***DEMAND RELATED QUESTIONS:***

*Demand Forecasting & Planning:*

**1. "What is the projected peak demand for next month?"**

**Projected Peak Demand for Next Month:**  
The projected peak demand for next month (June 2025) is **1,280 MW**, based on historical load patterns, temperature forecasts, and expected industrial activity.

*Note: Actual demand may vary depending on weather conditions and unplanned outages.*

Would you like the full demand forecast report in PDF or Excel format?

**2. "What was yesterday's maximum demand in Area A?"**

**Yesterday's Peak Demand in Area A:**  
The maximum demand recorded in Area A on **19th May 2025** was **162.4 MW at 14:45 hrs**.

Would you like a detailed load curve or comparison with the previous week?

**3. "Show me the demand trend for the past 7 days."**

**7-Day Demand Trend Overview:**  
Here is the peak demand data for the last 7 days:

| **Date** | **Peak Demand (MW)** | **Time** |
| --- | --- | --- |
| 19 May | 1,142 | 15:00 hrs |
| 18 May | 1,105 | 14:30 hrs |
| 17 May | 1,127 | 15:15 hrs |
| 16 May | 1,099 | 14:45 hrs |
| 15 May | 1,088 | 15:30 hrs |
| 14 May | 1,076 | 15:00 hrs |
| 13 May | 1,054 | 14:50 hrs |

You can download a graphical version of this trend or request a comparison with last month.

**4. "Which feeders experienced a sudden demand spike today?"**

**Feeders with Sudden Demand Spikes (20 May 2025):**  
As of the latest data:

* **Feeder F-102 (Division C):** 23% spike at 10:45 hrs
* **Feeder F-215 (Industrial Zone):** 18% spike at 12:05 hrs
* **Feeder F-043 (Urban South):** 21% spike at 14:20 hrs

Spikes may be due to industrial restarts or local faults. Load balancing measures were auto-initiated.

Would you like alerts to be configured for specific feeders?

**5. "Can I download the daily demand curve for Division B?"**

**Download Available:**  
Yes, you can download the **daily demand curve for Division B** in PDF, Excel, or CSV format.

[ Click here to download today’s demand curve (20 May 2025)]  
Would you like the curve for the past week or automated daily reports to your email?

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*Sanctioned Load / Contract Demand:*

**1. "What is the current sanctioned load for consumer number 123456?"**

**Sanctioned Load Details – Consumer No. 123456:**

* **Consumer Name:** M/s Techfab Industries
* **Connection Type:** HT
* **Sanctioned Load:** **750 kVA**
* **Contract Demand:** **700 kVA**
* **Last Updated:** 03-Apr-2025

Would you like to view the load history or submit a load enhancement request?

**2. "How can I view the contract demand details for a commercial connection?"**

**Viewing Contract Demand Details – Commercial Connection:**  
To view contract demand details for a commercial connection:

1. Go to the **"Consumer Services"** section.
2. Click on **"Load & Demand Info"**.
3. Enter the **Consumer Number or CA Number**.
4. Click **“Fetch Details”**.

Alternatively, I can help you retrieve specific data if you provide the consumer number.

**3. "Can I get a list of HT consumers with load above 500 kVA?"**

**HT Consumers with Load > 500 kVA:**  
Yes, here is a quick summary:

| **Consumer Name** | **Consumer No.** | **Sanctioned Load** | **Division** |
| --- | --- | --- | --- |
| M/s Alpha Cement Ltd. | 100982 | 1,200 kVA | Division A |
| M/s Orion Textiles | 102145 | 950 kVA | Division B |
| M/s Nimbus Chemicals | 109832 | 700 kVA | Division C |
| M/s Delta Electronics | 104478 | 600 kVA | Division D |

Total: **42 HT consumers** above 500 kVA.

[📥 Click here to download full list (Excel)]  
Would you like to filter by zone or industry type?

**4. "How many load enhancement applications are pending in Zone 2?"**

**Pending Load Enhancement Applications – Zone 2:**  
As of today (20 May 2025):

* **Total Applications Received:** 68
* **Pending for Approval:** **17**
* **Pending for Site Inspection:** **8**
* **Under Processing:** 12
* **Approved (Awaiting Execution):** 31

Average processing time: 9 working days.

Would you like the status of a specific application or a weekly summary report?

**5. "Is there a consumer who has exceeded their contract demand this month?"**

**Overdrawn Contract Demand – May 2025 (till date):**  
Yes, the following consumers have exceeded their contract demand:

| **Consumer Name** | **Contract Demand** | **Peak Demand Reached** | **Date** |
| --- | --- | --- | --- |
| M/s Orion Textiles | 700 Kva | **810 kVA** | 14-May |
| M/s Varun Metals | 1,000 kVA | **1,150 kVA** | 17-May |
| M/s Polar Ceramics | 650 kVA | **688 kVA** | 11-May |

Automated alerts were triggered. Penalties may apply as per tariff regulations.

Would you like to schedule weekly alerts for contract demand violations?

*Demand Side Management (DSM):*

**1. "What DSM programs are currently active?"**

**Active Demand Side Management (DSM) Programs – 20 May 2025:**

The following DSM initiatives are currently active:

1. **Peak Hour Rebate Program:**  
   Incentives for HT consumers reducing load between **18:00 – 22:00 hrs**.
2. **Smart Thermostat Pilot (Residential):**  
   In collaboration with OEMs in Zone 1 and Zone 3, offering time-based appliance control.
3. **Industrial Load Shifting Scheme:**  
   Encouraging off-peak operations for selected manufacturing units.
4. **Agricultural Supply Scheduling:**  
   Controlled hours of supply to agricultural feeders in morning and night slots.

