

NTPC
Welcomes You
To
9th Analysts and Investors Meet

INVESTORS PRESENTATION

1ST August 2013

INVESTORS PRESENTATION

1ST August 2013

Presentation by
Sh. A.K. Singhal
Director (Finance)



**To be the world's largest and best power producer,
powering India's growth**

Core Values



OUTLINE

About NTPC

Recent Financial Highlights

Opportunities and Sectoral Growth Drivers

Competitive Position

Risks and Mitigants

Growth and Capex Plans

Sustainability Initiatives

NTPC: SNAPSHOT



1. Power Generation	- As of July 31, 2013 total installed power generation capacity of 41,184 MW (including 5,364 MW through other group companies) 20,064 MW of capacity, under construction 1st Hydro project to be commissioned in the next financial year - Forayed into renewable energy projects- 10 MW Solar capacity commissioned in FY 2012-13, 85 MW Solar projects under construction - Global footprint in Sri Lanka and Bangladesh through JVs, contributed seed capital to both international JVs
2. Power Trading	- Subsidiary NVVN is the prominent power trader in India¹ - Also appointed for power supply to Bangladesh and nodal agency for trading power with Bhutan
3. Mining and Oil Exploration	6 coal mining blocks allotted to NTPC by Gol, work under progress 4 new coal blocks allotted for 8460 MW capacity- Banai, Bhalnuda, chandrabila, Kudanali- Laburi - Awarded oil exploration blocks
4. Power Equipment	JVs for manufacturing power equipment, castings, forgings, high voltage equipment and Balance of Plant (BoP) equipment for Indian and international markets
5. Others	- Electricity distribution business through its subsidiary NESCL - Consultancy services to State Electricity Boards, state generating companies and other private companies 5 MTPA LNG Terminal at Dabhol through JV, 1 MTPA commercial

NTPC Group has 22 JVs and 5 Subsidiary Companies

- Note:
- As per CERC report ,2013, it was 4th largest power trader in FY13.
 - As of March 31, 2013.
 - Ranking based on asset worth, revenues, profits, and return on invested capital (ROIC) in CY12.
<http://top250.platts.com/Top250Rankings/2012/Region/IndependentPowerProducersandEnergyTraders>.
 - Closing stock price on NSE @ Rs.148.15 as on July 01, 2013
- * Includes NTPC captive generation of 2.6 BU

- Incorporated as a Government company in 1975; amongst 7 Maharatna Gol companies, empowered to make its own investment decisions

- Accounts for 18.44% of India's total installed capacity²

Highest ever capacity addition of 4170 MW during FY13 – contributed to 20% of total addition in the country

- NTPC Group generated 249.59* BU of electricity which is 27.37% of India's total generation in FY13
 - Stand-alone NTPC generation of 232.03 BU in FY13

- Ranked as the No.1 IPP and Energy Trader Globally by Platts³

- Ranked 384th largest company in the world in the Forbes Global 2000 list 2013

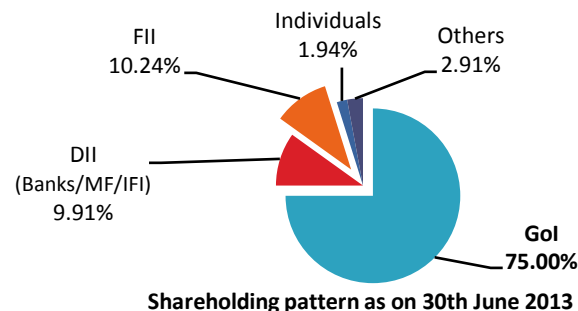
- Long term corporate plan of having 128 GW of Installed Capacity by 2032

FY13 Key Financials

P&L					(Rs. Crore)
	Consol	Stand-alone	Balance Sheet	Consol	Stand-alone
Revenue	72,541	68,776	Total Debt	70,036	58,146
EBITDA	21,346	20,750	Cash & Bank Bal.	18,738	16,868
PAT	12,591	12,619	Net Debt	51,298	41,278

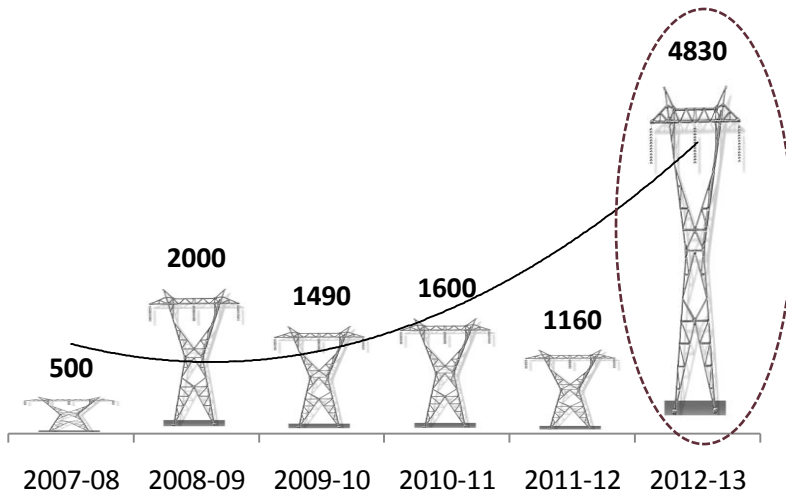
- Total revenue of Rs.68,776 crore includes consultancy and other income of Rs.3,102 crore
- Highest ever additional capacity of 4,170 MW added during FY13
- Exceeded XI plan target of 9,220 MW capacity addition by adding 9,610 MW over that period

Market Capitalization of Rs. 1,22,157 crore⁴ as on July 1, 2013

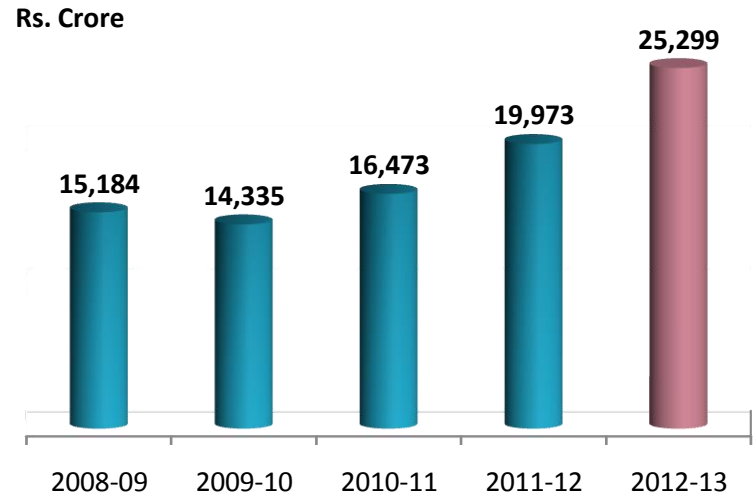


YEAR OF RECORDS: 2012-13

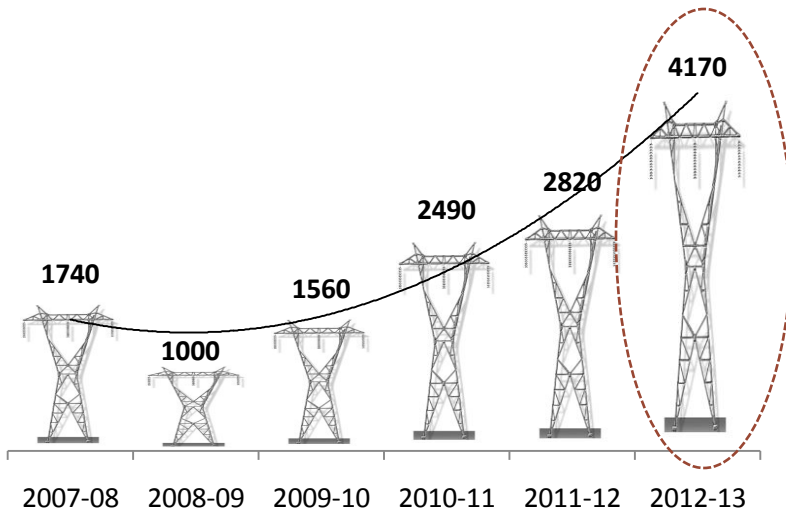
Year Wise Commercial Capacity Addition (NTPC Group) (MW)



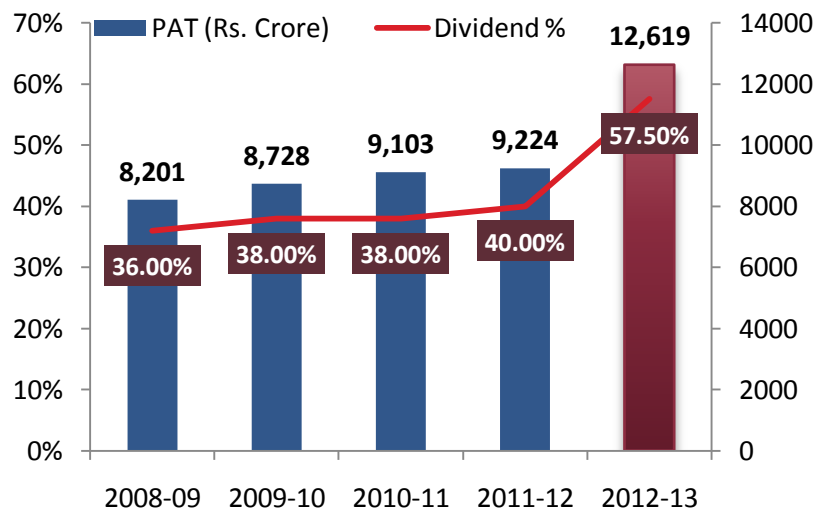
Year Wise Capex (NTPC Group)



Year Wise Installed Capacity Addition (NTPC Group) (MW)



Year wise Profit After Tax and Dividend %



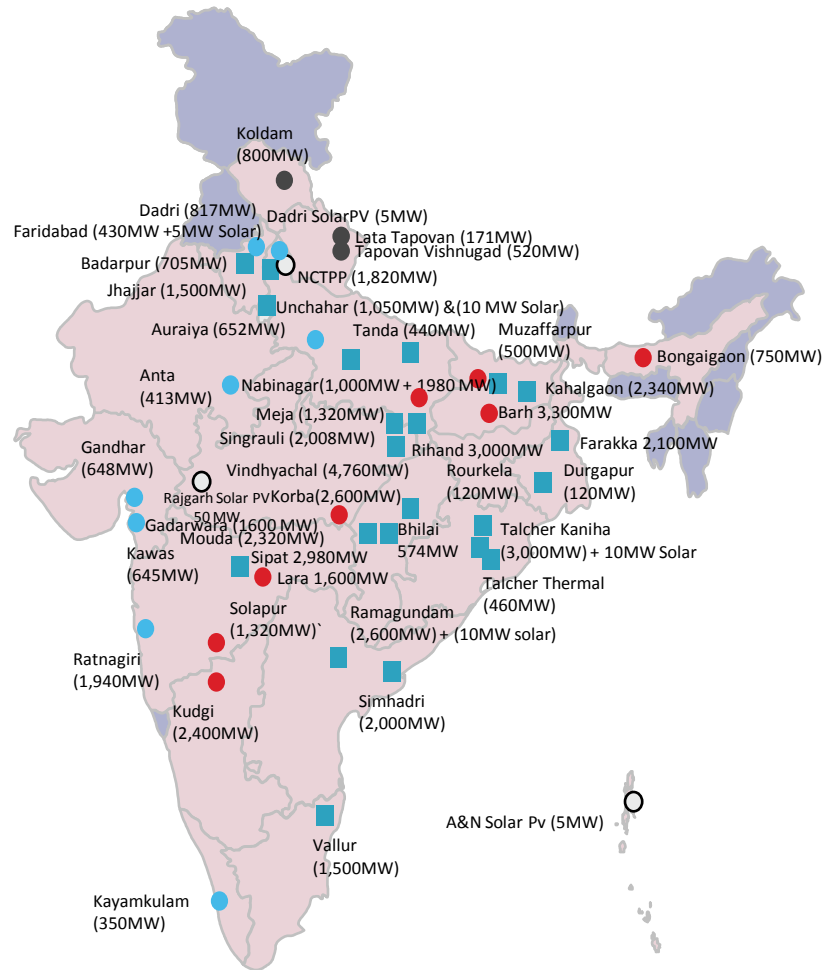
- Special Dividend of Rs.1030.68 crore recommended by Board of Directors for the first time since inception
- Investment Approval of 8521 MW accorded by Board of Directors in a single year.

