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Company update

Power

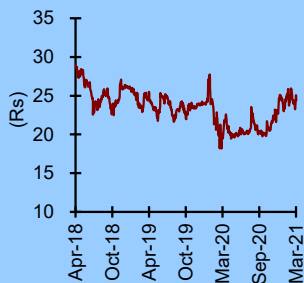
Target price: Rs34

Shareholding pattern

	Jun '20	Sep '20	Dec '20
Promoters	71.0	71.0	71.0
Institutional investors	18.7	18.7	18.5
MFs and others	5.9	6.1	6.2
Banks / FIs	0.6	0.6	0.6
Insurance Cos.	7.7	7.7	7.7
FIs	4.5	4.3	4.0
Others	10.3	10.3	10.5

Source: NSE

Price chart



INDIA

NHPC

BUY

Maintain

Rs24

Approvals to expedite project works

NHPC has recently received approval for two projects – Jal Power Corporation (JPCL) Rangit stage-IV and Ratle. The company is likely to expedite the tendering process and start construction activities in the near term. NHPC received the approval from MoP for an investment of Rs9.4bn for acquisition and construction of balance work for 120MW Rangit stage-IV project. It also received the board approval for the formation of a JV for 850MW Ratle in J&K at an equity investment of Rs510mn (51% stake). Once construction activities start, we expect both the projects to commission in 5-7 years. All these developments are positive for NHPC and will help it boost growth and earnings in the long term. Maintain BUY.

- ▶ **Rangit stage-IV investment receives MoP approval:** After receiving approval from NCLT Hyderabad bench on NHPC's Rs1.65bn resolution plan for 120MW Jal Power Corporation's (JPCL) Rangit stage-IV project in Jan'20, MoP has approved the investment of Rs9.4bn by NHPC for acquisition and construction of balance work. Tendering process for construction of the balance work is expected to begin from Apr'21. Timeline for completion is 42 months. JPCL is now a wholly-owned subsidiary of NHPC.
- ▶ **Board approves formation of JV for 850MW Ratle project:** NHPC had signed MoU with J&K government for execution of five hydro projects totaling 4,134MW at an estimated investment of Rs350bn. NHPC's board has approved the formation of a JV for the implementation of 850MW Ratle project on Chenab river in J&K. Board has also approved the investment of Rs510mn as equity by NHPC in the JV company, in which NHPC will have 51% stake while the balance 49% will be held by JKSPDCL.
- ▶ **To research on development of green hydrogen:** As per media reports ([link](#)), NHPC has collaborated with Banaras Hindu University's Hydrogen Energy Centre to research on the development of green hydrogen and for piloting development of hydrogen energy, based on National Hydrogen Energy Mission announced in the Union Budget 2021.
- ▶ **High dividend yield and attractive valuations:** NHPC's increase in standalone capacity from 5,551MW to 8,351MW in FY24E takes its regulated equity to Rs221bn in FY24E, at a CAGR of 14.5%, resulting in earnings CAGR of over 11%. At CMP of Rs24.5, the stock is trading at 7.2 P/E and 0.7 P/B on FY23E basis and at a dividend yield of 6.5% (interim dividend of Rs1.25/sh already announced). We maintain our **BUY** rating and target price of Rs34 on NHPC.
- ▶ **NHPC vs Verbund AG (Austria):** Verbund, Austria's leading electricity company and one of the largest producers of hydropower in Europe, with majority (51%) shareholding of the Republic of Austria, has an operational capacity of 8.3GW with low growth, and is trading at 3.2x PB & 38x PE on CY20 basis, while NHPC with 7GW capacity (FY20; 10GW by FY24) is trading at 0.8x PB & 8.2x PE on FY20 basis. The companies are comparable as both are PSUs with similar hydro capacity profiles and similar RoE ranging at 10% (NHPC's RoE to improve to 12% by FY24). Despite the similarities, their valuations are very divergent, evident in the fact that Verbund's dividend yield is 1%. Hence, we believe, there is an opportunity in NHPC. *For detailed comparison, please see [page 7](#).*

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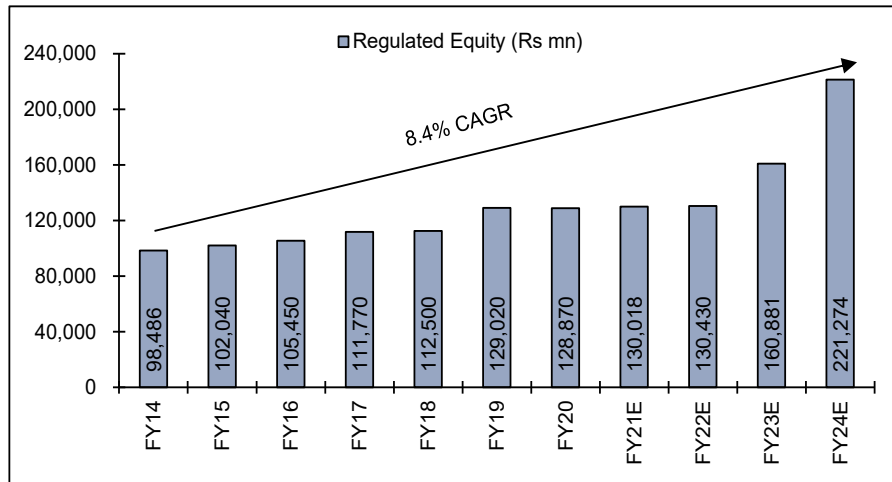
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Market Cap	Rs241bn/US\$3.3bn	Year to Mar	FY20	FY21E	FY22E	FY23E
Reuters/Bloomberg	NHPC.BO/ NHPC IN	Revenue (Rs mn)	87,354	86,687	89,391	108,108
Shares Outstanding (mn)	10,045.0	Net Income (Rs mn)	45,691	45,793	46,861	63,877
52-week Range (Rs)	28/18	EPS (Rs)	30,072	28,617	29,560	34,997
Free Float (%)	29.0	EPS growth (%)	3.0	2.8	2.9	3.5
FII (%)	4.0	P/E (x)	8.2	8.6	8.3	7.0
Daily Volume (US\$'000)	2,620	CEPS (Rs)	4.5	4.2	4.2	5.2
Absolute Return 3m (%)	8.9	EV/E (x)	10.4	10.4	10.8	8.2
Absolute Return 12m (%)	22.6	Dividend Yield	6.1	6.1	6.4	6.6
Sensex Return 3m (%)	3.9	RoCE (%)	6.9	6.2	5.8	7.0
Sensex Return 12m (%)	69.8	RoE (%)	10.0	9.1	9.0	10.1

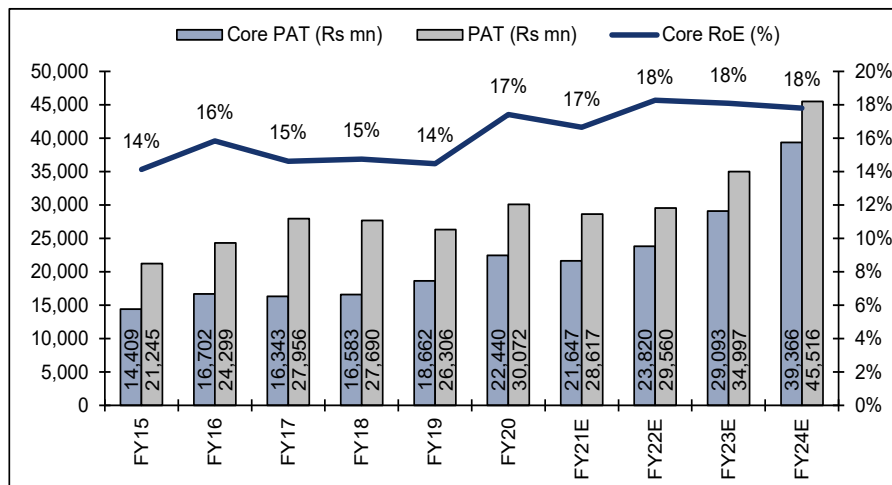
Please refer to important disclosures at the end of this report

