

In Expansion Phase
Buy
CMP: Rs.31.4
Target: Rs.38

Sensex	17467
Nifty	5231

Stock Data

Equity Cap	Rs.12,300.7cr
Face Value	Rs.10
Market Cap.	Rs.38,624cr
Avg. Vol. (2 weeks)	24.15lacs
52 wk High	Rs.39.75
52 wk Low	Rs.29.85
EPS (Tr.4Q)	Rs.1.40
BV/Share	Rs.18.44
P/E	22.43
P/B	1.73

Share Holding Pattern (%)

Promoter	86.4%
MFs/FIs/Banks	3.4%
FIIIs	1.6%
Bodies Corporate	2.1%
NRIs/OCBs	0.5%
Public	6.0%

 As on 31st Jan '10

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MATA RESEARCH

NHPC Ltd. is India's leading player in the hydropower generation. It is currently operating 13 hydro power plants with the total share of 14.03% in the total installed hydropower capacity of 36,885.4MW in the country. The company sells its entire power to the SEBs under the long term agreements and its tariff is determined on the regulated return basis as approved by the state electricity regulatory commissions.

HIGHLIGHTS:
❖ Capacity to Rise By 1.9x:

The company has an installed capacity of 5,175MW and has major expansion plans over the next few years. The company has an under construction capacity of 4,622MW to be commissioned by FY'13 taking the total installed capacity to 9,797 MW. The capacity expansion plans are expected to sustain the growth of the company as the increased level of capex gets converted into the regulatory capital on which the regulatory return of 15.5% is calculated.

The company has the capex plans of Rs.15,354cr over the FY'10 to FY'12 period. Subsequently it would incur the capex of Rs.29,000cr in the XIth plan period. The book value of the company is expected to register the CAGR of 11.1% over the FY'09-FY'13 period on account of this massive capex plan.

❖ Increased ROE Level to Propel Revenues & Profits:

CERC through its tariff regulations for 2009-2014 has raised the ROE on regulatory capital to 15.5% as against 14% for 2004-09 period. The improved ROE level would contribute to the higher aggregate revenue requirement by the company, consequently resulting in the high revenue growth over the next few years.

❖ Expectation to Sell Part of Power on Merchant Basis:

The power ministry has proposed to allow the central public sector utilities like NHPC and NTPC to sell 3.75% of power from their existing plants and 7.5% of power from the incremental capacities to be sold on the merchant power basis. If the proposal is accepted, it would lead to higher revenues and profitability.

❖ High Operating Margins in Hydro-power Business:

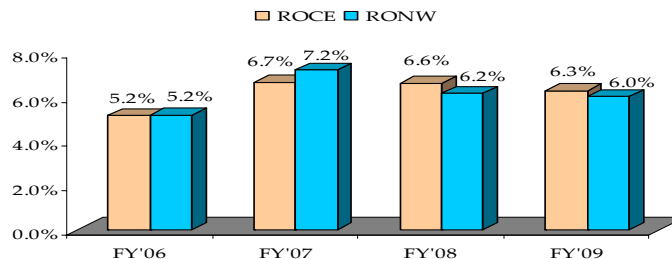
As the hydro power generation a devoid of any major fuel expenses, the company has maintained the high operating margins of over 70% over the last few years. PAT margin of the company has also remained about 40% over the last few years. Margins are also expected to remain stable over the next few years on account of the major expenses like O&M, interest and depreciation being the pass through cost in the form of aggregate revenue requirement as per the state electricity regulatory commission regulations.

❖ Diversification into Thermal Segment:

The company through its subsidiary NHDC, has plans to diversify into the new ventures of other conventional and non conventional sources of power i.e., wind or thermal power plants. NHDC would set up a 1320 MW supercritical coal based thermal power plant in Khandwa (M.P).

❖ Return Ratios Low:

The return ratios of the company have remained at the low levels over the past few years. The low return ratios is a major concern as the company has major capex plans over the next few years leading to the substantial rise in the total employed capital. Even though the company is expected to register high EPS growth at the CAGR of 20.4% over FY'09-FY'13, the return ratios are expected to remain low



VALUATION

NHPC is expected to maintain its leadership position in the hydro power generation segment with the efficient operation of its existing plants and 1.9x growth in its generation capacity over the next four years to 9,797 MW as against 5,175 MW now. The return ratios for the company, however, are expected to remain low going forward. The company has major capex plans over the next few years and the benefit of the higher free cash flows would accrue only after the next 4-5 years.

At the current market price of Rs.31.4 as on 22nd Mar'10, the stock trades at a PE of 22.43x based on trailing 4Q EPS of Rs.1.40. Mata Research expects the EPS to increase to Rs.1.76 in FY11E and Rs.1.98 in FY'12. The stock is expected to achieve the target of Rs.38 over the next 12-15 months. At target price of Rs.38, it discounts FY12E earnings by 19.2x. We initiate the coverage on the stock with the 'Buy' recommendation.

❖ Company Profile

Established to Ensure the optimal utilization of the hydropower potential of the country.

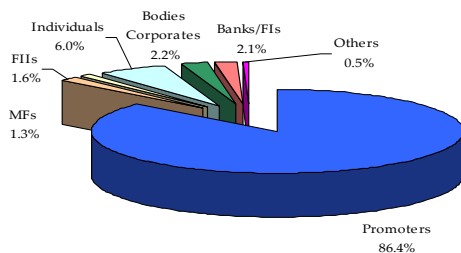
NHPC Ltd. is the largest player in India in the field of hydro power development and is categorized as ‘Mini-Ratna’ enterprise of the Government of India. The company is a hydroelectric power generating company dedicated to the planning, development and implementation of an integrated and efficient network of hydroelectric projects in India. It executes all aspects of the development of hydroelectric projects, from conception to commissioning of the projects.

Continuous Growth in the Hydropower Capacity by the company

NHPC Ltd. was incorporated on 7th Nov’1975 as National Hydroelectric Power Corporation Pvt. Ltd. which was converted to public limited company in 1986. The main objective of the company is to plan, promote and organize an integrated and efficient development of hydroelectric power capacity in India in all its aspects. Later, the objective was expanded to include the development of power in all aspects through conventional as well as non conventional sources in India as well as abroad.

