

Buy



BSE SENSEX S&P CNX 40,780 12,018

एनटीपीसी NTPC

Stock Info

Bloomberg	NTPC IN
Equity Shares (m)	9,895
M.Cap.(INRb)/(USDb)	1128.5 / 15.8
52-Week Range (INR)	146 / 107
1, 6, 12 Rel. Per (%)	-7/-18/-17
12M Avg Val (INR M)	1734
Free float (%)	45.5

Financials Snapshot (INR b)

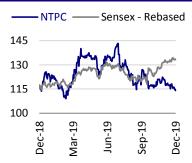
Y/E Mar	2019	2020E	2021E
Net Sales	906.4	993.6	1,100.3
EBITDA	199.1	304.0	363.9
PAT	114.6	130.0	150.8
EPS (INR)	11.6	13.1	15.2
Gr. (%)	30.3	13.4	16.0
BV/Sh (INR)	111.2	118.6	127.6
RoE (%)	10.7	11.4	12.4
RoCE (%)	6.7	6.8	7.6
P/E (x)	9.9	8.8	7.6
P/BV (x)	1.0	1.0	0.9

Shareholding pattern (%)

As On	Sep-19	Jun-19	Sep-18
Promoter	54.5	56.4	61.8
DII	30.8	28.5	23.5
FII	12.1	11.6	11.6
Others	2.6	3.5	3.1

FII Includes depository receipts

Stock Performance (1-year)



CMP: INR114 TP: INR164(+44%)

SCED implementation leading to savings

Data indicates annual benefit of ~INR4b for NTPC

- In Jan'19, the CERC (regulator) directed POSOCO to implement an optimization scheme for the dispatch of power. The scheme termed as Security Constrained Economic Dispatch (SCED) planned to optimize sourcing from thermal inter-state generating stations (whose full capacity is tied up and regulated with CERC).
- Under SCED, power would be dispatched in the order of the lowest cost (variable cost) of generation (while taking into account factors such as technical minimum, ramp rates and transmission constraints). With better utilization of lower cost plants, generation costs within the system were expected to reduce.
- The results of the SCED scheme have been encouraging. Total savings of ~INR3.1b were achieved for 3MFY20. According to CERC, 50% of these savings (post compensation for part load ops) would be shared with generators. Our analysis suggests that NTPC's share stands at INR1b for 3MFY20, implying an annual INR4b benefit for the company.

SCED – Implementation now beyond initial phase

POSOCO implemented the SCED mechanism on a pilot basis from 1st Apr'19. Under SCED, a separate account (called National Pool) was created for payments to/from generators for increment/decrement in their schedule. On implementation, the scheme led to savings of INR3.1b in the cost of power purchase (~1.5% reduction in generation cost*) over Apr-Jun'19. This was driven by an increase in generation from pit head (lower variable cost) plants in the northern and eastern regions of India; on the other hand, higher variable cost generation from the southern region has decreased (*see exhibit 1*). CERC, in its order, has taken note of this and (1) extended its implementation up to end-FY20, and (2) set out a methodology for sharing of benefits accumulated in the pool.

Benefits to be equally shared between DISCOMs/generators

The CERC has directed that benefits within the SCED pool should be shared equally between the participating generators and DISCOMs (after compensation for part load operations of generators). Further, the generators' share of benefit (i.e. 50% of net savings) would be divided in 60:40 ratio between SCED Up (generators whose dispatch has increased through SCED) and SCED Down (generators whose dispatch has decreased through SCED) for each 15min time block. The benefit for each generator would be in proportion to their share of SCED schedule for the time block (see exhibit 2).

*Based on data from Apr-Jul'19

NTPC benefits ~INR1b in 3MFY20

Our analysis suggests that NTPC is entitled to a net benefit of ~INR1b for the first three months of the pilot scheme (*see exhibit 3*). As observed, PLF for NTPC's nonpit head plants (such as Simhadri, Kudgi, Solapur and Dadri) have declined. We note that this does not impact the profitability as (1) compensation for back down is provided and (2) changes in schedule on account of SCED are not considered part of incentive calculations. Moreover, most of these plants were operating at <85% PLF, and hence, were not earning PLF incentives in the first place. Our interaction with NTPC indicates that the company has not yet received this SCED income. The annualizing of 1QFY20 numbers indicate a benefit of ~INR4b for NTPC (this may vary depending on supply/demand dynamics). While we have not built this benefit into our model, receipt of the same would provide an upside to our numbers.