Chart 1: Regulated equity increases to Rs221bn, at 8.4% CAGR for FY14-24E



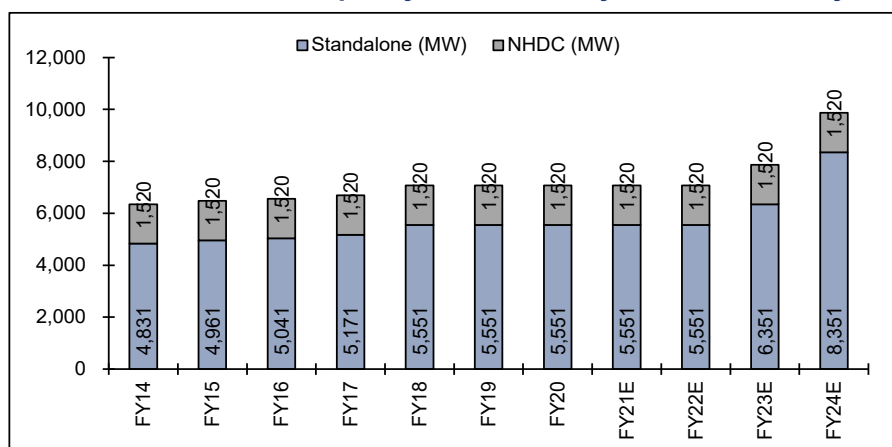
Source: Company, I-Sec research

Chart 2: PAT, core PAT and core RoE are on an increasing trajectory



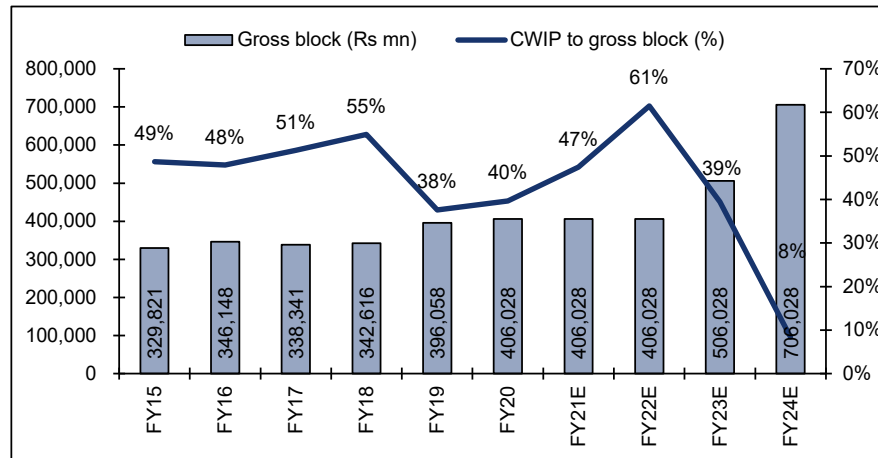
Source: Company, I-Sec research

Chart 3: Consolidated capacity to increase by 40% to 9.9GW by FY24E



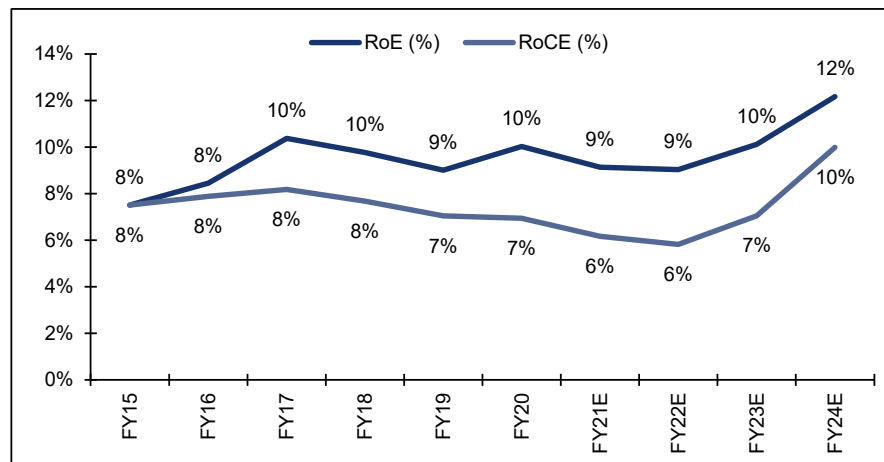
Source: Company, I-Sec research

Chart 4: CWIP to gross block to significantly decline as Parbati-II & Subansiri are commissioned



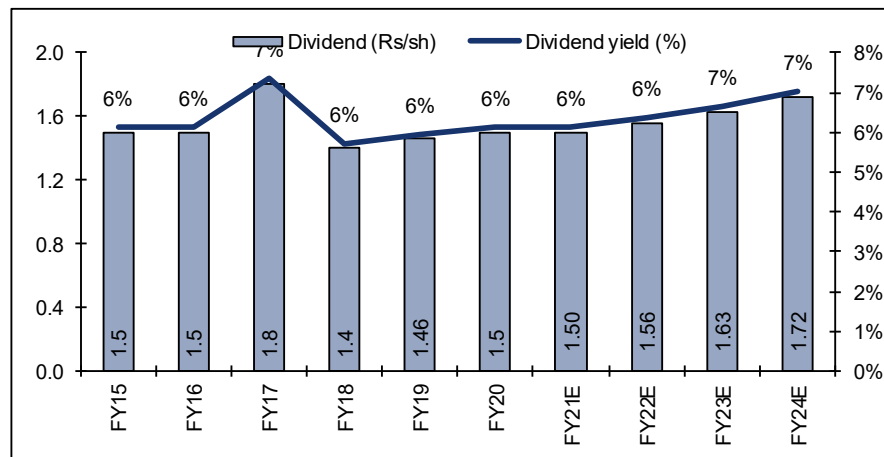
Source: Company, I-Sec research

Chart 5: RoE and RoCE trend



Source: Company, I-Sec research

Chart 6: Dividend and dividend yield trend



Source: Company, I-Sec research

Table 1: Under-construction capacity overview

S. No.	Project name	State/UT	No. of units	Installed capacity (MW)	Design Energy (MU)	CCEA est. cost (price level; Rs mn)	Anticipated project cost	Prov. Exp (till Sep'20; Rs mn)	Expected commissioning
Standalone									
1	Subansiri Lower	Assam/ Arunachal	8	2,000	7,422	62,853	203,689	125,171	Q2FY24
2	Parbati II	HP	4	800	3,125	39,196	98,976	84,516	Q4FY22
Subsidiary									
1	Lanco Teesta HPL	Sikkim	4	500	2,400	32,831	57,480		FY24
2	JPCL Rangit Stage-IV	Sikkim	3	120	513	7,262	16,926		FY26
JV									
1	Pakal Dul	J&K	4	1,000	3,330	81,120			Q2FY25
2	Kiru	J&K	4	624	2,272	42,880			Q2FY24
Grand Total				5,044	19,062				