In 1976-77, the company received Loktak hydroelectric project of 105MW capacity from the GOI. Gradually, the company increased up hydro power plants capacities and has now an installed capacity of 5175 MW spread over 6 states in the country including J&K, Himachal Pradesh, Manipur, Uttarakhand, Sikkim and Madhya Pradesh. With this capacity, NHPC has 14.03% market share in the installed hydroelectric power capacity in the country of 36,885.4MW (as on 31st Jan’10). The company started its consultancy business in 1993.

❖ Shareholding Pattern (As on 31st Jan’10):



NHPC, being a public sector company, has the majority of its shareholding vested with the President of India.

The company came up with its IPO in Aug’09, at Rs.36 per share with the face value of the stock being Rs.10 and premium at Rs.26 per share, after which the equity capital of the company increased from Rs.11,182.49cr to Rs.12,300.74cr.

❖ Subsidiaries/JVs

➤ **NHDC:**

Narmada Hydroelectric Power Corporation, which has been rechristened as NHDC Ltd, is 51% subsidiary of the company with Government of M.P. holding 49% share. The subsidiary is managing two hydroelectric power plants in M.P. totaling 1,520 MW. Total income of the subsidiary for Fy’09 was Rs.861cr while PAT was Rs.306cr, respectively.

NHDC has plans to diversify into the new ventures of other conventional and non conventional sources of power i.e. wind or

thermal power plants. It would set up a 1,320 MW supercritical coal based thermal power plant in Khandwa (M.P). NTPC is the consultant for the project and it is under the preliminary stages of construction.

A 100MW wind power potential site has also been identified at Kukru, Betul in MP and initial activities regarding the installation of the mast have been initiated.

➤ **NHPTCL:**

National High Power Test Laboratory Pvt. Ltd. (NHPTL), was incorporated on May 22, 2009 as a JV between NHPC, NTPC, PGCIL and Damodar Valley Corporation (DVC). The four participants own 25% stake each. NHPTL is authorized to plan, promote, organize, establish, construct, integrate, and efficient development of on-line high power test laboratory facility in India and/or abroad for testing and certification of short circuit and other testing of electrical equipments.

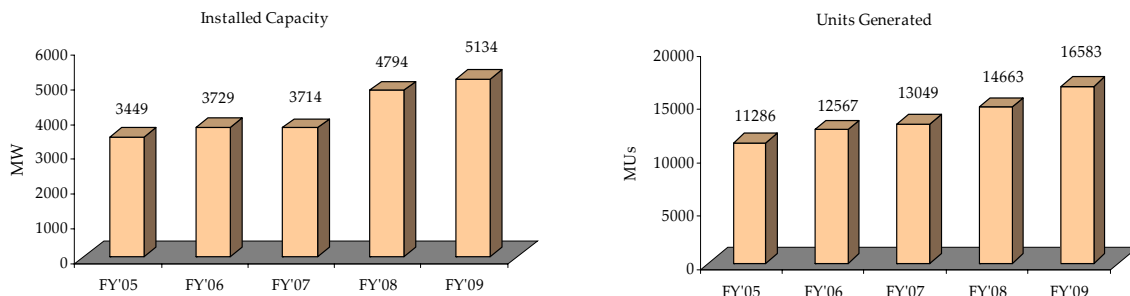
➤ **NPEX:**

National Power Exchange Ltd (NPEX) is a JV between NHPC (16.67%), NTPC (16.67%), PFS (16.67%) and TCS (50%). The JV plans to set up a power exchange in India in view of the huge potential of electricity trading in the country.

➤ **Tipaimukh Hydroelectric Project (1500MW):**

Tipaimukh project will be one of the largest HEP project in Eastern India to date and will be located 500 meters downstream of the confluence of the Tuivai and Barak Rivers in the District of Churacchander in Manipur. The Project will be completed in an estimated time of 12 years. It is to be executed as a JV among NHPC, SJVNL and Govt. of Manipur in the proportion 69:26:05.

❖ **Generation & Capacity Growth:**



The power generation growth of NHPC is more or less inline with the growth in the installed capacity. The power generation capacity increased from 3449mw in FY05 to 5134mw in FY09. The PLF of the

company was 41% for FY'09.

❖ **Existing Capacity:**

Leader in Hydropower Segment in India

NHPC is India's largest hydro power producer. The plants of the company are mainly based in North and North East India with 70.6% of the capacity installed in these regions. *The higher capacity index enables the company to earn incentives.* The company had completed Chamera – II, Dhauliganga – I, Indira Sagar and Omkareshwar projects ahead of the schedule.

Assured Return as ROE

The company sells its entire power to the SEBs under the long term PPAs. As of now, about 12% of the generation is sold as free power to the state SEBs in the respective states in which the plants are located. The power is sold as per the CERC guidelines for the determination of tariff which ensures 15.5% ROE on its total regulatory capital (including equity contribution of the company towards the capex during the year).

