



Welcome to Investors' / Analysts' Conference -05th November 2012-Mumbai







Investors' Presentation half year ended 30.09.2012



Agenda



- Hydro Scenario in India
- NHPC Overview
- Significant Expansion Plan
- Performance Highlights



















Hydro Scenario in India





















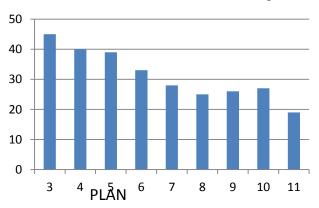
Hydropower Potential

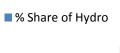


- ➤ Ideal for meeting demand during peak times
- ➤ Current installed hydropower capacity : 39,291.4 MW¹ out of potential installed capacity of 148,701 MW which is 26.42%.
- ➤ XI Plan- Target capacity addition -15627 MW, Commissioned 5544 MW.
- > XII Plan Hydro Target: 9204 MW .

Share of hydropower decreases....

% Share of Hydro



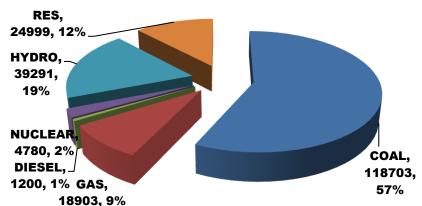


Entire potential to be tapped by 2027



Planned additions of hydropower capacity in each plan

... to 19 % of total installed Capacity-207876 MW



Ideal hydro-thermal mix = 40:60 – Considerable potential for hydropower development















Reasons for favoring Hydropower Development



- → Abundant hydro potential
- → Meets peaking power
- Improves grid stability and reliability
- → Renewable source of energy
- Affordable and cost effective
- → Environmentally benign source
- Additional benefits for storage schemes - flood moderation, irrigation, tourism etc
- → Long Life- The first hydro project completed in 1897 at Darjeeling is still in operation.
- → Has higher efficiency (over 90%) compared to thermal(35%) and gas (around 50%)
- → Cost of generation is free from inflationary effect after the initial installation.

Region	Potential Assessed (MW)	Potential Developed (MW)	Potential Under Develop ment (MW)	Balance (MW)	Balance %
North Eastern	58,971	1,200	2,852	54,304	93%
Northern	53,395	15,424	5,866	30,918	59%
Eastern	10,949	3,882	2,713	5,059	47%
Western	8,928	7,447	400	2,179	27%
Southern	16,458	11,338	570	5,953	37%
Total	148,701	39,291	13,481*	98,413	67%

^{*} In addition to 2 PSS (1080 MW) under construction



















NHPC Overview















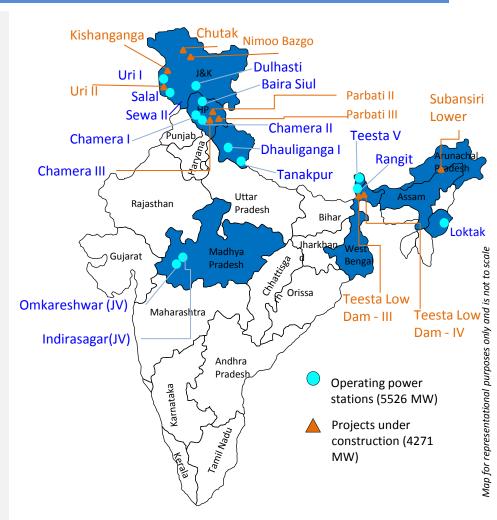




NHPC – Meeting India's Hydropower Needs



- Incorporated in 1975 with authorised capital of Rs.200 crore, the present authorised capital is Rs.15000 crore (Paid Up Capital Rs.12301 crore)
- → Mini-Ratna Category-I PSU (since Apr'08)
- Established track record, strong operational performance and in-house engineering capabilities
 - Involved across the entire chain of hydro power project development – from concept to commissioning
 - Presence across 8 states J&K, W.B, M.P, H.P,
 Arn.Prd., Manipur, Sikkim & Uttarakhand
 - 14.06% share of installed hydro-electric capacity in India (5,526 MW out of 39,291.4 MW)
 - Consultancy business
 - Exposure to international business opportunities