Source: Company, CEA, I-Sec research

Table 2: Projects under clearance

S. No.	Project name	State/UT	No. of units	Installed capacity (MW)	Design Energy (MU)	CCEA est. cost (price level; Rs mn)
Standalone						
1	Kotli Bhel-IA	Uttarakhand	3	195	1,026	23,210
2	Teesta-IV	Sikkim	4	520	2,252	58,110
3	Dibang	Arunachal Pradesh	12	2,880	11,223	298,390
4	Tawang-I	Arunachal Pradesh	3	600	2,963	53,420
5	Tawang-II	Arunachal Pradesh	4	800	3,622	67,690
Total				4,995	21,086	500,820
Subsidiary						
1	Loktak D/S	Manipur	2	66	334	13,290
JV						
1	Kwar	J&K	4	540	1,976	49,480
2	Ratle	J&K	5	850	3,137	52,820
3	Chamkharchhu	Bhutan		770	3,344	70,207
Grand Total				12,216	50,962	

Source: Company, I-Sec research

Table 3: Projects under pipeline

S. No.	Project name	State/UT	Installed capacity (MW)
1	Bursar	J&K	800
2	Garba Tawaghat	Uttarakhand	630
3	Dugar	Himachal Pradesh	500
4	Goriganga-II A	Uttarakhand	150
Total			2,080

Source: Company, I-Sec research

Renewables and power trading ventures have the potential to scale-up rapidly

NHPC's current operational renewable project profile includes 50MW solar PV plant in Rajasthan and 50MW wind power plant in Tamil Nadu.

Table 4: Operational RE projects

S. No.	Project	State/UT	Installed capacity (MW)	Design Energy (MU)	Commissioning year	Capital cost (as on FY19-end; Rs mn)	Tariff (FY19) (Rs/kWh)
1	Wind	Jaisalmer, Rajasthan	50	94	2016	3,304	3.67
2	Solar	Theni/Dindigul, TN	50	106	2018	2,906	4.41
	Total		100	200		6,210	

Source: Company, I-Sec research

NHPC plans to develop 7.5GW of RE projects (solar – terrestrial & floating – and wind) over the next three years. It has already commissioned 102.5MW RE capacity on ownership basis and has contracted 2GW on intermediary procurer basis (facilitator mode) with planned commissioning in CY21.

Further, 155MW solar-terrestrial & floating capacity is under final stages of award and another 2.9GW of solar capacity (500MW floating and 2400MW Terrestrial) is under various stages of development.

Overview of under construction/pipeline RE projects of NHPC:

- 500MW floating solar project in Odisha at an estimated investment of Rs25bn.
- 500MW floating solar project in Telangana: approval is presently held up due to the ongoing Covid-19 pandemic.
- 50MW floating solar project, Kerala.
- Development of UMREPPs at other locations is also being explored under the MNRE.
- 140 MW NHPC solar park in Odisha.
- 100MW solar power project at Mirzapur, Uttar Pradesh: NHPC has floated the tender for EPC contract. Contract award is expected in next 2-3 months after which the successful developer will have 12 months to commission the project.
- 1,200MW solar park in Jalaun, UP.
- Other utility scale solar projects are being explored in different states/UTs such as Telangana (293 MW), Tamil Nadu (25X25 MW) and Leh (50 MW).
- Kerala Wind Power Project (72MW).
- NHPC has also signed an MoU with IREDA to expand NHPC's renewable energy projects footprint in the country.

Power trading can become another large business:

- NHPC ventured into power trading in FY19. It traded 2,022MU with a turnover of Rs7bn in FY20.
- It has successfully executed tenders in Uttar Pradesh, Andhra Pradesh, Tamil Nadu and J&K during FY20.
- NHPC has also completed the letter of awards to developers for 2GW grid connected ISTS solar PV projects.
- PPA and PSA have been signed for the entire capacity (PSA for 1,680MW at tariff of Rs2.55/unit and for 320MW at tariff of Rs2.56/unit for 25years).
- NHPC will earn trading margins of Rs0.07/unit during the period.

Comparative analysis – NHPC with Verbund AG

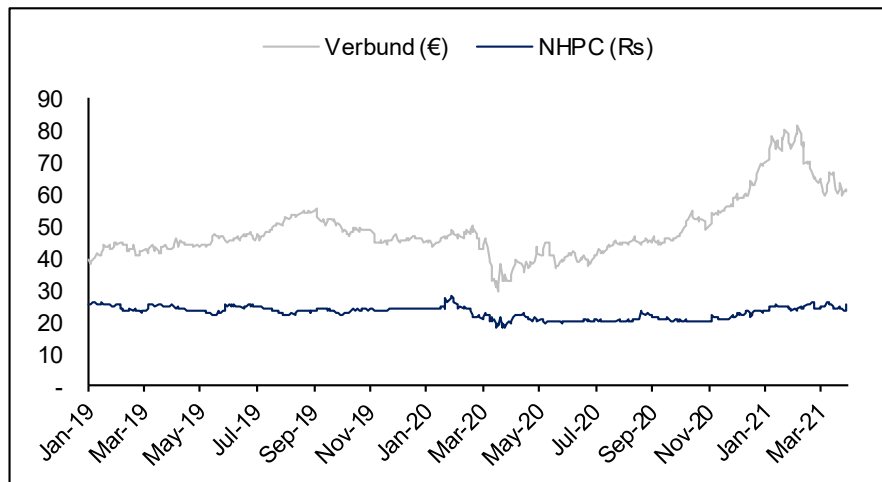
In this section, we compare NHPC with Verbund AG, a hydro power generating company with majority (51%) shareholding of the Republic of Austria. Verbund is Austria’s leading electricity company and one of the largest producers of hydropower electricity in Europe. In Austria, nearly 65% of electricity generation is covered by hydropower, and more than half of this comes from Verbund’s hydropower plants. Further, as 100% owner of the independently acting Austrian Power Grid, Verbund is Austria’s largest electricity transmission company. It transports about half of the country’s electricity.

The total output of all (131) of Verbund’s hydropower plants is about 8,222MW, which generated 92% of Verbund’s total generation in CY19 (30,660MU). Verbund has a total wind generation capacity of 418MW, through 153 plants, which generated 3% of total in CY19 (929MU). At the end of 2019, Verbund also operated two thermal power plants and one boiler unit, with 1,046MW capacity (848MW gas and 246MW coal), which generated 5% of the total in CY19 (1570MU).

Verbund Energy4Business is its central trading platform and one of the leading electricity trading companies in Europe.

Although NHPC and Verbund are much similar in terms of profile and capacity (in fact, NHPC has a 100% ‘green’ portfolio), the performance of their share prices are hugely divergent. While Verbund’s share prices have witnessed one of the best years during CY20 in terms of stock returns taking its market capitalisation to a peak of > €24bn, NHPC has continued to lag behind, despite 9MFY21 reported profit being the highest ever in its history.