WHAT WE PROMISED ... IS WHAT WE DELIVERED

Actual Performance Against Commitments Made to Investors as of 1 August, 2012

	Guidance	Performance
1	✳ Improve upon PAF of previous year (FY12) i.e. >88.35%	✳ PAF FY13 :87.62% (PAF Oct–December 2012: 88.56% and Jan-Mar 2013 : 92.66%)
2	✳ Commissioning of balance 2,000 MW i.e. 500 MW each at Mouda, Vindhyacha, Vallur and Jhajjar	✳ Commissioned entire 2,000 MW as promised in Aug 2012 to March 2013
3	✳ Declare commercial 2,000 MW (NTPC stand-alone) i.e. 500 MW each at Simhadri, Vindhyachal, Rihand and Mouda	✳ Declared commercial 2,000 MW as promised -500 MW each at Simhadri, Vindhyachal, Rihand and Mouda
4	✳ Expedite award of bulk tender projects of 6,780MW at Nabinagar, Lara, Gajmara and Darlipalli	✳ Main plant awarded for Lara -1,600 MW ✳ Main plant awarded for Nabinagar – 1,980 MW ✳ Main plant award for Gadarwara (1,600 MW) in place of Gajmara
5	✳ Capex target for 2012-13: Rs.20,995 crore (\$3.8bn) of which 17,017 crore (\$3.1bn) was to be made from July 2012–March 2013	✳ Capex incurred in FY 2012-13 Rs.19,926 crore (US\$3.63bn) ✳ Group capex incurred during 2012-13 is Rs.25,299 crore (US\$4.61bn)
6	✳ Revocation of de-allocation of NTPC mines	✳ MoC conveyed formal withdrawal of de-allocation vide letter dt. 23.01.13
7	✳ Regulated equity by FY13E to be Rs.32,431 crore (\$5.91bn)	✳ Regulated equity at end of FY13: Rs.32,576 crore (US\$5.93bn)

NTPC GROUP: PAN INDIA PRESENCE



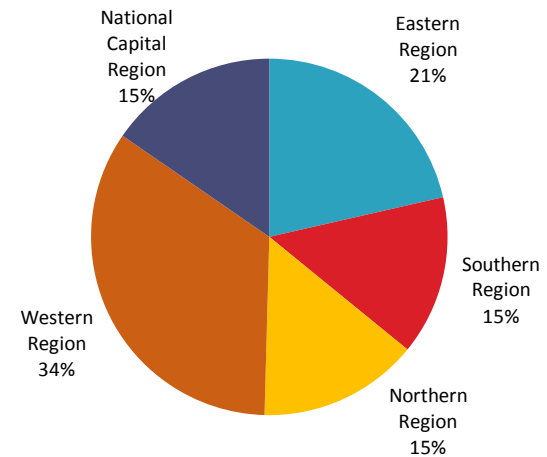
Map not to scale. Includes capacity of under construction plants

■ Coal Power Station
 ● Ongoing Hydro Power Projects
 ● Ongoing Thermal Projects
 ○ Solar PV

NTPC Group currently has projects across 18 Indian States including coal mining projects

● States with NTPC Plants
 ● States without NTPC Plants

Geographical Spread of NTPC Group Capacity (As of March 31, 2013)



Total: 41,184MW

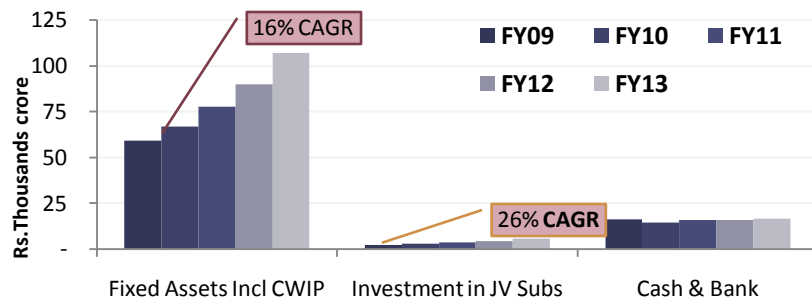
Fuel Mix	No. of Plants	Capacity (MW) ¹	% Share
NTPC Owned			
Coal	16	31,855	77.36%
Gas/Liquid Fuel	7	3,955	9.60%
Solar	2	10	0.02%
Sub-total	25	35,820	86.98%
Owned by JVs and Subs			
Coal	6	3,424	8.31%
Gas	1	1,940	4.71%
Sub-total	7	5,364	13.02%
Total	32	41,184	100.00%

1. As of March 31, 2013.

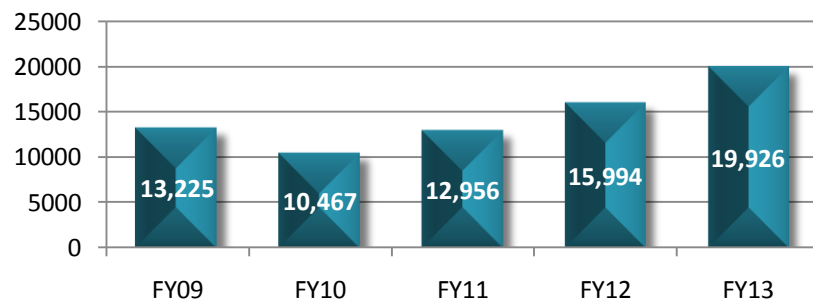
RECENT FINANCIAL HIGHLIGHTS

FINANCIAL HIGHLIGHTS 2012-13

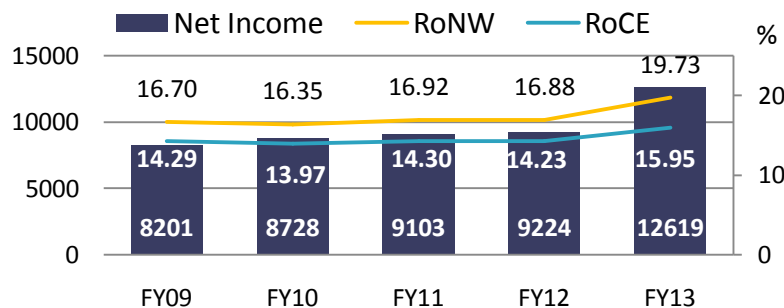
Assets Growth



Capex Growth



Margin Growth



All financial figures in Rs. Crore except where specified

RoNW- Return on Net Worth, RoCE- Return on Capital Employed

Financial Year 2013

Year	FY13	FY12	%Change
Key P&L Highlights			
Total Revenue	68,775.51	64,841.88	+6.1%
Profit Before Tax	16,578.63	12,326.16	+34.5%
Net income	12,619.39	9,223.73	+36.8%
Key Balance Sheet Highlights			
Total Assets	161,116.46	140,830.74	+14.4%
Capital WIP	37,109.42	41,827.86	-11.3%
Investments	10,760.10	11,206.38	-4.0%
Year end Cash Balance	16,867.70	16,141.83	+4.5%
Net worth	80,387.51	73,291.17	+9.7%
Total Debt	58,146.30	50,279.37	+15.6%

Other Highlights

Operating Cash Flows	15,495.17	10,709.85	+44.7%
Book Value Per Share (Rs.)	97.49	88.89	+9.7%
Dividend per Share (Rs.)	5.75	4.00	+43.8%
EPS (Rs.)	15.30	11.19	+36.8%
Dividend yield at year end*	4.05%	2.46%	+159ppt
Price/Book at year end*	1.46	1.83	-

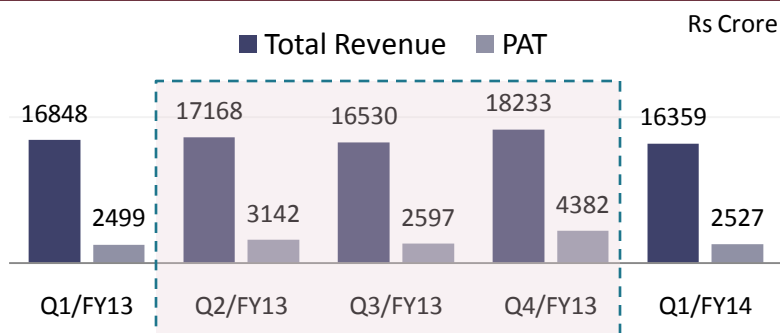
*Based on year end share price of Rs.141.95 and Rs.162.75 as on 31.03.2013 and 31.03.2012 respectively

FINANCIAL HIGHLIGHTS Q1/FY14

Position Statement Q1FY14

Quarter Ended	Q1/FY14	Q1FY13	% change
Key Balance Sheet Highlights			
Fixed Assets incl. CWIP	103,540.48	90,451.73	+14.5%
Investments	10,950.85	11,962.72	-8.5%
Cash & Bank Balance	18,622.04	18,341.12	+1.5%
Other Assets	33,870.46	27,879.09	+21.5%
Total Assets	166,983.83	148,634.66	+12.3%
Net Worth	82,914.53	75,789.83	+9.4%
Total Debt	60,139.98	54,021.56	+11.3%
Other Liabilities	23,929.32	18,823.27	+27.1%
Total of Liabilities	166,983.83	148,634.66	+12.3%

Q-o-Q Revenue and PAT



All financial figures in Rs. Crore except where specified

Income Statement Q1FY14

Quarter Ended	Q1/FY14	Q1/FY13	% change
Earnings Highlights			
Revenue from Operation	15,661.85	16,165.95	-3.1%
Other Income	696.93	681.99	+2.2%
Total Revenue	16,358.78	16,847.94	-2.9%
Expenses			
Fuel Cost	9,425.83	10,597.72	-11.1%
Employee benefit exp	942.50	793.72	+18.7%
Depreciation	942.33	760.22	+24.0%
Generation & Other Costs	979.28	941.00	+4.1%
Finance Cost	617.41	499.35	+23.6%
Profit Before Tax	3,451.43	3,255.93	+6.0%
Tax Expense	924.41	757.26	+22.1%
Profit After Tax	2,527.02	2,498.67	+1.1%
Other Financial Highlights			
EPS (Rs.)	3.06	3.03	1.1%
Book Value Per Share (Rs.)	100.56	91.92	+9.4%

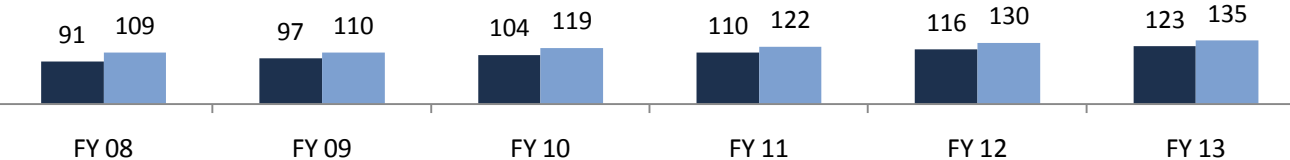
Book Value Per Share (BVPS) crosses Rs. 100 mark in Q1/FY14

OPPORTUNITIES AND SECTORAL GROWTH DRIVERS

POWER DEMAND SUPPLY

Peak Power Supply Position

(GW)



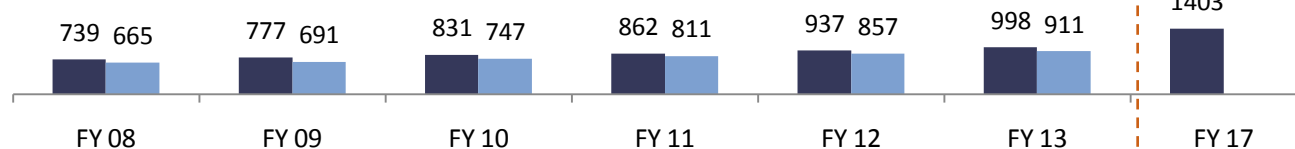
% Peak Deficit

■ Capacity ■ Peak Requirement



Energy Deficit Scenario

(BU)



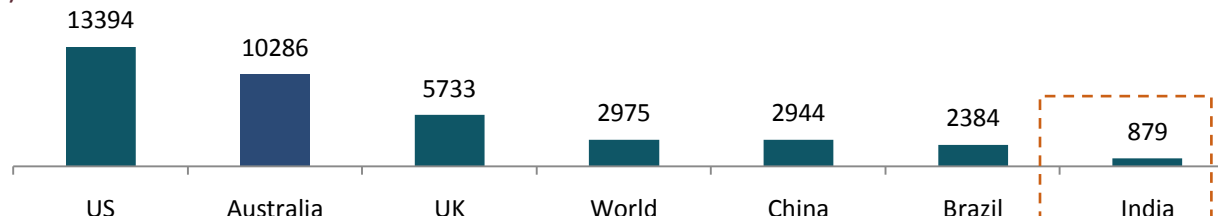
% Energy Deficit

■ Demand ■ Supply



Per Capita Consumption

(kWh/Year)



✦ Power deficit scenario has sustained despite capacity addition

- 8.7% energy deficit in FY13 (~87BU)
- 9.0% peak deficit in FY13 (~12 GW)

✦ Notwithstanding sustained demand, India continues to be among the lowest per capita consumers of electricity globally, lagging Brazil and China by ~3:1

✦ Per capita consumption c.29% of the world average

✦ Massive investments of Rs.17,47,323 crore are planned in 12th plan¹

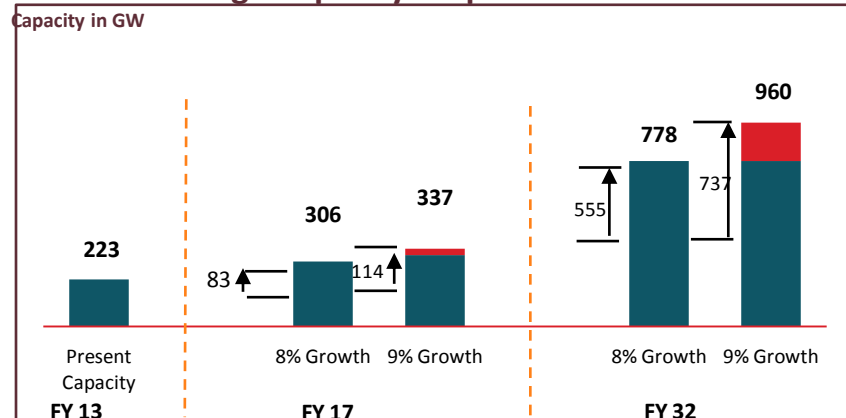
✦ ~106GW of capacity¹ addition required (during 12th plan) to meet 8% GDP growth rate target

Source: CEA Report, Gol Economic Survey.

