

**NTPC** 



## **Estimate change** TP change Rating change

Bloomberg	NTPC IN
Equity Shares (m)	9697
M.Cap.(INRb)/(USDb)	3868 / 46
52-Week Range (INR)	448 / 228
1, 6, 12 Rel. Per (%)	-2/4/45
12M Avg Val (INR M)	6358

#### Financials & Valuations (INR b)

Tillaticials & Valuations (IIVIV b)			
Y/E March	FY24	FY25E	FY26E
Sales	1,785	1,919	2,069
EBITDA	497	569	634
Adj. PAT	208	210	249
Adj. EPS (INR)	21	22	26
EPS Gr. (%)	23	1	19
BV/Sh.(INR)	166	178	193
Ratios			
Net D:E	1.4	1.3	1.2
RoE (%)	13.5	12.6	13.8
RoCE (%)	7.4	7.6	8.3
Payout (%)	36.1	43.5	39.9
Valuations			
P/E (x)	18.7	18.5	15.6
P/BV (x)	2.4	2.2	2.1
EV/EBITDA (x)	12.5	10.9	9.8
Div. Yield (%)	1.9	2.3	2.6
FCF Yield (%)	1.1	5.5	4.2

#### Shareholding pattern (%)

	0 1	` '	
As On	Sep-24	Jun-24	Sep-23
Promoter	51.1	51.1	51.1
DII	26.6	27.7	29.1
FII	18.6	17.7	16.7
Others	3.7	3.6	3.1

FII Includes depository receipts

**CMP: INR400** TP: INR450 (+12%) Neutral

## Miss on EBITDA; strategic focus on RE continues

- NTPC reported standalone 2QFY25 EBITDA of INR96.7b (-8% YoY), 19% below our estimate of INR119b. Sharp rise in other opex (INR55b vs. INR34b) in 2QFY24) led to the miss at the EBITDA level. On a consolidated basis, EBITDA was down 8% YoY in 2QFY25, while PAT rose 14% YoY, boosted by substantial regulatory deferral income of INR23b for the quarter.
- Standalone revenue for 2QFY25 at INR403b came in 3% below estimate (our est. of INR417b, -1% YoY) due to a decrease in the average coal price, which fell from INR3,791/tonne to INR3,584/tonne.
- We cut our standalone FY25E adjusted PAT by 6% to INR199b, primarily due to weaker profitability observed during the quarter.
- With a capex of INR174b for 1HFY25, NTPC remains focused on its ambitious project pipeline, including an IPO for NTPC Green Energy Limited (NGEL). The aim is to achieve a renewable energy (RE) capacity target of 60GW by FY32. Management expressed confidence in the timely execution of its RE projects.
- NGEL will commission 3GW/5GW/8GW capacities in FY25/FY26/FY27, while NTPC will add 2.7GW/8.0GW thermal capacities in FY25/FY26. Thermal pipeline beyond FY26 includes 8.8GW of projects with PPA visibility likely to be achieved by the end of CY24 for this pipeline.
- NTPC declared an interim dividend of INR2.50 per share for FY25 and the date of payment shall be 18th Nov'24.
- We reiterate our Neutral rating on the stock with a TP of INR450.

#### Miss on EBITDA due to a spike in other opex

- NTPC reported a standalone revenue of INR403b in 2QFY25, 3% below our estimate of INR417b (-1% YoY) due to a decline in the average coal price.
- EBITDA came in at INR96.7b (-8% YoY) for 2QFY25, which was 19% below our est. of INR119b. Sharp rise in other opex (INR55b vs. INR34b in 2QFY24) led to the miss at the EBITDA level.
- Adjusted standalone PAT was 9% below our est. at INR42b (+29% YoY). We note that NTPC's 2QFY24 financial performance was hit by one-off adjustments of INR6b relating to previous year sales.
- 1HFY25 PAT formed 42% of FY25E revised APAT. While implied 2HFY25 APAT run rate is significantly above 1HFY25, we believe this is achievable given seasonality and start of new projects driving rise in regulated equity.
- In 1HFY25, net sales grew 6% YoY to INR847b, while EBITDA/APAT increased 1%/21% YoY to INR221b/83b, respectively. In 2HFY25, we expect net sales/EBITDA/APAT to increase 7%/24%/21% YoY.
- Average tariff was INR4.67/unit in 1HFY25 vs. INR4.61 in 1HFY24.
- Operational highlights:
- The company's gross power generation was at 88BUs, 2% lower than 90BUs in 2QFY24. Plant availability for coal plants was down to 85% in 2QFY25 (2QFY24: 90%).

