



भारत सरकार Government of India विद्युत मंत्रालय

Ministry of Power केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority विद्युत शक्ति सर्वेक्षण और भार पूर्वानुमान प्रभाग Power Survey & Load Forecasting Division

संख्या : सीईए /Plg /PSLF/Registry/2018 । ५ 9

दिनांक: 13.04.2018

1. CMDs of CPSUs

2. Managing Director of DISCOMs, State GENCOs, IPPs

विषय: नेशनल लेवल डाटा रजिस्ट्री सिस्टम (National Level Data Registry System) के अन्तर्गत देश में स्थित 0.5 MW और उससे बड़ी सभी मौजूदा और आगामी विद्युत उत्पादन ईकाइयों के रजिस्ट्रेशन के संदर्भ में।

महाशय,

नेशनल लेवल डाटा रजिस्ट्री सिस्टम (National Level Data Registry System) के अन्तर्गत देश में स्थित 0.5 MW और उससे बड़ी सभी मौजूदा और आगामी विद्युत उत्पादन ईकाइयों का रजिस्ट्रेशन होना है तथा सभी मौजूदा और आगामी विदयत उत्पादन ईकाइयों को केन्द्रीय विदयत प्राधिकरण(CEA) द्वारा एक unique रजिस्ट्रेशन नंबर दिया जाना है। इसके लिए , केन्द्रीय विद्युत प्राधिकरण के द्वारा एक एक विस्तृत फ्रेमवर्क(Framework) तैयार किया गया था, जो विद्युत मंत्रालय, भारत सरकार के द्वारा अनुनोदित (approved) है | विस्तृत फ्रेमवर्क (Framework) की अनुमोदित (approved) प्रति आपकी जानकारी के लिए इस पत्र के साथ संलग्न है।

उपरोक्त नेशनल लेवल डाटा रजिस्ट्री सिस्टम के शुरु होने के लिए केन्द्रीय विद्युत प्राधिकरण के द्वारा एक E-Registration Portal बनाया जा रहा है, जिसके operational होने में 2 से 3 महीने का समय लग सकता है। के.वि.प्रा. के E-Registration Portal तैयार होने के बाद, सभी stakeholders को पंजीकरण करने और डाटा दर्ज करने के लिए के.वि.प्रा. द्वारा सूचित किया जाएगा। अत: आप से अनुरोध है कि इस कान के लिए एक नोडल अधिकारी को नामांकित करें और नोडल अधिकारी का विवरण(नाम, मोबाइल, ईमेल) ईमेल pslicea@yahoo.com पर भेजें । यह भी अनुरोध है कि नोडल अधिकारी को इस काम के लिए तत्पर रहने के निर्देश दें।

E-Registration Portal के operational होने के बाद , केन्द्रीय विदुयुत प्राधिकरण द्वारा सभी सम्बंधित stakeholders को इसकी सूचना जारी कर दी जाएगी।

जब तक केन्द्रीय विद्युत प्राधिकरण का E-Registration Portal शुरु नहीं हो जाता, तब तक data भेजने कि सभी प्रक्रियायें (Procedures) मौजूदा नियमों और प्रावधानों के अनुसार ही चलती रहेगी।

यह पत्र सदस्य(योजना), के.वि.प्रा. के अनुमोदन से जारी किया जा रहा है।

संलग्नक: विस्तृत फ्रेमवर्क की प्रति

मुख्य अभियंता (PS&LF)

Telefax: 011-26105546

प्रतिलिपि सूचना के लिए:

विशेष सहायक, अध्यक्ष, के.वि.प्रा.

2. विशेष सहायक, सदस्य(Plg/Hydro/Thermal/Power System/E&C/GO&D)

सचिव, के.वि.प्रा.

प्रतिलिपि जानकारी और Stakeholders को सूचित/जागरूक करने के लिए:

1. सदस्य सचिव (NRPC, WRPC, SRPC, ERPC, NERPC)/ मुख्य अभियंता(हा), के.ि.प्रा.

2. मुख्य अभियंता, RA/GM/PDM/Legal/IT/OPM/TPM I&II/HPA/TPP&D/RES/HPM, के.वि.प्रा.





भारत सरकार Government of India विद्युत मंत्रालय Ministry of Power केन्द्रीय विद्युत प्राधिकरण Central Electricity Authority

विद्युत शक्ति सर्वेक्षण और भार पूर्वानुमान प्रभाग Power Survey & Load Forecasting Division

No.: CEA /Plg /PSLF/Registry/2018 / 14 9

Dated 13.04.2018

To,

- 1. CMDs of CPSUs
- 2. Managing Director of DISCOMs, State GENCOs, IPPs

Subject: Registration of all existing and upcoming electricity generating units of the country of capacity 0.5 MW and above under National Level Data Registry System – Regarding Sir.