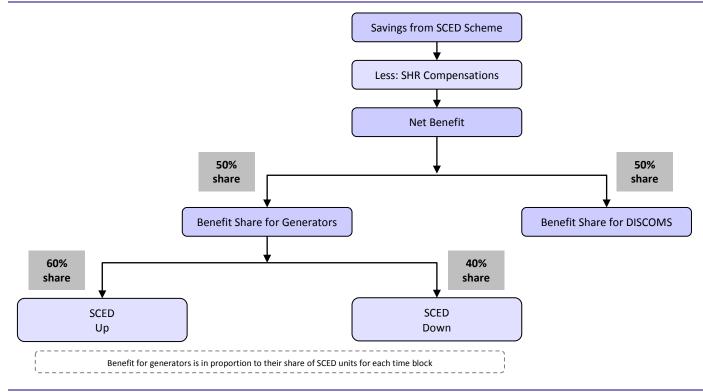
Generation from lower variable cost plants in the northern and eastern region has increased while that from higher variable cost plants in the southern region has decreased

Exhibit 1: Key plants with increase and decrease in schedule post SCED

Company	Danian	Variable Cost	Net SCED Up/(Down)	
Generator	Region	(INR/ kWh)	(mn kWh)	
CGPL	WR	1.91	345	
Rihand	NR	1.41	281	
Singrauli	NR	1.45	200	
Kahalgaon	ER	2.11	174	
Vindhyachal	WR	1.69	171	
BRBCL	ER	2.29	109	
Farakka: Stg. I & II	ER	0.83	96	
Vallur	SR	3.68	(392)	
Dadri	NR	4.38	(282)	
Simhadri	SR	3.15	(206)	
Kudgi	SR	4.05	(197)	
NSPCL	WR	4.29	(113)	
Jhajjar	NR	3.64	(104)	
NTPL	SR	2.78	(93)	
Mouda	WR	2.94	(90)	
Ramagundam	SR	2.62	(76)	

Source: POSOCO, Ministry of Power, CERC, MOFSL

Exhibit 2: Mechanism for sharing of benefit from SCED



Source: POSOCO, MOFSL

Exhibit 3: NTPC: Plant wise entitled benefit from SCED for 3MFY20

	Benefit	PLF	PLF	PLF YoY
Station	(INR m)	1Q'FY19 (%)	1Q' FY20 (%)	change (%)
Mouda	90	58.4	67.8	9.4
Farakka	78	71.9	73.6	1.7
Rihand	77	80.0	91.2	11.2
Simhadri	77	70.1	61.5	-8.5
Ramagundam	75	86.2	82.4	-3.8
Vallur	72	67.4	54.5	-12.9
Kahalgaon	68	78.0	77.3	-0.8
Dadri	63	74.9	56.5	-18.4
Unchahar	63	52.5	68.2	15.7
Vindhyachal	58	91.9	87.4	-4.5
Singrauli	55	74.0	89.0	15.0
Barh	41	85.0	89.6	4.6
Kudgi	38	41.8	25.8	-16.0
BRBCL	36	41.5	72.4	30.9
Bongaigaon	33	71.1	64.2	-7.0
Others	110			
Total benefit for NTPC plants (group)	1,033			
Benefit: adj. for NTPC's share	974			