Abhishek Nigam – Research Analyst (Abhishek.Nigam@MotilalOswal.com)

Preksha Daga - Research Analyst (Preksha.Daga@MotilalOswal.com)

- Coal plant PLF was 72% in 2QFY25, down 5% YoY.
- PLF for hydro plants improved to 97% (2QFY24: 93%) while it fell for gas plants to 6.7% (2QFY24: 18.25%).
- Coal production from captive mines for commercial use rose 62% YoY to 9MMT (2QFY24: 5.59MMT)
- > NTPC has a consolidated installed capacity of more than 76GW.

### **Highlights of the 2QFY25 performance:**

#### Operational performance:

- NTPC Group has added 485MW of commercial RE capacity in 1HFY25, with 90MW attributable to NTPC itself and 395MW to group companies.
- ➤ A total of 4,013MW of RE projects have been commissioned.
- ➤ The company's gross power generation was at 88Bus.
- Coal production from captive mines for commercial use rose to 9MMT.

#### Capex:

- NTPC's capex for 1HFY25 was INR174b, up from INR132b YoY.
- For FY25, the estimated standalone capital outlay stands at INR227b, while the consolidated capital outlay is INR279b.

#### Other Highlights:

- NTPC has a pipeline of 20-25GW of renewable energy initiatives, primarily focusing on solar and wind energy.
- The company aims to achieve a RE capacity target of 60GW by FY32, all under NTPC Green Energy.
- > NTPC's subsidiary, NVVN, signed a PPA with the Nepal Electricity Authority for the sale of 230MW of power.
- A trilateral agreement was also established for the supply of 40MW of power from Nepal to Bangladesh.

#### Valuation and view

Our TP of INR450 for NTPC is based on:

- Value of INR266 for the standalone business at Dec'26E P/B of 2.5x.
- Value of INR24 for other subsidiaries and INR64 for JV/associates at Dec'26E P/B of 2.5x.
- Value of INR91 for the renewables business at 14x FY27E EV/EBITDA.

#### (INR b) Standalone performance FY24 FY25 FY25E Y/E March Var. FY24 FY25E 1Q 2Q **3Q** 4Q 1Q 2Q 3QE 4QE 2QE % 425 444 **Net Sales 391** 409 395 403 399 480 1,620 1,727 417 -3% YoY Change (%) 2.0 -0.3 -4.7 2.9 13.5 -1.3 1.2 12.9 -1.1 6.6 2 **EBITDA** 114 105 113 124 97 129 431 486 120 99 **136** -19% Margin (%) 29.1 25.8 25.2 26.6 28.0 24.0 32.2 28.4 26.6 28.1 29 Depreciation 33 35 35 37 37 36 41 44 139 158 38 -4% 25 25 25 26 99 Interest 28 31 24 18 102 26 21% 6 6 8 17 6 9 9 37 37 7 Other Income 13 29% **PBT before EO items** 57 53 60 68 62 61 72 88 238 282 63 Extra-Ord inc/(exp) 0 0 0 8 0 0 0 0 8 0 PBT 57 53 60 **77** 62 61 72 88 247 282 63 -4% Tax 17 14 14 21 17 14 19 25 66 **75** 17 -17% Rate (%) 29 27 23 28 27 23 27 **27** 27 27 27 **Reported PAT** 41 39 46 45 46 **53** 62 181 207 46 **56** 1% Adj PAT **37** 33 44 **51** 42 42 **53 62** 164 199 46 -9% 9.6 -9.3 -1.5 4.3 13.9 28.9 2.3 41 YoY Change (%) 21.4 21.8 21.3 Margin (%) 9.4 8.0 11.0 12.0 9.4 10.4 13.2 12.9 10.1 11.5 11

