

11 February 2010

MF Global Initiating Report

NHPC

| Poised to take-off

POWER

NHPC IN: **BUY**

RS 32

Investment Rationale

- » NHPC operates on a regulated business model that offers safety against external risks like delay in support infrastructure, geological surprises, law and order issues etc., while assuring a fixed return on a large portion of its assets' life.
- » The company's profitability is expected to improve going forward due to favourable changes in CERC norms that allow higher RoE of 15.5%, complete recovery of O&M expenses, and full tariff recovery for Dulhasti, Omkareshwar & Teesta. We expect 14.5%-15% core RoE on a sustainable basis, from FY15E onwards, against the historic average of 8.5%. The overall RoE for the company would improve from 6.8% to 9.4% as assets under construction get operational by FY15E.
- » NHPC generation capacity would reach 9.5GW from the current 5.2GW by 2013. As most of these projects near completion, we get a definite timeline for value accretion, which is otherwise difficult for overtly long-gestational hydel projects. NHPC has 6.7GW projects awaiting CCEA clearance.
- » NHPC is strategically important to the Govt's plans to harness the entire 150GW of India's potential hydel capacity by the 14th Plan period. This provides a growth opportunity for NHPC, despite the risks in the sector.

Risks: (1) Delay in project execution, (2) Lower-than-estimated availability at NHDC stations, (3) Any unfavourable changes in regulations, (4) Cost-overruns are not assimilated by the regulator for tariff calculations.

Valuation: An average of P/B & DCF-based valuation suggests a FY11E fair value of Rs 40, implying an upside of 24% and a Buy rating. Currently, NHPC is trading at 1.4x FY11E P/B, and is trading at discount to its peers.

VALUATION SUMMARY

Y/E MAR, RS MN	FY2008	FY2009	FY2010E	FY2011E	FY2012E
NET SALES	29,248	34,278	50,024	50,353	61,353
GROWTH, %	30.2	17.2	45.9	0.7	21.8
CORE EBIDTA	22,573	24,373	41,218	39,852	49,355
EBIDTA MARGINS, %	77.2	71.1	82.4	79.1	80.4
NET PROFIT	11,462	13,057	18,723	15,889	18,944
NET PROFIT GROWTH, %	39.2	38.1	37.4	31.6	30.9
EPS, RS	1.0	1.2	1.6	1.3	1.5
EPS GROWTH, %	9.4	13.9	35.5	(18.4)	19.2
PER, X	31.6	27.7	20.5	25.1	21.0
EV/EBIDTA, X	20.7	19.9	11.5	12.1	9.7
EV/NET SALES, X	16.0	14.2	9.4	9.6	7.8
PRICE/BOOK VALUE, X	1.8	1.7	1.4	1.4	1.4
ROIC, %	5.3	5.0	5.9	4.8	5.8
ROE, %	5.8	6.3	7.8	5.8	6.7
DIVIDEND YIELD, %	0.8	0.9	1.4	1.3	1.4

Source: Company, MF Global India Research Estimates

TARGET RS 40 (+24%)

STOCK RATING

BUY	NEUTRAL	SELL
> 15%	-15% TO +15%	< -15%

COMPANY DATA

O/S SHARES :	12301MN
MARKET CAP (RS) :	398BN
MARKET CAP (USD) :	8.6BN
52 - WK HI/LO (RS) :	40 / 30
AVG. DAILY VOL. (3MTH) :	13.3MN
FACE VALUE (RS) :	10

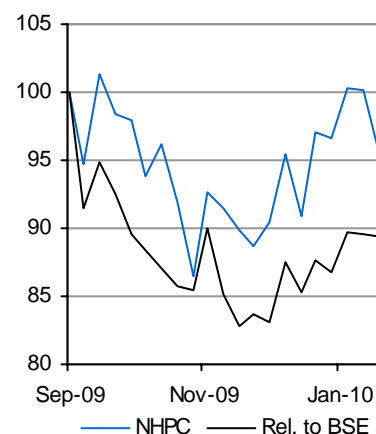
SHARE HOLDING PATTERN, %

PROMOTERS :	86.4
FII / NRI :	2.0
FI / MF :	3.3
NON-PROMOTER CORP. HOLDINGS :	2.2
PUBLIC & OTHERS :	6.1

PRICE PERFORMANCE, %

	1MTH	3MTH	1YR
ABS	-8.5	-0.6	-
REL TO BSE	-0.7	2.5	-

PRICE VS. SENSEX



Source: Bloomberg, MF Global India Research

INVESTMENT OVERVIEW

SUSTAINABLE COMPETITIVE ADVANTAGE	DOMINANT POSITION IN THE INDUSTRY, COUPLED WITH A RICH EXPERIENCE IN PROJECT EXECUTION, GIVES THE COMPANY A COMPETITIVE ADVANTAGE.
FINANCIAL STRUCTURE	NHPC HAS MAINTAINED A D/E OF 0.66X, WHILE POWER PROJECTS USUALLY HAVE A HIGH LEVERAGE OF 2.33X. THIS GIVES NHPC AMPLE COMFORT TO CARRY OUT ITS CAPEX PLANS.
SHAREHOLDER VALUE CREATION	GROWTH IN SCALE AND IMPROVEMENT IN PROFITABILITY ENSURE GREATER VALUE CREATION, GOING FORWARD
EARNINGS VISIBILITY	HAVING A 100% REGULATED BUSINESS MODEL FOR ALL ITS PLANTS ENSURES HIGH EARNINGS VISIBILITY. THE PROFITS ARE EXPECTED TO REGISTER A CAGR OF -16% OVER THE NEXT SIX YEARS.
VALUATION	AT RS 32.4, NHPC TRADES AT 1.4X FY11E B/V
MF GLOBAL VS. CONSENSUS	OUR ESTIMATES ARE IN LINE WITH THE CONSENSUS
FUTURE EVENT TRIGGERS	BRINGING PROJECTS AWAITING CCEA CLEARANCE UNDER EXECUTION.

Source: MF Global India Research

KEY RISKS

Delay in project execution

- » NHPC's projects, like all other hydel projects, are vulnerable to project execution delays due to systemic/procedural issues, geological surprises, delays from suppliers, delays in support infrastructure erection and other factors. In the past, there have been projects that have got delayed for over six years due to one or many of these reasons. Though we have assumed a reasonable delay, from the latest status update given by the CEA, we cannot rule out a further delay and this is therefore, a potential downside risk to our estimates.