Under the National Level Data Registry System, all the existing and upcoming electricity generating units of the country of capacity 0.5 MW and above would have to get registered with CEA and get a unique registration number from CEA. For this purpose, a detailed framework was prepared by CEA and the same has been approved by Ministry of Power, Government of India. A copy of approved framework is enclosed herewith for your kind information.

For implementing the aforementioned National Level Data Registry System, CEA is preparing a E-Registration Portal and operationalization of E-Registration Portal may take 2 to 3 months time. Once the E-Registration Portal of CEA is ready, all the stakeholders would be informed accordingly by CEA for registering and feeding the data. It is therefore, requested to nominate a nodal officer and intimate the name, mobile, email, address of the same to the undersigned at the e-mail address psicrea@yahoo.com. It is further intimated to keep the concerned officer in readiness for doing the needful.

Till the E-Registration Portal of CEA is operationalized, all the existing procedure of furnishing data will continue as per existing provisions and laws.

This issues with the approval of Member (Planning), CEA

Encl: Copy of detailed framework

(S. Mandilwar)
Chief Engineer(PS&LF)

Telefax: 011-26105546

Copy for information:

1. SA to Chairman, CEA

2. SA to Member(Plg/Hydro/Thermal/Power System/E&C/GO&D)

3. Secretary, CEA

Copy for information and intimating/sensitizing the stakeholder:

1. Member Secretary (NRPC, WRPC, SRPC, ERPC, NERPC)/Chief Engineer(EI), CEA

2. Chief Engineer, RA/GM/PDM/Legal/IT/OPM/TPM I&II/HPA/TPP&D/RES/HPM, CEA

FRAMEWORK FOR REGISTRATION OF GENERATING UNITS

1. Background

Section 74 of Electricity Act, 2003 & and Regulation 4 & 5 of CEA (Furnishing of statistics, returns and information) Regulations, 2007, even though mandates every licensee, generating company, or person(s) generating electricity for its or his own use to furnish the statistics, returns or other information relating to generation, transmission, distribution, trading to CEA, the complete data/information is not made available to CEA particularly from Captive Power Plants and RE Generators. Even in case of some conventional electricity generating units of IPP's, information is sometimes made available to CEA only at the time of commissioning of the electricity generating unit.

Hence, mandatory registration of all the electricity generating units, above a specified capacity, through a National Level Data Registry System, by assigning each of them a unique registration number, is the need of the hour so that generating capacity of all the electricity generating units in India is available with CEA and captured in CEA's data base.

2.0 Uniqueness of Registration Number

The registration number to be assigned by CEA shall be a unique for each generating unit in the country and the registration number once assigned to a generating unit would not be changed. The status of generating unit may change (planned/ under construction/ commissioned/retired etc.). Even if the generating unit retires, its registration number would not be assigned to any other generating unit.

3.0 Applicability

- 3.1 The following category of generating units are required to obtain the unique registration number:
 - i) All the conventional grid connected electricity generating units (whether in Central Sector, State Sector, Private Sector, IPP's, Joint Venture etc.) in the country whether coal based, gas based, liquid fuel based, Hydro Power based or nuclear, if the capacity of the electricity generating unit is 500 kW (0.5 MW) and above.
 - ii) All the electricity generating units of grid-connected captive power plants, if the capacity of the electricity generating unit is 500 kW (0.5 MW) and above.
 - iii) All the Grid connected Renewable Energy (RE) generators, if the capacity of RE generating unit is 500 kW (0.5 MW) or above. This also includes grid-connected roof-top solar installations.
 - iv) All the stand alone (off-grid) generating units, if the capacity of generating unit is 500 kW (0.5 MW) or above.
 - v) All the generating units supplying power to neighbouring countries, irrespective of whether these generating units are connected to the Indian Electricity Grid or not.
- 3.2 For existing grid connected electricity generating units, including grid connected captive and RES generating units, the registration number would be required for injecting power in the grid.

3.3 For under construction electricity generating units and generating units in conceptualisation stage, which includes grid connected captive and RES generating units, the registration number would be required while applying for grid connectivity. However, if grid connectivity has already been obtained or applied by these generating units, the registration number would still be required for physical injection of power in the grid.

