

SectorVector

February 2025

Reading the topical trends

Warm winter, sunny demand

Real-time market volume up 27% on-year in January as demand surges amid pick up in industrial activity

The third-warmest January in 125 years and industrial activity lifted demand for electricity ~2.2% on-year to ~138 billion units (BU) in the first month of 2025.

The India Meteorological Department said the all-India mean temperature in January was 0.94°C higher than the average of 18.04°C seen since 1901.

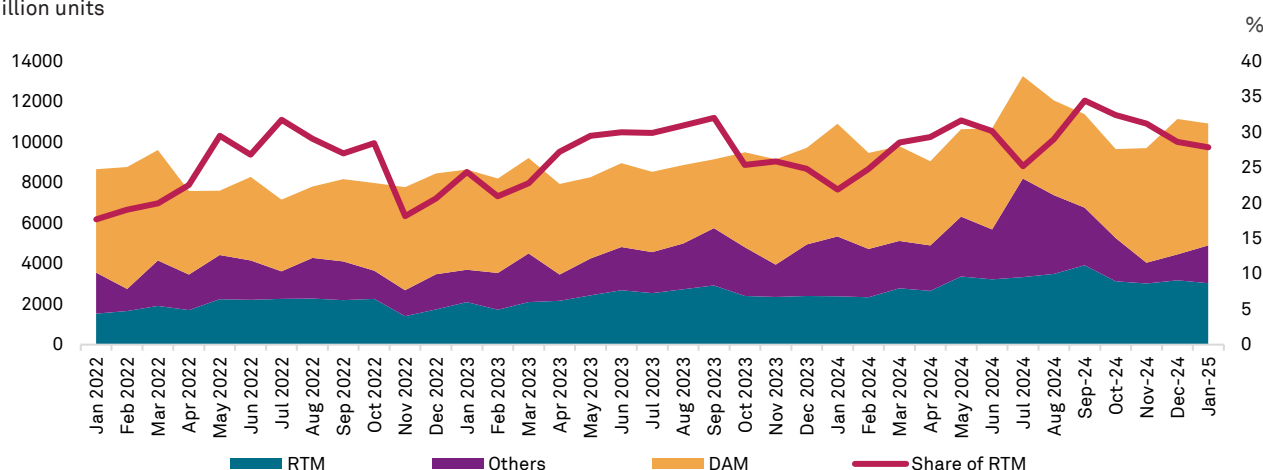
Typical heating requirements, a key driver of power demand, was subdued this time because of warmer and drier weather conditions.

The effects of this percolated to the short-term power market.

Real-time market (RTM) volume surged 27% on-year to 3,036 million units (MUs), while the day-ahead market (DAM) spiked 8% to 6,015 MU. Overall RTM volume at the Indian Energy Exchange (IEX) rose 400 basis points to 26% on-year in January.

Riding the sun

Million units



Source: IEX, Crisil Intelligence

Additionally, manufacturing activity continues well, as underscored by the Purchasing Managers' Index reading 57.7 for January, well above the mark of 50 that underscores expansion.

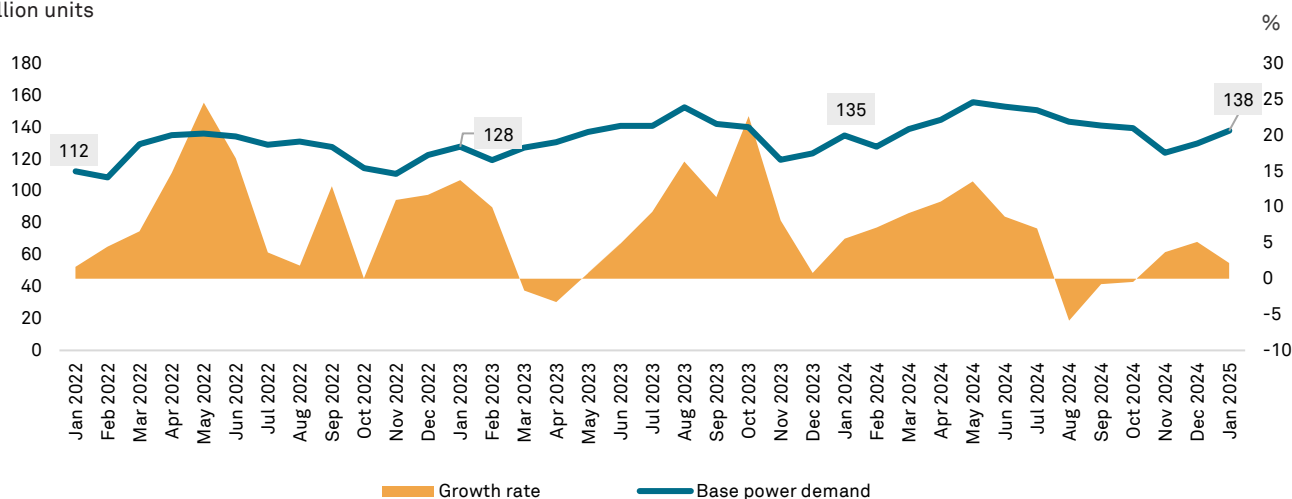
With nearly half of India's power demand coming from industrial and commercial consumers, expansion

of relevant activities is crucial for power demand to continue growing.

