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Government of India
Ministry of Power

Shram Shakti Bhawan, Rafi Marg.
New Delhi, Dated June, 2026
22nd

To

1. Secretary, MEITY, New Delhi.
2. Secretary, MNRE, New Delhi.
3. Chairperson, CEA, Sewa Bhawan, R.K. Puram, New Delhi.
4. Secretary, Central Electricity Regulatory Commission (CERC), New Delhi.
5. Principal Secretaries/Secretaries (Power/Energy) of all State Governments/UTs.
6. Secretaries of All State Electricity Regulatory Commissions/JERCs.
7. Chairman/CMDs of all PSUs under administrative control of Ministry of Power.
8. CEO, NeGD, New Delhi.
9. CMDs/MDs of Discoms/Gencos of all State Governments.
10. CMD Grid India
11. Director General, All India Discoms Association, Association of Power Producers, New Delhi.
12. President, FICCI, House No. 1, Tansen Marg New Delhi.
13. President, CII, New Delhi.
14. President, PHDCCI, New Delhi.
15. ASSOCHAM, Chanakyapuri, New Delhi.
16. Member, PRAYAS Energy Group, Pune.
17. Director General, Electric Power Transmission Association (EPTA), New Delhi.
18. Prof. Abhijit Abhyankar, IIT Delhi
19. CSEP, Chanakyapuri, New Delhi.
20. Prof. Gurunath Garrula, IISC, Bengaluru
21. CMD/CEO, BSES /Tata Power Distribution Co Ltd/ Torrent Power/ NPCL/CESC
22. CISO/Power
23. DG/NCIIPC
24. Director General, Power Foundation of India (PFI), New Delhi.

Subject: Seeking comments on draft National Electricity Data Sharing Framework, 2026 – reg.

Sir/Madam,

I am directed to forward herewith the draft National Electricity Data Sharing Framework, 2026 with request to provide your comments, if any, to this Ministry within 30 days from the date of issue of this letter i.e., by 21.07.2026. The comments (in MS word/ PDF format) may also be emailed at ursi2desk-mop@gov.in.

2. This issues with the approval of Competent Authority.

Encl: as above

Neeru Lal
22/6/26
(Neeru Lal)

Under Secretary to the Govt. of India
Tel. No. 011- 23705268

Copy to:

Technical Director, NIC Cell for uploading on MOP's website under "New Notices" with the heading "**Seeking comments on draft National Electricity Data Sharing Framework, 2026.**"

Copy for information to:

PS to Hon'ble Minister of Power, PS to Hon'ble MoSP, PPS to Secretary(P), PSO to JS(D&R), PPS to Director (UR&SI), Ministry of Power.

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1. Preamble

India's electricity sector generates large volumes of operational, planning, commercial, and consumer data across generating companies, Load Despatch Centres, transmission licensees, distribution licensees, Electricity Regulatory Commissions, and other Government agencies. These datasets are presently fragmented, follow inconsistent formats, and lack a unified access and standardization framework.

The National Electricity Data Sharing Framework provides broad principles and institutional structures to enable structured, secure, and transparent data sharing in the electricity sector — supporting non-discriminatory access while protecting Critical Information Infrastructure. Adoption of this Framework, whether in full or in part, shall be entirely voluntary for the sectoral entities. However, National Electricity Data Centre (NEDC) and the National Electricity Data Portal (NEDP) proposed as part of the Framework shall be established to create an ecosystem for data sharing across the country.