4.0 Procedure of Registration

- 4.1 The registration number would be generated online by the generating companies/project developers, after filling in certain details.
- 4.2 The Generating Companies would have to register themselves in e-Registration portal of CEA on CEA's website (www.cea.nic.in) after filling in necessary details viz. name of the generating company, sector etc. in a format designed for the purpose. They can choose any user id and password while registering their generating units. Alternatively, user ID may be the name of the Company.
- 4.3 Using the user id and password generated in step 4.2, generating companies can enter the details of their generating units one by one and generate unique registration number for each generating unit. The unique registration number shall be a 10 digit numeric identification number in the format XXXXXXXXXXXX. The first digit will indicate whether it is Generating Company, Transmission Company or Distribution Company (Generating Company -1; Transmission Company -2; Distribution Company -3). In case of Generating Company the second digit will indicate the type of generating unit (Hydro-1/Thermal-2/Nuclear-3/RES-4). Digits from 3-10 (8 digits) would be the unique registration number of the generating unit.

All the information associated with a generating unit will be linked with this unique registration number. All the associated information like location of the generating unit, fuel type, technology (sub critical, supercritical, ultra-supercritical, off-shore wind, on-shore wind, roof top solar, solar thermal, floating solar etc.), installed capacity, sector (central, state, private, JV), utility or captive, grid connected or off-grid etc. will be available in the database and will be visible to the authorised persons, once the registration number is entered.

4.4 The generating companies / project developers would submit the following data/information at the time of registering their generating units.

4.4.1 Existing Generating Units

- 4.4.1.1 Mandatory Information to be filled at the time of registration
 - Name of the generating unit
 - Capacity of the Generating unit in MW
 - State, Location & Address (including District) of the Generating Unit.
 - Latitude & Longitude of the Generating Unit.
 - Name of Owner (s) along with contact details including telephone, mobile, e-mail and fax.

- Name and contact details of person, including telephone, mobile, e-mail and fax number, to be contacted for clarifications, if required.
- Sector, whether Central/State/Private/JV
- Whether the generating unit is grid connected or off-grid
- Fuel type of generating unit (Coal/lignite/gas/diesel/HFO/Other Liquid Fuel/nuclear/hydro/solar/wind/ biomass/Coal Reject /Wind-Solar Hybrid etc.).
- Type of technology viz. Sub-critical/super-critical technology/ultra-super-critical technology in case of coal based generating unit; OCGT, CCGT, Gas Engines etc. etc. in case of gas based generating unit.
- Type of hydro viz. ROR, Pondage, Storage, Pumped Storage.
- Date of commissioning of the generating unit
- Date of Commercial Operation (COD) of the generating unit
- Fuel linkage/ source of fuel, if applicable
- Name of the Industry/Installation, in case of Captive Generating units

4.4.1.2 Information to be furnished subsequently

- Implementing Agency
- BTG Supplier in case of thermal generating units
- E&M, HM equipment supplier in case of Hydro generating units
- Type of hydro turbine viz. Pelton, Francis, Kaplan, Bulb, any other
- Ramp Up/ Down rate of the generating unit
- Minimum technical loading of the generating unit
- Whether the generating unit is connected to ISTS or State Grid
- Voltage level at which generating unit is connected to the ISTS/State Grid

4.4.2 Generating units under construction

4.4.2.1 Mandatory Information to be filled at the time of registration

- Name of the generating unit
- Capacity of the Generating unit in MW
- State, Location & Address (including District) of the Generating Unit.
- Latitude & Longitude of the Generating Unit.
- Name of Owner (s) along with contact details including telephone, mobile, e-mail and fax
- Name and contact details of person, including telephone, mobile, e-mail and fax number, to be contacted for clarifications, if required.
- Sector, whether Central/State/Private/JV
- Whether the generating unit is grid connected or off-grid
- Fuel type of generating unit (Coal/lignite/gas/diesel/nuclear/hydro/solar/wind/biomass/Coal Reject /Wind-solar hybrid etc.).
- Type of technology viz. Sub-critical/super-critical technology/ultra-super-critical technology in case of coal based generating unit; OCGT, CCGT etc. in case of gas based generating unit.

- Type of hydro viz. ROR, Pondage, Storage, Pumped Storage
- Letter of Award (LoA) Date {(a) BTG package for thermal generating units; (b) Main Civil, E&M and HM packages in case of Hydro generating units}
- Expected commissioning date of the generating unit
- Expected Date of Commercial Operation (COD) of the generating unit
- Fuel linkage/ source of fuel, if applicable
- Type of technology viz. Sub-critical/super-critical technology/ultra-super-critical technology in case of coal based generating unit
- Name of the Industry/Installation, in case of Captive Generating units