Between April 2024 and January 2025, power demand is estimated to have increased ~4.2% on-year.

Demand rises ~2.2% on-year

Billion units



Note: January 2025 data from Grid India is provisional

Source: CEA, Grid India, Crisil Intelligence

Peak power demand stable

GW	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
FY23	216	206	212	192	197	200	187	188	206	213	210	209
FY24	217	221	224	208	238	243	221	204	213	223	222	221
FY25	224	250	245	226	217	231	219	207	224	237		

Percentage deviation from peak

■ > 0% and ≤5%
 ■ More than 10%
■ > 5% and ≤10%
 ■ Peak demand for respective fiscal

Note: January 2025 data from Grid India is provisional

Source: CEA, Grid India, Crisil Intelligence

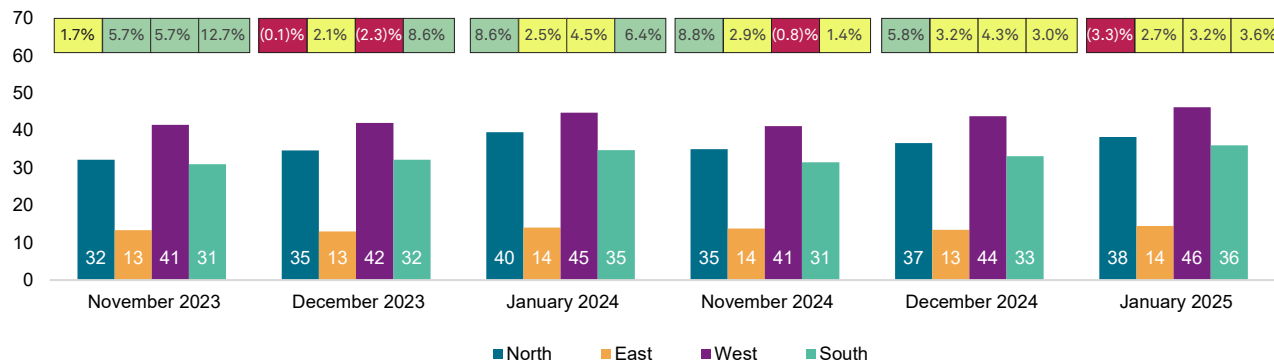
In January, peak power demand is estimated to have risen 14 GW on-year to 237 GW.

Overall, temperatures have been warmer across the country, but the growth in power demand has not been uniform. This winter, the northern region, which accounted for 29% of the country's power demand last

fiscal, saw a ~3.3% on-year decline. The western and southern regions, accounting for 32% and 26%, saw a growth of ~3.2% and ~3.6%, respectively. The eastern region, accounting for 12%, saw sub-2% growth.

Power demand ebb and rise

Billion units



Notes:

1) January 2025 data from Grid India is provisional

2) Percentage above the bar indicates on-year power demand growth

3) Red: <0%, yellow: 0-5%, green: >5%

4) North: Chandigarh, Delhi, Haryana, Himachal Pradesh, Jammu and Kashmir, Ladakh, Punjab, Rajasthan and Uttarakhand;

West: Chhattisgarh, Gujarat, Madhya Pradesh, Maharashtra, Dadra and Nagar Haveli, Daman and Diu and Goa;

South: Andhra Pradesh, Telangana, Karnataka, Kerala, Tamil Nadu, Puducherry and Lakshadweep;

East: Bihar, Damodar Valley Corporation, Jharkhand, Odisha, West Bengal, Sikkim, and Andaman and Nicobar Islands

Source: Central Electricity Authority (CEA), Grid India, Crisil Intelligence

Generation in sync, charges up ~3.9%

Power generation rose an estimated ~3.9% on-year to ~149 BU in January, surpassing typical monthly demand.