1. Report on financing of infrastructure – Planning commission.

2. World Bank indicator EG.USE.ELEC.KH.PC (web site) except India data for 2010 and India's data as on 31.03.2012 (source CEA)

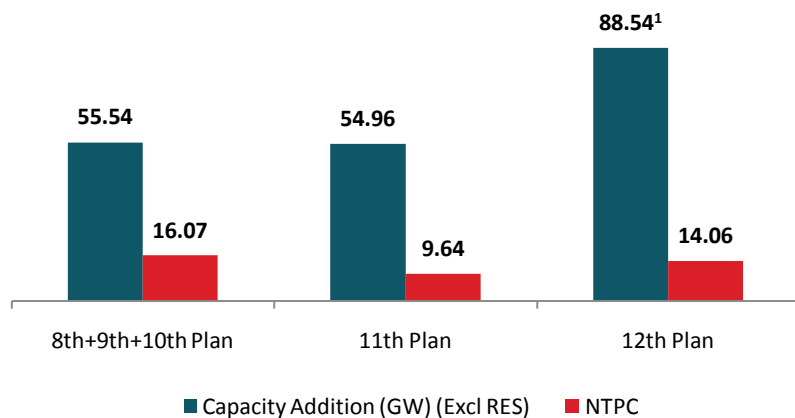
India has a Large Capacity Requirement ...



37% of existing capacity needs to be added by FY17 to achieve 8% GDP growth

Average annual capacity addition of ~21 GW required till FY17

Capacity Expansion Plans (GW)



12th Plan NTPC Own Capacity Addition: 11,168 MW, Through JVs/Subs: 2,890 MW, Total Capacity Addition: 14058 MW

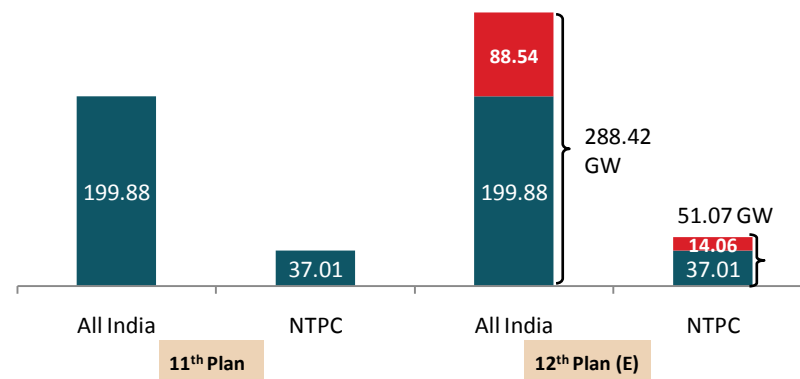
Already Added 4170 MW during FY 12-13

... with Significant Investments Planned in the Sector

12 th Plan (2012–17)	
Capacity excl. RES (MW) ¹	88,536.6
Expected Investments in Power Sector (Rs. Crore) ²	14,99,914
Expected Investments in Non-Conventional Energy (Rs. Crore) ²	2,47,409

Cumulative Capacity (GW)

(12th Plan capacity does not include Renewable Energy Source (RES) capacity addition)



COMPETITIVE POSITION

KEY COMPETITIVE STRENGTHS



Leadership Position in the Indian Power Sector

Long-term Fuel Security

High Operational Efficiency

Ability to Turn Around Underperforming Power Stations

Low Cost Power Producer

Prudent Off-take Policy

Strong Balance Sheet

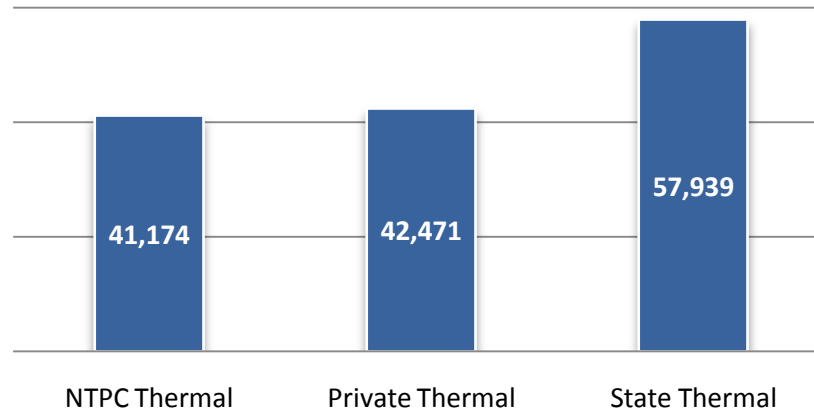
Competent and Committed Workforce

Integrated Business Model – de-risks main business

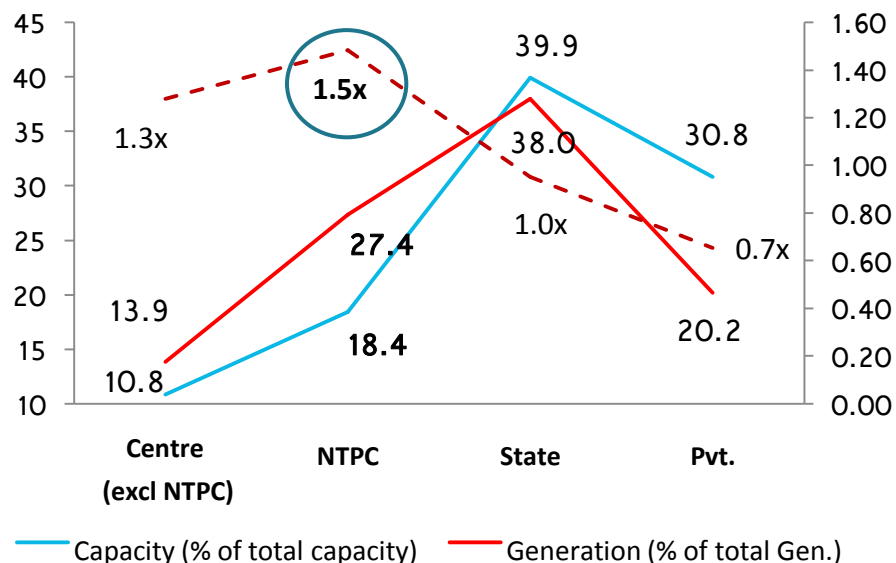
Financial & Physical Dominance

Rs Crore	एनटीपीसी NTPC	Reliance Power	Tata Power	Adani Power	JSW Energy
Market Cap as on 01.07.2013	1,22,157	19,327	21,892	12,234	7,569
Installed Capacity(GW)	41.2	2.5	8.5	5.9	3.1
FY13 Assets	1,61,116	51,934	28,093	38,252	20,350
FY13 EBITDA	20,750	2,070	2,746	1,332	2,739

Thermal capacity comparison (in MW)
(as on 31.03.2013)



Maximum Efficiency & Performance (Total Capacity and Total Generation Basis)



The largest Indian power generation company

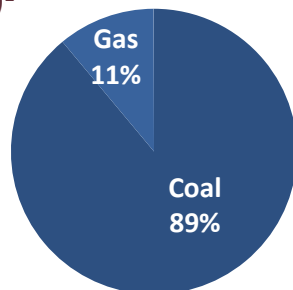
✓ Contribution in generation by State Sector is 38%, Centre contributes 41% and balance 20% is contributed by Pvt. Sector.

✓ With 18.44% share in total capacity of the country NTPC contributes 27.37% to the total generation. – an efficiency factor of 1.5 times of the share in capacity

LONG-TERM FUEL SECURITY

Current Capacity Break-up

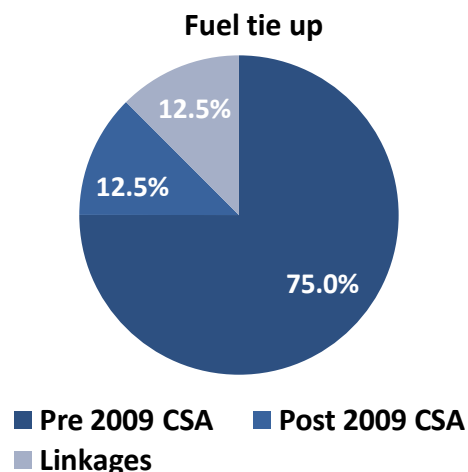
Capacity Break-up
(By Fuel)¹



- ⚡ Implements projects only upon establishing availability of fuel
- ⚡ 'Maharatna' status provides very high level of autonomy with regards to investments in backward integration and new fuel sources
- ⚡ By 2032, reliance on coal based fuel to reduce from present 89% to 56%

Coal: Long-term Fuel Security

Fuel Source Break-up –
Stations
(By Capacity)¹



- ⚡ Long-term Coal Supply Agreements (CSAs) with Coal India Limited (CIL) and Singareni Collieries Company (SCCL)
- ⚡ 10 out of 16 coal plants (accounting for 76% of directly owned coal-fire capacity) within 80 km of coal mines with own merry go round rail system/belt conveyor system
 - Supplies for the other 6 plants transported through national railway system
- ⚡ Developing 6 coal blocks allotted to NTPC
 - Estimated geological reserves of over 3BT
 - First coal mine Pakri-Barwadih expected to be operational during 2013-14
- ⚡ 4 more new coal blocks allotted to NTPC with estimated geological reserves of ~2BT
- ⚡ Imported coal accounted for 5.9% of total coal received in FY13; Pricing linked to global indices
 - Flexibility to increase imported coal blending from the current levels
- ⚡ Also sources coal through e-auctions conducted by coal companies

1. For NTPC directly owned plants as of July 31, 2013

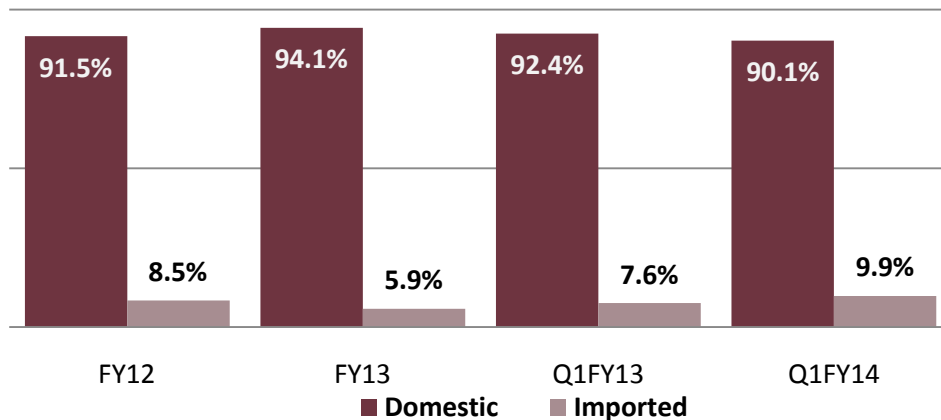
STATUS OF COAL SUPPLY AGREEMENTS

- Long Term CSAs available for 87.5% of current standalone installed capacity
- Long Term CSAs signed for all stations commissioned prior to 01.04.2009 i.e. for 23895 MW
- For Units commissioned after FY09 (including 1660 MW yet to be commissioned):
 - Out of standalone capacity of 9620 MW
 - CSAs for 4760 MW capacity signed till 17.07.2013
 - CSAs for balance 4860 MW capacity to be signed shortly
 - For JV capacities, CSAs for 4390 MW to be signed:
 - Out of which CSA for Vallur (JV with TNEB) signed with MCL for a capacity of 1000 MW, CSAs for balance 3390 MW to be signed shortly

LONG-TERM FUEL SECURITY (CONT'D)

Coal Supply

(For NTPC Own Plants)



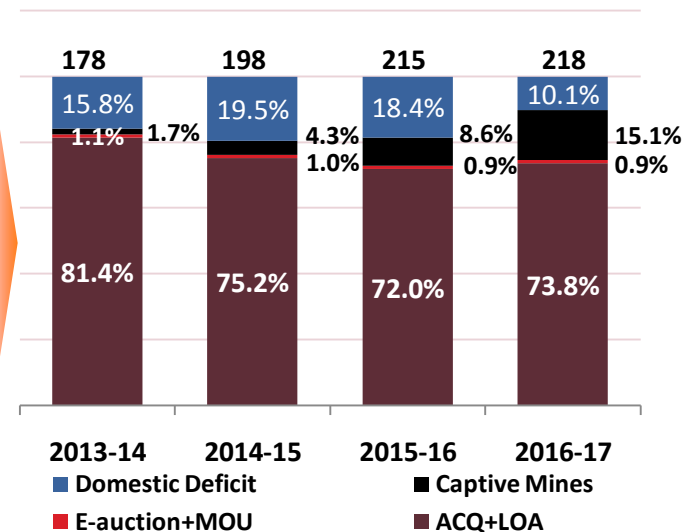
(In MT)	FY 2012	FY 2013	Q1FY2013	Q1FY 2014
Domestic	129.0	145.9	33.8	34.6
Import	12.0	9.1	2.8	3.8
Total	141.0	155.0	36.6	38.4

13% increase in domestic coal supply in FY13 vs. FY12

5% increase in total coal supply in Q1/FY14 vs. Q1/FY13

Coal Requirements FY14E to FY17E

(In MT)



Equivalent Imports (MT)