2. Background and Context

2.1 Key Entities in the Electricity Data Ecosystem

Stakeholder	Examples	Indicative Role in Data sharing
Generating Companies	Central/State/private generators (IPPs)	Submit/use operational and capacity data
Transmission Licensees	Inter-State and intra-State licensees	Submit/use network and connectivity data
Distribution Licensees	State and private DISCOMs	Submit/use consumer, outage, reliability, billing, and asset data
Load Despatch Centres	State Load Despatch Centres, Regional Load Despatch Centres, National Load Despatch Centre, Renewable Energy Management Centres	Submit/use scheduling, forecasting, and market data
Electricity Regulatory Commissions	Central Electricity Regulatory Commission, State Electricity Regulatory Commissions, Joint Electricity Regulatory Commissions	Submit/use regulatory information (Tariff petitions, orders)
Government Agencies	Central Electricity Authority, Central Transmission Utility, State Transmission Utilities	Infrastructure planning and other operational information

Market Bodies	Power exchanges, trading licensees, Over-The-Counter (OTC) platforms, Aggregators	Market information
Government	State and Central Government	Planning and policy formulation
Research & Academic Institutions	IITs, NITs, IISc, think tanks	Research, modelling, and publications
Technology Solution Providers	AI/ML companies and start-ups	Technological solutions

* The list is indicative and not exhaustive

2.2 Data Issues Today

- a) Inconsistent metadata across agencies.
- b) Different data definitions used by entities.
- c) No standardized classification of datasets.
- d) Limited visibility for regulators, policymakers, and researchers.

3. Scope of the Framework

This Framework will apply to all electricity sector data created and maintained by:

- a) Generating companies (including captive)
- b) Transmission licensees
- c) Distribution licensees
- d) Load Despatch Centres (LDCs)
- e) Electricity Regulatory Commissions
- f) Central and State agencies including CEA, CTU, STU and Grid India
- g) Energy markets participants including Power exchanges, Over the counter (OTC) platforms, Qualified Coordinating Agencies (QCA), Aggregators, REMCs, trading licensees.

It covers operational, planning, financial, technical, reliability, asset, market data, and all datasets may be shared in compliance to DPDP Act and other extant laws, rules and regulations. Sharing of sensitive information, including cyber defense protocols, real-time strategic telemetry, defense installation data, transmission corridor vulnerabilities, and power exchange bid data prior to market clearing, shall remain outside the scope of this Framework. However, the sharing of such information with Appropriate Governments, Regulators and Government agencies shall be governed by the extant rules, regulations, guidelines, and other defined mechanisms. This Framework, when adopted, will apply to all data sharing requirements in addition to the existing processes as mandated by various guidelines, rules and regulations.

4. Objectives

- a) Enable secure, structured sharing of and access to electricity sector data for planning, operations, regulation, and research in a non-discriminatory manner.

- b) Standardise classification of the datasets.
- c) Establish a transparent institutional mechanism for effective implementation of the Framework including defining principles of classification and levy of fees.
- d) Provide for anonymisation and de-identification of consumer-related or Personally identifiable data by data issuer before publication/sharing.
- e) Enable inter-sector data sharing by ensuring interoperability with adjacent sectors (transport, urban planning, climate action, financial services) and compatibility of metadata with the India Datasets platform (data.gov.in).
- f) Enable data sharing with third-party service providers through a consent mechanism aligned with the India Energy Stack or similar.

5. Critical definitions, roles and responsibilities

Term	Description
CEII — Critical Electricity Infrastructure Information	Electricity system information whose disclosure could compromise power system security and stability, grid reliability, have cybersecurity implications or may lead to damage to physical infrastructure.
NEDC — National Electricity Data Centre	Centre maintaining the National Electricity Data Portal for Public dataset publication and discovery.
NEDP — National Electricity Data Portal	National digital platform providing publicly accessible electricity sector datasets in standardised, machine-readable formats. It will also act as a shared platform for any data issuer willing to onboard for the purposes of this Framework.
Data issuer Portal	The Digital interface developed/used by the portal for the purposes of this Framework. This will also include NEDP, in case it is being used as a shared service by the data issuer.
DPDP Act	Digital Personal Data Protection Act, 2023.
Interoperability	Capability of different datasets to be machine-readable, communicable through secure APIs or any other mechanism.
Data Issuer	Entity that creates, collects, maintains, or operationally controls a dataset — responsible for its accuracy, classification, integrity, secure storage and lifecycle management.
Data Requestor	Any individual, institution, or organisation seeking access to datasets under this Framework.
API — Application Programming Interface	Defined under the National Open API policy issued by Ministry of Electronics and Information Technology (MeitY).
API Setu	Open API platform developed by MeitY to enable swift, transparent, secure and reliable information sharing across