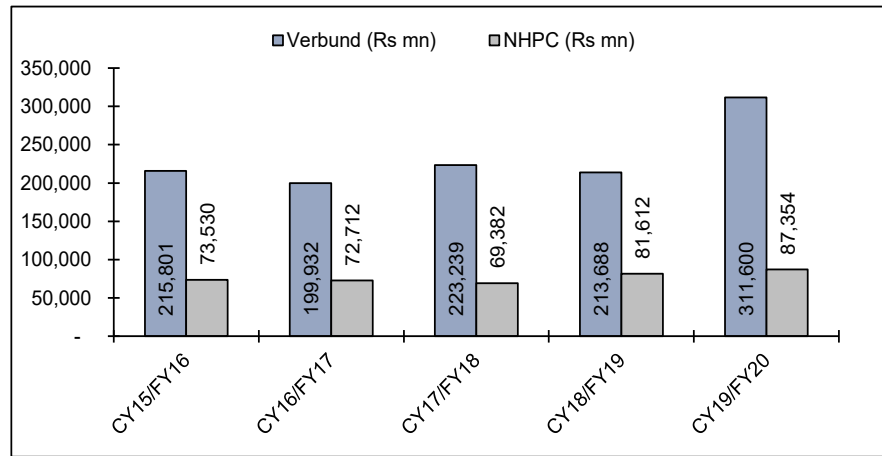
Chart 7: While NHPC’s share price (ex-dividend) has been range bound and has not given good returns since Jan’19, Verbund’s share has given >50% return during the same period



Source: Bloomberg, I-Sec research

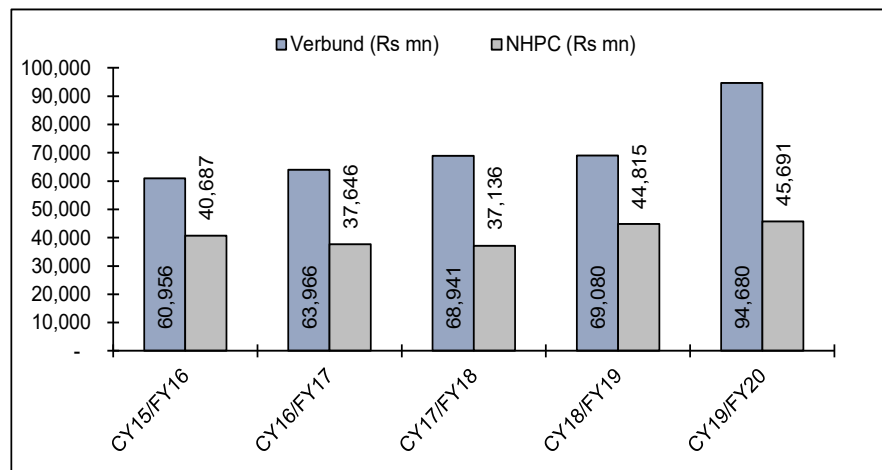
Key comparative charts: Income statement

