JM FINANCIAL

Utilities & Power Equipment

Transition Tracker #24

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Power demand remains subdued (-1% YTDFY26) due to early rains across the country. But this has helped in higher hydro (17% YoY) and wind (32% YoY) generation. Demand moderation and higher RE generation has led to decline in the PLF of thermal power plants (67% vs. 75% in Jun'24) and de-growth in coal production (-7% YoY) and off take (-4% YoY). Merchant tariff also remains soft at INR 4.1/unit (-28% YoY). On the supply chain front the solar PV module prices after dropping nearly 30% YoY remains flat since Jan'25. Tendering of RE projects have moderated (only 13GW of tenders issued so far in YTDFY26) with almost negligible tenders in vanilla solar (744 MW), but good traction in solar+storage (4.8 GW) and standalone BESS (4.3 GW). Currently, India has name plant cell/ module manufacturing capacity of 25 GW/88 GW. Here, we present a collection of 52 charts/exhibits representing important data points that help us track energy transition in India.

- **Power demand:** Energy/ peak power demand in Jun'25 remained subdued at 150BU (-2%YoY)/ 243GW (-1% YoY) due to early monsoon across the country. With this, YTDFY26 Energy/ Peak demand stands at 447 BU/ 243 GW, -1% YoY/-3% YoY.

- **Generation:** Total power generation (conventional) was 131 BU in Jun'25 (-6% YoY). Hydro generation during Jun'25 was 17BU (17% YoY) due to better rainfall across the country. RE generated 27BU (17%YoY) with increase in solar and wind generation by 9%/32% YoY.

- **Renewables:** In Jun'25, a total of 6,800MW of RE tenders were issued. In June 2025, a total of about 1,570 MW of BESS capacity and 312 MW of RE capacity was allocated to various RE developers. Standalone BESS tenders accounted for 83% of the total allotted capacity driven by strong government support in the form of VGF and falling battery costs. Standalone BESS tariffs touched lows of INR 2.08 lakh/MW/month (NHPC, Andhra) and INR 2.16 lakh/MW/month (NVVN, Tamil Nadu), while BSPGCL's Bihar tender stood out with a significantly higher flat rate of INR 4.44 lakh/MW/month, reflecting regional cost variations. SECI allotted 300 MW wind tender to Torrent Green at a tariff of INR 3.97/kWh.

- **Capacity addition:** In YTDFY26, about 10,601 MW of Solar capacity and 1,637 MW of Wind capacity were added, taking the cumulative RE capacity to 184.6GW (excl. large hydro). Wind capacity addition in Jun'25 was at 383MW vs. 234MW in Jun'24. Solar capacity addition is gaining traction with addition of 5,414 MW in Jun'25 vs. 1,197 MW capacity in Jun'24. Hydro capacity addition in YTDFY26 was at 1,650MW. A 600 MW Unit-7 of Rajasthan Atomic Power Project (RAPP) was added on 15 Apr'25.

- **Merchant tariff:** WAvg Market Clearing Price (MCP) on the exchange stood at INR 3.9/kWh in Jun'25 (purchase/ sell/ cleared volume 8142/14441/4581GWh) vs. INR 5.4/kWh in Jun'24 (purchase/ sell/ cleared volume 8878/8905/4995GWh) due to subdued power demand in Jun'25.

- **Capacity utilisation (PLF):** The PLF of coal-fired and gas-fired plants stood at 67% and 19% during Jun'25 vs. 75% and 26% during Jun'24.

- **Coal production:** Coal production in Jun'25 was 79MT, -7% YoY taking YTDFY26 production to 247 MT, 0% YoY. Coal dispatches in Jun'25 was 84MT, -4% YoY taking YTDFY26 dispatches to 261MT, -1% YoY.

- **Solar input material cost:** Price for global TopCon modules remained stable at USD 0.09/Wp (-22% YoY) since Jan'25. Prices for domestic modules for Mono PERC 500Wp/ Bifacial Modules/ Topcon Modules stood at INR 17.7/Wp / INR 17.8/Wp / INR 18.8/Wp showing signs of traction after hitting low of INR 13.5/Wp / INR 14.2/Wp / INR 15.5/Wp in Sep'24.

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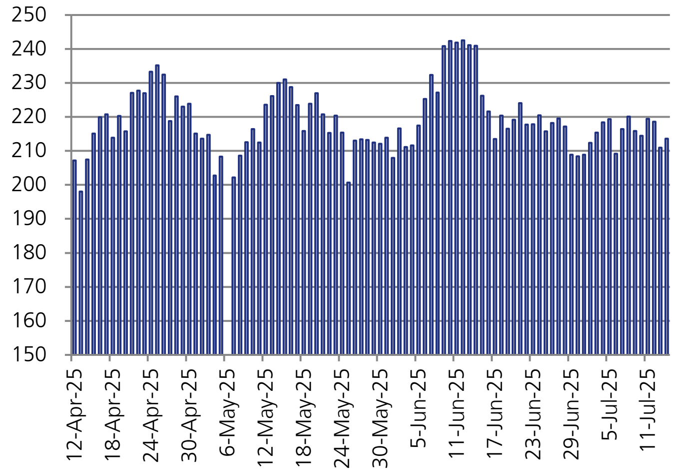
Power Demand

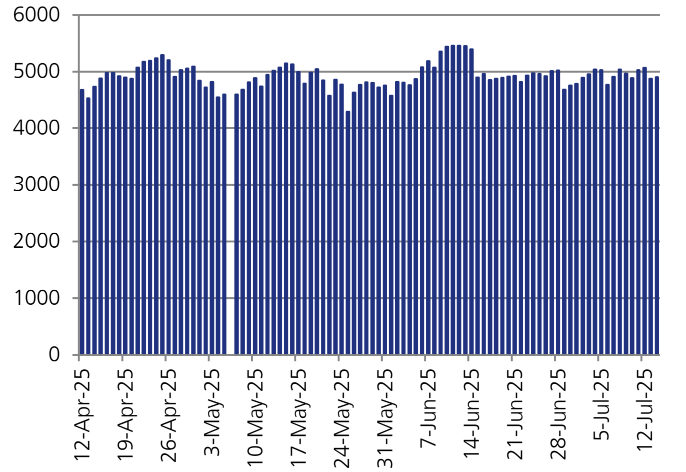
- The power consumption in Jun'25 was 150BU, -2% YoY. The peak demand met reached 243GW, -1% YoY.