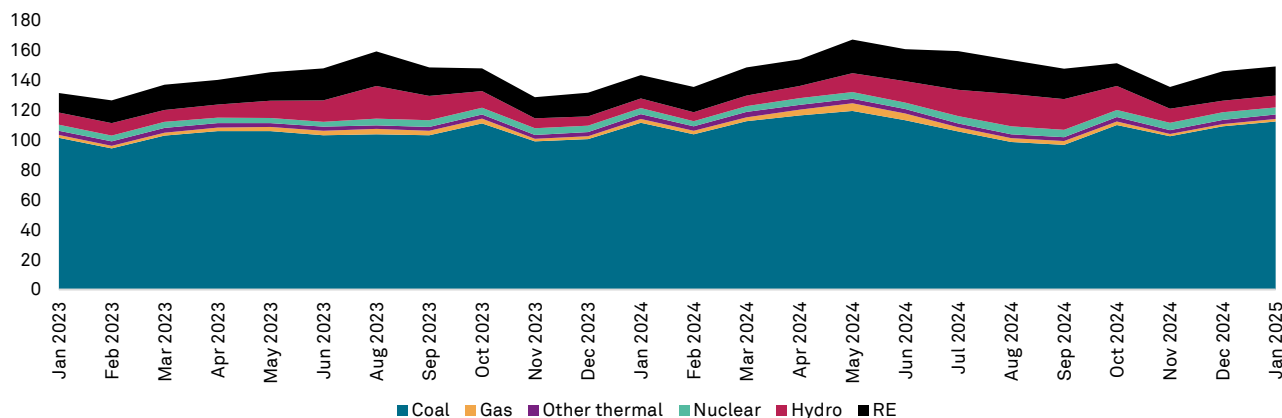
Coal generation inched up a meagre 0.8% on-year on a high base of 10% on-year growth last fiscal.

Generation of hydro, nuclear and renewable energy rose 24%, 15% and 24% on-year, respectively.

Higher hydro generation also rode on the base effect considering it had declined 21% in January 2024.

Coal-based generation slows as other sources pitch in

Billion units



Note: January 2025 data from Grid India is provisional

Source: Grid India, CEA, Crisil Intelligence

Coal inventory improves with generation subdued

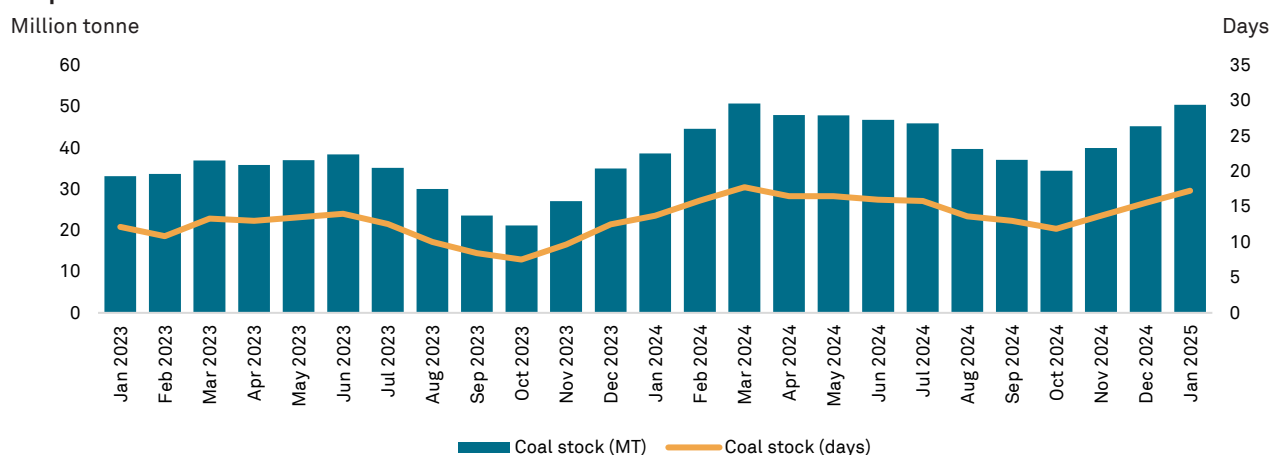
Coal is the key feedstock to generate electricity in India. Dispatches of coal to power plants surged 4.3% on-year between April-December 2024, which improved inventories. In December 2024, dispatches jumped up 5.0% on-year, with coal production surging 5.2% after the monsoon.

As on January 31, thermal power plants had 50 million tonne (MT) of coal stocks as against 39 MT a year ago. To recall, in 2023, higher temperatures brought

on by El Niño, along with lower rainfall, had led to a significantly higher dependence on coal. As a result, coal power generation had surged 10% on-year last fiscal.

With monsoon and temperatures better, the coal inventory has improved to 17 days this January 31, compared with 14 days in the corresponding previous period.

Dispatched to steadiness



Source: National Power Portal, Crisil Intelligence

Tracking economic activity

Overall, Crisil Intelligence projects power demand to rise 4.5-5.5% in fiscal 2025, driven by the vagaries of the weather, including the severe and prolonged heatwaves in the first quarter and insufficient rainfall in July in northern India.

Ample economic activity, with estimates of gross domestic product expanding 6.8% on-year this fiscal, is boosting demand, too.

On the other hand, above-normal minimum and maximum temperatures and below-normal cold waves expected this winter (December 2024-February 2025) are likely to impact power demand growth in the fiscal.

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