, the loss in generation due to such factors will be reduced from the performance rating targets. Achievement of milestone targets during 2006-2007 in execution of projects shall be subject to timely availability of funds, statutory clearances & Govt. sanction and non-occurrence of extra-ordinary conditions like law & order problems, flood etc.).

\* Excludes advance against depreciation and self insurance for contingencies in the net worth of the corporation.

\*\* Generation Targets are subject to revision with due approval of ATF in the mid of Financial Year in case the climatic condition are not favourable to the above generation targets if requested by PSU.

\*\*\* At present Corporation is following the policy of charging depreciation at rates prescribed by CERC only. The policy is under review at MOP. Impact of any change in the depreciation policy, at later stage, will be suitably accounted for in MOU financial parameters.

\*\*\*\* Target of preparation of DPR is subject to availability of statutory clearances

- |    |                                                                                                                                                                                                                             |            |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| 1. | Timely submission of draft MOU for 2007-08 after due discussion with Admin. Ministry/Deptt .                                                                                                                                | 30.11.2006 |
| 2. | Timely submission of Performance Evaluation Report (composite score) for 2005-2006 on the basis of the provisional data with adjustments, if any, through administrative Ministries/ Departments with proper justification. | 30.04.2006 |
| 3. | Timely signing of MOU for 2006-07                                                                                                                                                                                           | 31.03.2006 |
| 4. | Timely submission of Performance Evaluation Report (Composite score) for the year 2005-06 on the basis of Audited data                                                                                                      | 15.10.2006 |
| 5. | The data for compilation of Public Enterprise Survey 2005-06 including flash results for six months ending 30.9.2006                                                                                                        | 15.10.2006 |





#### **Part-IV : COMMITMENTS/ASSISTANCE FROM THE GOVERNMENT**

**The areas where NHPC expects the Govt. to provide assistance are:**

1. Securitisation of outstanding amount of Rs. 187.68 Cr. (Rs. 120.81 Cr. – Principal and Rs. 66.87 Cr. Surcharge after 60% of waiver) of DESU period and issuance of bonds/long-term advances in favour of NHPC.
2. To consider projects being executed and proposed for execution by NHPC for multilateral and bilateral financial assistance.
3. To help in acquisition of land for approved hydro projects.
4. To provide requisite equity support for execution of on-going schemes and to take up new schemes.
5. To assist in obtaining various statutory clearances including Environmental and Forest clearance from MOEF, as per statutory requirement and for resolving important issues pertaining to Environment and Forest, for timely accord of site clearance Stage-I&II, Environment and Forest clearance from MOEF.
6. To impress upon State Govt. of Himachal Pradesh not to insist upon for obtaining consent to establish and consent to operate for hydro projects located in H.P.
7. To impress upon State Govt. of Himachal Pradesh not to insist upon for release of minimum flow downstream of dam / diversion structure in accordance with notification issued by Himachal Pradesh Govt. dated 16.7.05 and 9.9.05.
8. For getting TAC/TEC from CEA/CWC for Siyom Project.
9. To impress upon State Govt. for submission of proposal for forest clearance by State Govt. of Arunachal Pradesh to MOEF.
10. To resolve issues of State Govt. of Arunachal Pradesh and Assam for signing of MOU
11. To resolve issue of provision of flood moderation in hydro project with the State Government of Arunachal Pradesh and Assam.
12. To help in obtaining Mini-Ratna status as a first step towards achieving Navratna Status.



## Part-V : ACTION PLAN FOR IMPLEMENTATION AND MONITORING OF THE MOU

The performance of the Corporation in respect of generation, execution of ongoing projects and financial aspects including budget utilisation & revenue realisation is presented to MOP in monthly reports. The review of performance of the Corporation is carried out by Ministry from time to time and by Secretary (Power) at regular intervals.

The provisional evaluation of performance will be done in the month of April, 2007 and the final evaluation in October, 2007 on completion of Audited Accounts.