Exhibit 1. Peak demand (GW), daily



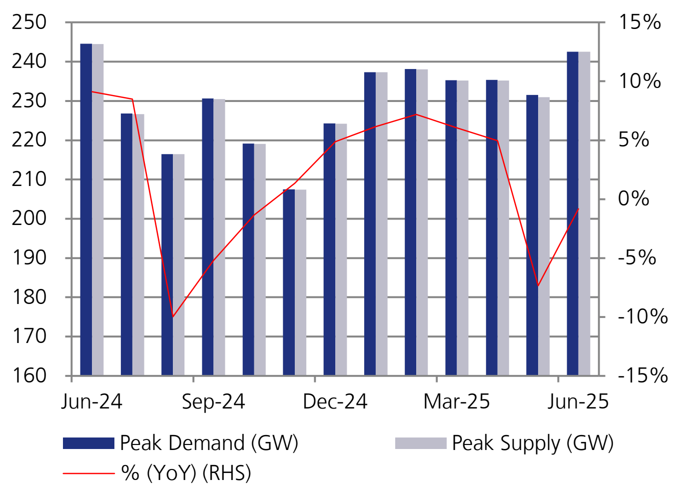
Source: CMIE, JM Financial

Exhibit 2. Energy demand (MU), daily



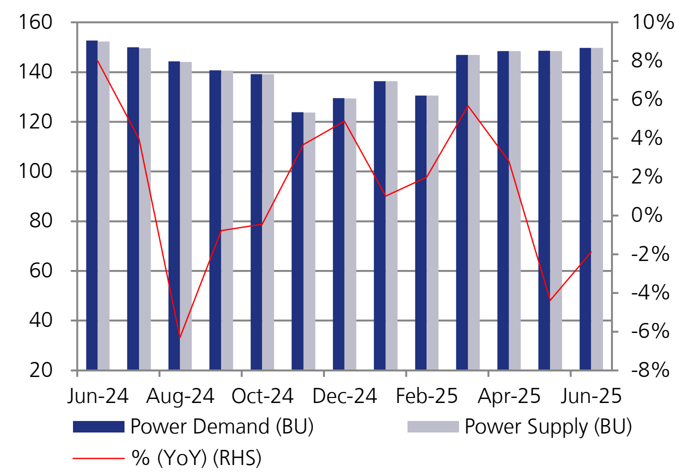
Source: CMIE, JM Financial

Exhibit 3. Peak power demand and supply, monthly



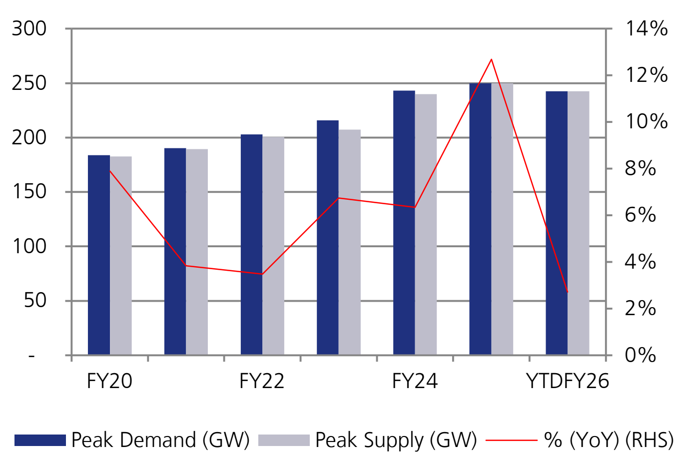
Source: CEA, CMIE, JM Financial

Exhibit 4. Energy demand and supply, monthly



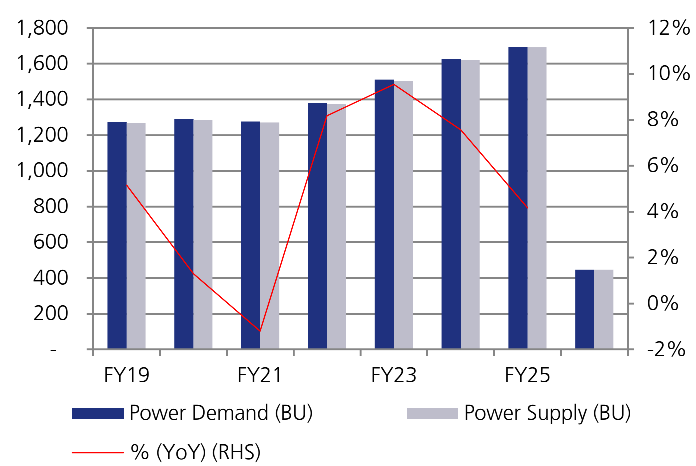
Source: CEA, CMIE, JM Financial

Exhibit 5. Peak power demand and supply, annual



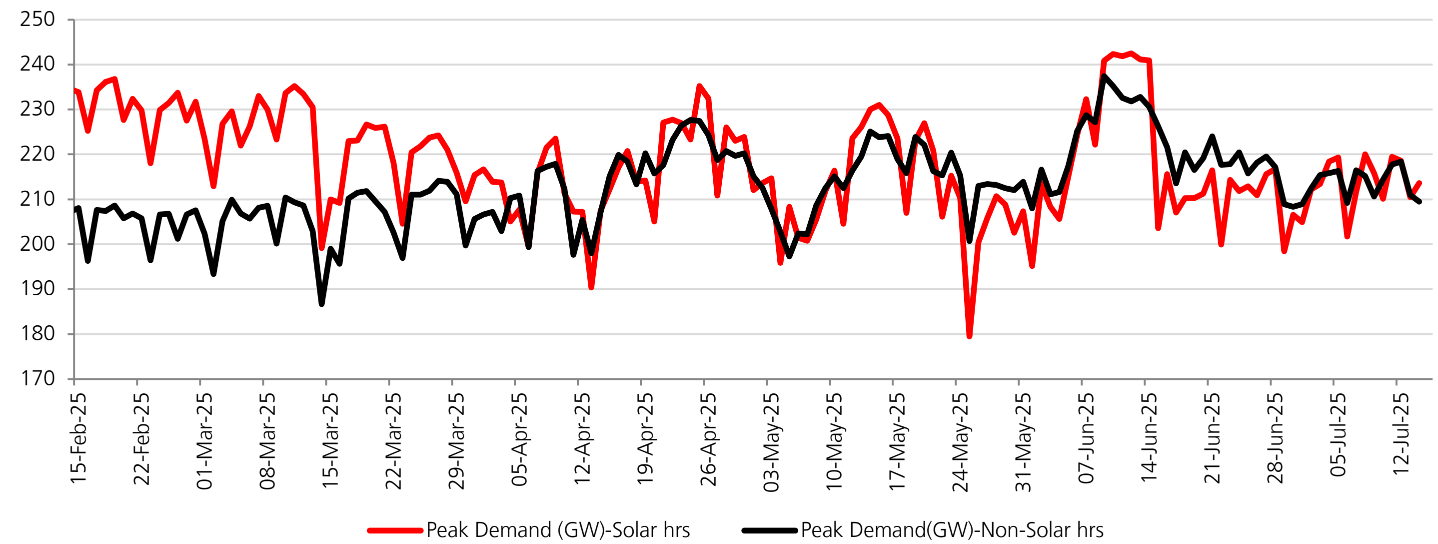
Source: CEA, CMIE, JM Financial

Exhibit 6. Energy demand and supply, annual



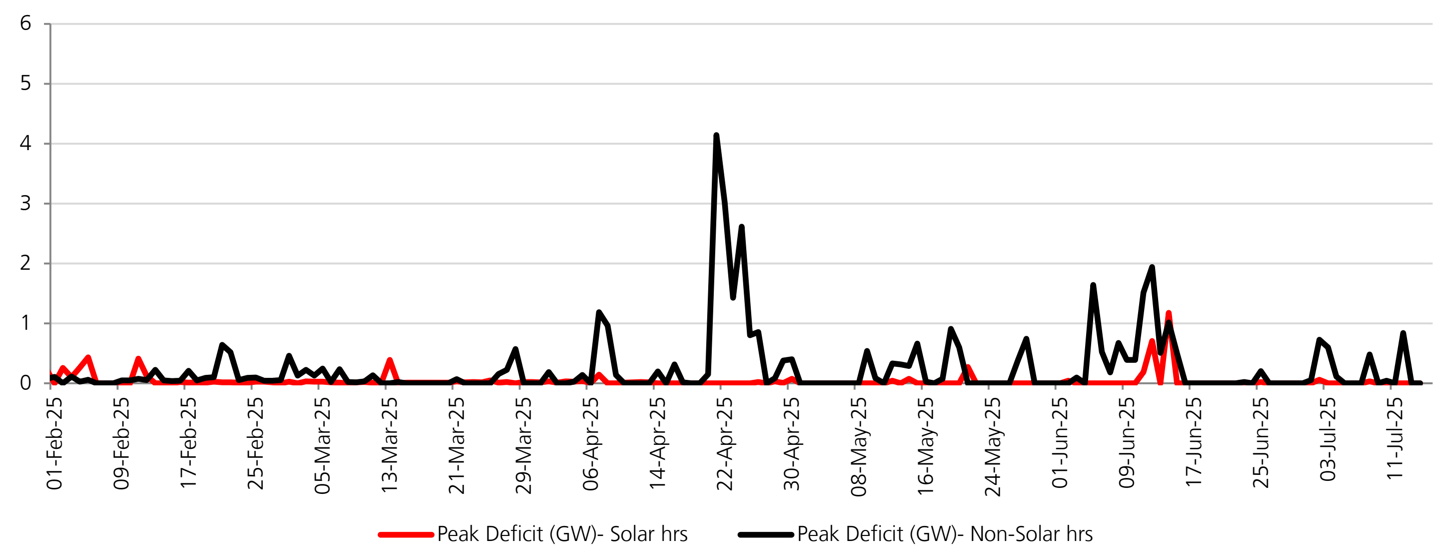
Source: CEA, CMIE, JM Financial

Exhibit 7. Peak demand, Solar and Non-Solar hrs (GW)



Source: Grid controller of India Ltd, JM Financial

Exhibit 8. Peak Deficit Solar and Non Solar hrs (GW)



Source: Grid controller of India Ltd, JM Financial

Installed Generation Capacity & additions

- Share of non-fossil/ renewables in total installed capacity increased from 29% in FY15 to 50% in YTDFY26.

Exhibit 9. Installed generation capacity (MW)

Fuel Type	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	YTDFY26
Coal	185,173	192,163	197,172	194,445	198,735	202,675	204,080	205,236	210,970	215,193	214,698
Diesel	994	838	838	638	510	510	510	589	589	589	589
Gas	24,509	25,329	24,897	24,937	24,955	24,924	24,900	24,824	25,038	24,533	20,132
Total Fossil	**210,675**	**218,330**	**222,907**	**226,279**	**230,810**	**234,728**	**236,109**	**237,269**	**243,217**	**246,936**	**242,040**
Nuclear	5,780	6,780	6,780	6,780	6,780	6,780	6,780	6,780	8,180	8,180	8,780
Hydro (> 25MW)	42,783	44,478	45,293	45,399	45,699	46,209	46,723	46,850	46,928	47,728	49,378
Small hydro (<= 25 MW)	4,177	4,380	4,486	4,593	4,683	4,787	4,849	4,944	5,003	5,101	5,102
Wind	25,088	32,280	34,046	35,626	37,669	39,247	40,358	42,633	45,887	50,038	51,675
Biomass	4,551	8,182	8,701	9,104	9,861	10,146	10,206	10,248	10,355	10,743	10,743
Urban & industrial waste	127	130	138	138	140	169	477	554	586	840	853
Solar	4,879	12,289	21,652	28,181	34,406	40,085	53,997	66,780	81,814	105,647	1,16,248
Total Non-Fossil	**87,385**	**108,519**	**121,096**	**129,821**	**139,239**	**147,423**	**163,388**	**178,790**	**198,759**	**228,276**	**242,779**
Total Installed capacity	**298,060**	**326,849**	**344,002**	**356,100**	**370,048**	**382,151**	**399,497**	**416,059**	**441,970**	**475,212**	**484,819**

Source: CEA, CMIE, JM Financial

- Share of RE in total annual generation increased from 5.6% in FY16 to 16.3% in YTDFY26.

Exhibit 10. Break-up of Generation (MU)

Fuel Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	YTDFY26
Thermal	1,037,059	1,072,224	1,042,748	1,032,514	1,114,715	1,206,211	1,326,549	1,363,890	341,807
Hydro	126,123	134,894	155,769	150,300	151,627	162,099	134,054	148,634	39,476
Nuclear	38,346	37,813	46,473	43,029	47,112	45,861	47,937	56,680	14,555
RE	101,840	126,759	138,337	147,248	170,912	203,552	225,835	255.009	77,449
Others	4,778	4,407	5,794	8,766	7,493	6,742	4,716	5,484	1,910
Total	**1,308,146**	**1,376,096**	**1,389,121**	**1,381,855**	**1,491,859**	**1,624,465**	**1,739,091**	**1,829,698**	**475,197**

Source: CMIE, JM Financial

- India added RE capacity of 10.6GW in YTDFY26.

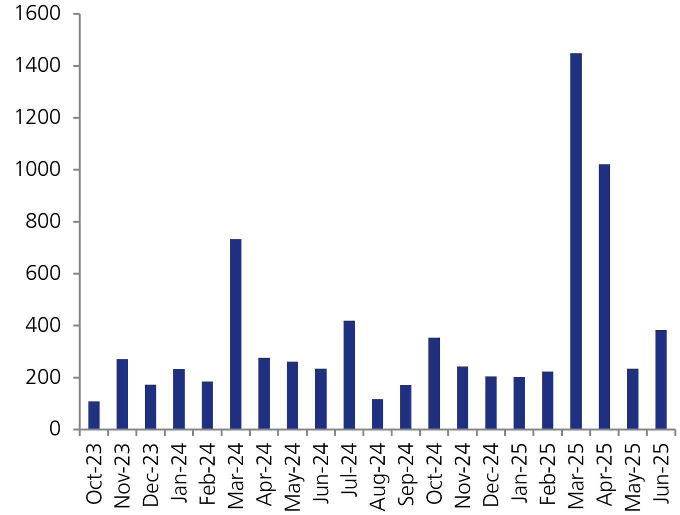
Exhibit 11. Capacity addition (MW), Annual

Fuel Type	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	YTDFY26
Thermal	7,655	4,577	3,373	4,530	3,919	1,381	1,160	5,948	3,719	-4,896
Nuclear	1,000	-	-	-	-	-	-	1400	-	600
Hydro	1,695	815	106	300	510	513	128	78	800	1,650
Renewables										
Solar	7,410	9,363	6,529	6,225	5,680	13,911	12,784	15,033	23,833	10,601
Wind	7,192	1,766	1,580	2,043	1,578	1,111	2,276	3,253	4,151	1,637
Others	3,837	633	510	849	417	430	215	198	740	14
Total Renewables	**18,439**	**11,762**	**8,619**	**9,118**	**7,675**	**15,452**	**15,274**	**18,485**	**28,724**	**12,253**
Total Capacity addition	**28,789**	**17,154**	**12,098**	**13,948**	**12,103**	**17,345**	**16,562**	**25,911**	**33,242**	**9,607**

Source: CMIE, JM Financial; *Net addition

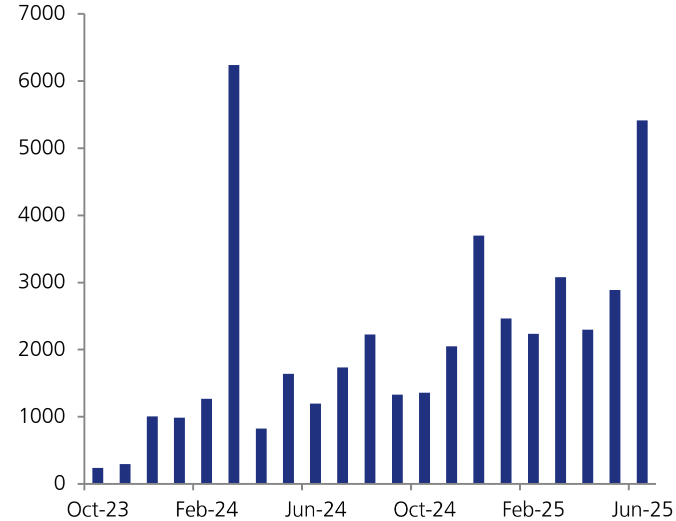
- Wind/ Solar capacity addition in Jun'25 was 383MW/ 5414MW vs. 234MW/ 1197MW in Jun'24.