	applications, while promoting innovation and interoperability.
NIC API Exchange Platform (NAPIX)	Centralized API management platform developed and maintained by the National Informatics Centre (NIC), Government of India.
India Urban Data Exchange (IUDX)	Initiative of the Ministry of Housing and Urban Affairs, Government of India to provide a data exchange platform to Indian cities.
India Energy Stack (IES)	Foundational Digital Public Infrastructure (DPI) launched by the Ministry of Power to unify, digitize, and modernize India's power sector.

5.1 Data Issuer Responsibilities

5.1.1 The Data issuer may appoint a Data Governance Officer (DGO) having a rank not below 2 levels of head of the institution/organisation. The DGO shall:

- a) Supervise the implementation of the Framework at the organisation level and classification of datasets as indicated in the matrix
- b) Monitor and process incoming data requests within prescribed timelines
- c) Execute user agreements or non-disclosure agreements, as required, on behalf of the Data Issuer
- d) Act as point of contact for grievance handling

5.1.2 The Data issuer may also ensure the following with respect to datasets being shared:

- a) Ensure accuracy of data and version control with timestamp and history
- b) Maintain retention schedules and ensure archival, anonymisation, or destruction at end of lifecycle
- c) Review the classification of datasets annually or as per requirement.

5.1.3 The Data issuer may levy reasonable access fees which should be published on the portal. The fee model can be subscription-based, per-request, or any other structure as deemed fit. However, so as to ensure that the fees does not act as a barrier to access, the following may be factored in:

- a) All data classified as Public may be made available free of cost for viewing purposes.
- b) Charges may be levied in case of API-based or bulk transfer for commercial purposes.
- c) Reduced or zero fees to apply for academic institutions and training institutes seeking data for research purposes.
- d) No fees may be levied for requests by Central/State Government, CEA, SERCs, or other statutory authorities.
- e) The charges may be reviewed annually.

5.1.4 The Data issuer may share data under the Framework through the data issuer portal or through NEDC after onboarding.

5.2. Data Requestor Responsibilities

The Data requester shall comply with the User agreements or Non-Disclosure Agreements signed with the data issuer. Such agreements shall, inter alia, ensure that access to and use of the dataset is restricted solely to end users that are registered Indian entities.

5.3 Grievance Redressal Mechanism

To ensure transparency and fairness in data access governance, a two-level grievance redressal mechanism may be established.

The data requester may apply in the portal if they have any grievance regarding access of data. The following grievance redressal framework is prescribed:

Level	Authority	Scope & Responsibilities	Timelines	Escalation / Outcome
Level 1	Data Governance Officer (DGO)	a) Initial review of grievance b) Examine decision and ensure compliance c) Issue reasoned response	Decide within 14 working days	Escalation to Level 2 within 14 working days if dissatisfied
Level 2	One level above DGO	a) Appellate review of Level 1 decision b) Ensure fairness and accountability c) Issue final determination	Decision within 14 working days of escalation	Final decision issued as a written speaking order

All decisions communicated at each level may be in writing and shared digitally. They may state the reasons for the determination and be communicated to the requester through the portal. A requester's right to approach any court or statutory authority of competent jurisdiction is not affected by the operation of this mechanism.