Efficient Management of Existing Plants

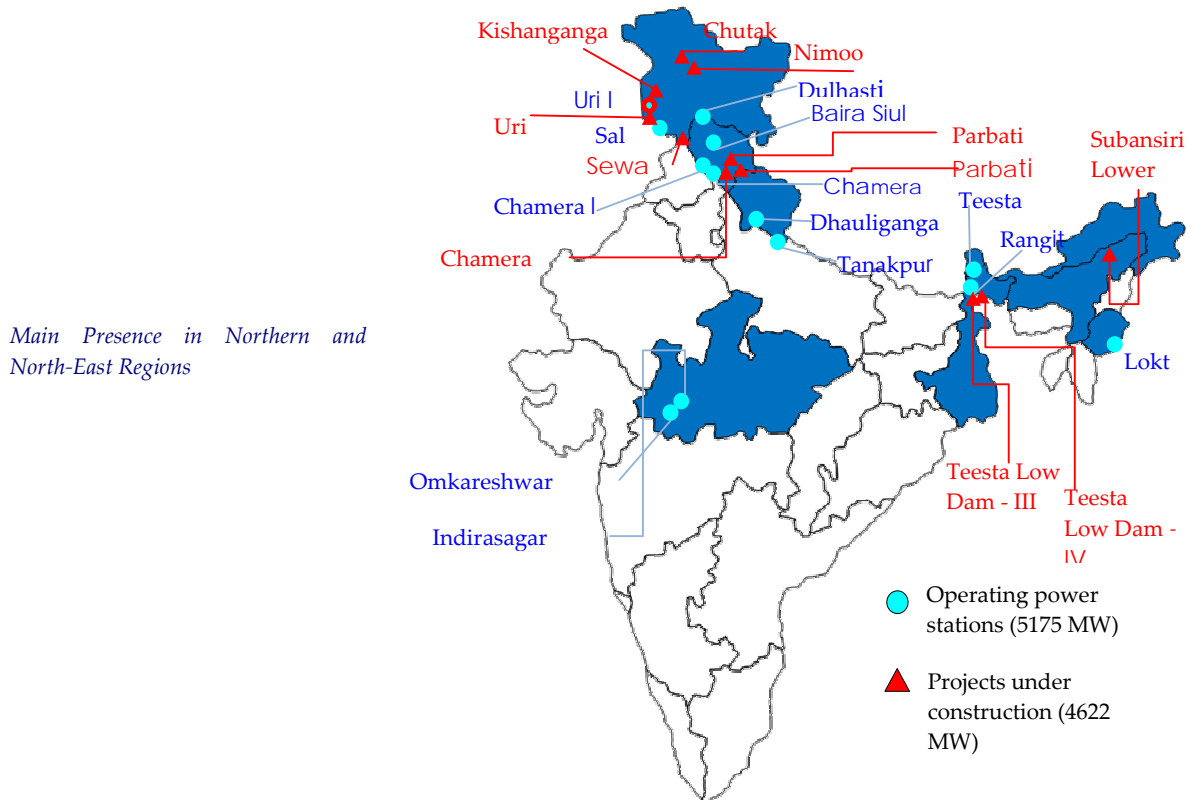
The availability factor of the plants is measured as the capacity index which has remained above 90% over the last few years. The Capacity Index of the plants of the company for FY'09 at 93.61% was much higher than the normative requirement by CERC of 85%.

The hydro power generation is impacted by the seasonal factors like the monsoon. Thus, the company schedules its periodic R&M activities for its plants in the lean season period, so that the plants remain available during the peak season.

S. N.	Project	State	Capacity (MW)	Commissioning	Type of Project
A Under NHPC					
1	Baira Siul	H.P	180	1981	Run of River
2	Chamera - I	H.P.	540	1994	Storage
3	Chamera - II	H.P.	300	2004	Run of River
4	Dhauliganga - I	U.K.	280	2005	Run of River
5	Dulhasti	J&K	390	2007	Run of River
6	Loktak	Manipur	105	1983	Reservoir
7	Rangit	Sikkim	60	1999	Run of River
8	Salal	J&K	690	1987/1996	Run of River
9	Tanakpur	U.K.	120	1992	Run of River
10	Teesta - V	Sikkim	510	2008	Run of River
11	Uri - I	J&K	480	1997	Run of River
Total (A)			3655		
B Projects With NHDC					
1	Indira Sagar	M.P.	1000	2005	Storage
2	Omkareshwar	M.P.	520	2007	Storage
Total			1520		
Total Capacity (A+B)			5175		

❖ Plant Location:

The plants of the company are located mainly in the northern and north-eastern states and also in M.P. The upcoming capacity is also mainly concentrated in these regions.



❖ Performance of Existing Plant (Apr'09-Feb'10):

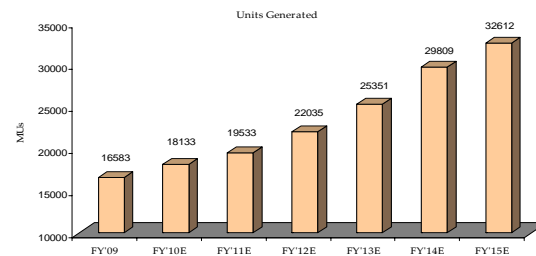
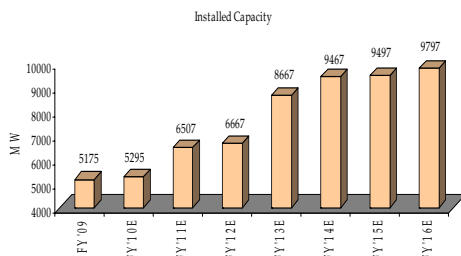
The performance of the plants of the company has been satisfactory with the achievement of 98% of the planned electricity generation during the first 11 months of FY'10.

S. N.	Project	Cap. (MW)	Actual (Apr'09-Feb'10)	Program (Apr'09-Feb'10)	% of Program	Actual (Apr'08-Feb'09)	Gr. (YoY)
1	Baira Siul	180	546	700	78%	637.72	-14%
2	Chamera - I	540	1,930	2,019	96%	2,061.68	-6%
3	Chamera - II	300	1,298	1,352	96%	1,325.27	-2%
4	Dhauliganga - I	280	1,092	1,051	104%	1,089.94	0%
5	Dulhasti	390	2,141	1,795	119%	2,103.25	2%
6	Loktak	105	349	417	84%	477.42	-27%
7	Rangit	60	315	319	99%	320.25	-2%
8	Salal	690	2,847	2,887	99%	2,871.01	-1%
9	Tanakpur	120	451	412	109%	414.8	9%
10	Teesta - V	510	2,474	2,425	102%	1,782.83	39%
11	Uri - I	480	2,360	2,322	102%	2,678.03	-12%
12	Indira Sagar	1000	1,925.75	2,220	87%	1,488.67	29%
13	Omkareshwar	520	862.93	978	88%	757.59	14%
Total Capacity		5175	18,589	18,897	98%	18,008	3%

Source : CEA

INVESTMENT RATIONALE:
• Major Expansion Plans:

The installed capacity of the company is expected to register a rise of 12.8% to 9,467 MW over the next five years. The company would maintain its leadership position in the hydro power generating companies. Sewa-II project which was to be commissioned by Jan'10 has hit some construction glitches and is now expected to be commissioned by Mar'10. The growth in the generation capacity would lead to the high growth in the units generated and units generated are expected to register the CAGR of 11.9% over the next six years. We have assumed the PLF of 40% for the plants. For the first 11 months of FY'10, the total units generated by the company were 18,589 MU's which has crossed our projected figure of 18,133 MU's for FY'10.

Major Expansion Plans Over the years

❖ Projects Under Construction:

The company has major expansion plans over the next few years and is expected to continue to maintain its leading position in the hydroelectric power segment. The projects may, however, experience delays from their scheduled dates of completion on account of the various unavoidable factors. We have considered the commissioning of 60% of the planned capacity to be commissioned during the year and the remaining being commissioned during the next year, a delay of 6-12 months.