Lower-than-estimated generation/availability at NHDC stations

- » NHDC's two stations—Omkareshwar and Indirasagar—have been generating at lower than normative levels. In our estimates, we have assumed that the generation will remain subdued, but an even lower generation is a potential downside to our estimates.

Change in regulations

- » Having a 100% regulated business model, any unfavourable changes in regulations would have a direct impact on our estimates.

Cost escalation is not assimilated by the regulator for tariff calculations

- » We have assumed that the regulator would approve the cost escalations for tariff calculations. In case the regulator does otherwise, there would be a negative impact on NHPC's profitability.

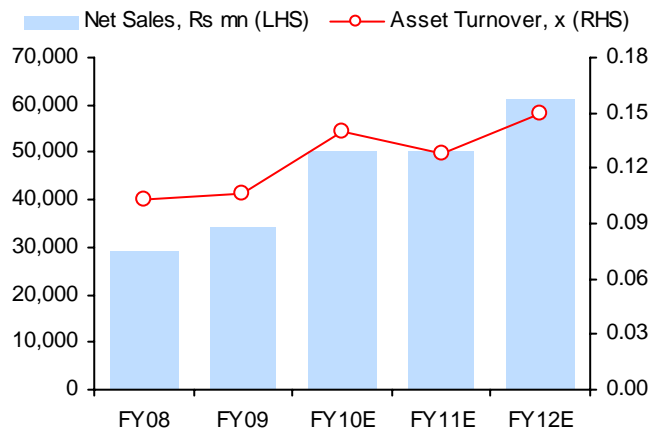
ASSUMPTIONS AND VALUE DRIVERS

Y/E MAR	FY2008	FY2009	FY2010E	FY2011E	FY2012E	FY2013E	FY2014E	FY2015E
INSTALLED CAPACITY (MW)	5178	5183	5188	6191	6680	6680	9480	9480
NHPC	3658	3663	3668	4671	5160	5160	7960	7960
NHDC	1520	1520	1520	1520	1520	1520	1520	1520
CAPEX (RS MN)			42984	45316	23081	16973	4893	0
PLF (%)								
NHPC	46.1%	52.0%	52.9%	46.4%	53.4%	56.8%	42.6%	51.5%
NHDC	25.8%	17.8%	16.8%	18.7%	18.7%	18.7%	18.7%	18.7%
UNITS GENERATED (MU)	18240	19058	19242	21455	26619	28145	32160	38377
NHPC	14811	16691	17009	18968	24132	25658	29673	35890
NHDC	3429	2367	2233	2487	2487	2487	2487	2487

Source: Company, MF Global India Research Estimates

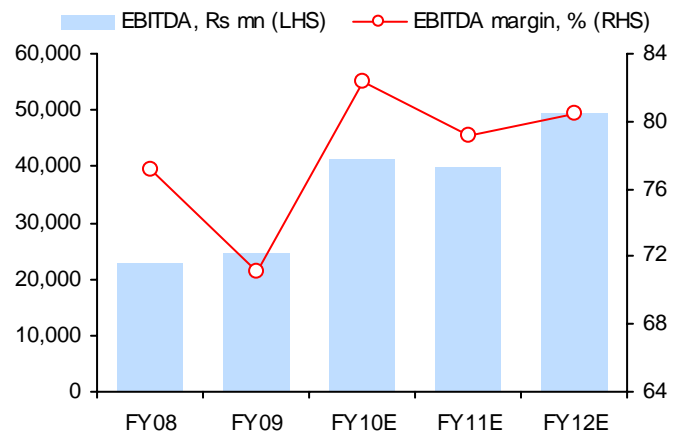
VALUE CREATION

SALES AND ASSET TURNOVER



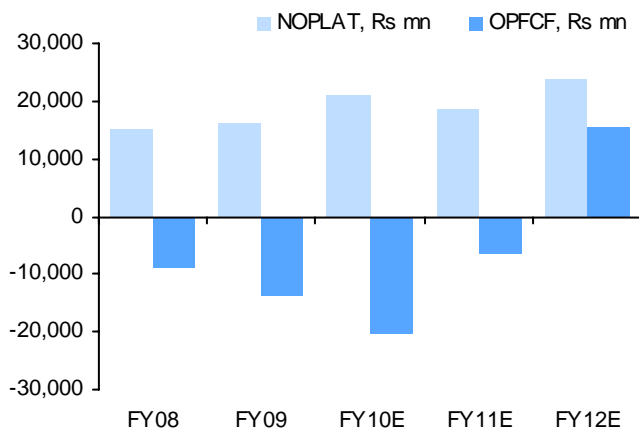
» The asset turnover would continue to rise as the plants under construction of ~4.3GW get operational.

EBITDA AND EBITDA MARGIN



» Due to changes in the CERC tariff norms, EBITDA margins would improve, but would get marginalised at the PAT level due to higher depreciation.

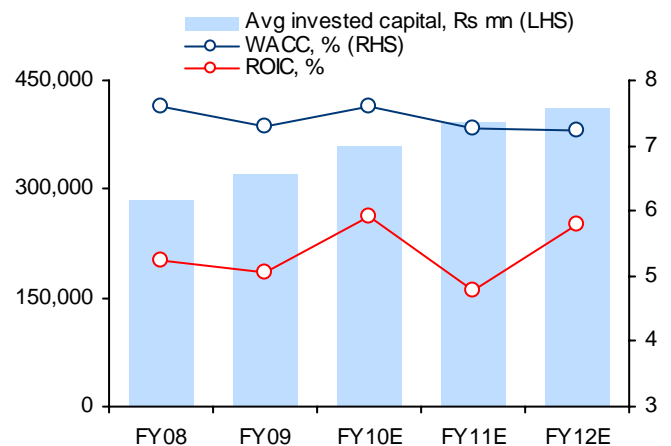
NOPLAT AND OPFCF



» As projects under construction go on stream, the operating cash flows would continue to rise until FY15.

Source: Company, MF Global India Research Estimates

ECONOMIC PROFIT



INVESTMENT THESIS

NHPC is India's largest hydel generation utility, with a business model that offers safe regulated returns to offset the risks of projects becoming commercially unviable due to the long gestation period of the projects, geological surprises and a host of other external risks. Going forward also, the company would play a pivotal role in harnessing the potential hydel capacity of the country and also develop hydel capacity in neighbouring countries, which would, in part, cater to India's power needs.

