INSTITUTIONAL RESEARCH

Sector Thematic

Power

Reforms essential for rennaissance

While the demand for power had been impacted by the pandemic in 1HFY21, its revival has been far exceeded everyone's expectation. H2FY21 saw 7.5% yoy growth in both demand and generation, which curbed the FY21 decline in power demand to only 1%. We expect FY22 to witness 12% yoy growth in demand and generation, led by recovery across the economic activities and low FY21 base. However, the pandemic has further aggravated the ailing financial status of the discoms, resulting in a steep rise in discom dues towards the gencos (scaling a new peak of INR1.4tn in Jan'21) and eventually a sharp rise in its borrowings. While the proposed reform measures like the Draft Electricity Amendment Bill will act as a silver lining towards reviving the sector, its successful implementation remains a key trigger to watch out for. We initiate coverage on the sector with the hope that a revival would take place, given these reforms could improve the discoms efficiencies and financials. We initiate our positive stance on NTPC, PGCIL, CESC, Tata Power, Torrent Power and NHPC, based on their risk averse regulatory business models, growth opportunities, healthy balance sheets and attractive valuations (~0.7x FY23 BV).

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INSTITUTIONAL RESEARCH

Indian Power Sector

Reforms essential for rennaissance

While the demand for power had been impacted by the pandemic in 1HFY21, its revival has been far exceeded everyone's expectation. H2FY21 saw 7.5% yoy growth in both demand and generation, which curbed the FY21 decline in power demand to only 1%. We expect FY22 to witness 12% yoy growth in demand and generation, led by recovery across the economic activities and low FY21 base. However, the pandemic has further aggravated the ailing financial status of the discoms, resulting in a steep rise in discom dues towards the gencos (scaling a new peak of INR1.4tn in Jan'21) and eventually a sharp rise in its borrowings. While the proposed reform measures like the Draft Electricity Amendment Bill will act as a silver lining towards reviving the sector, its successful implementation remains a key trigger to watch out for. We initiate coverage on the sector with the hope that a revival would take place, given these reforms could improve the discoms efficiencies and financials. We initiate our positive stance on NTPC, PGCIL, CESC, Tata Power, Torrent Power and NHPC, based on their risk averse regulatory business models, growth opportunities, healthy balance sheets and attractive valuations (~0.7x FY23 BV).

Power demand expected to increase 12% yoy in FY22: With power demand having attained a new peak during Jan-March 2021, we expect it to witness a steep 12.1% yoy rise in FY22, led by revival in economic activities and low FY21 base. However, the fall in demand from the high-tariff-paying commercial and industrial (C&I) segment during the lockdown is expected to escalate the Average Cost of Supply (ACS) and Average Revenue Realisation (ARR) gap to INR0.69/unit in FY21. Nevertheless, with the revival in demand in FY22E, the gap is expected to normalise to INR0.50/unit. This should bring down the discoms' under-recoveries in FY22 to ~INR709bn vs INR871bn expected in FY21.

Under-recoveries, rising dues to escalate discoms' debt to INR6tn: Rise in under-recoveries are expected to be funded through fresh debt in the form of Atmanirbhar scheme and working capital loans. While normalcy in expected from FY22 onwards in terms of better power demand, higher collection efficiency and tariff hikes by discoms; its' debt is still expected to attain a new high of INR6.1tn in FY22, led by under-recoveries (FY21 - INR871bn and FY22 - INR709bn).

Renewable energy will dominate capacity addition growth, going ahead: Assuming normalcy in economic activity from FY22 onwards, we expect that the average annual peak power demand would increase from 174GW in FY20 to 219GW in FY25E (CAGR of 4.7%) and beyond that, at 4.5% CAGR. In order to meet this demand growth, we expect India's installed capacity to increase by 97GW from current 370GW in FY20 to 467GW in FY24E. The growth would be led by the RES, which is expected to add 63GW of capacity (65% of the total incremental capacity addition). Coal would add 26GW of capacity over the next five years.

Reforms success depends on its proper execution: In order to provide the much-needed support to the power sector, the power ministry has announced a series of measures and reforms, including major ones like (a) the fourth draft Electricity Amendment Act – which primarily focusses on delicensing of distribution segment; (b) INR3.1tn budgetary support for improving distribution infrastructure; and (c) reform linked distribution scheme. However, these measures would lead to a turnaround in the sector only if executed successfully, which would enable sub-sectors like gencos, transcos and, more importantly, the discoms to become self-sufficient and improve their operational efficiencies.

Company	Reco	TP	Upside (%)
NTPC	Buy	143	40%
PGCIL	Buy	257	22%
NHPC	Add	27	12%
CESC	Buy	769	26%
JSW Energy	Reduce	95	-5%
Tata Power	Buy	128	32%
Torrent Power	Add	439	8%

FY23E	P/BV (x)	PER (X)
NTPC	0.7	5.8
PGCIL	1.4	8.0
NHPC	0.7	6.7
CESC	0.7	5.2
JSW Energy	1.1	13.1
Tata Power	1.1	10.2
Torrent Power	1.5	10.7

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Discoms debt likely to hit a new high of INR6tn in FY22

Fall in power demand, change in consumer composition mix, and lower collections efficiency will escalate the ACS and ARR gap in FY21. This in turn would lead to a rise in discom under-recoveries, which is likely to be funded through debt - Atmanirbhar scheme and working capital loans. While FY22E will witness normalisation in power demand, improved collection efficiency, and likelihood of tariff hikes (which would liquidate the large regulatory assets), we believe the debt of discoms would still attain a new high to INR6.1tn, led by under-recoveries (FY21 - INR871.3bn & FY22 - INR709.6 bn), accumulated losses from higher AT&C losses and enhanced interest cost burden on the loans availed under the Atmanirbhar scheme.

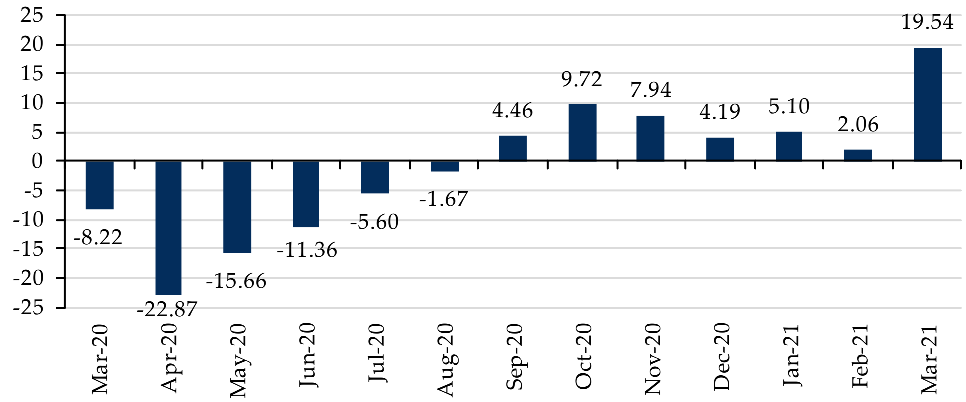
Power demand bounced back sharply in 2HFY21; overall demand decline curbed at -1% yoy in FY21

Discoms revenue likely to decline by 4.0% yoy in FY21 due to fall in demand across high tariff paying C&I consumers

Power demand was impacted significantly during the Q1FY21 lockdown (due to all economic activity coming to a standstill), falling 15.5% yoy during Q1FY21 and 7.8% yoy during 1HFY21. However, it has picked up significantly since the beginning of the unlocking phase and reported a 6.7% yoy surge in Q3FY21. This spurt in demand is led by improvement in economic activity and higher domestic usage of electricity, driven by enhanced connectivity and lesser load shedding. The overall fall in demand during FY21 has been capped at only ~1% yoy, largely due to 20.3%/11.8% yoy growth across the Domestic/Agriculture segments (partially offset by 17.3%/16.5% yoy decline in demand across the Industrial/Commercial segments (C&I)). Thus, a 1% yoy fall in power demand to 1,270 BUs is likely to result in a 4.0% yoy decline in revenues to INR7,512bn for discoms in FY21E. This is largely due to the sharp demand drop across high-tariff-paying C&I consumers and the fall in bill collection efficiency to 94% from an average of 98-99% due to the shutting down of many MSMEs, job losses, and the lack of paying capacity by consumers.

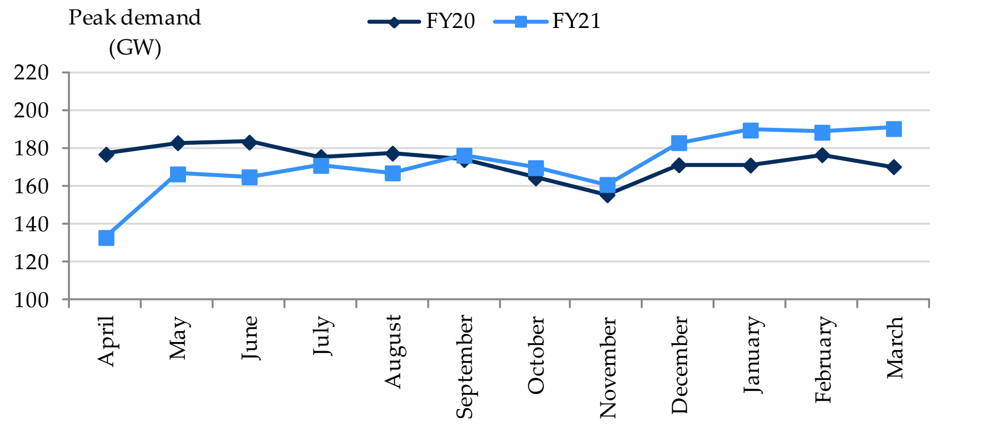
However, as economic activity has resumed, we expect power demand to increase by 12.1% yoy in FY22. Peak power demand already reached a new record of 190GW in Jan 2021.

Exhibit-1: Power generation growth in FY21 (%)



Source: CEA, HSIE Research

Exhibit-2: Peak power demand growth surpassed FY20 level from the 2HFY21



Source: CEA, HSIE Research

ACS-ARR gap expected to increase to Rs0.69/unit in FY21 vs Rs0.50/unit yoy. With normalisation expected in FY22, the gap would fall back to Rs0.50/unit

ACS-ARR gap to be widened in FY21E: The ACS-ARR gap is expected to widen to INR0.69/unit in FY21 from INR0.50/unit in FY20 due to a fall in power demand from the C&I segment, lower payment collection and lower cross-subsidisation due to a change in consumer mix (from a steep fall in power offtake in C&I segments). The C&I segments, on an average, provide INR1.5-INR2.0/unit of subsidy to the agriculture and rural consumers. Thus, lower consumption of the C&I segment is likely to increase the ACS-ARR gap in FY21. This would increase the difference between the Average Cost of Supply (ACS) and Average Revenue Requirement (ARR) to INR0.69/unit in FY21 vs INR0.50/unit in FY20 (Assuming ACS at INR6.6/unit). This should escalate discoms' under-recoveries in FY21 to ~INR871bn vs ~INR641bn yoy. Under-recoveries, however, are expected to slightly recover in FY22E with losses expected to decline to INR709bn due to revival in C&I demand, better energy mix, and collection efficiency. The ACS-ARR gap in FY22E is expected to decline to INR0.50/unit.

Exhibit-3: Expected power demand across categories (BUs)

Volume BUs	FY20	FY21E	% growth
Domestic	333.6	401.3	20.3
Agri	230.9	258.1	11.8
Industrial	500.3	413.6	-17.3
Commercial	102.6	85.7	-16.5
Others	115.5	111.7	-3.3
Total	1282.9	1270.4	-1.0

Source: HSIE Research

Power demand declined by 1.2% in FY21 due to ~17% decline in demand across the C&I segment, partially offset by improved demand from domestic and agri segment

Exhibit-4: Expected revenue across categories (INR bn)

Revenue (INR bn)	FY20	FY21E	% growth
Domestic	1601.1	1937.3	21.0
Agri	785.1	885.5	12.8
Industrial	3702.4	3122.4	-15.7
Commercial	985.3	833.7	-15.4
Others	750.5	732.9	-2.3
Total	7824.4	7511.9	-4.0

Source: HSIE Research

Exhibit-5: Change in consumer mix (%)

Consumer Mix (Mus)	FY20	FY21E	FY22E
Domestic	26%	32%	27.1%
Agri	18%	20%	18.9%
Industrial	39%	33%	37.7%
Commercial	8%	7%	7.7%
Others	9%	9%	8.6%
Total	100%	100%	100%

Source: HSIE Research

FY22E demand growth would be fueled by improved power consumption from C&I segment

Exhibit-6: Demand expected to recover in FY22E reporting 12.1% yoy growth

Volumes (BUs)	FY21E	FY22E	% growth
Domestic	401.3	385.2	-4.0
Agri	258.1	268.4	4.0
Industrial	413.6	537.7	30.0
Commercial	85.7	109.8	28.0
Others	111.7	122.8	10.0
Total	**1270.4**	**1423.9**	**12.1**

Source: HSIE Research

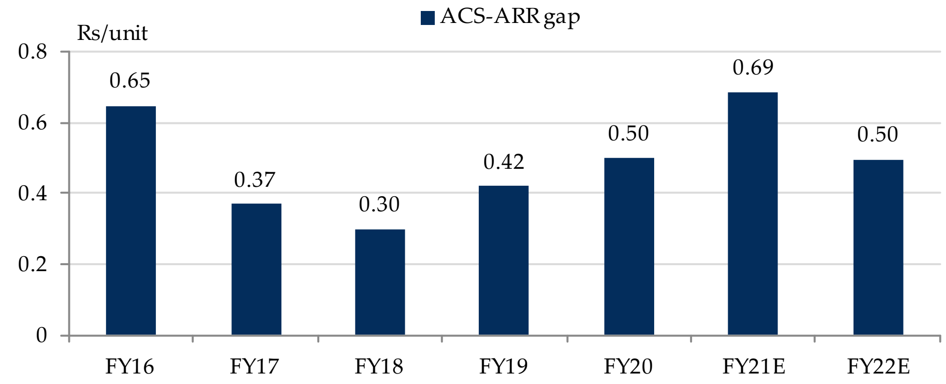
Discoms revenue should normalise in FY22E, led by revival in power demand from the C&I segment

Exhibit-7: Revenue across customer category in FY22 is expected to increase 21.9% yoy

Revenue (INR bn)	FY21E	FY22E	% growth
Domestic	1937.3	1941.5	0.2
Agri	885.5	976.4	10.3
Industrial	3122.4	4257.4	36.3
Commercial	833.7	1127.4	35.2
Others	732.9	854.4	16.6
Total	**7511.9**	**9157.1**	**21.9**

Source: HSIE Research

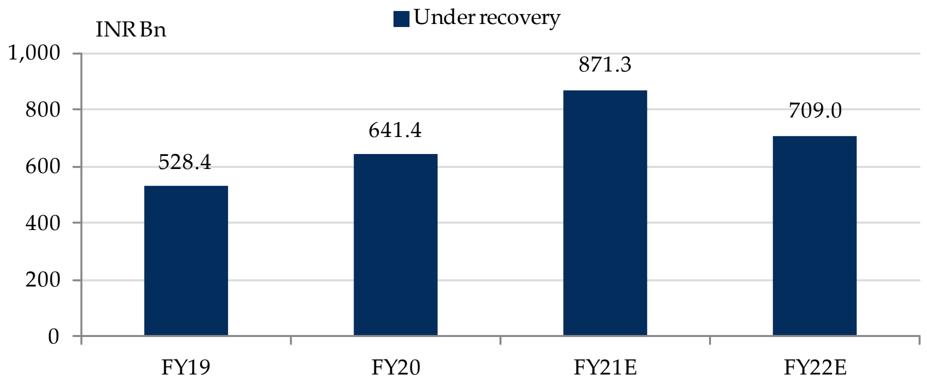
Exhibit-8: ACS-ARR gap to widen in FY21E but would normalize in FY22E



Source: HSIE Research

Exhibit-9: Under recovery to increase steeply in FY21E; but will fall in FY22E

Discoms under-recovery should settle down to INR709bn in FY22 after reaching a peak of INR871bn in FY21

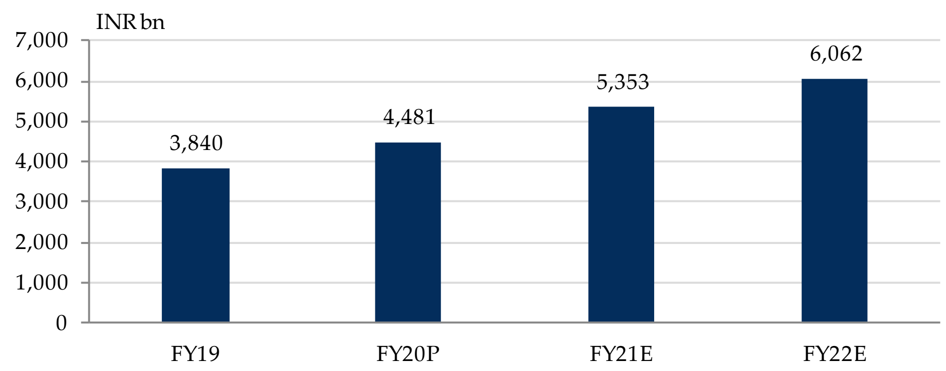


Source: HSIE Research

The rise in under-recovery would scale up discoms' debt to a new high: Based on the widened gap in the ACS-ARR, the under-recovery over FY20/21/22 is expected to be INR641bn/INR871bn/INR709bn. These under-recoveries will be largely funded through long-term loans, which would eventually surge the debt of discoms to INR6.1tn in FY22e compared to INR3.8tn reported in FY19. The rise in gross debt across the state discoms is largely due to capex, piling up of regulated assets, funding of losses and rising receivables from the state government subsidy and power bills.

Discoms' debt expected to increase to INR6.1 tn in FY22 from INR3.8tn in FY19

Exhibit-10: Discoms' debt likely to reach new high of INR6.1tn by FY22E

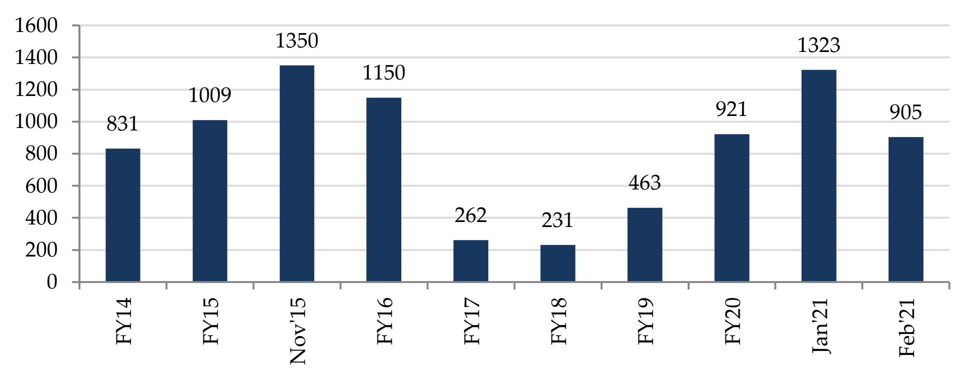


Source: HSIE Research

Discoms' dues to gencos reached a new peak of Rs1.4tn in Jan'21

Discoms' dues to gencos reached a new peak: Fall in demand, change in consumer mix, lower collections, increased ACS-ARR gap and accumulated losses have impacted the discoms' cash flows and paying capabilities. As result, their overall outstanding towards gencos breached the earlier high of INR1.35 tn attained in Nov 2015 (pre-COVID) to touch INR.1.4 tn in Nov 2020 and stands at INR1.37tn in Jan'21 (+50% since Mar'20). Of this, overdue sum (>60 days) has inched up to INR1.28tn in Jan'21 from INR766.bn in Mar'20 (+66% yoy). However, the month of Feb 2021 witnessed an escalation in the pace of loan disbursement by PFC/REC which led to a fall in overall discom dues to INR905bn while the overall outstanding stood at INR1.02tn. Of the total overdue to gencos, CPSEs and independent power producers (IPPs) have the highest share at 33% each, followed by state gencos (25%) and renewable energy firms (9%).

Exhibit-11: Discoms' dues scaled up to new high during Jan'21 (INR bn)



Source: HSIE Research

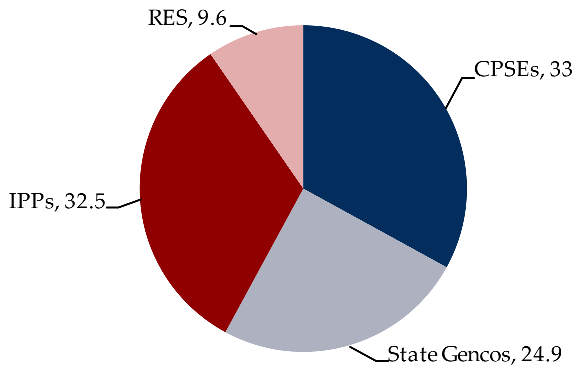
While state discoms continued their weak performance in terms of AT&C losses, low collections and inefficiencies, private discoms in Mumbai, Delhi, Surat, Ahmedabad and Kolkata managed to bring their losses down since 2HFY21, led by improved collection and low AT&C losses.

Liquidity scheme unlikely to resolve discoms' financial mess in the near term

Disbursement under the Atmanirbhar scheme has been only Rs755.5bn until date, against the sanctioned sum of Rs1.35tn

While the government has announced a loan package of INR1.35tn under the Atmanirbhar scheme to discoms in May'20 (initial package was INR900bn which was later increased due to prolonged lockdowns and rising outstanding across the discoms), the disbursement pace has been much slower than expected. The delay has been on the part of the state government to adhere to the conditions laid down by the PFC/REC related to the liquidation of outstanding dues from the state governments and laying down a concrete plan to reduce operating and financial losses by the discoms. Till date, INR755.6bn of the loans have been disbursed by the PFC (INR364.4bn)/REC (INR391.2bn), while the overdue quantum still stands at INR905bn. Financial crunch would also restrain the state discoms from incurring the required capex across the distribution infrastructure space, which is essential to bring down the AT&C losses. Thus, the discoms' financials would continue to remain in a mess due to the rising outstanding, under-recoveries and higher AT&C losses expected over the next 2-3 years.

Exhibit-12: Discom dues composition (% mix)



Source: HSIE Research

Exhibit-13: Sanction and disbursement status under the Atmanirbhar scheme

S. No.	State	Discom	Loan sanctioned (INR bn)			Disbursement (INR bn)		
			REC	PFC	Total	REC	PFC	Total
1	Andhra Pradesh	APSPDCL & APEPDCL	33.0	33.0	66.0	16.5	16.5	33.0
2	Telangana	TSNPDCL TSSPDCL	63.3	63.3	126.5	62.7	63.0	125.8
3	Punjab	PSPCL	20.0	20.0	40.0	5.0	5.0	10.0
4	Uttar Pradesh	UPPCL	104.7	104.7	209.4	104.7	104.7	209.4
5	Rajasthan	AVVNL, JVVNL, JdVVNL	20.3	20.3	40.6	10.2	10.2	20.3
6	West Bengal	WBSEDCL	5.1	5.1	10.2	2.3	2.3	4.5
7	Manipur	MSPDCL	0.6	0.6	1.1	0.6	0.6	1.1
8	Karnataka	GESCOM, HESCOM, CESC, BESCOM	36.2	36.2	72.5	0.0	0.0	0.0
9	J&K	JKPDC	22.9	22.9	45.8	11.5	11.5	22.9
10	Puducherry	Energy Dept.	1.5	-	1.5	0.3	0.0	0.3
11	Meghalaya	MeEPDCL	6.7	6.7	13.5	3.4	3.4	6.7
Sub-Total A (INR bn)			314.3	312.8	627.1	217.0	217.0	434.0
Under UDAY Limit								
1	Maharashtra	MSEDCL	25.0	25.0	50.0	25.0	0.0	25.0
2	Uttrakhand	UPCL	4.0	4.0	8.0	4.0	2.0	6.0
3	J&K	JKPDC	5.0	5.0	10.0	5.0	5.0	10.0
Sub-Total B (INR bn)			34.0	34.0	68.0	34.0	7.0	41.0

S. No.	State	Discom	Loan sanctioned (INR bn)			Disbursement (INR bn)		
			REC	PFC	Total	REC	PFC	Total
Under UDAY Limit relaxation								
1	Bihar	NBPDCL & SBPDCL	17.5	17.5	35.0	17.5	17.4	34.9
2	Tamil Nadu	TANGEDCO	178.3	124.0	302.3	87.0	60.0	147.0
3	J&K	JKPCL	-	54.4	54.4	0.0	27.2	27.2
4	Himachal Pradesh	HPSEBL	1.4	1.4	2.8	0.7	0.7	1.4
5	Maharashtra	MSEDCL	46.6	46.6	93.1	0.0	0.0	0.0
6	Andhra Pradesh	APEPDCL, APSPDCL	8.9	8.9	17.7	0.0	0.0	0.0
7	Uttar Pradesh	UPPCL	64.9	64.9	129.8	35.0	35.0	70.0
8	Rajasthan	AVVNL, JVVNL, JdVVNL	0.0	24.7	24.7	0.0	0.0	0.0
Sub-Total C (INR bn)			317.5	342.3	659.9	140.2	140.4	280.5
Total- A+B+C (INR bn)			**665.8**	**689.1**	**1355.0**	**391.2**	**364.4**	**755.5**

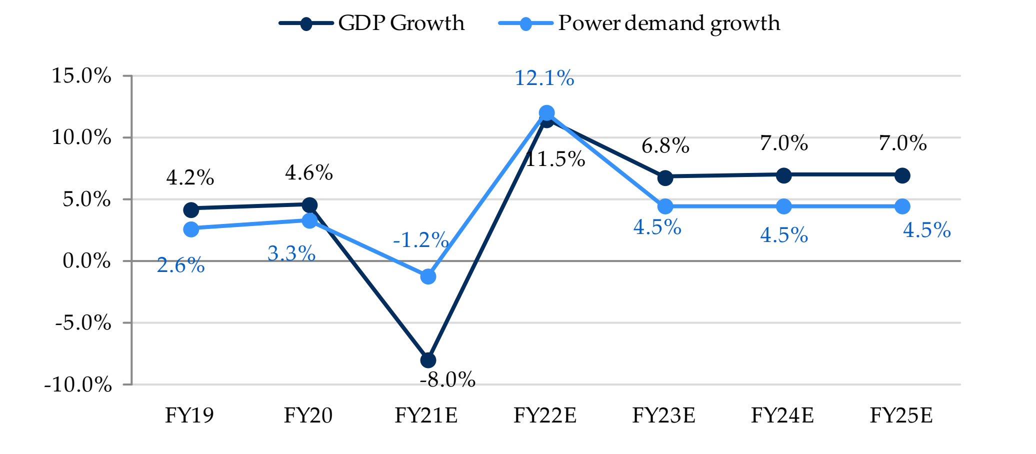
Source: HSIE Research

Thermal capacity addition will remain sluggish, RES to lead from front:

Annual average peak power demand expected to increase at a CAGR of 4.7% over FY20-25 to reach 219GW

FY22E onwards, we expect an improvement in power demand, led by normalised activities across the C&I segments. We expect it to improve by 12.1% yoy in FY22, driven by better demand from C&I segments due to higher utilisation across factories and offices. In addition, high growth will reflect the low FY21E base. From FY23E, we expect our base-case power demand to grow at a CAGR of 4.5% over FY23-FY25, reflecting its ~0.7x elasticity with the rise in GDP growth in a particular year. Thus, the average annual peak power demand is expected to increase from 174GW in FY20 to 219GW in FY25E (CAGR of 4.7%) and beyond that at an average growth rate of 4.5% pa.