*Eligibility varies by zone and consumer category. Participation reports available on request.*

Would you like to enroll a consumer or download program brochures?

**2. "Are there any load shedding schedules today?"**

**Load Shedding Schedule – 20 May 2025:**

Yes, planned load shedding is scheduled due to maintenance and peak load conditions:

* **Zone 2 (Rural East):** 12:00 – 14:00 hrs
* **Zone 5 (Urban North):** 15:00 – 16:00 hrs *(feeder maintenance)*
* **Zone 7 (Industrial Substation D):** 16:30 – 17:15 hrs *(contingency reserve)*

Real-time updates are also sent via the DISCOM mobile app and SMS alerts.

Would you like to subscribe to area-specific outage alerts?

**3. "Which areas are under peak load restrictions?"**

**Peak Load Restrictions – Active Zones (20 May 2025):**

To manage grid stability, the following areas are under peak load restrictions from **18:00 – 22:00 hrs**:

* **Zone 4 – Industrial South:**  
  Max draw limit: 85% of contract demand
* **Zone 6 – Commercial Belt A:**  
  Cooling loads to be limited during evening hours
* **Feeder F-209 (Tech Park):**  
  Peak hour curtailment in effect

Non-compliance may lead to temporary isolation or penalty as per DSM regulations.

Would you like the restriction circular or an exemption request form?

**4. "Can you send alerts for high-demand periods?"**

**High-Demand Alerts – Subscription Available**

Yes, you can subscribe to **real-time alerts** via:

* **SMS**
* **Email**
* **Mobile App Push Notifications**

Alerts include:

* Upcoming peak load hours
* Demand threshold breaches
* Curtailment instructions (if applicable)

[🔔 Click here to manage alert preferences]

Let me know your preferred zones or consumer categories for notifications.

**5. "What is the load curtailment plan for industries?"**

**Industrial Load Curtailment Plan – May 2025:**

In case of grid stress or demand-supply mismatch, the following curtailment protocol applies:

| **Load Category** | **Curtailment %** | **Applicable Hours** |
| --- | --- | --- |
| HT > 1 MVA | Up to 20% | 18:00 – 22:00 hrs |
| HT 500 kVA–1 MVA | Up to 15% | 17:00 – 21:00 hrs |
| EHT Consumers | By prior notice | Peak + contingency hours |

Voluntary curtailment is rewarded under the DSM incentive scheme.

Would you like to access the official DSM circular or apply for a curtailment exemption?

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*Consumer Demand Monitoring:*

**1. "Has consumer ID 890123 exceeded their maximum demand?"**

**Demand Violation Alert – Consumer ID 890123:**  
Yes, this consumer has **exceeded their contract demand** during the current billing cycle.

* **Contract Demand:** 800 kVA
* **Maximum Demand Recorded:** **870 kVA**
* **Date & Time:** 16 May 2025, 15:40 hrs
* **Duration Above Threshold:** ~35 minutes

A penalty will apply as per the HT tariff schedule. The consumer has been notified.

Would you like to view a graphical load curve or trigger an inspection alert?

**2. "Can you list the top 10 industrial consumers by demand?"**

**Top 10 Industrial Consumers by Peak Demand – May 2025 (till date):**

| **Rank** | **Consumer Name** | **Consumer ID** | **Peak Demand (kVA)** | **Zone** |
| --- | --- | --- | --- | --- |
| 1 | M/s Orion Steel Ltd. | 100456 | 2,320 | Zone B |
| 2 | M/s Delta Polymers | 101982 | 2,120 | Zone A |
| 3 | M/s Varun Automotives | 103110 | 2,045 | Zone D |
| 4 | M/s Zenith Cement | 109002 | 1,990 | Zone B |
| 5 | M/s Nimbus Chemicals | 108456 | 1,860 | Zone C |
| 6 | M/s Arctic Alloys | 104789 | 1,790 | Zone D |
| 7 | M/s Vega Textiles | 107321 | 1,765 | Zone A |
| 8 | M/s Stellar Pipes | 102443 | 1,740 | Zone C |
| 9 | M/s Globe Machinery | 101267 | 1,710 | Zone E |
| 10 | M/s AquaTech Pvt. Ltd. | 105890 | 1,698 | Zone F |

[ Download full report in Excel]  
Would you like this sorted by average monthly demand or by contract demand utilization?

**3. "What is the demand utilization rate of consumer X?"**

**Demand Utilization – Consumer X (ID: 112233):**

* **Contract Demand:** 900 kVA
* **Maximum Demand (This Month):** 855 kVA
* **Utilization Rate:** **95.0%**
* **Avg. Demand Utilization:** 88.4% (past 6 months)

This consumer is operating close to their maximum allowable limit.

Would you like to recommend a load enhancement or set up alerts for threshold breaches?

**4. "Has there been unauthorized load growth in Zone C?"**

**Unauthorized Load Growth – Zone C (May 2025):**

Yes, based on smart meter data and inspection reports:

* **Detected Cases:** 6
* **Common Indicators:**
  + - * Load spikes beyond sanctioned limits
      * Bypassed metering in 2 locations
      * Consumption anomalies flagged in analytics
* **Notable Case:**
  + - * **Consumer ID:** 106781
      * **Sanctioned Load:** 300 kVA
      * **Recorded Peak Load:** 487 kVA
      * **Action:** Under verification by Enforcement Team

A field audit is underway. Notices have been issued for confirmed cases.

Would you like to view detailed case logs or initiate a surprise inspection request?

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*OPERTIONAL DEMAND QUERIES:*

**1. "Is the substation at 132kV XYZ overloaded?"**

**Substation Load Status – 132kV XYZ (as of 20 May 2025, 14:00 hrs):**

* + **Installed Capacity:** 160 MVA
  + **Current Peak Load:** **151 MVA**
  + **Utilization:** **94.4%**
  + **Status:** 🔸 *Near capacity threshold*

The substation is **not currently overloaded**, but operating in the high utilization range.  
Load diversion to alternate feeders is under review.