Possibility of Delay in Commissioning

S. N.	Project	State	Capacity (MW)	Expected Commissioning	Annual Generation* (Mus)	Project Cost (Rs. Cr.)	Per MW Cost
1	Parbati - II	H.P.	800	Mar'13	3,109	3,920	4.9
2	Sewa - II	J&K	120	Jan'10	534	665	5.5
3	Subansiri (Lower)	Assam	2,000	Dec'12	7,421	6,285	3.1
4	Uri - II	J&K	240	Feb'11	1,123	1,725	7.2
5	Chamera - III	H.P.	231	Aug'10	1,104	1,406	6.1
6	Teesta Low Dam - III	W.B.	132	Feb'11	594	769	5.8
7	Kishenganga	J&K	330	Jan'16	1,350	3,642	11.0
8	Teesta Low Dam - IV	W.B.	160	Aug'11	720	1,061	6.6
9	Parbati - III	H.P.	520	Nov'10	1,963	2,305	4.4
10	Nimmo Bazgo	J&K	45	Aug'10	239	611	13.6
11	Chutak	J&K	44	Feb'11	213	621	14.1
Total			4,622		18,369	23,010	5.0

*Assuming 90% dependable year

Even though the cost per MW in case of the projects located in J&K viz., Uri-II, Kishenganga, Nimmo Bazgo and Chutak are on the higher side, the overall cost of the capacity expansion is within the industry benchmarks of Rs.5cr per MW which is satisfactory. The major contributor to this factor is the Subansiri (Lower) project in Assam of 2,000 MW capacity which is being constructed at the per MW cost of only Rs.3.1cr per MW.

➤ **Increased ROE to Result in Higher Returns:**

Higher ROE with higher capex

The ROE as per CERC guidelines has been revised to 15.5% (additional 0.5% for timely commissioning of the project) for 2009-2014 period as against 14% for 2004-2009 period. The higher ROE entitlement would result in the better return to the company.

The company has major capex plans over the next few years with capex being Rs.4,008cr for FY'10, Rs.4,894cr for FY'11 and Rs.6,542cr for FY'12. The total planned capex for the XIIth plan period is Rs.29,000cr.

The huge capex corresponding with the huge capacity enhancement plans means that the eligible regulatory capital base of the company which is at present is about Rs.8,500cr would continue to rise. Consequently, EPS is expected to register the CAGR of 20.4% over FY'09-FY'13E.

➤ **Diversification Underway:**

Entry in Thermal Capacity Space

NHDC, the 51% subsidiary of the company is diversifying into the conventional as well as non conventional sources of power viz., wind power, thermal power, etc.

The GoMP has agreed for setting up of a supercritical coal fired power plant of 1320 MW capacity (2*660) by NHDC in M.P. The initial activities for the identification of land around the periphery of Indra Sagar Reservoir, preparation of PFR, application for the coal linkages, engagement of NTPC as the consultant, etc are under progress.

❖ **Massive Capacities Under Development Stages:**

Potential from Under Plan projects

In addition to the above capacity of 4622 MW, the company also has about 14,156 MW of capacity under various stages of development. Even though it is too early to gain growth visibility aided by these plants, the visibility may improve going forward as and when these projects achieve sanctions and clearances. The break-up of this proposed capacity is as under:

Projects Under Development	Capacity
Projects Awaiting Sanctions	6,315 MW
Projects Under Survey and Investigation	4,155 MW
JV Projects	3,686 MW
Total	14,156 MW

➤ *Projects Awaiting Sanctions:*

The total capacity of the projects awaiting sanctions is 6315 MW mainly in Uttarakhand and North East. Out of these all clearances have been already received for Kotli Bhel Stage I B, II and I A.

Project	Location	Proposed Capacity (MW)
Kotli Bhel Stage IA	Uttarakhand	195
Kotli Bhel Stage IB	Uttarakhand	320
Kotli Bhel Stage II	Uttarakhand	530
Dibang	A.P.	3,000
Teesta IV	Sikkim	520
Tawang I	A.P.	750
Tawang II	A.P.	1,000
Total		6,315

➤ *Projects Under Survey and Investigation:*

Project	Location	Proposed Capacity (MW)
Karmoli Lumti Tulli	Uttarakhand	55
Garba Tawaghat	Uttarakhand	630
Chungar Chal	Uttarakhand	240
Lachen	Sikkim	210
Subansiri	A.P.	2,000
Bursar	J&K	1,020
Total		4,155

➤ *JV Projects:*

Tapaimukh Hydroelectric Project is a JV between NHPC, SJVNL and Govt. of Manipur in the proportion 69:26:05. Loktak Downstream Hydroelectric Corp. Ltd. would be a JV between NHPC (74%) and Government of Manipur (26%). Pakal Dul and other Chenab Basin based projects are being established through the JV between NHPC (49%), JKSPDC (49%) and PTC (2%).

Project	Location	Proposed Capacity (MW)
Tapaimukh Hydroelectric Project	Manipur	1500
Loktak Downstream	Manipur	66
Pakal Dul & Other Chenab Basin Projects	J&K	2120
Total		3686

• *Potential CER Credits :*

The company is targeting to secure benefits from its hydro power projects under the clean development mechanism (“CDM”) scheme

pursuant to the United Nations Framework Convention on Climate Change. If its projects get registered as CDM projects by the CDM Executive Board, it would be eligible to earn CER credits because its hydro generation activities help to reduce green house gas emissions. These CERs can be sold to industrialized countries that are required to meet their green house gas emission reduction targets under the terms of the Kyoto Protocol Treaty. CERs may provide the company with an additional revenue stream.

*Revenues Under CDM- A long
Way to go*

As per CERC regulations, the developer has to share the proceeds from the sale of CERs with the customers. While the whole benefit may be retained in the first year of operation, the developer would have to share additional 10% benefit each year till the upper limit of 50% sharing.

NHPC has identified two of its hydro projects as having potential for registration as CDM projects, viz., Nimoo Bazgo hydroelectric project (3x15 MW) and the Chutak hydroelectric project (4x11 MW) both located in the state of Jammu & Kashmir. Preliminary investigations in to CDM registrations for these two projects are being made.

However, considering the uncertainty over the future development on this front, we have not considered the potential revenue from sale of such CERs in our financial projections. Moreover, considering the low capacity of the projects which are under consideration for this purpose, the revenue contribution from this stream is expected to be low (up to Rs.20-25cr per year by FY13) as compared to the overall operations of the company.