Exhibit-14: GDP growth and power demand over FY20-FY25



Source: HSIE Research

Coal segment to witness net capacity addition of 26GW over FY20-25; while RES to witness capacity addition of 63GW over the same period

In order to meet this demand growth, we believe India's installed capacity will increase by 97GW from 370GW in FY20 to 467GW in FY25E. Of this, the coal segment is expected to add another net 26GW of capacity (after considering retirement of ~4GW of old capacities). NTPC would add bulk of these coal based capacities. Further, we expect PLF across the coal segment to improve from 59% in FY20 to 63% in FY25E, which eventually should add another 12GW of net capacity in the system. The renewable segment is expected to add 63GW, witnessing the highest CAGR of 11.5% in FY20-FY25 from 87GW in FY20 to 150GW in FY25E. The capacity addition across the RES is much lower than the targeted capacity, as we believe that the COVID-19 impact has delayed the pace of capacity addition across both private and CPSEs sectors.

Exhibit-15: Expected capacity addition over FY21-FY25

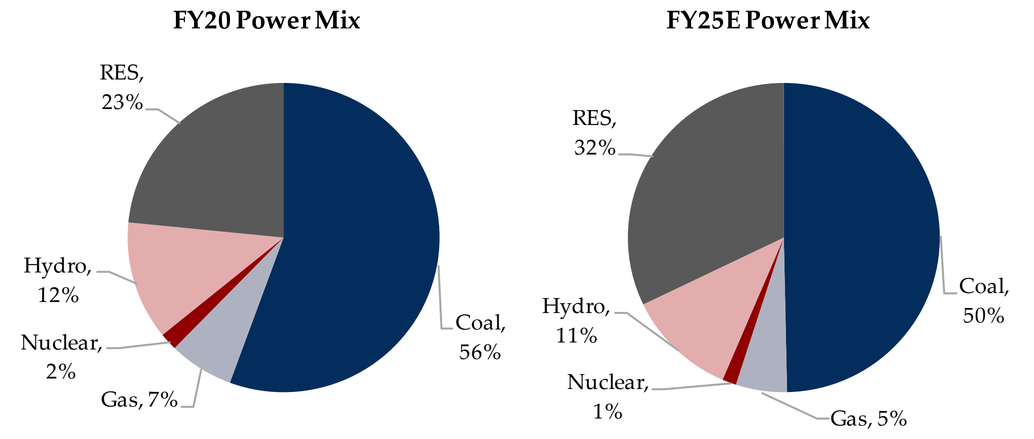
In GW	FY20	FY21E	FY22E	FY23E	FY24E	FY25E	CAGR %
Coal	206	208	215	221	227	232	2.4%
Gas	25	25	25	25	25	25	0.0%
Nuclear	7	7	7	7	7	7	0.0%
Hydro	46	46	48	48	50	54	3.2%
RES	87	94	104	119	135	150	11.5%
Total	**370**	**379**	**398**	**419**	**443**	**467**	**4.8%**
Power Demand	**173**	**171**	**191**	**200**	**209**	**218**	**4.7%**

Source: HSIE Research

With greater trust on non-conventional capacities, the proportion of renewable capacities in the overall mix is expected to increase to 32% in FY25 vs 23% in FY20 while the share of coal energy is expected to decline to 50% in FY25E from 56% in FY20.

Share of coal segment in the power mix is expected to fall to 50% in FY25 vs 56% in FY20; RES share will see a jump to 32% in FY25 from 23% in FY20

Exhibit-16: Change in power mix over FY20-FY25



Source: HSIE Research

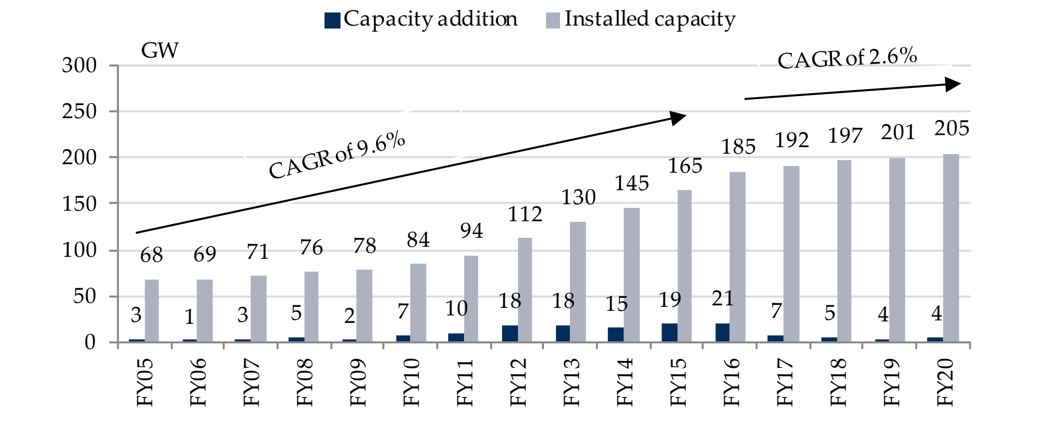
Domestic coal sufficient to meet the future requirement

Share of imported coal increased during FY05-16 period due to strong capacity addition across the coal segment

Domestic coal availability has been a cause of concern in the past decade (till 2016) for many coal-based stations, mainly due to robust coal-based capacity additions in FY05-FY16 to meet the rising power deficit in the country. Capacity addition across the coal-based stations witnessed a robust 9.6% CAGR over FY05-FY16, while coal production and dispatches, on the other hand, grew at a subdued rate of 4.8% and 5.1% respectively over the same period.

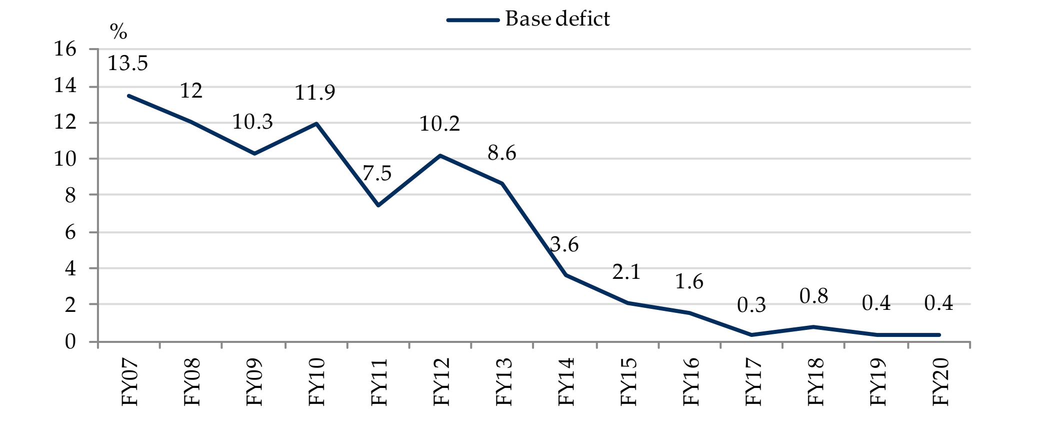
This led to a scarcity in the availability of domestic fuel and developers increased coal imports to bridge the supply gap. Overall, coal import in the country increased at a CAGR of 19.4% over FY05-FY16, mainly driven by the import of non-coking coal, which increased at a CAGR of 26.5% over the same period. Power deficit also declined from the peak of 13.5% in FY07 to 1.6% in FY16. However, things reversed from FY16 onwards as the capacity addition pace normalised (coal-based capacity addition increased at a CAGR of 2.6% over FY16-20) with slowing power demand and further narrowing of deficit while coal production maintained its existing space. This led to better inventory levels across coal-based plants and a fall in coal imports.

Exhibit-17: Capacity additions were robust during FY05-20 (GW)



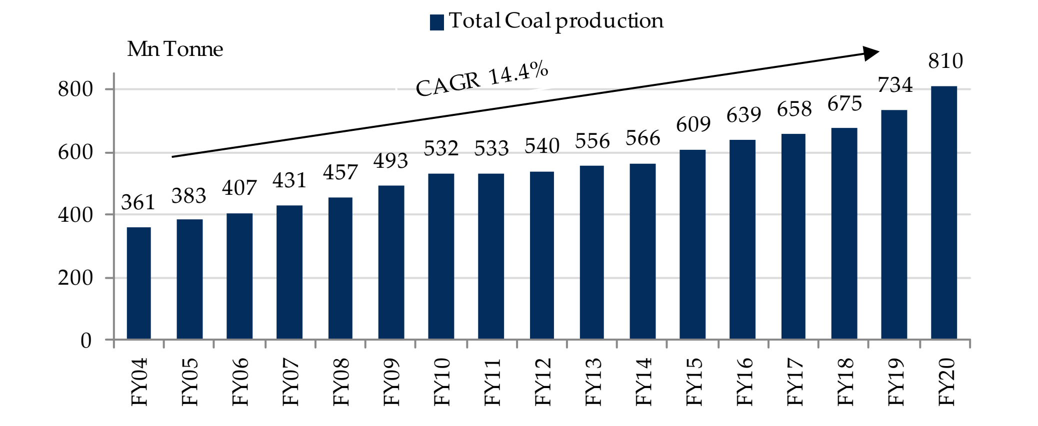
Source: HSIE Research

Exhibit-18: Power deficit declined significantly over strong capacity addition



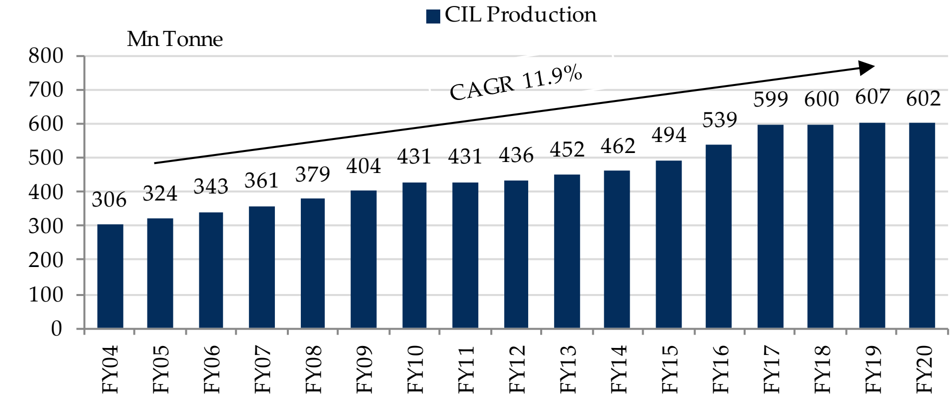
Source: HSIE Research

Exhibit-19: Domestic coal production increased at a CAGR of 14.4% over FY04-FY20



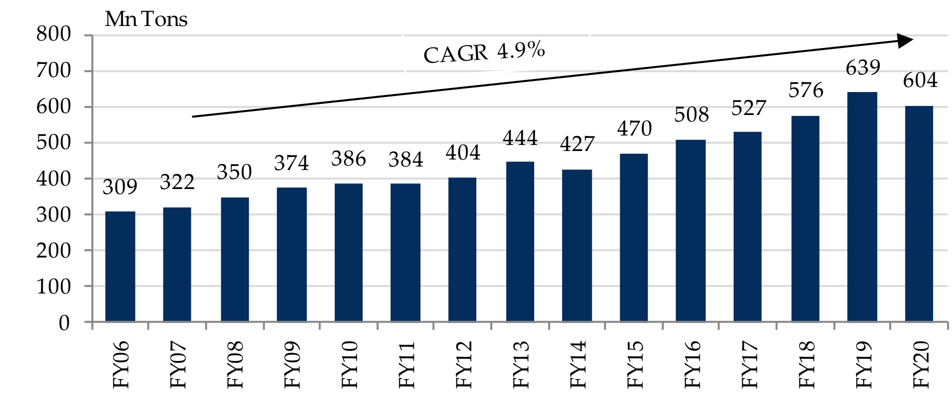
Source: HSIE Research

Exhibit-20: CIL coal production increased at a CAGR of 11.9% over FY04-FY20



Source: HSIE Research

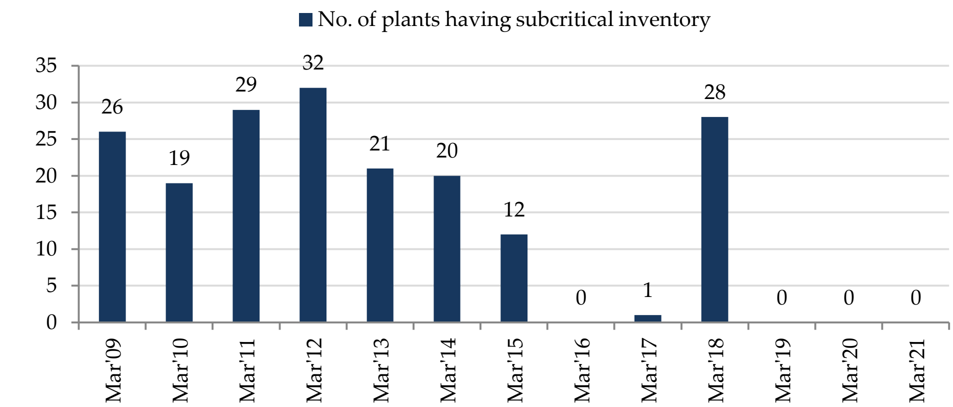
Exhibit-21: Dispatches to power plants has increased at a CAGR of 4.9% over FY04-FY20



Source: HSIE Research

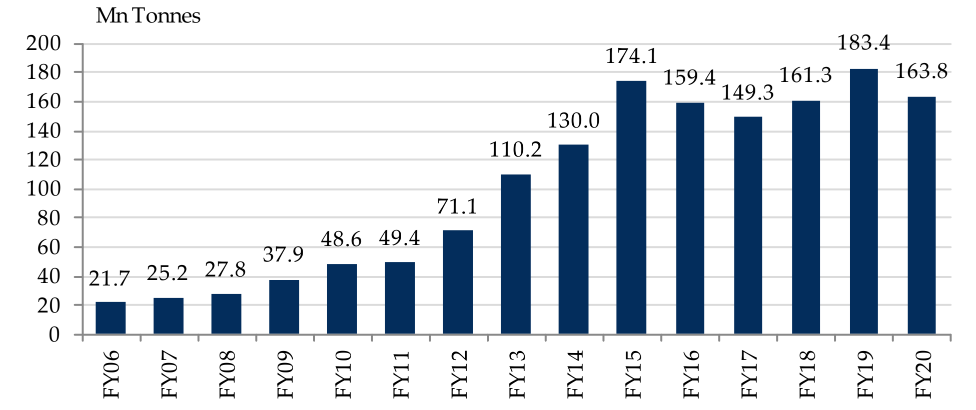
Exhibit-22: Inventory level across power stations improved since FY16 with zero plants Facing subcritical level of inventory

Inventory level across the power stations have improved significantly since FY16 due to fall in PLF led by surplus capacity and subdued demand



Source: HSIE Research

Exhibit-23: Growth across the import on Non-coking coal declined significantly after FY15

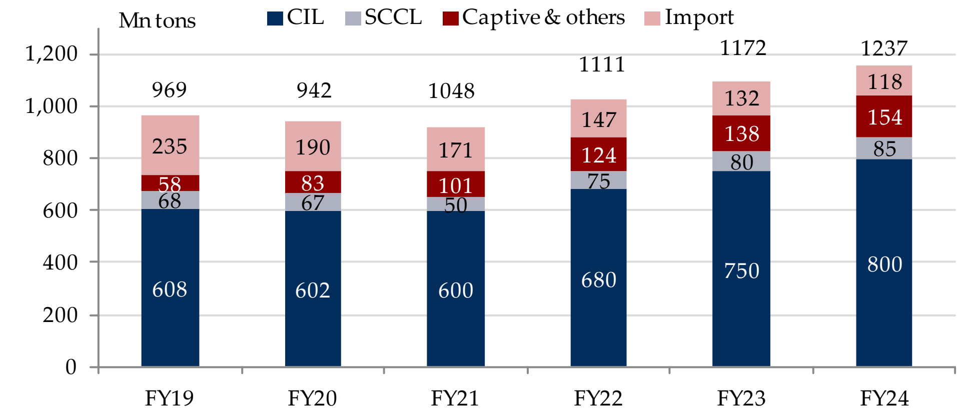


Source: HSIE Research

Improved PLF and new capacities would require 140mn tons of incremental coal over FY21E-25E

Based on our capacity addition estimates, we assume that the domestic coal availability will be enough to meet the requirement of domestic plants as CIL has a target to enhance its production to ~900mn ton of coal output by FY24-FY25E vs. the current level of 602mn ton in FY20 (CAGR of 13.5%) and similar level in FY21. We expect an incremental new coal-based capacity addition of 26GW over the next four years, which would lead to additional coal requirement of ~100mn tons. Further, a 4% percentage point improvement in PLF across the existing coal-based power stations (205GW) from current 59% to 63% will bring in additional 10GW of coal capacity in the system. This would require another ~40mn tons of coal over the next 4-5 years. Thus, total incremental requirement for non-coking coal from the power sector would be to the tune of ~140mn tons. This would take the total coal demand from the sector to ~750mn tons by FY25E from 605mn tons in FY20.

Exhibit-24: Expected coal availability over FY20-24 to be sufficient to meet power demand



Source: HSIE Research

FGD installations across coal-based projects likely to miss FY22 deadline again:

As coal-fired power plants are big contributors to emissions of sulphur oxide (SOx), nitrogen oxide (NOx), suspended particulate matter (SPM) and mercury, the Ministry of Environment, Forest and Climate Change (MoEFCC), issued environmental norms in December 2015 to curb the emissions of the above-mentioned content through the installation of flue-gas desulphurisation (FGD) technology.

The SOx emission limit for thermal power plants installed up to 31 December 2016 was set at 600 mg/Nm3 for units smaller than 500 MW and 200 mg/Nm3 for units above 500 MW. For all thermal plants installed from 1 January 2017 onwards, the SOx limit was set at 100 mg/Nm3 for all unit sizes. The CERC has already recognised the revised environmental norms as a "change in law" event, and is planning to amend its tariff regulations for 2019-24 in order to incorporate the cost of emission control systems in tariff calculations.

Till Feb'21 only 68.7GW of the total 170GW coal based capacities have awarded bids for FGD

Delay in execution: FGD installation across the plants generally takes two and a half years after the letter of award is issued. While the initial deadline of 2017 has already been postponed to 2022, the progress on this front as well is highly unsatisfactory as only 68.7GW of the total coal capacity (40.5% of total 170 GW coal capacity comprising 155 units out of 448 units) has awarded bids for FGD implementation till Feb'21, while the balance 59.5% has not even awarded the bid.

Of this, 47.7GW comprising 114 units in the central sector (28.1% of the total), 16.6GW comprising 29 units in the private sector (9.8% of the total) and 4.3GW comprising 12 units in the state sector (2.5% of the total) have been awarded. The reason for the delay is largely attributable to the concerns of limited vendor and sub-vendor capabilities globally to supply FGDs (due to a lack of technical and operational expertise over FGD technology in the market).

As compared to the total planned capacity in each sector, the central sector has awarded 86.4% of its capacity, followed by 27.1% in the private sector and only 8.1% in the state sector.

Bids for 31.1GW have been opened but yet to be awarded, while bids for 28.6GW are yet to be opened

Further, bids that have been opened but not yet awarded include 75 units (totaling 31.1GW), of which 17 units (3.7GW) are in the central sector, 24 units (12.3GW) are in the private sector and 34 units (15.0GW) are in the state sector. A notice inviting tender (NIT) has also been issued for 28.6GW of capacity, but bids have not yet been opened.

The industry has been seeking an extension of the 2022 deadline to 2024 because of the COVID-19 pandemic and the import ban; however, the Supreme Court has rejected a similar plea from a major PSU.

Exhibit-25: FGD status as on Feb'21 in GW

In GW	FGD Planned	Feasibility Study started	Feasibility Study completed	Tender Specifications made	NIT Issued	Bids Awarded	FGD Commissioned
Central	55.3	55.3	55.3	55.3	55.3	47.7	0.8
State	53.2	53.2	52.0	36.5	31.4	4.3	0.0
Private	61.2	59.3	56.2	50.1	44.7	16.6	1.3
Total	**169.7**	**167.8**	**163.5**	**141.8**	**131.3**	**68.7**	**2.2**

Source: HSIE Research

Exhibit-26: FGD status as on Feb'21 in Units

In units	FGD Planned	Feasibility Study started	Feasibility Study completed	Tender Specifications made	NIT Issued	Bids Awarded	FGD Commissioned
Central	149.0	149.0	149.0	149.0	149.0	114.0	4.0
State	166.0	166.0	164.0	106.0	85.0	12.0	0.0
Private	133.0	129.0	119.0	104.0	93.0	29.0	2.0
Total	**448.0**	**444.0**	**432.0**	**359.0**	**327.0**	**155.0**	**6.0**

Source: HSIE Research

Sector's revival would largely depend on the successful implementation of proposed reform measures

In order to provide the much-needed support to the power sector, the ministry has announced a series of measures and reforms, including major ones like (a) the fourth draft Electricity Amendment Act – which primarily focusses on delicensing of distribution segment; (b) INR3.1tn budgetary support for improving distribution infrastructure; and (c) reform linked distribution scheme.

1) The Fourth draft of the Electricity (Amendment) Bill:

The fourth draft amendment bill focuses largely on privatization and delicensing of distribution utilities so as to improve operational and financial efficiency of the discoms

Given the unsatisfactory progress in improving operational efficiencies and escalating financial losses across the state discoms, the Union Government has drafted the **Electricity (Amendment) Bill,** which mainly focuses on the delicensing and privatisation of the underperforming state discoms. While the distribution losses and collection efficiencies remain healthy (at less than 10%) in the license area operated by the private players like Tata Power (Mumbai & Delhi), Torrent Power (Surat & Ahmedabad), and CESC (Kolkatta), the losses across the state discoms range from 15% to 40% with all India average at ~22% as on FY19.

- Accordingly, the ministry of power has notified the draft bidding guidelines for privatisation of distribution licensees and announced the privatisation of discoms in 7 Union Territories (UTs), namely – Chandigarh, Dadra and Nagar Haveli & Daman and Diu (DNHDD), Jammu and Kashmir, Ladakh, Lakshadweep, Andaman and Nicobar and Puducherry.
- The draft also proposes that the state regulator determine retail tariff without any subsidy and the government pay the subsidy directly to any specific category of consumers under the Direct Benefit Transfer (DBT) Scheme.
- Besides, the Centre has also proposed a clause in the bill to restrict electricity dispatch to discoms from power plants in favour of which the utilities have not opened bank guarantees. This proposal is made to avoid piling up of discoms' dues towards gencos.
- Other key provisions of the draft bill include expanding the scope of renewable purchase obligations (RPOs) to include hydropower purchase obligations (HPOs) and an increase in the penalty for violation of RPO and HPO targets.

Inspite of state resistances, the bill has been circulated for inter-ministerial discussion and is likely to be introduced in the current session of parliament

While the privatisation process in Odisha concluded in a smooth manner with Tata Power taking over all the four circles, the privatisation progress across the UTs have been progressing very slow due to the significant resistance by the respective employee unions and certain consumer groups through various petitions filed against the privatization of discoms before the courts.

After Chandigarh, even DNHDD privatisation process has been halted by the Bombay High Court followed by a PIL filed by an individual who does not appear to have any institutional affiliations. Despite several challenges, the government targets to introduce the draft bill in the ongoing session of the Parliament.

According to the industry sources, the Union power ministry has circulated the proposed Electricity (Amendment) Bill 2021 for inter-ministerial consultation and vetting to the law and justice ministry. After Cabinet approval, the government aims to introduce and pass the Bill in the current session of Parliament.

2) Budget allocation of INR3.1tn:

The use of smart meters has enabled several discoms to achieve 95% billing efficiency and increase their average monthly revenue/consumer by 15-20%

The government has announced a package of INR3.1tn in the recent budget to be spent over the next five years, which aims to: Lower the AT&C losses of discoms to 12%, reduce the ACS-ARR gap and promote private participation in power distribution through public private participation (PPP) model and franchisee model. This would be achieved through the utilisation of the scheme towards the development of distribution infrastructure, installation of smart meters (target is to replace 250 mn conventional meters with smart meter) and feeder separation. The use of smart meters has enabled several discoms to achieve 95% billing efficiency and increase their average monthly revenue/consumer by 15-20%. The funds will be released based on financial performance and viability demonstration by the discoms.

3) Reform-linked distribution scheme:

The power ministry (MoP) is also formulating a new reform-linked scheme by merging the two ongoing schemes, viz, the Integrated Power Development Scheme and Deendayal Upadhyay Gram Jyoti Yojana. As per the scheme, the state has to submit an action plan to improve the discoms' operational and financial efficiency by framing out a road map on how to improve power supply reliability and quality, reduce AT&C losses to 12-15% and bring down the ACS-ARR gaps to zero by 2024-25. Funds under the scheme would be released in proportion to the achievement by discoms against mutually agreed targets in the action plan.

Our View

We prefer regulated entities like NTPC, CESC, NHPC, PGCIL and also Tata Power for its balance sheet deleveraging and capital reallocation strategy.

The above-mentioned reforms could bring about a turnaround in the sector only if executed successfully. This could largely address the power sector concerns and would enable sub-sectors like gencos, transcos and more importantly the discoms to become self-sufficient in improving their operational efficiencies. Furthermore, the proposed changes in the Electricity Act, if implemented, could go a long way in improving the financial efficiency of discoms. These measures would bring down discoms' losses and bring the much-needed self-generated liquidity into the system. We continue to believe that with the revival in the financials of discoms, the sector would see a much-needed turnaround and attract the requisite investor interest across the entire value chain. We continue to prefer regulated entities such as NTPC, CESC, NHPC, Torrent Power and PGCIL that operate in a risk averse regulated business environment and earn a fixed return on invested project equities, provided normative availability is achieved. We also prefer Tata Power for its balance sheet deleveraging and capital reallocation strategy, which would enhance its RoE, going ahead.

NTPC

Risk averse regulatory business model with attractive valuation

(TP INR 143; BUY)

We initiate coverage on NTPC with a FY23 P/BV (Consolidated) target price of INR 143/share, implying an upside of 40% from the current level. Our BUY recommendation on the stock is premised on (1) strong and stable coal-based capacity addition across the regulated business model; (2) risk averse regulatory business model; (3) stable growth across the regulated equity; and (4) evolution into cleaner energy by focusing on adding renewable capacities. We expect NTPC's standalone PAT to grow at a 13.0% CAGR over FY20-23E, led by improved PLF, PAF and regulated equity. The RoE shall expand from 11.3% in FY20 to 13.6% in FY23E and generate an FCF of INR 108bn over FY21-23E despite the huge capex plan.

Key Investment Rationale

- **Risk averse regulatory business model**: NTPC operates on a risk averse regulatory business model with fixed return on project equity. It has an installed capacity of 65.2GW on a consolidated level and 52.4GW on a standalone level as of FY21 and plans to become a 130GW firm by 2032. We expect an earnings CAGR of 13% over FY20-23E from the rise in regulated equity, improved availability of coal due to better coal supply from Coal India and captive mining.