16

21

22

12

- ✚ The deficit in domestic coal is likely to increase in the next 2 years but will get lower by FY17
- ✚ Usage of inland waterways to transport imported coal—reduction of dependence on railways .
- ✚ NTPC plans to tide over this gap through long-term Fuel Supply Agreements (FSAs) with existing suppliers as well as through coal production from the 10 coal blocks allocated by the Government
 - Commencement of production in FY14 from captive coal blocks to support PLFs of existing capacities till supply levels from Coal India improve and new capacities based on these captive blocks are brought on-stream

CAPTIVE COAL BLOCKS FOR LONG-TERM FUEL SECURITY (CONT'D)

✈ Six coal mining blocks allocated to NTPC

- Pakri Barwadih, Talaipalli, Dulanga, Kerandari, Chatti Bariatu and Chatti Bariatu (South)
- Estimated geological reserves of over **3BT**
- Incurred cumulative Capex of Rs.1,536 crore till Q1FY14
- Target coal production of ~33 MT by FY17 from 5 of the coal blocks
- Peak production capacity of these mines is 53 MT

Current Development Status of the Coal Blocks

	Coal Blocks				
Particulars	Pakri Barwadih	Chatti-Bariatu	Kerandari	Talaipalli	Dulanga
Environment Clearance	✓	✓	✓	✓	In-principle clearance obtained
Forest Clearance	✓	✓	✓*	In Process	In Process
Acquisition Notifications	✓	✓	✓	✓	✓
Appointment of Mine Developer cum Operator (MDO)	✓	✓	In process	✓	In process

* First Stage clearance received

NEW COAL BLOCKS

⚡ 4 new coal mining blocks allocated to NTPC

- Banai (Chhatisgarh), Bhalnuda (Chattisgarh), Chanrabila (Odisha), Kudanali-Laburi (Odisha)
- Estimated geological reserves of ~ **2BT**
- Estimated Capacity : 45MTPA of which 2.5 MTPA for J&K

	Coal Blocks			
Particulars	Banai	Bhalmuda	Chandrabila	Kudanali-Laburi
Geological Reserves (MT)	629	550	550	266
Block Area (Km ²)	~17	~16	~9	6.5
Estimated Mine Capacity (MTPA)	12	14.4	10.8	7.8
Status of Mine	Exploration under progress by CMPDIL	Unexplored	Unexplored	Unexplored

Source: Ministry of Coal's press release dated 03.07.2013

LONG-TERM FUEL SECURITY (CONT'D)

Gas: Long-term Fuel Security

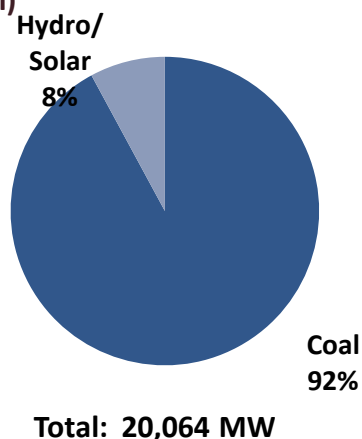
- Long-term gas supply agreements with GAIL under APM for supply of gas to all directly-owned gas power stations at regulated pricing under Government orders
- Domestic natural gas (KG-D6) supply agreements on a long-term basis at prices approved by GoI for four plants
- Gas and R-LNG from public and private sector companies on a spot, short and/or long-term basis
- All owned gas plants strategically located along major gas pipelines

Details of Gas/RLNG tie ups for NTPC Existing Gas Stations

Gas Type	Source/Supplier	Contracted Quantity (MMSCMD)	Contract Valid Till
APM / PMT Gas	ONGC / GAIL	14.48	2021/2019
Non-APM Gas	ONGC / GAIL	0.82	2016
KGD6 Gas	RIL / Niko / BPEAL	2.30	2014
RLNG-Long-term	GAIL	2.0	Dec 2019
Spot/Fallback RLNG	Domestic suppliers	Based on demand form time to time	On reasonable endeavour basis

Diversifying Fuel Mix

Under-construction Capacity Breakup (by Fuel)¹



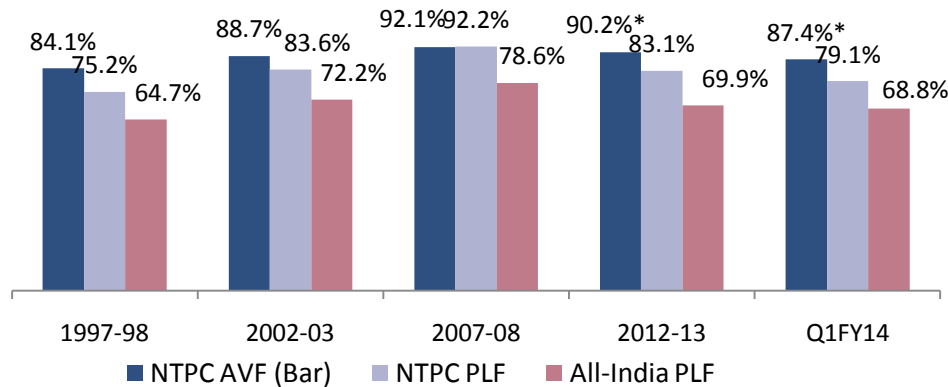
- Planning to reduce its carbon footprint and reduce dependence on existing fuel sources
- 10 MW Solar PV projects under operation
- 1,499 MW hydroelectric and 85MW solar PV projects already under construction
- 120 MW of hydro capacity and 15MW of other renewable capacity currently under bidding
- Formed JV with Nuclear Power Corporation of India in January 2011 with the objective of setting up a nuclear power project

– Planning to set-up 1,400MW PWRH nuclear power plant in Haryana

1. For NTPC Group as of July 31, 2013.

HIGHLY EFFICIENT PLANT OPERATIONS

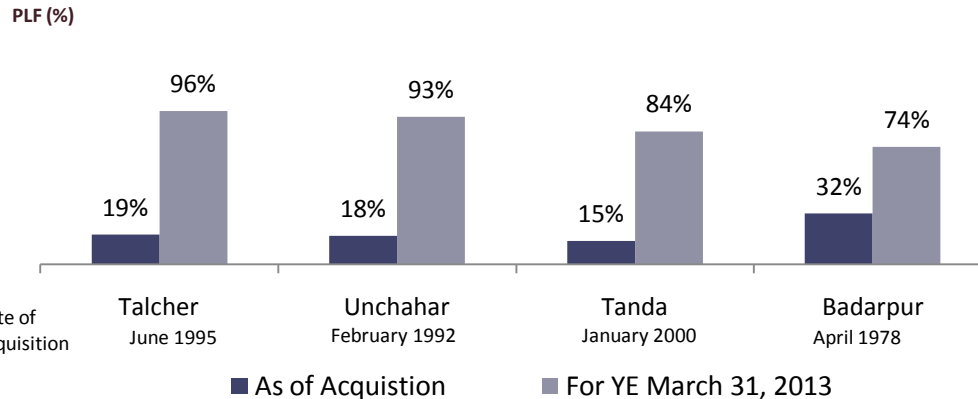
Proven Operational Excellence



Source: Company data.
AVF (DC) 2012-13 is 87.62% and AVF (DC) for Q1FY14 is 84.85%

- ⚡ Among lowest cost producers of power in India
- ⚡ Successful in growing and achieving high PLF despite fuel shortage concerns in India
- ⚡ In FY13, 6 coal based stations out of 16 achieved more than 90%
- ⚡ On forefront of adopting latest and most efficient technology—commissioned its first super-critical project at Sipat in 2011
- ⚡ Market leader in terms of setting up of projects based on super-critical technology (~78% of under construction thermal capacity)

Turnaround at Acquired Plants



- ⚡ Through in-depth engineering, renovation and management capabilities has turned around sick plants across India
- ⚡ Experience of operating and managing power plants with varied fuel sources and technologies

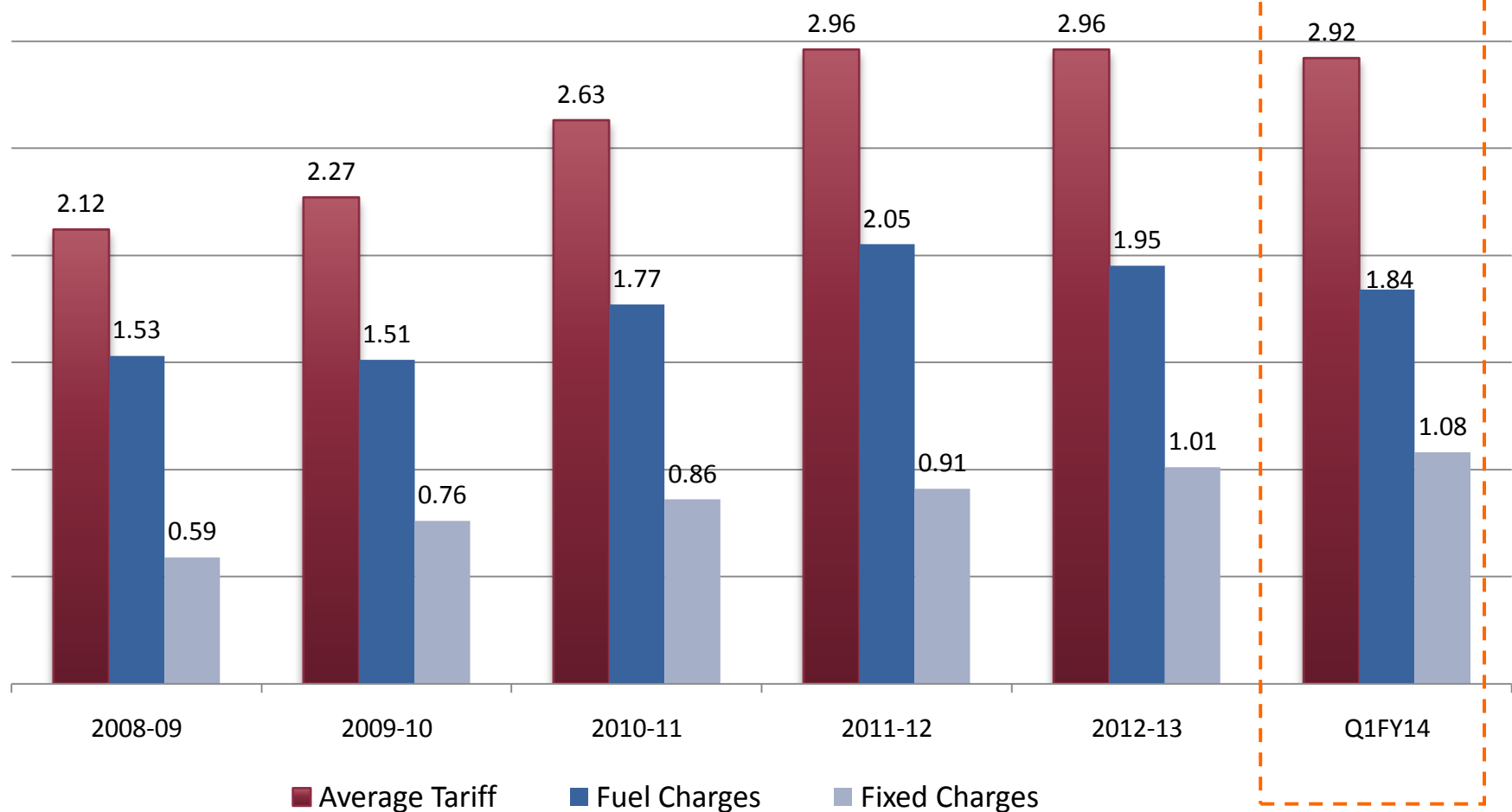
Stellar Track Record

- ⚡ Accounted for 27.37% of India's power output despite having only 18.44% of the total generation capacity in FY13
- ⚡ Maintenance practices and real-time monitoring system ensure high availability and efficient operations
- ⚡ Implementing Perform Achieve Trade (PAT) Scheme under National Mission on Enhanced Energy Efficiency at 22 power stations.

Source: CEA.
1. For NTPC owned plants.

SUSTAINING ITS STATUS OF COMPETITIVE COST POWER PRODUCER

Rs/kWh



Coal Based Plants Close to Pit Head Stations Ensure Competitive Variable Cost of Generation

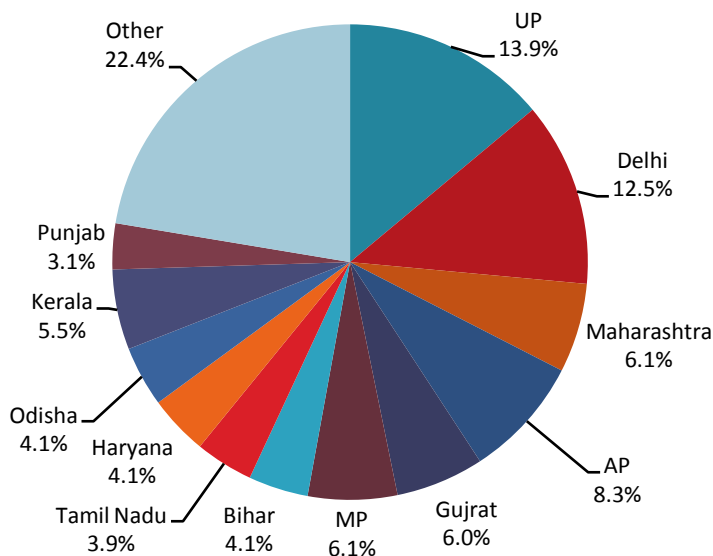
1. Based on NTPC stand-alone data.