Source: POSOCO, CEA, MOFSL

Financials and Valuations

Income Statement							(II)	NR Million)
Y/E Mar	2014	2015	2016	2017	2018	2019	2020E	2021E
Net Sales	789,506	806,220	727,055	817,171	877,622	906,369	993,562	1,100,340
Change (%)	20.1	2.1	-9.8	12.4	7.4	3.3	9.6	10.7
EBITDA	197,106	171,941	179,569	218,300	229,808	199,086	304,035	363,863
EBITDA Margin (%)	25.0	21.3	24.7	26.7	26.2	22.0	30.6	33.1
Depreciation	47,700	55,646	52,240	60,099	74,599	76,881	88,696	104,077
EBIT	149,406	116,295	127,329	158,201	155,209	122,205	215,339	259,786
Interest	32,031	35,704	33,137	36,511	44,346	52,609	69,064	82,871
Other Income	27,601	20,789	10,576	9,668	15,583	17,953	18,043	13,366
Extraordinary items	-119	3,182	0	0	0	0	0	0
PBT	144,858	104,562	104,768	131,358	126,446	87,550	164,318	190,280
Tax	30,824	4,638	-1,628	30,467	25,881	-32,064	41,235	47,865
Tax Rate (%)	21.3	4.4	-1.6	23.2	20.5	-36.6	25.1	25.2
Min. Int. & Assoc. Share	0	0	-204	-57	-425	-66	-57	-57
Reported PAT	114,034	99,924	108,012	107,196	105,440	126,400	130,005	150,753
Adjusted PAT	91,496	87,596	96,957	98,717	87,992	114,614	130,005	150,753
Change (%)	-16.6	-4.3	10.7	1.8	-10.9	30.3	13.4	16.0

Balance Sheet							(11)	IR Million)
Y/E Mar	2014	2015	2016	2017	2018	2019	2020E	2021E
Share Capital	82,455	82,455	82,455	82,455	82,455	98,946	98,946	98,946
Reserves	790,843	738,485	809,511	895,926	953,180	1,001,424	1,074,437	1,163,447
Net Worth	873,297	820,940	891,965	978,380	1,035,635	1,100,370	1,173,382	1,262,393
Debt	814,549	1,022,520	1,120,194	1,137,551	1,300,143	1,616,818	1,688,579	1,709,681
Deferred Tax	12,393	12,656	14,094	14,849	24,081	41,997	41,997	41,997
Total Capital Employed	1,707,044	1,864,995	2,035,181	2,138,812	2,369,337	2,765,833	2,910,606	3,020,719
Gross Fixed Assets	1,313,937	1,443,608	1,632,140	1,170,879	1,501,531	1,665,811	2,006,253	2,448,026
Less: Acc Depreciation	471,858	525,077	587,180	125,562	206,147	287,597	376,293	480,370
Net Fixed Assets	842,080	918,530	1,044,959	1,045,317	1,295,385	1,378,214	1,629,961	1,967,657
Capital WIP	538,250	675,547	815,497	868,957	820,931	1,067,775	942,270	707,897
Investments	16,635	141	148	78,023	92,515	81,000	91,263	91,263
Current Assets	603,487	601,543	543,886	492,677	534,851	646,976	635,172	646,936
Inventory	59,885	79,725	79,592	65,861	61,403	81,194	75,544	80,442
Debtors	67,257	92,499	101,740	89,995	88,122	101,477	99,077	106,446
Cash & Bank	186,876	161,390	57,370	33,015	43,876	27,823	24,069	23,567
Loans & Adv, Others	289,470	267,929	305,185	303,806	341,450	436,482	436,482	436,482
Curr Liabs & Provns	293,408	330,766	369,310	346,162	374,344	408,131	388,059	393,033
Curr. Liabilities	293,408	330,766	369,310	346,162	374,344	408,131	388,059	393,033
Net Current Assets	310,080	270,777	174,577	146,515	160,507	238,845	247,113	253,904
Total Assets	1,707,044	1,864,995	2,035,181	2,138,812	2,369,337	2,765,833	2,910,606	3,020,719