NTPC expects to add 2.3GW/2.5GW solar capacity in FY22/23

- **Expect NTPC to commercialise 7.5GW in FY22E and 6.7GW in FY23**: NTPC commercialized 4.0 GW in FY21 (Standalone: 2.7 GW and JV: 1.3GW). For FY22E, we expect asset commercialisation of 7.5GW (Standalone: 3.6GW, JV: 1.6GW and Solar: 2.3GW). For FY23, we expect capacity addition of 6.7GW (Standalone: 2.8GW, JV: 1.4GW and Solar: 2.5GW).

Regulated equity expected to grow at a CAGR of 9.8% over FY20-23 to reach

- **Stable growth across regulated equity will continue to enhance earnings**: NTPC's earnings growth mirrors its rise in regulated equity, driven by its cost plus model, where it earns 15.5% RoE on project equity. Overall, the company has ~13GW of thermal projects under execution, which provide growth visibility in regulated equity over the next three years. Based on our capacity addition assumptions, NTPC's standalone regulated equity will grow at a CAGR of 9.8% over FY20-FY23E to INR799bn from INR603bn in FY20. The incremental INR198bn of regulated equity will provide an additional INR30.7bn rise in its standalone PAT to INR171.3bn in FY23.

Even at a low tariff of Rs2/unit, the solar projects are likely to earn equity IRR of 12-13%

- **With greater focus on clean energy, the target is to scale up score in ESG metrics**: In a move to transform itself into a cleaner source of energy, NTPC is planning huge capacity addition in the RES space. Along with implementation of FGDs across its coal-based plants, the company plans to add 30GW of RES capacity by 2030 with an aim to build a 30% non-fossil fuel portfolio by 2032, from 1.7% in FY20. NTPC currently has 1.1GW of solar projects operational with another 2GW under the construction phase. Recently, NTPC emerged as the lowest bidder by quoting a record low tariff of INR1.99/unit bid for 200MW capacity (GUVNL's Phase XI tender for 500 MW of solar projects) and INR2.01/unit for 470MW solar project floated by SECI. With the low cost of debt of ~6.3%, the waiver of development costs by states and fall in module prices, these projects can earn an equity IRR of 12-13% at these low tariffs. The company targets to add 2.5GW-3GW of solar capacity p.a over the next 2-3 years. With cleaner emissions from thermal projects and greater thrust of renewable capacity, the company's score on the ESG metrics is expected to improve in the coming years (currently, the score is 40.7 and the rating is considered as a severe risk).

We expect the company to generate a FCF of INR108bn over FY21-23E.

- **Cash flow sufficient to fund capex**: While the transition to a cleaner source of energy will take place over the next decade, the capacity addition and implementation of FGD equipment would require huge investments. We believe that with improved earnings and efficient working capital management, NTPC would generate sufficient cash flow to fund this capex. We expect the company to generate a FCF of INR108bn over FY21-23E. Eventually, the existing thermal assets will continue to play a vital role in not only meeting the future power demand but also providing sufficient cash flow to meet equity requirement for upcoming RES projects.

Commercialisation of 7.5GW in FY22/6.7GW in FY23 expected

NTPC commercialized 4.0 GW in FY21 (Standalone: 2.7 GW and JV: 1.3GW). For FY22E, we expect asset commercialisation of 7.5GW (Standalone: 3.6GW, JV: 1.6GW and Solar: 2.3GW). For FY23, we expect capacity addition of 6.7GW (Standalone: 2.8GW, JV: 1.4GW and Solar: 2.5GW). Overall, we expect NTPC's regulated equity to grow at a CAGR of 9.8% over FY20-23E to INR800bn.

Exhibit-27: 7.5GW project to achieve CoD in FY22

Projects	Capacity (MW)
Standalone	**5880**
Barh 2	660
Darlipalli Unit -2	800
Tanda - Unit 1	660
North Karanpura	660
Karim Nagar Tengana	800
Solar	2300
JV	**1620**
New Nabinagar	660
BIFPCL	660
Neepco Patratu project	300
Total	**7500**

Source: Company, HSIE Research

Exhibit-28: 7.5GW project to achieve CoD in FY23

Projects	Capacity (MW)
Standalone	**5880**
Barh 2	660
North Karanpura	1320
Karim Nagar Tengana	800
Solar	2500
JV	**1620**
BIFPCL	660
PUVNL	800
Total	**6740**

Source: Company, HSIE Research

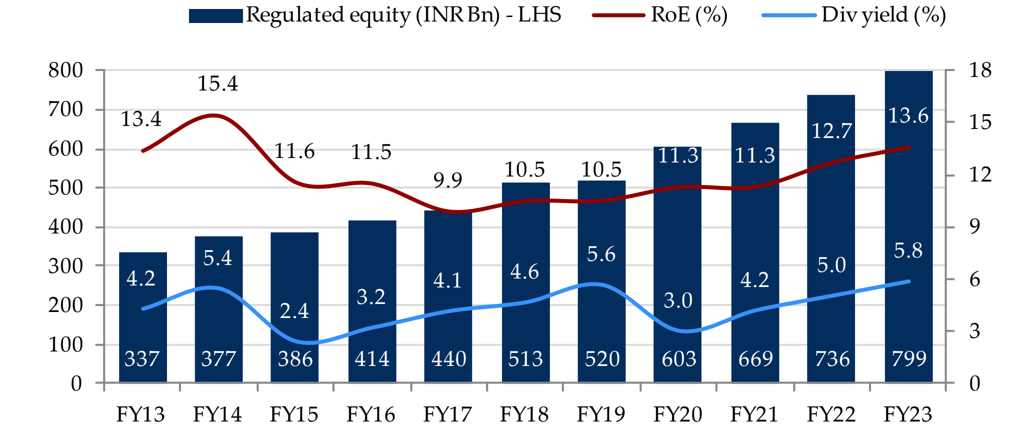
Incremental coal requirements for this capacity should be ~40MT. Of this, 11MT of coal is expected to be procured from captive mines (Pakri barwadih: 8.5MT and Dhulanga: 2.5MT).

Exhibit-29: Key assumption for standalone business

	FY19	FY20	FY21E	FY22E	FY23E
Standalone capacity addition (MW)	1930	3940	3080	5880	5280
Cumulative Standalone capacity (MW)	46258	50198	53278	59158	64438
Regulated Equity (INRbn)	520	603	669	736	799
Coal PLF (%)	74%	70%	61%	68%	66%

Source: Company, HSIE Research

Exhibit-30: Key assumption for standalone business



Source: Company, HSIE Research

PAT is expected to grow at a CAGR of 13% over FY20-23.

Valuation: We expect NTPC's standalone PAT to grow at a 13% CAGR over FY20-23E, led by improvement in PLF, PAF and regulated equity. The RoE shall expand from 11.3% in FY20 to 13.6% in FY23E and generate an FCF of INR108bn over FY21-23E. We initiate coverage on NTPC with a FY23 P/BV (consolidated) target price of INR 143/share, implying an upside of 40% from the current level. The stock is currently trading at a FY23 standalone P/BV of 0.8x and a P/E of 5.8x (consolidated P/E of 5.1x).

The stock is currently trading at an attractive valuation of 0.8xFY23 BV and 5.8x FY23 PE (consolidated P/E of 5.1x)

Exhibit-31: Valuation table

SOTP	Total value	Per/share	Multiple	TP
Regulated Equity std alone	799037	83	1.1	90
CWIP	188897	20	0.5	10
Cash & Inv	319179	33	1.0	33
Regulated Equity JV	154220	16	0.6	10
Total Value				**143**

Key risks:

Key downside risks that could impede NTPC shares from reaching our target price Include the following:

- Further slower execution in project completion would delay capacity additions
- A weak ramp-up of domestic coal supply from CIL and captive coal blocks.
- Changes in the regulatory environment – NTPC's RoE could get impacted by any stringent norms implemented by the CERC. The regulator had enforced stringent norms earlier related to tax calculation, return on equity and tightening of O&M expenses, which has impacted plant incentives.

Financials (Standalone)

INCOME STATEMENT

INR mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Net Revenues	**7,20,856**	**7,68,898**	**8,29,450**	**9,00,768**	**9,58,999**	**9,74,062**	**11,52,005**	**12,37,897**
Growth (%)	***1.7***	***-1.6***	***6.7***	***7.9***	***8.6***	***6.5***	***1.6***	***18.3***
Power&Fuel	4,37,933	4,75,592	4,96,290	5,52,074	5,62,340	5,83,253	7,04,041	7,34,443
Employee Cost	36,093	41,179	42,987	47,799	49,256	55,530	60,066	64,223
O&M and Other expenses	53,192	50,924	64,884	66,577	93,461	57,796	62,518	66,844
Total Operating Expenses	5,27,218	5,67,694	6,04,161	6,66,450	7,05,057	6,96,580	8,26,625	8,65,509
EBITDA	**1,93,638**	**2,01,204**	**2,25,289**	**2,34,318**	**2,53,943**	**2,77,482**	**3,25,381**	**3,72,388**
EBITDA Margin (%)	***26.9***	***26.2***	***27.2***	***26.0***	***26.5***	***28.5***	***28.2***	***30.1***
EBIDTA Growth (%)	***19.6***	***3.9***	***12.0***	***4.0***	***8.4***	***9.3***	***17.3***	***14.4***
Depreciation	51,723	59,208	70,989	72,544	88,127	1,13,041	1,24,669	1,36,107
EBIT	**1,57,579**	**1,56,565**	**1,71,853**	**1,80,495**	**1,93,596**	**1,93,055**	**2,30,183**	**2,66,638**
Other Income (Including EO Items)	15,665	14,569	17,553	18,721	27,780	28,614	29,472	30,356
Interest	32,964	35,972	39,843	47,167	67,820	57,272	62,534	67,709
PBT	**1,24,615**	**1,20,593**	**1,32,010**	**1,33,328**	**1,25,776**	**1,35,783**	**1,67,650**	**1,98,929**
Tax	20,921	30,153	36,106	-28,915	59,793	34,430	41,441	48,322
RPAT	**1,05,254**	**94,545**	**1,07,945**	**1,17,499**	**1,01,102**	**1,22,071**	**1,46,927**	**1,71,324**
Rate regulated activities	-4,682	3,357	8,153	-53,834	48,288	20,718	20,718	20,718
EO (Loss) / Profit (Net of Tax)	9,970	1,196	6,212	14,521	-21,037	0	0	0
APAT	**99,012**	**93,797**	**1,04,056**	**1,08,409**	**1,14,271**	**1,22,071**	**1,46,927**	**1,71,324**
APAT Growth (%)	*1.2*	*-5.3*	*10.9*	*4.2*	*5.4*	*6.8*	*20.4*	*16.6*
AEPS	**12.6**	**11.5**	**12.3**	**10.7**	**12.0**	**12.6**	**15.2**	**17.7**
EPS Growth (%)	*1.2*	*-5.3*	*10.9*	*4.2*	*5.4*	*4.8*	*20.4*	*16.6*

BALANCE SHEET

INR mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
SOURCES OF FUNDS								
Share Capital	82,455	82,455	82,455	98,946	98,946	96,967	96,967	96,967
Reserves	8,30,482	8,79,858	9,35,323	9,75,136	10,36,749	10,95,316	11,90,819	13,02,179
Total Shareholders' Funds	**9,10,198**	**9,54,154**	**9,30,645**	**10,36,722**	**10,39,084**	**10,95,672**	**11,91,175**	**13,02,536**
Long-term Debt	8,33,960	9,73,393	10,86,976	11,96,981	14,65,387	15,59,574	16,58,263	17,47,262
Short-term Debt	30,005	30,006	65003	155029	140494	143303	146170	149093
Total Debt	**8,63,965**	**10,03,398**	**11,51,979**	**13,52,010**	**16,05,881**	**17,02,878**	**18,04,433**	**18,96,355**
Deferred revenues & Regulatory deferral A/C credit balance	23,430	26,039	20,859	21,394	32,425	32,425	32,425	32,425
Long-term Provisions & Others	34,854	27,278	26,456	19,030	12,879	12,879	12,879	12,879
Net Deferred Tax Liability	11,522	14,849	1,00,472	42,001	80,940	80,940	80,940	80,940
TOTAL SOURCES OF FUNDS	**18,46,707**	**20,33,876**	**23,17,543**	**25,08,517**	**28,67,819**	**30,21,405**	**32,18,462**	**34,21,745**
APPLICATION OF FUNDS								
Net Block	**9,14,994**	**9,90,627**	**11,94,276**	**12,52,907**	**15,62,730**	**16,67,503**	**17,67,160**	**18,41,617**
CWIP	6,64,232	8,07,371	7,90,763	9,12,067	7,33,593	6,85,339	7,19,606	7,55,587
Investments	83,930	89,524	1,00,475	1,31,459	2,64,009	3,03,610	3,33,971	3,67,368
LT Loans & Advances	2,739	8,159	87,133	37,359	96,610	96,610	96,610	96,610
Total Non-current Assets	**16,65,895**	**18,95,680**	**21,72,646**	**23,33,793**	**26,56,942**	**27,53,063**	**29,17,348**	**30,61,182**
Inventories	70,104	65,048	60,574	79,880	1,07,319	1,19,847	1,25,377	1,36,828
Debtors	78,034	81,735	75,780	84,339	1,56,681	1,65,457	1,89,371	2,06,881
Cash & Equivalents	44,608	29,305	39,784	21,443	22,091	18,155	60,032	62,021
ST Loans & Advances	1,01,744	1,08,267	1,91,175	2,36,943	2,02,161	2,39,693	2,50,754	2,71,643
Other Current Assets	1,90,999	1,85,740	1,38,363	1,52,380	1,31,480	1,35,425	1,39,488	1,42,277
Total Current Assets	**4,85,488**	**4,70,095**	**5,05,675**	**5,74,985**	**6,19,732**	**6,78,577**	**7,65,022**	**8,19,650**
Creditors	2,35,406	2,51,498	2,79,889	3,31,857	3,40,553	3,43,519	3,85,003	3,91,257
Provisions	69,270	80,401	80,888	68,404	68,302	66,717	78,904	67,830
Total Current Liabilities	**3,04,676**	**3,31,899**	**3,60,778**	**4,00,261**	**4,08,855**	**4,10,235**	**4,63,908**	**4,59,087**
Net Current Assets	**1,80,812**	**1,38,196**	**1,44,898**	**1,74,724**	**2,10,877**	**2,68,341**	**3,01,114**	**3,60,563**
TOTAL APPLICATION OF FUNDS	**18,46,707**	**20,33,876**	**23,17,543**	**25,08,517**	**28,67,819**	**30,21,405**	**32,18,462**	**34,21,745**

Source: Company, HSIE Research

CASH FLOW STATEMENT

INR Mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Reported PBT	1,24,615	1,20,593	1,32,010	1,33,328	1,25,776	1,35,722	1,67,650	1,98,929
Non-operating & EO Items	-15,665	-14,569	-17,553	-18,721	-27,780	-28,614	-29,472	-30,356
Interest Expenses	32,964	35,972	-39,843	-47,167	-67,820	-57,272	-62,534	-67,709
Depreciation	51,723	59,208	-70,989	-72,544	-88,127	-1,13,041	-1,24,669	-1,36,107
Working Capital Change	-24,730	30,640	89,400	-1,06,637	3,433	-61,400	9,104	-57,460
Tax Paid	-21,054	-27,051	-25,768	-46,899	-15,574	-34,430	-41,441	-48,322
OPERATING CASH FLOW (a)	**1,47,854**	**2,04,793**	**2,88,921**	**80,781**	**2,41,802**	**1,81,591**	**3,13,762**	**2,87,324**
Capex	-2,84,480	-2,77,981	-2,58,029	-2,52,479	-2,19,476	-1,69,561	-2,58,593	-2,46,544
Free Cash Flow (FCF)	*-1,36,626*	*-73,187*	*30,891*	*-1,71,698*	*22,325*	*12,031*	*55,169*	*40,780*
Investments	16,472	-16,606	-1,00,876	-12,196	-3,24,350	-79,203	-60,722	-66,794
Non-operating Income	15,665	14,569	17,553	18,721	27,780	28,614	29,472	30,356
Others	-117	-5,420	-78,974	49,773	-59,251	0	0	0
INVESTING CASH FLOW (b)	**-2,60,639**	**-2,74,425**	**-3,30,402**	**-2,14,969**	**-3,83,497**	**-1,80,549**	**-2,59,482**	**-2,49,585**
Debt Issuance/(Repaid)	86,531	1,34,467	1,42,579	1,93,140	2,58,752	96,997	1,01,555	91,922
Interest Expenses	-32,964	-35,972	-39,843	-47,167	-67,820	-57,272	-62,534	-67,709
Other Financing activity	3,393	-1,555	-6,155	15,553	-5,712	0	0	0
Share Capital Issuance	0	0	0	16,491	0	-1,979	0	0
Dividend	-32,318	-42,612	-44,622	-62,169	-42,877	-42,725	-51,424	-59,964
FINANCING CASH FLOW (c)	**24,642**	**54,328**	**51,960**	**1,15,848**	**1,42,343**	**-4,979**	**-12,403**	**-35,751**
NET CASH FLOW (a+b+c)	**-88,142**	**-15,303**	**10,479**	**-18,340**	**648**	**-3,936**	**41,877**	**1,988**
Opening cash balance	1,32,750	44,608	29,305	39,784	21,443	22,091	18,155	60,032
Closing Cash & Equivalents	**44,608**	**29,305**	**39,784**	**21,443**	**22,091**	**18,155**	**60,032**	**62,021**

Source: Company, HSIE Research

KEY RATIOS

	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
PROFITABILITY (%)								
GPM	39.2	38.1	40.2	38.7	41.4	40.1	38.9	40.7
EBITDA Margin	26.9	26.2	27.2	26.0	26.5	28.5	28.2	30.1
EBIT Margin	19.7	18.5	18.6	18.0	17.3	16.9	17.4	19.1
APAT Margin	14.4	11.8	11.6	18.0	6.9	10.4	11.0	12.2
RoE	11.5	9.9	10.5	10.5	11.3	11.3	12.7	13.6
Core RoCE	11.3	10.1	11.0	11.0	11.0	11.4	12.8	13.7
RoCE	8.9	8.1	8.1	7.7	7.4	6.8	7.6	8.3
EFFICIENCY								
Tax Rate (%)	16.8	25.0	27.4	-21.7	47.5	25.4	24.7	24.3
Asset Turnover (x)	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4
Inventory (days)	35	31	27	32	41	45	40	40
Debtors (days)	40	39	33	34	60	62	60	61
Payables (days)	163	162	169	182	176	180	170	165
Cash Conversion Cycle (days)	-49	-59	-23	-3	13	82	60	79
Net Debt/EBITDA (x)	4.5	5.1	5.1	5.9	6.4	6.2	5.5	5.0
Net D/E	1.0	1.1	1.2	1.3	1.6	1.6	1.5	1.4
Interest Coverage	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.3
PER SHARE DATA								
EPS (INR/sh)	12.6	11.5	12.3	10.7	12.0	12.6	15.2	17.7
CEPS (INR/sh)	18.2	18.6	21.2	17.7	20.2	24.2	28.0	31.7
DPS (INR/sh)	3.4	4.4	4.6	5.4	3.7	4.4	5.3	6.2
BV (INR/sh)	114.6	119.0	116.1	106.7	106.3	112.0	121.7	132.9
VALUATION								
P/E	8.1	8.9	8.3	9.6	8.5	8.1	6.8	5.8
P/BV	0.9	0.9	0.9	1.0	1.0	0.9	0.8	0.8
EV/EBITDA	8.9	9.3	8.9	10.2	10.4	9.8	8.6	7.7
OCF/EV (%)	8.6	10.9	14.4	3.4	9.2	6.7	11.3	10.0
FCF/EV (%)	-7.9%	-3.9%	1.5%	-7.2%	0.8%	0.4%	2.0%	1.4%
Dividend Yield (%)	**3.3**	**4.3**	**4.5**	**5.2**	**3.6**	**4.3**	**5.2**	**6.0**

Source: Company, HSIE Research

Power Grid Corporation of India Ltd (PGCIL)

Renewables would throw robust evacuation opportunity

(TP INR 257; BUY)

We initiate coverage on Power Grid Corporation of India Ltd. (PGCIL) with a BUY recommendation. Our P/BV target price of INR 257/share (core business – 1.5x P/BV, RoE – 17.4%, CoE – 12.0% and earnings growth rate 3.0%) implies an upside of 22% from the current level. Like NTPC, PGCIL also operates a risk-averse regulatory business model with fixed 15.5% RoE (provided normative line availability – PAF – is achieved). The company has a lion's share in the interstate transmission projects. Furthermore, with a robust operating cash flow of ~INR310bn p.a, lower capex guidance of below INR100bn in FY22E and comfortable D/E of below 2.0x, PGCIL is well poised to benefit from the INR3.0 tn investment opportunity in the transmission space within the renewable sector over the next five years.

PGCIL's regulated equity stands at ~INR747bn as on Q3FY21 and is expected to reach INR860bn by FY23.

- **Fixed return on project equity -** 95% of the PGCIL's current operational assets operate on risk averse regulatory business model where returns are fixed on project equity (provided regulatory norms are met). PGCIL's current regulated equity stands at ~INR747 bn as on Q3FY21 and with INR471bn worth of work in hand, growth in regulated equity should continue for the next 2-3 years. However, the rate of annual capitalisation would be much slower than in the past decade. We expect its regulated equity to increase at a CAGR of 7.5% over FY20-FY23E to INR860bn vs an exceptional CAGR of 18.0% over FY14-FY20. Eventually we expect its earnings to grow at a CAGR of 8.1% over FY20-FY23 to INR136.6bn.

Robust RES capacity addition over the next 7-8 years would necessitate transmission capex of INR3tn for evacuation of power

- **Visibility of 3-4 years on current order book -** PGCIL now has total projects worth INR471bn in hand as of Q3FY21, of which CWIP and TBCB stood at INR225bn and INR150bn, respectively. These projects are expected to be capitalised over the next 2.5 years. PGCIL has also recently won five TBCB projects and one cross border transmission project connecting Katihar (India) – Parbotipur (Bangladesh) – Bornagar (India) under the RTM basis from the GoI. The total project cost for these five TBCB and one RTM is estimated at INR120bn. Furthermore, INR140bn of projects are likely to be tendered over the next 6-12 months (INR120bn - Interstate Renewable project and INR20bn in TBCB) and another INR280-300bn worth of projects will be tendered in the next two years. With India's target expected to reach 450GW of RES capacity by 2030 (from current 90GW and expected 150GW by FY22E), the incremental investments of INR3trn within the transmission segment are expected over the next five years. With market leadership in the inter-state transmission segment, strong balance sheet, healthy operating cash flow of INR310bn and low capex requirement of INR105bn/INR75bn over FY21/22, PGCIL is well poised to benefit from these opportunities in the transmission space over the next five years.

- **Management has retained its capex/capitalisation target for FY21**: Management has retained its capex guidance of INR105bn and capitalisation guidance of INR210bn for FY21, aided by the commissioning of the Raigarh-Pugalur project. In 9MFY21, PGCIL incurred a capex of INR79.4bn and capitalised assets worth INR125.7bn. For FY22, we expect a capex/capitalisation of INR75bn/170bn respectively.

- **Attractive dividend yield:** With a fall in annual capital expenditure in FY21E and FY22E to INR105bn and INR75bn respectively vs an average of INR260bn in the prior period, we expect that the company would be left with enough cash flow to

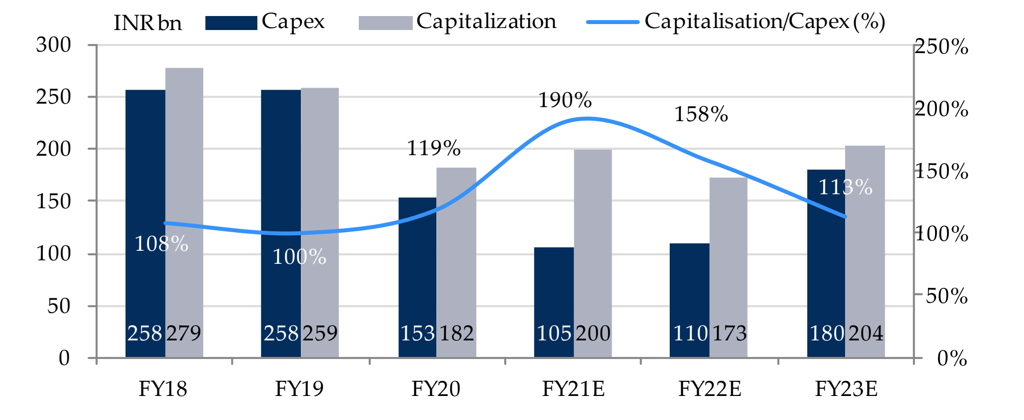
With lower capex requirement over FY21 and FY23, dividend yield is expected to increase to 7.5%

pay high dividend, going ahead. With an operating cash flow of INR310bn on a consolidated basis and the proposed INR105bn capex, the company would have strong cash flow left to pay high dividend (the interest outflow is to the tune of INR91bn). We expect DPS to rise from INR10/share in FY20 to INR15.7/share in FY23E, implying FY23E dividend yield of ~7.5%.

- **Asset monetisation to free equity for future capex**: InvIT is expected to come on the floor in 1HFY22. The proceeds of the same will be utilised for meeting the future capex plan and dividend payout. Management has indicated of better payout, going forward. The company is also working on the second tranche of the InvIT, which is under process.

- **Capitalisation/capex ratio to rise in FY21E:** PGCIL's capitalisation-to-capex ratio in FY20 stood at ~1.2x. For FY21, we expect the ratio to increase to 1.9x due to the commissioning of the Raigarh-Pugalur project in the current fiscal and a fall in capex to INR105bn in FY21 vs. INR153bn in FY20. Going ahead, as well, we expect the ratio to remain high with the backlog projects achieving CoD in FY22/23.

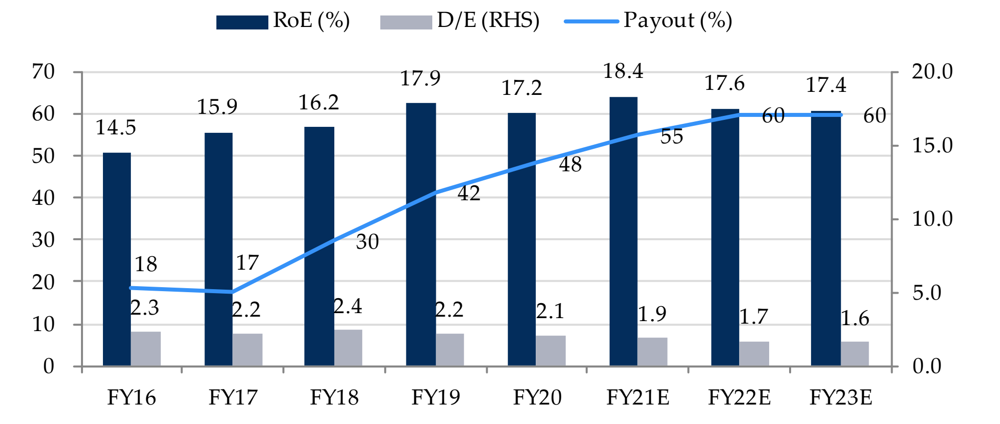
Exhibit-32: Capitalization/capex ratio to rise in FY21E



Source: Company, HSIE Research

With sufficient cash flow generation, dividend payout expected to remain strong going ahead at ~60%

Exhibit-33: RoE, D/E and dividend payout trend



Source: Company, HSIE Research

- **Valuation:** PGCIL has recently participated and won projects with a strike rate of above 50%, which is better than its historical market share of 40% in the TBCB segment. The recent better winning rate highlights the strong competitive edge that the company enjoys over its peers. We initiate coverage on PGCIL with a BUY recommendation. Our P/BV target price of INR 257/share (core business – 1.5x P/BV, RoE – 17.4%, CoE – 12.0% and earnings growth rate 3.0%) implies an upside of 22% from the current level.