Chart 8: Revenue comparison



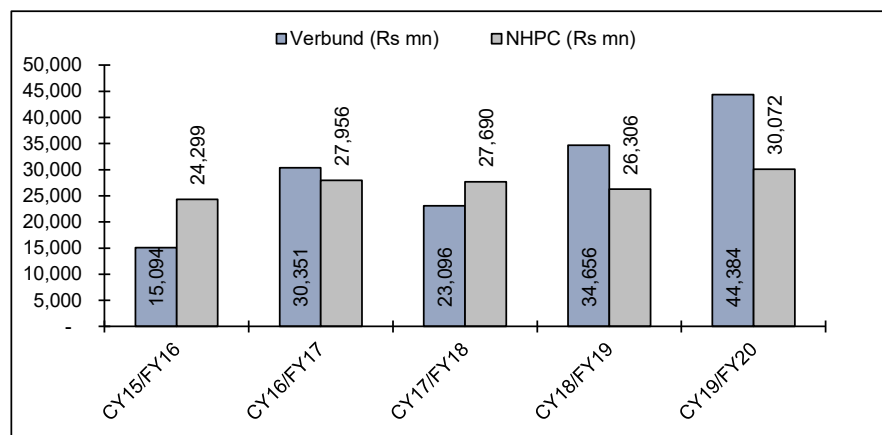
Source: Company, I-Sec research

Chart 9: EBITDA comparison



Source: Company, I-Sec research

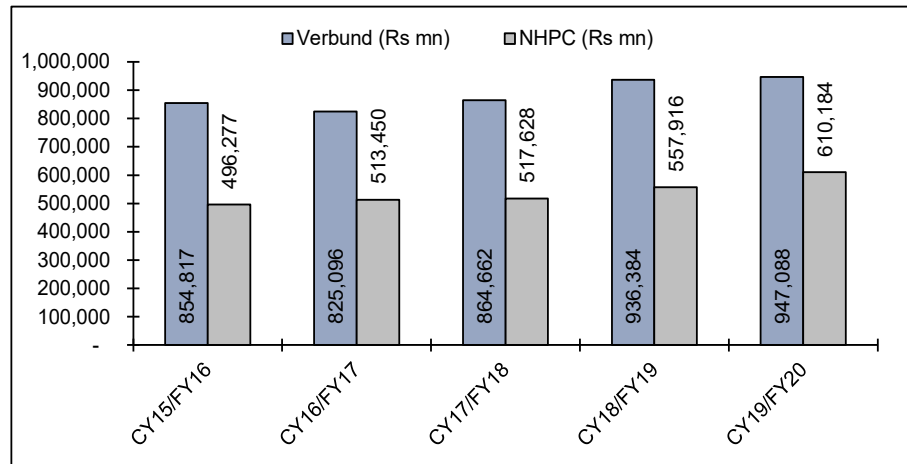
Chart 10: PAT comparison



Source: Company, I-Sec research

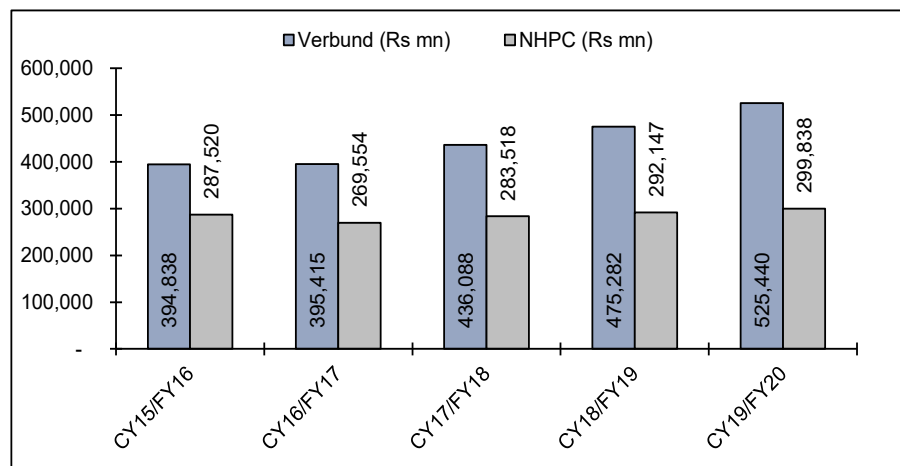
Key comparative charts: Balance sheet

Chart 11: Total assets trend



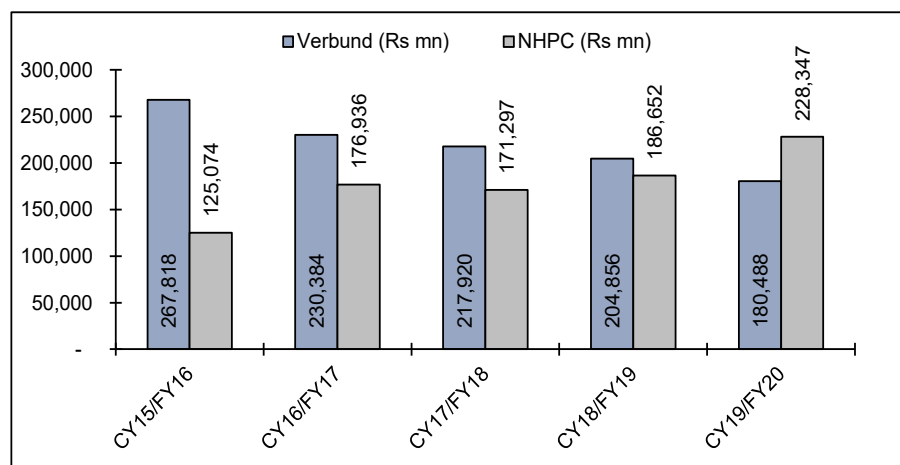
Source: Company, I-Sec research

Chart 12: Net worth trend



Source: Company, I-Sec research

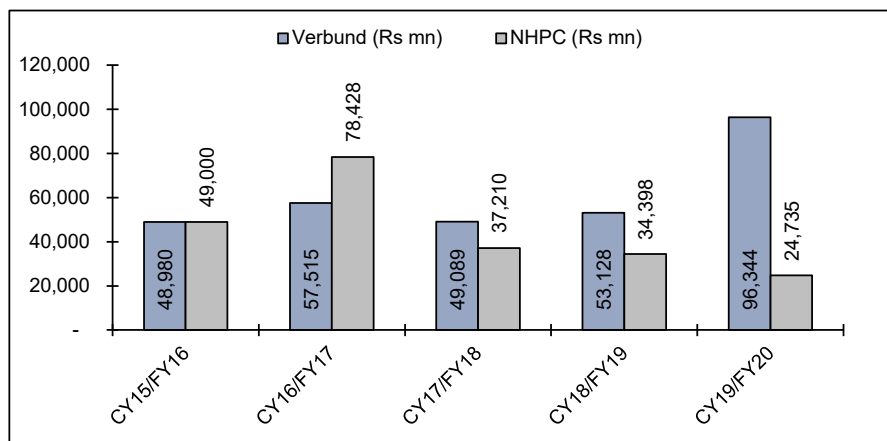
Chart 13: Net debt trend



Source: Company, I-Sec research

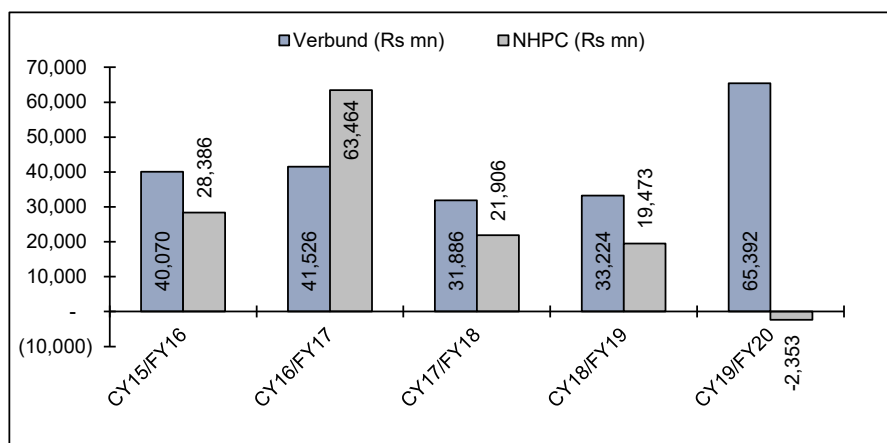
Key comparative charts: Cashflow

Chart 14: Cashflow from operations trend



Source: Company, I-Sec research

Chart 15: Free cashflow trend



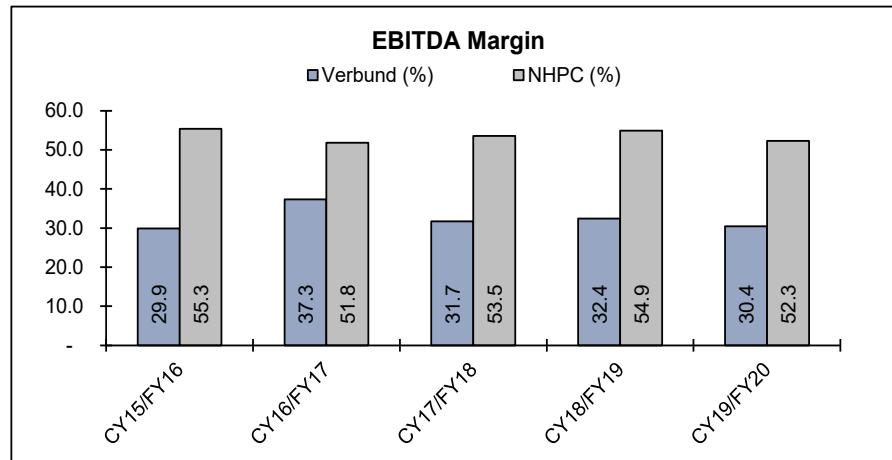
Source: Company, I-Sec research

Euro-INR conversion rate considered for the above charts

Year	CY15	CY16	CY17	CY18	CY19
Eur-INR	72.7	71.5	76.6	80.0	80.0

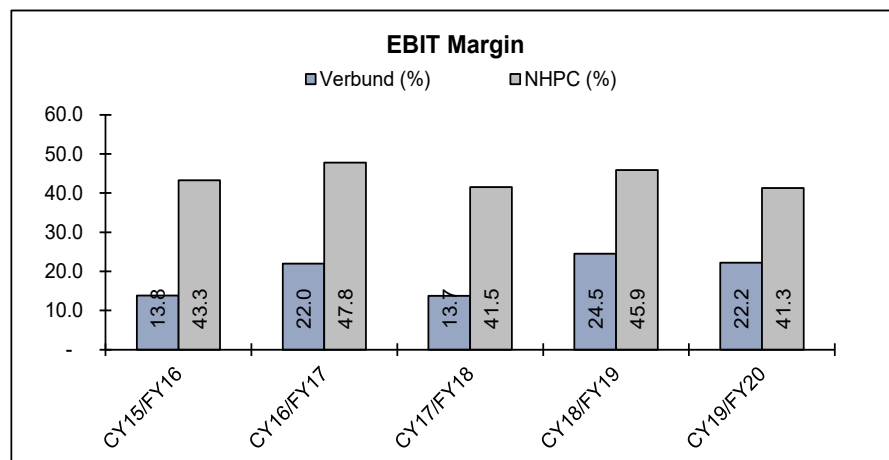
Key comparative charts: Margins and ratios