*S.K. Garg*

**(S.K. Garg)**  
Chairman & Managing Director  
National Hydroelectric Power  
Corporation Limited

*R.V. Shahi*

**(R.V. Shahi)**  
Secretary  
Ministry of Power  
Govt. of India

New Delhi  
28th March, 2006



## Annex.-I

**RESEARCH & DEVELOPMENT AND ENERGY AUDIT**  
**Performance Parameters & Their Weightages (Year 2006-2007)**

Sl.No.	Performance Indicator	Unit	Wt.	Performance Rating					BE 2005-06 PSE	BE 2006-07 PSE
				1	2	3	4	5		
	R&D Activities									
1.	Approval of designated National Authority for CDM benefits	Nimoo Bazgo/ Chutak	2%	Dec,06	Jan,07	Feb,07	Mar,07	-	-	Feb,07
2.	Energy Audit of Generating Units									
(i)	Loktak Power Station	No. of Units	1%	3	2	1	-	-	-	1
(ii)	Tanakpur Power Station	No. of Units	1%	3	2	1	-	-	-	1



## MILESTONES - 2006-07

Sl. No.	Activity	Weights	CRITERIA VALUE				
			Excellent	Very Good	Good	Fair	Poor
A.	TEESTA H.E. PROJECT (St-V) -510 MW						
1	Complete erection of all radial gates	1%	Jan. 2007	Feb. 2007	Mar. 2007	-	-
2	HRT Completion	1%	Nov. 2006	Dec. 2006	Jan. 2007	Feb. 2007	Mar. 2007
3	Lower Surge Gallery Completion	1%	Dec. 2006	Jan. 2007	Feb. 2007	Mar. 2007	-
4	Commissioning of 1st Unit	1%	Jan. 2007	Feb. 2007	Mar. 2007	-	-
B.	PARBATI H.E. PROJECT (Stage-II) - 800 MW						
1	Dam concreting (80,000 cum)	1%	Jan. 2007	Feb. 2007	Mar. 2007	-	-
2	Complete Excavation of HRT Face-I	1%	Dec. 2006	Jan. 2007	Feb. 2007	Mar. 2007	-
3	Excavation of HRT, Face-4 by TBM upto RD 4800 m	1%	Oct. 2006	Nov. 2006	Dec. 2006	Jan. 2007	Feb. 2007
4	Complete excavation of inclined Pr. Shaft	1%	Nov. 2006	Dec. 2006	Jan. 2007	Feb. 2007	Mar. 2007
C.	SUBANSIRI LOWER H.E. PROJECT -2000 MW						
1	Daylighting of Diversion Tunnel	1%	Dec. 2006	Jan. 2007	Feb. 2007	Mar. 2007	-
2	Completion of Power House Excavation	1%	Dec. 2006	Jan. 2007	Feb. 2007	Mar. 2007	-
3	Start of HRT Excavation	1%	Jul. 2006	Aug. 2006	Sept. 2006	Oct. 2006	Nov. 2006
4	Start of Power House concreting Unit 1	1%	Sept. 2006	Oct. 2006	Nov. 2006	Dec. 2006	Jan. 2007