- **Potential Upside From Merchant Sales:**

*Expected Sale On Merchant Power
Basis*

The Union Government currently has the discretionary quota of 15% in the overall generation capacity of the Central PSUs. The Ministry of Power has floated a cabinet note for the approvals so as to allow the CPSUs to sell 3.75% of the existing generation and 7.5% of the incremental generation in the Short Term open access markets at the market determined rates.

The proposal is a major positive development for the central sector utilities like NTPC and NHPC. However, in view of the uncertainty over the final regulations on the matter, we have not taken the valuation upside from this potential development.

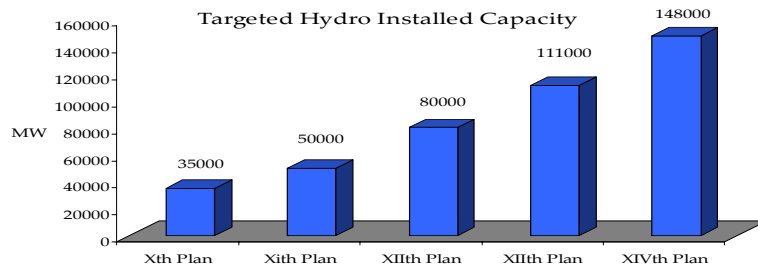
- **Diversification into Consultancy Business:**

The major consultancy assignments include assignments from central and state government agencies including SEBs and PSUs. The consultancy services of the company are registered with World Bank, ADB, African Development Bank, Central Water Commission, etc. The company has so far completed 77 consultancy assignments and 17 consultancy assignments are ongoing as on 30th Nov'09.

INDUSTRY OUTLOOK

❖ Huge Potential For Hydropower Development:

The total installed capacity in hydro segment as on 31st Jan'10 is 36,885MW which is only 25% of the total potential capacity of 1,48,000 MW of the country. The share of hydropower in the total installed capacity has continued to decrease over the years on account of the high growth in the thermal based power capacity as compared to capacity addition in hydro power sector. Ideally, the mix between the hydro and thermal based power generation should be 40:60. However, in India, the capacity mix is heavily skewed in favour of thermal based capacity and the hydro segment contributing only 23.5% to the overall installed capacity in the country as against 66.6% (as on 31st Jan'10) by the thermal segment. During the XIth plan period, the total capacity addition target is 10,347 MW; out of which, 3,431 MW has been commissioned so far. For the XIIth plan period the targeted addition is 30,000 MW out of which 3,431 MW is to be set up by NHPC.



Source: CEA

❖ NHPC's Focus on Northern and NE Regions:

The north-eastern region of the country offers enormous potential for the hydro power development in the country. More importantly, only 7% of this potential has been harnessed so far. Overall, the Northern region (states of J&K, Himachal Pradesh and Uttarakhand) account for 62% of the untapped hydro power potential.

NHPC is also setting up several projects in this region. About 43.3% (2000 MW) of the company's capacity under construction would be in the north eastern region while is almost 50.4% of the capacity would be located in the northern region.

Region	Potential Assessed (MW)	Potential Developed (MW)	Potential Under Development (MW)	Balance (MW)	Balance %
North Eastern	58971	1116	2724	55131	93.0%
Northern	53395	13310	7064	33021	62.0%
Eastern	10949	3904	2211	4834	44.0%
Western	8928	7448	400	1080	12.0%
Southern	16458	11107	786	4565	28.0%
Total	148701	36885	13185	98631	66.0%

Source: CEA

❖ PEER GROUP COMPARISON:

Particulars	NHPC	Tata Power	NTPC	NLC
CMP (Rs.)	31.4	1364	201	158
Market Cap.(Rs.Cr.)	38624	32380	166269	26432
Capacity (MW)	5175	2791	30144	2490
Revenues (Rs cr)	3476.7	17587.53	44313.8	3545.9
YOY growth (%)	16.96%	61.49%	14.52%	0.68%
OPM (%)	66.63%	19.19%	24.20%	26%
PAT Margin (%)	38.29%	7.38%	18.26%	23.15%
EPS (Rs)	1.08	58.66	9.81	4.89
ROCE	6.30%	15.32%	12.59%	8.10%
RONW	6.00%	13.25%	14.14%	8.93%
Gearing Ratio	0.66	1.38	0.65	0.45
BV/Share	18.4	469.9	72.9	55.7
P/BV	1.74	2.83	2.76	2.87
Rev./MW	0.67	6.30	1.47	1.42
Mkt Cap./MW	7.6	11.3	5.5	10.8

NHPC has the highest operating margins among the major power sector players as it is into the hydro power segment which does not require any fuel expenses. However, the return ratios for the company are low vis-à-vis the other major players. The gearing ratio of the company is at the comfortable levels and comparable to the other leading players.

❖ RISKS AND CONCERNS:
➤ Hindrance Due to Execution Delays:

The installation of the hydro power plants is subject to many environmental, regulatory as well as topographical hurdles. The plants of NHPC have also in past faced the delays of up to 8 to 10 months on account of these factors. We have factored in appropriate delays in the commissioning of the company's plants. However, any substantial delay beyond the estimates may adversely impact the valuations.

➤ Potential Regulatory Changes:

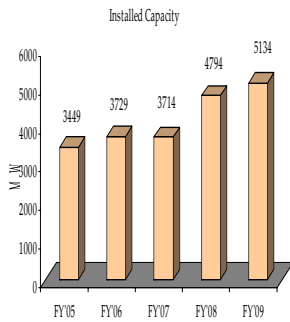
The improvement in the allowable ROE to 15.5% from 14% has been the positive development for the company. However, any adverse regulatory changes may impact the profitability of the company.

➤ Water Dispute With China:

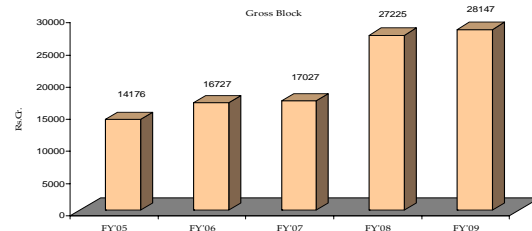
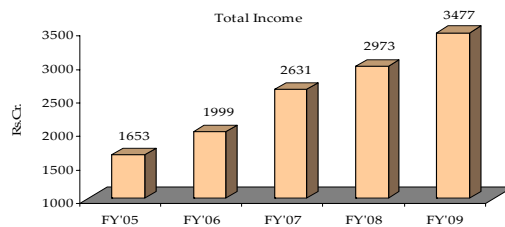
China has an ambitious \$62bn South-North water diversion scheme for its own benefit. This has the potential to adversely impact the water flow in the rivers of the North-Eastern states, particularly Brahmaputra.