PRUDENT OFF-TAKE POLICY

Secured Off-take

- ⚡ PPAs have been signed for all operating and under construction projects
- ⚡ Policy of securing PPAs for all new plants before approval is given for investment
- ⚡ Entire power output of NTPC power stations has been contracted under PPAs
- ⚡ NTPC does not presently sell any power in the merchant market, so they are immune to volatile merchant power prices

Geographically Diversified Customers¹



1. Based on billing for FY13.

Bolstered by a Regulated Pricing Mechanism ...

- ⚡ Tariffs based on Regulations notified by CERC for the period 2009–2014
- ⚡ Capacity charges: Allowed to recover the capacity charge in full if plant availability is at least 85%
 - Return on equity on pre-tax basis at a base rate of 15.5%, to be grossed up by the applicable tax rate
- ⚡ Energy charge: Fuel cost is a pass-through to the customer
- ⚡ The recovery of interest cost on normative debt and return on equity on a prescribed 70:30 debt to equity ratio
- ⚡ **New Regulations are also expected to be balanced considering negative sentiments for new investments**

... and Coupled with High Collection Efficiency

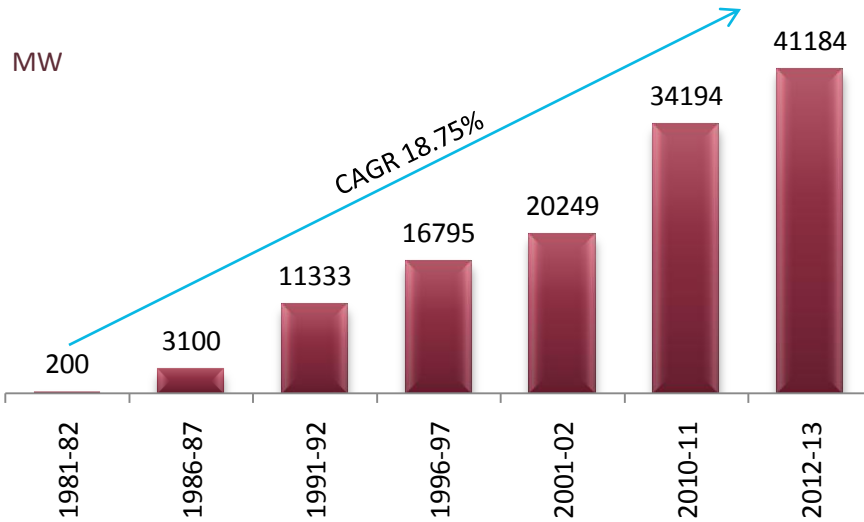


- ⚡ 100% collection efficiency 10th year in succession in FY13
- ⚡ Payment Security Mechanisms
 - LC coverage from SEBs adequate to cover monthly billing
 - Tripartite Agreements between Government, RBI and each state in terms of the Scheme for One Time Settlement of SEB dues valid till October 31, 2016
 - Recourse to Reserve Bank of India (RBI) in case of default in making payment
 - Supplementary agreements signed with all discoms for first charge over State utilities' receivables after 2016

ROBUST FINANCIALS- PROVEN ALL ROUND TRACK RECORD

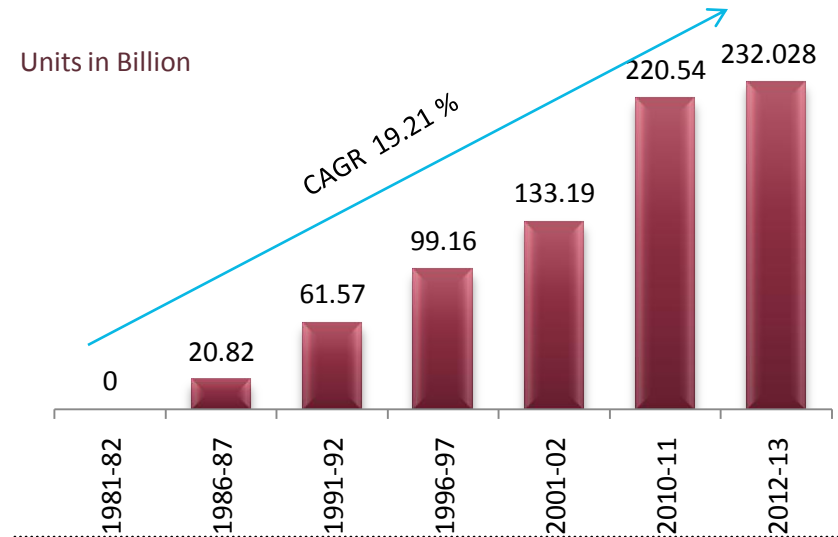
Capacity (NTPC Group)

MW



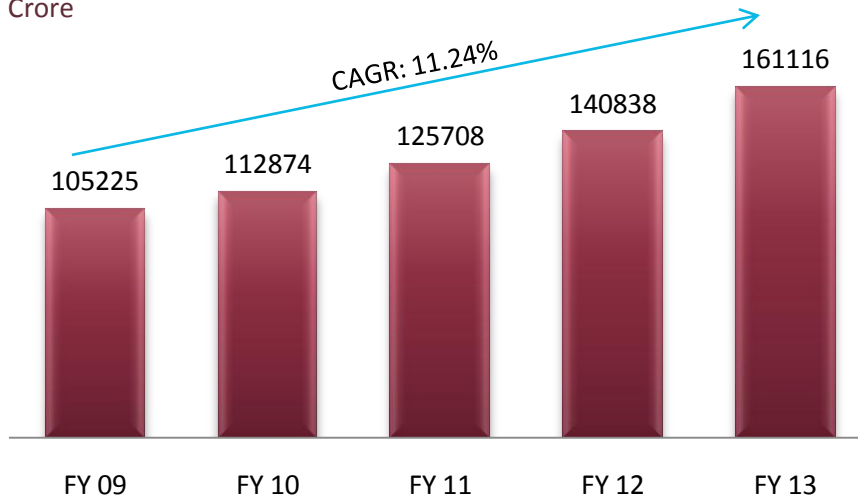
Generation (NTPC Standalone)

Units in Billion



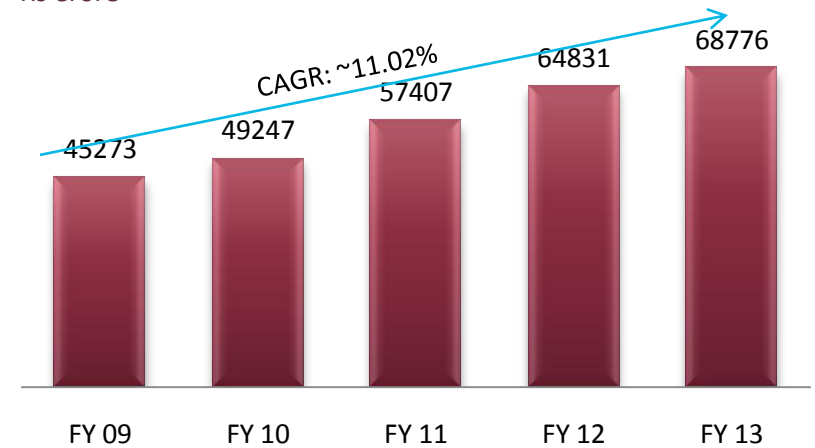
Total Assets¹

Rs. Crore



Total Revenue¹

Rs Crore



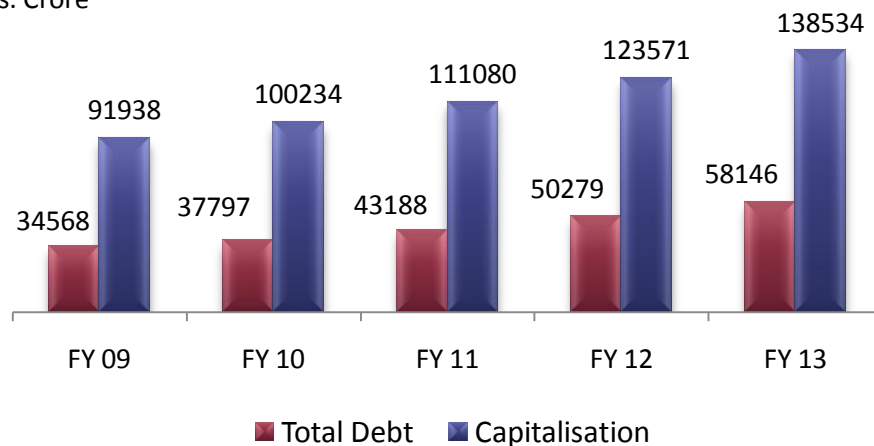
Note:.

1. Based on stand-alone NTPC numbers.

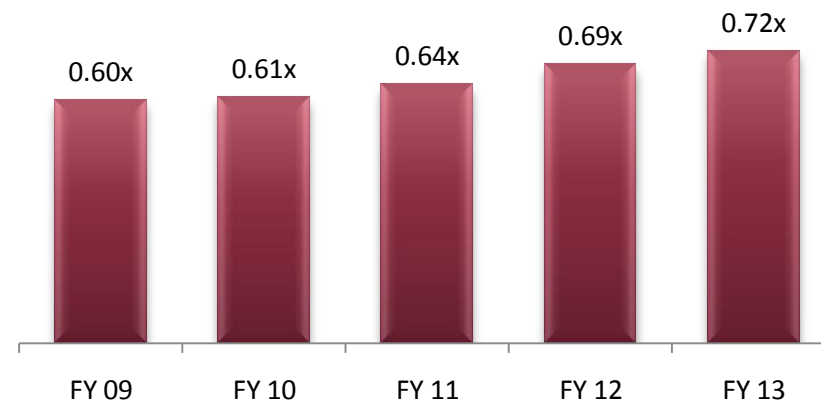
ROBUST FINANCIALS CONTD..