Chart 16: EBITDA margin trend



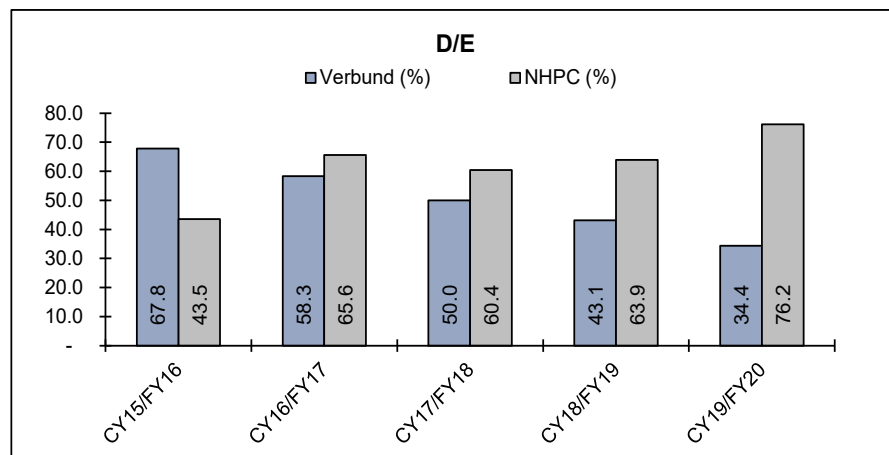
Source: Company, I-Sec research

Chart 17: EBIT margin trend



Source: Company, I-Sec research

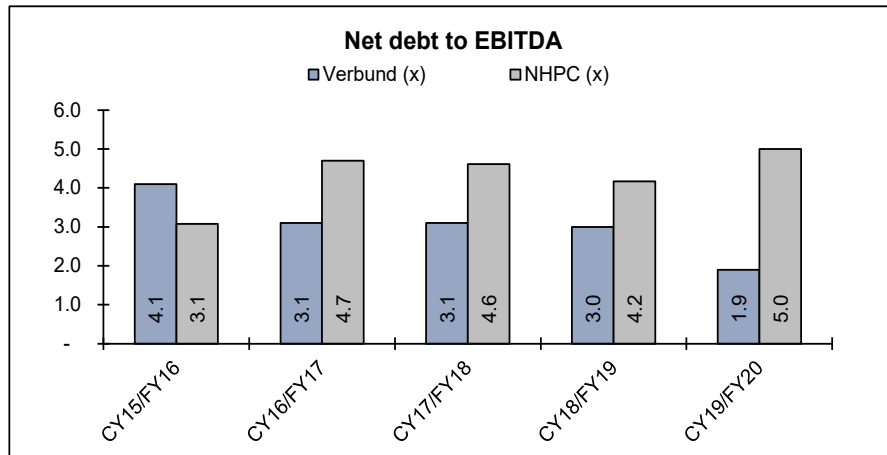
Chart 18: Net debt to equity



Source: Company, I-Sec research

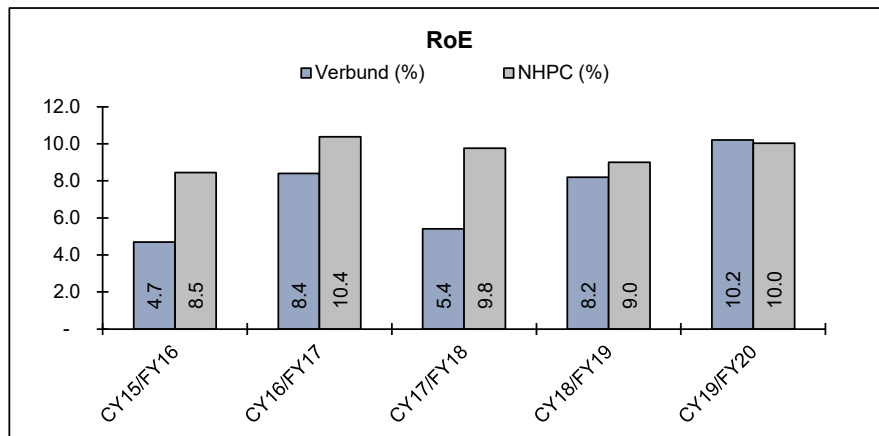
Note: D/E may not be comparable since NHPC is a regulated business while Verbund has majority market based sale

Chart 19: Net debt to EBITDA



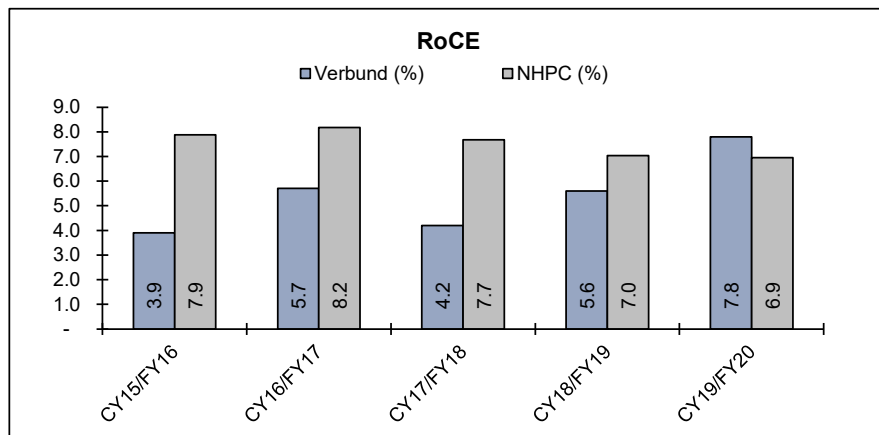
Source: Company, I-Sec research

Chart 20: RoE – Verbund is volatile due to other generation sources and businesses



Source: Company, I-Sec research

Chart 21: RoCE trend

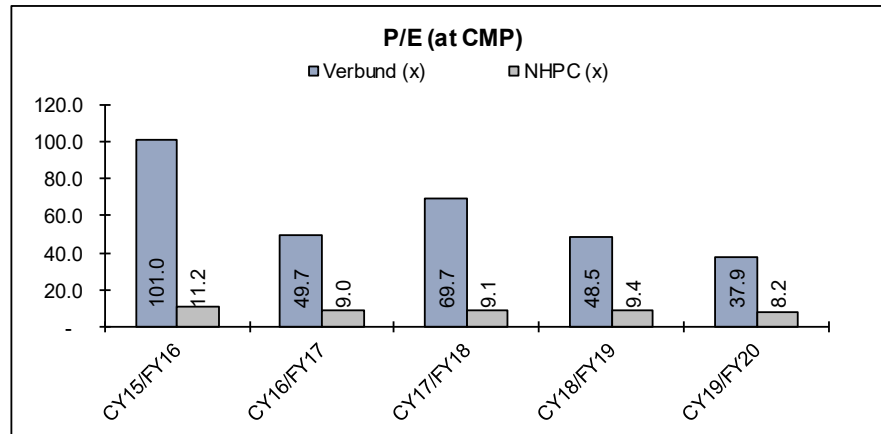


Source: Company, I-Sec research

Key comparative charts: Valuation

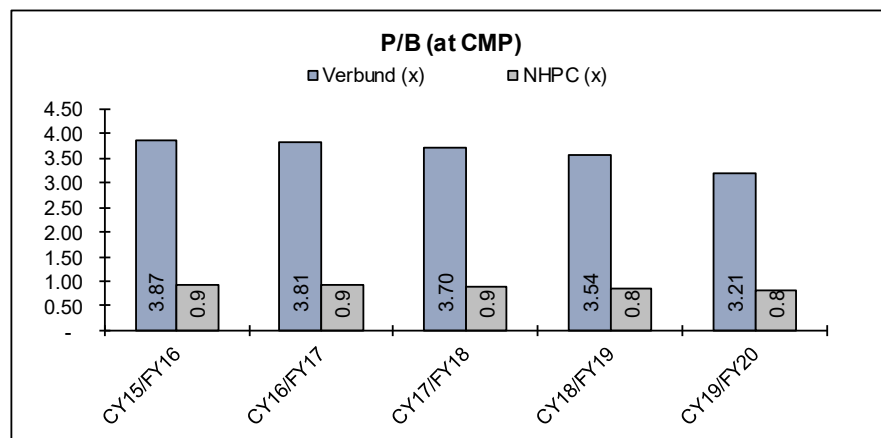
(CMP/sh – Verbund: €60.6; NHPC: Rs24.5)