Financials and Valuations

Ratios								
Y/E Mar	2014	2015	2016	2017	2018	2019	2020E	2021E
Basic (INR)								
EPS	9.2	8.9	9.8	10.0	8.9	11.6	13.1	15.2
Cash EPS	16.3	15.7	16.2	16.9	18.2	20.5	22.1	25.8
Book Value	88.3	83.0	90.1	98.9	104.7	111.2	118.6	127.6
DPS	4.6	4.6	2.7	3.8	3.6	3.6	4.8	5.2
Payout (incl. Div. Tax.)	39.9	45.5	24.6	35.3	33.8	28.0	36.5	34.1
Valuation(x)								
P/E	9.9	11.3	10.4	10.5	10.7	8.9	8.7	7.5
Cash P/E	7.0	7.3	7.0	6.7	6.3	5.6	5.2	4.4
Price / Book Value	1.3	1.4	1.3	1.2	1.1	1.0	1.0	0.9
EV/Sales	2.2	2.5	3.0	2.7	2.7	3.0	2.8	2.6
EV/EBITDA	10.1	12.5	13.0	10.6	11.2	14.5	9.2	7.7
Dividend Yield (%)	4.0	4.0	2.3	3.4	3.2	3.1	4.2	4.6
Profitability Ratios (%)								
RoE	10.9	10.0	11.3	10.6	8.7	10.7	11.4	12.4
RoCE	8.5	7.3	7.2	6.0	5.8	7.8	6.2	6.9
RoIC	13.7	11.2	11.8	10.5	9.6	11.1	9.4	9.6
Turnover Ratios (%)								
Asset Turnover (x)	1.1	0.9	0.7	0.8	0.7	0.7	0.7	0.6
Debtors (No. of Days)	31	42	51	40	37	41	36	35
Inventory (No. of Days)	37	46	53	40	35	42	40	40
Leverage Ratios (%)								
Net Debt/Equity (x)	0.7	1.0	1.2	1.1	1.2	1.4	1.4	1.3

Cash Flow Statement							(1)	NR Million)
Y/E Mar	2014	2015	2016	2017	2018	2019	2020E	2021E
Adjusted EBITDA	174,568	159,613	168,514	209,821	212,360	187,300	304,035	363,863
Non cash opr. exp (inc)	49,633	35,881	35,146	23,574	38,815	25,731	24,965	21,703
(Inc)/Dec in Wkg. Cap.	-13,109	-11,694	-36,422	-2,073	-58,298	-72,868	-12,022	-7,293
Tax Paid	-26,867	-20,100	-14,584	-26,263	19,257	-30,390	-41,235	-47,865
Other operating activities	-18,917	-16,242	1,452	-3,395	-15,508	53,898	-18,043	-13,366
CF from Op. Activity	165,308	147,459	154,106	201,666	196,627	163,671	257,699	317,042
(Inc)/Dec in FA & CWIP	-189,485	-191,772	-232,470	-243,451	-187,559	-197,548	-214,938	-207,399
Free cash flows	-24,176	-44,314	-78,364	-41,785	9,068	-33,877	42,761	109,643
(Pur)/Sale of Invt	16,225	16,391	16,536	3,436	0	0	0	0
Others	37,017	17,182	-6,986	-17,558	-8,539	-39,152	7,781	13,366
CF from Inv. Activity	-136,243	-158,200	-222,920	-257,573	-196,099	-236,700	-207,158	-194,034
Inc / (Dec) in Debt	93,854	205,811	80,528	150,466	145,059	224,698	71,761	21,103
Interest Paid	-62,429	-72,371	-83,473	-75,645	-86,058	-107,672	-69,064	-82,871
Divd Paid (incl Tax) & Others	-58,516	-148,185	-32,261	-43,269	-48,669	-60,049	-56,993	-61,742
CF from Fin. Activity	-27,091	-14,745	-35,206	31,552	10,333	56,976	-54,295	-123,511
Inc/(Dec) in Cash	1,975	-25,486	-104,021	-24,355	10,861	-16,053	-3,754	-502
Add: Opening Balance	184,902	186,876	161,390	57,369	33,015	43,876	27,823	24,069
Closing Balance	186,876	161,390	57,369	33,015	43,876	27,823	24,069	23,567

NOTES

Explanation of Investment Rating					
Investment Rating	Expected return (over 12-month)				
BUY	>=15%				
SELL	<-10%				
NEUTRAL	< - 10 % to 15%				
UNDER REVIEW	Rating may undergo a change				
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation				

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7 6 December 2019

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