Our investment argument for NHPC is based on the following lines of reasoning:

- » **Sound business model:** We believe that NHPC has a sound business model that ensures (a) High earnings visibility; due to regulated RoE and long-term PPAs for all its existing assets, (b) Value accretion in the near future as 4.3GW expansion plans are under construction.
- » **Huge growth potential:** Growth potential is immense due to unharnessed hydel potential in India and neighbouring countries. Though the growth might get restrained due to systemic and other external factors, the value accretion for the company remains phenomenal.

Sound Business Model

We have strong faith in NHPC's business model, which gives us confidence in the company's earnings visibility. We derive our confidence from the following characteristics:

- » Assured profit model.
- » Higher profitability on the back of the new CERC norms.
- » Tangible expansion plans.

Assured Profit Model

NHPC's entire generation capacity of 5.18GW as well as 4.3GW of capacity under construction is regulated. Operating in an industry, which is afflicted by numerous external risks that prolong projects' gestation period, resulting in abnormal cost over-runs, regulations come as a much-needed support. In the past, NHPC's projects have experienced doubling of their gestation period and thereby, a proportionate or even more-than-proportionate increase in project costs. However, in cases where the delays were prominently due to factors that were beyond the control of the company, the regulator approved almost the entire cost escalation. The projects that are under construction are already 1-4 years behind its schedules, and have already suffered cost escalations. Having a regulated business model, these projects would earn returns on the total equity invested in them. This ensures visibility to prospective earnings from the projects under construction as well as operational capacities.

Also, as the regulations prescribe a fixed RoE for a long duration, usually 30-35 years, stable returns are assured for a larger portion of the assets' life.

TIME & COST OVER-RUNS OF NHPC PLANTS

NAME OF THE PLANT	ORIGINAL COD	TIMER	ORIGINAL COST	COST OVER-RUN	% COST
		OVER-RUN (YRS)	RS MN	RS MN	ESCALATION
DHAULIGANGA	FY99	7	6019.8	9763.3	162%
DULHASTI	FY01-02	6	12629.7	39655.2	314%
TEESTA-III	FY07	4	7689.2	5104.8	66.4%
SEWA-II	FY08	2	6654.6	2315.4	34.8%
PARBATI-II	FY10	3	39195.9	349	0.9%
TEESTA-IV	FY10	2	10613.8	0.2	0.0%
URI-II	FY10	1.5-2	17247.9	2.1	0.0%
CHAMERA-III	FY11	0	14056.3	1787.2	12.7%
NIMMOOBAZGO	FY11	1	6110.1	1849.9	30.3%
SUBANSIRILOWER	FY11	2	62853.3	11666.6	18.6%
PARBATI-III	FY11	0	23045.6	-864.9	-3.8%
CHUTAK	FY11	1	6212.6	1807.4	29.1%

Projects commissioned in the last few years

Projects under construction

Source: CERC, CEA, MF Global India Research Estimates

Profitability to improve, going forward

Despite being guaranteed a RoE of the earlier 14% and now 15.5%, NHPC's core RoE hovered around 8.5% historically. The reasons for the same were:

- » Under-recovery of O&M expenses.
- » Under-recoveries due to provisional tariff being charged for 1420MW.
- » Lower RoE due to project costs unapproved by the regulator.

We believe that NHPC's core RoE would rise to 14.5%-15% on a sustainable basis from FY15E onwards as:

- A. New tariff norms to boost RoE
- B. Under-recoveries on account of provisional tariffs would be recovered
- C. Projects under construction go on stream

A. New tariff norms to boost RoE:

- » The new CERC norms prescribe a RoE of 15.5% (earlier, the normative RoE was 14%). This would directly add Rs 1bn to PAT on an annual basis (for capacity already operational).
- » The new norms prescribe regulatory approval for a cost escalation on actual historic O&M expenses for plants (that have been operational for over five years). Earlier, the norms provided for O&M expenses as a percentage of project cost and an escalation thereon. As a result, NHPC reported under-recoveries on old projects that had a relatively low capital base. Thus, on an annual basis, the company has been reporting an under-recovery of Rs 1bn.

Few important changes in CERC norms, along with their impact on NHPC are presented in the table below:

IMPACT OF NEW CERC PROVISIONS ON NHPC

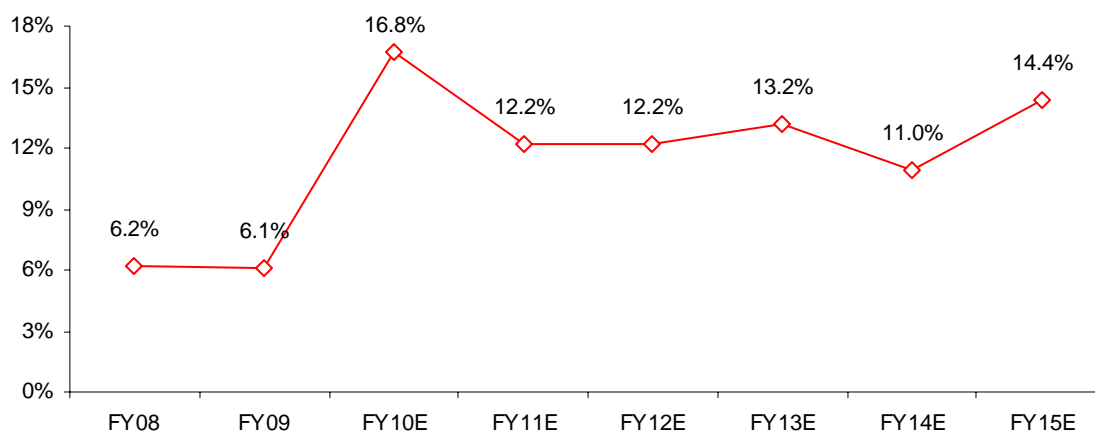
HEADS	NEW PROVISIONS	OLD PROVISIONS	IMPACT ON NHPC
ROE	15.5% (ADDITIONAL 0.5% ON TIMELY COMPLETION OF PROJECTS)	14%	A DIRECT POSITIVE IMPACT OF 1.5 PERCENTAGE POINTS.
PAF	PLANT-SPECIFIC PAF GIVEN FOR ALL CENTRAL HYDEL POWER PLANTS	RECOVERY NOT ON THE BASIS OF PAF	A UTILITY WILL NOW EARN AN IMPLIED INCENTIVE ON ITS CAPACITY CHARGE ON ADDITIONAL PAF ACHIEVED OVER & ABOVE NORMATIVE PAF. WHILE SECONDARY ENERGY CHARGE WOULD GET A MAXIMUM RECOVERY OF 80 PAISE ON ANY ADDITIONAL UNIT GENERATED OVER AND ABOVE DESIGN ENERGY.
INCENTIVE/ PENALTIES	ADDITIONAL RECOVERY OVER COST IN CASE THE PAF IS HIGHER THAN THE NORMATIVE PAF, & VICE VERSA.	65% OF AFC FOR THE ADDITIONAL CAPACITY INDEX ACHIEVED. THE COMPANY WAS NOT PENALISED FOR ACTUALS LOWER THAN NORMS.	POSITIVE.
REFINANCING OF LOAN	BENEFITS/COSTS RELATED TO REFINANCING OF LOANS TO BE SHARED BETWEEN THE BENEFICIARY AND GENERATING COMPANY IN THE RATIO OF 2:1	BENEFITS/COSTS RELATED TO REFINANCING OF LOANS TO BE PASSED ON TO THE BENEFICIARY.	POSITIVE.
O&M EXP CALCULATION	ESCALATED BY 5.72% OVER THE 5-YEAR AVERAGE OF HISTORICAL COSTS; FOR PLANTS WITH LESS THAN 5 YEARS' OF AGE, O&M EXPENSES ARE INITIALLY FIXED AT 2% OF CAPITAL COST (EXCLUDING R&R EXP) WITH AN ANNUAL ESCALATION OF 5.17% TO ARRIVE AT THE O&M EXP FOR 2009-10 AND AN ANNUAL ESCALATION OF 5.72% DURING THE TARIFF PERIOD.	ESCALATED BY 4% OVER THE 5-YEAR AVERAGE OF HISTORICAL COSTS; FOR PLANTS WITH LESS THAN 5 YEARS' OF AGE, O&M EXPENSES ARE INITIALLY FIXED AT 1.5% OF CAPITAL COST WITH AN ANNUAL ESCALATION OF 4%.	PREVIOUS CERC NORMS PROVIDED FOR O&M EXPENSES AS A % OF TOTAL PROJECT COST, WHICH WAS VERY LOW FOR OLDER PLANTS. AS A RESULT, NHPC REGISTERED UNDER-RECOVERIES OF RS 1BN ON AN ANNUAL BASIS. HOWEVER, AS THE NEW NORMS CONSIDER ACTUAL O&M EXP, THE COMPANY WOULD BE ABLE TO RECOVER ITS ENTIRE O&M COST.
TAX	THE ROE TO BE GROSSED UP THE NORMAL TAX RATE. THE UTILITY WOULD BE BEARING 100% OF THE TAX INCIDENCE ON INCENTIVES.	THE ENTIRE TAX INCIDENCE OF A UTILITY WAS PASSED ON TO THE BENEFICIARY.	NEGATIVE

Source: CERC, MF Global India Research

B. Under-recoveries on account of provisional tariff to get sorted out:

» Three of NHPC's plants, Dulhasti, Omkareshwar & Teesta, had been billing beneficiaries provisional tariff, as they awaited their final tariff orders. The total installed capacity for these plants is 1420MW, and these got operational in FY06-07. The company reported under-recovery of ~Rs 6.5bn till now. While the tariff orders for Dulhasti & Teesta are already out, we expect the tariff order for Omkareshwar to come in 2010. As we expect a recovery of ~Rs 6.5bn in relation to Dulhasti's & Teesta's previous years' under-recovery in FY10E, there would be a temporary fillip to profitability in FY10E to that extent.

CORE ROE



Source: Company, MF Global India Research Estimates

C. Projects under construction going onstream

Earlier, due to unapproved project costs, NHPC's capital structure was skewed towards a higher equity portion, which resulted in lower core RoE. This is one of the reasons that the company had been earning a lower RoE of 8.5% in the past. However, all of NHPC's projects that are under construction are financed with 70:30 debt:equity ratio, which is in line with the provisions of the new CERC norms. Now that NHPC has a favourable capital structure, the risk of lower RoE on account of a disproportionate capital structure is eliminated. However, NHPC would continue to earn lower effective returns on its old projects, where a portion of the project cost has not been approved by the regulator.

Overall, NHPC's RoE is also expected to improve profitability on core assets as the assets under construction get operational. Thus, we expect the RoE to be ~14.5%-15% going forward, as against the historic 8.5%.

Freeing a portion of Unallocated Quota: A Potential Upside

The Ministry of Power is considering allowing a portion of unallocated quota of generation by CGUs (~15% of total generation) for sale at the discretion of the utility, as provided in The Electricity Act, 2003. CGUs and the Planning Commission have been recommending this move to make investments in the sector more attractive. Due to various reasons, political and otherwise, this proposal is still pending with the Ministry of Power.

If this is allowed, it would translate into big benefits for all CGUs, particularly hydel CGUs. Thus, as a hydel generator, NHPC stands to gain substantially. However, as this proposal is still in a nascent stage, we have not factored this into our estimates. If it does come through, it would be a potential upside to our estimates.

Tangible expansion plan

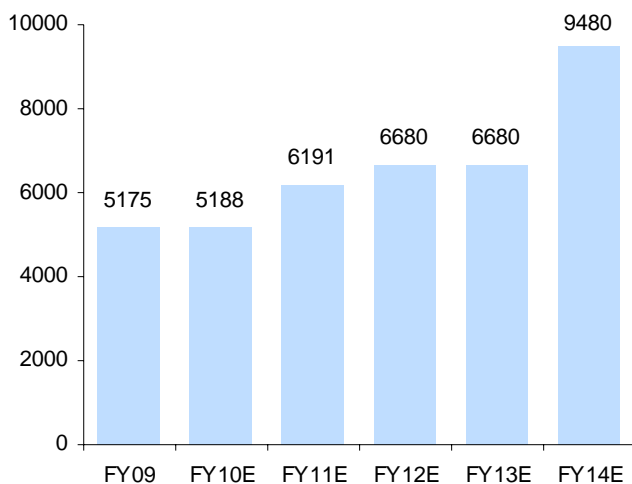
NHPC plans to add 4.3GW to its current generation capacity of 5.2GW through FY14. The projects are under construction and are in an advanced stage of execution. These projects have a total capex requirement of Rs 213.7bn, and have a debt/equity ratio of 70:30. While the company has already tied up the debt requirement of the projects, the equity requirement would be met by the IPO proceeds and internal accruals. Other requirements like land acquisition, equipment ordering and EPC works contract, power take-off agreements etc. are already in place for these projects.