Exhibit-34: SoTP valuation table

SOTP	Total value (INR mn)	Per/share	Multiple	TP
Regulated Equity	859744	164	1.5	240
CWIP	75999	15	1.0	15
Cash & Inv	13600	3	1.0	3
Target Price				257

Source: Company, HSIE Research

Key risk:

- Significant fall in the ISTS capex basket in the 13th Plan.
- Competition across the upcoming transmission bid may get more intense with lower opportunities available in the market due to slowdown in thermal capacity addition. This could entail participants to bid more aggressively in the upcoming bids, which may lower the project IRR and RoE, going ahead, as they will be left with little margin for error in case of any delay in projects' execution.

Financials (Standalone)

INCOME STATEMENT

INR mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Net Revenues	**2,06,658**	**2,57,165**	**2,97,525**	**3,41,191**	**3,61,855**	**3,83,239**	**4,07,113**	**4,25,894**
Growth (%)	***20.3***	***24.4***	***15.7***	***14.7***	***6.1***	***5.9***	***6.2***	***4.6***
Employee Cost	9,937	13,771	16,059	17,836	19,595	18,806	19,657	21,037
O&M and Other expenses	13,943	17,379	22,089	30,534	28,244	29,414	32,071	34,323
Total Operating Expenses	23,880	31,150	38,148	48,370	47,838	48,220	51,728	55,359
EBITDA	**1,82,778**	**2,26,015**	**2,59,377**	**2,92,821**	**3,14,017**	**3,35,020**	**3,55,384**	**3,70,534**
EBITDA Margin (%)	***88.4***	***87.9***	***87.2***	***85.8***	***86.8***	***87.4***	***87.3***	***87.0***
EBIDTA Growth (%)	***22.5***	***23.7***	***14.8***	***12.9***	***7.2***	***6.7***	***6.1***	***4.3***
Depreciation	61,798	76,628	90,913	1,02,007	1,10,732	1,16,032	1,20,625	1,26,031
EBIT	**1,20,980**	**1,49,387**	**1,68,464**	**1,90,815**	**2,03,285**	**2,18,988**	**2,34,759**	**2,44,503**
Other Income (Including EO Items)	5,775	8,649	10,139	14,990	21,324	16,936	17,495	17,398
Interest	51,349	63,038	75,907	90,914	98,136	93,656	91,262	90,562
PBT	**75,405**	**95,698**	**1,04,769**	**89,621**	**1,43,308**	**1,42,268**	**1,60,993**	**1,71,340**
Tax	15,920	20,496	22,379	-9,764	35,196	31,613	32,615	34,707
RPAT	**59,485**	**75,202**	**82,390**	**99,386**	**1,08,112**	**1,24,435**	**1,28,378**	**1,36,633**
Rate regulated activities	-1	699	2,072	-25,269	16,834	0	0	0
EO (Loss) / Profit (Net of Tax)								
APAT	**59,485**	**75,202**	**82,390**	**99,386**	**1,08,112**	**1,24,435**	**1,28,378**	**1,36,633**
APAT Growth (%)	*15.1*	*26.4*	*9.6*	*20.6*	*8.8*	*15.1*	*3.2*	*6.4*
AEPS	**11.4**	**14.4**	**15.7**	**19.0**	**20.7**	**23.8**	**24.5**	**26.1**
EPS Growth (%)	*15.1*	*26.4*	*9.6*	*20.6*	*8.8*	*15.1*	*3.2*	*6.4*

Source: Company, HSIE Research

BALANCE SHEET

INR mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
SOURCES OF FUNDS								
Share Capital	52,316	52,316	52,316	52,316	52,316	52,316	52,316	52,316
Reserves	4,52,146	5,11,750	5,57,844	6,79,947	7,44,255	8,00,251	8,51,602	9,06,255
Total Shareholders' Funds	**5,04,462**	**5,64,066**	**6,10,160**	**7,32,263**	**7,96,571**	**8,52,567**	**9,03,918**	**9,58,571**
Long-term Debt	10,02,398	11,09,632	12,24,203	13,10,395	13,54,211	13,21,662	12,85,811	13,01,672
Short-term Debt								
Total Debt	**10,02,398**	**11,09,632**	**12,24,203**	**13,10,395**	**13,54,211**	**13,21,662**	**12,85,811**	**13,01,672**
Deferred revenues & Regulatory deferral A/C credit balance	67	0	1,13,042	80,833	1,01,231	91,108	81,997	73,797
Long-term Provisions & Others								
Net Deferred Tax Liability	24,894	25,505	1,35,589	1,00,930	1,13,819	1,14,148	1,14,487	1,14,849
TOTAL SOURCES OF FUNDS	**15,31,754**	**16,99,203**	**19,69,952**	**21,43,589**	**22,64,601**	**22,88,376**	**23,04,216**	**23,75,092**
APPLICATION OF FUNDS								
Net Block	**11,52,942**	**13,42,526**	**15,22,439**	**16,22,669**	**16,83,390**	**17,78,245**	**18,30,953**	**19,08,922**
CWIP	4,36,737	3,58,068	3,02,612	3,35,781	3,03,996	2,08,996	1,45,663	1,21,663
Investments	7,713	21,491	1,37,788	1,53,882	1,79,936	1,58,926	1,49,815	1,41,615
LT Loans & Advances	48,762	48,738	96,196	1,23,021	1,42,812	1,42,812	1,42,812	1,42,812
Total Non-current Assets	**16,46,154**	**17,70,823**	**20,59,035**	**22,35,353**	**23,10,134**	**22,88,979**	**22,69,243**	**23,15,012**
Inventories	8,237	9,070	10,385	12,263	14,006	14,833	15,757	16,484
Debtors	27,380	32,211	36,390	46,287	48,679	57,748	61,346	64,176
Cash & Equivalents	24,894	33,431	21,704	43,320	53,945	75,987	87,790	90,995
ST Loans & Advances	39,308	33,696	49,168	72,701	65,257	68,248	72,500	75,844
Other Current Assets	38,318	67,565	62,270	54,806	63,476	73,476	88,476	1,03,476
Total Current Assets	**1,38,136**	**1,75,972**	**1,79,917**	**2,29,378**	**2,45,363**	**2,90,293**	**3,25,869**	**3,50,976**
Creditors	2,37,052	2,42,219	2,58,404	3,14,136	2,83,249	2,82,797	2,82,292	2,81,895
Provisions	15,484	5,372	10,596	7,006	7,647	8,099	8,604	9,001
Total Current Liabilities	**2,52,536**	**2,47,591**	**2,68,999**	**3,21,141**	**2,90,896**	**2,90,896**	**2,90,896**	**2,90,896**
Net Current Assets	**-1,14,400**	**-71,620**	**-89,083**	**-91,764**	**-45,533**	**-603**	**34,973**	**60,080**
TOTAL APPLICATION OF FUNDS	**15,31,754**	**16,99,203**	**19,69,952**	**21,43,589**	**22,64,601**	**22,88,376**	**23,04,216**	**23,75,092**

Source: Company, HSIE Research

CASH FLOW STATEMENT

INR Mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Reported PBT	75,405	95,698	1,04,769	89,621	1,43,308	1,42,268	1,60,993	1,71,340
Non-operating & EO Items	-5,775	-8,649	-10,139	-14,990	-21,324	-16,936	-17,495	-17,398
Interest Expenses	51,349	63,038	75,907	90,914	98,136	93,656	91,262	90,562
Depreciation	61,798	76,628	90,913	1,02,007	1,10,732	1,16,032	1,20,625	1,26,031
Working Capital Change	26,744	-33,632	1,15,820	-10,361	-22,718	-22,559	-23,433	-21,540
Tax Paid	-15,920	-20,496	-22,379	9,764	-35,196	-31,613	-32,615	-34,707
OPERATING CASH FLOW (a)	**2,49,711**	**1,72,353**	**3,47,513**	**3,37,930**	**3,01,242**	**2,80,848**	**2,99,336**	**3,14,287**
Capex	-1,91,699	-1,87,543	-2,15,369	-2,35,406	-1,50,556	-1,05,000	-1,10,000	-1,80,000
Free Cash Flow (FCF)	*58,012*	*-15,190*	*1,32,144*	*1,02,524*	*1,50,686*	*1,75,848*	*1,89,336*	*1,34,287*
Investments	-303	-13,779	-1,16,297	-16,094	-26,054	29,903	9,111	8,200
Non-operating Income	5,775	8,649	10,139	14,990	21,324	16,936	17,495	17,398
Others	56,343	-46,344	-7,394	-5,107	18,222	0	0	0
INVESTING CASH FLOW (b)	**-1,86,227**	**-1,92,672**	**-3,21,528**	**-2,36,510**	**-1,55,285**	**-58,161**	**-83,394**	**-1,54,402**
Debt Issuance/(Repaid)	51,952	1,07,234	1,14,572	86,192	43,816	-32,550	-35,851	15,862
Interest Expenses	-51,349	-63,038	-75,907	-90,914	-98,136	-93,656	-91,262	-90,562
Other Financing activity	-48,762	24	-47,458	-26,825	-19,791	0	0	0
Share Capital Issuance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dividend	-12,915	-15,364	-28,919	-48,257	-61,222	-68,439	-77,027	-81,980
FINANCING CASH FLOW (c)	**-61,075**	**28,857**	**-37,712**	**-79,804**	**-1,35,332**	**-1,94,644**	**-2,04,139**	**-1,56,680**
NET CASH FLOW (a+b+c)	**2,410**	**8,537**	**-11,727**	**21,616**	**10,625**	**28,042**	**11,803**	**3,205**
Opening cash balance	22,484	24,894	33,431	21,704	43,320	53,945	75,987	87,790
Closing Cash & Equivalents	**24,894**	**33,431**	**21,704**	**43,320**	**53,945**	**81,987**	**87,790**	**90,995**

Source: Company, HSIE Research

KEY RATIOS

	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
PROFITABILITY (%)								
GPM	95.2	94.6	94.6	94.8	94.6	95.1	95.2	95.1
EBITDA Margin	88.4	87.9	87.2	85.8	86.8	87.4	87.3	87.0
EBIT Margin	58.5	58.1	56.6	55.9	56.2	57.1	57.7	57.4
APAT Margin	28.8	29.2	27.7	29.1	29.9	32.5	31.5	32.1
RoE	14.5	15.9	16.2	17.9	17.2	18.4	17.6	17.4
Core RoE	14.5	15.9	16.2	17.9	17.2	18.4	17.6	17.4
RoCE	9.0	10.2	10.2	10.6	10.9	11.1	11.7	11.9
EFFICIENCY								
Tax Rate (%)	21.1	21.4	21.4	-10.9	24.6	22.2	20.3	20.3
Asset Turnover (x)	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Inventory (days)	15	13	13	13	14	14	14	14
Debtors (days)	48	46	45	50	49	55	55	55
Payables (days)	183	91	79	82	37	4	-22	-43
Cash Conversion Cycle (days)	-246	-149	-136	-145	-100	-73	-47	-26
Net Debt/EBITDA (x)	5.3	4.8	4.6	4.3	4.1	3.7	3.4	3.3
Net D/E	2.2	2.1	2.4	2.1	2.0	1.8	1.6	1.5
Interest Coverage	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3
PER SHARE DATA								
EPS (INR/sh)	11.4	14.4	15.7	19.0	20.7	23.8	24.5	26.1
CEPS (INR/sh)	23.2	29.0	33.1	38.5	41.8	46.0	47.6	50.2
DPS (INR/sh)	2.1	2.5	4.7	7.9	10.0	13.1	14.7	15.7
BV (INR/sh)	83.4	97.0	96.9	115.8	124.2	134.9	144.7	155.1
VALUATION								
P/E	18.5	14.6	13.3	11.0	10.2	8.8	8.6	8.0
P/BV	2.5	2.2	2.2	1.8	1.7	1.6	1.5	1.4
EV/EBITDA	11.4	9.6	8.9	8.1	7.6	7.0	6.5	6.2
OCF/EV (%)	12.0	7.9	15.1	14.3	12.6	12.0	13.0	13.6
FCF/EV (%)	2.8%	-0.7%	5.7%	4.3%	6.3%	7.5%	8.2%	5.8%
Dividend Yield (%)	**1.0**	**1.2**	**2.3**	**3.8**	**4.8**	**6.2**	**7.0**	**7.5**

Source: Company, HSIE Research

NHPC

Regulated hydro play with high dividend yield

(TP INR 27; Add)

We initiate coverage on NHPC with an ADD recommendation. Our P/BV target price of INR 27/share (Core business – 1.3x P/BV, RoE – 10.0%, CoE – 13.5% and FY23 BV of INR36.3/share) implies an upside of 12% from the current level. Our positive stance on the stock is premised on (a) 35% growth in regulated equity over FY21-FY25E; (b) risk averse regulatory business model; (c) strong cash flow meeting equity requirements for upcoming projects; and (d) attractive valuation (0.7x FY23 BV) with high dividend yield (6-7%).

Key Investment Rationale

800 MW Parbati II and 2000 MW Subansiri project expected to achive CoD by Q4FY22 and FY25 respectively

Regulated equity to increase 35% by FY25E: NHPC also operates on a risk-averse regulatory business model with fixed 16.5% RoE on project equity. The earnings growth is largely driven by growth of regulated equity which happens through assets capitalisation. NHPC is targeting the commercialisation of the 800MW Parbati-II project in Q4FY22 and the 2,000MW Subhanshiri project in FY25. These two projects will increase regulated equity by 35% to INR220bn in FY25E vs. INR129bn in FY20. Strong capitalisation would continue to drive growth in regulated equity going ahead as well, as the company has lined up a capex of INR1tn over the next decade.

NHPC would require equity contribution of INR70bn over FY21-23 which would be met through internal cash generation

Enough cash flow to meet upcoming equity requirement: NHPC expects to incur a capex of INR54bn/INR82bn/INR75bn in FY21E/FY22E/23E on various under construction hydro projects, including solar projects as well. This would require an equity contribution of INR70bn over FY21-23 as capex (~30% equity). NHPC has over deployed equity to the tune of INR40bn in many operational projects, which would be replaced by debts and the equity will be infused in upcoming projects. Furthermore, the company generates an annual PAT of ~INR30bn (with a payout ratio of 50%). Thus, the company would still have INR45bn of earnings available over the next three years (INR15bn p.a.) to be deployed as equity in the new projects.

NHPC offers high dividend yield of ~6.5%: NHPC has paid a full-year dividend of INR1.5/share in FY20, providing a dividend yield of 6.5% on a payout ratio of 50%. The company has already paid an interim dividend of INR1.25/share. Based on surplus cash flow that the company expects to generate going ahead, we expect that payout would remain at similar levels in the future as well.

New draft electricity amendment bill has proposed hydro projects to have a must run status likewise renewables

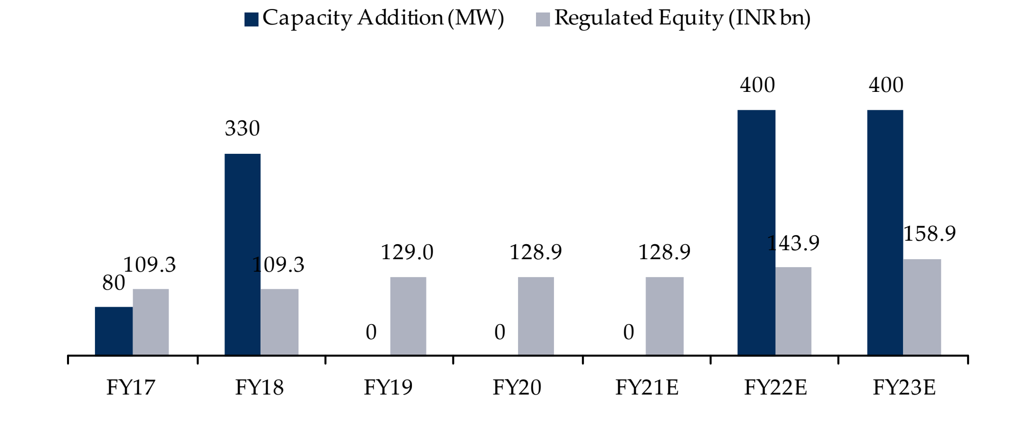
Regulatory risk to RoE is low in hydro power: The risk of the regulator revising the RoE downwards is low as the government will have to encourage investment in hydro to balance the volatile solar energy in grid. Higher solar/wind penetration will require the support of flexible hydro generation, which cannot be provided by thermal plants. Moreover, new hydro projects continue to enjoy regulated returns unlike mandatory competitive bidding for new thermal projects. Also, the draft Electricity Act (Amendment), 2020, considers hydro generation as renewable and has expanded the scope of must run status across the hydro projects. This should bode well in terms of project incentives with 100% offtake.

High capex drag on RoE and FCF: As hydro projects are highly capital intensive with long gestation periods, the above-mentioned high capex plan over FY21-23 will lower the company's FCF and RoEs during the period (~10%). Also, the next asset capitalisation will happen only in FY23 with the commissioning of 800MW Parbati-II while Subansiri is expected to achieve CoD by FY25. Hence, in the near term (FY21-22), the regulated equity is expected to remain muted.

Stock is trading at an attractive valuation of 0.7x FY23 BV. Initiate coverage with a Add rating and a target price of INR27

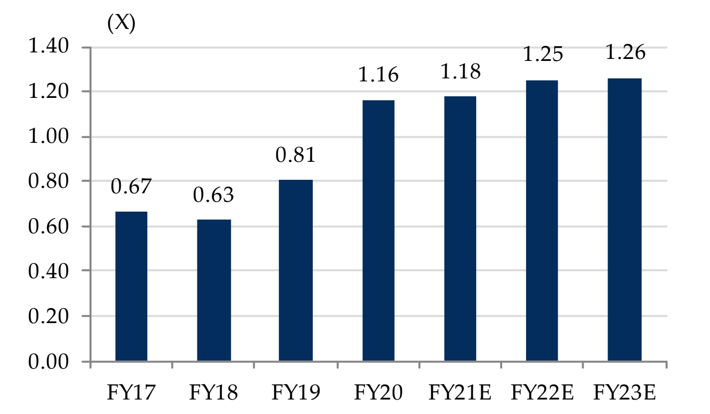
Initiate with an ADD rating: NHPC operates on a risk averse regulatory business model and trades at an attractive valuation (trading at 0.7x FY23BV). It also provides a high dividend yield of 6.5%. Furthermore, its regulated equity will grow with the commissioning of Parbati II and Subansiri going ahead. However, its RoEs will remain subdued at ~10% over FY20-23 due to heavy capex and muted capacity addition over FY21-22. Hence, we initiate coverage on NHPC with an ADD rating and derive a target price of INR27 (Core business – 1.3x P/BV, RoE – 10.0%, CoE – 13.5% and FY23BV of INR36.3/share) which provides an upside of 12% from its current market price.

Exhibit-35: Capacity addition and Regulated equity



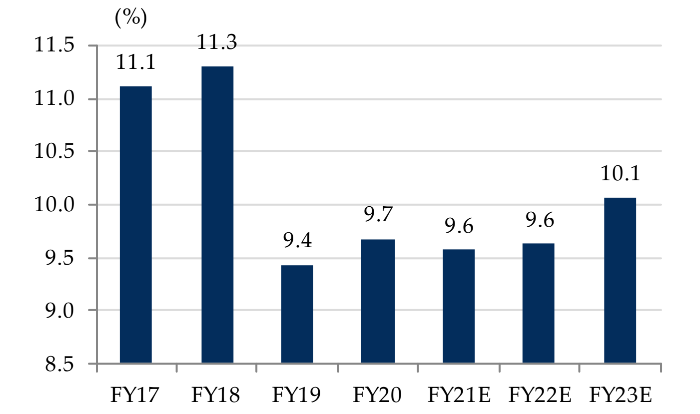
Source: Company, HSIE Research

Exhibit-36: D/E (x)



Source: Company, HSIE Research

Exhibit-37: RoE (%)

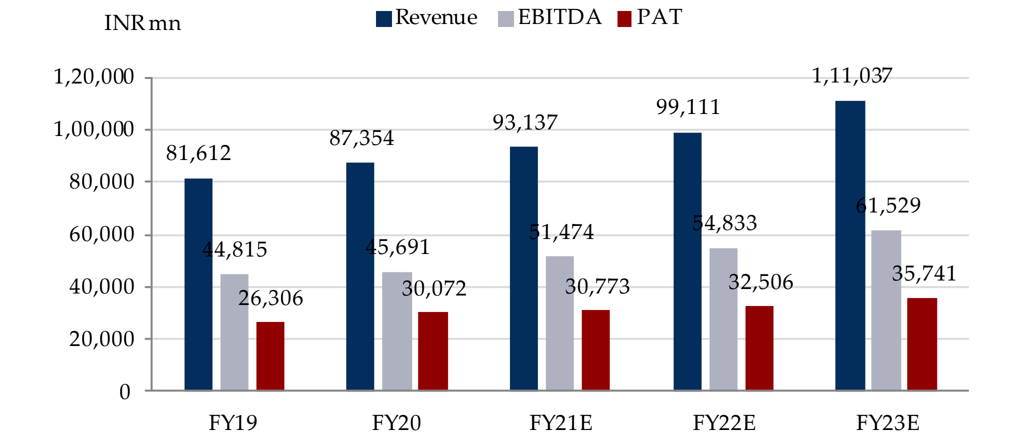


Source: Company, HSIE Research

Details of upcoming capacities

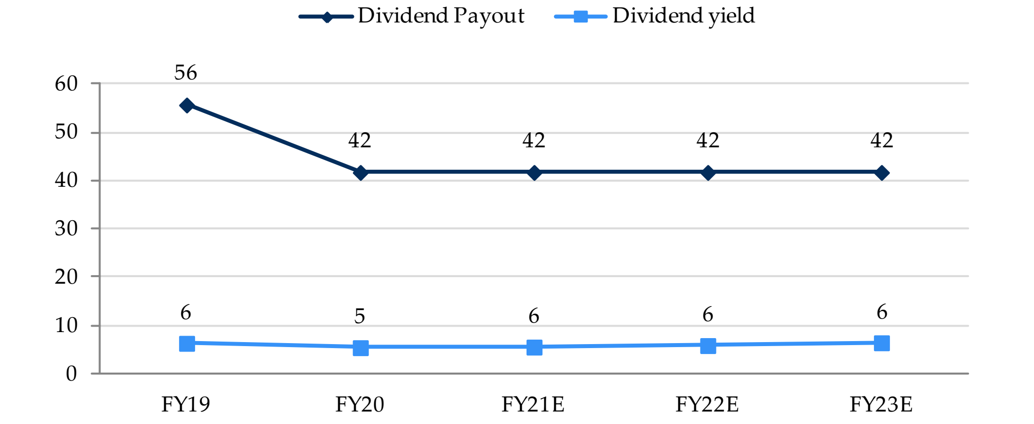
Project	Capacity	Initial Capex (Rsbn)	Latest anticipated Project cost (Rs bn)	% Cost over run	Capex/MW (Rs Bn)	Capex incurred till Q1FY21 (Rs bn)	Capex required to be incurred (Rs bn)	Expected CoD
Parbati II	800	39.2	100.0	255.1%	0.12	82.6	17.4	FY22E
Subansiri lower	2000	62.9	203.7	323.8%	0.10	123.3	80.4	FY25E
Total	**2800**	**102.1**	**303.7**	**289.5%**		**205.9**	**97.8**	

Exhibit-38: Revenue, EBIDTA and PAT



Source: Company, HSIE Research

Exhibit-39: Dividend Payout & Yield trend (%)



Source: Company, HSIE Research

Exhibit-40: SoTP valuation

Particulars	INR bn	Multiple	Equity value	INR/ share
Regulated Equity	159	1.3	207	21
CWIP	104	0.5	52	5
Cash	17	1.0	17	2
Target Price				27

Source: Company, HSIE Research

Financials (Standalone)

INCOME STATEMENT

INR mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Net Revenues	**72,940**	**72,712**	**69,340**	**81,612**	**87,354**	**93,137**	**99,111**	**1,11,037**
Growth (%)	***7.5***	***-0.3***	***-4.6***	***17.7***	***7.0***	***6.6***	***6.4***	***12.0***
Employee Cost	11,159	15,748	15,853	17,047	15,155	15,155	16,106	18,009
O&M and Other expenses	20,717	19,318	17,056	19,751	26,508	26,508	28,171	31,499
Total Operating Expenses	31,876	35,066	32,909	36,797	41,663	41,663	44,278	49,508
EBITDA	**41,065**	**37,646**	**36,431**	**44,815**	**45,691**	**51,474**	**54,833**	**61,529**
EBITDA Margin (%)	***56.3***	***51.8***	***52.5***	***54.9***	***52.3***	***55.3***	***55.3***	***55.4***
EBIDTA Growth (%)	***-4.6***	***-8.3***	***-3.2***	***23.0***	***2.0***	***12.7***	***6.5***	***12.2***
Depreciation	14,521	13,884	14,059	15,900	15,453	15,453	16,423	18,363
EBIT	**35,741**	**38,338**	**37,282**	**38,163**	**40,600**	**44,037**	**46,731**	**51,855**
Other Income (Including EO Items)	9,198	14,577	14,910	9,248	10,362	8,016	8,321	8,689
Interest	10,674	10,732	9,223	8,949	7,954	7,954	8,453	9,452
PBT	**25,067**	**34,746**	**35,257**	**37,448**	**36,082**	**39,588**	**41,817**	**45,978**
Tax	-285	6,790	7,671	11,142	6,010	8,814	9,311	10,237
RPAT	**25,352**	**27,956**	**27,587**	**26,306**	**30,072**	**30,773**	**32,506**	**35,741**
Rate regulated activities	0	7,140	7,198	8,234	3,436	3,505	3,540	3,575
APAT	**27,833**	**27,956**	**27,587**	**26,306**	**30,072**	**30,773**	**32,506**	**35,741**
APAT Growth (%)	*14.64*	*0.44*	*-1.32*	*-4.64*	*14.32*	*2.33*	*5.63*	*9.95*
AEPS	**2.29**	**2.72**	**2.69**	**2.62**	**2.99**	**3.06**	**3.24**	**3.56**
EPS Growth (%)	*4.42*	*18.99*	*-1.32*	*-2.61*	*14.32*	*2.33*	*5.63*	*9.95*