Exhibit 12. Wind capacity addition monthly (MW)



Source: CMIE, JM Financial

Exhibit 13. Solar capacity addition monthly (MW)

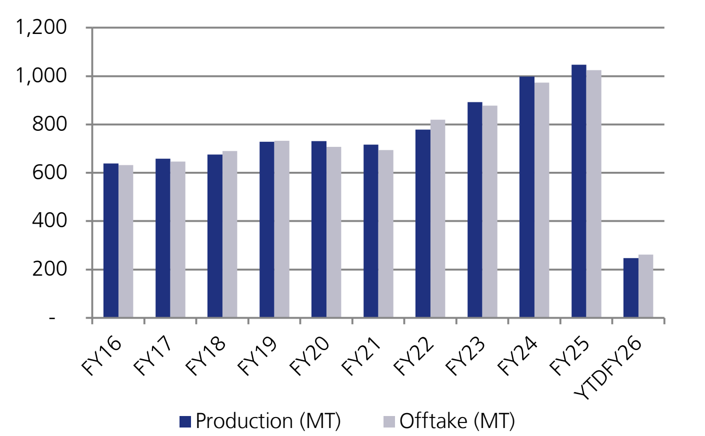


Source: CMIE, JM Financial

Coal production, supply and prices

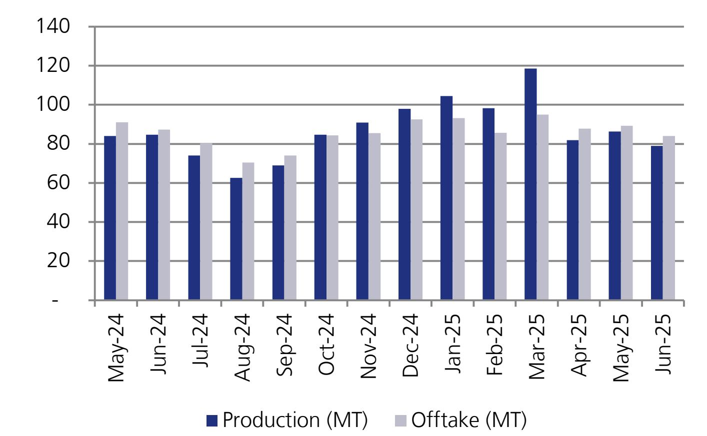
- Coal production was 79MT in Jun’25 vs. 85MT in Jun’24.
- Coal dispatches in Jun’25, was 84MT vs. 87MT in Jun’24.
- Indonesian coal prices for 5,900kCal/kg stood at USD76/MT in Jun’25, -4% MoM, -21% YoY.
- Coal stock at power plants stood at 56.9mnt as of Jun’25 vs. 47.24mnt as of Jun’24.

Exhibit 14. Coal production and offtake (MT), annual



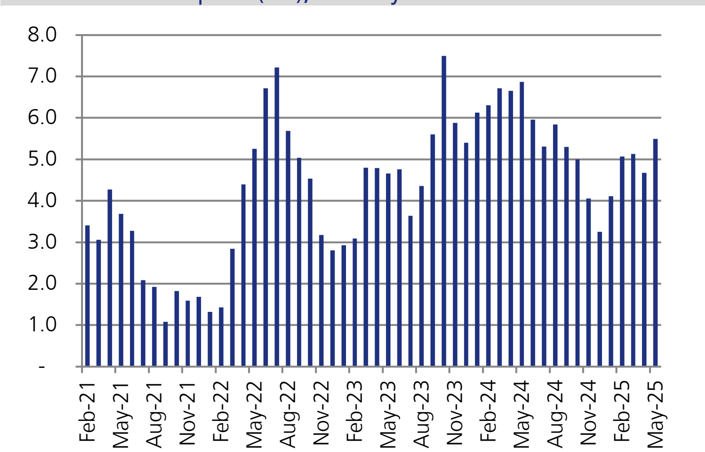
Source: CMIE, JM Financial

Exhibit 15. Coal production and offtake (MT), monthly



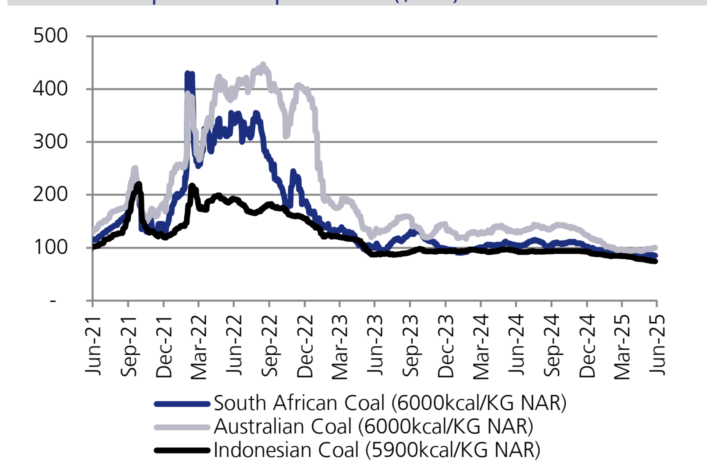
Source: CMIE, JM Financial

Exhibit 16. Coal imports (MT), monthly



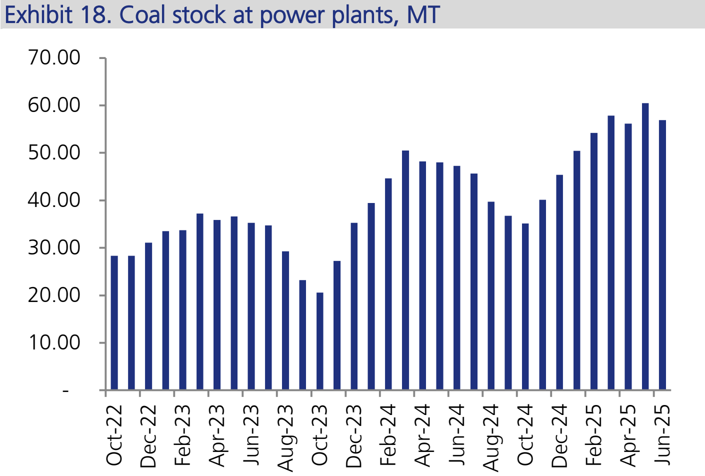
Source: CMIE, JM Financial

Exhibit 17. Imported coal price trend ($/ton)



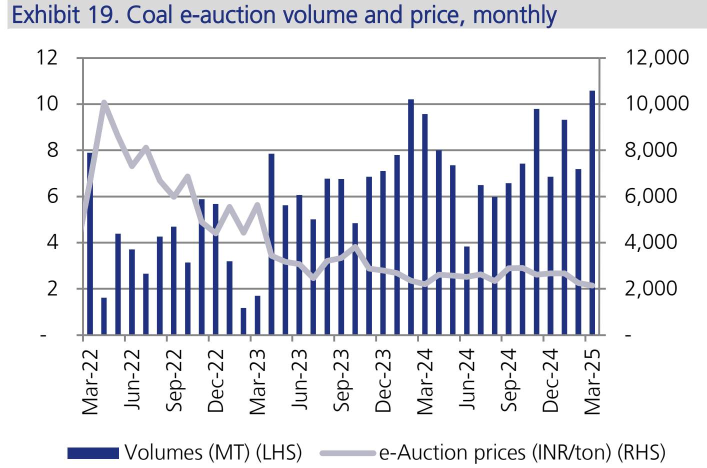
Source: Elekore, JM Financial

Exhibit 18. Coal stock at power plants, MT



Source: CMIE, JM Financial

Exhibit 19. Coal e-auction volume and price, monthly

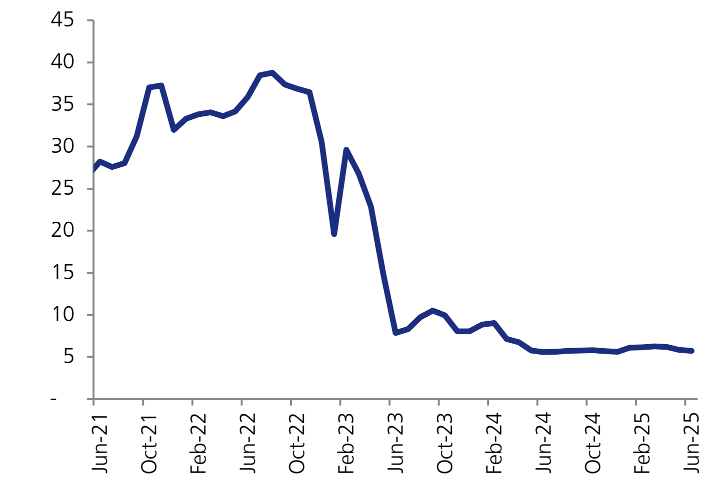


Source: Elekore, JM Financial *e-auction data pertains to power sector

Solar components prices

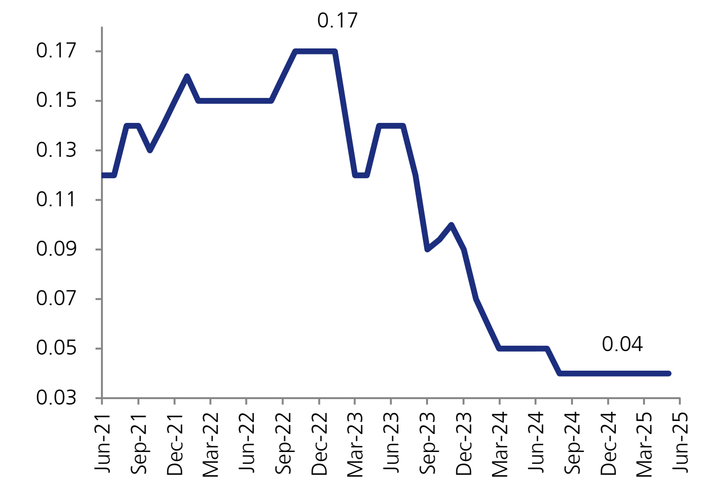
- The prices of solar components, viz., polysilicon, wafers and, cells remain stable.

Exhibit 20. Polysilicon prices (USD/kg)



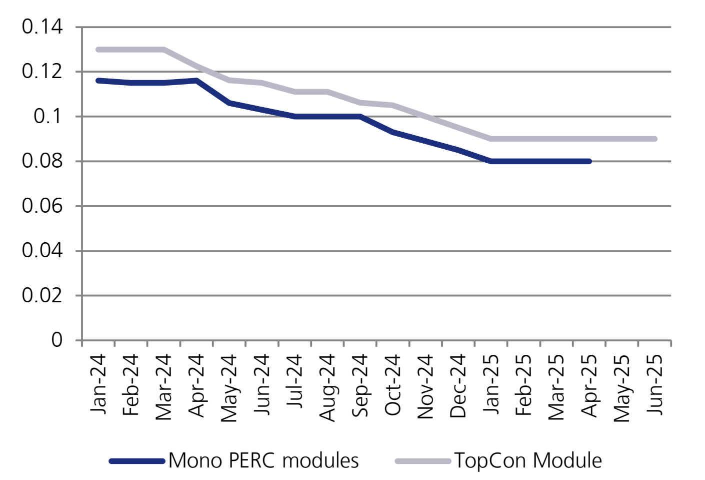
Source: Bloomberg, JM Financial

Exhibit 21. Solar cell prices (USD/watt)



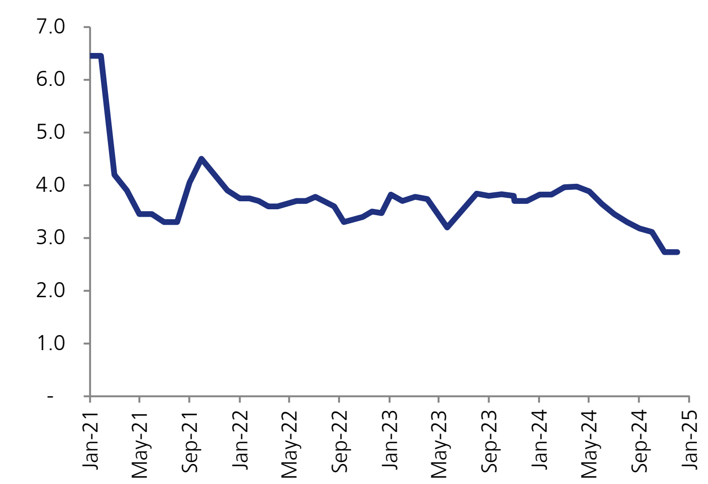
Source: Bloomberg, JM Financial

Exhibit 22. Global module price trends (USD/watt)*



Source: JMK Research, JM Financial

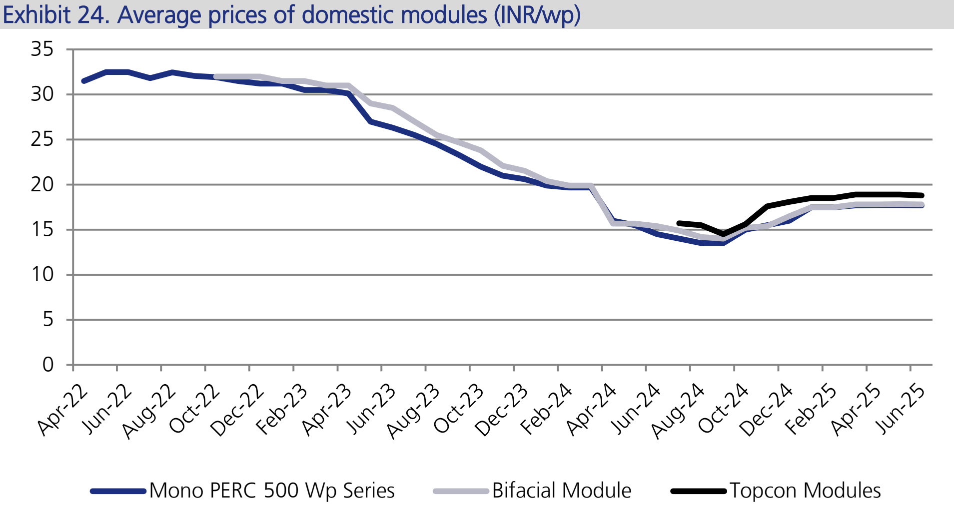
Exhibit 23. Prices of PV cell coating glass (USD/m2)



* The top of a traditional silicon monofacial module is rolled glass with a thickness of 3.2mm, and the back of a polymer layer, or backsheet. Bifacial modules are increasingly common and usually consist of two pieces of glass.