5526 MW¹ installed capacity through 15 power stations

 $^{
m 1}$ Including two projects of 1,520 MW from NHDC



















Composition of Board of Directors



Shri. G. Sai Prasad	Government Nominee Director & CMD
Shri. A.B.L.Srivastava	Director (Finance)
Shri. D.P.Bhargava	Director (Technical)
Shri. J.K.Sharma	Director (Projects)
Shri. R.S.Mina	Director (Personnel)
Shri. A.S.Bakshi	Government Nominee Director
Shri. A.Gopalakrishnan	Independent Director
Shri. G.S.Vedi	Independent Director
Shri. A.K.Mago	Independent Director
Shri. R.Jeyaseelan	Independent Director
Shri. Ashok K Dutta	Independent Director
Shri. Atul Kumar Garg	Independent Director
Shri. Shantikam Hazarika	Independent Director

Operational Projects



Project	Location	No of Units	Installed Capa (MW)	-	Year of imissioning	Type of the project
Baira Siul	НР	3	180		1981	ROR ² with small pondage
Loktak	Manipur	3	105		1983	Reservoir
Salal	J&K	6	690	19	87/1996	ROR ²
Tanakpur	Uttarakhand	3	120 ¹		1992	ROR ²
Chamera I	HP	3	540		1994	Storage
Uri I	J&K	4	480	2475 MW	1997	ROR ²
Rangit	Sikkim	3	60	(2.5 GW)	1999	ROR ² with small pondage
Chamera II	HP	3	300		2004	ROR ² with small pondage
Dhauliganga I	Uttarakhand	4	280		2005	ROR ² with small pondage
Dulhasti	J&K	3	390		2007	ROR ² with small pondage
Teesta V	Sikkim	3	510	= 1300 MW	2008	ROR ² with small pondage
Sewa II	J&K	3	120	1.3 (GW)	2010	ROR ² with small pondage
Chamera III	HP	3	231	Jul	y 4, 2012	ROR ² with small pondage
Total			4,006(4.0	SW)		
Completed Project	cts with NHDC					
Indira Sagar	MP	8	1,000	1520	2005	Storage
Omkareshwar	MP	8	520	MW	2007	Storage
Total 1,520 (1.5 GW)						
Grand Total			5,526 (5.5 0	św)		

¹ Derated to 94.2 MW; 2-Run of the River



















Operational Projects



			Generatio	on for the year 2	2012-13 (MU)	NAPAF	PAF ACHIEVED
Project	Capacity (MW)	Design Energy (MU)	Target for the Year	Target Upto 30 th Sep., 2012	Actual up to 30th Sep.,20 12	IN %	UPTO 30 TH September 12
Baira Siul	180	779	779	581.7	546	85	99.2
Loktak	105	448	505	266.6	269	85	90.8
Salal	690	3082	3112	2409.5	2452	60	88.6
Tanakpur	120	452	456	291.8	297	55	79.6
Chamera I	540	1665	2298	1756.1	1946	90	97.9
Uri I	480	2587	2612	1864.2	1979	60	97.2
Rangit	60	339	342	223.1	203	85	98.1
Chamera II	300	1500	1500	1126.2	1111	90	99.4
Dhauliganga I	280	1135	1146	875.5	882	85	98.2
Dulhasti	390	1907	2222	1553.3	1526	90	101.1
Teesta V	510	2573	2598	1788.4	1752	85	90.8
Sewa II	120	534	534	379.7	297	81	73.1
Chamera III	231	1086	1053	777	522	85	96.8
Total	4006	18087	19157*	13893	13782		94.3
Completed Pro	jects with NH	DC					
Indira Sagar	1000	1979	3360 -NHDC	1552	1552	85	82.79
Omkareshwar	520	897		690	690	85	96.17
Grand Total	5526	20963	22517	16135	16024		

^{*} MOU 12-13 Generation Target : 20550 MU. Balance 1393 MU from projects to be commissioned in FY12-13