PLANT-WISE CAPACITY EXPANSION DETAILS

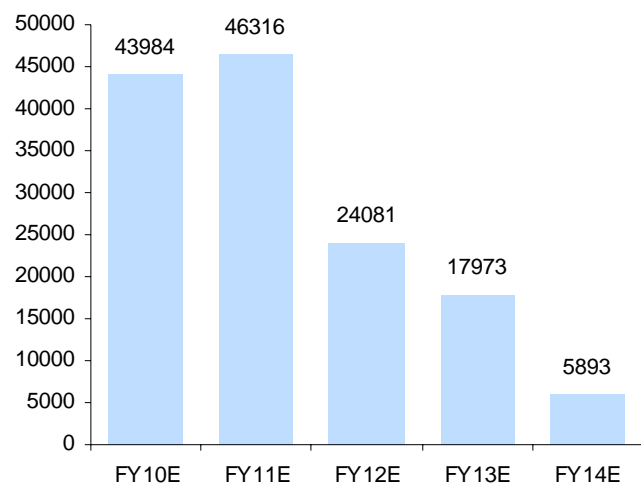
NAME	LOCATION	CAPACITY (MW)	CEA ESTIMATED COD	EXPECTED COD	PROJECT COST- CEA ESTIMATE (RS MN)	PROJECT COST – MF GLOBAL ESTIMATE(RS MN)
SEWA-II	J&K	120	MAR-10	MAY-10	8,970	9,239
TEESTA-III	WB	132	AUG-10	NOV-10	12,794	13,178
NIMMOBAZGO	J&K	45	JUN-11	DEC-11	7,960	8,318
CHAMERA-III	HP	231	AUG-10	NOV-10	15,844	16,319
PARBATH-III	HP	520	NOV-10	FEB-11	22,181	22,846
URI-II	J&K	240	FEB-11	AUG-11	17,250	18,026
TEESTA-IV	WB	160	JUN-11	DEC-11	10,614	11,092
CHUTAK	J&K	44	AUG-11	JAN-12	8,020	8,381
SUBANSIRILOWER	AP	2,000	DEC-12	SEP-13	74,520	78,991
PARBATH-II	HP	800	MAR-13	JAN-14	39,545	42,511
TOTAL		4,292			217,697	228,901

Source: Company, CEA, MF Global India Research Estimates

INSTALLED GEN. CAPACITY (MW)



YEAR-WISE CAPEX (RS MN)



Source: Company, MF Global India Research Estimates

All these above-mentioned factors instill the faith that these projects, which are already at advanced stages of execution, would get commissioned in the near future. Thus, we have a defined time-line for prospective value accretion, which otherwise is very difficult for overtly long-gestational hydro power plants in India. We have, however, assumed further delays than what the company has defined in its commissioning schedule.

Beyond this, NHPC has a project pipeline of ~14GW. Of this, 6.7GW awaits final clearance from the CCEA and is likely to commence construction in the near future. We believe that NHPC has the requisite financial muscle and credibility to carry out the execution of projects in the pipeline, if approved.

PROJECTS AWAITING FINAL SANCTION FROM THE CCEA

PROJECTS	STATE	PROPOSED CAPACITY
KOTLI BHEL STAGE IA(1)	UTTARAKHAND	195
KOTLI BHEL STAGE IB(1)	UTTARAKHAND	320
KOTLI BHEL STAGE II(1)	UTTARAKHAND	530
DIBANG(2)	ARUNACHAL PRADESH	3,000
TEESTA IV	SIKKIM	520
TOTAL		4565
JOINT VENTURE PROJECTS		
LOKTAK DOWNSTREAM	MANIPUR	66
PAKAL DUL AND OTHER HYDROELECTRIC PROJECTS IN THE CHENAB RIVER	JAMMU & KASHMIR	2100
GRAND TOTAL		6731

Source: Company

PROJECTS UNDER SURVEY AND INVESTIGATION FOR PREPARATION OF A DPR

PROJECT	STATE	PROPOSED INSTALLED CAPACITY (MW)
KARMOLI LUMTI TULLI	UTTARAKHAND	55
GARBA TAWAGHAT	UTTARAKHAND	630
CHUNGAR CHAL	UTTARAKHAND	240
LACHEN	SIKKIM	210
TAWANG I	ARUNACHAL PRADESH	750
TAWANG II	ARUNACHAL PRADESH	750
SUBANSIRI (MIDDLE)	ARUNACHAL PRADESH	1,600
SUBANSIRI (UPPER)	ARUNACHAL PRADESH	2,000
BURSAR	JAMMU & KASHMIR	1,020
TOTAL		7255

Source: Company

While we believe that the management has the capability to execute these projects, we have not included these projects in our explicit period estimates, as the management has not guided on the timeline.

NHPC is yet to brace itself for the competitive bidding regime to start in January 2011. Earlier, despite having prepared the DPRs, the company could not bag a couple of state-level projects on a competitive basis, particularly in Arunachal Pradesh (Subansiri Middle, 1600MW & projects in Siang Valley, 3000MW). However, considering the projects that await clearance or are already allocated to NHPC, the company has its kitty full for next decade or so.

Operating in an opportunity-rich industry

NHPC's growth potential is way beyond what is written down on paper and comes from: (a) The huge demand-supply mismatch, and (b) The under-utilised hydel capacity in India.

That the power deficit in India has reached critical levels is not news to anybody and nor is the fact that India's hydel potential is grossly under-utilised. Periodic assessments have indicated that India's total hydel potential stands at 150GW. At 36.9GW of installed capacity, we have utilised a mere 25% of India's potential. Hydel generation capacity is also an ideal choice to cater to peak deficit, and also is free of many other concerns like fuel supply issues, environmental issues, etc. Thus, the power ministry has drafted a broad timeline to develop/harness the potential hydel capacity in India.