Source: Bloomberg, JM Financial

Exhibit 24. Average prices of domestic modules (INR/wp)

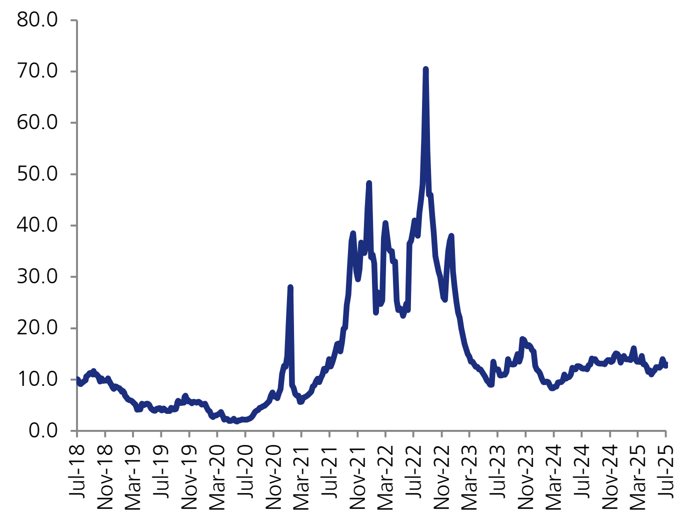


Source: JMK Research, JM Financial

Raw material prices

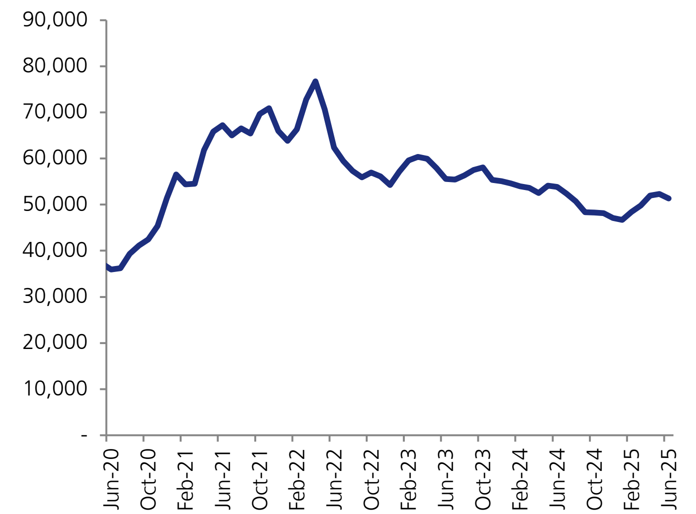
- Prices of key raw materials such as LNG, steel, silver and aluminium have moderated sharply, which bodes well for the entire Solar PV value chain.
- LNG prices moderated from USD 70/mmBtu in Aug'22 to USD 11/mmBtu in May'23 before increasing to USD 17.75/mmBtu in Nov'23, prices now has declined to USD 12.9/mmBtu in Jul'25.
- Domestic HRC steel prices declined from a high of INR 76K/t in Apr'22 to INR 47k/t in Dec'24 and are currently at INR 51.4K/t in Jun'25.

Exhibit 25. Asia spot LNG weekly prices (USD/mmBtu)



Source: Bloomberg, JM Financial

Exhibit 26. Domestic HRC steel prices (INR/ton)



Source: Bloomberg, JM Financial

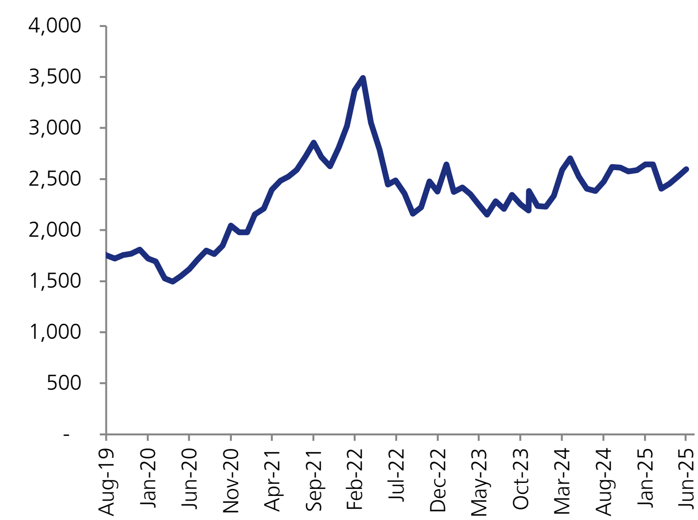
- After reaching a high of USD 27.40/troy ounce in Aug'20, silver prices dropped to USD 17.90/troy ounce in Aug'22. The prices have touched a fresh high of 37.1/troy (25% YoY) ounce in Jul'25.
- Aluminium prices have declined from USD 3,369/MT in Feb'22 to USD 2,152/MT in Jun'23. In Jul'25 Aluminium prices are at ~ USD 2,526/MT (0% YoY).

Exhibit 27. Silver prices (USD/troy ounce)

Source: Bloomberg, JM Financial

* Silver paste is the biggest cost component of making wafers into cells and accounts for about 6-7% of the cost for integrated module production. The avg. use of silver in silicon PV modules was 18.5 milligrams per watt in 2020.; 1 troy ounce= 31.1 g

Exhibit 28. Aluminium prices (USD/MT)



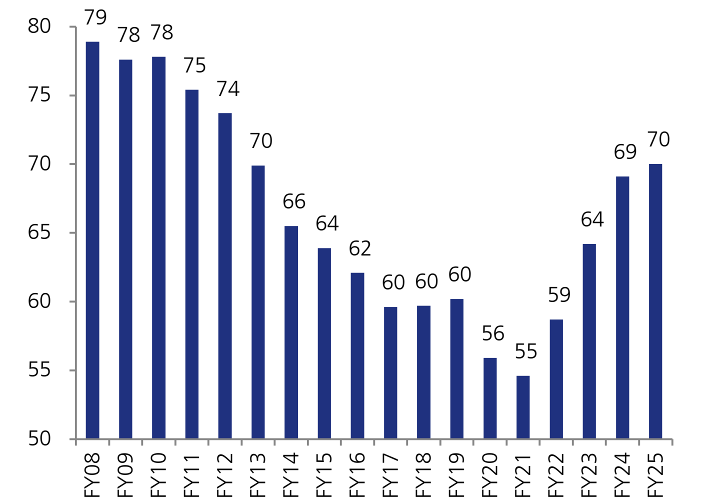
Source: Bloomberg, JM Financial

* Module frames are made of aluminium, making it one of the major cost components of module assembly. Typical consumption of aluminium in silicon PV modules is 5-6 grams per watt.

Plant Load Factor (PLF)

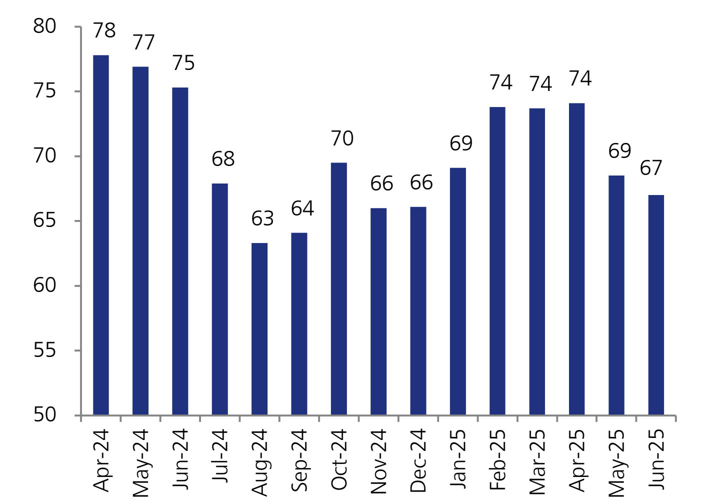
- Monthly Coal PLF/ Gas PLF stood at 67%/19% in Jun'25 vs. 75%/26% in Jun'24.

Exhibit 29. Annual PLF for coal-fired power plants (%)



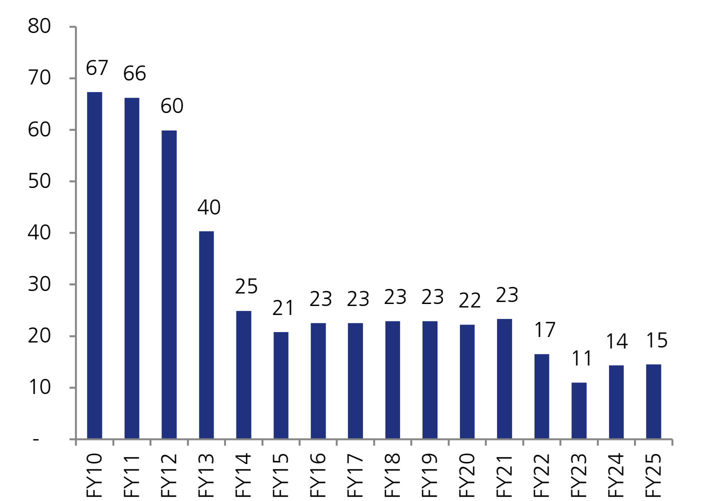
Source: CMIE, JM Financial

Exhibit 30. Monthly PLF for coal-fired power plants (%)



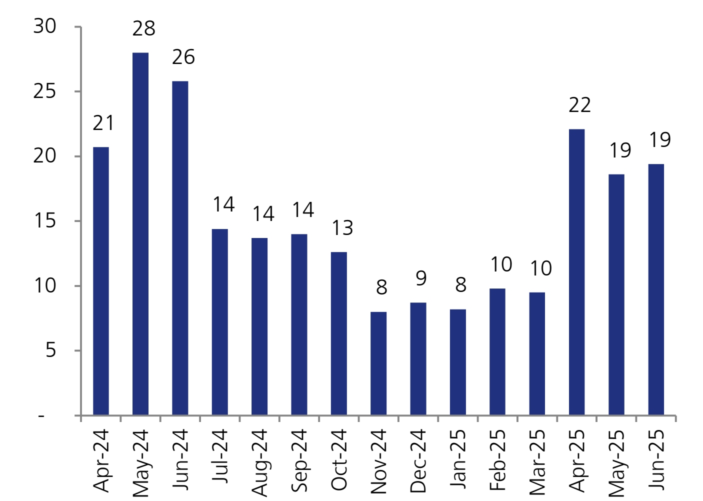
Source: CMIE, JM Financial

Exhibit 31. Annual PLF for gas-fired power plants (%)