#### **SoTP valuation**

Segment	Regulated Equity (Dec-26E)	P/B (x)	Value/Sh. (INR)
Standalone	10,17,221	2.5	266
Other subsidiaries	92,799	2.5	24
JV & Associates	2,47,414	2.5	64
Renewable	FY27 EBITDA		91
Cash and equivalents			5
Target price			450
CMP			400
Upside/(Downside)			12%

Source: MOFSL

MOTILAL OSWAL NTPC



## Highlights from the management commentary

#### Financial performance:

- Standalone regulated equity for NTPC's power and mining businesses grew 7.67% YoY to INR894b as of 30<sup>th</sup> Sep, 2024.
- > An interim dividend of INR2.50/share has been declared for FY25.

### Capacity expansion:

- NTPC Group has added 485MW of commercial RE capacity in 1HFY25, with 90MW attributable to NTPC itself and 395MW to group companies.
- ➤ A total of 4,013MW of RE projects have been commissioned.
- NTPC is targeting awarding additional thermal capacity of 13.6GW by FY26-27, complementing the 11.16GW already under construction.
- The current year is expected to see a capacity addition of 3GW in renewables, with projections of 5GW next year and 8GW in the following year.

#### Fund mobilization:

- NTPC secured a term loan agreement of INR50b with HDFC Bank on May 31, 2024.
- The average interest rate on borrowings during H1FY25 was 6.63%, a slight decrease from 6.67% in H1FY24.

#### Capex:

- NTPC's capex for 1HFY25 was INR174b, up from INR132b YoY.
- For FY25, the estimated standalone capital outlay stands at INR227b, while the consolidated capital outlay is INR279b.

#### NTPC Green:

- NGEL has filed a DRHP for its IPO on 18<sup>th</sup> Sep'24. A Memorandum of Understanding (MoU) was signed with the Govt. of Rajasthan to advance RE projects.
- It entered into a joint venture (JV) with Rajya Vidyut Utpadan Nigam Limited (RVUNL) to develop 25GW of RE projects and 1MMT per annum of green hydrogen derivatives in Rajasthan.
- Another JV with Mahatma Phule Renewable Energy and Infrastructure Technology Limited (MAHAPREIT) targets the development of 10GW of RE parks and projects across Maharashtra or other states.

## RE pipeline:

- NTPC has a pipeline of 20-25GW of renewable energy initiatives, primarily focusing on solar and wind energy.
- The company aims to achieve a RE capacity target of 60GW by FY32, all under NTPC Green Energy.

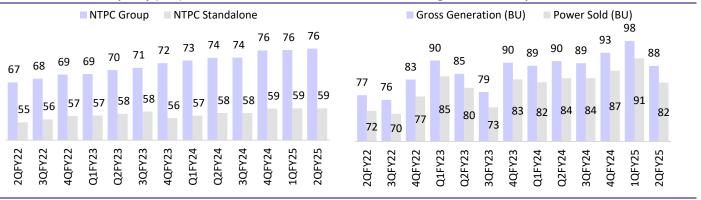
#### Power Purchase Agreements (PPAs):

- NTPC's subsidiary, NVVN, signed a PPA with the Nepal Electricity Authority for the sale of 230MW of power.
- A trilateral agreement was also established for the supply of 40MW of power from Nepal to Bangladesh.

# Story in charts - 2QFY25

#### Exhibit 1: Installed capacity (GW)

**Exhibit 2: Gross generation and power sold** 

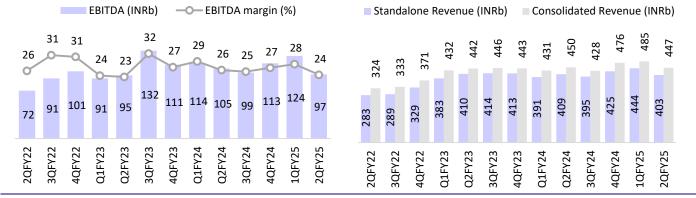


Source: Company, MOFSL

Source: Company, MOFSL

**Exhibit 3: Standalone EBITDA & EBITDA margin** 

Exhibit 4: Standalone and consolidated revenue

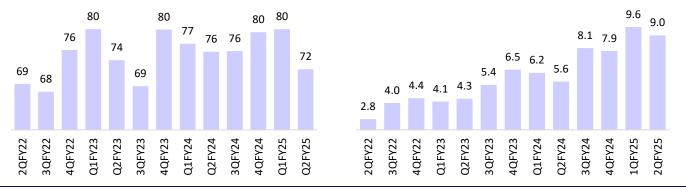


Source: Company, MOFSL

Source: Company, MOFSL

Exhibit 5: Coal PLF (%)