Source: Company, HSIE Research

BALANCE SHEET

INR mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
SOURCES OF FUNDS								
Share Capital	1,10,707	1,02,593	5,57,844	6,79,947	7,44,255	8,00,251	8,51,602	9,06,255
Reserves	2,04,828	1,86,422	95,428	95,428	95,428	95,428	95,428	95,428
Total Shareholders' Funds	**3,15,535**	**2,89,015**	**5,13,964**	**6,09,242**	**6,53,759**	**7,09,755**	**7,61,106**	**8,15,759**
Long-term Debt	1,81,932	1,72,456	1,67,282	1,70,446	2,08,918	2,30,162	2,66,657	2,92,084
Short-term Debt	255	256	385	4,160	7,143	6,786	6,447	6,124
Total Debt	**1,82,187**	**1,72,713**	**1,67,667**	**1,74,606**	**2,16,061**	**2,36,948**	**2,73,103**	**2,98,209**
Deferred revenues & Regulatory deferral A/C credit balance	8,619	9,385	10,766	47,207	42,291	43,188	44,135	45,177
TOTAL SOURCES OF FUNDS	**5,06,341**	**4,71,113**	**4,78,219**	**6,08,931**	**6,52,295**	**6,89,818**	**7,43,547**	**7,87,974**
APPLICATION OF FUNDS								
Net Block	**2,13,039**	**2,09,772**	**1,99,943**	**2,49,766**	**2,16,355**	**2,00,902**	**2,34,464**	**2,66,086**
CWIP	1,87,600	2,02,545	2,24,144	1,50,368	1,71,804	2,24,804	2,50,999	2,61,013
Investments	20,267	24,613	1,37,788	1,53,882	1,79,936	1,58,926	1,49,815	1,41,615
Other Non-Current Assets	33,027	30,633	33,585	1,70,972	2,08,468	2,08,468	2,08,468	2,08,468
Total Non-current Assets	**4,53,933**	**4,67,562**	**5,95,461**	**7,24,988**	**7,76,563**	**7,93,100**	**8,43,746**	**8,77,183**
Inventories	840	916	36,390	46,287	48,679	57,748	61,346	64,176
Debtors	15,544	14,929	21,704	43,320	53,945	75,987	87,790	90,995
Cash & Equivalents	58,768	15,331	49,168	72,701	65,257	68,248	72,500	75,844
ST Loans & Advances	24,882	24,332	62,270	54,806	63,476	73,476	88,476	1,03,476
Total Current Assets	**1,00,034**	**55,509**	**51,585**	**83,319**	**98,101**	**1,03,301**	**1,01,164**	**1,11,732**
Creditors	34,996	37,059	39,002	42,510	41,426	45,658	48,524	54,255
Provisions	12,630	14,900	17,530	15,813	14,985	15,977	17,002	19,048
Total Current Liabilities	**47,626**	**51,958**	**56,533**	**58,324**	**56,411**	**61,635**	**65,525**	**73,303**
Net Current Assets	**52,408**	**3,551**	**-4,948**	**24,996**	**41,690**	**41,666**	**35,639**	**38,429**
TOTAL APPLICATION OF FUNDS	**5,06,341**	**4,71,113**	**4,78,219**	**6,08,931**	**6,52,295**	**6,89,818**	**7,43,547**	**7,87,974**

Source: Company, HSIE Research

CASH FLOW STATEMENT

INR Mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Reported PBT	25,067	34,746	35,257	37,448	36,082	39,588	41,817	45,978
Non-operating & EO Items	9,198	14,577	14,910	9,248	10,362	8,016	8,321	8,689
Interest Expenses	10,674	3,592	2,025	715	4,518	4,449	4,914	5,877
Depreciation	14,521	13,884	14,059	15,900	15,453	15,453	16,423	18,363
Working Capital Change	26,466	6,186	9,273	14,226	-27,130	748	13,913	-503
Tax Paid	-7,450	-7,066	-6,347	-6,498	-6,024	-7,918	-8,363	-9,196
OPERATING CASH FLOW (a)	**60,081**	**36,766**	**39,357**	**52,543**	**12,537**	**44,304**	**60,383**	**51,831**
Capex	-5,280	-25,562	-25,830	8,053	-3,479	-53,000	-76,180	-60,000
Free Cash Flow (FCF)	*54,801*	*11,205*	*13,528*	*60,596*	*9,058*	*-8,696*	*-15,797*	*-8,169*
Investments	-8,003	-4,345	-882	12,665	-1,147	-1	0	0
Non-operating Income	9,198	14,577	14,910	9,248	10,362	8,016	8,321	8,689
INVESTING CASH FLOW (b)	**-4,085**	**-15,330**	**-11,801**	**29,966**	**5,736**	**-44,985**	**-67,859**	**-51,311**
Debt Issuance/(Repaid)	-20,551	-9,474	-5,046	6,940	41,455	20,887	36,156	25,105
Interest Expenses	-10,674	-3,592	-2,025	-715	-4,518	-4,449	-4,914	-5,877
Other Financing activity	-10,127	-22,086	-4,288	-61,703	-46,039	-897	-947	-1,042
Share Capital Issuance	0	-8,114	0	-2,143	0	0	0	0
Dividend	-20,186	-21,606	-16,805	-17,159	-14,691	-15,034	-15,880	-17,460
FINANCING CASH FLOW (c)	**-61,538**	**-64,872**	**-28,164**	**-74,780**	**-23,793**	**507**	**14,414**	**726**
NET CASH FLOW (a+b+c)	**-5,543**	**-43,436**	**-608**	**7,729**	**-5,520**	**-173**	**6,938**	**1,246**
Opening cash balance	64,310	58,768	15,331	14,724	22,453	16,933	16,759	23,697
Closing Cash & Equivalents	**58,768**	**15,331**	**14,724**	**22,453**	**16,933**	**16,759**	**23,697**	**24,943**

Source: Company, HSIE Research

KEY RATIOS

	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
PROFITABILITY (%)								
GPM	84.7	78.3	77.1	79.1	82.7	83.7	83.7	83.8
EBITDA Margin	56.3	51.8	52.5	54.9	52.3	55.3	55.3	55.4
EBIT Margin	36.4	32.7	32.3	35.4	34.6	38.7	38.8	38.9
APAT Margin	34.8	38.4	39.8	32.2	34.4	33.0	32.8	32.2
RoE	9.8	11.1	11.3	9.4	9.7	9.6	9.6	10.1
Core RoE	9.6	10.3	10.5	10.9	15.0	15.9	15.5	15.7
RoCE	7.3	8.4	8.4	8.6	9.2	9.5	9.2	9.3
EFFICIENCY								
Tax Rate (%)	-1.1	19.5	21.8	29.8	16.7	22.3	22.3	22.3
Asset Turnover (x)	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2
Inventory (days)	4	5	5	6	5	5	5	5
Debtors (days)	78	75	67	130	159	159	130	130
Payables (days)	401	386	433	422	363	400	400	400
Cash Conversion Cycle (days)	-32	-59	-104	11	103	98	44	44
Net Debt/EBITDA (x)	3.0	4.2	4.2	3.4	4.4	4.3	4.5	4.4
Net D/E	0.4	0.6	0.6	0.7	1.1	1.1	1.1	1.2
Interest Coverage	0.3	0.1	0.1	0.0	0.1	0.1	0.1	0.1
PER SHARE DATA								
EPS (INR/sh)	2.3	2.7	2.7	2.6	3.0	3.1	3.2	3.6
CEPS (INR/sh)	3.8	4.1	4.1	4.2	4.5	4.6	4.9	5.4
DPS (INR/sh)	1.6	1.8	1.4	1.5	1.3	1.3	1.4	1.5
BV (INR/sh)	23.9	23.3	24.3	30.7	31.2	32.8	34.5	36.3
VALUATION								
P/E	10.5	8.8	8.9	9.2	8.0	7.9	7.4	6.8
P/BV	1.0	1.0	1.0	0.8	0.8	0.7	0.7	0.7
EV/EBITDA	9.5	10.7	11.0	8.8	9.6	9.0	9.0	8.4
OCF/EV (%)	15.4	9.1	9.8	13.3	2.8	9.6	12.3	10.1
FCF/EV (%)	14.1%	2.8%	3.4%	15.4%	2.1%	-1.9%	-3.2%	-1.6%
Dividend Yield (%)	**6.5**	**7.5**	**5.8**	**6.1**	**5.2**	**5.3**	**5.6**	**6.2**

Source: Company, HSIE Research

CESC

Improvement across all business segments

(TP INR 769; BUY)

We initiate coverage on CESC with a BUY recommendation. Our SoTP target price of INR 769/share (distribution business including franchisee –INR360/share and generation business including renewables and regulated – INR410/share) implies an upside of 26% from the current level. Our positive stance on the stock is premised on (a) turnaround across its lossmaking Dhariwal project; (b) moderating losses at the Rajasthan franchisee; (c) discom privatisation and franchisee (DF) opportunity; (d) attractive valuation (0.7x FY23BV consolidated) with high dividend yield (7%); and (e) stable earnings from extant business.

Key Investment Rationale

Dhariwal had turned back in the black during FY21, while its franchisee division should break even by FY23

Visibility of earnings at Dhariwal and DFs is improving. The Dhariwal project reported a PAT of INR 750mn in 9MFY21 vs a loss of INR 640mn yoy. This was largely driven by (1) the extension of the PPA term with Maharashtra discom for 185 MW, (2) short-term PPAs for its untied capacity, and (3) recovery of higher coal cess and other duties and taxes in tariffs from the Noida discom under a change in law. We expect Dhariwal to report a PAT of INR1bn in FY21, which would be the first time since its inception in FY14. The franchisee business' losses also declined to INR110mn in 9MFY21 vs INR290mn in 9MFY20. We expect its Rajasthan DF business to turn back in the black in FY22, with reduction in AT&C losses. However, the overall DF business will continue to report a loss over FY21-22 due to the initial stabilisation across its newly acquired Malegaon franchisee circle.

CESC has won 4 franchisee circles out of 6 circles bid for in the past four years

CESC is well placed to capitalise on the distribution franchisee (DF). Given discoms' weak financials and central government's push to privatise lossmaking circles, the privatisation and DF model would provide a huge long-term opportunity for the company. In the past four years, CESC has won four circles (three in Rajasthan and one in Maharashtra) under the DF model. Management expects that 4-5 circles would be tendered for franchisee annually, of which CESC has the operational and financial capacity to take over 3-4 circles (on a franchisee basis).

CESC's standalone and Haldia project assets generate a healthy FCF. CESC's Kolkata business operates on a risk averse regulatory business model and generates a FCF of INR13.5bn p.a. Similarly, its 600 MW Haldia project operates on cost plus model and has been generating a PAT of INR3.2bn and an FCF of INR4bn plus since FY17. The project generates a healthy project RoE of 25% plus and is expected to remain a cash cow for the firm.

With low capex requirement, payout expected to remain high: CESC requires a moderate annual capex of INR6.5bn across its standalone business and the losses from DF business have been shrinking every year with breakeven expected in FY24. With Dhariwal turning back in the black, the firm generates sufficient cash flow and hardly has any major capex requirement. The management has already provided a healthy dividend of INR45/share in FY21 (74% payout on standalone EPS vs 29% in FY20), indicating the company's willingness to return excess cash to shareholders. We believe that the payout would continue to remain healthy, going ahead as well (with minimal capex requirement and turnaround across all segments), which would mean a dividend yield of ~7% for its shareholders.

Regulatory order would help liquidate its INR7.4bn of regulatory assets

Long-awaited regulatory order expected after state election: CESC's regulatory assets stand at INR7.4bn on a consolidated basis in FY20; this is largely on account of expenses related to cost of fuel and power purchases, which are not yet considered in the annual performance review (APR). Furthermore, the regulator is yet to approve capex to the tune of INR11bn incurred across the standalone business in the past two years. With 30% equity ratio, the earnings have been under reported by INR530mn. We believe that with the pandemic situation dissipating in FY21 and state election by May 2021 concluding, the regulator would finalise the pending tariff orders for the company, which would liquidate the regulated assets and approve the capex plan. This, in turn, should enhance its earnings.

With healthy dividend yield of ~7% and attractive P/BV of 0.7x FY23 BV, we initiate coverage on CESC with a BUY rating and an SoTP of INR769/share

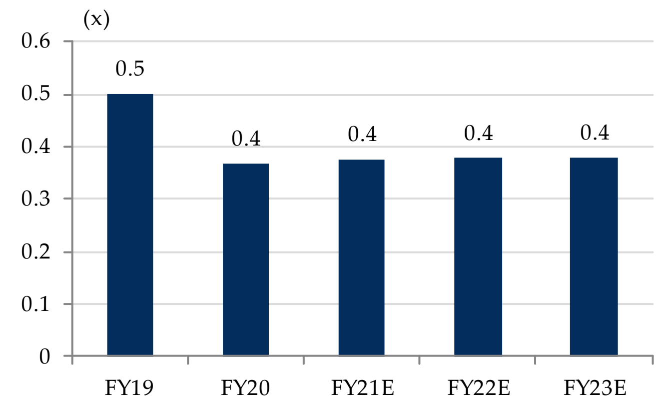
Valuation and view: CESC is witnessing a turnaround across all its business segments, driven by a revival in power demand and fall in AT&C losses across its licensee and franchisee segment. Accordingly, losses across its franchisee segment have been depleting at a much faster rate than the street expectation. We expect its franchisee segment to attain breakeven in FY23. Overall, we expect the company's consolidated profit to grow at a CAGR of 5.7% over FY20-23 to INR15.4bn. CESC is currently valued at an attractive P/BV of 0.7x FY23BV consolidated and a P/E of 5.2x FY23 consolidated EPS. A high dividend payout of INR45/share (~7% yield) will also augur well for the company and will be in tune with investors' expectations, Thus, we initiate coverage on CESC with a BUY rating and an SoTP-based TP of INR769, which provides an upside potential of 26% from the CMP.

Exhibit-41: Earnings estimate of subsidiaries and consolidated figure

Earnings INR mn	FY19	FY20	FY21E	FY22E	FY23E	CAGR (FY20-23)
Standalone	9370	9180	8076	9404	9756	2.0%
Haldia	3240	3181.07	3181	3142	3188	0.1%
Dhariwal	-930	-101.81	1015	1230	1290	333.1%
Crescent Power & Solar Vidyut	540	260	286	300	306	5.6%
Noida Power	1400	1400	980	1000	1030	-9.7%
Distribution Franchisee	-600	-530	-795	-239	239	176.6%
Consol Profit	11980	13060	12430	14472	15420	5.7%
EPS	90	99	94	109	116	5.7%

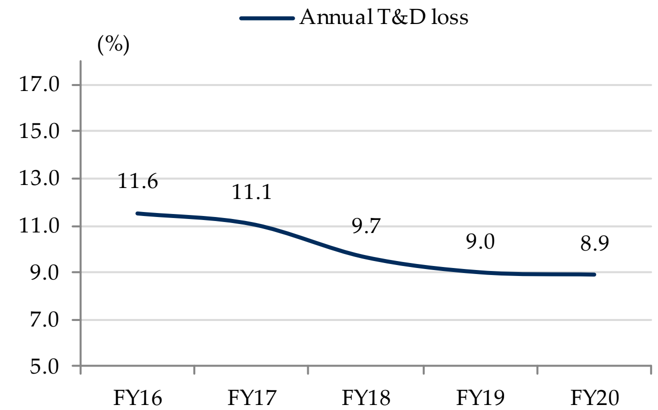
Source: Company, HSIE Research

Exhibit-42: D/E (x)



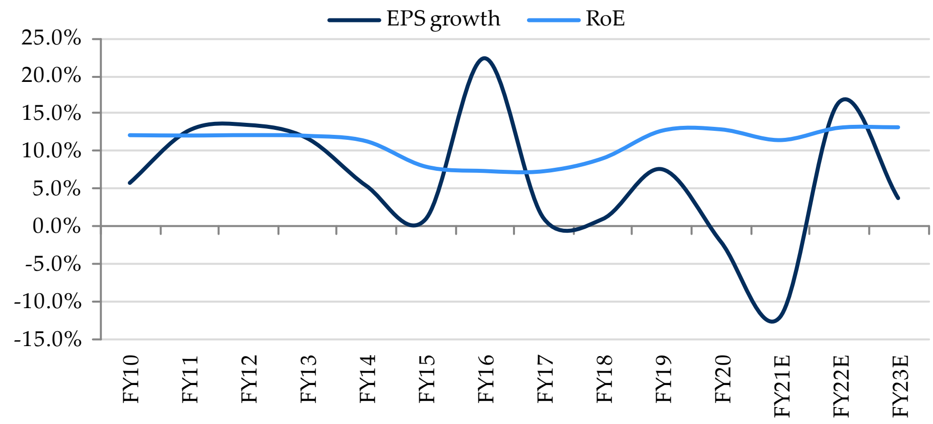
Source: Company, HSIE Research

Exhibit-43: AT&C loss (%)



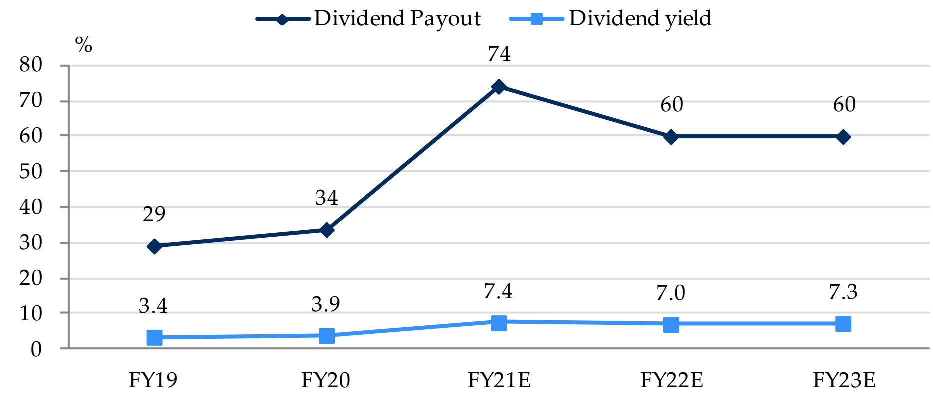
Source: Company, HSIE Research

Exhibit-44: EPS growth and ROE Trend



Source: Company, HSIE Research

Exhibit-45: Dividend Payout & Yield trend (%)



Source: Company, HSIE Research

Exhibit-46: SoTP valuation

	INR mn	RoE	CoE	P/BV	Valuation	Per share
Regulated Equity						360
Kolkatta	25000	18%	12%	1.6	39167	295
Noida	2000	17%	12%	1.6	3250	25
Rajasthan Franchisee					**5256**	40
Regulated Equity						**410**
Kolkatta	12000	18%	12%	1.5	17500	132
Haldia	11000	20%	12%	1.7	18333	138
Chandrapur						
Tied capacity	6000	14%	12%	1.2	7000	53
Untied Capacity	6000	11%	12%	0.9	5500	41
Crescent	2500	13%	12%	1.1	2708	20
Renewable	3000	13%	12%	1.1	3250	25
Target Price (INR)						**769**

Source: Company, HSIE Research

Financials (Standalone)

INCOME STATEMENT

INR mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Net Revenues	**67,961**	**72,201**	**77,730**	**77,540**	**78,360**	**71,988**	**82,643**	**86,819**
Growth (%)	***9.8***	***6.2***	***7.7***	***-0.2***	***1.1***	***-8.1***	***14.8***	***5.1***
Power&Fuel	13,473	13,587	14,020	15,760	15,680	13,622	15,658	16,450
Purchase of electricity	20,393	26,144	29,580	29,990	29,660	28,024	31,805	33,414
Employee Cost	7,074	7,798	8,650	9,260	9,690	9,507	9,215	9,682
O&M and Other expenses	7,699	8,461	8,950	8,950	9,000	9,223	9,460	9,939
EBITDA	**19,323**	**16,211**	**16,530**	**13,580**	**14,330**	**11,613**	**16,505**	**17,335**
EBITDA Margin (%)	***28.4***	***22.5***	***21.3***	***17.5***	***18.3***	***16.1***	***20.0***	***20.0***
EBIDTA Growth (%)	***24.7***	***-16.1***	***2.0***	***-17.8***	***5.5***	***-19.0***	***42.1***	***5.0***
Depreciation	3,695	4,088	4,330	4,330	4,480	4,527	4,694	4,862
EBIT	**15,628**	**12,122**	**12,200**	**9,250**	**9,850**	**7,086**	**11,811**	**12,473**
Other Income (Including EO Items)	1,277	1,466	1,660	1,650	1,460	1,329	1,629	1,429
Interest	4,562	4,478	4,840	4,660	5,440	4,940	4,740	4,741
PBT	**12,342**	**9,110**	**9,020**	**6,240**	**5,870**	**3,475**	**8,699**	**9,160**
Tax	2,009	2,384	2,420	2,570	1,950	999	2,495	2,604
RPAT	**10,333**	**8,626**	**8,690**	**9,370**	**9,240**	**8,076**	**9,404**	**9,756**
Rate regulated activities	0	1,900	2,090	5,700	5,320	5,600	3,200	3,200
EO (Loss) / Profit (Net of Tax)	0	0	0	0	0	0	0	0
APAT	**10,333**	**8,626**	**8,690**	**9,370**	**9,240**	**8,076**	**9,404**	**9,757**
APAT Growth (%)	*48.1*	*-16.5*	*0.7*	*7.8*	*-1.4*	*-12.6*	*16.4*	*3.8*
AEPS	**77.6**	**64.8**	**65.2**	**70.3**	**69.4**	**60.6**	**70.6**	**73.2**
EPS Growth (%)	*48.1*	*-16.5*	*0.7*	*7.8*	*-1.4*	*-12.6*	*16.4*	*3.8*

Source: Company, HSIE Research

BALANCE SHEET

INR mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
SOURCES OF FUNDS								
Share Capital	1,332	1,332	1,332	1,332	1,332	1,332	1,332	1,332
Reserves	1,28,678	1,31,905	93,145	96,300	99,050	1,01,133	1,04,896	1,08,800
Total Shareholders' Funds	**1,30,011**	**1,33,238**	**94,477**	**97,632**	**1,00,382**	**1,02,466**	**1,06,228**	**1,10,133**
Long-term Debt	45,125	53,387	49,604	48,450	52,780	54,395	56,010	57,625
Short-term Debt	3,832	4,048	4,998	6,028	8,850	8,850	8,850	8,851
Total Debt	**48,957**	**57,435**	**54,602**	**54,478**	**61,630**	**63,245**	**64,860**	**66,476**
Deferred revenues & Regulatory deferral A/C credit balance	4,700	4,589	9,306	9,420	4,962	4,962	4,962	4,962
TOTAL SOURCES OF FUNDS	**2,24,872**	**2,38,408**	**1,89,701**	**1,92,270**	**2,08,090**	**2,12,215**	**2,18,020**	**2,23,969**
APPLICATION OF FUNDS								
Net Block	**1,46,330**	**1,45,963**	**1,45,940**	**1,45,530**	**1,46,300**	**1,48,473**	**1,50,479**	**1,52,317**
CWIP	1,960	1,878	1,267	670	890	890	890	890
Investments	55,040	65,786	44,990	45,750	46,080	48,416	50,123	48,329
Other Non-Current Assets	13,532	15,962	18,196	23,860	28,970	30,359	31,815	33,346
Total Non-current Assets	**2,16,861**	**2,29,588**	**2,10,393**	**2,15,810**	**2,22,240**	**2,28,138**	**2,33,308**	**2,34,883**
Inventories	3,165	3,786	3,870	3,830	3,870	3,555	4,051	4,256
Debtors	9,664	9,685	10,415	10,280	9,910	9,104	10,452	10,980
Cash & Equivalents	10,943	11,891	4,357	3,210	10,500	8,524	11,018	16,961
ST Loans & Advances	3,564	3,007	3,595	4,320	3,390	3,114	3,549	3,728
Total Current Assets	**27,336**	**28,369**	**22,237**	**21,640**	**27,670**	**24,297**	**29,070**	**35,925**
Creditors	18,750	18,844	42,085	44,550	41,190	38,839	42,546	44,699
Provisions	575	706	844	630	630	1,381	1,811	2,141
Total Current Liabilities	**19,325**	**19,549**	**42,929**	**45,180**	**41,820**	**40,219**	**44,357**	**46,839**
Net Current Assets	**8,011**	**8,820**	**-20,692**	**-23,540**	**-14,150**	**-15,923**	**-15,287**	**-10,914**
TOTAL APPLICATION OF FUNDS	**2,24,872**	**2,38,408**	**1,89,701**	**1,92,270**	**2,08,090**	**2,12,215**	**2,18,020**	**2,23,969**

Source: Company, HSIE Research

CASH FLOW STATEMENT

INR Mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Reported PBT	**FY16**	9,110	9,020	6,240	5,870	3,475	8,699	9,160
Non-operating & EO Items	12,342	1,466	1,660	1,650	1,460	1,329	1,629	1,429
Interest Expenses	1,277	4,478	4,840	4,660	5,440	4,940	4,740	4,741
Depreciation	4,562	4,088	4,330	4,330	4,480	4,527	4,694	4,862
Working Capital Change	3,695	250	17,261	1,587	2,358	-203	1,859	1,570
Tax Paid	2,436	2,384	2,420	2,570	1,950	999	2,495	2,604
OPERATING CASH FLOW (a)	2,009	**18,844**	**36,211**	**17,737**	**18,638**	**12,409**	**20,859**	**21,508**
Capex	**23,768**	-3,478	-3,536	-3,323	-5,470	-6,700	-6,700	-6,700
Free Cash Flow (FCF)	-4,418	*15,366*	*32,674*	*14,414*	*13,168*	*5,709*	*14,159*	*14,808*
Investments	*19,349*	-10,746	20,796	-760	-330	-2,336	-1,707	1,794
Non-operating Income	-3,993	1,466	1,660	1,650	1,460	1,329	1,629	1,429
INVESTING CASH FLOW (b)	1,277	**-12,758**	**18,919**	**-2,433**	**-4,340**	**-7,707**	**-6,779**	**-3,477**
Debt Issuance/(Repaid)	**-7,135**	1,34,467	1,42,579	1,93,140	2,58,752	96,997	1,01,555	91,922
Interest Expenses	86,531	-4,478	-4,840	-4,660	-5,440	-4,940	-4,740	-4,741
Other Financing activity	-4,562	-7,414	-53,122	-8,939	-5,603	2,640	-2,485	-2,778
Share Capital Issuance	-7,539	0	-126	0	0	0	0	1
Dividend	0	-1,725	-1,742	-2,728	-3,117	-5,992	-5,642	-5,854
FINANCING CASH FLOW (c)	-1,707	**-5,138**	**-62,664**	**-16,451**	**-7,008**	**-6,678**	**-11,252**	**-11,755**
NET CASH FLOW (a+b+c)	**-15,370**	**948**	**-7,534**	**-1,147**	**7,290**	**-1,976**	**2,829**	**6,275**
Opening cash balance	**1,263**	10,943	11,891	4,357	3,210	10,500	8,524	11,018
Closing Cash & Equivalents	9,680	**11,891**	**4,357**	**3,210**	**10,500**	**8,524**	**11,353**	**17,294**

Source: Company, HSIE Research

KEY RATIOS

	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
PROFITABILITY (%)								
GPM	50.2	45.0	43.9	41.0	42.1	42.1	42.6	42.6
EBITDA Margin	28.4	22.5	21.3	17.5	18.3	16.1	20.0	20.0
EBIT Margin	23.0	16.8	15.7	11.9	12.6	9.8	14.3	14.4
APAT Margin	15.2	11.9	11.2	12.1	11.8	11.2	11.4	11.2
RoE	7.5	7.4	9.1	12.7	12.9	11.5	13.1	13.1
Core RoCE	9.1	7.5	9.2	12.9	13.2	11.7	13.3	13.3
RoCE	23.7	19.7	24.5	23.2	23.8	17.2	22.6	21.5
EFFICIENCY								
Tax Rate (%)	16.3	26.2	26.8	41.2	33.2	28.8	28.7	28.4
Asset Turnover (x)	0.4	0.4	0.4	0.5	0.5	0.4	0.5	0.5
Inventory (days)	17	19	18	18	18	18	18	18
Debtors (days)	52	49	49	48	46	46	46	46
Payables (days)	141	123	251	254	235	235	235	235
Cash Conversion Cycle (days)	-16	-16	-118	-126	-115	-124	-116	-117
Net Debt/EBITDA (x)	2.0	2.8	3.0	3.8	3.6	4.7	3.3	2.9
Net D/E	0.3	0.4	0.7	0.7	0.7	0.8	0.7	0.7
Interest Coverage	0.3	0.3	0.3	0.4	0.5	0.6	0.4	0.3
PER SHARE DATA								
EPS (INR/sh)	77.6	64.8	65.2	70.3	69.4	60.6	70.6	73.2
CEPS (INR/sh)	105.3	95.4	97.7	102.8	103.0	94.6	105.8	109.7
DPS (INR/sh)	12.8	13.0	13.1	20.5	23.4	45.0	42.4	43.9
BV (INR/sh)	870.8	875.9	563.8	545.5	526.2	531.4	548.7	566.5
VALUATION								
P/E	7.9	9.4	9.4	8.7	8.8	10.1	8.6	8.3
P/BV	0.7	0.7	1.1	1.1	1.2	1.1	1.1	1.1
EV/EBITDA	6.2	7.8	8.0	9.8	9.2	11.7	8.2	7.5
OCF/EV (%)	19.9	14.9	27.5	13.4	14.1	9.1	15.4	16.4
FCF/EV (%)	16.2	12.1	24.8	10.9	9.9	4.2	10.5	11.3
Dividend Yield (%)	**2.1**	**2.1**	**2.1**	**3.4**	**3.8**	**7.4**	**6.9**	**7.2**

Source: Company, HSIE Research

JSW Energy

Healthy cash flow generation but valuation no more attractive

(TP INR 95; Reduce)

JSW Energy has one the strongest balance sheets in the industry with the current net D/E of 0.5x (vs the industry average of above 2.0x). The company has been generating strong cash flows over the past four years (~ INR25bn-30bn p.a.), which have been largely utilised to repay debt which in turn would strengthen its balance sheet. The company is well-placed to add on new capacities to its portfolio without putting much stress on its balance sheet. This will help the management in meeting its targeted 10GW of project portfolio over the next 5-6 years. However, the stock has recently witnessed a substantial rise in its price and, thus, factors in majority of these benefits in the CMP. Hence, we initiate coverage on JSW Energy with a reduce recommendation as our SoTP target price of INR 95/share (including investment in JSW Steel and recently won RES project) implies a downside of 5% from the CMP.