Would you like to view historical load trends or upcoming augmentation plans for this substation?

**2. "What is the feeder-wise load data for today?"**

**Feeder-Wise Load Data – 20 May 2025 (Updated hourly):**

| **Feeder ID** | **Zone** | **Peak Load (kW)** | **Load Factor (%)** | **Status** |
| --- | --- | --- | --- | --- |
| F-102 | Zone A | 8,920 | 72.4 | Normal |
| F-215 | Zone B | 10,340 | 88.1 | High Load |
| F-331 | Zone C | 6,480 | 65.7 | Normal |
| F-187 | Zone D | 11,200 | 92.5 | 🔴 Critical |
| F-098 | Zone E | 5,920 | 60.1 | Normal |

*Feeder F-187 is nearing overload; load redistribution is advised.*

Would you like a downloadable Excel or graphical view?

**3. "Can you show me load balancing recommendations?"**

**Load Balancing Recommendations – Real-Time Advisory (20 May 2025):**

Based on current substation and feeder loads, the following actions are recommended:

1. **Shift 1.5 MW from Feeder F-187 (Zone D)** to F-088 (Zone D) to reduce stress.
2. **Redistribute residential load from F-215 to F-210** during 18:00 – 22:00 hrs to maintain feeder stability.
3. **Balance industrial load in Zone B** between substations B1 and B3 to optimize transformer usage.
4. **Enable smart curtailment triggers** in Zone C feeders between 16:00 – 20:00 hrs for proactive DSM.

These recommendations are based on real-time SCADA and historical trends.

Would you like to export this as a load shift instruction set?

**4. "Which transformers are running close to full capacity?"**

**Transformers Near Full Load Capacity – 20 May 2025:**

| **Transformer ID** | **Location** | **Capacity (MVA)** | **Load (MVA)** | **Utilization (%)** | **Status** |
| --- | --- | --- | --- | --- | --- |
| T-112 | 132kV XYZ | 40 | 38.5 | 96.3 | ⚠️ High |
| T-076 | Urban South | 20 | 18.9 | 94.5 | ⚠️ High |
| T-143 | Zone D | 63 | 60.2 | 95.5 | ⚠️ High |
| T-091 | Zone B | 25 | 24.3 | 97.2 | 🔴 Critical |

3 transformers are operating above 94% capacity. Load balancing or temporary shifting is advised.

Would you like real-time alerts set up for transformers crossing 90% utilization?

*ALERTS & EXEPTIONS:*

**1. "Notify me when demand exceeds 90% of transformer capacity."**

**Alert Subscription Confirmed – Transformer Load Threshold**

You will now be notified **when any transformer crosses 90% of its rated capacity**.

**Alert Mode:** Email + Dashboard Notification  
 **Coverage:** All transformers under Division A & B (as per your access role)  
 **Frequency:** Real-time (every 5 min polling from SCADA feed)

*Example Alert:*  
**[Live Alert]** T-076 (Zone D) at 94.6% load – 15:10 hrs, 20 May 2025

Would you like to receive SMS alerts as well or limit monitoring to specific transformers?

**2. "Send SMS alerts to HT consumers during peak hours."**

**SMS Alert Service – HT Consumers (Activated)**

**Period:** Active daily during **18:00 – 22:00 hrs (Peak Period)**  
 **Target Group:** All HT consumers with contract demand ≥ 500 kVA  
 **Message Format:**

“⚠️ High Load Alert: Reduce load between 18:00–22:00 to avoid penalties. – DISCOM”

**Delivery Channels:**

* SMS Gateway: Integrated (via [VendorName])
* Email Copy: Optional (can be activated)

Would you like to review or edit the SMS content or add WhatsApp alerts?

**3. "Has any critical feeder tripped due to overload today?"**

**Feeder Trip Report – 20 May 2025 (as of 15:30 hrs):**

Yes, the following **critical feeder(s)** experienced trips due to overload:

| **Feeder ID** | **Zone** | **Trip Time** | **Cause** | **Status** |
| --- | --- | --- | --- | --- |
| F-187 | Zone D | 13:45 hrs | Overload @ 11.2 MW | Restored @ 14:10 hrs |
| F-092 | Zone B | 11:20 hrs | Transformer backup failure | Under restoration |

Feeder F-187 auto-isolated after exceeding load threshold for 3 minutes.  
Load was shifted to adjacent feeder F-088 as per SOP.

Would you like to download the trip logs or view restoration timelines?

*GENERATING PLANT:*

***Power Availability and Generation Status****:*

**1. "Which generating plants are currently online?"**

**Current Generation Status – As of 20 May 2025, 15:45 hrs**

The following generating plants are **currently online and synchronized with the grid**:

| **Plant Name** | **Type** | **Capacity (MW)** | **Generation (MW)** | **Status** |
| --- | --- | --- | --- | --- |
| XYZ Thermal | Thermal | 500 | 455 | ✅ Online |
| ABC Hydro | Hydro | 120 | 98 | ✅ Online |
| Solar Park-1 | Solar PV | 100 | 63 | ☀️ Daylight Only |
| DEF Gas Turbine | Gas | 150 | 142 | ✅ Online |
| Wind Cluster-Z | Wind | 80 | 47 | ✅ Online |

Total Real-time Availability: **805 MW**  
 *Note:* LMN Biomass Plant is offline for scheduled maintenance.

Would you like a downloadable report or status by fuel type?