FINANCIAL ANALYSIS:

➤ **High Revenue Growth:**



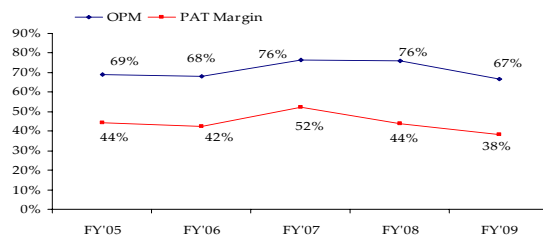
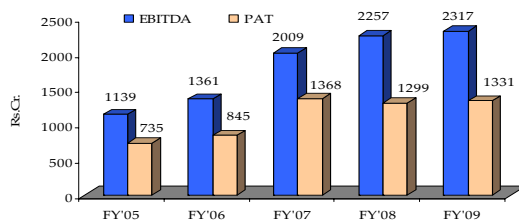
The total income of the company has registered a CAGR of 20.4% over the last four years on account of the major capacity expansion by the company over the same period. The installed capacity of the company has grown at the CAGR of 10.5% over the last four years, particularly during the last two year when the company added 1,420 MW. The expansion phase of the company has essentially got converted into the higher ROE as it is calculated on the regulatory capital which continues to increase with the increase in the capex.



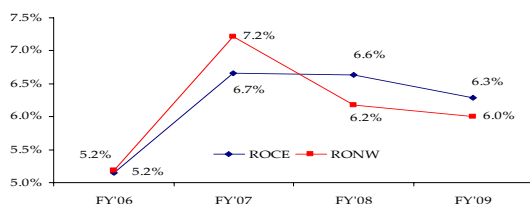
The gross block of the company has grown at the CAGR of 18.7% over the past four years. The increasing depreciation and interest costs are also the 'pass through' for the company alongwith the O&M expenses.

➤ **Stable Profit Margins:**

Hydro power generation is a high operating margin business as it does not involve any fuel cost as in case of the thermal power generation. The only major expenses are R&M and employees expenses. Moreover, as the Aggregate Revenue Requirement of the power companies includes the O&M expenses, Interest on long term loans, interest on working capital, depreciation and the return on equity, the profit margins of the company have remained stable over the years.

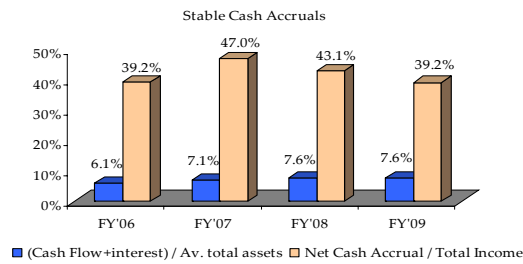


➤ **Low Return Ratios:**



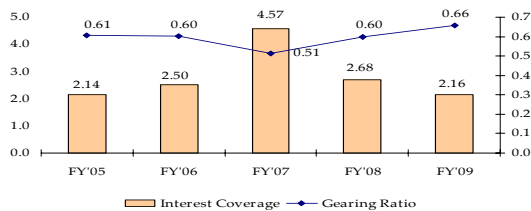
The return ratios for the company have been low on account of the high gross block as well as the high cash position of the company. The company has maintained high cash reserves (Rs.2,346cr - FY'08 and Rs.2,606cr-FY'09) over the past two years. The investment levels of the company are also high thus further impacting the return ratios.

➤ **Cash Flows Stable:**



The cash accruals of the company have remained stable over the last four years despite the heavy expansion phase. The cash accruals to total income ratio has remained at the high levels as the hydro power business has high margins. On the other hand, the cash flow to average total assets has also remained stable despite the high growth in the gross block of the company.

➤ **Gearing Ratio Under Control:**



The company has maintained the gearing ratio at the low levels despite the capital intensive nature of the business and the debt-equity norm being 70:30.

The interest coverage has also remained comfortable over the last few years.

Financial Performance (9m FY'10):

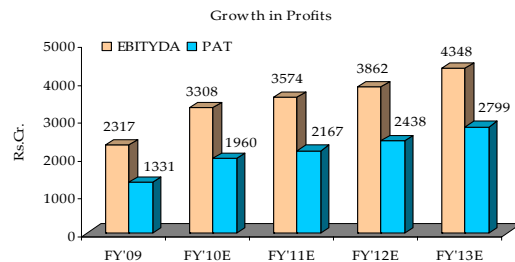
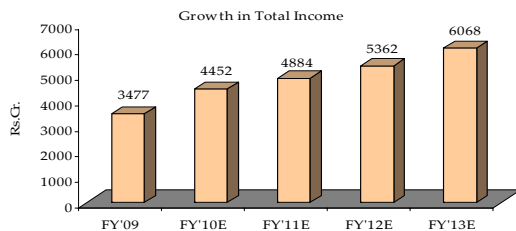
- ❖ Total income of the company has registered high growth of 49.2% during the first 9 months of FY'10. The high growth has been mainly due to the high capex planned for FY'10 resulting in the high growth in the aggregate revenue as the ROE is calculated over the increased equity contribution towards the capex.
- ❖ The profit margins of the company which are already high, have further improved during 9mFY'10 (YoY) on account of control over the O&M expenses.