**Exhibit 6: Coal Produced (MMT)** 

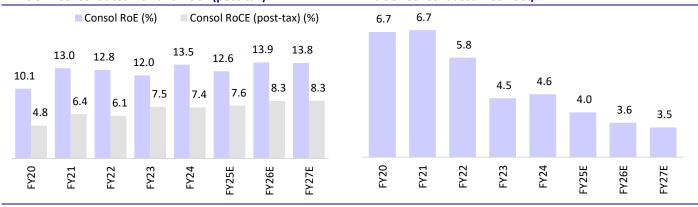


Source: Company, MOFSL

Source: Company, MOFSL

## Exhibit 7: Consolidated RoE and RoCE (post-tax)

### **Exhibit 8: Consolidated Net Debt/EBITDA**



Source: Company, MOFSL

Source: Company, MOFSL

#### Exhibit 9: NTPC 1-yr FWD P/E Exhibit 10: NTPC 1-yr FWD P/B P/E (x) - P/B (x) - Max (x) - Avg (x) - Max (x) Avg (x) **- -** -1SD Min (x) +1SD Min (x) - +1SD - - -1SD 3.2 20.0 **17.4** 2.3 **17.0** 2.3 2.4 16.0 **12.5** 1.6 12.0 7.8 0.8 8.0 0.6 0.0 4.0 Aug-19 Sep-24 Jun-14 Oct-15 Jan-17 Apr-18 Nov-20 Feb-22 Jun-23 Sep-24 Jun-14 Oct-15 Nov-20 Feb-22 Jun-23