JSW energy targets to execute 2360MW of renewable project over the next 2-3 years

Target to more than double its capacity to 10GW - JSW Energy has a power generation capacity of 4,559 MW (Thermal - 3,158 MW, Hydro - 1,391 MW and Solar - 10 MW). In line with the country's commitment to lower its carbon emission footprint, the company aims to add 5.5GW of renewable capacity to its portfolio over the next 5-6 years. In view to achieve this, the company had won a 810MW wind project in SECI's tender (Tranche IX) in Aug'20 at a tariff of INR3.01/unit and another 450MW wind project under SECI's 1.2GW in March'21 tender (Tranche X) at a tariff of INR2.78/unit. The company is also constructing a 240MW of Kutehr Hydro project at a cost of INR27.5bn. Furthermore, the company is actively working with group companies to finalise close to 1,100 MW of their RPO obligation. Overall, the company targets to execute ~2360 MW of renewable projects over the next 2-3 years. While the discoms are yet to sign PPAs for both these projects, our initial assessment suggests that the company can generate an Equity IRR (EIRR) of ~12-13% at this tariff (factoring in its lower cost of funding of ~9%).

High LT PPA mix renders strong cash flow visibility - JSW Energy has now tied up 3,696 MW of its capacity under the LT PPA (81% of its total capacity) as compared to 2,866 MW in FY17 (64.5% of its total capacity). Accordingly, the company now generates more stable cash flows (~INR25-30bn p.a.) under the two-part tariff scheme (with full fuel cost pass through), which insulates it from forex/fuel price fluctuations. For the balance untied capacity, the management plans to tie up with the group's captive requirement (with JSW Steel and cement) over the next 2-3 years.

The company has repaid ~INR84bn of its debt over the past 5 years; net D/E has fallen from 1.8x in FY16 to 0.5x in Q3FY21

Net debt/equity bottomed out; fresh capacities should leverage the balance sheet - The company has been consistently deleveraging its balance sheet over the past four years by repaying debts from its healthy cash flows. It reduced its net debt from INR151bn in FY16 to INR67.2bn as on Q3FY21. Accordingly, its net debt/equity also fell from 1.8x in FY16 to 0.5x in Q3FY21 (at an average interest cost of 8.3%), making it one of the strongest balance sheets among its peers. However, with robust capacity addition in the pipeline over the next 2-3 years, we expect deleveraging to end and debt to increase.

High solar capacities would curb the benefit of peak season demand. JSW Energy and other merchant players have been benefitted earlier from rise in demand and high merchant rates during the peak summer season (March-June). However, with the onset of significant capacity addition across the solar sector, the anticipated spike in the merchant rates have been curbed to a great extent. Solar capacities in India have augmented from 6.8GW in FY16 to ~40GW in FY21 (43% CAGR), which is vital now in meeting excess power demand during the peak season. Also, with India's

JSW Energy's exposure to the merchant market has fallen from 35.5% in FY17 to 19% as on date

target to add 450GW of RES capacity by 2030 (Solar - ~350GW), the expectation of high merchant rates looks bleak during even the peak season, going ahead. Also, the company's overall exposure to the merchant market has lowered over the past four years with only 19% of its capacity lying untied now vs 35.5% in FY17.

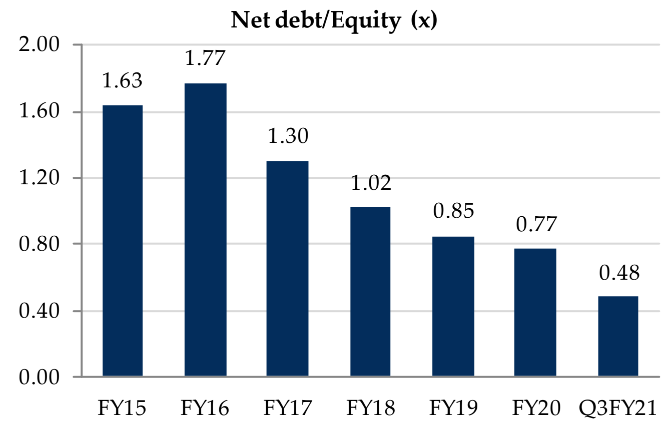
Valuation and view: The company is far better placed to attain its 10GW target capacity, driven by its balance sheet strength and cash flows. While the deleveraging efforts have strengthened its balance sheet, the lack of opportunity to sign the LT PPA for its untied capacity has impacted its RoE (which has been subdued at below 9%). We initiate on JSW Energy with a SoTP target price of INR 95/share (which includes its investment in JSW Steel at a 30% discount and recently won RES project). The stock, however, has witnessed a steep rise in its price and thus factors in most of these benefits in the CMP of INR99.9. Hence, we recommend a reduce rating on JSW Energy.

Exhibit-47: Key assumption

	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Generation (mn Units)	22064	23648	23508	23755	22668	20733	23907	24028
Avg Tariff (INR/unit)	4.5	3.5	3.4	3.8	3.6	3.5	3.9	3.9

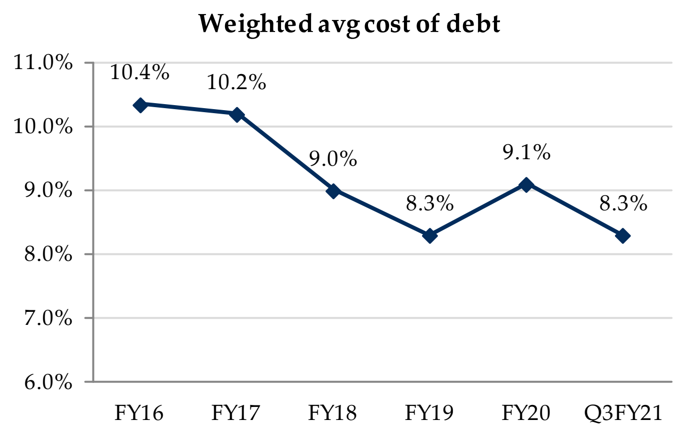
Source: Company, HSIE Research

Exhibit-48: D/E (x)



Source: Company, HSIE Research

Exhibit-49: Weighted average cost of debt (%)



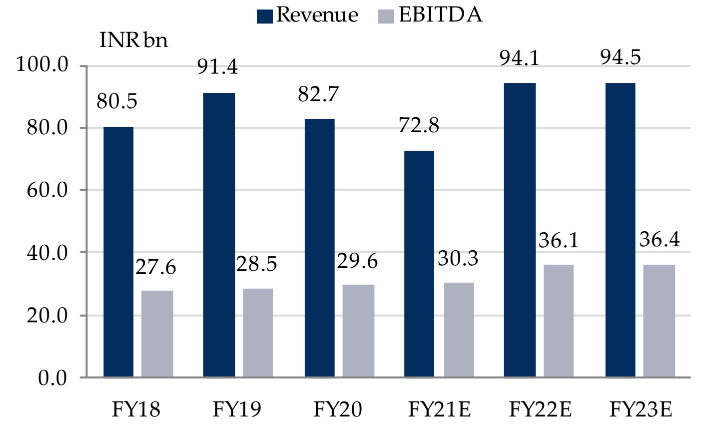
Source: Company, HSIE Research

Exhibit-50: PLF Trend

PLF Trend %	FY17	FY18	FY19	FY20E	FY21E	FY22E	FY23E
Barmer	84	84	84	70	68	72	70
Ratnagiri	64	64	76	77	60	75	78
Vijay Nagar	59	53	50	42	40	60	60
Hydro Plants	50	46	52	50	50	50	50

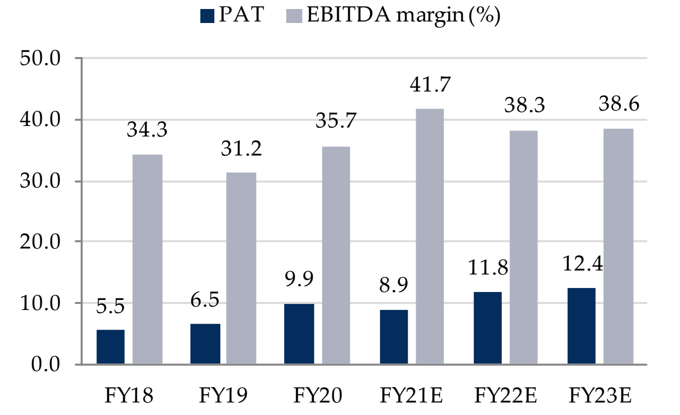
Source: Company, HSIE Research

Exhibit-51: Revenue and EBITDA trend



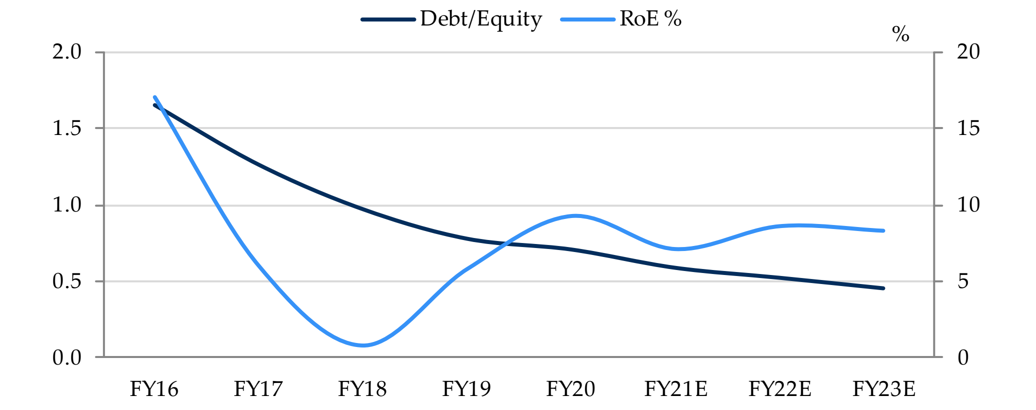
Source: Company, HSIE Research

Exhibit-52: PAT (INR bn) and EBITDA margin (%)



Source: Company, HSIE Research

Exhibit-53: D/E (x) and RoE (%)



Source: Company, HSIE Research

Exhibit-54: SoTP valuation

Project	Value	Per/share
Vijay SBU -1	5,808	3.6
Vijay SBU-2	12,447	7.6
Rajwest - Barmer	30,061	18.3
Ratnagiri 1200	16,253	10.0
Baspa	4,657	2.9
Karcham Wangtoo	31,411	19.1
Cash & liquid investments	5,728	3.5
JSW Steel investment	30,348	18.6
RES project	19,571	11.9
Total Value	**1,60,231**	**95.4**

Source: Company, HSIE Research

Financials (Standalone)

INCOME STATEMENT

INR mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Net Revenues	**98,245**	**82,634**	**80,490**	**91,376**	**82,727**	**72,828**	**94,145**	**94,464**
Growth (%)	***4.7***	***-15.9***	***-2.6***	***13.5***	***-9.5***	***-12.0***	***29.3***	***0.3***
Power&Fuel	43,774	39,072	43,389	53,562	44,605	35,615	49,802	49,589
Purchase of electricity	5,432	1,531	746	785	378	0	0	0
Employee Cost	1,838	2,118	2,151	2,436	2,430	2,325	2,581	2,643
O&M and Other expenses	6,941	6,670	6,579	6,062	5,746	4,549	5,686	5,799
EBITDA	**40,261**	**33,244**	**27,625**	**28,531**	**29,569**	**30,340**	**36,077**	**36,432**
EBITDA Margin (%)	***41.0***	***40.2***	***34.3***	***31.2***	***35.7***	***41.7***	***38.3***	***38.6***
EBIDTA Growth (%)	***11.1***	***-17.4***	***-16.9***	***3.3***	***3.6***	***2.6***	***18.9***	***1.0***
Depreciation	8,543	9,692	9,661	11,637	11,681	11,673	11,673	11,673
EBIT	**31,719**	**23,552**	**17,965**	**16,894**	**17,888**	**18,667**	**24,404**	**24,759**
Other Income (Including EO Items)	2,351	2,170	4,650	3,680	2,870	2,748	2,387	2,788
Interest	14,981	16,848	14,559	11,924	10,511	8,436	8,420	8,491
PBT	**19,089**	**8,875**	**8,056**	**8,650**	**10,247**	**12,979**	**18,371**	**19,056**
Tax	5,563	2,690	2,532	2,124	330	4,064	6,554	6,610
RPAT	**13,526**	**6,185**	**5,523**	**6,526**	**9,917**	**8,916**	**11,817**	**12,446**
Rate regulated activities	423	-41	495	-319	-280	0	0	0
EO (Loss) / Profit (Net of Tax)	-1	0	0	0	0	0	0	0
APAT	**15,450**	**6,144**	**1,839**	**6,206**	**10,251**	**8,916**	**11,817**	**12,446**
APAT Growth (%)	*-3.1*	*-55.6*	*-2.8*	*3.1*	*55.1*	*-7.5*	*32.5*	*5.3*
AEPS	**8.5**	**3.8**	**3.7**	**3.8**	**5.9**	**5.4**	**7.2**	**7.6**
EPS Growth (%)	*-3.1*	*-55.6*	*-2.8*	*3.1*	*55.1*	*-7.5*	*32.5*	*5.3*

Source: Company, HSIE Research

BALANCE SHEET

INR mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
SOURCES OF FUNDS								
Share Capital	16,401	16,280	16,401	16,401	16,419	16,419	16,419	16,419
Reserves	68,958	87,429	94,657	1,01,814	1,00,037	1,08,953	1,20,770	1,33,217
Total Shareholders' Funds	**85,358**	**1,03,708**	**1,11,058**	**1,18,214**	**1,16,456**	**1,25,372**	**1,37,189**	**1,49,636**
Long-term Debt	1,25,592	1,31,259	1,08,210	92,404	82,807	74,021	72,042	68,227
Short-term Debt	17,859	104	148	61	0	140	138	135
Total Debt	**1,43,451**	**1,31,363**	**1,08,358**	**92,464**	**82,807**	**74,161**	**72,180**	**68,363**
Deferred revenues & Regulatory deferral A/C credit balance	4,383	5,801	4,280	4,441	3,466	6,174	6,174	7,815
TOTAL SOURCES OF FUNDS	**2,33,743**	**2,40,873**	**2,23,695**	**2,15,119**	**2,02,730**	**2,05,708**	**2,15,544**	**2,25,814**
APPLICATION OF FUNDS								
Net Block	**2,23,098**	**1,94,906**	**1,88,774**	**1,78,245**	**1,69,836**	**1,59,662**	**1,49,489**	**1,46,316**
CWIP	0.00	5,269.00	2,935.30	3,991.70	3,913.20	3,913.20	3,913.20	3,913.20
Investments	1,932	2,189	3,368	3,423	7,441	7,441	7,441	7,441
Other Non-Current Assets	0	0	0	0	0	0	0	0
Total Non-current Assets	**2,25,030**	**2,02,364**	**1,95,078**	**1,85,660**	**1,81,189**	**1,71,016**	**1,60,843**	**1,57,670**
Inventories	6,494	5,967	5,355	4,547	6,396	5,439	7,606	7,574
Debtors	28,381	21,828	11,512	14,278	21,032	17,958	21,924	20,704
Cash & Equivalents	3,949	7,843	3,110	2,036	2,007	10,436	12,259	13,201
ST Loans & Advances	17,520	47,887	52,154	52,733	43,202	41,901	61,342	68,161
Total Current Assets	**56,344**	**83,525**	**72,132**	**73,593**	**72,637**	**75,734**	**1,03,131**	**1,09,640**
Creditors	25,632	21,187	23,271	18,395	16,029	13,173	15,009	12,227
Provisions	21,998	23,829	20,243	25,738	32,360	27,870	33,421	29,268
Total Current Liabilities	**43,236**	**44,449**	**41,846**	**42,718**	**46,810**	**36,322**	**42,400**	**37,022**
Net Current Assets	**8,714**	**38,509**	**28,618**	**29,459**	**24,249**	**34,691**	**54,701**	**68,144**
TOTAL APPLICATION OF FUNDS	**2,33,743**	**2,40,873**	**2,23,695**	**2,15,119**	**2,02,730**	**2,05,708**	**2,15,544**	**2,25,814**

Source: Company, HSIE Research

CASH FLOW STATEMENT

INR Mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Reported PBT	19,089	8,875	8,056	8,650	10,247	12,979	18,371	19,056
Non-operating & EO Items	2,351	2,170	4,650	3,680	2,870	2,748	2,387	2,788
Interest Expenses	14,981	16,848	14,559	11,924	10,511	8,436	8,420	8,491
Depreciation	8,543	9,692	9,661	11,637	11,681	11,673	11,673	11,673
Working Capital Change	-927	-24,483	3,637	-1,755	4,208	694	-18,187	-10,860
Tax Paid	-5,563	-2,690	-2,532	-2,124	-330	-4,064	-6,554	-6,610
OPERATING CASH FLOW (a)	**35,695**	**6,030**	**25,046**	**24,332**	**33,781**	**26,971**	**11,336**	**18,962**
Capex	-94,447	13,232	-1,195	-2,165	-3,192	-1,500	-1,500	-8,500
Free Cash Flow (FCF)	*-58,752*	*19,262*	*23,850*	*22,168*	*30,589*	*25,471*	*9,836*	*10,462*
Investments	14,257	-257	-1,179	-54	-1,310	-2,708	0	0
Non-operating Income	2,351	2,170	4,650	3,680	2,870	2,748	2,387	2,788
INVESTING CASH FLOW (b)	**-77,839**	**15,144**	**2,276**	**1,460**	**-1,632**	**-1,460**	**887**	**-5,712**
Debt Issuance/(Repaid)	-62,828	12,088	23,005	15,894	9,657	8,646	1,981	3,818
Interest Expenses	-14,981	-16,848	-14,559	-11,924	-10,511	-8,436	-8,420	-8,491
Other Financing activity	4	-551	0	0	0	0	0	0
Share Capital Issuance	-5,271	12,206	5,510	950	-12,009	0	0	1
Dividend	0	0	0	1,640	1,642	1,642	1,642	3,284
FINANCING CASH FLOW (c)	**42,579**	**-17,280**	**-32,054**	**-26,868**	**-32,177**	**-17,082**	**-10,400**	**-12,308**
NET CASH FLOW (a+b+c)	**435**	**3,895**	**-4,733**	**-1,075**	**-28**	**8,429**	**1,822**	**942**
Opening cash balance	3,514	3,949	7,843	3,110	2,036	2,007	10,436	12,259
Closing Cash & Equivalents	**3,948**	**7,843**	**3,110**	**2,035**	**2,008**	**10,436**	**12,259**	**13,201**

Source: Company, HSIE Research

KEY RATIOS

	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
PROFITABILITY (%)								
GPM	49.9	50.9	45.2	40.5	45.6	51.1	47.1	47.5
EBITDA Margin	41.0	40.2	34.3	31.2	35.7	41.7	38.3	38.6
EBIT Margin	32.3	28.5	22.3	18.5	21.6	25.6	25.9	26.2
APAT Margin	19.4	10.7	10.0	9.5	12.4	17.8	19.5	20.2
RoE	17.4	6.5	5.6	5.4	8.2	7.4	9.0	8.7
Core RoCE	17.4	6.5	5.6	5.4	8.2	7.4	9.0	8.7
RoCE	17.3	10.8	9.7	9.4	9.9	10.5	12.7	12.5
EFFICIENCY								
Tax Rate (%)	29.1	30.3	31.4	24.6	3.2	31.3	35.7	34.7
Asset Turnover (x)	0.5	0.3	0.3	0.4	0.4	0.4	0.4	0.4
Inventory (days)	24	26	24	18	28	27	29	29
Debtors (days)	105	96	52	57	93	90	85	80
Payables (days)	272	328	289	248	321	312	267	233
Cash Conversion Cycle (days)	18	75	21	25	49	66	91	111
Net Debt/EBITDA (x)	3.5	3.7	3.8	3.2	2.7	2.1	1.7	1.5
Net D/E	1.6	1.2	0.9	0.8	0.7	0.5	0.4	0.4
Interest Coverage	0.4	0.7	0.6	0.6	0.5	0.4	0.3	0.3
PER SHARE DATA								
EPS (INR/sh)	8.5	3.8	3.7	3.8	5.9	5.4	7.2	7.6
CEPS (INR/sh)	13.7	9.7	9.6	10.9	13.0	12.5	14.3	14.7
DPS (INR/sh)	0.0	0.0	0.0	1.0	1.0	1.0	1.0	2.0
BV (INR/sh)	52.0	63.7	67.7	72.1	70.9	76.4	83.6	91.1
VALUATION								
P/E	11.7	26.5	27.2	26.4	17.0	18.4	13.9	13.2
P/BV	1.9	1.6	1.5	1.4	1.4	1.3	1.2	1.1
EV/EBITDA	7.5	8.6	9.7	8.9	8.3	7.5	6.2	6.0
OCF/EV (%)	11.8	2.1	9.3	9.6	13.8	11.8	5.1	8.7
FCF/EV (%)	-19.4	6.7	8.9	8.7	12.5	11.2	4.4	4.8
Dividend Yield (%)	**0.0**	**0.0**	**0.0**	**1.0**	**1.0**	**1.0**	**1.0**	**2.0**

Source: Company, HSIE Research

Tata power

Re-allocating capital to predictable businesses

(TP INR 128; Buy)

The deleveraging process would redirects company's cash flows towards more predictable regulated businesses of power and distribution, where the company plans to incur a capex of INR200bn over FY20-25E. Along with growth in the solar sector, this would enable the company's EPC segment to flourish, given its proven track record and high market share. Furthermore, Mundra's self-sufficiency path to pare losses and upcoming opportunity across the discom privatisation space are the key growth trigger for Tata Power to excel, going ahead. While InvIT transaction missed the FY21 end target, the same is now anticipated to get executed in FY22, which would reduce the consolidated net debt to INR250bn from current INR363bn. We initiate coverage on Tata Power with a BUY rating, factoring in the growth in EPC business, higher regulated capex, reducing Mundra losses, debt reduction and merger benefits. We assign a SoTP TP of INR128 (+ 32% upside from the CMP).

Regulated equity expected to grow from INR72.9bn in FY20 to INR106.4bn by FY23 due to capex across T&D segment

Growth across regulated business to drive earnings going ahead - Tata Power's total regulated equity stands at INR72.9bn as of FY20. We expect this to grow to INR106.4 bn by FY23E. The bulk of the incremental regulated equity growth should be in the Transmission and Distribution segments. The company has laid out an INR200bn capex plan across all three regulated business segments (generation, distribution and transmission) over FY21-25 with a D/E ratio of 70:30. This capex would lead to an incremental INR5.2bn growth across regulated PAT over FY20-FY23E.

Well-placed to leverage the discom privatisation opportunity - The failure of states to lower AT&C losses could speed up the need for discom privatisation; we believe that Tata Power is well-placed to capitalise on opportunities arising from it. The company has proved its expertise in managing and turning around lossmaking discoms (Delhi, Ajmer and Mumbai) in the past. It recently outbid its peers and acquired a majority stake (51%) across all the 4 distribution circles in Odisha (CESU, SouthCo, WesCo, and NesCo). Tata Power is also the only company that has managed a discom turnaround in partnership with state governments (joint holding). We believe this gives the company an edge over competitors such as Adani Transmission, CESC and Torrent Power, which lack the experience of jointly working with state governments. Apart from UTs, there are a few other states like Punjab, Rajasthan, MP and UP which are working towards privatising their lossmaking discoms. We believe Tata Power is better placed, compared to its peer, to benefit from these upcoming opportunities.