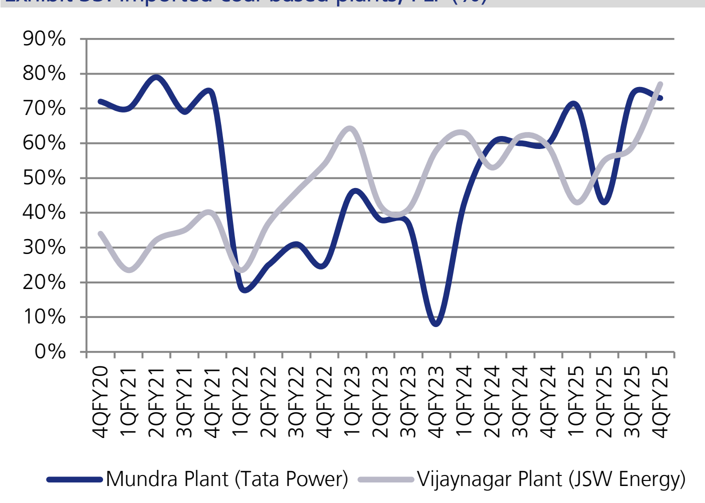
Source: CMIE, JM Financial

Exhibit 32. Monthly PLF for gas-fired power plants (%)



Source: CMIE, JM Financial

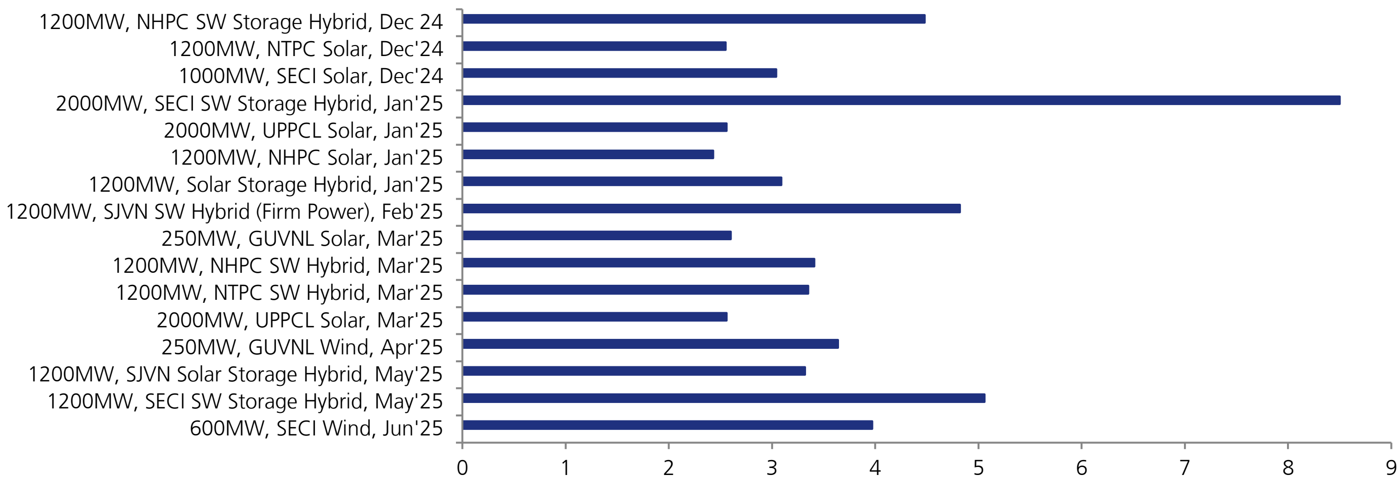
Exhibit 33. Imported coal-based plants, PLF (%)



Source: Company, NPP, JM Financial

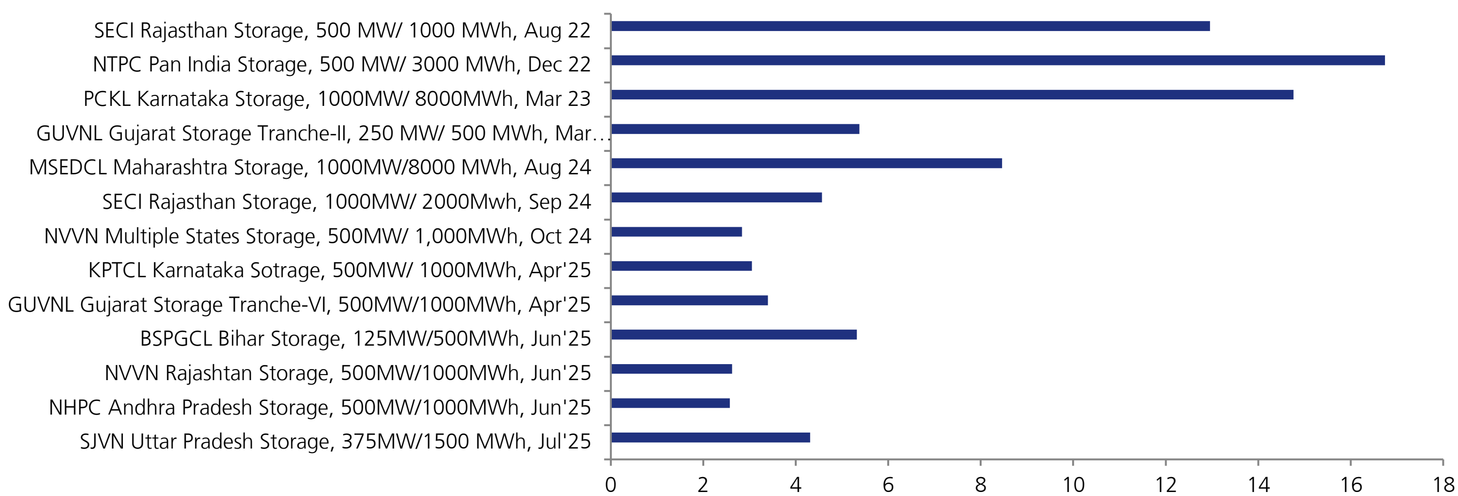
Renewable tariff bidding trend

Exhibit 34. Renewable tariff bidding trend (INR/kWh)



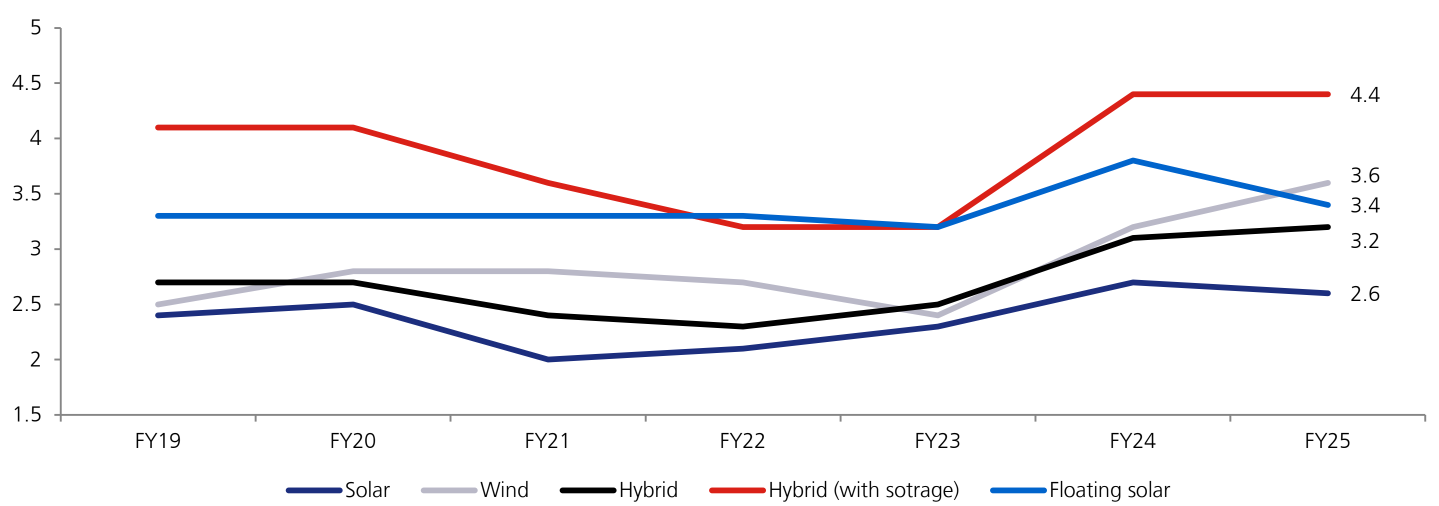
Source: Elekore, JM Financial

Exhibit 35. Storage bidding trend (INR Mn/ MW/ Year)



Source: Elekore, JM Financial

Exhibit 36. Renewable projects – annual weighted average tariff bidding trend (INR/kWh)

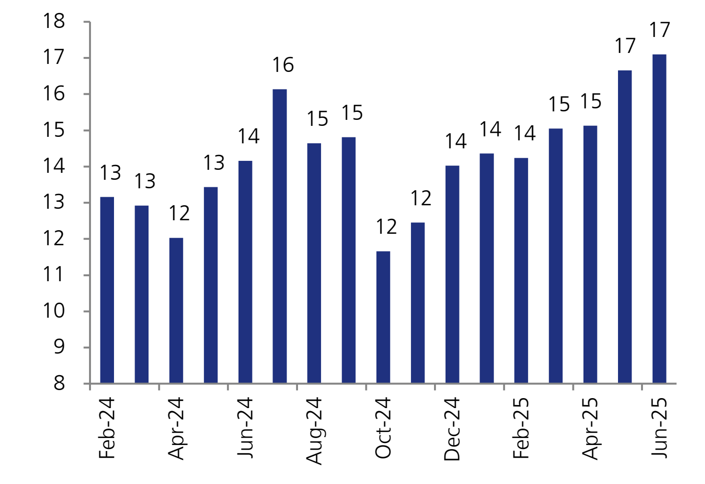


Source: Elekore, JM Financial

Share of renewables in total generation

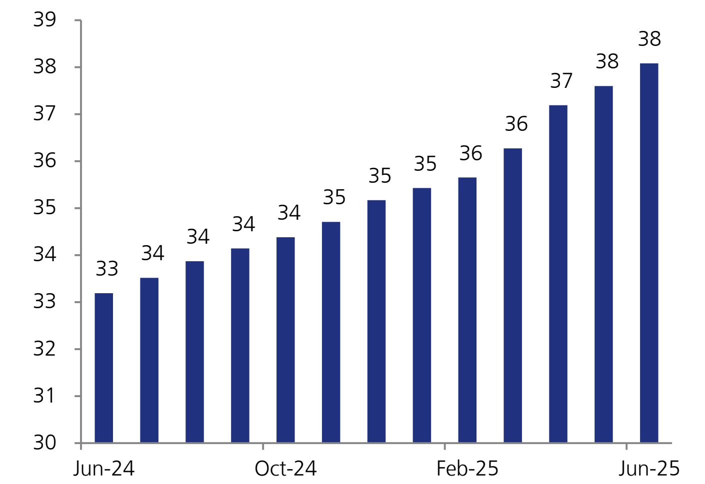
- Share of RE in total annual generation increased from 5.6% in FY16 to 16% in YTDFY26.
- Share of RE in total installed capacity increased from 12% in FY14 to 38% in Jun'25.