Source: Company, MOFSL

Source: Company, MOFSL

# **Financials and valuations**

		=>			(INR m)
Y/E March	FY23	FY24	FY25E	FY26E	FY27E
Net Sales	17,62,072	17,85,009	19,18,773	20,69,499	21,72,300
Change (%)	32.8	1.3	7.5	7.9	5.0
Total Expenses	12,77,283	12,87,537	13,50,065	14,35,284	14,83,671
EBITDA	4,84,789	4,97,472	5,68,708	6,34,216	6,88,628
Depn. & Amortization	1,47,923	1,62,036	1,87,761	2,07,357	2,26,190
EBIT	3,36,866	3,35,436	3,80,947	4,26,859	4,62,438
Net Interest	1,05,835	1,19,407	1,23,252	1,23,945	1,33,149
Other income	17,692	26,650	16,572	16,572	16,572
PBT before EO	2,48,723	2,42,679	2,74,267	3,19,486	3,45,862
Regulatory inc./(exp)	-4,131	10,002	0	0	0
EO expense/(inc.)	0	0	0	0	0
PBT after EO	2,31,377	2,65,061	2,74,267	3,19,486	3,45,862
Tax	67,961	68,092	79,340	85,491	93,497
Rate (%)	29.4	25.7	28.9	26.8	27.0
JV	7,797.7	16,356.0	17,856.0	19,356.0	21,856.0
Reported PAT	1,71,214	2,13,325	2,12,784	2,53,351	2,74,221
Minority	2,088	5,206	3,167	4,228	4,298
Adjusted PAT	1,69,126	2,08,119	2,09,616	2,49,122	2,69,923
Change (%)	1.4	23.1	0.7	18.8	8.3
Consolidated Balance Sheet Y/E March	FY23	FY24	FY25E	FY26E	(INR m) FY27E
Share Capital	96,967	96,967	96,967	96,967	96,967
Reserves	13,73,265	15,10,126	16,28,565	17,78,239	19,45,243
Net Worth	14,70,232	16,07,093	17,25,532	18,75,206	20,42,210
Minority Interest	39,305	44,130	47,297	51,526	55,823
Total Loans	22,10,924	23,50,403	22,99,998	23,57,686	25,90,167
Deferred Tax Liability	1,17,522	1,40,619	1,40,619	1,40,619	1,40,619
Capital Employed	38,37,981	41,42,245	42,13,446	44,25,036	48,28,820
Gross Block	33,92,828	37,45,108	42,40,351	45,82,593	51,02,334
Less: Accum. Deprn.	9,88,584	11,55,772	13,43,532	15,50,889	17,77,079
Net Fixed Assets	24,04,244	25,89,336	28,96,819	30,31,704	33,25,254
	8,91,790	8,76,645	7,22,958	7,42,550	6,80,100
Capital WIP	0,31,730	8,70,043	.,==,555		0,00,200
Capital WIP Goodwill	0	0	0	0	0
_ ·					
Goodwill	0	0	0	0	2,47,914
Goodwill Investments	0 1,39,348	0 1,58,846	0 1,86,702	0 2,16,058	0
Goodwill Investments Curr. Assets Inventories	0 1,39,348 <b>10,34,372</b>	0 1,58,846 <b>11,65,440</b>	0 1,86,702 <b>10,60,683</b>	0 2,16,058 <b>10,92,845</b>	2,47,914 12,34,611 1,58,282
Goodwill Investments Curr. Assets	0 1,39,348 <b>10,34,372</b> 1,42,404	0 1,58,846 <b>11,65,440</b> 1,80,191	0 1,86,702 <b>10,60,683</b> 1,49,982	0 2,16,058 <b>10,92,845</b> 1,56,278	2,47,914 <b>12,34,611</b>
Goodwill Investments Curr. Assets Inventories Account Receivables Cash and Bank Balance	0 1,39,348 <b>10,34,372</b> 1,42,404 3,27,511	0 1,58,846 <b>11,65,440</b> 1,80,191 3,46,372	0 1,86,702 <b>10,60,683</b> 1,49,982 3,06,302	0 2,16,058 <b>10,92,845</b> 1,56,278 3,16,791	2,47,914 <b>12,34,611</b> 1,58,282 3,18,281
Goodwill Investments Curr. Assets Inventories Account Receivables Cash and Bank Balance Others	0 1,39,348 <b>10,34,372</b> 1,42,404 3,27,511 49,485	0 1,58,846 <b>11,65,440</b> 1,80,191 3,46,372 68,473	0 1,86,702 <b>10,60,683</b> 1,49,982 3,06,302 33,996	0 2,16,058 <b>10,92,845</b> 1,56,278 3,16,791 49,373	2,47,914 12,34,611 1,58,282 3,18,281 1,87,645
Goodwill Investments Curr. Assets Inventories Account Receivables	0 1,39,348 <b>10,34,372</b> 1,42,404 3,27,511 49,485 5,14,972	0 1,58,846 11,65,440 1,80,191 3,46,372 68,473 5,70,404 6,48,022	0 1,86,702 <b>10,60,683</b> 1,49,982 3,06,302 33,996 5,70,404 <b>6,53,715</b>	0 2,16,058 <b>10,92,845</b> 1,56,278 3,16,791 49,373 5,70,404 <b>6,58,120</b>	2,47,914 12,34,611 1,58,282 3,18,281 1,87,645 5,70,404 6,59,060
Goodwill Investments Curr. Assets Inventories Account Receivables Cash and Bank Balance Others Curr. Liability & Prov.	0 1,39,348 10,34,372 1,42,404 3,27,511 49,485 5,14,972 6,31,773	0 1,58,846 <b>11,65,440</b> 1,80,191 3,46,372 68,473 5,70,404	0 1,86,702 <b>10,60,683</b> 1,49,982 3,06,302 33,996 5,70,404	0 2,16,058 <b>10,92,845</b> 1,56,278 3,16,791 49,373 5,70,404	2,47,914 12,34,611 1,58,282 3,18,281 1,87,645 5,70,404
Goodwill Investments Curr. Assets Inventories Account Receivables Cash and Bank Balance Others Curr. Liability & Prov. Account Payables	0 1,39,348 10,34,372 1,42,404 3,27,511 49,485 5,14,972 6,31,773 1,13,562	0 1,58,846 11,65,440 1,80,191 3,46,372 68,473 5,70,404 6,48,022 1,13,380	0 1,86,702 <b>10,60,683</b> 1,49,982 3,06,302 33,996 5,70,404 <b>6,53,715</b> 1,19,073	0 2,16,058 <b>10,92,845</b> 1,56,278 3,16,791 49,373 5,70,404 <b>6,58,120</b> 1,23,478	2,47,914 12,34,611 1,58,282 3,18,281 1,87,645 5,70,404 6,59,060 1,24,418