Annex-II  
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Sl. No.	Activity	Weights	CRITERIA VALUE				
			Excellent	Very Good	Good	Fair	Poor
D.	SEWA H.E. PROJECT (Stage-II) -120 MW						
1	Complete excavation of vertical pressure shaft	1%	Jun. 2006	Jul. 2006	Aug. 2006	Sept. 2006	Oct. 2006
2	Concreting of Dam upto Spillway crest level (EL 1168 m)	1%	Aug. 2006	Sept. 2006	Oct. 2006	Nov. 2006	Dec. 2006
3	Erection of Generator of Unit-1	1%	Jan. 2007	Feb. 2007	Mar. 2007	-	-
E.	TEESTA LOW DAM H.E. PROJECT (St-III) - 132 MW						
1	Complete excavation of Barrage (Block III to VII)	1%	May 2006	Jun. 2006	Jul. 2006	Aug. 2006	Sept. 2006
2	Completion of concreting of Intake	1%	Dec. 2006	Jan. 2007	Feb. 2007	Mar. 2007	-
3	Concreting in cellular wall (40,000 cum)	1%	Jan. 2007	Feb. 2007	Mar. 2007	-	-
F.	URI H.E. PROJECT (St-II) - 240 MW						
1	River Diversion	1%	Dec. 2006	Jan. 2007	Feb. 2007	Mar. 2007	-
G.	CHAMERA H.E. PROJECT (St-III) - 231 MW						
1	Diversion Tunnel works completion	1%	Jan. 2007	Feb. 2007	Mar. 2007	-	-
H.	PARBATI H.E. PROJECT (St-III) - 520 MW						
1	Diversion Tunnel works completion	1%	Feb. 2007	Mar. 2007	-	-	-
I.	TEESTA LOW DAM H.E. PROJECT (St-IV) - 160 MW						
1	River diversion - 1st Phase	1%	Nov. 2006	Dec. 2006	Jan. 2007	Feb. 2007	Mar. 2007



Sl. No.	Activity	Weights	CRITERIA VALUE				
			Excellent	Very Good	Good	Fair	Poor
J.	DULHASTI H.E. PROJECT - 390 MW						
1	Completion of HRT Lining	1%	May 2006	Jun. 2006	Jul. 2006	Aug. 2006	Sept. 2006
2	Plugging of Adits	1%	Jun. 2006	Jul. 2006	Aug. 2006	Sept. 2006	Oct. 2006
3	Commissioning of 1st unit	1%	Jun. 2006	Jul. 2006	Aug. 2006	Sept. 2006	Oct. 2006
K.	NARMADA HYDROELECTRIC DEVELOPMENT CORPORATION LIMITED						
1	OMKARESHWAR H.E. PROJECT - 520 MW						
	Erection of Radial Gates 7 nos.	1%	Jun. 2006	Jul. 2006	Aug. 2006	Sept. 2006	Oct. 2006
2	Second Stage concreting for 6 units around Spiral casing, Generator barrel & Generator floor upto EL 170.29 m	1%	Nov. 2006	Dec. 2006	Jan. 2007	Feb. 2007	Mar. 2007
3	Complete Generator assembly for units 1 & 2	1%	Jan. 2007	Feb. 2007	Mar. 2007	-	-





## PERFORMANCE FOR THE LAST 5 YEARS

Sl. No.	Parameters	2001-02	2002-03	2003-04	2004-05	2005-06 (Target)	2006-07 (Target)
I.	Part-A Static Financial Parameters						
(a)	Financial Performance indicators						
(i)	Gross Margin/Gross Block (%)	17.08	15.77	16.67	16.08	8.10	10.80
(ii)	Net Profit /Net Worth (%)	8.14	7.97	8.10	8.17	3.11	6.43
(iii)	Gross Profit/Capital Employed (%)	10.23	9.77	11.38	10.88	4.76	6.57
(b)	Financial indicators - Size						
(i)	Gross Margin (Rs.in crores)	1316.66	1225.90	1615.71	1569.92	1338.50	1794.76
(ii)	Gross Sales (Rs.in crores)	1349.63	1324.90	1414.43	1581.73	1610.09	2019.27
(c)	Financial returns-Labour productivity and Total Factor productivity						
(i)	PBDIT/Total Employment (Rs. in Lacs/capita)	--	--	--	34.79	22.71	31.30
(ii)	Added Value / Gross Sales (%)	42.35	34.87	51.13	43.94	-7.72	18.19
II.	Dynamic Parameters						
1.	Recovery of Current Dues (%)	80	93.63	97.06	101.29	92	93
2.	HRD Programme (mandays)	24294	25387				
3.	HRD Programme % of manpower Trained (%)	---	---	47.03	49.5	20	40
4.	% investment of gross salary towards training & HRD activities	---	---	---	---	1.5	1.6
	Part-B Specific Parameters						
1	Capacity Index (%)	96.86	96.62	97.55	95.3	91.2	92
2	Generation (MU)	8912.29	9862.71	10859.28	11286.43	11726	12540

\* Parameter changed to percentage of workforce trained.