Chart 22: P/E ratio – Verbund trades several times higher



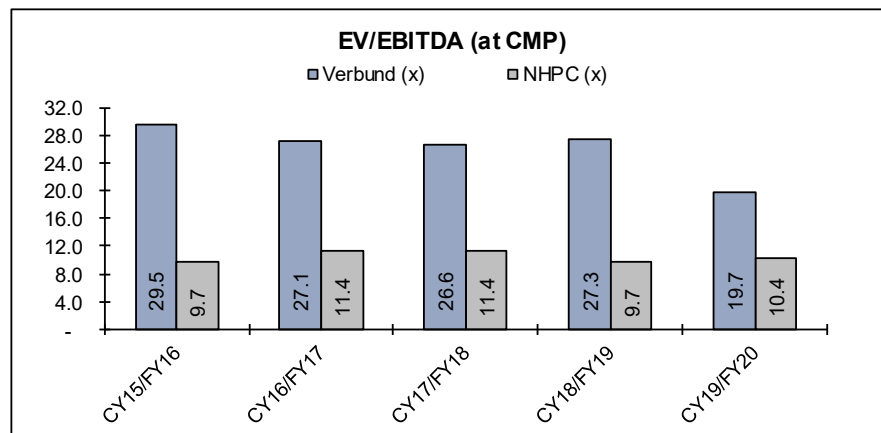
Source: Company, I-Sec research

Chart 23: P/B ratio



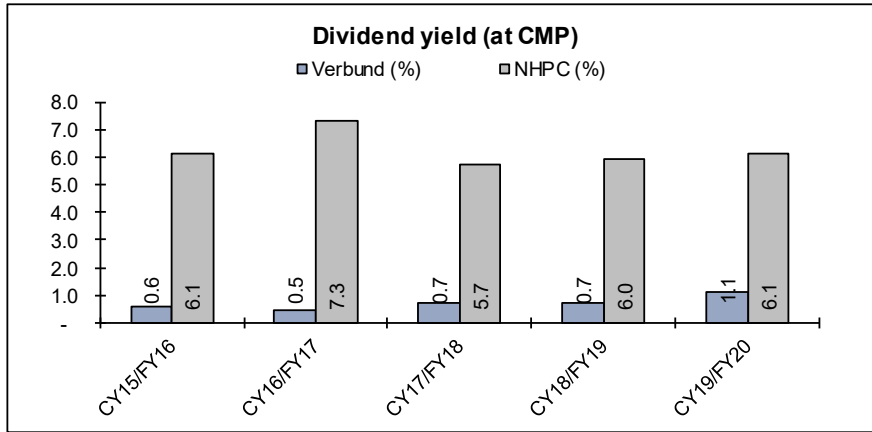
Source: Company, I-Sec research

Chart 24: EV/EBITDA



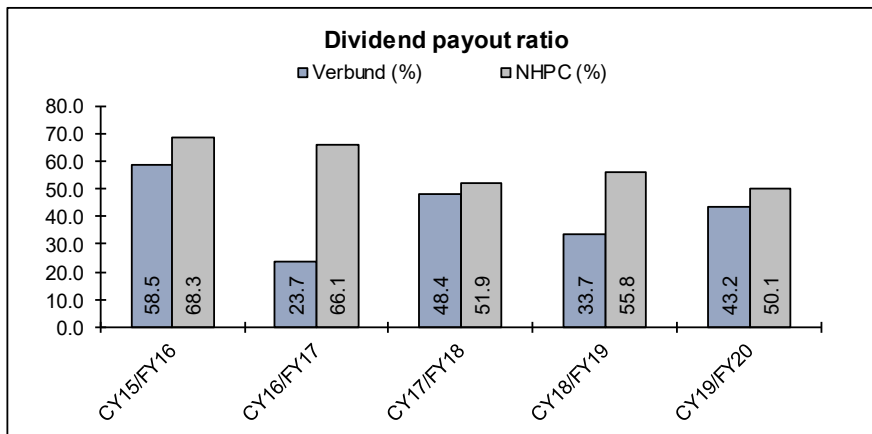
Source: Company, I-Sec research

Chart 25: Dividend yield



Source: Company, I-Sec research

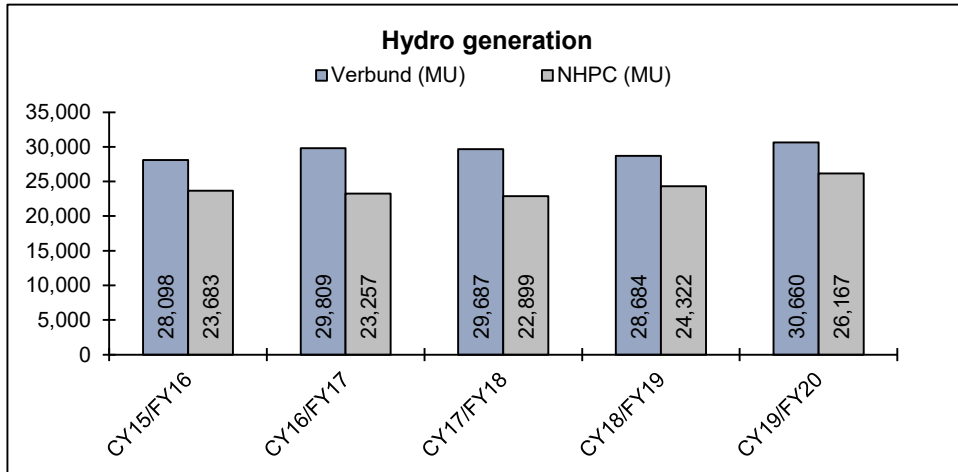
Chart 26: Dividend payout ratio



Source: Company, I-Sec research

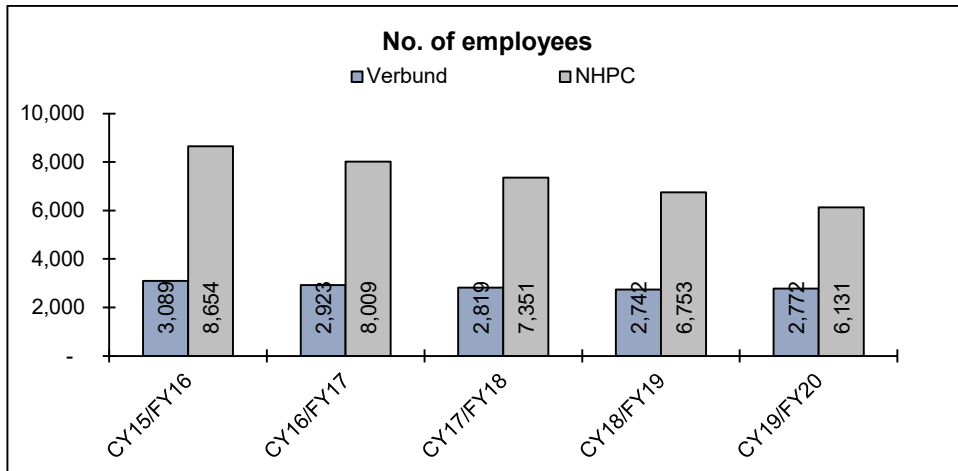
Key comparative charts: Operational

Chart 27: Hydro generation – Verbund higher due to higher operational capacity



Source: Company, I-Sec research

Chart 28: No. of employees – Verbund operates higher capacity with less than half of NHPC’s manpower but NHPC’s manpower strength is in a declining trend



Source: Company, I-Sec research

Financial summary (standalone)

Table 5: Profit and loss statement

(Rs mn, year ending Mar 31)