Projects Under Construction



Project under construction	Location	Design Energy (MU)	Installed Capacity (MW)	Anticipated Project Cost (in Rs. Cr.)	Project Expenditure till Sep '12 (in Rs.Cr)	Type of the project	Plan wise Capacity Addition
Chutak *	J&K, 11*4	216	44	913	754.57	ROR	XII th Plan
Uri II	J&K, 60*4	1123	240	2,081	1,787.44	ROR	XII th Plan
TLD III	WB, 33*4	594	132	1,628	1,563.13	ROR	XII th Plan
Parbati III	HP, 130*4	1963	520	2,716	1,912.00	ROR	XII th Plan
Nimoo Bazgo	J&K, 15*3	239	45	936	794.58	ROR with small pondage	XII th Plan
TLD IV	WB, 40*4	720	160	1,502	1,194.26	ROR with small pondage	XII th Plan
Subansiri Lower	Assam / Ar.P, 250*8	7422	2,000	10,667	5,761.64	Reservoir	Yet to be finalised.
Parbati II	HP, 200*4	3108	800	5,366	3,554.41	ROR with small pondage	Yet to be finalised.
Kishanganga	J&K, 110*3	1350	330	3,642	1,689.17	ROR	XII th Plan
Total		16735	4,271	29,451	19,011.20		

^{*} Three units have been Synchronized.



















Projects Under Construction-Status



Name of the project	Likely COD (As disclosed in the prospectus)	Likely COD (Now)	Status
Uri-II HE Project(4X60=240MW) , J&K	Feb'11	Mar'13	1 st unit likely to be commissioned by Jan'13 and all the units by March'13.
TLDP-III HE Project/ W.B/ (4 x 33 MW = 132 MW)	Feb,11	Feb,13	All major civil & HM works complete. E&M works in advance stages of completion. Project likely to be commissioned by Feb'13.
Chutak HE Project/ J&K/ (4 x 11 MW = 44 MW)	Feb,11	Nov'12	All major civil & HM works complete. 3 units have already been commissioned. 4 th unit to be commissioned by Nov.'12. Date of Commercial Operation is yet to be declared.
TLDP-IV HE Project/ W.B/ (4 x 40 MW = 160 MW)	Aug,11	Oct, 13	1 st unit likely to be commissioned by July'13 and all the units by Oct.'13.
Nimoo Bazgo HE Project/ J&K/ (3 x 15 MW = 45 MW)	Aug,10	Jan'13	1 unit synchronized. Other units likely to be synchronized by Nov.' 12 & Jan'13





















Projects Under Construction-Status



Name of the project	Likely COD (As disclosed in the Prospectus)	Likely COD (Now)	Status
Subansiri Lower (8x250=2000 MW), Ar. Pradesh	Dec,12	Yet to be finalized.	Works of the project are at standstill since Dec.'11 due to agitation by various organizations.43% Dam concreting, 41% Power House Concreting & 99% of HRT Heading Excavation has been completed. Anticipated date of commissioning of project is yet to be finalised.
Parbati III, (4X130=520M W)	Nov,2010	Jun' 2013 (With first unit in Dec,12)	All major civil works completed. Hydro Mechanical and E&M works in advance stage of progress. 1 st unit likely to be commissioned by Dec.'12 & all the units by June.'13.
Parbati II (4 x 200= 800 MW)	Sep., 2009	Yet to be finalized	91% concreting in Dam Completed. 62% concreting in Power house Area completed. LOT-II for TBM has been terminated and contract is under process for award. Anticipated date of commissioning of project is yet to be finalised.
Kishanganga (3 X 110 = 330 MW)	Dec'16	Dec'16	River diversion completed. Dam spillway excavation in progress. 35% of tunnel excavation by TBM completed. Project likely to be commissioned by Nov.'16.





















Significant Expansion Plans





















Details	No. of Projects	Capacity
Project Awaiting Sanctions	5 No.'s	5,115 MW
Projects under Survey & Investigation	7 No.'s	2,485 MW
Joint Venture Projects	5 No.'s	3,686 MW
Total		11,286 MW























Projects awaiting Sanctions

Project	Location	Proposed Installed Capacity (MW)
Kotli Bhel Stage IA ⁽¹⁾	Uttarakhand	195 (ROR)
Dibang ⁽²⁾	Arunachal Pradesh	3,000 (Storage)
Teesta IV (2)	Sikkim	520 (ROR)
Tawang I ⁽³⁾	Arunachal Pradesh	600 (ROR)
Tawang II ⁽³⁾	Arunachal Pradesh	800 (ROR)
Total		5,115

- 1. All clearance available, Revised PIB/CCEA under process.
- 2. Environment & Forest Clearance awaited.
- 3. Forest clearance is awaited.



