Particulars	Rs.Cr.		
	9mFY'10	9mFY'09	Growth
Op. Income	3469.1	2211.5	56.9%
Other Income	438.0	407.0	7.6%
Total Income	3907.1	2618.5	49.2%
Employee Cost	396.88	352.69	12.5%
Other Exp.	304.71	283.16	7.6%
Total Expenditure	701.59	635.85	10.3%
PBDIT	3205.5	1982.7	61.7%
Exceptional Items	0	-68.42	
Depreciation	791.19	387.2	104.3%
Interest	356.54	389.42	-8.4%
PBT	2057.8	1137.6	80.9%
Tax	357.41	89.77	298.1%
PAT	1700.4	1047.9	62.3%
OPM %	82%	76%	
PAT Margin %	44%	40%	

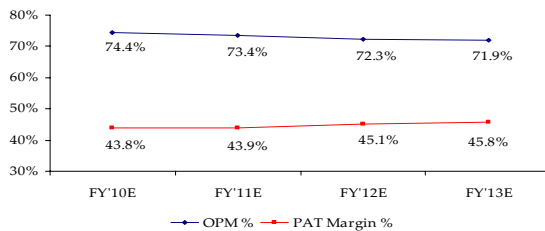
FINANCIAL PROJECTIONS

➤ Consistent Growth to Sustain:

Total income of the company is expected to register a CAGR of 14.9% over the next four years to Rs.6,068cr in FY'13, on account of the heavy capex on the capacity expansion plans by the company, adding to the regulatory capital of the company on which the ROE is calculated to determine the aggregate revenue requirement. EBITDA is expected to register the CAGR of 17% to Rs.4,348cr and PAT a CAGR of 20.4% to Rs.2,799cr over the next four years.

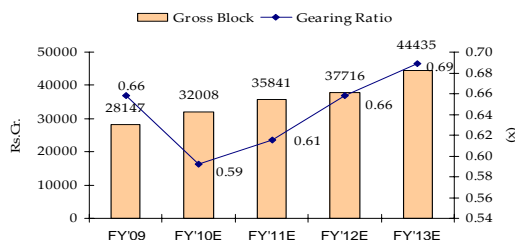


➤ Profit Margins to Remain Stable:



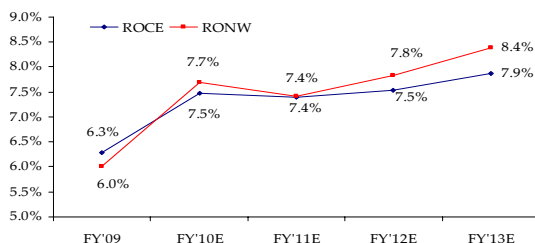
The profit margins of the company are expected to remain stable over the next few years as the major expenses like O&M expenses, interest on long term liabilities, interest on working capital and depreciation are the pass through in nature. The operating margin is high at over 70% as the operational costs are limited mainly to the employee expenses and O&M expenses.

➤ Gearing Ratio to Remain in Control:



The gearing ratio of the company is expected to remain within the comfortable level of 0.7x over the next four years despite the high growth in the capex over the next few years consequently resulting in the high growth in the gross block of the company which is expected to register a CAGR of 12% over the next four years.

➤ Low Return Ratios :



Even though the return ratios are expected to improve gradually over the next few years, the return ratios remain at the low levels of below 8% which is one of the negative aspects for the company. Despite the high growth in PAT, the return ratios are low on account of the high growth in gross block and consequently in the total capital employed.

Valuation:

NHPC is expected to maintain its leadership position in the hydro power generation segment with the efficient operation of its existing plants and 1.9x growth in its generation capacity over the next four years to 9,797 MW as against 5,175 MW now. The return ratios for the company, however, are expected to remain low going forward even though the EPS is expected to rise at the CAGR of 20.4% over the next four years. The company has major capex plans over the next few years and the benefit of the higher free cash flows would accrue only after the next 4-5 years. The major trigger for the company would be the improving cash flows from the enhanced capacity after the capex plans of the company are completed.



At the current market price of Rs.31.4 as on 22nd Mar'10, the stock trades at a PE of 22.43x based on trailing 4Q EPS of Rs.1.40. *Mata Research* expects the EPS to increase to Rs.1.76 in FY11E and Rs.1.98 in FY'12. The stock is expected to achieve the target of Rs.38 over the next 12-15 months. At target price of Rs.38, it discounts FY12E earnings by 19.2x. We initiate the coverage on the stock with the 'Buy' recommendation.

FINANCIAL PERFORMANCE
Profit & Loss Account
Rs. Cr.

Particulars	FY'06	FY'07	FY'08	FY'09
Net Sales	1950.1	2502.7	2924.8	3427.8
Other Income	48.4	128.8	47.8	48.9
Total Income	1998.5	2631.4	2972.6	3476.7
Cost of Sales	637.8	622.7	715.3	1160.2
PBDILT	1360.7	2008.7	2257.3	2316.5
Depreciation	329.8	356.7	545.5	644.1
PBILT	1030.9	1652.0	1711.8	1672.5
Interest	412.0	361.5	637.7	776.0
Op. Pr. bfr. Tax	618.9	1290.5	1074.1	896.5
Extra-ord. Items	307.9	302.5	414.9	589.8
PBT	926.8	1593.0	1489.0	1486.3
Tax	81.5	224.7	189.6	155.2
PAT	845.3	1368.3	1299.4	1331.1

Balance Sheet
Rs. Cr.

Particulars	FY'06	FY'07	FY'08	FY'09
Assets				
F.Assets	25049.9	28224.0	31027.3	34337.4
Invest	2576.8	2320.8	2046.8	1791.2
NCA	360.8	409.8	1412.0	1486.8
C.A.	2280.0	2712.5	4491.7	5655.7
C.L.	1919.2	2302.7	3079.8	4168.9
Tot. Cap. Empd.	27987.5	30954.6	34486.1	37615.4
Liabilities				
Share Cap	10576.1	11198.2	11182.5	11182.5
Reserves	5891.8	8052.5	9051.7	10009.8
Min.Int.	1008.0	1232.1	1396.4	1492.1
Net Worth	17475.9	20482.8	21630.6	22684.4
Term Liab	10511.6	10471.8	12855.5	14931.0
Tot. Cap. Empd.	27987.5	30954.6	34486.1	37615.4

Key Ratios

Particulars	FY'06	FY'07	FY'08	FY'09
Gr Tot Inc.	20.9%	31.7%	13.0%	17.0%
Gro PAT	15.0%	61.9%	-5.0%	2.4%
PBDIT Mar	68.1%	76.3%	75.9%	66.6%
PAT Mar	42.3%	52.0%	43.7%	38.3%
ROCE	5.2%	6.7%	6.6%	6.3%
RONW	5.2%	7.2%	6.2%	6.0%
Fix. Asset ratio	0.99	0.99	0.96	0.96
Gearing (x)	0.60	0.51	0.59	0.66
Ov. Gearing (x)	0.60	0.51	0.60	0.66
Curr. Ratio (x)	1.19	1.18	1.46	1.36
Int. Cov. (x)	2.50	4.57	2.68	2.16
Drs. Turnover	4.12	4.54	3.41	4.17
Sales Per Share	1.62	2.14	2.42	2.83
EPS (Rs.)	0.69	1.11	1.06	1.08
Cash EPS (Rs.)	0.96	1.40	1.50	1.61
BV (Rs.)	14.21	16.65	17.58	18.44
DPS (Rs)	0.19	0.23	0.24	0.26

Cash Flow Statement
Rs. Cr.