HYDRO POWER POTENTIAL IN INDIA

BASIN/RIVERS	POTENTIAL AT 60% LOAD FACTOR (MW)		2001-02 RANKING STUDIES
	1953-59 ASSESSMENT	1978-87 ASSESSMENT	INSTALLED CAPACITY
INDUS	6583	19988	33382
GANGA	4817	10715	20711
CENTRAL INDIAN RIVERS	4300	2740	4152
WEST FLOWING RIVERS	4350	6149	94300
EAST FLOWING RIVERS	8633	9532	14511
BRAHMAPUTRA	13417	34920	66065
TOTAL	42100	84044	106910

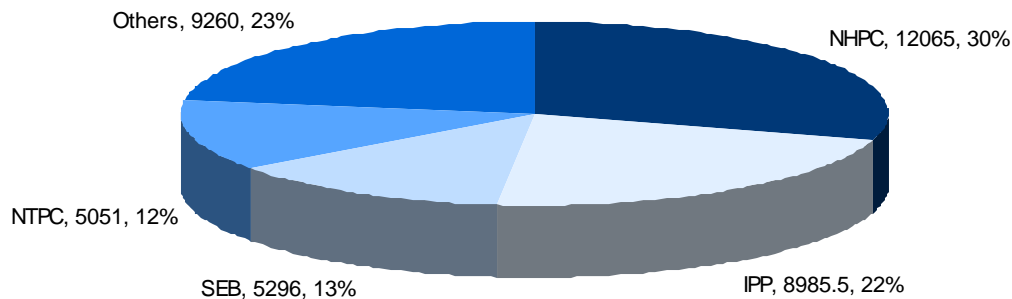
Source: Hydro Power Policy, 2008; Hydro Development Plan for 12th Five Year Plan, 2008

LONG-TERM PLAN FOR HYDRO DEVELOPMENT

PLAN PERIOD	HYDRO CAPACITY (MW)	HYDRO CAP AT THE END OF THE PLAN PERIOD (MW)
10 PLAN (2002-07)		34653.8
11 PLAN (2007-12)	16553	51207
12 PLAN (2012-17)	30000	81207
13 PLAN (2017-22)	31000	112207
14 PLAN (2022-27)	36494	148701

Source: Hydro Power Policy, 2008

Until the '70s, capacity augmentation in the power sector was marred by weak political will at the state level. Thus, as an initiative to revive the sector, the central government formed NHPC and other CGUs in 1975. Since its inception, the company has grown at a CAGR of 13.2% to reach 5175MW. The company owns 15% of total hydel installed capacity in the country, which illustrates the role that NHPC has played in the sector. Going forward, for the 11th & the 12th Five-Year Plan period as well, NHPC is expected to add ~30% of the total hydel generation capacity addition.

AGENCY-WISE DETAIL OF HYDEL PLANTS LIKELY TO BENEFIT IN 12TH PLAN


Source: Working Group on XIth Plan Paper

To cater to the demand for power in the country, the GOI has worked out partnerships with neighbouring countries to harness their hydel potential and bring power to India. A joint initiative is being undertaken by GOI & the Bhutan Government to develop 10,000MW of hydel capacity in Bhutan by 2020. NHPC is already being allotted 3190MW under the scheme in early 2009. Talks are on with the Myanmar government as well on the same lines, however, no concrete plan has been finalised. We believe that the visibility of the projects in Bhutan is relatively higher. However, these projects remain out of the purview of our explicit assumptions, until greater clarity emerges. According to the ministry estimates, the total hydel potential in the neighbouring countries is ~130GW.

INTERNATIONAL PROJECTS

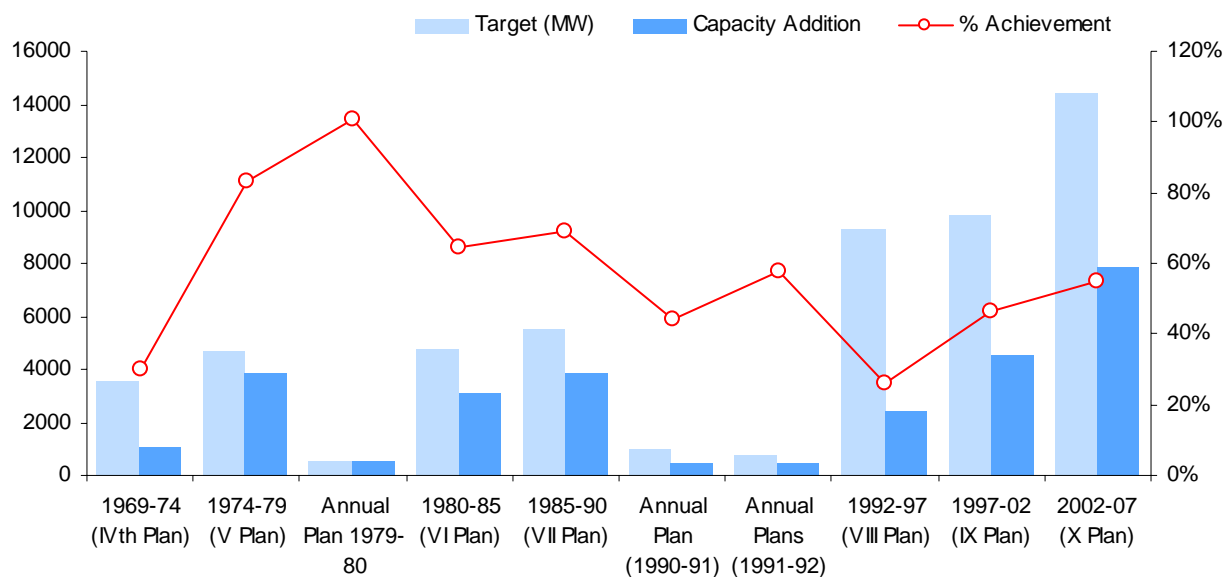
PROJET NAME	CAPACITY (MW)	COUNTRY	STATUS
MANGDECHHU	720	BHUTAN	DRP SUBMITTED TO DEPT OF ENERGY, BHUTAN
CHAMKARCHHU	670	BHUTAN	PREPARING DPR
KURI GONGRI	1800	BHUTAN	PREPARING DPR
TAMANTHI	1200	MYANMAR	ENTERED IN MOU WITH THE UNION OF MYANMAR
SHWZAYE	642	MYANMAR	ENTERED IN MOU WITH THE UNION OF MYANMAR
TOTAL	5032		

Source: Company

Systemic issues and other external factors restrict growth

Hydel power projects in India are more exposed to systemic and external risks. These plants have to go through tedious bureaucratic approvals for investment approvals and environmental clearances, geological surprises, law and order issues etc., which not only result in long construction periods, but also delayed project approvals as well. As a result, hydel capacity addition has remained low and the share of hydro-based generation capacity as a percentage of total generation capacity has come down from 37% in 1956 to 23% in 2009.