Total Debt and Capitalization¹

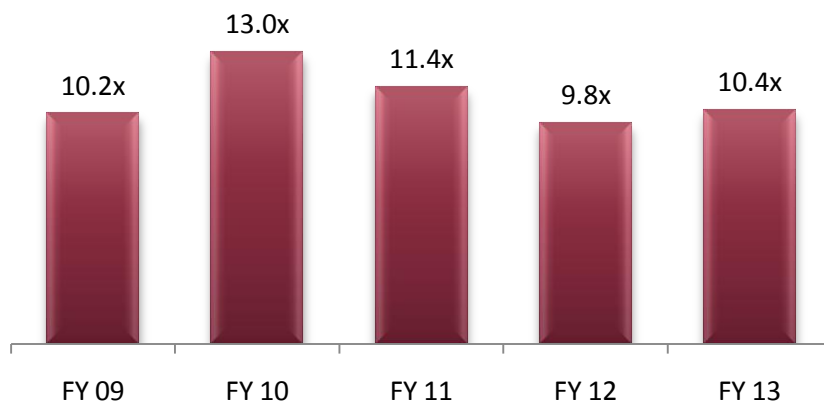
Rs. Crore



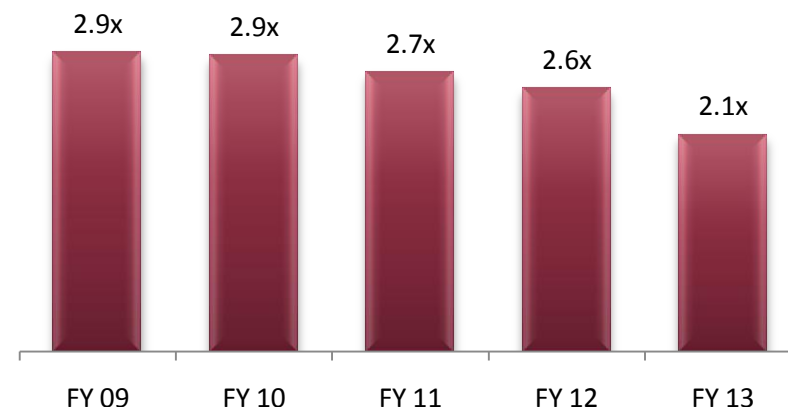
Debt/Equity



Interest Service Coverage Ratio¹



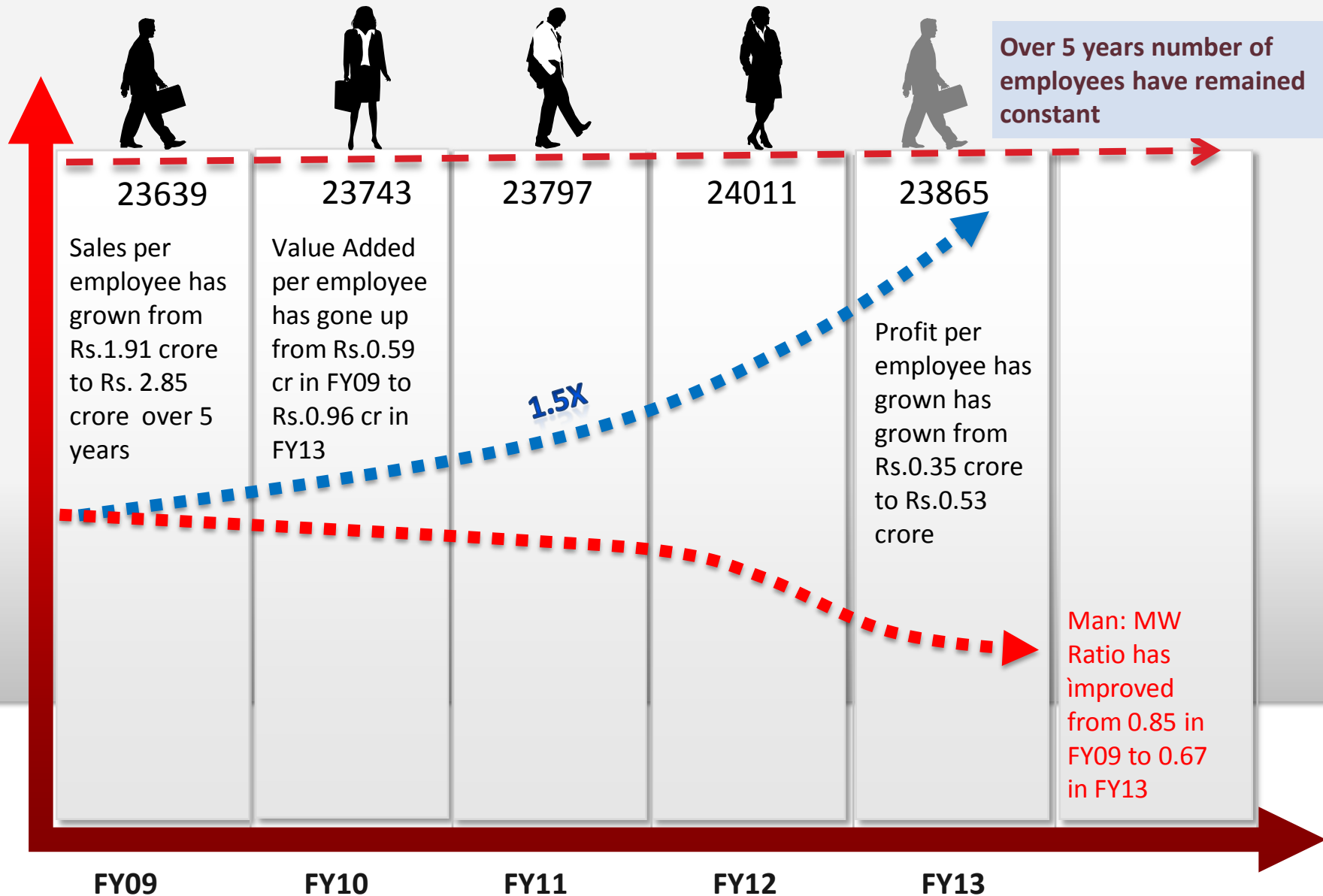
Current Ratio¹



Strong Credit Metrics Ensure Debt at Optimal Cost

1. Based on stand-alone NTPC numbers.

HUMAN RESOURCE METRICS



NTPC has been ranked 3rd Best Company in Reward and Recognition in India in 2013 by a study conducted by Great Place to Work® Institute India in partnership with Edenred

PRESENCE ACROSS THE POWER VALUE CHAIN

Integrated Business Model – Within the Business and Across the Value Chain

Coal Mining & Exploration

- ✓ 10 coal mining blocks awarded directly to NTPC by GoI with GR of ~ 5 BT
- ✓ Aim to meet ~ 15% of its coal requirement from its captive mines by 2017
- ✓ Awarded 1 oil exploration block by GoI with a 100% interest and 3 oil exploration blocks to separate consortiums in which NTPC holds a 10% interest
- ✓ 5 MTPA LNG Terminal at Dabhol through JV

Equipment Manufacturing

- ✓ NTPC has formed JVs with BHEL and Bharat Forge Ltd.
- ✓ JVs for manufacturing power equipment, castings, forgings, high voltage equipment and Balance of Plant (BoP) equipment for Indian and international markets
- ✓ Also acquired a stake in Transformers and Electricals Kerala Ltd. (TELK) for manufacturing and repair of transformers

Power Generation

- ✓ Total installed power generation capacity of 41,184MW
- ✓ 20,064MW of capacity under construction
- ✓ 1st Hydro project to be commissioned in the next fiscal year
- ✓ Also developing other renewable energy projects, such as wind and solar, as well as nuclear power projects
- ✓ Global footprint in Sri Lanka and Bangladesh through JVs

Power Distribution/ Consultancy Services

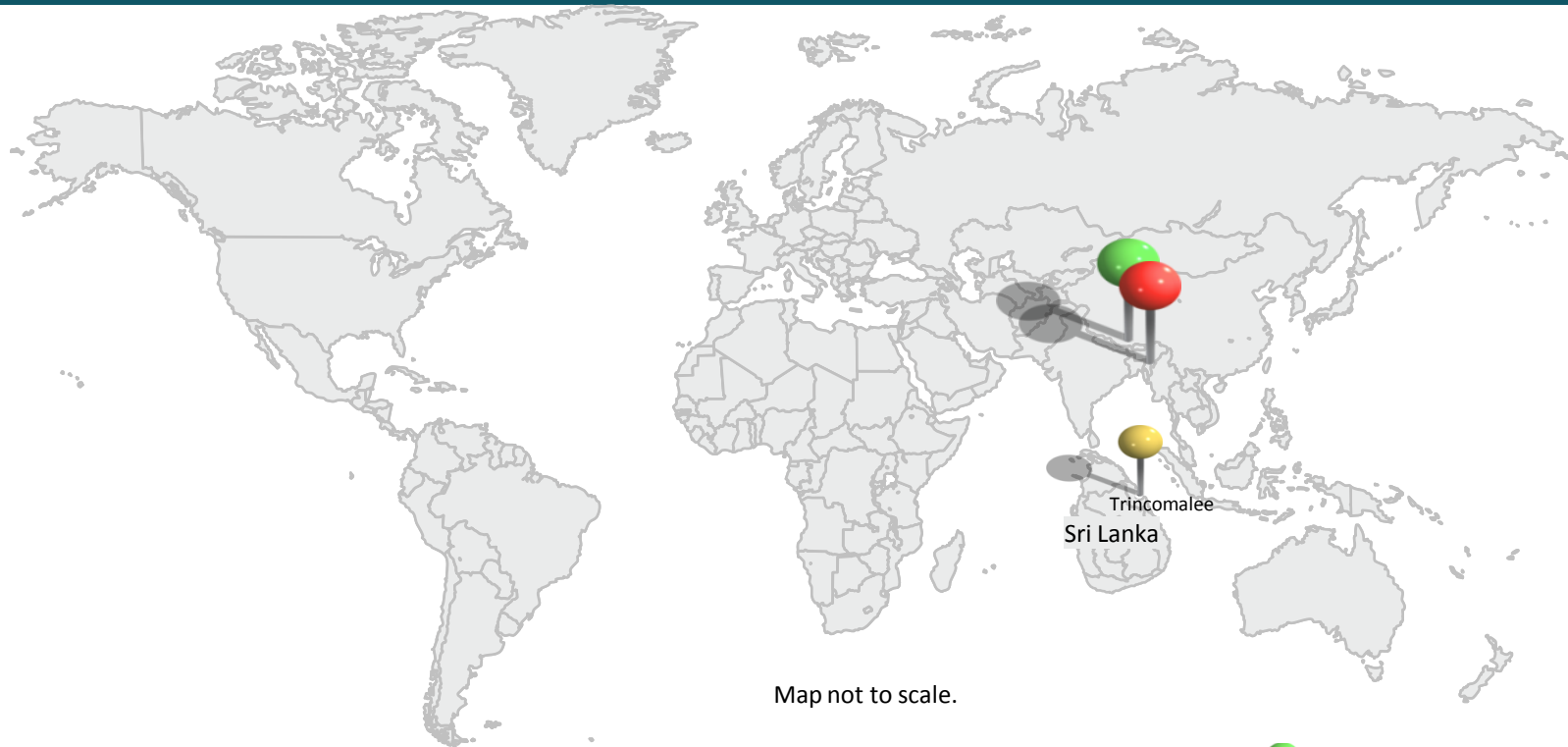
- ✓ NTPC has forayed into the power distribution business through its subsidiary NESCL
- ✓ NESCL actively engaged in rural electrification
- ✓ NTPC also offers consultancy services to State Electricity Boards, State generating companies and other private companies both in India and abroad

Power Trading

- ✓ NTPC's wholly owned subsidiary 'NTPC Vidyut Vyapar Nigam Ltd.' (NVVN) is prominent power trading company in India. It traded over 8 billion units of electricity in each of the FY12 and FY13
- ✓ NVVN has also been appointed as nodal agency for trading power with Bangladesh and Bhutan



GLOBAL FOOTPRINT



Map not to scale.

Sri Lanka (Trincomalee)

- 2x250MW coal based power project in Trincomalee through a JV Co. "Trincomalee Power Co. Ltd." with Ceylon Electricity Board (CEB)
- Sampur site in Trincomalee region is identified for the project. Feasibility study has been prepared and submitted to CEB

Bangladesh

- 1320MW imported coal based power plant at Khulna Being Developed through a 50:50 JV Co. with BPDB on BOO basis. A JV Co. 'Bangladesh-India Friendship Power Company (Pvt.) Limited' incorporated. PPA signed for the same
- Consultancy Agreement with EGCB for providing O&M services for 2x120MW Gas based power plant. This is the largest single international order received by NTPC
- NVVN appointed for supplying Power to Bangladesh

Bhutan

- Agreement with Royal Govt. of Bhutan for preparing DPR for 620MW Amochhu Reservoir based HEP
- NVVN appointed as the nodal agency for trading power from Bhutan

RISKS AND MITIGATION

KEY RISKS AND MITIGATION

Risk	Mitigation
Coal and Gas Supply Constraints	✓ Long term Fuel Supply Agreements signed with CIL for supply of coal for a period of 20 years for stations set up prior to March 2009 – ACQ supply tied up ~124.9MT ✓ FSA being signed for post 2009 stations, FSA for 4.76 GW signed up, for 4.86 GW in process. ✓ 6 captive coal blocks with reserves of ~3BT, target production of ~33MT by FY17, 4 new blocks allotted ✓ Long Term APM/PMT Gas Supply Agreement with GAIL for supply of 14.48 MMSCMD gas upto 2021/2019 ✓ Long term Agreement with GAIL for supply of 2.5 MMSCMD of RLNG till 2019 ✓ Fallback agreements with GAIL BPCL, IOC and GSPL for supply of gas on Reasonable Endeavour basis ✓ Govt. allocated 4.46MMSCMD from KG-D6 for NCR projects
SEB Financial Distress	✓ Tripartite agreement in place with RBI – SEB's required to issue LCs covering 105% of the average monthly billing – Realized 100% payment of bills from customers for 10 years in succession ✓ SEB restructuring announced by Gol and tariff revision by majority SEB's during 2012–2013
Land Acquisition Uncertainty	✓ Progressive R&R Policy, focus on consultation and participation, negotiated settlement ✓ Institutional mechanisms like Village Development Advisory Committees and Public Information Centers ✓ Project head in place at site well in advance to expedite land acquisition ✓ Appointed Chief Forest Officer for expeditious forest clearance ✓ Land acquisition cell created at corporate centre to support the activities at site
Accelerated Capacity Addition	✓ Multi-pronged strategy developed and enhanced delegation of power for quick decision making ✓ Bulk Tendering of 11,540 MW already awarded and are under construction
Consistent RoE	✓ Capex intensive model delivering consistent earnings and dividends ✓ Upsides from PAF and PLF incentives ✓ Supplementary agreements signed for first charge over state utilities' receivables after 2016
Competition from Private Players	✓ Relatively robust business model with regulated returns ✓ Gol ownership ✓ Strong management expertise and high standards of corporate governance
Funding Requirements for New Projects	✓ Strong balance sheet and healthy leverage ratios ✓ Easy access to domestic and overseas debt market; mobilized debt on most optimal rates from both domestic and international markets due to low gearing and healthy coverage ratios ✓ 12th Plan outlay finalized at Rs.1,52,341 crore to be funded by debt equivalent of Rs.1,01,406 crore . Debt o Rs. 11,133 crore already deployed during FY13, Debt of Rs.17,074 Crore already tied up and yet to be drawn as on 31.03.13
Environmental Laws and Regulations	✓ Excellent track record ✓ Environmental clearances for all under construction projects received ✓ Strong focus on sustainability and fuel diversification- 10 MW solar plants commercialised, 85 MW under construction

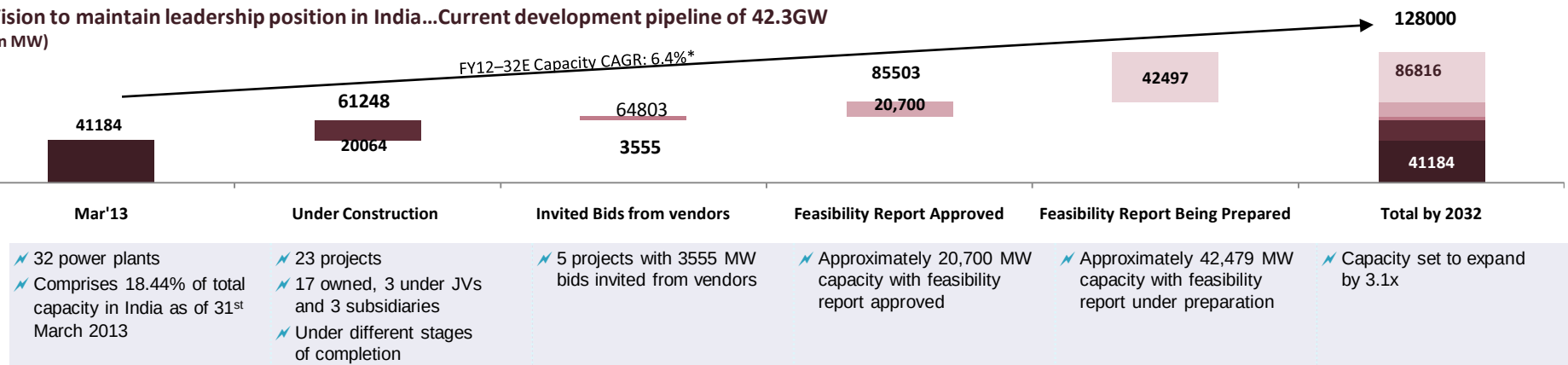
GROWTH AND CAPEX PLANS

GROWTH VISIBILITY

NTPC takes the decision to proceed with a new project only once it is satisfied on the availability of land, water, fuel, off-take arrangements and environmental clearances.