Particulars	FY'06	FY'07	FY'08	FY'09
Profit After Tax	845.3	1368.3	1299.4	1331.1
Depreciation	329.8	356.7	545.5	644.1
Misc Exo w/o	0.0	0.0	0.0	0.0
Change in WC	-1284.4	224.5	717.5	295.4
Op. Cash Fl.	-109.3	1949.5	2562.4	2270.5
Chg in G.B.	-2551.8	-300.0	-10197.2	-922.4
Chg in CWIP	-256.5	-3285.8	6860.4	-3094.8
Chg in Inv	0.0	256.0	274.0	255.6
Csh Fl Inv. Act.	-2808.2	-3329.8	-3062.8	-3761.6
Pay of Div.	-267.7	-340.5	-367.8	-379.6
Cg. in Term Liab.	1365.6	-39.8	2383.7	2075.5
Chg. in Sh. Cap.	657.8	622.1	-15.7	0.0
Chg. in Sh. Pre.	1105.1	141.3	56.8	121.3
Chg. Oth. Fin Act	-27.6	903.7	-60.2	-66.4
Csh Fl. Fin. Act.	2833.2	1286.8	1996.9	1750.8
Op. Csh Bal.	973.6	892.8	816.3	2345.9
Cl. Cash Bal.	889.2	799.3	2312.8	2605.6

FINANCIAL PROJECTIONS
Operational Performance
Rs. Cr.

Particulars	FY' 10E	FY'11E	FY' 12E	FY'13E
Net Sales	4426.8	4899.6	5410.6	6159.5
Other Income	49.9	50.9	51.9	53.0
Total Income	4476.7	4950.5	5462.5	6212.4
Cost of Sales	1144.2	1310.0	1500.6	1719.9
PBDILT	3332.5	3640.5	3961.8	4492.5
Depreciation	960.2	1017.7	1103.4	1232.3
PBILT	2372.3	2622.8	2858.5	3260.2
Fin. Charges	883.9	1045.3	1148.3	1350.2
Op Pr. bfr. Tax	1488.4	1577.5	1710.2	1910.0
Extra-ord.	714.4	857.3	1028.7	1234.5
PBT	2202.8	2434.8	2738.9	3144.5
Less: Tax	242.3	267.8	301.3	345.9
PAT	1960.5	2166.9	2437.6	2798.6

Balance Sheet
Rs. Cr.

Particulars	FY' 10E	FY'11E	FY' 12E	FY'13E
Assets				
F.Assets	37385.1	41261.4	46610.1	51877.8
Invest	2291.2	2491.2	2691.2	2891.2
NCA	5353.8	5372.4	5126.0	5348.6
C.A.	9472.7	9441.3	9144.9	9317.5
C.L.	4118.9	4068.9	4018.9	3968.9
Tot. Cap. Emp.	45030.1	49125.0	54427.2	60117.6
Liabilities				
Share Cap	12300.7	12300.7	12300.7	12300.7
Reserves	14496.1	16281.3	18337.1	20754.0
Min.Int.	1492.1	1492.1	1492.1	1492.1
Net Worth	28288.9	30074.1	32130.0	34546.8
Term Liab	16741.2	19050.9	22297.2	25570.8
Tot. Cap. Emp.	45030.1	49125.0	54427.2	60117.6

Key Ratios

Particulars	FY' 10E	FY'11E	FY' 12E	FY'13E
Gr Tot Inc.	28.8%	10.6%	10.3%	13.7%
Gro PAT	47.3%	10.5%	12.5%	14.8%
PBDIT Mar	74.4%	73.5%	72.5%	72.3%
PAT Mar	43.8%	43.8%	44.6%	45.0%
ROCE	7.5%	7.4%	7.5%	7.8%
RONW	7.7%	7.4%	7.8%	8.4%
Fix. Asset Ratio	0.87	0.88	0.90	0.91
Gearing (x)	0.59	0.63	0.69	0.74
Ov. Gearing (x)	0.59	0.63	0.69	0.74
Curr. Ratio (x)	2.30	2.32	2.28	2.35
Int. Cov. (x)	2.68	2.51	2.49	2.41
Drs. Turnover	6.75	9.64	13.21	19.81
Sales Per Share	3.64	4.02	4.44	5.05
EPS (Rs.)	1.59	1.76	1.98	2.28
Cash EPS (Rs.)	2.37	2.59	2.88	3.28
BV/sh.(Rs.)	23.00	24.45	26.12	28.09
DPS (Rs)	0.30	0.30	0.30	0.30

Cash Flows
Rs. Cr.

Particulars	FY' 10E	FY'11E	FY' 12E	FY'13E
Profit After Tax	1960.5	2166.9	2437.6	2798.6
Depreciation	960.2	1017.7	1103.4	1232.3
Misc Exo w/o	0.0	0.0	0.0	0.0
Change in WC	-110.0	-220.0	-220.0	-220.0
Op. Cash Fl.	2810.7	2964.7	3321.0	3810.9
Chg in G.B.	-3860.8	-3833.2	-1875.2	-6718.8
Chg in CWIP	-147.2	-1060.8	-4576.8	218.8
Chg in Inv	-500.0	-200.0	-200.0	-200.0
Csh Fl Inv. Act.	-4508.0	-5094.0	-6652.0	-6700.0
Pay of Div.	-431.8	-431.8	-431.8	-431.8
Chg. in Term Liab.	1810.2	2309.7	3246.3	3273.5
Chg. in Sh Cap	1118.3	0.0	0.0	0.0
Chg. in Sh. Prem.	2907.6	0.0	0.0	0.0
Chg. Oth. Fin Act.	50.0	50.0	50.0	50.0
Csh Fl. Fr. Fin.Act.	5454.3	1928.0	2864.6	2891.8
Op. Csh Bal.	2606.1	6363.0	6161.7	5695.3
Cl. Cash Bal.	6363.0	6161.7	5695.3	5697.9

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