Projects under Survey & Investigation

Project	Location	Installed Capacity
Dauliganga Intermediate*	UK	210
Gauriganga*	UK	120
Karmoli Lumti Tulli	UK	55
Garba Tawaghat	UK	630
Chungar Chal	UK	240
Lachen	Sikkim	210
Bursar	J&K	1,020
Total		2,485 ⁽¹⁾

- 1. Projects under DPR Stage
- * In-principle consent has been received from GoUK for signing of implementation agreement.





















Joint Venture Projects

Project	Location	Proposed Installed Capacity (MW)
Tapaimukh Hydroelectric Project	Manipur	1500
Loktak Downstream	Manipur	66
Pakal Dul and other projects in the Chenab River Basin	J&K	2,120
Sub-Total		3,686
Grand Total		11,286

















Major Subsidiary/Joint Ventures



NHDC

Subsidiary pursuant to MoU with GoMP (NHPC : GoMP = 51:49)

Operates 1,520 MW through Indira Sagar and Omkareshwar projects

Loktak Downstream (66 MW)

Subsidiary NHPC : GoManipur = 74:26

The subsidiary company has been formed .

Projects in Jammu & Kashmir (2120 MW)

JV of 49:49:02 between NHPC, JKSPDC and PTC.

Joint Venture Company 'Chenab Valley Power Projects (P) Limited' has been formed for execution of Pakal Dul and other hydroelectric projects having an aggregate capacity of about 2120 MW in Chenab River basin of Jammu Kashmir.

Projects: Pakal Dul – 1000 MW (Rs. 9756.99 cr. P/L Mar 12, Kiru – 600 MW (Rs. 4068.13 cr. P/L Jan 2012), Kwar – 520 MW (Rs. 4375 P/L Jan 2012)

Tipaimukh (1500 MW)

JV of 69:26:05 between NHPC, SJVNL and Govt. of Manipur

MoU signed on 28.4.2010 amongst NHPC, SJVNL and Govt. of Manipur. Estimated Cost-Rs.8138.79 cr.(P/L-Sep'08)

NHPC signed promoter's agreement with SJVNL and Government of Manipur for implementation of the project.

Some of the other Joint Ventures are NHPTL, NPEX.



















Investment Plan



Plan Expenditure

Parti	cular	Amount (Rs. In Crore)			
9 th	Plan	4,841			
10 th	Plan	10,888			
11 th	Plan	17,269			
12 th Plan (Proposed)				
2012-13	4,097				
2013-14	5,638				
2014-15	6,408	29,000			
2015-16	6,466				
2016-17	6,391				
TOTAL	29,000				





















Performance Highlights



















Performance Highlights



Highlights of Financial Results for the qtr / half year ended 30-09-2012

- ➤ Registered PAT of Rs.783 Crore and Rs.1453 Crore respectively for the quarter and half year ended 30.09.2012 as against Rs. 966 Crore and Rs.1757 Crore respectively during corresponding previous quarter and half year ended 30.09.2011.
- ➤ Registered a Generation of 13782 MUs in current half year as against 13372 MUs in corresponding half year.
- ➤ Registered sales turnover of Rs.1701 Crore and Rs.3100 Crore respectively during quarter and half year ended 30.09.2012 as against Rs.1831 Crore and Rs.3262 Crore respectively in corresponding previous quarter and half year ended 30.09.2011.
- ➤ During the half year Chamera III Power Station has been commissioned. Power Station contributed Rs.122 crore towards sales turnover and Rs.50 Crore towards Profit before tax.
- ➤ Chutak HE Project has been capitalised during half year ended 30.09.2012.
- There is increase of Rs.115 Crore in PAT in current half year as compared to corresponding previous half year on adjusted basis.

















(Rs in crores)



Particulars	HY 30.09.2012	HY 30.09.2011	Remarks
INCOME			
Revenue from Operations			
- Net Sales/Income from operations	3099.85	3262.06	Decrease of 162.21 Cr. (-) 4.97% due to <i>Earlier Year Sales</i> .
- Other operating Income	97.04	279.69	Decrease of Rs.182.65 Cr (-65.30%) due to interest from beneficiaries by and reduction of consultancy income.
Other Income	483.02	350.52	Increase of Rs. 132.50 Cr 37.38% mainly due to interest on term deposit / late payment surcharge.





