## Annex-III (Page 2 of 2)

## PROJECTED PERFORMANCE FOR THE NEXT 5 YEAR FOR MAJOR HEADS

Sl. No.	Parameters	2007-08	2008-09	2009-10	2010-11	2011-12
I.	Part-A Static Financial Parameters					
(a)	Financial Performance indicators					
(i)	Gross Margin/Gross Block (%)	11.96	13.57	12.47	11.98	13.63
(ii)	Net Profit/Net Worth (%)	9.40	9.49	8.91	7.78	8.18
(iii)	Gross Profit/Capital Employed (%)	8.49	9.37	8.67	7.94	9.09
(b)	Financial indicators - Size					
(i)	Gross Margin (Rs.in crores)	2826.93	3311.20	3464.14	4598.62	5231.67
(ii)	Gross Sales (Rs.in crores)	3185.63	3770.56	3998.90	5291.24	6074.30
(c)	Financial returns-Labour productivity and Total Factor productivity					
(i)	Added Value/Gross Sales (%)	27.67	35.11	30.70	29.20	36.35
II.	Dynamic Parameters					
(a)	Recovery of Current Dues (%)	97	97	97	97	97
	HRD Programme					
(b)	% of Workforce to be Trained	55	60	65	75	85
(c)	% investment of gross salary towards training and HRD activity	2.1	2.6	2.9	3.6	4.6
	Part-B Specific Parameters					
1.	Capacity Index (%)	91.57	92.90	94.04	91.33	92.27
2.	Generation (MU)	17242	20554	21122	25534	33357