Tata Power is the only company which has successfully turned around lossmaking discoms in partnership with the state government

Strong order book in solar EPC business to increase earnings multifold: Tata Power Solar is one of the largest EPC players in India and has been a major beneficiary of the growing thrust on solar capacity addition in the country. The segment has so far executed over 2.5GW of solar capacity for various developers (including for TPREL as well) and has a strong order book of 3GW in the pipeline valued at ~INR90bn. Tata Power itself plans to add at least 2GW of solar capacity p.a. while NTPC (which shares a major chunk of the company's EPC order book) plans to add 30GW of solar capacity over the next decade. Both these opportunities and robust capacity addition by other players provide a bright future growth outlook for its EPC segment. The company targets to enhance its market share in the EPC segment from current 16.5% to 20% over FY20-FY25 and aims to maintain an order book of 3.5GW-4GW every year. We have factored in revenue growth at 54.4% CAGR over FY20-FY23 to reach

Earnings across its EPC division is expected to increase at a CAGR of ~47% to INR3.9bn over FY20-23

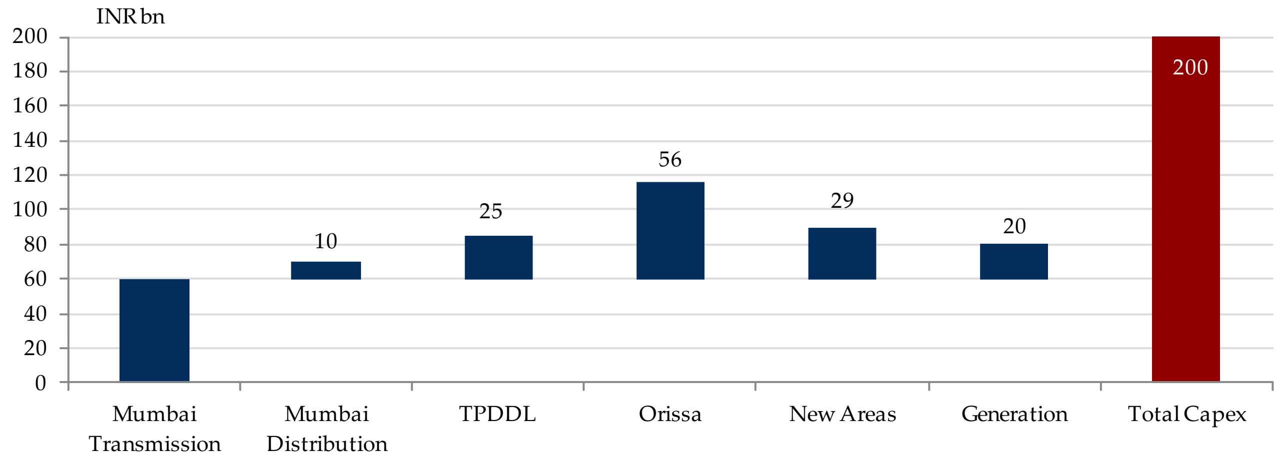
INR78.7bn, while EBITDA and PAT are expected to see CAGRs of 50.7% and 46.8% to INR6.5bn and INR3.9bn, respectively, in FY20-FY23

NPV of the aforementioned tax savings from merger would work out to INR25bn, translating to INR8/share

Earnings to benefit from Mundra's debt reduction along with merger proposal – a key trigger for upside Tata Power's proposal to merge Mundra UMPP with the parent entity will bring in significant tax savings and fiscal alignment through lower borrowing cost. Mundra UMPP has an accumulated loss of INR180bn, which would be utilised in the merged entity to offset tax expenses. The NPV of the aforementioned tax savings would work out to INR25bn, translating to a per share amount of INR8. Furthermore, the project's long-term debt is now reduced to INR37.9bn of bonds and debentures as the company has recently repaid INR41.5bn of its debt. The project has now turned cash positive due to lower interest cost, fall in under-recovery, and financial restructurings, which would be the primary upside catalyst, in our view.

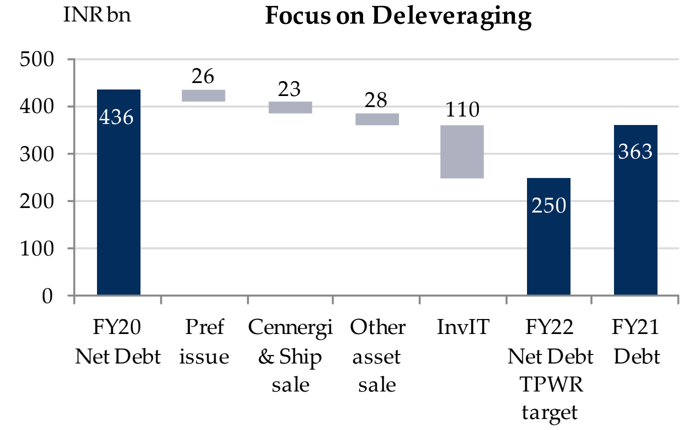
Asset monetisation on track while InvIT delayed to FY22: A significant portion of the company's debt that was to be transferred to InvIT (INR115bn) in FY21 has now been delayed to FY22 due to negotiation in the term sheets between the parties. InvIT would form a key piece of the jigsaw in management's attempt to deconsolidate debt and reduce it to more sustainable levels. However, its asset monetisation is on track as the company completed the sale of Cennergi and shipping companies and raised further capital through preferential issue to Tata Sons. The company has lowered its net debt by 17% in the past year to INR363bn in Q3FY21. In FY22, the company targets to further monetise its assets in the Strategic Engineering Division, BSSR mine and hydro plants in Zambia and Georgia. Accordingly, consolidated net debt/equity should fall from 2.3x in FY20 to ~1.2x by FY22E and further to 1.0x by FY23.

Exhibit-55: Capex across segments over FY20-25 (INR Bn)



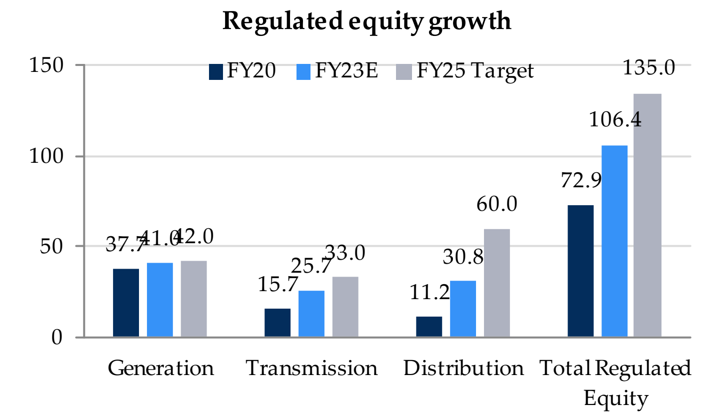
Source: Company, HSIE Research

Exhibit-56: Deleveraging process



Source: Company, HSIE Research

Exhibit-57: Regulated equity growth



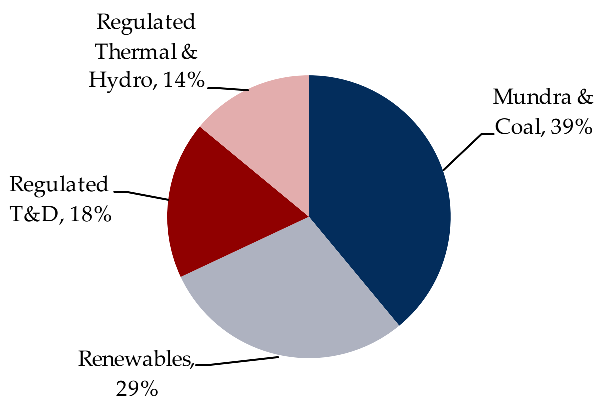
Source: Company, HSIE Research

Exhibit-58: Consolidated revenue to see 6.5% CAGR over FY20-23E

Year ending March (fig in INR mn)	FY20	FY21E	FY22E	FY23E	CAGR FY20-23E
Tata Power (Standalone)	77,264	77,497	85,194	87,811	4.4%
CGPL (Mundra UMPP)	70,169	67,489	74,363	75,275	2.4%
MPL (Maithon Power)	27,412	26,138	31,015	31,515	4.8%
TPDDL (Delhi Discom)	78,880	81,598	85,325	89,254	4.2%
TPTCL (Power Trading)	40,693	42,728	44,864	47,108	5.0%
Tata Power Solar (Solar Mfg)	21,407	25,688	60,900	78,750	54.4%
SPV Renewable project*	9,175	10,256	10,462	10,671	5.2%
Others	5,880	8,520	8,520	8,520	13.2%
Elimination	-83,151	-76,188	-76,122	-77,203	-2.4%
Gross Sales	**2,91,364**	**2,86,613**	**3,24,520**	**3,51,701**	**6.5%**

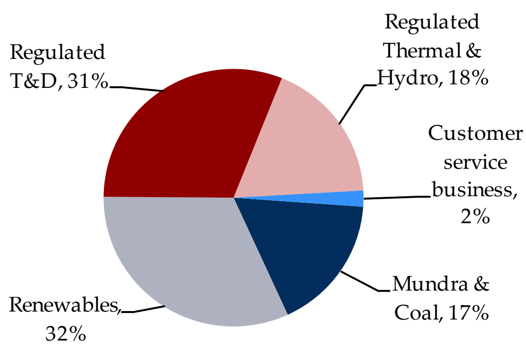
Source: Company, HSIE Research

Exhibit-59: Capital allocation - FY20



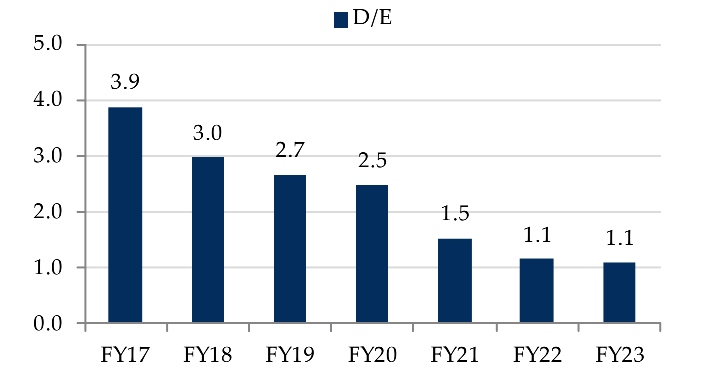
Source: Company, HSIE Research

Exhibit-60: Capital allocation - FY25



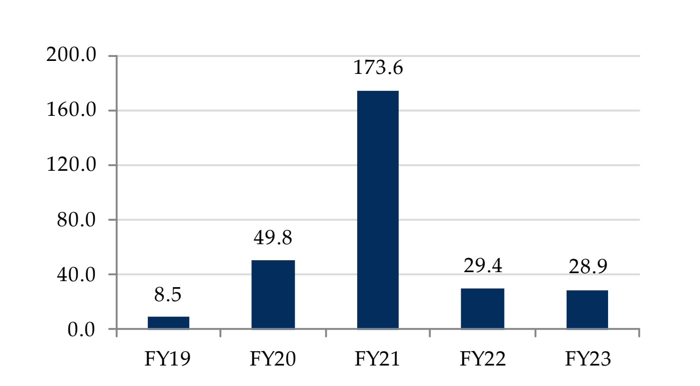
Source: Company, HSIE Research

Exhibit-61: D/E trend (x)



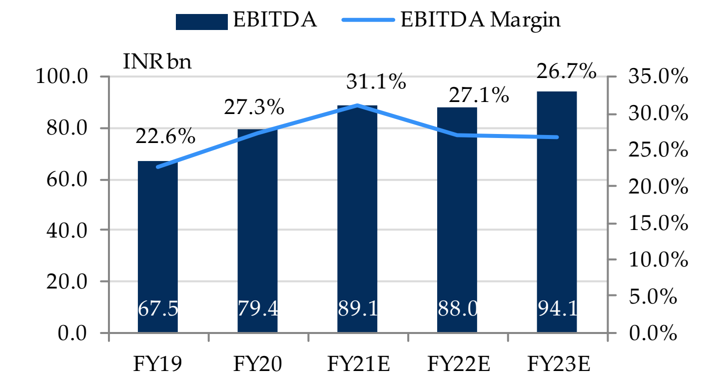
Source: Company, HSIE Research

Exhibit-62: FCF trend (INR Bn)



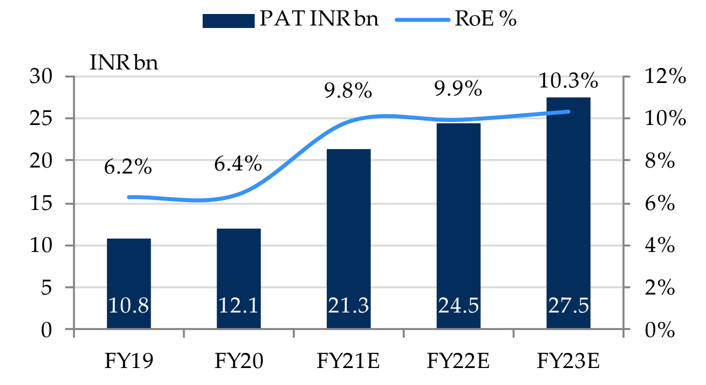
Source: Company, HSIE Research

Exhibit-63: EBITDA (INR bn) and PAT margin (%)



Source: Company, HSIE Research

Exhibit-64: PAT (INR bn) & RoE (%)



Source: Company, HSIE Research

Exhibit-65: SoTP Valuation

Business	Segment	Tata power share (%)	Method	Regulated Equity INR bn	RoE	Multiple (x)	Implied Valn (INR bn)	Value/ shr (INR)
Mumbai Operations	Generation and T&D	100%	P/BV	43.0	17.5%	1.9	80	25
Mumbai other segments (Wind, Jojobera, haldia)	Generation	100%	P/BV	7.1	16.0%	1.7	12	4
Powerlinks - 51% stake	Transmission JV	51%	P/BV	4.7	17.9%	1.9	5	1
Delhi Distribution (NDPL)	Distribution Licensee	51%	P/BV	16.9	16.9%	1.8	15	5
IEL - 74% stake	Captive – Tata Steel	74%	P/BV	6.9	16.0%	1.7	9	3
Maithon Power	Power generation	74%	DCF				29	9
Bumi stake	Coal mining		EV/EBITDA			4	65	20
Orissa (CESU, WESCO, SOUTCO. NESCO)	Distribution Licensee	51%	DCF				10	3
4GW Mundra UMPP	Power Generation	100%	DCF				(8)	-2
Tata Power Trading	Trading		P/E			10	4.1	1
International Power Ventures	Power Generation	50%	P/BV	6.5	15.0%	1.5	10	3
Renewable			P/BV	53.0				
TPREL	Power Generation		P/BV	31.8	2.9%	0.9	14	4
WREL (Welspun Acq)	Power Generation		P/BV	21.2	14.2%	1.4	15	5
Tata Solar Mfg/EPC	EPC	100%	P/E			10	39	12
Investments	% stake holding							
Tata Projects stake	EPC	48%	EV/EBITDA			8	26	8
Other investments (MFs)							13	4
Cash on Books FY20							21	7
Sale Proceeds : Cynergi + Shipping							24	8
Tax saving benefit on Mundra merger							25	8
TPWR SOTP Valuation							**408**	**128**

Financials (Standalone)

INCOME STATEMENT

INR mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Net Revenues	**2,86,929**	**2,78,977**	**2,68,403**	**2,98,811**	**2,91,364**	**2,86,613**	**3,24,520**	**3,51,701**
Growth (%)	***-14.9***	***-2.8***	***-3.8***	***11.3***	***-2.5***	***-1.6***	***13.2***	***8.4***
Power&Fuel	1,89,004	1,81,716	1,68,113	1,95,367	1,74,101	1,64,134	2,00,122	2,18,866
Purchase of electricity	91,575	82,190	55,973	66,078	64,345	59,820	62,716	65,753
Employee Cost	12,275	12,959	13,819	13,391	14,406	13,324	13,724	14,135
O&M and Other expenses	21,577	22,052	23,741	22,602	23,428	20,063	22,716	24,619
EBITDA	**64,073**	**62,250**	**62,729**	**67,451**	**79,428**	**89,092**	**87,958**	**94,080**
EBITDA Margin (%)	***22.3***	***22.3***	***23.4***	***22.6***	***27.3***	***31.1***	***27.1***	***26.7***
EBIDTA Growth (%)	***-42.4***	***-2.8***	***0.8***	***7.5***	***17.8***	***12.2***	***-1.3***	***7.0***
Depreciation	16,487	19,886	23,462	23,931	26,336	26,734	28,444	30,675
EBIT	**47,586**	**42,364**	**39,268**	**43,520**	**53,093**	**62,358**	**59,514**	**63,405**
Other Income (Including EO Items)	7,541	2,022	4,327	3,862	5,626	2,398	6,988	2,105
Interest	32,358	31,140	37,615	38,252	44,937	40,116	34,814	30,101
PBT	**13,017**	**3,369**	**1,881**	**10,163**	**11,894**	**24,641**	**31,689**	**35,410**
Tax	6,803	-458	1,643	10,876	6,360	7,392	11,091	12,393
RPAT	**6,213**	**3,827**	**238**	**-713**	**5,535**	**17,248**	**20,598**	**23,016**
Rate regulated activities	1,860	12,173	15,539	14,018	9,526	6,365	6,700	7,419
EO (Loss) / Profit (Net of Tax)	-978	-295	11,025	12,751	-1,896	0	0	0
APAT	**7,095**	**15,705**	**26,803**	**26,057**	**13,164**	**23,613**	**27,297**	**30,436**
APAT Growth (%)	*n.a.*	*98.2*	*-1.4*	*-15.7*	*13.2*	*56.8*	*15.6*	*11.5*
AEPS	**3.0**	**5.9**	**5.8**	**4.9**	**5.6**	**7.4**	**8.5**	**9.5**
EPS Growth (%)	*n.a.*	*98.2*	*-1.4*	*-15.7*	*13.2*	*56.8*	*15.6*	*11.5*

Source: Company, HSIE Research

BALANCE SHEET

INR mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
SOURCES OF FUNDS								
Share Capital	2,705	2,705	2,705	2,705	2,705	3,196	3,196	3,196
Reserves	1,28,434	1,30,090	1,61,294	1,79,507	1,92,955	2,34,470	2,52,596	2,73,304
Total Shareholders' Funds	**1,31,139**	**1,32,795**	**1,63,999**	**1,82,212**	**1,95,660**	**2,37,666**	**2,55,792**	**2,76,500**
Long-term Debt	4,16,209	5,14,453	4,85,892	4,85,060	4,83,759	3,63,259	2,91,599	3,01,599
Short-term Debt								
Total Debt	**4,16,209**	**5,14,453**	**4,85,892**	**4,85,060**	**4,83,759**	**3,63,259**	**2,91,599**	**3,01,599**
Deferred revenues & Regulatory deferral A/C credit balance	45,269	17,511	19,053	19,598	21,623	21,623	21,623	21,623
TOTAL SOURCES OF FUNDS	**6,18,430**	**6,83,449**	**6,89,098**	**7,08,537**	**7,24,363**	**6,48,158**	**5,97,420**	**6,31,088**
APPLICATION OF FUNDS								
Net Block	**4,65,786**	**5,19,602**	**4,94,350**	**4,98,470**	**5,39,194**	**4,49,350**	**4,39,473**	**4,30,198**
CWIP	41,676	19,232	16,526	25,757	16,115	8,115	18,115	18,115
Investments	33,488	1,19,570	1,24,289	1,30,181	1,45,348	1,22,248	1,22,248	1,22,248
Other Non-Current Assets								
Total Non-current Assets	**5,40,949**	**6,58,405**	**6,35,165**	**6,54,408**	**7,00,658**	**5,79,714**	**5,79,837**	**5,70,562**
Inventories	18,061	15,996	16,231	17,064	17,524	15,705	16,004	19,271
Debtors	1,42,895	1,21,959	1,07,027	1,18,378	1,13,579	94,229	1,06,692	1,20,445
Cash & Equivalents	12,108	9,540	11,858	7,875	20,942	86,508	16,756	28,269
ST Loans & Advances	62,935	41,848	49,820	43,001	44,037	43,188	44,455	52,996
Total Current Assets	**2,35,999**	**1,89,343**	**1,84,935**	**1,86,318**	**1,96,081**	**2,39,630**	**1,83,906**	**2,20,982**
Creditors	1,36,721	1,59,516	1,26,068	1,27,083	1,67,138	1,64,900	1,60,037	1,54,170
Provisions	21,797	4,783	4,934	5,106	5,238	6,286	6,286	6,286
Total Current Liabilities	**1,58,518**	**1,64,299**	**1,31,002**	**1,32,189**	**1,72,376**	**1,71,186**	**1,66,323**	**1,60,456**
Net Current Assets	**77,481**	**25,045**	**53,933**	**54,129**	**23,705**	**68,444**	**17,583**	**60,526**
TOTAL APPLICATION OF FUNDS	**6,18,430**	**6,83,449**	**6,89,098**	**7,08,537**	**7,24,363**	**6,48,158**	**5,97,420**	**6,31,088**

Source: Company, HSIE Research

CASH FLOW STATEMENT

INR Mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Reported PBT	13,017	3,369	1,881	10,163	11,894	24,641	31,689	35,410
Non-operating & EO Items	7,541	2,022	4,327	3,862	5,626	2,398	6,988	2,105
Interest Expenses	32,358	31,140	37,615	38,252	44,937	40,116	34,814	30,101
Depreciation	16,487	19,886	23,462	23,931	26,336	26,734	28,444	30,675
Working Capital Change	16,203	22,112	-25,029	-3,635	45,516	20,828	-18,891	-31,430
Tax Paid	-6,803	458	-1,643	-10,876	-6,360	-7,392	-11,091	-12,393
OPERATING CASH FLOW (a)	**74,151**	**70,142**	**63,639**	**45,738**	**73,753**	**1,02,527**	**57,976**	**50,257**
Capex	-34,882	-51,259	4,497	-37,283	-23,948	71,110	-28,567	-21,400
Free Cash Flow (FCF)	*39,269*	*18,883*	*68,136*	*8,455*	*49,806*	*1,73,638*	*29,409*	*28,857*
Investments	1,754	-73,910	10,820	8,127	-5,642	29,465	6,700	7,419
Non-operating Income	7,541	2,022	4,327	3,862	5,626	2,398	6,988	2,105
INVESTING CASH FLOW (b)	**-18,181**	**-74,190**	**-15,179**	**-3,192**	**-5,429**	**1,02,974**	**-14,879**	**-11,875**
Debt Issuance/(Repaid)	-7,210	98,244	-28,561	-832	-1,301	-1,20,500	-71,660	10,000
Interest Expenses	-32,358	-31,140	-37,615	-38,252	-44,937	-40,116	-34,814	-30,101
Other Financing activity	-8,447	-61,931	24,136	-3,811	-4,513	0	0	0
Share Capital Issuance	0	0	0	0	0	26,000	0	0
Dividend	-4,110	-4,156	-4,165	-4,104	-5,006	-5,319	-6,376	-6,767
FINANCING CASH FLOW (c)	**-52,125**	**1,018**	**-46,205**	**-46,998**	**-55,757**	**-1,39,934**	**-1,12,849**	**-26,868**
NET CASH FLOW (a+b+c)	**3,974**	**-2,567**	**2,317**	**-3,983**	**13,067**	**65,567**	**-69,752**	**11,513**
Opening cash balance	8,133	12,108	9,540	11,858	7,874	20,942	86,508	16,756
Closing Cash & Equivalents	**12,108**	**9,540**	**11,858**	**7,874**	**20,942**	**86,508**	**16,756**	**28,269**

Source: Company, HSIE Research

KEY RATIOS

	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
PROFITABILITY (%)								
GPM	2.2	5.4	16.5	12.5	18.2	21.9	19.0	19.1
EBITDA Margin	22.3	22.3	23.4	22.6	27.3	31.1	27.1	26.7
EBIT Margin	16.6	15.2	14.6	14.6	18.2	21.8	18.3	18.0
APAT Margin	2.2	1.4	0.1	-0.2	1.9	6.0	6.3	6.5
RoE	5.3	10.6	9.3	6.2	6.4	9.8	9.9	10.3
Core RoCE	4.8	4.9	4.6	4.0	3.8	3.2	2.5	2.3
RoCE	4.6	6.4	6.0	5.1	5.5	7.0	6.9	6.9
EFFICIENCY								
Tax Rate (%)	52.3	-13.6	87.3	107.0	53.5	30.0	35.0	35.0
Asset Turnover (x)	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.6
Inventory (days)	23	21	22	21	22	20	18	20
Debtors (days)	182	160	146	145	142	120	120	125
Payables (days)	224	269	224	200	288	305	247	218
Cash Conversion Cycle (days)	83	20	57	57	3	-23	1	33
Net Debt/EBITDA (x)	6.3	8.1	7.6	7.1	5.8	3.1	3.1	2.9
Net D/E	3.2	3.9	3.0	2.7	2.5	1.5	1.1	1.1
Interest Coverage	0.6	0.7	0.9	0.8	0.8	0.6	0.5	0.5
PER SHARE DATA								
EPS (INR/sh)	3.0	5.9	5.8	4.9	5.6	7.4	8.5	9.5
CEPS (INR/sh)	9.1	13.3	14.5	13.8	15.3	15.8	17.4	19.1
DPS (INR/sh)	1.5	1.5	1.5	1.5	1.9	1.8	1.8	1.8
BV (INR/sh)	48.5	49.1	60.6	67.4	72.3	74.4	80.0	86.5
VALUATION								
P/E	32.5	16.4	16.7	19.8	17.4	13.1	11.4	10.2
P/BV	2.0	2.0	1.6	1.4	1.3	1.3	1.2	1.1
EV/EBITDA	10.4	12.3	11.7	11.0	9.1	6.6	6.7	6.2
OCF/EV (%)	11.1	9.1	8.6	6.2	10.2	17.5	9.9	8.6
FCF/EV (%)	5.9	2.5	9.2	1.1	6.9	29.6	5.0	4.9
Dividend Yield (%)	**1.6**	**1.6**	**1.6**	**1.6**	**1.9**	**1.8**	**1.8**	**1.8**

Source: Company, HSIE Research

Torrent Power

An integrated contender with a healthy balance sheet

(TP INR 439; ADD)

We initiate coverage on Torrent Power (TPW) with an ADD rating, deriving a SoTP TP of INR439, which implies an upside of 8% from its CMP. Our positive recommendation on the stock is premised on (1) strong and diverse portfolio, providing a healthy growth opportunity across segments; (2) one of the healthiest balance sheets in the private power sector; (3) growing thrust on the renewable segment; and (4) rising opportunity across the discom privatisation and franchisee (DF). We expect TPW's PAT to grow at a 14.9% CAGR over FY20-23E, led by growth across its renewable portfolio, improvement in DF, and steady growth in the regulated distribution business. The RoE shall expand from 13% in FY20 to 14.7% in FY23E, while FCF will be lower at INR41bn due to renewable capex.

Key Investment Rationale

TPW is well-placed to benefit from the growing opportunity across the renewable and discom privatisation segment

- **Present across entire value chain**: TPW has assets spanning across distribution (regulated and DF) and generation business (with 78% capacity having LT PPA). It has a regulated electricity distribution license in Ahmedabad (including Gandhinagar) and Surat in Gujarat where it is the sole operator. The AT&C losses across these circles are amongst the lowest in the country with the tightest regulatory norms. Hence, the risk of any further stringency in these norms looks very low. TPW generates 14% RoE on its regulated equity in these circles. Apart from this, the company has DF business in Agra, Bhiwandi and Shil-Kalwa-Mumbra Area (SMK), which has been witnessing sharp improvement across its operational performance. Its DF business is not subject to regulatory norms; hence, the returns have a good potential. TPW also has installed generation capacity of 3.9 GW (Thermal – 3.1GW and RES – 0.8GW) and another 550MW of solar project under development stage, which has been won through competitive bidding. With a diverse presence, TPW is well-placed to benefit from the growth opportunity across renewables and discom privatisation.