	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Operating Income (Sales)	73,530	72,712	69,382	81,612	87,354	86,687	89,391	108,108
Operating Expenses	32,843	35,066	32,246	36,797	41,663	40,894	42,530	44,231
EBITDA	40,687	37,646	37,136	44,815	45,691	45,793	46,861	63,877
% margins	55.3	51.8	53.5	54.9	52.3	52.8	52.4	59.1
Depreciation & Amortisation	13,591	13,884	13,955	15,900	15,453	13,347	12,298	17,640
Gross Interest	10,721	10,732	9,223	8,949	7,954	6,047	5,514	10,757
Other Income	9,921	14,577	14,206	9,248	10,362	8,500	7,000	7,200
Recurring PBT	26,296	27,606	28,163	29,214	32,646	34,899	36,049	42,679
Add: Extraordinaries	5,509	7,140	623	8,234	3,436	-	-	-
Less: Taxes	7,506	6,790	1,096	11,142	6,010	6,282	6,489	7,682
- Current tax	7,450	7,066	6,278	6,498	6,024	6,282	6,489	7,682
- Deferred tax	56	(276)	(5,182)	4,645	(14)	-	-	-
Net Income (Reported)	24,299	27,956	27,690	26,306	30,072	28,617	29,560	34,997
Recurring Net Income	24,299	27,956	27,690	26,306	30,072	28,617	29,560	34,997

Source: Company data, I-Sec research

Table 6: Balance sheet

(Rs mn, year ending Mar 31)

	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Assets								
Total Current Assets	98,593	55,509	44,380	55,768	75,863	83,687	88,571	99,434
of which cash & cash eqv.	58,779	15,331	14,724	3,906	3,891	16,648	27,842	38,989
Total Current Liabilities & Provisions	55,384	37,017	38,048	38,178	35,952	34,000	34,000	34,000
Net Current Assets	43,208	18,493	6,332	17,590	39,912	49,687	54,571	65,434
Investments	15,964	21,003	22,096	23,662	34,052	35,155	37,360	41,770
of which								
Strategic/Group	15,964	21,003	22,096	23,662	34,052	35,155	37,360	41,770
Other Marketable	-	-	-	-	-	-	-	-
Net Fixed Assets	394,595	383,406	388,319	387,455	393,887	412,100	456,802	489,162
of which								
intangibles								
Capital Work-in-Progress	165,757	173,501	188,140	148,981	160,977	192,537	249,537	199,537
Goodwill & other long term assets	42,510	90,548	100,881	129,210	142,333	142,333	142,333	142,333
Total Assets	496,277	513,450	517,628	557,916	610,184	639,275	691,065	738,698
Liabilities								
Borrowings	183,853	192,267	186,021	190,558	232,238	247,779	285,679	314,679
Deferred Tax Liability	8,457	36,647	31,454	36,106	36,412	36,412	36,412	36,412
Equity Share Capital	110,707	102,593	102,593	100,450	100,450	100,450	100,450	100,450
Face Value per share (Rs)	10	10	10	10	10	10	10	10
Reserves & Surplus	176,813	166,961	180,925	191,697	199,388	212,938	226,828	245,461
Net Worth	287,520	269,554	283,518	292,147	299,838	313,388	327,279	345,912
Other long term liabilities	16,448	14,981	16,635	39,104	41,695	41,695	41,695	41,695
Total Liabilities	496,277	513,450	517,628	557,916	610,184	639,275	691,065	738,698

Source: Company data, I-Sec research

Table 7: Cashflow statement*(Rs mn, year ending Mar 31)*

	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Operating Cashflow	33,193	33,889	35,496	38,325	41,748	41,964	41,858	52,637
Working Capital Changes	15,807	44,539	1,714	(3,927)	(17,014)	4,331	4,824	3,840
Capital Commitments	(20,614)	(14,964)	(15,304)	(14,925)	(27,087)	(31,560)	(57,000)	(50,000)
Free Cashflow	28,386	63,464	21,906	19,473	(2,353)	14,736	(10,318)	6,477
Cash flow from Investing Activities	12,621	663	7,673	3,275	(4,476)	7,398	4,795	2,790
Issue of Share Capital	-	-	-	-	-	-	-	-
Buyback of shares	-	(26,259)	-	(6,062)	-	-	-	-
Inc (Dec) in Borrowings	1,038	(5,339)	(5,009)	7,008	42,527	15,541	37,900	29,000
Dividend paid	(17,347)	(29,964)	(13,785)	(11,490)	(22,375)	(15,068)	(15,669)	(16,364)
Extraordinary Items	-	-	-	-	-	-	-	-
Chg. in Cash & Bank balance	10,087	(11,345)	(529)	53	(32)	16,560	11,194	11,146

Source: Company data, I-Sec research

Table 8: Key ratios*(Year ending Mar 31)*

	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Per Share Data (Rs)								
EPS(Basic Recurring)	2.2	2.7	2.7	2.6	3.0	2.8	2.9	3.5
Diluted Recurring EPS	2.2	2.7	2.7	2.6	3.0	2.8	2.9	3.5
Recurring Cash EPS	3.4	4.1	4.1	4.2	4.5	4.2	4.2	5.2
Dividend per share (DPS)	1.5	1.8	1.4	1.5	1.5	1.5	1.6	1.6
Book Value per share (BV)	26.0	26.3	27.6	29.1	29.8	31.2	32.6	34.4
Growth Ratios (%)								
Operating Income	8.1	(1.1)	(4.6)	17.6	7.0	(0.8)	3.1	20.9
EBITDA	1.9	(7.5)	(1.4)	20.7	2.0	0.2	2.3	36.3
Recurring Net Income	14.4	15.1	(1.0)	(5.0)	14.3	(4.8)	3.3	18.4
Diluted Recurring EPS	14.4	24.1	(1.0)	(3.0)	14.3	(4.8)	3.3	18.4
Diluted Recurring CEPS	6.7	19.2	(0.5)	3.5	7.9	(7.8)	(0.3)	25.8
Valuation Ratios (x)								
P/E	11.2	9.0	9.1	9.4	8.2	8.6	8.3	7.0
P/CEPS	7.2	6.0	6.0	5.8	5.4	5.9	5.9	4.7
P/BV	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.7
EV / EBITDA	9.7	11.4	11.4	9.7	10.4	10.4	10.8	8.2
EV / Operating Income	5.4	5.9	6.1	5.3	5.4	5.5	5.6	4.8
EV / Operating FCF	14.0	6.7	19.3	22.2	(201.7)	32.4	(48.8)	80.6
Operating Ratios								
SG&A cost / Revenue	28.9	26.6	24.3	24.0	27.7	29.0	29.2	25.1
Operating expenses / Revenue	44.7	48.2	46.5	45.1	47.7	47.2	47.6	40.9
Other Income / PBT (%)	37.7	52.8	50.4	31.7	31.7	24.4	19.4	16.9
Effective Tax Rate (%)	23.4	20.3	21.8	17.4	16.7	18.0	18.0	18.0
NWC / Total Assets (%)	(3.1)	0.6	(1.6)	2.5	5.9	5.2	3.9	3.6
Inventory Turnover (days)	9.5	9.5	10.8	11.6	10.4	10.6	10.1	9.8
Receivables (days)	100.1	74.9	57.7	117.3	159.5	140.0	110.0	90.0
Payables (days)	13.6	15.3	20.6	17.9	26.7	26.7	26.7	26.7
Net D/E Ratio (x)	0.4	0.7	0.6	0.6	0.8	0.7	0.8	0.8
Return/Profitability Ratios (%)								
Recurring Net Income Margins	33.0	38.4	39.9	32.2	34.4	33.0	33.1	32.4
RoCE	7.9	8.2	7.7	7.0	6.9	6.2	5.8	7.0
RoNW	8.5	10.4	9.8	9.0	10.0	9.1	9.0	10.1
Dividend Payout Ratio	0.7	0.7	0.5	0.6	0.5	0.5	0.5	0.5
Dividend Yield	6.1	7.3	5.7	6.0	6.1	6.1	6.4	6.6
EBITDA Margins	55.3	51.8	53.5	54.9	52.3	52.8	52.4	59.1

Source: Company data, I-Sec research

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