PLAN-WISE HYDRO CAPACITY ADDITION ACHIEVEMENT VS. TARGET



Source: Hydro Power Policy, 2008

MAJOR REASONS FOR SLIPPAGES FOR PROJECTS IN XTH FIVE-YEAR PLAN

REASONS FOR DELAY	CAPACITY (MW)	(%)
DELAY IN ENVIRONMENTAL CLEARANCES, GEOGRAPHICAL SURPRISES, NATURAL CALAMITIES, R&R ISSUES, DELAY IN SIGNING MOU AND COURT CASES	3155 MW	48.5%
DELAY IN CLEARANCES/INVESTMENT DECISIONS (HYDRO PROJECTS)	2391 MW	36.7%
DELAY IN SUPPLIES/ERECTION BY SUPPLIERS/ CONTRACTORS	679 MW	10.4%
DELAYS IN AWARD OF WORKS MAINLY IN STATE SECTOR	222 MW	3.4%
LAW & ORDER PROBLEM	60 MW	1.0%
TOTAL	6507 MW	

Source: 12th Plan Hydro Power Plan

Diversifying into related businesses

NHPC is also contemplating diversification into coal-based generation. The company has signed an MoU with the MP Government for developing a 1320MW coal-based power plant. However, there has not been any major progress on the MoU, and thus, this remains out of the purview of our estimates.

Utilising its 35 years' experience and expertise in developing hydro power plants in the country, NHPC has also set up a consultancy division. NHPC is currently engaged in consulting on national as well as international contracts. Though the consultancy is a relatively small segment, it has grown at a compounded rate of 18% over the last four years. Considering that the space is abuzz with activity and NHPC has unmatched experience in project execution, we expect the division to grow at a rate of ~11% in the near future.

VALUATIONS

We view NHPC as a company that would earn core RoE of 14.5-15% with long-term growth prospects. To value the company, we have taken an average of DCF & P/B methodologies of valuation, and we thus arrive at a price target of Rs 40 for the company.

NHPC is trading at significant discounts to its peers. We concede that NHPC would have lower valuations to thermal utilities as it earns lower core RoE in comparison to its peers and is primarily in the delay-ridden hydel generation segment. However, at the same time, we believe that the discount at which the stock is currently trading at should come down as the RoE of NHPC improve, and thus the discount is not warranted. At our price target, the company would be trading at 1.8x FY11E P/B, which means that the company would yet be trading at a discount to its peers.

COMPARATIVE VALUATION FY11E

COMPANY	PRICE (RS)	EPS (RS)	BV (RS)	ROE (%)	P/E, X	P/B, X
NHPC	33	1.29	21.5	6.2	25.24	1.52
NTPC	208	11.5	82.1	14.9	18.06	2.53
TATA POWER	1277	86.5	606.6	15.3	14.77	2.11
NEYVELI LIGNITE	150	7.9	64.6	12.7	18.99	2.32
POWER GRID*	112	5.996	44.047	14.0	18.68	2.54

Source: Bloomberg, MF Global India Research Estimates

Our price target price holds a 24% upside from the CMP of Rs 32 and thus, we recommend a Buy on the stock.

FINANCIALS

INCOME STATEMENT

Y/E MAR, RS MN	FY2008	FY2009	FY2010E	FY2011E	FY2012E
NET SALES	29,248	34,278	50,024	50,353	61,353
<i>GROWTH, %</i>	30	17	46	1	22
OTHER INCOME	478	489	575	662	744
TOTAL INCOME	29,726	34,767	50,600	51,015	62,097
OPERATING EXPENSES	-7,153	-10,394	-9,382	-11,163	-12,742
EBITDA (CORE)	22,573	24,373	41,218	39,852	49,355
<i>GROWTH, %</i>	26	8	69	-3	24
<i>MARGIN, %</i>	77	71	82	79	80
DEPRECIATION	-5,455	-6,441	-12,757	-14,498	-17,183
EBIT	17,118	17,933	28,462	25,354	32,172
<i>GROWTH, %</i>	21	5	59	-11	27
<i>MARGIN, %</i>	59	52	57	50	52
INTEREST PAID	-6,377	-7,760	-7,256	-8,192	-11,259
OTHER NON-OPERATING INCOME	4,572	5,953	5,267	6,014	6,123
PRE-TAX PROFIT	14,890	16,071	26,472	23,177	27,036
TAX PROVIDED	-1,896	-1,552	-6,825	-6,067	-7,003
PROFIT AFTER TAX	12,994	14,519	19,647	17,109	20,033
NET PROFIT	11,462	13,057	18,723	15,889	18,944
MF NET PROFIT	11,462	13,057	18,723	15,889	18,944
<i>GROWTH, %</i>	9.3	13.9	43.4	(15.1)	19.2
EXTRAORDINARY ITEMS: GAINS/(LOSSES)	0	-1,208	0	2,024	0
NET PROFIT ADJUSTED	11,462	14,265	18,723	13,865	18,944
UNADJ. SHARES (M)	11,182	11,182	12,301	12,301	12,301
WTD AVG SHARES (M)	11,182	11,182	11,835	12,301	12,301