**2. "What is the real-time generation from XYZ thermal plant?"**

**Real-Time Generation – XYZ Thermal Plant**

* + **Plant Type:** Coal-Based Thermal
  + **Installed Capacity:** 500 MW
  + **Current Generation:** **455 MW**
  + **Unit Status:**
    - Unit 1 (250 MW) – Online at 232 MW
    - Unit 2 (250 MW) – Online at 223 MW
  + **PLF (Today):** 91.0%

Operating within technical limits. No known issues reported.

Would you like a 24-hour generation trend or ash utilization stats?

**3. "How much power is available from solar generation today?"**

**Solar Generation Summary – 20 May 2025 (till 15:30 hrs):**

* + **Total Installed Solar Capacity (DISCOM-connected):** 320 MW
  + **Peak Solar Generation Today:** **278 MW @ 12:15 hrs**
  + **Current Output:** **63 MW**
  + **Total Energy Generated Today (so far):** **1.89 MUs**

Cloud cover in Zone A impacted generation during 10:00–11:30 hrs.

Would you like forecasts for tomorrow’s solar yield or plant-wise breakdown?

**4. "Is the hydro plant at ABC operational right now?"**

**ABC Hydro Plant – Operational Status**

* + **Plant Type:** Small Hydro
  + **Installed Capacity:** 120 MW
  + **Status:** ✅ **Online**
  + **Current Generation:** 98 MW
  + **Reservoir Level:** 88.2%
  + **Turbine Status:**
    - Turbine 1: Operational (50 MW)
    - Turbine 2: Operational (48 MW)

Water inflow and grid frequency are within safe limits.

Would you like a weekly water level trend or dispatch schedule?

**5. "What is the current PLF (Plant Load Factor) of XYZ generating station?"**

**Plant Load Factor – XYZ Thermal Generating Station**

* + **Installed Capacity:** 500 MW
  + **Daily PLF (as of 15:30 hrs):** **91.0%**
  + **Monthly Average PLF (May 2025):** **87.4%**
  + **Last Month’s PLF:** 84.6%

PLF is high due to increased base load dispatch and stable fuel supply.

Would you like a historical comparison or benchmark against similar plants?

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***Scheduling and Load Dispatch****:*

**1. "What is the generation schedule for today?"**

**Daily Generation Schedule – 20 May 2025**

| **Power Plant** | **Type** | **Scheduled Generation (MW)** | **Peak Block (MW)** | **Remarks** |
| --- | --- | --- | --- | --- |
| XYZ Thermal | Thermal | 470 | 490 (Block 38) | As per SLDC Merit Order |
| ABC Hydro | Hydro | 100 | 110 | Peak hours only |
| Solar Park-1 | Solar | 85 | 95 (Block 22) | Variable – Weather dependent |
| NTPC – Allocation | Central | 320 | 325 | Confirmed |
| DEF Gas | Gas | 140 | 145 | Must-run |

Updated every 15 minutes via SLDC coordination.  
Would you like to view the block-wise 96-slot schedule or export as Excel?

**2. "How much power are we scheduled to receive from NTPC?"**

**Scheduled Allocation – NTPC Stations (20 May 2025)**

| **NTPC Station** | **Contracted Capacity (MW)** | **Scheduled Drawal (MW)** | **Time Block** |
| --- | --- | --- | --- |
| NTPC Dadri | 120 | 114 | Full-day |
| NTPC Talcher | 150 | 148 | Full-day |
| NTPC Vindhyachal | 60 | 58 | Peak hours only |

**Total Scheduled from NTPC:** **320 MW**  
SLDC has not flagged any revisions for today.

Would you like to monitor real-time deviation or historical usage from NTPC?

**3. "Has the schedule for Unit 2 at ABC plant changed?"**

**Unit Schedule Status – ABC Plant (Unit 2)**

* **Previous Schedule:** 50 MW (00:00 – 24:00 hrs)
* **Revised Schedule (as of 11:30 hrs):**
  + - 00:00 – 14:00 hrs → 50 MW
    - 14:00 – 24:00 hrs → **Reduced to 40 MW**

**Reason:** Partial derating due to cooling system maintenance.  
 Approved via SLDC Revision #37

Alert triggered for intra-day revision. Instruct dispatch team to update slot-wise load plan.

Would you like to subscribe to auto-alerts for unit-wise schedule changes?

**4. "What is the deviation from scheduled vs. actual drawal?"**

**Drawal Deviation Summary – 20 May 2025 (till 15:30 hrs):**

| **Parameter** | **Value** |
| --- | --- |
| **Scheduled Drawal (Avg)** | 1125 MW |
| **Actual Drawal (Avg)** | 1178 MW |
| **Deviation (Avg)** | **+53 MW** |
| **Highest Positive Deviation** | +96 MW @ Block 40 (20:00 hrs) |
| **DSM Penalty Triggered:** | Yes – Overdrawal beyond limits during 13:00–14:00 |

*Action Required:* Optimize drawal during evening peak to avoid further UI penalties.

Would you like a detailed DSM charge report or block-wise deviation graph?

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***Cost and Merit Order:***

**1. "What is the cost per unit from XYZ gas-based plant?"**

**Cost per Unit – XYZ Gas-Based Power Plant**

* + **Plant Type:** Open Cycle Gas Turbine
  + **Fuel Source:** RLNG (Regasified LNG)
  + **Variable Cost (as on 20 May 2025):** ₹7.85/kWh
  + **Fixed Cost (per unit):** ₹0.95/kWh
    - **Total Effective Cost:** **₹8.80/kWh**

Note: RLNG prices have risen due to global supply constraints.

Would you like to compare it with alternate gas or renewable sources?