6. Data Classification

The data classification framework is applicable only to data that has been designated as shareable by the data issuer. The following classification of data is made under the framework

6.1 Classification Matrix

Tier	Description	Access	Indicative Examples
Tier 1: Public	Datasets that may be placed in the public domain without risk to	Open access	Installed capacity, aggregated renewable statistics, state-level generation mix, annual

	operations, privacy, or national security		energy balance summaries, market volume / price data
Tier 2: Access Controlled	Datasets that can be accessed by Data Requestor after a registration process.	Mandatory Registration and KYC process required. (E.g. – PAN, CIN, DIN etc.)	Detailed load flow cases, feeder-level operational data, unaggregated outage data, de-identified smart meter and other consumer meter data at various levels, certain industrial feeder data

Feature	Tier 1: Public	Tier 2: Access Controlled
Eligibility	Individual/Entity	Any registered Indian entity
Registration / KYC Required	No	Yes
API / Secure Data Environment Access	No	Allowed with secure data access link.

In case of bulk data transfer for Public data through APIs, data dumps or any other mode, the data issuer may require registration.

6.2 Criteria for Classification

The Data Issuer may classify all datasets based on the principles issued by NEDC. An indicative Data Classification matrix is enclosed as Annexure A.

6.3 Data De-identification

The data issuer will carry out the de-identification process before sharing for personally identifiable information or any dataset wherever required. The application of a de-identification process does not alter the classification of the original dataset; it produces a new derived dataset with its own classification.

The de-identification processes for the reclassification shall be as per the applicable MeitY guidelines.

The following techniques have been recognized under the Framework:

1. **Anonymization** – Irreversible removal or transformation of personal or asset-identifying information such that re-identification is not reasonably possible, including through the use of auxiliary data.

2. **Pseudonymization** – Replacement of direct identifiers (such as IDs and UUIDs) with surrogate keys generated through a one-way cryptographic function. The original identity is recoverable only through a separately held key.
3. **Tokenization** – Replacement of a sensitive data value with a non-sensitive substitute token that has no exploitable relationship to the original value.
4. **Aggregation** – Combination of per-asset or per-consumer values into group-level statistics computed over a minimum population threshold. The specific threshold shall be determined by the data Issuer based on re-identification risk assessment.
5. **Value Banding** – Replacement of a precise numeric value with a categorical range calibrated to retain analytical utility while preventing reverse-engineering of precise technical parameters.
6. **Spatial Displacement** – Shifting of precise GPS coordinates to a lower-precision geographic reference, such as a grid centroid at 250 metres in urban areas or 500 metres in rural areas, an administrative boundary label, or a feeder segment midpoint. Street-level and building-level coordinates must be fully removed.
7. **Suppression** – Complete removal of an attribute from the derived dataset where no safe transformed form exists. Suppression is mandatory for attributes where re-identification risk or critical infrastructure exposure cannot be reduced through any other process.

The de-identification process applied to each derived dataset, the resulting classification tier, and the residual risk assessment be documented for record purposes.

7. Processes and Workflows:

(Indicative Data Sharing Design Architecture Principles and Data issuer Design are enclosed at Annexure B and C respectively)

7.1 Provisions for Access:

Data hosting will remain with the concerned Data Issuer, except where Public datasets are voluntarily published through NEDC for immediate public access

7.2 Modalities for Data Exchange:

- a) The Data Issuer may provide access to access-controlled datasets to Data Requestors through APIs, Secure Data Environments, or any other suitable mechanism, using such technical modalities as deemed appropriate based on dataset characteristics, system capabilities, and access authorisation levels, in accordance with the Open API Policy or any other data transfer mechanism policy issued by MeitY.
- b) API endpoints and formats as and when developed under the India Energy Stack may be utilised where applicable.
- c) The APIs developed for data exchange may be published on the website/digital interface portal of the data issuer/NEDC. For this API Setu or NAPIX may be leveraged.

- d) The data exchange may also be carried through data exchange platforms developed by States, IUDX, data dumps etc. as per the requirements.
- e) The metadata discovery can be done through published API formats, registries or any other data access mechanism to facilitate machine-readable data access to data requesters.
- f) API endpoint structures for Access Controlled datasets category to be published on the portal.
- g) Data issuers may establish Secure Data Environments (SDEs) as controlled platforms for the secure access, storage, and analysis of electricity sector data for research, innovation, planning, and policy purposes, without requiring transfer or download of datasets. They may give preferential access to Indian AI developers/ startups.
- h) Data Issuers operating legacy systems that are not natively API-capable may develop and deploy data wrappers to enable interoperable access to such datasets. These wrappers will be designed as per India Energy Stack architecture or similar.