# **Financials and valuations**

Ratios					
Y/E March	FY23	FY24	FY25E	FY26E	FY27E
Basic (INR)					
EPS	17.4	21.5	21.6	25.7	27.8
Cash EPS	32.7	38.2	41.0	47.1	51.2
BV/Share	151.6	165.7	178.0	193.4	210.6
DPS	7.3	7.8	9.4	10.3	10.6
Payout (%)	41.6	36.1	43.5	39.9	38.1
Dividend yield (%)	1.8	1.9	2.3	2.6	2.7
Valuation (x)		-			
P/E	23.0	18.7	18.5	15.6	14.4
Cash P/E	12.2	10.5	9.8	8.5	7.8
P/BV	2.6	2.4	2.2	2.1	1.9
EV/EBITDA	12.5	12.5	10.9	9.8	9.2
Dividend Yield (%)	1.8	1.9	2.3	2.6	2.7
Return Ratios (%)		2.0			
EBITDA Margin (%)	27.5	27.9	29.6	30.6	31.7
Net Profit Margin (%)	9.6	11.7	10.9	12.0	12.4
RoE	12.0	13.5	12.6	13.8	13.8
RoCE (post-tax)	7.5	7.4	7.6	8.3	8.3
RoIC (post-tax)	8.7	8.6	8.6	9.4	9.5
Working Capital Ratios	<u> </u>	0.0	0.0		5.5
Fixed Asset Turnover (x)	0.7	0.7	0.7	0.7	0.7
Asset Turnover (x)	0.5	0.4	0.5	0.5	0.4
Debtor (Days)	68	71	58	56	53
Inventory (Days)	29	37	29	28	27
Leverage Ratio (x)					
Current Ratio					
Net Debt/EBITDA	4.5	4.6	4.0	3.6	3.5
Debt/Equity	1.4	1.4	1.3	1.2	1.1
Consolidated Cash Flow Statement					(INR m)
Y/E March	FY23	FY24	FY25E	FY26E	FY27E
EBITDA	4,84,789	4,97,472		6,34,216	
WC	1,78,362	-84,854	<b>5,68,708</b> 75,973	-12,380	<b>6,88,628</b> -2,555
Others	-81,176	-55,712	-79,340	-85,491	-93,497
Direct taxes (net)	19,400	25,131	75,540	05,431	0
CF from Op. Activity	6,01,374	3,82,037	5,65,342	5,36,345	5,92,576
Capex	-2,18,332	-3,40,276	-3,51,556	-3,71,834	-4,67,291
FCF	3,83,042	41,761	2,13,786	1,64,511	1,25,285
Int & div income	17,692	26,650	16,572	16,572	16,572
Investments(subs/JVs)	-500	0	0	0	0
CF from Inv. Activity	17,192	26,650	16,572	16,572	16,572
Share capital	0	0	0	0	0
Borrowings	-1,09,745	1,39,479	-50,405	57,688	2,32,482
Finance cost	-1,05,835	-1,19,407	-1,23,252	-1,23,945	-1,33,149
Dividend	-70,301	-75,149	-91,178	-99,448	-1,02,919
Others	-67,055	6,438	-91,178	-99,448	-1,02,919
CF from Fin. Activity	-3,52,936	- <b>48,639</b>	-2,64,835	-1,65,705	-3,586
(Inc)/Dec in Cash	36,253	22,895	-2,64,835	15,377	1,38,271
Opening balance	44,581	49,485	68,473	33,996	49,373
Closing balance					
Ciosing naidlice	49,485	68,473	33,996	49,373	1,87,645