**2. "Which generating plants are currently on merit?"**

**Merit Order Dispatch – Active as of 16:00 hrs**

| **Rank** | **Power Plant** | **Variable Cost (₹/kWh)** | **Scheduled (MW)** | **Status** |
| --- | --- | --- | --- | --- |
| 1 | Solar Park-1 | 0.00 | 80 | ✅ On Merit |
| 2 | ABC Hydro | 0.12 | 100 | ✅ On Merit |
| 3 | XYZ Thermal | 2.65 | 470 | ✅ On Merit |
| 4 | NTPC Talcher | 3.12 | 148 | ✅ On Merit |
| 5 | DEF Gas (standby) | 7.10 | 0 | ❌ Off Merit |

Merit order based on SLDC's cost-stack algorithm and availability.  
Auto-updated every 15 minutes or on schedule revision.

Would you like a download of today’s full merit stack?

**3. "Are any high-cost generators being dispatched today?"**

**High-Cost Generator Dispatch – 20 May 2025**

Yes, the following high-cost plants are currently being partially dispatched due to peak load demand:

| **Plant Name** | **Cost (₹/kWh)** | **Dispatched (MW)** | **Reason** |
| --- | --- | --- | --- |
| XYZ Gas Plant | ₹8.80 | 60 | Evening peak |
| Diesel Reserve Unit | ₹11.25 | 20 | Emergency (14:00–15:00 hrs) |

Dispatch approved by SLDC to maintain grid stability during frequency dip.

Would you like to set alerts for off-merit or costly dispatch events?

**4. "What is the average power purchase cost today?"**

**Average Power Purchase Cost – 20 May 2025 (Till 16:00 hrs)**

* **Total Scheduled Power:** 1210 MW (Avg)
* **Weighted Average Cost:** **₹3.96/kWh**
* **Breakdown:**
  + - Renewables: ₹2.25/kWh
    - Thermal (State + Central): ₹3.45/kWh
    - Gas-based & Others: ₹7.90/kWh
    - Exchange Purchase (if any): ₹4.75/kWh

Note: Cost slightly elevated due to peak-hour dispatch of gas-based units.

Would you like a graph of daily purchase cost trends or yesterday’s breakdown?

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***Outages and Emergencies****:*

**1. "Is there any forced outage at a generating unit?"**

**Forced Outage Alert – As of 20 May 2025, 17:00 hrs**

Yes, the following generating unit is currently under **forced outage**:

| **Unit** | **Plant** | **Type** | **Capacity** | **Outage Time** | **Cause** | **Status** |
| --- | --- | --- | --- | --- | --- | --- |
| Unit-2 | XYZ Thermal | Thermal | 250 MW | 14:35 hrs | Boiler trip | Under diagnosis |

Initial assessment points to high drum pressure. SLDC and plant control room are coordinating restoration.

Would you like real-time updates when unit health status changes?

**2. "What is the expected restoration time for ABC plant?"**

**Restoration Timeline – ABC Hydro Plant**

* + **Plant Status:** Offline since 10:10 hrs (today)
  + **Reason:** Emergency shut-off due to gate control failure
  + **Restoration ETA (as per latest update):** **By 18:30 hrs, 20 May 2025**
  + **Work in Progress:** Gate actuator assembly under testing

Plant crew is on-site; restoration timeline will be updated every hour.

Would you like to receive an alert once generation resumes?

**3. "Which generating units are under maintenance?"**

**Scheduled Maintenance – As of 20 May 2025**

| **Unit** | **Plant** | **Capacity** | **Maintenance Window** | **Remarks** |
| --- | --- | --- | --- | --- |
| Unit-1 | LMN Biomass | 50 MW | 17–22 May 2025 | Annual overhaul |
| Unit-3 | XYZ Thermal | 250 MW | 18–21 May 2025 | Boiler inspection |
| Turbine-2 | DEF Hydro | 40 MW | 19–20 May 2025 | Governor tuning |

SLDC has accounted for these outages in the day-ahead dispatch plan.

Would you like a full calendar of upcoming maintenance blocks?

**4. "Has there been any generation curtailment today?"**

**Generation Curtailment Log – 20 May 2025 (Till 17:00 hrs)**

Yes, curtailments were logged at the following plants:

| **Plant** | **Type** | **Curtailment (MW)** | **Time Frame** | **Reason** |
| --- | --- | --- | --- | --- |
| Solar Park-1 | Solar | 30 MW | 11:30–12:15 hrs | Grid congestion |
| NTPC Allocation | Thermal | 20 MW | 13:00–13:30 hrs | Frequency control |

Curtailments initiated based on SLDC directives to maintain grid balance.

Would you like to download the curtailment report or enable auto-notification for future events?

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***Renewable Energy (RE) Generation****:*

**1. "How much solar power was generated in Zone A today?"**

**Solar Generation – Zone A (20 May 2025)**

| **Metric** | **Value** |
| --- | --- |
| Installed Capacity (Zone A) | 180 MW |
| Total Energy Generated | **1.92 MUs** |
| Peak Generation | 164 MW @ 12:20 hrs |
| Generation Window | 06:10 hrs – 18:35 hrs |
| Weather Impact | Minor cloud cover during 10:30–11:30 hrs |

Generation figures are provisional and subject to final SLDC validation.

Would you like a 7-day trend or breakdown by plant or developer?

**2. "What is the forecasted wind generation for tomorrow?"**

**Wind Generation Forecast – 21 May 2025**

| **Zone** | **Forecasted Generation (MUs)** | **Peak Forecast (MW)** | **Wind Speed (Expected)** |
| --- | --- | --- | --- |
| Zone B | 1.45 | 128 MW @ 02:00 hrs | 10.6 m/s |
| Zone C | 0.88 | 96 MW @ 03:45 hrs | 9.2 m/s |

Forecast based on IMD wind models and SCADA inputs (updated every 6 hours).  
 Slight drop expected post 06:00 hrs due to weakening wind patterns.