7.3 Metadata Requirements:

Every data issuer is required to discover and publish metadata for each dataset. The Metadata may be published for each data set on the digital portal. The metadata should have the following elements:

- a) **Description** – Brief explanation of the dataset, its purpose, and scope
- b) **Schema** – Structure of the dataset including key fields, identifiers, and data format as maintained by the Data Issuer and aligned with CEA-prescribed format specifications where applicable
- c) **Source** – Origin of the data, including generating system or process (e.g., sensor-based, operational system, manually reported)
- d) **Update Cycle** – Frequency of data updates such as real-time, periodic, daily, or monthly etc.
- e) **Classification** - Indicating whether the dataset is Public or Access Controlled based on the approved data classification framework

7.4 End to End Data Flow:

- a) Data issuer to classify datasets and maintain metadata
- b) Publish metadata for Public or Access Controlled datasets and API end-point structures through the portal w.r.t. Access Controlled datasets.

7.5 Registration on Portal:

- a) Each Data Issuer may facilitate a system of registration of the data requester on the portal
- b) Any individual affiliated with an institution/organization may register themselves on the portal and access the Access Controlled datasets as per defined sharing mechanisms.

- c) The Data issuer may establish/ deploy required KYC mechanism.

7.6 Meta Data Inventory and Publication Timelines

To ensure that the request-based data access architecture under this Framework is effective, every Data Issuer, upon adoption of this framework, may publish a comprehensive data inventory as per the following timelines:

- a) Within 12 months of the effective date of this Framework, every Data Issuer may publish on the portal a complete metadata catalogue of all datasets it holds, specifying the metadata requirements as per Clause 7.3 above, and the designated Data Governance Officer.
- b) Within 18 months of the effective date of this Framework, every Data Issuer may ensure that metadata for all Public datasets is also discoverable through the NEDC portal in a standardised machine-readable format.
- c) Data Issuers may update their published catalogue at least once every six months. Any new dataset created or acquired after the initial publication may be added to the inventory and classified within 90 working days of creation.

8. Electricity Data Reference Model and Format

Central Electricity Authority (CEA) shall formulate the data structure and format for publication of the datasets. CEA may issue or update data format specifications periodically, and data Issuers may ensure their datasets remain aligned with the current applicable specifications.

9. Inter-Sector Data Sharing

The electricity sector is increasingly interconnected with adjacent sectors including transport, urban planning, climate action, and financial services. Data generated within the electricity ecosystem has significant value for planning and decision-making in these sectors, and vice versa.

(a) Data Issuers should ensure that Public datasets published on the NEDC portal or data Issuer portals are made available in machine-readable formats compatible with the India Datasets platform (data.gov.in).

(b) Cross-sector data requests shall be subject to the same classification, registration, and user agreement requirements applicable to intra-sector requests.

(c) The NEDC shall coordinate with the Ministry of Power, and relevant sectoral data bodies to ensure interoperability of metadata standards, API specifications, and data exchange protocols across sectors. Where data exchange standards/ APIs have been developed under the India Energy Stack, these shall be adopted for inter-sector data exchange involving electricity datasets.

(d) Specific inter-sector data sharing use cases of national importance, including electric vehicle charging infrastructure planning, building energy efficiency programmes, climate reporting, and green finance, may be identified by the Ministry of Power from time to time.

Data Issuers holding datasets relevant to such use cases should proactively publish or make available the required datasets in accordance with this Framework.

10. Cost implications on regulated entities:

The implementation of the Framework may require modifications in existing systems with some expenditure involvement. While the utilities/data issuers may develop their own portals, or onboard themselves on NEDP, ERCs should enable passthrough in Annual Revenue Requirement (ARR) after prudence checks.