Exhibit 37. Share of RE in total generation, monthly (%)



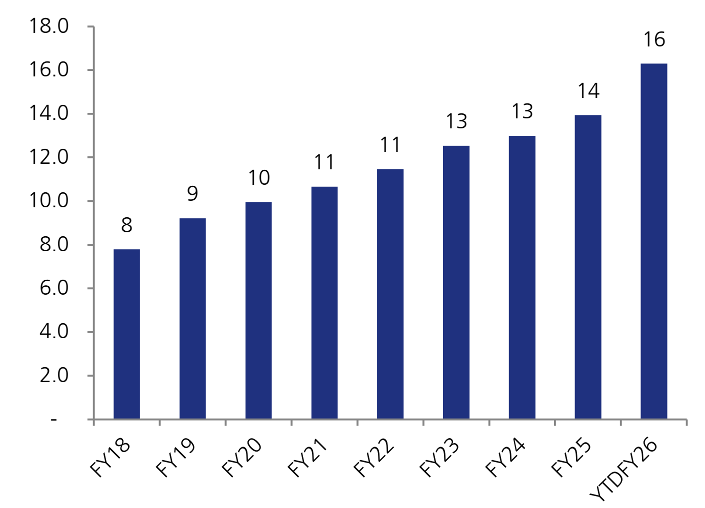
Source: CMIE, JM Financial

Exhibit 38. Share of RE in total installed capacity, monthly (%)



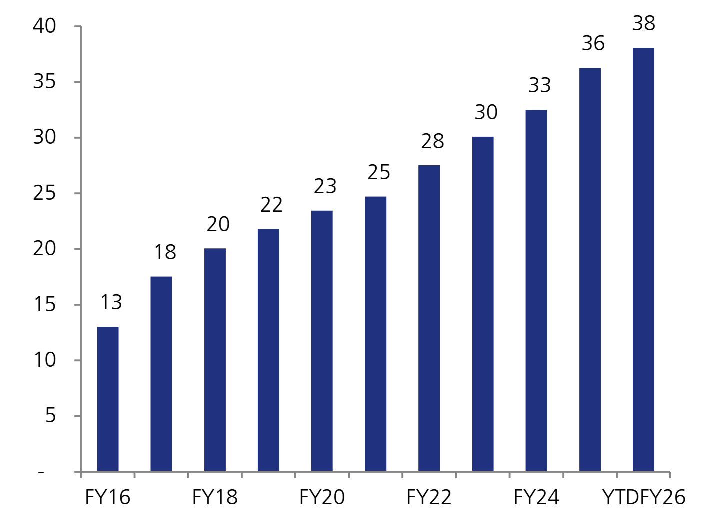
Source: CMIE, JM Financial

Exhibit 39. Share of RE in total generation, annual (%)



Source: CMIE, JM Financial

Exhibit 40. Share of RE in total installed capacity, annual (%)

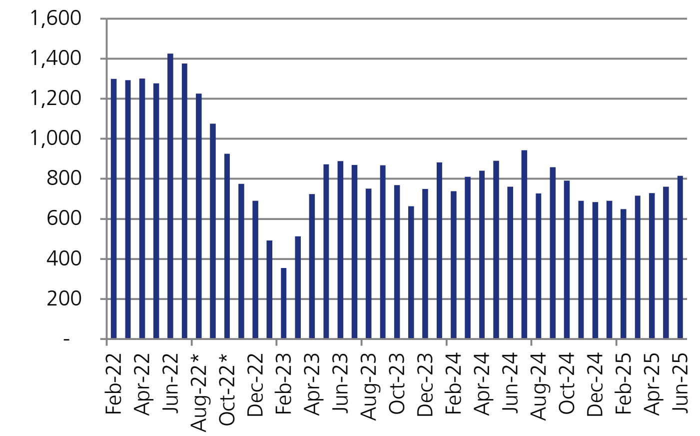


Source: CMIE, JM Financial

Outstanding dues of discoms and other parameters

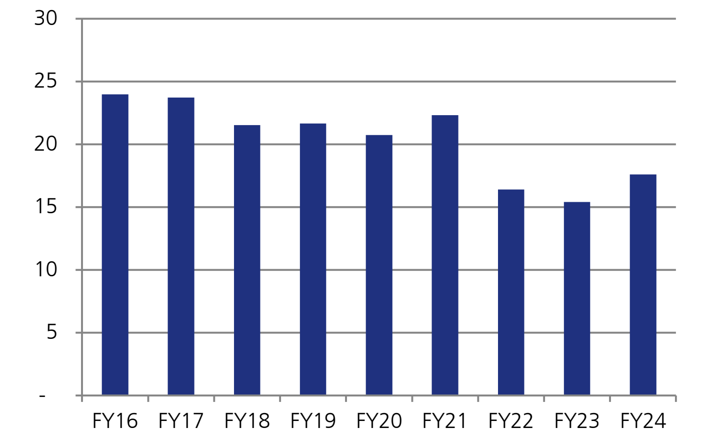
- Outstanding dues of discoms declined sharply from INR 1,426bn in Jun'22 to INR 649bn in Feb'25. Currently, it stands at ~INR 816bn.
- Annual per capita consumption of electricity witnessed a healthy growth from 1,075kWh in FY16 to 1,395kWh in FY24.

Exhibit 41. Discoms' current o/s dues to gencos (INR bn)



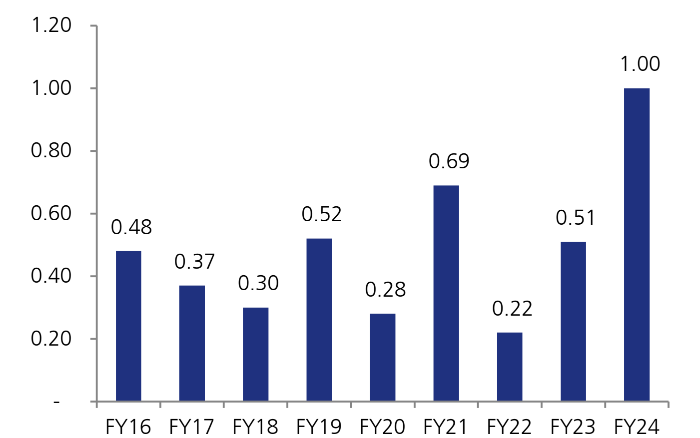
Source: Elekore, JM Financial; * O/s dues for Aug-Nov'22 are estimated

Exhibit 42. Trend in AT&C losses (%)



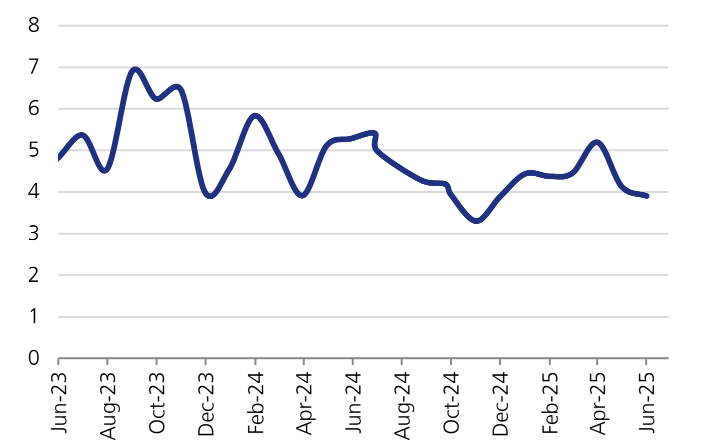
Source: CEA, MoP, UDAY, JM Financial

Exhibit 43. ACS-ARR gap (INR/kWh)



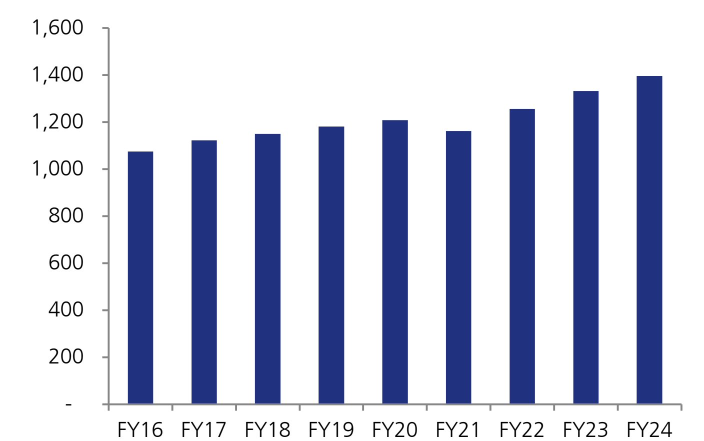
Source: MoP, UDAY; #ACS – Average Cost of Supply; ARR – Average Realizable Revenue *estimated

Exhibit 44. Short-term market prices (INR/kWh)



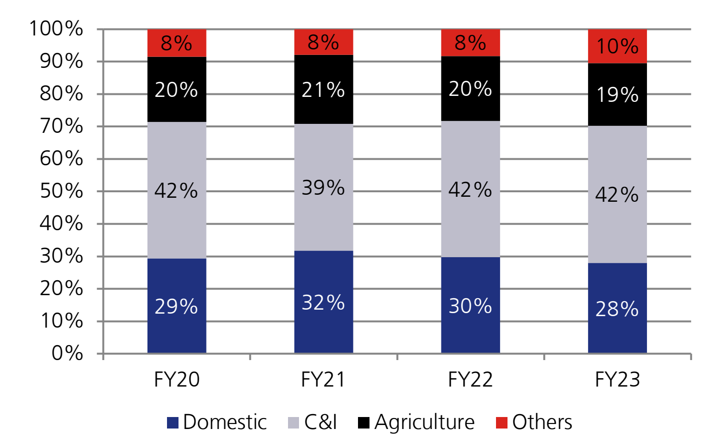
Source: IEX, JM Financial

Exhibit 45. Annual per capita consumption of electricity (kWh)



Source: MoP, CEA, JM Financial; *Provisional

Exhibit 46. Consumer-wise electricity consumption



Source: CMIE, Power Line, JM Financial

Projects under construction

Exhibit 47. Generation capacities under construction (MW)

Technology type	Total capacities under construction (MW)
Renewable*	142,771
Nuclear	6,600
Hydro	21,538
Thermal (coal)	34,560
Total	**205,469**

Source: CEA, DAE, JM Financial: *As on Jun'25

Status of Nuclear power projects

Exhibit 48. Status of nuclear power projects

State	Location	Project	Capacity (MW)	Expected Completion	Physical Progress/Status
Projects Under Construction					
Rajasthan	Rawatbhata	RAPP-8	1 X 700	2025	Unit is under advanced stages of commissioning
Tamilnadu	Kudankulam	KKNPP-3&4	2 X 1000	2025	Construction of various buildings is in advanced stage. Progressive manufacturing, delivery, erection & testing of various equipment & components are in progress. In Unit-3, Major milestone like construction of Inner Containment (IC) dome, Concreting of Outer Containment (OC) dome and Main Coolant Pipeline welding are completed. In Unit-4, construction of Inner Containment Dome is in progress. Erection of Nuclear Steam Supply system (NSSS) is completed.
		KKNPP-5&6	2 X 1000	2027	Tendering/Procurement/Manufacturing and progressive delivery of various equipment and components are in progress. Civil works are in progress.
	Kalpakkam	PFBR	1 X 500	NA	-
Haryana	Gorakhpur	GHAVP-1&2	2 X 700	2031	Construction of various civil structures like Fire Water Pump House, Safety Related Pump House, Fuel Oil Storage Area, D2O Upgrading Building, Switchyard Control Building, Fire and Industrial Safety House, Tunnels, Emergency Makeup Water Pond Area, Retaining wall, etc. are in progress. Construction of Fuel Oil Storage Area (FOSA) is completed. Purchase Orders for various major equipment/components are placed and manufacturing and supply of these are in progress. EPC Contracts for Turbine Island package, Main Plant Electrical Systems & Switchyard Package, Nuclear Island Package, etc have been placed and further activities are in progress.
Projects Accorded Administrative Approval & Financial Sanction					
Karnataka	Kaiga	Kaiga-5&6	2 X 700	Progressively by 2031	Land is available at GHAVP-3&4 and Kaiga-5&6. Possession letter has been issued for all types of land at Chutka. Land acquisition is in process for Mahi Banswara and forest clearance is available. Environmental Clearance from MoEFCC is available for GHAVP-3&4, Kaiga-5&6 and Chutka-1&2. For Mahi Banswara, MoEFCC clearance is in process. AERB Siting consent is available for GHAVP-3&4 and Kaiga-5&6. Excavation is completed in main plant area and preparatory activities for First Pour of Concrete (FPC) are in progress in Kaiga5&6. Bulk Pro Pre-project activities at sites and bulk procurement of long manufacturing cycle equipment are underway. Excavation has commenced in Kaiga-5&6.
Haryana	Gorakhpur	GHAVP–3&4	2 X 700		
Madhya Pradesh	Chutka	Chutka-1&2	2 X 700		
Rajasthan	Mahi Banswara	Mahi Banswara-1&2	2 X 700		
		Mahi Banswara-3&4	2 X 700		