Would you like to subscribe to daily wind forecast reports?

**3. "Are we complying with RPO (Renewable Purchase Obligation)?"**

**RPO Compliance – FY 2024–25 (YTD)**

| **RPO Category** | **Target (%)** | **Achieved (%)** | **Status** |
| --- | --- | --- | --- |
| **Solar** | 10.50 | 9.85 | 🟡 Near Target |
| **Non-Solar** | 9.00 | 9.32 | 🟢 Met |
| **Total RPO** | 19.50 | **19.17** | 🟡 Partial |

Shortfall of ~0.33% in solar RPO, expected to be offset via RECs in Q4.  
 Latest RPO audit submitted to SERC on 10 May 2025.

Would you like to view REC (Renewable Energy Certificate) purchases or detailed compliance logs?

**4. "Is solar curtailment active right now?"**

**Solar Curtailment Status – As of 20 May 2025, 17:10 hrs**

* **Curtailment Status:** ✅ **Active (Selective)**
* **Impacted Zones:** Zone A, Zone D
* **Curtailment Level:** 35 MW total
* **Reason:** Transmission constraint on 132kV corridor
* **Curtailment Window:** 16:45 – 18:00 hrs (as per SLDC directive)

Affected developers have been notified via real-time SCADA dispatch alerts.

Would you like to receive curtailment alerts via SMS or email?

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***Forecasts and Planning****:*

**1. "What is the expected availability from all sources tomorrow?"**

**Projected Power Availability – 21 May 2025**

| **Source Type** | **Expected Availability (MW)** |
| --- | --- |
| State Thermal | 490 |
| Central Allocation (NTPC, etc.) | 325 |
| Gas-Based Plants | 120 |
| Hydro | 110 |
| Solar (Daytime Avg.) | 160 |
| Wind (Nighttime Avg.) | 130 |
| Short-Term Market | 70 (tied up) |

**Total Expected Availability:** **1,405 MW**  
Forecast based on SLDC scheduling, RE forecasts, and bilateral contracts.

Would you like the block-wise 96-slot availability chart?

**2. "How much firm power can we expect during peak hours?"**

**Firm Power Forecast – Peak Hours (18:00–22:00 hrs, 21 May 2025)**

| **Source** | **Firm Availability (MW)** |
| --- | --- |
| Thermal + NTPC | 785 |
| Hydro | 90 |
| Gas-Based | 115 |
| Wind | 60 (expected) |
| Market Purchase | 70 |

**Total Firm Power Available:** **~1,120 MW**  
Peak demand expected: ~1,090 MW  
Wind forecast is moderate; standby gas capacity kept available.

Would you like to set a real-time alert if firm availability drops below demand?

**3. "Is XYZ plant expected to meet its generation target this month?"**

**Monthly Performance Projection – XYZ Thermal Plant**

* + **Target Generation (May 2025):** 370 MUs
  + **Actual Till Date:** 248.6 MUs (as of 20 May)
  + **Daily Average Needed (remaining):** 10.1 MUs
  + **Plant Status:** Fully operational (no outages logged)
  + **Forecast:** ✅ **On track to meet target**, assuming no derating or fuel constraints.

Last reviewed by plant control room at 09:00 hrs today.

Would you like daily progress updates or a generation tracking dashboard?

**4. "When is the next generating unit at ABC plant expected to come online?"**

**Unit Commissioning Schedule – ABC Plant**

* + - **Unit Name:** ABC Unit-3 (Supercritical Thermal)
    - **Capacity:** 660 MW
    - **Current Stage:** Synchronization testing completed
    - **Expected COD (Commercial Operation Date):** **26 May 2025**
    - **Trial Load Test:** Scheduled for 22–23 May
    - **Clearance Status:** CEA & SLDC approvals in process

Engineering and testing teams are on schedule; no delays reported.

Would you like commissioning milestones auto-notified?

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**Power Exchanges and Short-Term Purchase**:

**1. "Are we buying power from exchange today?"**

**Exchange Power Procurement – 20 May 2025**

* **Yes**, power has been scheduled from the exchange today.

| **Market Segment** | **Volume Purchased** | **Avg. Rate (₹/kWh)** | **Time Blocks Scheduled** |
| --- | --- | --- | --- |
| Day Ahead Market (DAM) | 90 MW | ₹4.12 | 00:00–06:00 hrs, 14:00–18:00 hrs |
| Real-Time Market (RTM) | 40 MW | ₹5.25 | 12:15–13:00 hrs (high load) |

DAM procurement helped optimize cost compared to state thermal plants.

Would you like a chart of today's exchange schedule vs. actual drawal?

**2. "What is the rate on the DAM (Day Ahead Market)?"**

**DAM Clearing Prices – IEX (for 21 May 2025)**

| **Time Block** | **MCP (₹/kWh)** |
| --- | --- |
| 00:00–06:00 hrs | ₹3.85 |
| 06:00–18:00 hrs | ₹4.10 |
| 18:00–22:00 hrs | ₹5.40 |
| 22:00–24:00 hrs | ₹4.65 |

* **Average Market Clearing Price (MCP):** ₹4.48/kWh
* Prices vary by regional congestion and demand zones (NR/ER/SR split).

Data auto-synced from Market Coupling system.

Would you like an alert when MCP drops below your threshold?

**3. "Which plants were backed down due to cheaper exchange power?"**

**Plant Backdown Report – 20 May 2025**

| **Plant Name** | **Type** | **Backed Down (MW)** | **Reason** |
| --- | --- | --- | --- |
| ABC Thermal-2 | Coal | 80 | High VC (~₹4.95/kWh) |
| DEF Gas Plant | RLNG | 60 | Costlier than exchange |

Replaced with DAM power (₹4.10/kWh average) to optimize merit order.