Financial Results for the Half Year ended 30th Sep 12

्रण्यपासी **NHPC**

(Rs in crores)

Particulars	HY 30.09.2012	HY 30.09.2011	Remarks
EXPENDITURE			
Employee benefit expenses	410.71	410.41	
Depreciation & Amortization Expenses	474.96	449.20	Increase by 25.76 Cr (+ 5%) due to capitalisation of Chutak
Generation, Admn. and Other Expenses	194.36	173.90	Citutak
Water Cess	427.46	407.72	
Provisions	4.11	1.56	
Expenditure on Contract, Project Management and Consultancy Works	47.62	61.73	
Prior Period expense	2.49	27.22	
Finance Cost	184.47	171.95	
Exceptional items	-	(68.86)	
Profit Before Tax	1933.73	2257.44	
Tax expenses	480.54	499.92	
PROFIT AFTER TAX	1453.19	1757.52	Net Decrease of 304.33 Cr. (-17.31%)



















Adjusted PAT





Particulars	HY 30.9.2012	HY 30.09.2011
PAT (A)	1453.19	1757.52
Detail of adjustments carried out		
Water Cess included in sales on account of 2010- 11, recognized in corresponding previous half year	-	(56.02)
Earlier year sales	(79.11)	(345.74)
Other Income-Interest from beneficiaries	(55.76)	(212.70)
Prior period adjustments	2.49	27.22
Exceptional Item-profit on sale of project	-	(68.86)
Tax impact on adjustments	26.49	131.27
Net Adjustments (B)	(105.89)	(524.83)
Adjusted PAT(Net Increase of Rs.114.61 Cr.) (A+B)	1347.30	1232.69



















Borrowings



(Rs. In Crores)

	III-ICVII	H-ICV	
Particulars	Sep 30, 2012	Half Year ended as on Sep 30, 2011	
Secured loans:			
Domestic Borrowings- From FI/Banks/LIC	13169.75	11,080.81	
Unsecured loans:			
Foreign Currency Loan	2938.24	3,003.06	
Loans from Govt. of India	1668.81	1,155.73	
Total Unsecured Loan	4607.05	4,158.79	
Total Borrowings	17776.80	15239.60	
Debt Equity Ratio	0.64	0.58	
Debt Service Coverage Ratio	5.87	7.43	
Interest Service Coverage Ratio	15.41	18.41	

















Details of Incentives, Secondary Energy, UI Charges & PAF



(Rupees in Crores)

CNI	Incentives Details	HY	HY
S.N		30.9.2012	30.9.2011
1	Secondary Energy	104.60	120.38
2	Incentives	158.88	150.24
3	UI Charges	67.92	68.44



















Fundamentals of the Company



Particulars	NHPC Figure (stand alone)
Current Book Value (30.9.12)	22.61
Book Value (31.03.2012)	21.42
Book Value at the time of IPO (As on 31.03.2009)	15.98
EPS on Half Year ended 30.09.12	1.18
EPS FY 12	2.25
EPS at the time of IPO (As on 31.03.2009)	0.98

- Established track record of more than 35 implementing hydroelectric in years projects, Strong operational performance and In house Design & Engineering Team.
- Largest Hydro CPSU with expertise in execution of Hydro Projects from concept to commissioning, with 14.06% share of installed hydro-electric capacity in India and presence across 8 states with installed capacity of 5526 MW.
- > Assured income business model due to long term power purchase agreement.
- Ability to meet peaking power demand & improves grid stability and reliability.
- ➤ High Credit rating by reputed credit rating agencies.





















Shareholding Pattern



Sr.No	Category	Holding at the time of IPO	Holding (30.09.12)	Change
1	PRESIDENT OF INDIA	86.36%	86.36%	0.00%
2	RESIDENT INDIVIDUALS	4.53%	6.69%	2.16%
3	BODIES CORPORATES	1.25%	1.78%	0.53%
4	FOREIGN INSTITUTIONAL INVESTORS	4.46%	1.30%	-3.16%
5	MUTUAL FUNDS	0.96%	1.25%	0.29%
6	BANKS	1.27%	0.65%	-0.62%
7	INDIAN FINANCIAL INSTITUTIONS	0.85%	1.39%	0.54%
8	HUF	0.29%	0.35%	0.06%
9	NON RESIDENT INDIANS	0.02%	0.15%	0.13%
10	OTHERS	0.01%	0.08%	0.07%





















Thank You

