4.4.2.2 Information to be furnished subsequently

- Implementing Agency
- BTG Supplier in case of thermal generating units
- E&M, HM equipment supplier in case of Hydro generating units
- Type of hydro turbine viz. Pelton, Francis, Kaplan, Bulb, any other.
- Ramp Up/ Down rate of the generating unit
- Minimum technical loading of the generating unit
- Whether the generating unit is connected to ISTS or State Grid
- Voltage level at which generating unit is connected to the ISTS/State Grid

4.4.3 Generating units in conceptualisation stage

4.4.3.1 Mandatory Information to be filled at the time of registration

- Name of the generating unit
- Capacity of the Generating unit in MW
- State, Location & Address (including District) of the Generating Unit.
- Latitude & Longitude of the Generating Unit.
- Name of Owner (s) along with contact details including telephone, mobile, e-mail and fax
- Name and contact details of person, including telephone, mobile, e-mail and fax number, to be contacted for clarifications, if required.
- Sector, whether Central/State/Private/JV
- Fuel type of generating unit (Coal/lignite/gas/diesel/nuclear/hydro/solar/wind/biomass/Coal reject/Wind-solar Hybrid etc.).
- Whether the generating unit is grid connected or off-grid.
- Type of technology viz. Sub-critical/super-critical technology/ultra-super-critical technology in case of coal based generating unit; OCGT, CCGT etc. in case of gas based generating unit.
- Type of hydro viz. ROR, Pondage, Storage, Pumped Storage.
- Likely Letter of Award (LoA) date.
- Expected commissioning date of the generating unit, if available.
- Name of the Industry/Installation, in case of Captive Generating units

4.4.3.2 Information to be furnished subsequently

- BTG Supplier in case of thermal generating units
- E&M, HM equipment supplier in case of Hydro generating units
- Type of hydro turbine viz. Pelton, Francis, Kaplan, Bulb, any other.
- Likely source of fuel, if applicable.
- Ramp Up/ Down rate of the generating unit
- Minimum technical loading of the generating unit
- Whether the generating unit is proposed to be connected to ISTS or State Grid
- Voltage level at which generating unit is proposed to be connected to the ISTS/State Grid

5.0 Role of different Divisions of CEA in registration process.

Information in respect of most of the generating units is already available in CEA in different Divisions based on the work being handled by them. For example, data of existing generating units is maintained by PDM Division, CEA; data of under construction hydro generating units is maintained by HPM Division, CEA; data of under construction thermal generating units is maintained by TPM Division, CEA etc. Through the registration process, a unique ID would be assigned to each generating unit. Registration of different class (existing, under construction, planned etc.) of generating units would be handled by different Divisions of CEA who are dealing with respective class (existing, under construction, planned etc.) of generating units and are having expertise in the respective field.

5.1 Existing generating units (utilities)

• Nodal Division for registration of Existing Generating Units (Utilities) - PDM Division, CEA.

The data of existing generating units is being maintained by PDM Division, CEA. As data base of existing generating units is also being maintained by OPM Division, CEA, for monitoring electricity generation, PDM Division, CEA, may associate with OPM Division, CEA, in this regard so that the data base being maintained by both the Divisions is uniform. These Divisions may seek clarification from the project developers, if necessary. To make changes like uprating/deration/retirement, the project developer would have to follow the process being followed at present. For example, to retire a generating unit, the project developer should furnish approval letter from the Board of Directors of the Company along with relevant supporting documents, if any, to CEA. The generating unit would then be removed by CEA from its installed capacity database.

The prime responsibility of PDM/OPM Division (in regards to existing generating units):

- To check that the on-line data of existing generating units as submitted by Generating Companies/project developers matches with the data already available/ being maintained in CEA in terms of name, capacity, location, fuel type, developer, sector etc. of generating units.
- To see that data duplicity is not there.
- To see that all the existing generating units as per CEA database are registered. If not, communicate with the concerned persons.

5.2 Generating units under construction (utilities)

- Nodal Division for registration of Under Construction Thermal & Nuclear Generating Units TPM I & II Divisions, CEA
- Nodal Division for registration of Under Construction Hydro Generating Units HPM Division, CEA

Data of under construction generating units is maintained by TPM/HPM Divisions. Data of under construction generating units along with critical milestones, as submitted on-line by the project developers at the time of registration, would be analysed and maintained by TPM/HPM Divisions of CEA.

The project developer/generating Company would update the progress of construction of his project on CEA's website from time to time. Once the generating units is commissioned, the project developer would update the status of generating unit from "under construction" to "Commissioned" and submit relevant documents (on-line) to CEA as a proof of having commissioned the generating unit. Similarly, once the generating unit achieves Commercial Operation, the project developer would update its status on CEA's website and submit relevant documents (on-line) to CEA.