Would you like a daily backdown summary or auto-merit comparison?

**4. "Can we replace XYZ plant with short-term purchase today?"**

**Feasibility Check – Replacement of XYZ Plant (20 May 2025)**

* **XYZ Plant Cost:** ₹6.25/kWh (RLNG based)
* **Available Short-Term Option:**
  + - **DAM Price (Avg):** ₹4.48/kWh
    - **RTM Availability:** 60 MW @ ₹5.10/kWh

**Yes**, it is economically feasible to replace XYZ plant today with short-term purchase from DAM/RTM for **non-peak blocks**.

For peak hours (18:00–21:00), real-time balancing margin is limited — SLDC approval required before full shutdown.

Would you like to simulate a replacement scenario or initiate requisition to the trading team?

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***POWER THEFT:***

**1. "Are there any suspected power theft cases today?"**

Power Theft Alerts – 20 May 2025

* + Total Suspected Cases Flagged: 7
  + Detection Basis: Sudden drop in consumption, meter bypass indicators, tamper alerts from AMI
  + Top Locations:
    - Feeder 12 (Zone B) – 3 cases
    - Industrial Area (Zone D) – 2 cases
    - Rural Line R4 (Zone C) – 2 cases

Vigilance teams have been notified and site inspections are scheduled.  
Would you like the case details or assign to a field officer?

**2. "Which feeders have abnormal losses in Division A?"**

High Loss Feeders – Division A (Current Month)

| Feeder Name | Technical Loss (%) | Billed Loss (%) | Alert Flag |
| --- | --- | --- | --- |
| Feeder A12 | 6.5 | 34.7 | 🔴 |
| Feeder A07 | 7.2 | 28.3 | 🟠 |
| Feeder A09 | 5.8 | 30.1 | 🔴 |

Loss > 25% is considered abnormal under DISCOM norms.  
 Action: Suggested audit or feeder-wise load study.

Would you like to drill down to consumer-level analysis?

**3. "Can you show me consumers with zero consumption but active meters?"**

Zero-Consumption Consumers (Active Meters) – Snapshot

* Division C Total: 42 flagged accounts
* Top Consumer Categories:
  + - Domestic: 26
    - Commercial: 12
    - Small Industrial: 4
* Verification Status:
  + 15 under field verification
  + 8 suspected meter bypass
  + 19 pending inspection

Would you like to export this list or send to vigilance for spot checking?

**4. "Is there any sudden drop in billing in Zone 3 this month?"**

Billing Anomaly Detection – Zone 3 (May 2025)

* Drop in Billed Units: –18.6% compared to April 2025
* Affected Subdivisions: Sub D3, D7
* Suspected Causes:
  + - Batch meter read failure in D3 (reported 15 May)
    - 13 HT consumers in D7 showing ~40% dip in recorded demand

Suggest: Cross-check with meter reading logs & feeder energy input.

Would you like a list of high-deviation consumers from these areas?

**5. "Which DTs (Distribution Transformers) show a high technical vs. billed mismatch?"**

DT Loss Mismatch Report – 20 May 2025

| DT Name | Input Energy (kWh) | Billed Energy (kWh) | Loss (%) | Flag |
| --- | --- | --- | --- | --- |
| DT-54 (Zone B) | 12,430 | 7,800 | 37.3% | 🔴 |
| DT-22 (Zone E) | 9,200 | 6,190 | 32.7% | 🟠 |
| DT-71 (Zone A) | 10,800 | 6,950 | 35.6% | 🔴 |

⚠️ Technical loss estimate is 8–10% — above that likely indicates non-technical losses or unmetered load.

Would you like a DT audit summary or suggest tagging these for load survey?

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***Location and Area-Based Queries****:*

**1. "List high-loss areas in our urban network."**

**Urban Network – High-Loss Areas (as of May 20, 2025)**

| **Area / Subdivision** | **Loss Percentage** | **Remarks** |
| --- | --- | --- |
| Subdivision U-5 (Old City) | 38.6% | Dense load + theft-prone |
| Zone B – Sector 3 | 33.4% | High unauthorized connections |
| Urban Pocket U-9 | 29.8% | Metering gaps identified |

Areas above 25% loss flagged for audit and targeted DSM.

Would you like a loss heatmap or consumer-level breakdown for these zones?

**2. "Which areas have repeated theft cases?"**

**Areas with Repeated Theft Incidents – Past 3 Months**

| **Area Name** | **No. of Cases** | **Last Case Logged** |
| --- | --- | --- |
| Rural Zone D – Line R5 | 14 | 17 May 2025 |
| Urban Block U-6 | 11 | 18 May 2025 |
| Slum Cluster (Sector A) | 9 | 16 May 2025 |

These areas have recurring issues like meter bypass, hooking, and broken seals.  
 Special drives and enforcement planned this week.

Would you like to notify the vigilance officer assigned to these regions?

**3. "Are there any tampered meters in Rural Circle 2?"**

**Tampered Meter Alerts – Rural Circle 2 (May 2025)**

* **Total Meters Flagged:** 18
* **Tamper Types Detected:**
  + Magnetic Interference – 7
  + Terminal Cover Open – 5
  + Reverse Current Flow – 6
* **Locations:** Villages B3, C1, C4, and Line R-8 (Clustered tampering pattern)

Inspection teams dispatched; 6 meters already replaced with tamper-proof variants.

Would you like tamper logs exported or forwarded to local field teams?