Vision to maintain leadership position in India...Current development pipeline of 42.3GW

(In MW)



NTPC's Projects Under Construction

Projects	Fuel	Capacity (MW)	Expected Commissioning	Technology	Land	MoEF Clearance		NTPC/JV
						Environmental Clearance	Forest Clearance	
Koldam	Hydro	800	FY15	–	Yes	Yes	Yes	NTPC
Barh I	Coal	1,980	FY16, FY17	Super-Critical	Yes	Yes	Yes	NTPC
Tapovan Vishnugad	Hydro	520	FY16	–	Yes	Yes	Yes	NTPC
Bongaigaon	Coal	750	FY15, FY16	Sub-Critical	Yes	Yes	Yes	NTPC
Barh II	Coal	1,320	FY14, FY15	Super-Critical	Yes	Yes	Yes	NTPC
Rihand III	Coal	500	FY14	Sub-Critical	Yes	Yes	Yes	NTPC
Singrauli Hydro	Hydro	8	FY15	–	Yes	Yes	Yes	NTPC
Solapur	Coal	1,320	FY17+	Super-Critical	Yes	Yes	Yes	NTPC
Mouda II	Coal	1,320	FY17+	Super-Critical	Yes	Yes	Yes	NTPC
Vindhyachal V	Coal	500	FY16	Sub-Critical	Yes	Yes	Yes	NTPC
Kudgi	Coal	2,400	FY16, FY17, FY17+	Super-Critical	Yes	Yes	Yes	NTPC
Unchahar Solar	Solar PV	10	FY14	–	Yes	Yes	Yes	NTPC
Ramagundam Solar	Solar PV	10	FY14	–	Yes	Yes	Yes	NTPC
Talcher Solar	Solar PV	10	FY14	–	Yes	Yes	Yes	NTPC
Faridabad Solar	Solar PV	5	FY14	–	Yes	Yes	Yes	NTPC
Rajgarh Solar	Solar PV	50	FY14	–	Yes	Yes	Yes	NTPC
Lara	Coal	1,600	FY17+	Super-Critical	Yes	Yes	Yes	NTPC
Gadarwara	Coal	1,600	FY17+	Super-Critical	Yes	Yes	Yes	NTPC
Lata Tapovan	Hydro	171	FY17+	–	Yes	Yes	Yes	Sub (NHL) ¹
Vallur	Coal	500	FY14	Sub-Critical	Yes	Yes	Yes	JV
Nabinagar (BRBCL)	Coal	1,000	FY15, FY16	Sub-Critical	Yes	Yes	Yes	Sub
Nabinagar (JV with BSEB)	Coal	1,980	FY17+	Super-Critical	Yes	Yes	Yes	JV
Kanti	Coal	390	FY 14, FY15	Sub-Critical	Yes	Yes	Yes	Sub
Meja	Coal	1,320	FY17+	Super-Critical	Yes	Yes	Yes	JV
Total		20,064						

*NTPC Group YE FY12 capacity was 37,014GW.

1. Currently under merger with NTPC.

CAPACITY ADDITION SCHEDULED IN 12TH PLAN

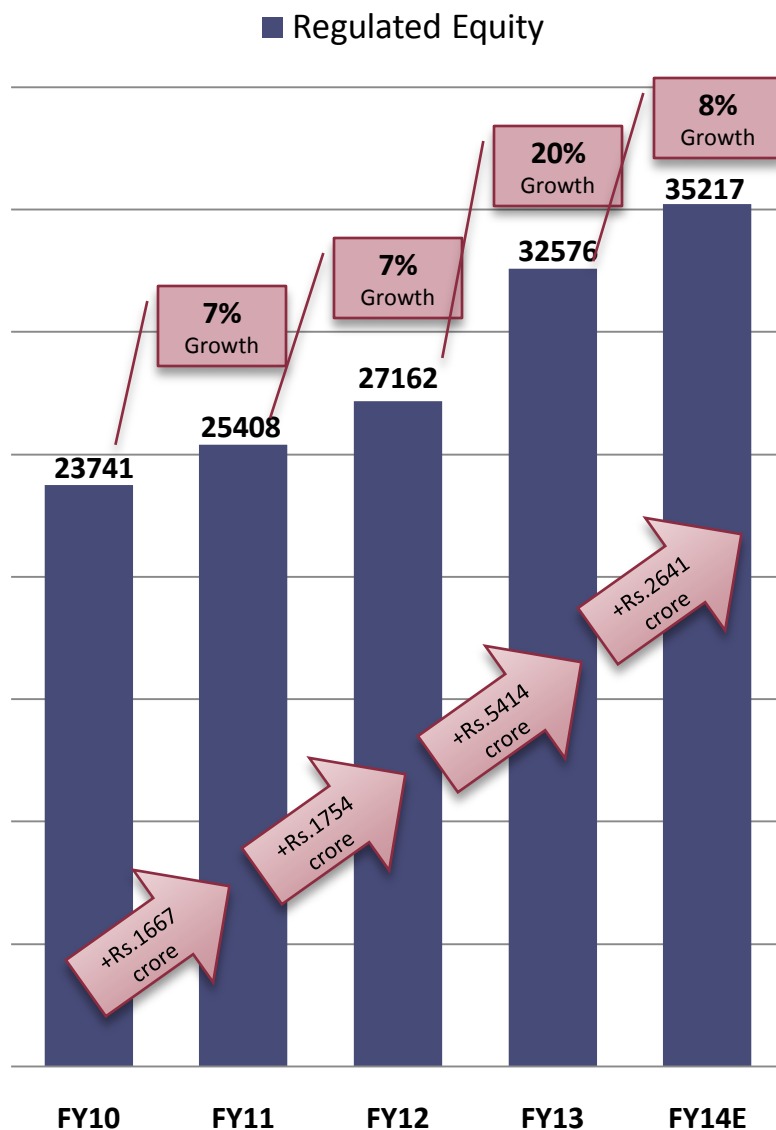
Year	Project	MW
FY13	Sipat	660
	Indira Gandhi STPP JV	500
	Mouda – I, Unit - 1	500
	Vindhyachal – Unit 11	500
	Rihand – III	500
	Vindhyachal – Unit 12	500
	Mouda – I, Unit- 2	500
	Vallur – I JV	500
	Solar PV (A&N, Dadri)	10
Total FY 13		4,170
FY14	Rihand – III	500
	Barh-II	660
	Solar PVs	20
	Kanti- Subsidiary	195
	Vallur – I JV	500
Total FY 14		1,875*
FY15	Bongaigaon	250
	Barh-II	660
	Koldam- Hydro	800
	Singrauli Hydro	8
	Nabinagar JV	500
	Kanti - Subsidiary	195
Total FY 15		2413
FY16	Barh-I	660
	Vindhyachal – V	500
	Tapovan Hydro	520
	Kudgi	800
	Bongaigaon	500
	Nabinagar JV	500
Total FY 16		3,480
FY17	Barh-I	1320
	Kudgi	800
Total FY 17		2120
Total (FY12-17)		14,058

Units Commissioned

* In addition 65 MW Solar PV likely to be commissioned shortly

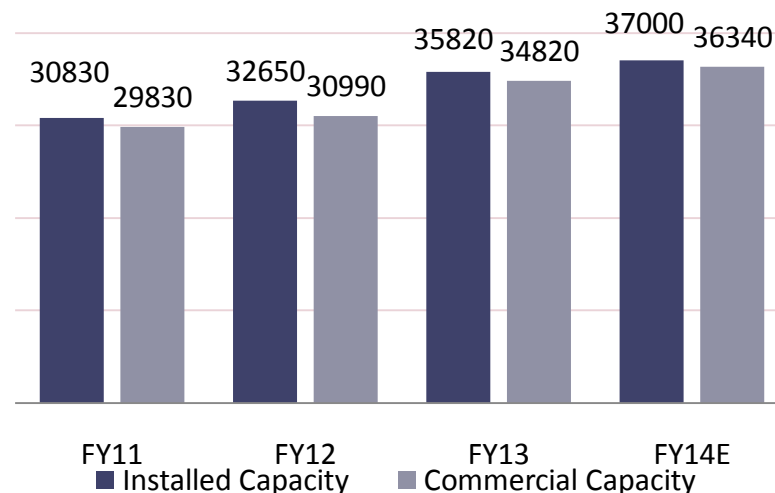
REGULATED EQUITY GROWTH

Regulated Equity (Standalone) (Rs. Crore)



Capex Addition of Rs. 20200 crore planned in FY2013-14

Capacity Growth (Standalone) (MW)



Commercial Capacity Target

Commercial Capacity (Standalone)	Capacity (MW)
As on 31.03.13	34,820
CoD target for FY 14E	
Mouda	500
Vindhyachal	500
Rihand	500
Solar	20
Total	1,520
Total Commercial Capacity FY14E	36,340

Full impact of Regulated Equity added in FY 2013 will translate into earnings in 2013-14

SUSTAINABILITY INITIATIVES

SUSTAINABILITY INITIATIVES

Renewable and Nuclear Energy—Reducing Carbon Footprints

Own Basket

- ✓ Basket of 1,000MW of renewable energy sources under development
- ✓ 300MW being targeted for completion by 2017
- ✓ Of this 105 MW solar capacity by 2017
- ✓ 5MW each at A&N islands and Dadri is under commercial operation, 85 MW at Unchahar (10MW), Ramagundam (10MW), Talcher (10MW), and Faridabad (5MW) & Rajgarh (50MW) under construction

In Partnership

- ✓ Pan-Asian Renewable Private Limited, JVC to initially develop renewable energy projects of about 500MW
- ✓ “Anushakti” formed with 51% stake of NPCIL¹ and 49% stake of NTPC for developing nuclear power projects

JNNSM

- ✓ NVVN² a nodal agency for JNNSM³ implementing 1,050 MW of solar capacity
- ✓ Contracts awarded for 1,028 MW
- ✓ 528 MW has already been commissioned - 478MW of solar PV and 50MW Solar thermal
- ✓ Traded 1590 MU of bundled solar power in FY13 and sold 1011 MU of bundled solar power in Q1FY14

Environmental Initiatives—More Than 34 Million Tons of CO₂ has been Avoided in NTPC

Technology Choices

- ✓ Advanced and high efficiency technologies
- ✓ NTPC's 1st Super-Critical unit of 660MW is declared on commercial operation at Sipat-I Power Project
- ✓ 1980 MW super critical capacity ('SCC') already under commercial operation
- ✓ 15,640MW SCC under construction
- ✓ Reducing reliance on fossil fuels

Monitoring Systems

- ✓ CO₂ measurement systems being installed at all NTPC stations in the chimney stacks
- ✓ 67 Ambient Air Quality Monitoring System (AAQMS) installed in NTPC stations

Energy Conservation

- ✓ Online energy management system at 15 stations to reduce auxiliary power consumption
- ✓ Energy Audits

Sustainability Report

- ✓ A Sustainability Report for the year 2011-12 based on GRI indicators have been prepared and is available on Company's website



2.15 Million Tons CO₂ Avoided in 2012-13

Created green wealth of ~19 million trees at and around stations

1. Nuclear Power Corporation of India.
2. NTPC Vidyut Vyapar Nigam.
3. Jawaharlal Nehru National Solar Mission.

TECHNOLOGY PROGRESSION—INCREASED EFFICIENCY AND GREATER ENVIRONMENTAL PROTECTION

Leader in introducing new technologies in the power sector.