Regulated equity expected to grow at a CAGR of 11.3% across its Ahmedabad and Surat distribution business

- **Regulated equity to grow at a CAGR of 9% over FY20-23**: TPW has planned a Capex of INR15bn p.a over the next 2-3 years, largely towards enhancing and maintaining its existing licensed distribution network. The Capex would help the company meet the rising peak power demand of Ahmedabad and Surat, which have been increasing at a CAGR of 5% over the past five years to 2.8GW in FY20. This Capex would increase the regulated equity base of its distribution segment by 11.3% CAGR over FY20-FY23E to INR35.5bn across its distribution business and by 9% across both generation and distribution business. As the company earns 14% fixed RoE on its regulated equity, the increased Capex would enhance distribution segments' regulated PAT by ~4% CAGR over FY20-23E to INR5.5bn.

EBITDA/PAT is expected to grow at 5.9%/15.8% CAGR over FY20-23

- **75% of EBITDA comes from stable and regulated business**: TPW generates ~75% of its EBITDA from the regulated distribution business (30%), LT PPA generation business (29%) and stable renewable business (15% - largely from high profitable Feed-in-tariff PPAs). DF segment, which is witnessing significant improvement across its AT&C losses, contributes 25% to its consolidated EBITDA. Going ahead, the EBITDA contribution would continue to grow across its distribution (from enhanced regulated Capex) and renewable segment (550MW under development). This provides a stable and strong EBITDA/PAT growth visibility of 5.9%/15.8% CAGR over FY20-23 for TPW.

DF PAT is expected to grow at a CAGR of 53.8% over FY21-23 to INR5.5bn

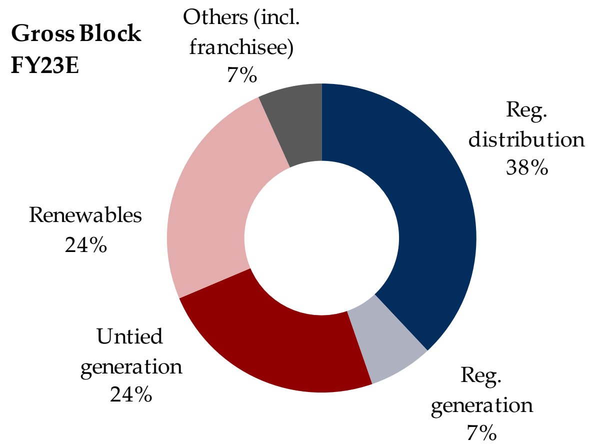
- **Well-placed to grab the opportunity across renewable and discom privatisation space**: TPW was among the first company to venture into the DF business in India by taking over Bhiwandi and Agra circle and then successfully turning them into a profitable venture by significantly lowering AT&C losses. In FY20, the company won DF bid for SMK circle in Maharashtra and took over the operation. Management expects to achieve breakeven in SMK circle by FY23. TPW's DF PAT is expected to grow at a CAGR of 53.8% over FY21-FY23 to INR5.5bn. TPW has also successfully won the bid for the union territory of Daman & Diu, Dadra and Nagar Haveli circle in March'21; however, the handover process has been delayed due to the stay imposed by the high court. TPW has over decades of experience in managing and operating lossmaking discoms and turning them around into a profitable segment. Considering the central government's thrust to privatise lossmaking discoms, TPW will be a strong contender to win such bids.

  Similarly, likewise all conventional gencos, TPW is also aggressively looking to expand its generation portfolio across the renewable segment and improve its score in the ESG metrics. The company has recently won three renewable bids totaling 550 MW (120 MW – Wind and 400MW – Solar), which are expected to be completed by FY23, provided discoms sign PPA.

Net D/E is 0.8x currently and has never exceeded 1.2x. Net debt/EBITDA also is attractive at 2.0x

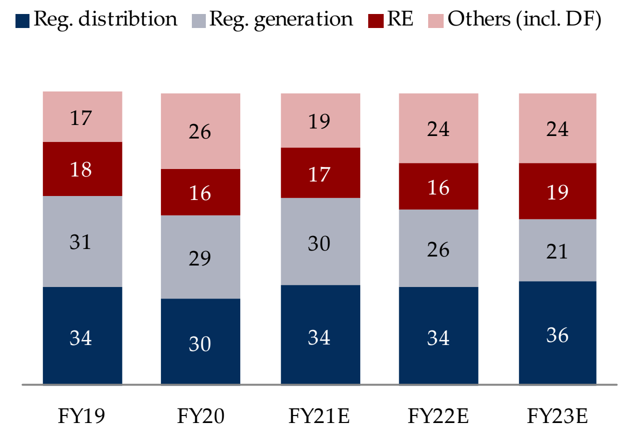
- **Deleveraged balance sheet provides strong base for growth**: TPW has one of the strongest balance sheets amongst the private sector power players with a net D/E of 0.8x (Industry average ~2x). The net D/E has never exceeded ~1.2x despite the Capex phase and unutilised assets. Its net debt/EBITDA is also very competitive at ~2x, largely led by its strong cash flow from operations. We expect its net D/E to remain low at 0.6x despite increased Capex plan, going ahead (INR75bn over FY20-23), due to generation of strong cash flow from operation (INR138bn over FY20-23). Low D/E would aid the company to increase its leverage for future growth as well. Also, with its vast experience across the power sector value chain – distribution, conventional generation and renewable projects – TPW is well-placed to capture potential growth opportunities.

Exhibit-66: Gross Block - FY23E



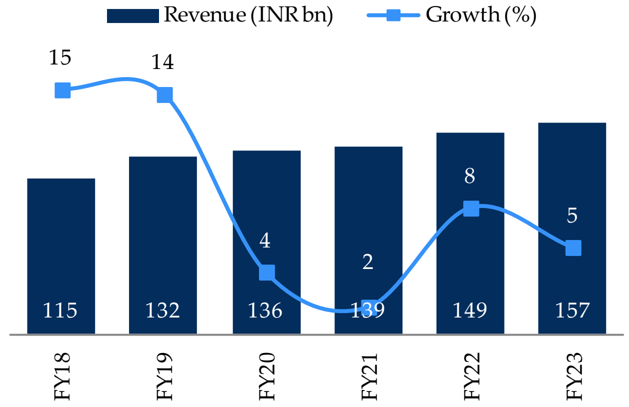
Source: Company, HSIE Research

Exhibit-67: 75% EBITDA from regulated and RE segment (%)



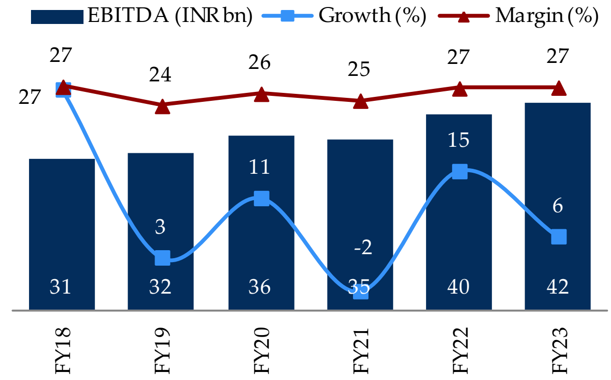
Source: Company, HSIE Research

Exhibit-68: Revenue and growth



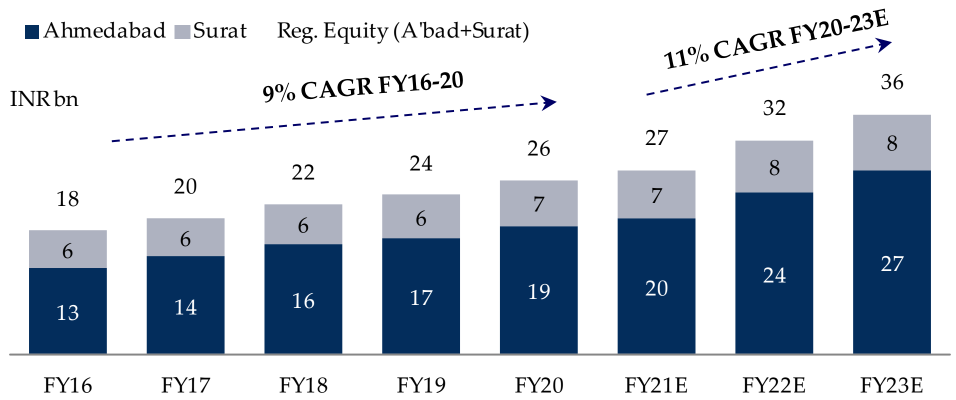
Source: Company, HSIE Research

Exhibit-69: EBITDA, growth and margin trend



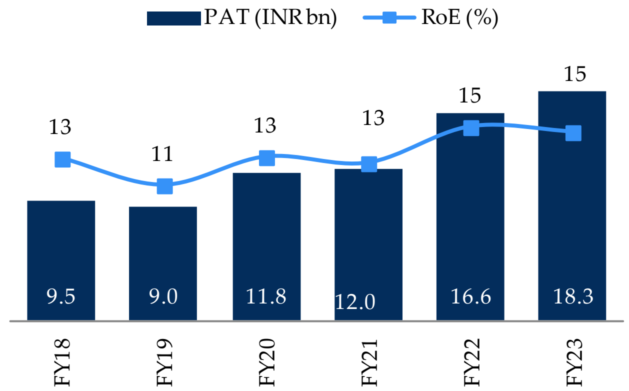
Source: Company, HSIE Research

Exhibit-70: Regulated equity growth across Ahmedabad – Surat Circle



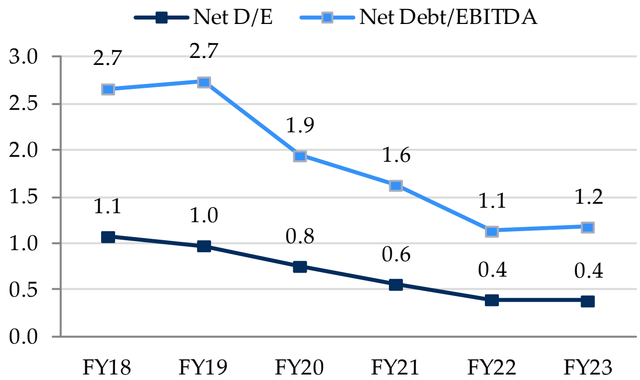
Source: Company, HSIE Research

Exhibit-71: PAT and ROE trend



Source: Company, HSIE Research

Exhibit-72: Net D/E and Net Debt/EBITDA



Source: Company, HSIE Research

Valuation: TPW's presence across different segments of the sector provides it with a strong platform for future growth. In our view, the company is well poised to capitalise on opportunities stemming from renewable energy growth and distribution privatisation. We value the stock on an SOTP basis at INR439/share, implying an upside of 8%, and thus initiate coverage with an ADD rating. The stock is currently trading at a FY23 standalone P/BV of 1.5x and a P/E of 10.7x.

We derive a SoTP TP of INR439/share, which implies an upside of 8% from CMP. The stock is currently trading at a valuation of 1.5x FY23 BV and 10.7x FY23 PE

Exhibit-73: Valuation table

FY23 basis	Reg. Equity INR m	RoE %	Growth %	Multiple x	Equity Value INR m	Norm. Debt INR m	EV INR m
Regulated businesses	**46,397**			**(RoE-g)/(CoE-g)**	**57,845**	**41,345**	**1,04,771**
Distribution							
Ahmedabad	20,022	15.0	4.0	1.4	28,418	21,767	50,185
Surat	7,250	15.0	4.0	1.4	10,290	4,025	14,315
Regulatory assets	7,500				7,500	0	7,500
Generation							
Sabarmati	4,515	14.0	0.0	0.5	2,258	0	2,258
Sugen	7,110	15.5	0.0	1.3	9,380	15,553	24,932
UnoSugen						5,581	5,581
Others businesses	**EBITDA INR m**						
RE projects	8,214			8.0			65,710
Bhiwandi and Agra DFs	9,566			8.0			76,531
Sugen PPA efficiency earnings	2,598			8.0			20,785
Others							
EV							**2,67,797**
Less: Net debt							56,591
MCap							**2,11,206**
No. of shares							481
Value per share							**439**

Financials (Standalone)

INCOME STATEMENT

INR mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Net Revenues	**1,17,158**	**1,00,536**	**1,15,121**	**1,31,510**	**1,36,406**	**1,38,654**	**1,49,065**	**1,56,788**
Growth (%)	***12.7***	***-14.2***	***14.5***	***14.2***	***3.7***	***1.6***	***7.5***	***5.2***
Power&Fuel	2,355	1,970	2,334	2,599	2,506	2,631	2,763	2,901
Purchase of electricity	33,062	36,342	35,848	41,165	37,094	38,949	40,896	42,941
Employee Cost	3,907	4,172	4,670	4,864	5,321	5,587	5,866	6,159
O&M and Other expenses	47,218	33,449	41,097	50,887	55,925	56,704	59,540	62,517
EBITDA	**30,616**	**24,603**	**31,171**	**31,995**	**35,561**	**34,783**	**40,001**	**42,270**
EBITDA Margin (%)	***26.1***	***24.5***	***27.1***	***24.3***	***26.1***	***25.1***	***26.8***	***27.0***
EBIDTA Growth (%)	***47.2***	***-19.6***	***26.7***	***2.6***	***11.1***	***-2.2***	***15.0***	***5.7***
Depreciation	9,157	10,059	11,315	12,265	13,043	13,512	13,886	14,801
EBIT	**21,459**	**14,544**	**19,856**	**19,730**	**22,518**	**21,271**	**26,115**	**27,469**
Other Income (Including EO Items)	2,819	1,909	2,636	1,896	1,776	1,487	2,235	2,477
Interest	11,308	10,580	8,482	8,989	9,546	7,110	6,840	6,165
PBT	**12,970**	**5,873**	**14,010**	**12,636**	**14,748**	**15,648**	**21,511**	**23,782**
Tax	3,874	1,576	4,489	3,598	-7,040	3,599	4,947	5,470
RPAT	**9,022**	**4,298**	**9,521**	**9,038**	**11,789**	**12,049**	**16,563**	**18,312**
Rate regulated activities	0	0	0	0	0	0	0	0
EO (Loss) / Profit (Net of Tax)	-74	0	0	0	-10,000	0	0	0
APAT	**8,928**	**4,290**	**9,423**	**8,989**	**1,741**	**12,041**	**16,555**	**18,303**
APAT Growth (%)	*165.2*	*-52.0*	*119.7*	*-4.6*	*-80.6*	*591.4*	*37.5*	*10.6*
AEPS	**18.6**	**8.9**	**19.6**	**18.7**	**3.6**	**25.1**	**34.4**	**38.1**
EPS Growth (%)	*165.2*	*-52.0*	*119.7*	*-4.6*	*-80.6*	*591.4*	*37.5*	*10.6*

BALANCE SHEET

INR mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
SOURCES OF FUNDS								
Share Capital	4,806	4,806	4,806	4,806	4,806	4,806	4,806	4,806
Reserves	59,898	64,115	72,389	84,896	86,729	95,886	1,09,557	1,24,977
Total Shareholders' Funds	**64,705**	**68,921**	**77,195**	**89,702**	**91,535**	**1,00,693**	**1,14,364**	**1,29,783**
Long-term Debt	68,119	70,145	74,385	77,721	62,397	63,997	57,597	51,997
Short-term Debt	17,030	17,536	18,596	19,430	15,599	15,999	14,399	12,999
Total Debt	**85,148**	**87,681**	**92,981**	**97,152**	**77,996**	**79,996**	**71,996**	**64,996**
Deferred tax liability	13,061	13,363	14,799	15,654	5,528	6,393	7,583	7,583
TOTAL SOURCES OF FUNDS	**1,63,215**	**1,70,255**	**1,85,334**	**2,02,882**	**1,75,416**	**1,87,446**	**1,94,315**	**2,02,743**
APPLICATION OF FUNDS								
Net Block	**1,51,295**	**1,68,040**	**1,78,707**	**1,80,139**	**1,75,693**	**1,66,217**	**1,69,052**	**1,88,363**
CWIP	2,133	3,321	3,925	3,593	5,676	10,801	10,801	10,801
Investments	50	66	1,923	2,876	1,160	1,160	1,160	1,160
Other Non-Current Assets	100	0	0	0	0	0	0	0
Total Non-current Assets	**1,53,578**	**1,71,427**	**1,84,555**	**1,86,607**	**1,82,528**	**1,78,177**	**1,81,012**	**2,00,324**
Inventories	4,202	3,694	4,549	6,270	5,982	5,318	5,718	6,014
Debtors	10,570	9,751	11,305	12,297	12,798	13,296	14,294	15,034
Cash & Equivalents	12,856	9,336	9,982	9,549	8,879	23,405	26,668	15,214
ST Loans & Advances	14,912	13,778	15,500	30,817	26,044	26,044	26,044	26,044
Total Current Assets	**42,540**	**36,559**	**41,335**	**58,933**	**53,702**	**68,062**	**72,723**	**62,306**
Creditors	9,520	9,054	7,534	8,998	11,476	9,454	10,082	10,547
Provisions	23,382	28,677	33,023	33,661	49,339	49,339	49,339	49,339
Total Current Liabilities	**32,902**	**37,731**	**40,556**	**42,659**	**60,815**	**58,793**	**59,421**	**59,886**
Net Current Assets	**9,637**	**-1,172**	**779**	**16,274**	**-7,113**	**9,269**	**13,303**	**2,420**
TOTAL APPLICATION OF FUNDS	**1,63,215**	**1,70,255**	**1,85,334**	**2,02,882**	**1,75,416**	**1,87,446**	**1,94,315**	**2,02,743**

Source: Company, HSIE Research

CASH FLOW STATEMENT

INR Mn	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Reported PBT	12,896	5,873	14,010	12,636	4,748	15,648	21,511	23,782
Non-operating & EO Items	-2,805	-257	-80	-270	-37	0	0	0
Interest Expenses	11,308	10,580	8,482	8,989	9,546	7,110	6,840	6,165
Depreciation	9,157	10,059	11,315	12,265	13,043	13,512	13,886	14,801
Working Capital Change	-534	236	-922	-4,729	1,258	-1,856	-770	-571
Tax Paid	-3,167	-1,056	-3,200	-2,859	-2,977	-2,734	-3,758	-5,470
OPERATING CASH FLOW (a)	**25,503**	**24,168**	**27,635**	**24,246**	**36,354**	**30,193**	**35,473**	**36,229**
Capex	-16,349	-21,745	-23,866	-19,887	-14,916	-9,161	-16,721	-34,112
Free Cash Flow (FCF)	*9,155*	*2,423*	*3,769*	*4,359*	*21,438*	*21,033*	*18,752*	*2,117*
Investments	-13	-16	-17	-19	-19	0	0	0
Non-operating Income	1,612	845	8	2,962	3,394	1,487	2,235	2,477
INVESTING CASH FLOW (b)	**-14,750**	**-20,916**	**-23,875**	**-16,944**	**-11,541**	**-7,674**	**-14,486**	**-31,635**
Debt Issuance/(Repaid)	-8,055	2,442	5,276	4,175	-8,535	2,000	-8,000	-7,000
Interest Expenses	-11,818	-10,334	-8,285	-9,076	-8,643	-7,110	-6,840	-6,165
Other Financing activity	1,686	1,182	1,205	1,660	1,800	0	0	0
Share Capital Issuance	0	0	0	0	0	0	0	0
Dividend	-3,442	-62	-1,310	-2,925	-9,683	-2,884	-2,884	-2,884
FINANCING CASH FLOW (c)	**-21,629**	**-6,771**	**-3,114**	**-6,166**	**-25,062**	**-7,993**	**-17,723**	**-16,048**
NET CASH FLOW (a+b+c)	**-10,876**	**-3,520**	**646**	**1,136**	**-249**	**14,526**	**3,263**	**-11,454**
Opening cash balance	23,732	12,856	9,336	9,982	9,549	8,879	23,405	26,668
Closing Cash & Equivalents	**12,856**	**9,336**	**9,982**	**11,118**	**9,300**	**23,405**	**26,668**	**15,214**

Source: Company, HSIE Research

KEY RATIOS

	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
PROFITABILITY (%)								
GPM	69.8	61.9	66.8	66.7	71.0	70.0	70.7	70.8
EBITDA Margin	26.1	24.5	27.1	24.3	26.1	25.1	26.8	27.0
EBIT Margin	18.3	14.5	17.2	15.0	16.5	15.3	17.5	17.5
APAT Margin	7.6	4.3	8.2	6.8	1.3	8.7	11.1	11.7
RoE	13.7	6.4	12.9	10.8	13.0	12.5	15.4	15.0
Core RoCE	9.8	6.6	8.4	8.5	9.8	9.5	11.3	11.5
RoCE	9.8	6.6	8.4	8.5	9.8	9.5	11.3	11.5
EFFICIENCY								
Tax Rate (%)	30.0	26.8	32.0	28.5	-148.3	23.0	23.0	23.0
Asset Turnover (x)	0.7	0.6	0.6	0.6	0.8	0.7	0.8	0.8
Inventory (days)	13	13	14	17	16	14	14	14
Debtors (days)	33	35	36	34	34	35	35	35
Payables (days)	23	31	21	22	28	22	22	22
Cash Conversion Cycle (days)	23	18	29	30	22	27	27	27
Net Debt/EBITDA (x)	2.4	3.2	2.7	2.7	1.9	1.6	1.1	1.2
Net D/E	1.1	1.1	1.1	1.0	0.8	0.6	0.4	0.4
Interest Coverage	2.7	2.3	3.7	3.6	3.7	4.9	5.8	6.9
PER SHARE DATA								
EPS (Rs/sh)	18.8	8.9	19.8	18.8	24.5	25.1	34.5	38.1
CEPS (Rs/sh)	37.6	29.9	43.1	44.2	30.8	53.2	63.3	68.9
DPS (Rs/sh)	6.0	0.0	2.2	5.0	5.0	5.0	5.0	5.0
BV (Rs/sh)	134.6	143.4	160.6	186.6	190.5	209.5	238.0	270.0
VALUATION								
P/E	12.5	25.8	11.7	21.8	112.6	16.3	11.8	10.7
P/BV	1.7	1.6	1.4	2.2	2.1	1.9	1.7	1.5
EV/EBITDA	6.0	7.7	6.2	8.9	7.5	7.3	6.0	5.8
OCF/EV (%)	13.9	12.8	14.3	8.5	13.7	11.9	14.7	14.7
FCF/EV (%)	5.0	1.3	2.0	1.5	8.1	8.3	7.8	0.9
Dividend Yield (%)	**2.6**	**0.0**	**1.0**	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**

Source: Company, HSIE Research

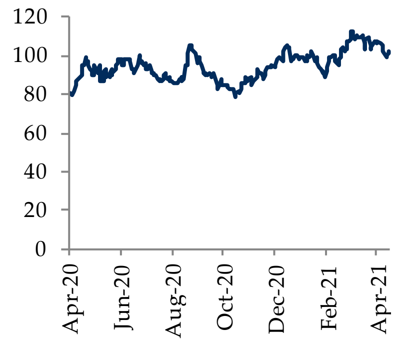
Exhibit-74: Peer valuation table

Company	CMP (INR)	RECO	TP (INR)	P/E (x)			RoE (%)			EV/EBITDA (x)			Dividend yield (%)			FCFF yield (%)		
				FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
NTPC	102	Buy	143	0.8	0.7	0.7	11.3	12.7	13.6	9.8	8.6	7.7	4.3	5.2	6	39.7	62.4	58.9
PGCIL	210	Buy	257	1.6	1.5	1.4	18.4	17.6	17.4	7.0	6.5	6.2	6.2	7.0	7.5	41.8	43.9	51.6
NHPC	24	Add	27	0.7	0.7	0.7	9.6	9.6	10.1	8.8	8.8	8.2	5.5	5.8	6.4	41.7	58.1	48.2
CESC	610	Buy	769	0.8	0.7	0.7	12.0	12.9	12.6	11.6	8.1	7.5	7.4	7.0	7.3	28.1	38.5	39.3
JSW Energy	100	Reduce	95	1.3	1.2	1.1	7.4	9.0	8.7	7.5	6.2	6.0	1.0	1.0	2.0	20.9	11.1	20.1
Tata Power	97	Buy	128	1.3	1.2	1.1	9.8	9.9	10.3	6.6	6.7	6.2	1.8	1.8	1.8	19.2	35.2	29.4
Torrent Power	408	Add	439	1.9	1.7	1.5	12.5	15.4	15.0	7.3	6.0	5.8	1.2	1.2	1.2	9.3	10.5	92.6

Source: Company, HSIE Research

1Yr Price Performance

NTPC



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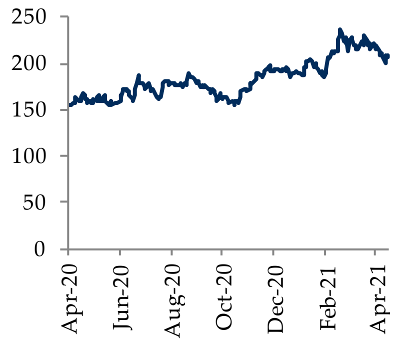

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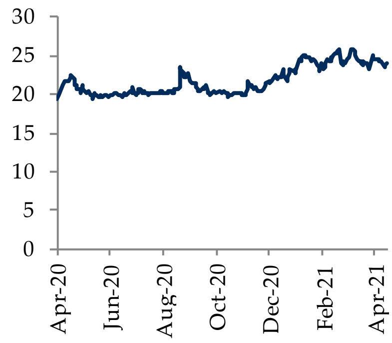

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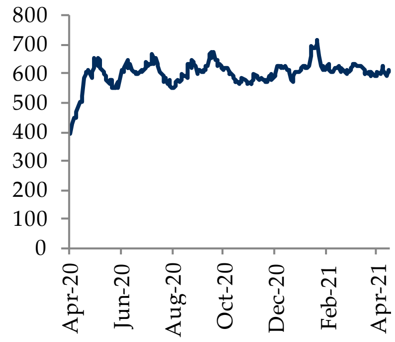
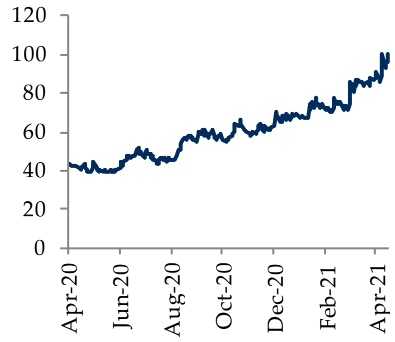
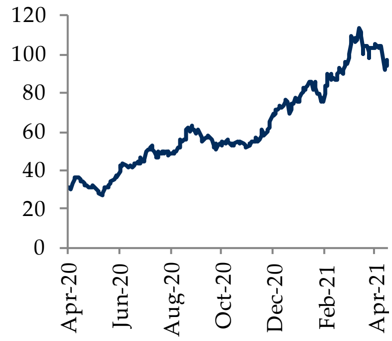


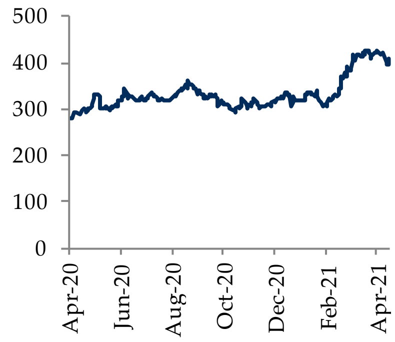
JSW Energy



Tata Power



Torrent Power



Rating Criteria

BUY: >+15% return potential
ADD: +5% to +15% return potential
REDUCE: -10% to +5% return potential
SELL: > 10% Downside return potential

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