11. Cybersecurity Compliance

The NEDC and all Data Issuers shall comply with the applicable laws, rules, regulations, policies, and guidelines issued by the Government of India, including those issued by the Ministry of Electronics and Information Technology, the Ministry of Power, NCIIPC and CERT-In, as amended from time to time.

Prior to making any hosting infrastructure operational, including hardware, software, network components, and data processing environments, comprehensive cybersecurity testing shall be conducted as per applicable guidelines. Such testing shall include vulnerability assessment and penetration testing, security configuration review, and validation of access control and encryption mechanisms. Infrastructure shall not be made live until testing has been completed and identified vulnerabilities have been remediated to an acceptable residual risk level.

12. Annexure A: Classification Matrix

An indicative matrix for classifying electricity sector datasets may be seen below:

1. Primary Classification considerations

#	Dimension
1	Personal Identifiable Information
2	Operational Sensitivity
3	Infrastructure Exposure
4	Market Sensitivity
5	Physical and Cybersecurity Risk
6	Re-identification Risk

2. Indicative Decision Matrix

Personal identifiable information	Aggregated state-/district-level consumption statistics, published tariff schedules, consumer category counts including smart meter data	Public
	De-identified smart-meter time-series, consumer complaint registers (name removed), billing analytics	Access Controlled
Operational sensitivity	Annual plant availability factors, published load-despatch reports, generation mix statistics	Public
	Intra-day scheduling data, 15-min area control error logs	Access Controlled
Infrastructure exposure	General transmission corridor maps, substation district-level count, published network expansion plans	Public
	Substation single-line diagrams (non-critical), asset inventory by voltage class	Access Controlled
Market sensitivity	DAM and RTM clearing prices (post-settlement), published annual revenue requirement (ARR), AT&C loss figures in tariff orders	Public
	Utility-specific bilateral contract summary terms, generator-wise variable-cost data used in merit-order despatch	Access Controlled
Physical & cyber security risk	Generic cyber-hygiene advisories, published cybersecurity regulations	Public

	Anonymized incident reports (sector-wide learning)	Access Controlled
Re-identification risk	District-level or state-level aggregated consumption, category-wise consumer counts	Public
	Feeder-level data; high-value industrial feeder consumption; time-series isolating rooftop solar installations	Access Controlled

3. Basic Principles:

- a) Personally identifiable datasets may be shared after de-identification as per the DPDP Act or in an aggregated manner subject to the reidentification risk dimension.
- b) The classification of datasets under this Framework will be in accordance with all extant laws, rules or regulations regarding data sensitivity.

13. Annexure B: Indicative Data Sharing Design Principles

1. Purpose and Applicability

This Annexure indicates architecture for secure sharing of data in respect of the National Electricity Data Portal and Data Issuer portals described in this Framework.

2. Architectural Principles

Principle	Requirement
Access tiering	Enforce tier-based access: Public, Access Controlled datasets
Auditability	Complete auditability and traceability across all transactions
Data protection	Encryption at rest and in transit; CEII segregation
Access control	Role-based, Time-bound and revocable access;
Access Type/Mode	API-based, SDEs, data dumps, Data exchange Platforms like IUDX, as per requirement

3. Security Controls

- a) Establish a regular backup schedule (e.g., daily or weekly) and store encrypted backup copies in secure, other network sites, combining offsite, and offline
- b) Test backup restoration procedures periodically to ensure data recoverability and system resilience
- c) Develop and maintain a Business Continuity Plan (BCP) for identified critical applications providing the datasets under the Framework to ensure timely recovery and continuity of operations
- d) Ensure secure disposal of both physical and digital media using proper sanitization or destruction methods.
- e) Assign unique user IDs to all individuals to avoid shared accounts and ensure full traceability of system activity
- f) Implement role-based access controls aligned with defined job responsibilities, following the principle of least privilege
- g) Review and update user access privileges periodically at least quarterly or immediately upon role changes, transfers, or employee exits, using a formal offboarding checklist
- h) Grant administrative privileges only when essential, and enforce segregation of duties across administrative, financial, and data functions
- i) Ensure alignment with guidelines, mandates from CERT-In, National Critical Information Infrastructure Protection Centre (NCIIPC) and Computer Security Incident Response Team (CSIRT) – Power