Investment in securities market are subject to market risks. Read all the related documents carefully before investing

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	

\*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

#### Disclosures:

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Depository participant services & distribution of various financial products. MOFSL is a listed public company, the details in respect of which are available on <a href="https://www.motilaloswal.com">www.motilaloswal.com</a>, MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL),NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Ltd. are available on the website at <a href="http://onlinereports.motilaloswal.com/Dormant/documents/Associate%20Details.pdf">http://onlinereports.motilaloswal.com/Dormant/documents/Associate%20Details.pdf</a>

Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx

MOFSL, it's associates, Research Analyst or their relatives may have any financial interest in the subject company. MOFSL and/or its associates and/or Research Analyst or their relatives may have actual beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance. MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may have any other potential conflict of interests at the time of publication of the research report or at the time of public appearance, however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.

In the past 12 months, MOFSL or any of its associates may have:

- a) received any compensation/other benefits from the subject company of this report
- b) managed or co-managed public offering of securities from subject company of this research report,
- c) received compensation for investment banking or merchant banking or brokerage services from subject company of this research report,
- d) received compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company of this research report.
- . MOFSL and it's associates have not received any compensation or other benefits from the subject company or third party in connection with the research report.
- . Subject Company may have been a client of MOFSL or its associates during twelve months preceding the date of distribution of the research report.
- Research Analyst may have served as director/officer/employee in the subject company.
- MOFSL and research analyst may engage in market making activity for the subject company.

MOFSL and its associate company(ies), and Research Analyst and their relatives from time to time may have:

a) a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein.

(b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures. To enhance transparency, MOFSL has incorporated a Disclosure of Interest Statement in this document. This should, however, not be treated as endorsement of the views expressed in the report. MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report.

#### Terms & Conditions:

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

#### **Analyst Certification**

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

Disclosure of Interest Statement	
Analyst ownership of the stock	of the stock No

A graph of daily closing prices of securities is available at <a href="www.nseindia.com">www.bseindia.com</a>, <a href="www.nseindia.com">www.bseindia.com</a>. Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to subject company for which Research Team have expressed their views.

#### Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

#### For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Financial Services Limited (SEBI Reg No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

#### For U.S

MOTILAL Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act

MOTILAL OSWAL NTPC

and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

#### For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets Singapore Pte Ltd ("MOCMSPL") (Co. Reg. NO. 201129401Z) which is a holder of a capital markets services license and an exempt financial adviser in Singapore. Persons in Singapore should contact MOCMSPL in respect of any matter arising from, or in connection with this report/publication/communication. This report is distributed solely to persons who qualify as "Institutional Investors", of which some of whom may consist of "accredited" institutional investors as defined in section 4A(1) of the Securities and Futures Act of Singapore .Accordingly, if a Singapore person is not, or ceases to be, such an investor, they must immediately discontinue any use of this Report and inform MOCMSPL.

#### Disclaimer:

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

This report is meant for the clients of Motilal Oswal only.

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 - 71934200 / 71934263; www.motilaloswal.com.

Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai-400 064. Tel No: 022 71881000. Details of Compliance Officer: Neeraj Agarwal, Email Id: na@motilaloswal.com, Contact No::022-40548085.

#### Grievance Redressal Cell

Onevance Neuressal Cell.		
Contact Person	Contact No.	Email ID
Ms. Hemangi Date	022 40548000 / 022 67490600	query@motilaloswal.com
Ms. Kumud Upadhyay	022 40548082	servicehead@motilaloswal.com
Mr. Aiay Menon	022 40548083	am@motilaloswal.com

Registration details of group entities.: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/MSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412 . AMFI: ARN .: 146822. IRDA Corporate Agent – CA0579. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products.

Customer having any query/feedback/ clarification may write to query@motilaloswal.com. In case of grievances for any of the services rendered by Motilal Oswal Financial Services Limited (MOFSL) write to grievances@motilaloswal.com, for DP to dpgrievances@motilaloswal.com.