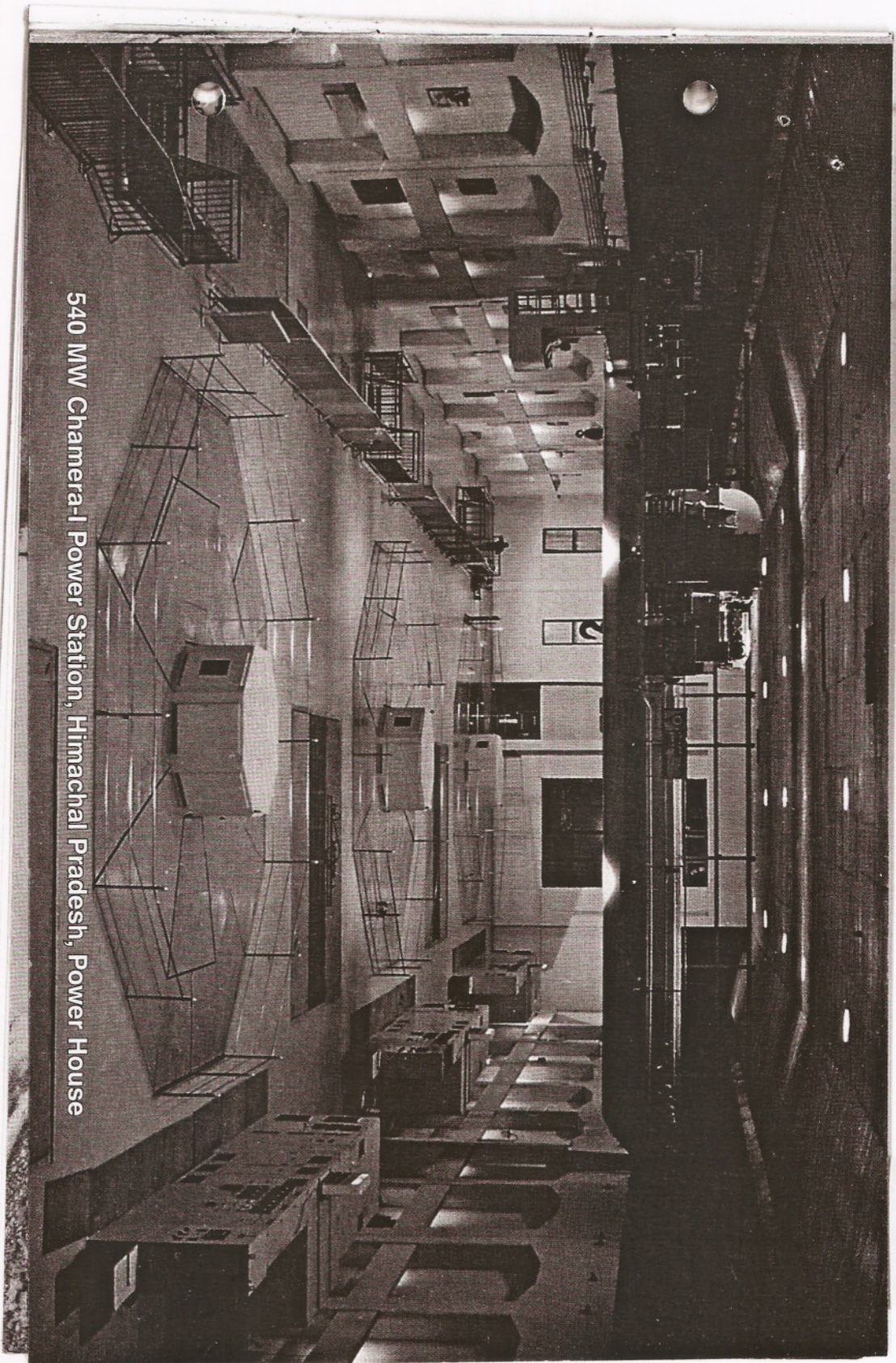


## Annex-IV

## COST &amp; TIME ESTIMATES

Sl. No.	Name of Project	Original Sanctioned Cost (Rs. in crs)	Revised Cost (Rs. in crs)	Original Comm. Schedule	Revised Comm. Schedule
1.	Dulhasti	183.45 (3/80)	4924.55 (8/05)	1990	Aug. 06
2.	Teesta - V	2198.04 (4/99)	-----	Feb.07	-----
3.	Parbati-II	3919.59 (12/01)	-----	Sept.09	-----
4.	Subansiri Lower	6285.33 (12/02)	-----	Sept.10	-----
5.	Sewa - II	665.46 (9/02)	-----	Sept.07	-----
6.	Teesta Low Dam - III	768.92 (12/02)	-----	Mar.07	Mar.08
7.	Omkareshwar	2041.93 (11/02)	-----	Feb.08	Oct.07 (Contract)
8.	Uri-II	1724.79 (02/05)	-----	Nov.09	-----
9.	Chamera-III	1405.63 (02/05)	-----	Aug.10	-----
10.	Teesta Low Dam-IV	1061.38 (03/05)	-----	Aug.09	-----
11.	Parbati-III	2304.55 (05/05)	-----	Sept.10	-----





540 MW Chamera-I Power Station, Himachal Pradesh, Power House



### **Corporate Vision**

A world class, diversified & transnational organization for sustainable development of hydro power and water resources with strong environment conscience.

### **Corporate Mission**

- ❖ To achieve international standards of excellence in all aspects of hydro power and diversified business.
- ❖ To execute and operate projects in a cost effective, environment friendly and socio-economically responsive manner.
- ❖ To foster competent, trained and multi-disciplinary human capital.
- ❖ To continually develop state-of-the-art technologies through innovative R&D and adopt best practices.
- ❖ To adopt the best practices of corporate governance and institutionalize value based management for a strong corporate identity.
- ❖ To maximize creation of wealth through generation of internal funds and effective management of resources.



**National Hydroelectric Power Corporation Ltd.**

**(A Government of India Enterprise)**

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