14. Annexure C: Data Issuer Portal Design Principles

The Data issuer portals or the National Electricity Data portal should comply with the following requirements:

1. The design features should be capable of supporting the processes and workflows as per Para 7 of the Policy.

2. Portal Access and Dataset Listing

Feature	Requirement
Information	URL identifying the Data Issuer; names the DGO with contact details
Public datasets	No registration required.
Access Controlled datasets	Require authenticated access after registration
Accessibility	Accessible from standard web browsers without proprietary software

For Bulk data transfer through API or data dump in case of public data, provision for registration to be included.

2. Registration:

- Provision for registration for any individual affiliated with an organization based on KYC verification
- For Access Controlled datasets, additional check of institutional/ organizational verification may be added.
- Deemed approval within 3 days of filling the application

3. Request Submission

Element	Details
Minimum form fields	Dataset name and classification tier; fields and granularity; geography and time period; declared purpose; intended outputs; preferred fulfilment mode
On submission	Unique request reference number generated; automated acknowledgment within 1 working day; incomplete submissions flagged with specific reasons before entering review queue

4. User Agreement Execution: The Portal should have provision for executing user agreements/non-disclosure agreements with timestamped records of all executed agreements.

5. Grievance Interface

Feature	Requirement
Grievance form fields	Request reference number; nature of grievance; supporting documentation; desired resolution
DGO notification	Within 1 working day of submission

15. Annexure D: Recommended Tier 1 Public Datasets

An indicative list of electricity sector datasets recommended for publication is placed below:

A. Generation

A.1 Installed Capacity

#	Dataset	Granularity	Frequency
1	All India installed generating capacity by fuel type	National / Regional / State	Monthly
2	Installed capacity by sector (Central, State, Private)	National / Regional / State	Monthly
3	Station-wise and unit-wise installed capacity (>25 MW)	Station / Unit	Monthly
4	RE installed capacity by state and technology	State / Technology	Monthly
5	Capacity additions — new units commissioned	National / State	Annual
6	Plant load factor and capacity utilization	Station / Sector	Monthly
7	Forced outage rate by fuel category and sector	National / Sector	Annual

A.2 Generation Output

#	Dataset	Granularity	Frequency
8	Region/state/fuel/station-wise electricity generation (actual vs. programme)	Region / State / Station	Daily, Monthly
9	All India power generation summary by fuel category	National	Daily, Monthly
10	Category-wise and fuel-wise monthly generation report	National / Sector	Monthly
11	Historical growth of electricity generation	National	Annual
12	RE generation by state and technology	State / Technology	Monthly

A.3 Outage and Availability

#	Dataset	Granularity	Frequency
13	Daily outage report — coal, lignite, and nuclear units	Unit-level	Daily
14	Daily outage report — hydro units	Unit-level	Daily
15	Thermal and nuclear units out of grid for more than 15 days	Unit-level	Rolling daily
16	Region-wise plant availability report (>25 MW)	Region / Station	Daily

A.4 Coal and Fuel

#	Dataset	Granularity	Frequency
17	Daily coal stock position at thermal stations (days of stock)	Station-level	Daily
18	Monthly coal supply and consumption at thermal stations	Station / Sector	Monthly
19	Hydro reservoir level — major reservoirs linked to generating stations	Reservoir / Station	Daily
20	Annual fuel-wise energy balance	National	Annual