1. **"Show me locations where direct hooking is frequently reported."**

**Hooking-Prone Locations (Based on Field Reports & Images)**

| **Location** | **Hooking Frequency** | **Recent Incidents** |
| --- | --- | --- |
| Feeder R12 – Slum Pocket | High | 19 May 2025 |
| Periphery of Urban Zone G | Medium | 17 May 2025 |
| Agricultural Belt – Zone C | High | 18 May 2025 |

Hooking evidence captured via drone in R12 zone – sent to control room for escalation.

Suggesting enhanced patrolling + AB cable replacement in hotspot zones.

Would you like incident visuals or site audit scheduling assistance?

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***Case and Complaint****:*

**1. "What is the status of theft case ID THF-20230512-01?"**

Case Status – Theft Case ID: THF-20230512-01

* + Consumer ID: 772145
  + Location: Feeder 9, Zone B
  + Case Type: Direct hooking
  + Status: Provisional Assessment Issued
  + Date of Detection: 12 May 2025
  + Next Action: Awaiting consumer response (due by 24 May 2025)

Documents: [PA Notice PDF] | [Inspection Report]

Would you like to forward this case to the legal team or generate the final assessment?

**2. "Has a provisional assessment been issued for consumer 123456?"**

**Provisional Assessment Check – Consumer No. 123456**

* **Yes**, a provisional assessment was issued on **16 May 2025**
* **Reason:** Meter bypass detected during routine inspection
* **Assessed Amount:** ₹48,750
* **Due Date for Reply:** 25 May 2025
* **Status:** Pending Consumer Acknowledgement

You may initiate follow-up notice or track payment status.

**3. "When was the last theft inspection done in Consumer No. 890123?"**

Inspection History – Consumer No. 890123

* Last Theft Inspection Date: 04 April 2025
* Inspection Type: Random vigilance drive (no tampering detected)
* Previous Violation: None recorded in the past 12 months

📋 Field remarks: Load matched with contract; meter seals intact.

Would you like to schedule a re-inspection or flag for routine surveillance?

**4. "Can I see a summary of theft cases filed this month?"**

**Theft Case Summary – May 2025 (as of 20 May)**

| **Division** | **Cases Filed** | **PA Issued** | **FIRs Registered** |
| --- | --- | --- | --- |
| Division A | 12 | 10 | 4 |
| Division C | 8 | 6 | 2 |
| Rural Circle 1 | 15 | 12 | 6 |
| **Total** | **35** | **28** | **12** |

Highest activity noted between 10–15 May.  
 Would you like this report emailed daily or auto-exported as PDF?

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***Evidence and Field:***

**1. "Upload tampering photos from site visit yesterday."**

Upload Confirmation – Tampering Photos

* Please upload the photos from your device or drag-and-drop them here.
* Accepted formats: JPG, PNG, PDF
* Max file size per upload: 10 MB

Once uploaded, the photos will be tagged with yesterday’s date and linked to the relevant inspection report automatically.

Expected processing time: < 2 minutes.  
You will receive a confirmation notification when upload is successful.

**2. "Is the site report for inspection on Street X uploaded?"**

Inspection Report Status – Street X

* + Yes, the site inspection report for Street X was uploaded on 19 May 2025 at 16:45 hrs.
  + Report ID: INS-20250519-STRX-07
  + Filed by: Field Officer R. Kumar
  + Summary: Tampering detected near meter box; photos and meter readings attached.

You can view or download the full report [here](https://chatgpt.com/c/682c36ac-ac24-800b-85e7-67233cd3d9b8) (link to internal report portal).

**3. "Where can I view meter images captured during inspection?"**

**Meter Images Access**

* All meter images captured during field inspections are stored in the **Meter Inspection Portal** under your assigned region.
* To access:
  1. Log in to the **Vigilance Dashboard**
  2. Navigate to **Inspections → Meter Images**
  3. Filter by date, consumer ID, or location for quick search
* Alternatively, provide me a consumer number or inspection date, and I can fetch specific images for you.

Would you like me to retrieve images for a specific consumer or inspection date now?

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***Penalties and Recovery****:*

**1. "What is the penalty amount for meter bypassing?"**

**Penalty for Meter Bypassing**

* As per DISCOM’s tariff and theft prevention policy, the penalty includes:
  + - **Provisional Assessment Amount:** Calculated based on estimated unbilled consumption
    - **Fixed Penalty:** ₹10,000 per violation
    - **Additional Charges:** Possible disconnection fees and legal costs
* The total penalty varies case-by-case, depending on the assessed load and duration of theft.

For an exact amount, please provide the consumer ID or case number.

**2. "Has consumer 456789 paid the assessed theft charge?"**

**Theft Charge Payment Status – Consumer No. 456789**

* + **Assessed Amount:** ₹72,500 (issued on 02 May 2025)
  + **Payment Status:** Partially paid
    - Amount received: ₹50,000
    - Balance due: ₹22,500 (due by 30 May 2025)
  + **Payment Mode:** Online bank transfer

Would you like to send a payment reminder or generate a receipt?

**3. "How much theft recovery was collected last quarter?"**

**Theft Recovery Summary – Q1 2025**

| **Month** | **Recovery Amount (₹)** |
| --- | --- |
| January | 1,25,00,000 |
| February | 1,10,50,000 |
| March | 1,38,75,000 |
| **Total** | **3,74,25,000** |

Recovery includes payments from provisional assessments, fines, and settlements.

Would you like a detailed breakdown by division or consumer category?

**4. "Is interest applicable on unpaid theft penalties?"**

ℹ️ **Interest on Unpaid Theft Penalties**

* + Yes, interest is levied on unpaid theft penalties at **1.5% per month**, starting from the penalty due date until full payment is received.
  + Interest charges are compounded monthly and added to the outstanding balance.
  + Consumers are notified of accrued interest during follow-up notices.

Would you like to see the interest calculation for a specific consumer or case?