Source: DAE, JM Financial

Status of Hydropower projects

Exhibit 49. Status of hydroelectric projects (above 25MW) under implementation

Sl. No.	Name of the Project (Executing Agency)	State / UT	District	I.C. (No. X MW.)	Cap. Under Execution(MW)	River/Basin	Date of finish/ commissioning
	Central Sector						
1	Subansiri Lower (NHPC)	Arunachal Pradesh/Assam	Lower Subansiri, Ar. Pradesh / Dhemaji, Assam	8x250	2000.00	Subansiri/ Brahmaputra	2025-27 # (May'26)
2	Dibang Multipurpose Project (NHPC)	Arunachal Pradesh	Lower Dibang Valley	12x240	2880.00	Dibang/Brahmaputra	2031-32 (Feb'32)
3	Teesta St. VI NHPC	Sikkim	South Sikkim	4x125	500.00	Teesta/Brahmaputra	2027-28 (Dec'27)
4	Rangit-IV (NHPC)	Sikkim	West Sikkim	3x40	120.00	Rangit/ Teesta/Brahmaputra	2025-26 (Dec'25)
5	Ratle (RHEPPL / NHPC)	UT of Jammu & Kashmir	Kishtwar	4x205 + 1x30	850.00	Chenab/Indus	2028-29 (Nov'28)
6	Pakal Dul (CVPPL)	UT of Jammu & Kashmir	Kishtwar	4x250	1000.00	Marusadar/ Chenab / Indus	2026-27 (Sept'26)
7	Kiru (CVPPL)	UT of Jammu & Kashmir	Kishtwar	4x156	624.00	Chenab/ Indus	2026-27 (Sept'26)
8	Kwar (CVPPPL)	UT of Jammu & Kashmir	Kishtwar	4x135	540.00	Chenab/Indus	2027-28 (Dec'27)
9	Luhri-I (SJVN)	Himachal Pradesh	Kullu/Shimla	2x80+2x25	210.00	Satluj/Indus	2028-29 (Dec'28)
10	Dhaulasidh (SJVN)	Himachal Pradesh	Hamirpur/ Kangra	2x33	66.00	Beas/Indus	2026-27 (Mar'27)
11	Sunni Dam (SJVN)	Himachal Pradesh	Shimla/Mandi	4x73+1x73+1x17	382.00	Satluj/Indus	2028-29 (Dec'28)
12	Vishnugad Pipalkoti (THDC)	Uttarakhand	Chamoli	4x111	444.00	Alaknanada/Ganga	2026-27 (Mar'27)
13	Tapovan Vishnugad (NTPC)	Uttarakhand	Chamoli	4x130	520.00	Dhauliganga / Alaknanada & /Ganga	2028-29 (Mar'29)
14	Rammam-III (NTPC)	West Bengal	Darjeeling	3x40	120.00	Rammam/ Rangit/Teesta Brahmaputra	2028-29 (Mar'29)
Sub-Total: Central Sector					10256.00		
	State Sector						
15	Polavaram (APGENCO/ Irrigation Dept., A.P.)	Andhra Pradesh	East & West Godavari	12x80	960.00	Godavari/EFR	2027-28 (Sep'27)
16	Lower Sileru Extension (APGENCO)	Andhra Pradesh	Alluri Sitharamaraju	2x115	230.00	Sileru/Godavari	2025-26 (Mar'26)
17	Shongtong Karcham (HPPCL)	Himachal Pradesh	Kinnaur	3x150	450.00	Satluj/ Indus	2028-29 (Sep'28)
18	Chanju-III (HPPCL)	Himachal Pradesh	Chamba	3x16	48.00	Chanju Nallah	2027-28 (Dec'27)
19	Mankulam (KSEB)	Kerala	Idukki	2x20	40.00	Melachery	2026-27 (Dec'26)
20	Lower Kopli (APGCL)	Assam	Dima Hasao & Karbi Anglong	2x55+2x2.5+1x5	120.00	Kopili/Brahmaputra	2026-27 (Apr'26)
21	Parnai (JKSPDC)	UT of Jammu & Kashmir	Poonch	3x12.5	37.50	Jhelum/ Indus	2027-28 (Jul'27)
22	Shahpurkandi (PSPCL/ Irrigation Deptt., Pb.)	Punjab	Pathankot	3x33+3x33+1x8	206.00	Ravi/ Indus	2026-27 (Oct'26)
23	Lakhwar Multipurpose Project (UJVNL)	Uttarakhand	Dehradun & Tehri Garhwal	3x100	300.00	Yamuna	2031-32 (Dec'31)
Sub-Total: State Sector					2391.50		
24	Tidong-I (Statkraft IPL)	Himachal Pradesh	Kinnaur	3x50	150.00	Tidong/Satluj/Indus	2026-27 (Jun'26)
25	Kutehr (JSW Energy Ltd)	Himachal Pradesh	Chamba	3x80	240.00	Ravi/ Indus	2025-26 (Jun'25)
Sub-Total: Private Sector					390.00		
	Total:				13037.50		

Source: CEA as on Jun'25, JM Financial
Note: Presently 25 no. of hydroelectric project (above 25 MW) totalling to 13037.5 MW are under construction.

Exhibit 50. Status of Pumped storage Projects (above 25MW) – under implementation

Sl. No.	Name of the Project (Executing Agency)	State / UT	District	I.C. (No. X MW.)	Cap. Under Execution(MW)	River/Basin	Date of finish/ commissioning
	Central Sector						
1	Tehri PSS (THDC)	Uttarakhand	Tehri Garhwal	3x250	750.00	Bhilangna/Bhagirathi/ Ganga	2025-26 (Oct'25)
Sub-Total: Central Sector					750.00		
	State Sector						
2	Upper Sileru PSP (APGENCO)	Andhra Pradesh	Alluri Sitharamaraju	9x150	1350.00	Sileru/Godavari	2028-29 (Feb'29)
3	Sharavathy Pumped Storage Project	Karntaka	Upper dam (Shimoga) & Lower dam (Uttara Kannada)	8x250	2000.00	Sharavathy/WFR	2029-30 (Dec'29)
4	Kundah Pumped Storage Phase-I,II&III)	Tamil Nadu	Nilgiris	4x125	500.00	Kundah/Bhavani/ Cauvery/EFR	2025-27 (Apr'26)
Sub-Total: State Sector					3850.00		
	Private Sector						
5	Pinnapuram (Greenko AP01 IREP Private Limited)	Andhra Pradesh	Kurnool	2x240+1x120	480.00	Off stream	2025-26 (Sept'25)
6	MP30 Gandhi Sagar Pumped Storage Project (Greenko MP01 IREP Private Limited)	Madhya Pradesh	Neemuch	7x240 + 2x120	1920.00	Off stream	2028-29 (Jun'28)
7	Chitravathi PSP (Adani Renewable Energy Forty-Two Limited)	Andhra Pradesh	Satya Sai	2x250	500.00	Chitravathi River	2026-27 (Oct'26)
8	Bhivpuri PSP (Tata Power Company Limited)	Maharashtra	Raigad	4x200 + 2x100	1000.00	Indrayani River	2027-28 (Jan'28)
Sub-Total: Private Sector					3900.00		
Total:					8500.00		

Source: CEA as on Jun'25, JM Financial

Status of thermal (coal) capacities

Currently, there are 25 thermal projects under construction with capacity of 34,560MW.

Exhibit 51. Thermal (coal) capacities under construction

Sr. No	Project Name	State Implementing Agency Boiler Turbine	LOA Date	Unit No	Cap. (MW)	Original Trial Run	Anticipated Trial Run (as per CEA)	Physical Progress %
	Central Sector							
1	Barh STPP, St-I	BR NTPC Doosan Power M/c, Russia	Mar'05	U-3	660	Oct'11	Jun'25	98%
2	Buxar TPP	BR SJVN L&T L&T	Jun'19	U-1	660	May'23	Jul'25	99%
				U-2	660	Sep'23	Oct'25	93%
3	Patratu STPP	JH PVUNL BHEL BHEL	Mar'18	U-1	800	Jan'22	Jun'25	81%
				U-2	800	Jul'22	Feb'26	74%
				U-3	800	Jan'23	Jul'26	61%
4	Talcher TPP, St-III	OR NTPC BHEL BHEL	Sep'22	U-1	660	Nov'26	Sep'27	34%
				U-2	660	May'27	Dec'27	29%
5	Lara STPP St-II	CH NTPC BHEL BHEL	Aug'23	U-1	800	Dec'27	Dec'27	15%
				U-2	800	Jun'28	Jun'28	9%
6	Ghatampur TPP	UP L&T MHPS GE Power NUPPL	Aug'16	U-2	660	Nov'20	Jul'25	95%
				U-3	660	May'21	Nov'25	87%
7	NLC TALABIRA TPP	Odisha NLC BHEL BHEL	Jan'24	U-1	800	May'28	Mar'29	0%
				U-2	800	Nov'28	Sep'29	0%
				U-3	800	May'29	Mar'30	0%
8	Sipat STPP, St-III	Chhattisgarh NTPC BHEL BHEL	Sep'24	U-6	800	Sep'29	Sep'29	0%
9	Khurja SCTPP	UP L&T MHI THDC BHEL	Aug'19	U-2	660	Jan'24	Jun'25	89%
10	Singrauli STPP, St-III	MP NTPC BHEL BHEL	Mar'24	U-1	800	May'29	May'29	6%
				U-2	800	Feb'30	Nov'30	5%
11	Koderma TPS, Ph-II	JH DVC BHEL BHEL	Nov'24	U-1	800	Aug'28	Aug'28	0%
				U-2	800	Dec'28	Dec'28	0%
12	Nabinagar STPP, St-II	BH NTPC L&T L&T	Mar'25	U-4	800	Jul'29	Jul'29	0%
				U-5	800	Jan'30	Jan'30	0%
				U-6	800	Jul'30	Jul'30	0%
13	Raghunathpur TPS, Ph-II	WB DVC BHEL BHEL	Feb'25	U-3	660	Dec'28	Dec'28	0%
				U-4	660	Apr'29	Apr'29	0%
	State Sector							
1	Obra-C STPP	UP UPRVUNL Doosan India Doosan India (GE)	Dec-16	U-2	660	Apr'21	May'25	89%
2	Ennore SCTPP	TN TANGEDCO BHEL BHEL	Sep'14	U-1	660	Jan'18	Sep'26	79%
				U-2	660	Mar'18	Nov'26	77%
3	North Chennai TPP, St-III	TN TANGEDCO BHEL BHEL	Jan'16	U-1	800	Oct'19	Jun'25	96%

Source: CEA as on Jun'25, JM Financial

Exhibit 51. Thermal (coal) capacities under construction (Contd…)

Sr. No	Project Name	State Implementing Agency Boiler Turbine	LOA Date	Unit No	Cap. (MW)	Original Trial Run	Anticipated Trial Run (as per CEA)	Physical Progress %
4	Udangudi STPP, St-I	TN TANGEDCO BHEL BHEL	Dec'17	U-1	660	Jan'21	Jul'25	93%
				U-2	660	Mar'21	Oct'25	93%
5	Sagardighi TPP St-III	WB WBPDCL BHEL BHEL	Dec'18	U-5	660	Jan'24	Jun'25	93%
6	Yadadri TPS	TEL TSGENCO BHEL BHEL	Oct'17	U-1	800	Oct'21	Mar'25	95%
				U-3	800	Jun'22	Oct'25	93%
				U-4	800	Jun'22	Aug'25	94%
				U-5	800	Oct'22	Dec'25	90%
7	DCRTPP Extn	HR HPCGL BHEL BHEL	Feb'24	U-3	800	Sep'29	Sep'29	0%
8	Singareni TPP,PhII	TEL SCCL BHEL BHEL	Feb'25	U-3	800	Dec'28	Dec'28	0%
9	Ukai TPP	GUJ GSECL BHEL BHEL	Mar'25	U-7	800	Sep'29	Sep'29	0%
	Private Sector							
1	Mahan STPP	MP Mahan Energen Ltd BHEL (Supply) BHEL (Supply)	Aug'23	U-3	800	Nov'26	Dec'26	48%
				U-4	800	May'27	May'27	42%
2	Raipur Ext TPP, Ph-II	CH Adani Power BHEL (Supply) BHEL (Supply)	Jun'24	U-3	800	Jan'28	Jan'28	0%
				U-4	800	Jul'28	Jul'28	0%
3	Raigarh USCTPP, St-II	CH Adani Power BHEL (Supply) BHEL (Supply)	Oct'24	U-3	800	Jun'27	Jan'28	0%
				U-4	800	Oct'27	Jul'28	0%
					34,560			

Source: CEA as on Jun'25, JM Financial

Status of stressed power projects

- Total of 26 power projects having capacity of 23,205MW remain stressed as of May'25.