B. Transmission

#	Dataset	Granularity	Frequency
21	All India transmission line length at ≥ 220 kV by voltage level and region	National / Regional	Quarterly
22	Transmission and transformation capacity at ≥ 220 kV (MVA)	National / Regional	Quarterly
23	Progress of ISTS transmission lines under construction	Project-level	Monthly
24	Substations commissioned (≥ 220 kV)	National / Regional	Monthly, Annual
25	Transmission lines commissioned (≥ 220 kV)	National / Regional	Monthly, Annual
26	Inter-regional power flows — actual energy exchanged between regions	Regional	Monthly
27	Transmission losses at national and regional level (%)	National / Regional	Annual

C. Distribution

#	Dataset	Granularity	Frequency
29	State-wise and DISCOM-wise AT&C losses	State / DISCOM	Quarterly
30	Electricity consumption including de-identified smart meter interval data at various levels	DISCOM/Feeder/National	Quarterly
31	Per capita electricity consumption — state-wise	DISCOM	Annual
32	Number of electricity consumers by category — state-wise	DISCOM / Category	Annual
33	Electrified villages and households — state-wise and scheme wise	State	Annual
34	DISCOM financial performance — ACS-ARR gap, aggregate loss	DISCOM	Annual

35	SAIDI and SAIFI aggregated at DISCOM level	DISCOM	Quarterly
36	Distribution transformer failure rates — state-wise aggregate	State	Annual

D. Energy Demand and Supply, Grid Operations

#	Dataset	Granularity	Frequency
37	Monthly energy supply and demand — All India and region-wise	National / Regional	Monthly
38	Energy balance — requirement, availability, surplus/deficit	National / Regional / State	Quarterly
39	Peak demand met and peak deficit — region-wise and state-wise	National / Regional / State	Quarterly
40	National and state-level electricity demand forecast (5-year)	National / State	Annual
41	Hours of supply per day — state-wise and category-wise (urban, rural)	State / Category	Annual
42	Grid frequency profile and deviations	National / Regional	Monthly
43	Transmission line loading and congestion status	National / Regional	Monthly
44	Ancillary services deployment and reserves position	National	Monthly
45	Transmission system availability and reliability indices	National / Regional	Quarterly
46	Inter-regional power transfer capability and utilization	Regional	Monthly
47	Energy storage utilization and availability	National	Monthly
48	Forecast accuracy of load and renewable generation	National / Regional	Quarterly

E. Renewable Energy

#	Dataset	Granularity	Frequency
49	State-wise cumulative and incremental RE installed capacity (solar, wind, small hydro, biomass)	State / Technology	Monthly
50	Rooftop solar — state-wise cumulative capacity and installations	State	Monthly
51	RE generation data and as % of total generation	National / State	Monthly, Annual
52	Pumped hydro storage — installed and under construction	National	Annual

F. Tariff and Regulatory

#	Dataset	Granularity	Frequency
53	Average cost of supply and average billing rate — DISCOM and state-wise	DISCOM / State	Annual
54	Approved tariff schedules by consumer category — state-wise	State / Category	On tariff revision
55	CERC tariff orders for central generating stations	Station / Utility	On notification
56	Day-ahead market (DAM) and Real-Time market (RTM) clearing price and volume summary	National / Zone	Daily
57	State government subsidy to DISCOMs — state-wise aggregate	State	Annual

G. Schemes

#	Dataset	Granularity	Frequency
58	Saubhagya scheme progress — state-wise households electrified	State	Monthly
59	RDSS scheme progress — state-wise physical and financial	State	Quarterly
60	Smart metering rollout — state-wise and DISCOM-wise	State / DISCOM	Quarterly

H. Planning and Policy Documents

#	Dataset	Granularity	Frequency
61	National Electricity Plan — Volumes I (Generation) and II (Transmission)	National	Once in 5 years
62	All India Electricity Statistics — Annual General Review	National	Annual
63	Growth of Electricity Sector in India publication	National	Annual
64	National Electricity Policy and National Tariff Policy — notified documents	National	On notification
65	Optimal generation capacity mix study and reports	National	Periodic
66	Market Monitoring reports	National	Monthly