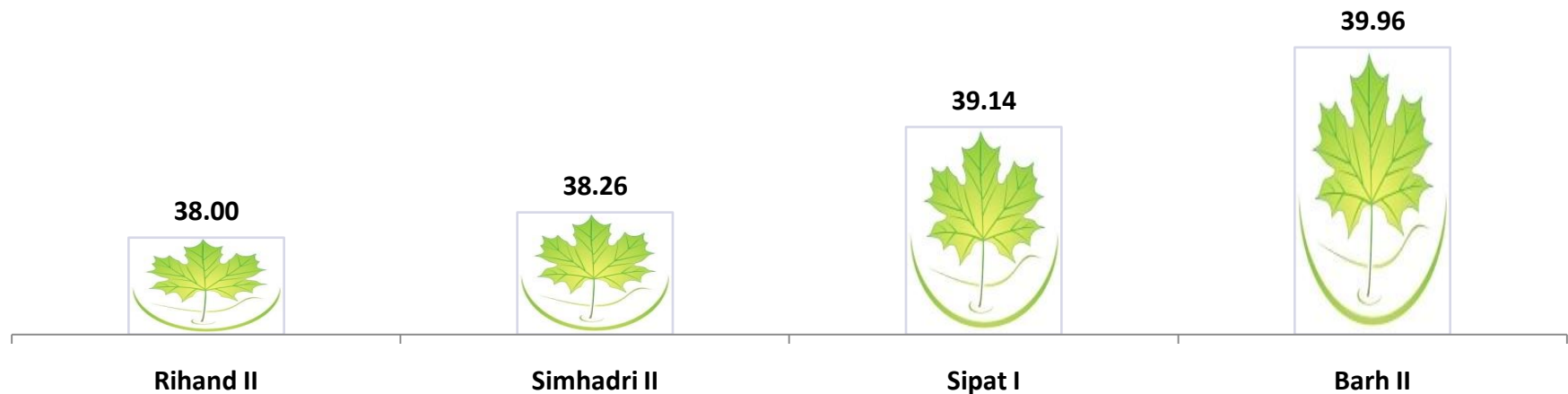
Technologies Introduced

- ✓ Adoption of super critical parameters for higher efficiency
- ✓ Higher size units of 660 and 800MW
- ✓ Adoption of high reheat parameters for smaller units
- ✓ 765KV AC switchyard
- ✓ State of art automation technologies for C&I and Electrical systems
- ✓ Tunnel Boring machines
- ✓ Flue gas desulphurisation
- ✓ High concentration slurry disposal system & Dry Ash extraction and disposal system

Technologies Under Development

- ✓ Development of IGCC suitable for Indian coal
- ✓ Development of Adv Ultra supercritical power plant along with IGCAR and BHEL for inlet steam temperature in the range of 700°C
- ✓ Use of advanced technologies in the renovation and modernization of aging power stations

Gross Efficiency HHV%



Committed to invest up to 1% of distributable profit for R&D Activities and Climate Change Technologies.

Efficiency Improvement and Cost Reduction

- ✓ Waste heat recovery from flue gas
- ✓ Aqua Ammonia cycle for low grade heat utilization
- ✓ Artificial Intelligence based Plant Advisory
- ✓ CFD based flue gas duct modification
- ✓ Online chemical monitoring & advisory

Climate change

- ✓ Pressure Swing Adsorption based CO₂ capture technology
- ✓ Micro Algae based CO₂ fixation
- ✓ Study of CO₂ capture & storage technology (With IIT Guwahati & With IIT Kharagpur)
- ✓ CO₂ capture thru Fly Ash Mineralization
- ✓ Ammonia based Flue Gas Conditioning

Renewable energy

- ✓ 40 TR Solar Thermal Air Conditioning System
- ✓ 15MW Solar Thermal Hybrid Plant
- ✓ Integrated biodiesel plant to produce Electricity and biodiesel
- ✓ Municipal Solid Waste to fuel system
- ✓ MoU with DLR, Germany and ISE-Fraunhofer for setup of Solar Thermal and Photovoltaic Lab

- ✓ **Infrastructure:** 18 number of Labs in place, 2 more in offing
- ✓ **Manpower:** 102 Executives including 16 PhD's and 29 M.Tech's
- ✓ **Networking:** R&D Collaboration with 12 national and 2 international institutions
- ✓ **IPR:** 21 Patent Applications Filed, one patent granted, several more in pipeline
- ✓ **Membership:** NETRA is a member of (1) IEA GHG R&D Program, France; (2) CSLF France (3) IERE Japan (4) GCCSI Australia

NETRA: NTPC Energy Technology Research Alliance.

EXTENSIVE ENGAGEMENT WITH SOCIETY

NTPC has committed to contribute 1% of Net Profit towards Sustainable Development from FY 2013-14 onwards

Social Inclusiveness

- ✓ Land acquisition through a participatory process
- ✓ Progressive R&R and CSR policies
- ✓ Compensation and R&R entitlement finalized through a consultative and participatory process with the stakeholders
- ✓ Efforts for negotiated settlements
- ✓ Focus on capacity building
- ✓ Intensive community and peripheral development

Stakeholder Engagement

- ✓ Information sharing through Public Information Centers ('PIC')
- ✓ Multi Stakeholder Engagement mechanisms like Village Development Advisory Committees
- ✓ Socio Economic Surveys / Audits / Evaluation through independent agency / academic institute of repute
- ✓ Grievance redressal mechanisms
- ✓ Effective institutional set up

Skill Creation

- ✓ Adopted 17 ITIs and creating 9 new ITIs
- ✓ Sponsored around 750 youth from villages in the vicinity of NTPC units for ITI training
- ✓ Setting up Solapur Power Training Institute in Maharashtra to provide skill development for power generation and transmission
- ✓ 1st batch to roll out by end of 2013
- ✓ Information and Communication Technology (ICT) Centre for physically and visually challenged students set up at Delhi University, Guwahati University and Devi Ahilya Vishwa Vidhyalaya at Indore by NTPC Foundation
- ✓ Udaan initiative- Training 1000 J&K youths in thermal power plant engineering

Preserving Heritage

- ✓ Conservation of selected National Monuments in association with ASI

Support Initiatives Like Access to Healthcare, Gender Justice, Community Welfare...



DISCLAIMER

- This presentation is issued by NTPC Limited (the "Company") for general information purposes only and does not constitute any recommendation or form part of any offer or invitation or inducement to sell or issue, or any solicitation of any offer to purchase or subscribe for, any securities of the Company, nor shall it or any part of it or the fact of its distribution form the basis of, or be relied on in connection with, any contract or commitment thereof. This presentation does not solicit any action based on the material contained herein. Nothing in this presentation is intended by the Company to be construed as legal, accounting or tax advice*
- This presentation has been prepared by the Company based upon information available in the public domain. This presentation has not been approved and will not be reviewed or approved by any statutory or regulatory authority in India or by any Stock Exchange in India.*
- This presentation may include statements which may constitute forward-looking statements relating to the business, financial performance, strategy and results of the Company and/or the industry in which it operates. Forward-looking statements are statements concerning future circumstances and results, and any other statements that are not historical facts, sometimes identified by the words "believes", "expects", "predicts", "intends", "projects", "plans", "estimates", "aims", "foresees", "anticipates", "targets", and similar expressions. The forward-looking statements, including those cited from third party sources, contained in this presentation are based on numerous assumptions and are uncertain and subject to risks. A multitude of factors including, but not limited to, changes in demand, competition and technology, can cause actual events, performance or results to differ significantly from any anticipated development. Neither the Company nor its Directors, Promoter, affiliates or advisors or representatives nor any of its or their parent or subsidiary undertakings or any such person's officers or employees gives any assurance that the assumptions underlying such forward-looking statements are free from errors nor do any of them accept any responsibility for the future accuracy of the forward-looking statements contained in this Presentation or the actual occurrence of the forecasted developments. Forward-looking statements speak only as of the date of this presentation. The Company expressly disclaims any obligation or undertaking to release any update or revisions to any forward-looking statements in this presentation as a result of any change in expectations or any change in events, conditions, assumptions or circumstances on which these forward-looking statements are based.*
- The information contained in these materials has not been independently verified. None of the Company, its Directors, Promoter or affiliates, nor any of its or their respective employees, advisers or representatives or any other person accepts any responsibility or liability whatsoever, whether arising in tort, contract or otherwise, for any errors, omissions or inaccuracies in such information or opinions or for any loss, cost or damage suffered or incurred howsoever arising, directly or indirectly, from any use of this document or its contents or otherwise in connection with this document, and makes no representation or warranty, express or implied, for the contents of this document including its accuracy, fairness, completeness or verification or for any other statement made or purported to be made by or on behalf of any of them, and nothing in this document may be relied upon as a promise or representation in any respect. Past performance is not a guide for future performance. The information contained in this presentation is current and, if not stated otherwise, made as of the date of this presentation. The Company undertakes no obligation to update or revise any information in this presentation as a result of new information, future events or otherwise. Any person or party intending to provide finance or to invest in the securities or businesses of the Company should do so after seeking their own professional advice and after carrying out their own due diligence and conducting their own analysis of the Company and its market position.*
- This presentation is strictly confidential and may not be copied or disseminated, in whole or in part, and in any manner or for any purpose. No person is authorized to give any information or to make any representation not contained in or inconsistent with this presentation and if given or made, such information or representation must not be relied upon as having been authorized by any person. Failure to comply with this restriction may constitute a violation of applicable securities laws. Neither this document nor any part or copy of it may be distributed, directly or indirectly, or published in the United States. The distribution of this document in other jurisdictions may be restricted by law and persons in to whose possession this presentation comes should inform themselves about and observe any such restrictions. By reviewing this presentation, you agree to be bound by the foregoing limitations. You further represent and agree that (i) you are located outside the United States and you are permitted under the laws of your jurisdiction to receive this presentation or (ii) you are located in the United States and are a "qualified institutional buyer" (as defined in Rule 144A under the Securities Act of 1933, as amended (the "Securities Act")).*
- This presentation is not an offer to sell or a solicitation of any offer to buy the securities of the Company in the United States or in any other jurisdiction where such offer or sale would be unlawful. Securities may not be offered, sold, resold, pledged, delivered, distributed or transferred, directly or indirectly, into or within the United States absent registration under the Securities Act, except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and in compliance with the applicable securities laws of any state or other jurisdiction of the United States.*

THANK YOU

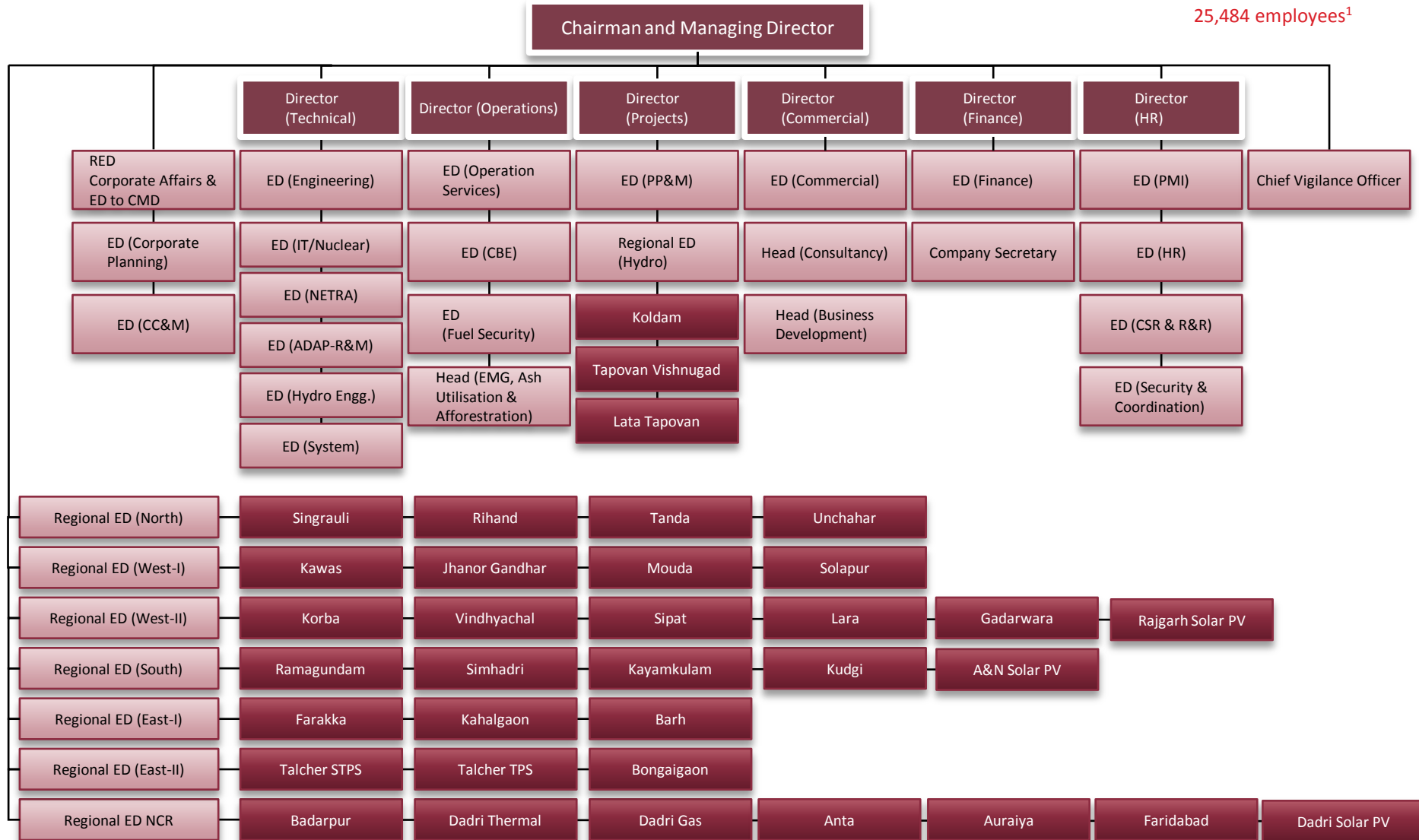


Q & A

ORGANIZATIONAL DEPTH AND AN EXPERIENCED TEAM

NTPC has the Platform and Experience to Manage a Large and Growing Portfolio

25,484 employees¹



1. As of March 31, 2013. including JVs and Subsidiaries of NTPC. 23,865 in NTPC and 1,619 NTPC employees in subs and JVs.