CASH FLOW

Y/E MAR, RS MN	FY2008	FY2009	FY2010E	FY2011E	FY2012E
PRE-TAX PROFIT	14,890	16,071	26,472	23,177	27,036
DEPRECIATION	5,455	6,441	12,757	14,498	17,183
CHG IN WORKING CAPITAL	5,590	3,070	-10,486	6,300	-2,849
TOTAL TAX PAID	-1,896	-1,552	-6,825	-6,067	-7,003
CASH FLOW FROM OPERATING ACTIVITIES	24,040	24,030	21,918	37,907	34,367
CAPITAL EXPENDITURE	-35,265	-39,545	-44,197	-46,466	-24,231
CHG IN INVESTMENTS	2,735	2,556	2,831	2,699	2,699
CASH FLOW FROM INVESTING ACTIVITIES	-32,529	-36,989	-41,365	-43,767	-21,531
FREE CASH FLOW	-8,489	-12,959	-19,448	-5,860	12,836
EQUITY RAISED/(REPAID)	2,183	-20	40,280	0	0
DEBT RAISED/(REPAID)	23,837	20,755	18,360	29,631	11,088
DIVIDEND (INCL. TAX)	-3,678	-3,795	-6,432	-6,102	-6,484
OTHER FINANCING ACTIVITIES	1,407	-894	0	2,024	0
CASH FLOW FROM FINANCING ACTIVITIES	23,785	15,562	51,674	25,124	4,222
NET CHG IN CASH	15,295	2,602	32,226	19,264	17,058

BALANCE SHEET

AS AT 31ST MAR, RS MN	FY2008	FY2009	FY2010E	FY2011E	FY2012E
CASH & BANK	23,459	26,061	58,287	77,551	94,609
DEBTORS	9,046	7,636	12,274	7,662	7,789
INVENTORY	397	415	517	517	568
LOANS & ADVANCES	7,983	17,137	17,548	17,533	22,125
OTHER CURRENT ASSETS	4,033	5,308	6,320	6,040	7,211
TOTAL CURRENT ASSETS	44,917	56,557	94,947	109,304	132,302
INVESTMENTS	20,468	17,912	15,081	12,381	9,682
GROSS FIXED ASSETS	272,246	281,469	282,604	345,335	392,302
LESS: DEPRECIATION	-36,075	-43,146	-55,910	-70,407	-87,591
ADD: CAPITAL WIP	74,098	105,050	148,120	131,854	109,118
NET FIXED ASSETS	310,269	343,374	374,814	406,783	413,830
TOTAL ASSETS	375,654	417,843	484,841	528,467	555,813
CURRENT LIABILITIES	13,414	22,560	19,532	20,443	22,228
PROVISIONS	17,380	19,129	18,652	19,950	22,073
TOTAL CURRENT LIABILITIES	30,794	41,689	38,183	40,393	44,301
NON-CURRENT LIABILITIES	141,588	163,555	181,098	209,912	220,184
TOTAL LIABILITIES	172,382	205,244	219,281	250,305	264,484
PAID-UP CAPITAL	111,825	111,825	123,007	123,007	123,007
RESERVES & SURPLUS	77,484	85,853	127,219	139,029	151,489
SHAREHOLDERS' EQUITY	203,273	212,599	265,560	278,162	291,329
TOTAL EQUITY & LIABILITIES	375,654	417,843	484,841	528,468	555,813

PER-SHARE DATA

	FY2008	FY2009	FY2010E	FY2011E	FY2012E
MF EPS (INR)	1.0	1.2	1.6	1.3	1.5
<i>GROWTH, %</i>	9.4	13.9	35.5	(18.4)	19.2
BOOK NAV/SHARE (INR)	18.2	19.0	22.4	22.6	23.7
FDEPS (INR)	1.0	1.2	1.5	1.3	1.5
CEPS (INR)	1.5	1.7	2.7	2.5	2.9
CFPS (INR)	1.8	1.6	1.4	2.6	2.3
DPS (INR)	0.3	0.3	0.5	0.4	0.4

FINANCIAL STRUCTURE

	FY2008	FY2009	FY2010E	FY2011E	FY2012E
TOTAL DEBT/EQUITY (%)	63.2	70.2	63.1	70.9	71.5
NET DEBT/EQUITY (%)	51.7	58.0	41.2	43.1	39.1

PROFITABILITY, PRODUCTIVITY, LIQUIDITY AND VALUATION RATIOS

	FY2008	FY2009	FY2010E	FY2011E	FY2012E
RETURN ON ASSETS (%)	5.5	5.6	6.0	5.0	5.8
RETURN ON EQUITY (%)	5.8	6.3	7.8	5.8	6.7
RETURN ON INVESTED CAPITAL (%)	5.3	5.0	5.9	4.8	5.8
ROIC/COST OF CAPITAL (X)	0.7	0.7	0.8	0.7	0.8
ROIC - COST OF CAPITAL (%)	(2.4)	(2.3)	(1.7)	(2.5)	(1.5)
RETURN ON CAPITAL EMPLOYED (%)	5.8	5.9	6.2	5.2	6.0
COST OF CAPITAL (%)	7.6	7.3	7.6	7.3	7.2
ROCE - COST OF CAPITAL (%)	(1.8)	(1.4)	(1.4)	(2.1)	(1.2)
ASSET TURNOVER (X)	0.1	0.1	0.1	0.1	0.1
SALES/TOTAL ASSETS (X)	0.1	0.1	0.1	0.1	0.1
SALES/NET FA (X)	0.1	0.1	0.1	0.1	0.1
WORKING CAPITAL/SALES (X)	0.3	0.2	0.3	0.2	0.3
RECEIVABLE DAYS	112.9	81.3	89.6	55.5	46.3
INVENTORY DAYS	5.0	4.4	3.8	3.7	3.4
PAYABLE DAYS	684	792	760	668	637
CURRENT RATIO (X)	3.3	2.5	4.9	5.3	6.0
QUICK RATIO (X)	3.3	2.5	4.8	5.3	5.9
INTEREST COVER (X)	2.7	2.3	3.9	3.1	2.9
DIVIDEND COVER (X)	3.8	4.0	3.5	3.1	3.5
PER (X)	31.6	27.7	20.5	25.1	21.0
PEG (X) - Y-O-Y GROWTH	3.4	2.0	0.6	(1.4)	1.1
PRICE/BOOK (X)	1.8	1.7	1.4	1.4	1.4
YIELD (%)	0.8	0.9	1.4	1.3	1.4
EV/NET SALES (X)	16.0	14.2	9.4	9.6	7.8
EV/EBITDA (X)	20.7	19.9	11.5	12.1	9.7
EV/EBIT (X)	27.3	27.1	16.6	19.0	14.8
EV/NOPLAT (X)	22.6	21.3	13.7	14.3	11.3
EV/CE	31.3	30.0	22.4	25.8	20.0
EV/IC (X)	(52.0)	(35.6)	(23.3)	(75.6)	31.2

Source: Company, MF Global India Research Estimates

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