Exhibit 52. Status of stressed power projects

Sr No	State	Project Name / Implementation Agency/ EPC or BTG	LOA/ Date/ ordered date	Unit No	Capacity MW	Original Commissioning Schedule	Present Status/Remarks
CENTRAL SECTOR							
1	Rajasthan	Barsingar TPP ext/ NLC/ Reliance Infra/ Chinese	Nov'16	U-1	250	May'20	Project was held up due to withdrawal of PPA by DISCOM (Rajasthan), due to land issue in linked mines and consequently higher tariff. On 04-08-2022, a meeting was held (Additional Secretary-Coal, GoI along with NLCIL Directors met Chief Secretary-GoR and Principal Secretary-Energy) and it was jointly decided not to pursue with the Barsingsar TPS Extension project (1X250 MW) along with Hadla Mine.
2	Rajasthan	Bithnok TPP/ NLC/ Reliance Infra/ Chinese	Nov'16	U-1	250	May'20	Project was held up due to withdrawal of PPA by DISCOM (Rajasthan) due to increased project cost and time over run. On 04-08-2022 a meeting was held (Additional Secretary-Coal, GoI along with NLCIL Directors met Chief Secretary-GoR and Principal Secretary-Energy) to revive the Bithnok TPS. Based on the decision, a consultant was appointed to prepare feasibility. Further, as per the discussions held with Rajasthan government officials, it has been agreed that NLC and GoR will jointly work to revive the Bithnok Thermal Power Project along with Bithnok Mines. The consultant has prepared the feasibility report for revival of the project and the same is under "scrutiny and approval"
PRIVATE SECTOR							
1	Andhra Pradesh	Bhavanapadu TPP Ph-I / East Coast Energy Ltd. / BTG DEC china	Sep'09	U-1	660	Oct'13	Liquidation Order date 22/04/2019. Liquidator has partially sold the assets (P&M) of the company on a standalone basis through e-auction. Further, the liquidator has also sold the Land including buildings at the Plant Site on 9th Feb 2023.
			Sep'09	U-2	660	Mar'14	
2	Andhra Pradesh	Thamminapatnam TPP St–II / Meenakshi Energy Pvt. Ltd. SG-Cether vessels TG- Chinese	Dec'09	U-3	350	May'12	Vedanta Ltd. Has bought this plant under NCLT route. The project is likely to be commissioned during 2025-26. (U#3: Apr'25, U#4: Jun'25)
			Dec'09	U-4	350	Aug'12	
3	Bihar	Siriya TPP (Jas Infra. TPP) / JICPL BTG- DEC China	Mar'11	U-1	660	Aug'14	Liquidation Order date 17.07.2020; The Enforcement directorate has attached the assets of the corporate debtor and as a result of which the auction of the assets are kept on hold.
			Mar'11	U-2	660	Dec'14	
			Mar'11	U-3	660	Apr'15	
			Mar'11	U-4	660	Aug'15	
4	Chhattisgarh	Akaltara TPP (Naiyara) / KSK Mahandi Power Co. Ltd./ Boiler- SEPCO CHINA/ TG- SEPCO (Dongfong China)	Apr'09	U-4	600	Apr'13	CIRP commenced on 3rd October 2019 & currently under NCLT. Resolution Plans were opened on 05-06-2024. M/s JSW Energy has been declared as successful Resolution applicant. Units are likely to be revived by CY2030.
			Apr'09	U-5	600	Aug'13	
			Apr'09	U-6	600	Dec'13	
5	Chhattisgarh	Binjkote TPP/ SKS Power Generation (Chhattisgarh) Ltd. Boiler-Cethar Vessels /Turbine-Harbin China	Mar'11	U-3	300	Mar'14	Reworked bids (seven) received from the Resolution Applicants. Voting is completed. Plan submitted by Sarda Energy & Minerals has been approved by NCLT on 13-08-2024. The Unit#3&4 are likely to be revived by CY 2031.
			Mar'11	U-4	300	Jun'14	
6	Chhattisgarh	Lanco Amarkantak TPP- II/ LAP Pvt. Ltd. BTG-DEC china	Nov'09	U-3	660	Jan'12	Adani Power Limited has bought this plant under NCLT route as per approved the resolution plan on 21-08-2024. The project is likely to be commissioned during 2025-26. (U#3: Sep-2025, U#4: Feb-2026)
			Nov'09	U-4	660	Mar'12	
7	Chhattisgarh	Singhitarai TPP/ Athena CG Power Ltd. BTG–DEC china	Dec'09	U-1	600	Nov'14	Vedanta Ltd. has bought the power plant under liquidation. The project is likely to be commissioned during 2025-26 and 2026-27 (U#1: Jul-2025, U#2: Jul2026)
			Dec'09	U-2	600	Feb'15	
8	Chhattisgarh	Salora TPP / Vandana Vidyut/ Boiler- Cether Vessles / TG Harbin China	Sep'09	U-2	135	Sep'11	The liquidator successfully sold the assets of corporate debtor as per provision of IBC, 2016.
9	Chhattisgarh	Deveri (Visa) TPP / Visa Power Ltd. BTG-BHEL	Jun'10	U-1	600	Aug'13	The liquidator has started the process of liquidating the company by selling the assets of the Corporate Debtor on piecemeal basis. BHEL claims certain unpaid lien on the assets available at the site of the Corporate Debtor and in this regard matter is still pending before the Supreme Court of India.

Source: CEA, May'25, JM Financial

Exhibit 52. Status of stressed power projects (Contd…)

Sr No	State	Project Name / Implementation Agency/ EPC or BTG	LOA/ Date/ ordered date	Unit No	Capacity MW	Original Commissioning Schedule	Present Status/Remarks
10	Jharkhand	Matrishri Usha TPP Ph-I / CorporatePower Ltd. EPC- BHEL	Dec'09	U-1	270	Apr'12	The liquidator is making endeavor to sell the company as per provision of IBC, 2016 and the regulation laid there in.
			Dec'09	U-2	270	May'12	
11	Jharkhand	Matrishri Usha TPP Ph-II / CorporatePower Ltd. EPC- BHEL	Mar'11	U-3	270	Oct'12	
			Mar'11	U-4	270	Jan'13	
12	Jharkhand	Tori TPP Ph-I / Essar Power Ltd. BTG- Harbin China	Aug'08	U-1	600	Jul'12	The Liquidator has initiated the e-auction process for realizing the assets of the Corporate Debtor and till date has sold around 15,000 MT of Fabricated Steel Structure from the power plant
			Aug'08	U-2	600	Sep'12	
13	Jharkhand	Tori TPP Ph-II / Essar Power Ltd./ BTG- Harbin China	Feb'10	U-3	600	Dec'15	
14	Maharashtra	Amravati TPP Ph-II / Ratan India Power Pvt. Ltd. BTG- BHEL	Oct-10	U-1	270	Jul-14	Company has decided to drop Phase II due to following reasons: a) no new Bids for Long Term PPAs have been coming up in the Market since the last 5 years. b) the revised emission norms under the Environment (Protection) Amendment Rules, 2015 revising, inter alia, emission norms for thermal power plants., drastic changes in the design and equipment of Phase II was required to be carried out.
			Oct'10	U-2	270	Sep'14	
			Oct'10	U-3	270	Nov'14	
			Oct'10	U-4	270	Jan'15	
			Oct'10	U-5	270	Mar'15	
15	Maharashtra	Nasik TPP Ph-II / Ratan India Nasik Power Pvt. Ltd. BTG- BHEL	Nov'09	U-1	270	Apr'13	
			Nov'09	U-2	270	Jun'13	
			Nov'09	U-3	270	Aug'13	
			Nov'09	U-4	270	Oct'13	
			Nov'09	U-5	270	Dec'13	
16	Maharashtra	Lanco Vidarbha TPP / LVP Pvt. Ltd. EPC-LANCO/ Boiler- Dongfong China / Turbine- Harbin china	Nov'09	U-1	660	Jul'14	Majority of Plant material has been auctioned and removed from site. 706 Acres of Land and approx. 4000 MT of material is yet to be auctioned as they were under Litigation.
			Nov'09	U-2	660	Nov'14	
17	Maharashtra	Bijora Ghanmukh TPP / Jinbhuvish Power Generation Pvt. Ltd.	Sep'11	U-1	300	Dec'16	The coal linkage matter for this project is sub judice and once it is resolved, developer will be looking for funding options and further process.
			Sep'11	U-2	300	Mar'17	
18	Madhya Pradesh	Gorgi TPP / D.B. Power (MP) Ltd. BTG- BHEL	Mar'11	U-1	660	Jun'13	The company has requested a COD extension with GoMP, and a revival will be planned accordingly on the final permission.
19	Odisha	KVK Nilanchal TPP/ KVK Nilanchal/ BTG-Harbin China	Nov'09	U-1	350	Dec'11	Project sold to successful bidder M/s Padmaprabhu Commodity Trading Pvt Ltd in the E-auction held on 26th August 2022
			Nov'09	U-2	350	Feb'12	
			Nov'09	U-3	350	Feb'12	
20	Odisha	Lanco Babandh TPP / LBP Ltd./ BTG- DEC Chinese	Nov'09	U-1	660	Apr'13	The Liquidator has partially sold the assets of the company on a standalone basis through e-auction dated 27.08.2021
			Nov'09	U-2	660	Aug'13	
21	Odisha	Malibrahmani TPP / MPCL/ BTG-BHEL	Jun'10	U-1	525	Dec'12	Jindal Steel & Power has acquired the plant under NCLT route. This plant will be revived in FY 2025 - 26 (U-1 as captive unit). U-2 of the Plant is likely to be commissioned in Aug'-2025.
			Jun'10	U-2	525	Feb'13	
22	Tamil Nadu	Tuticorin TPP (Ind- Barath) / IBPIL / BTG- Shangdong China	May'10	U-1	660	May'12	Successful bidder has been identified. However, the Liquidation process has been stayed by the Hon'ble NCLAT.
23	West Bengal	Hiranmaye Energy Ltd (India Power corporation (Haldia) TPP / Haldia Energy Ltd/ EPC- MEIL / BTG- BHEL.	Sep'10	U-3	150	May'16	Project is currently under hold.
TOTAL [No. of Projects:25, No. of Units:52]					23,205		

Source: CEA, May'25, JM Financial

APPENDIX I

JM Financial Institutional Securities Limited

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Hold	Price expected to move in the range of 10% downside to 10% upside from the current market price for stocks with market capitalisation in excess of INR 200 billion and REITs* and in the range of 10% downside to 15% upside from the current market price for all other stocks, over the next twelve months.
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