Once the generating unit is commissioned, the data of generating unit would be passed on to PDM/OPM Division, CEA, for further necessary action.

The responsibility of TPM & HPM Division, CEA, would be:

- To check that the on-line data of under construction generating units as submitted by Generating Companies, matches with the data already available/being maintained in TPM/HPM Divisions in terms of name, capacity, location, progress of construction, fuel type etc. of generating units.
- To see that data duplicity is not there.
- To see that all the under construction generating units as per CEA database are registered. If not, communicate with the concerned persons after a pre-specified time.
- To examine/monitor the progress of under construction generating units based on the periodic updates submitted by the project developers.

5.3 Generating units in conceptualisation stage (utilities)

- Nodal Division for registration of Planned (in conceptualisation stage) Thermal & Nuclear Generating Units- TPP&D Division, CEA
- Nodal Division for registration of Planned (in conceptualisation stage) Hydro Generating Units- HPA Division, CEA

Data of generating units in conceptualisation stage, including its different milestones, would be maintained by TPP&D/HPA Divisions of CEA, as these Divisions are already maintaining data of such generating units and have the necessary expertise in this field.

Once the generating unit qualifies for under construction status, relevant details of the generating unit would be passed on to TPM/HPM Division, CEA, for further necessary action.

Subsequently, when a generating unit is commissioned, details of generating unit would be passed on to PDM & OPM Divisions, CEA, for further necessary action.

5.4 Data of RE Generators

• Nodal Division for registration of RE based Generating Units (Utilities as well as Captive)
- RES Development Division, CEA

Data of RE Generators (utilities & captive), existing, under construction as well as planned, would be maintained by RES Development Division, CEA.

5.5 Captive Generating units

• Nodal Division for registration of Captive Generating Units (excluding RE based Captive Generating Units) - PS&LF Division, CEA

Data of Captive Generating Units (excluding RE based Captive Generating Units), existing, under construction as well as planned, would be maintained by PS&LF Division, CEA.

5.6 Maintaining the e-registration portal and ensuring smooth operation of the same

• The e-registration portal would be designed and maintained by IT Division, CEA.

6.0 Operationalisation of the scheme-Action to be taken by CEA/CERC/SERCs /JERC's /Forum of Regulators (FOR)

6.1 E-Registration portal and the Format for registration would be required to be designed on CEA's website in such a way that all the information could be filled on-line by the Generating companies in the prescribed format which would automatically go to the concerned Divisions of CEA for information and for monitoring (e.g. in case of Thermal projects, the information would go to TPM/TPP&D, in case of Renewable projects, the information would go to RES Development Division etc.).

(Action: IT Division, CEA, in association with TPM I&II, HPM, TPP&D, HPA, RES Development, OPM, PDM, PS&LF Divisions).

- 6.2 Maintenance of e-registration Portal for registration of electricity generating units under National Level Data Registry System. (Action: IT Division, CEA)
- 6.3 In order to make it mandatory for the electricity generating units to obtain the unique registration number from CEA, necessary regulatory provisions/modifications would need to be incorporated in the following:
 - a) General Grid connectivity conditions of CEA (Technical Standards for Connectivity of the Grid) Regulations, 2007 as amended & CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations, 2013.

(Action: GM Division, Legal Division, CEA).

b) Appropriate Regulations of CERC & SERCs by taking up the matter with Forum of Regulators.

(Action: Secretary, CEA in association with RA/Legal Division, CEA)

- CEA (Furnishing of statistics, returns and information) Regulations, 2007.
 (Action: Secretary, CEA in association with PDM/RA/Legal Division, CEA),
- **7.0** The scheme would be implemented from the date from which the necessary logistics/enabling-provisions for implementation of the scheme would be ready, which may take about 6 months. The date from which the scheme is to be implemented would be intimated to all the stakeholders in due course.

8.0 Registration of Transmission & Distribution System

The registration process is to be first started for generating units. The information to be collected and format of registration number for transmission/distribution system would be designed subsequently.

8.1 Transmission System

The registration of transmission system (existing, under construction and planned) and data submitted by developers of transmission system would be analysed and maintained by PSPM Division of CEA, who have expertise in this area. The data to be collected, relevant formats for data collection and the format of registration number shall be devised by PSPM Division separately as and when the registration process of Transmission system is conceptualised.

8.2 Distribution System

The registration of Distribution System (existing, under construction and planned) and data submitted by developers of Distribution System would be analysed and maintained by DP&D Division of CEA, who have expertise in this area. The data to be collected, relevant formats for data collection and the format of registration number shall be devised by DP&D Division separately as and when the registration process of Distribution System is conceptualised.