

Power Plants

Identification Information:

Citation:

Citation Information:

Publication Date: 20200710
Title: Power Plants
Geospatial Data Presentation Form: vector digital data

Description:

Abstract: The attribute data for this point dataset come from the U.S. Energy Information Administration, EIA-860, Annual Electric Generator Report; EIA-860M, Monthly Update to the Annual Electric Generator Report; and EIA-923, Power Plant Operations Report. It includes all operable plants by energy source with a combined nameplate capacity of 1 megawatt or more that are operating, are on standby, or out of service for short- or long-term.
Purpose: These data identify operable electric generating plants in the United States by energy source, as of June 2024.

Status:

Maintenance and Update Frequency: Quarterly

Spatial Domain:

Bounding Coordinates:

West Bounding Coordinate: -171.712439
East Bounding Coordinate: -65.279560
North Bounding Coordinate: 71.292000
South Bounding Coordinate: 17.947115

Keywords:

Theme:

Theme Keyword Thesaurus: None
Theme Keyword: energy, infrastructure, electricity, power plants, biomass, coal, geothermal, hydroelectric, natural gas, nuclear, petroleum, pumped storage, solar, wind, USA, EIA, shapefile, geospatial

Theme:

Theme Keyword Thesaurus: ISO 19115 Topic Categories
Theme Keyword: location

Place:

Place Keyword Thesaurus: None
Place Keyword: United States

Place:

Place Keyword Thesaurus: None
Place Keyword: United States, USA

Access Constraints: None
Use Constraints: None (public use). Users are advised to thoroughly review the metadata to understand the appropriate use and limitations of the data. These data and related graphics, if available, are not legal documents and are not intended to be used as such. The information contained in these data is dynamic and may change over time. The U.S. Energy Information Administration gives no warranty, expressed or implied, as to the accuracy, reliability, or completeness of these data.
Point of Contact:

Contact Information:

Contact Person Primary:
Contact Person: EIA mapping feedback: mapping@eia.gov

Data Set Credit: U.S. Energy Information Administration
Native Data Set Environment: Esri ArcGIS 13.0.3.36057

Data Quality Information:

Lineage:

Process Step:

Process Description:

Data for each power plant was aggregated from more granular generator level information. Each plant's primary energy source was de

Spatial Data Organization Information:

Direct Spatial Reference Method: Vector
Point and Vector Object Information:

SDTS Terms Description:

SDTS Point and Vector Object Type: Entity point
Point and Vector Object Count: 0

Entity and Attribute Information:

Detailed Description:

Entity Type:

Entity Type Label: PowerPlants_staging
Entity Type Definition Source: EIA

Attribute:

Attribute Label: OBJECTID
Attribute Definition: Internal feature number.
Attribute Definition Source: Esri
Attribute Domain Values:

Unrepresentable Domain: Sequential unique whole numbers that are automatically generated.

Attribute:

Attribute Label: Plant_Code
Attribute Definition: EIA-assigned plant identification number.
Attribute Definition Source: EIA

Attribute:

Attribute Label: Plant_Name
Attribute Definition: Name of power plant.
Attribute Definition Source: EIA

Attribute:

Attribute Label: Utility_Name
Attribute Definition: Legal name of the company that is responsible for the day-to-day operations of the generator.
Attribute Definition Source: EIA

Attribute:

Attribute Label: Utility_ID
Attribute Definition: EIA-assigned identification number for the company that is responsible for the day-to-day operations of the generator.
Attribute Definition Source: EIA

Attribute:

Attribute Label: sector_name
Attribute Definition: Plant-level sector name, designated by the primary purpose, regulatory status and plant-level combined heat and power status.
Attribute Definition Source: EIA

Attribute:

Attribute Label: City
Attribute Definition: City location of power plant.
Attribute Definition Source: EIA

Attribute:

Attribute Label: County
Attribute Definition: County location of power plant.
Attribute Definition Source: EIA

Attribute:

Attribute Label: Zip
Attribute Definition: Zip code of power plant.
Attribute Definition Source: EIA

Attribute:

Attribute Label: State

Attribute:

Attribute Label: Street_Address

Attribute Definition: Street address of power plant.

Attribute Definition Source: EIA

Attribute:

Attribute Label: PrimSource

Attribute Definition: The most predominant type of energy that fuels the generator. The primary energy source is determined by net summer capacity.

Attribute Definition Source: EIA

Attribute:

Attribute Label: Install_MW

Attribute Definition: The total combined generator nameplate capacity (installed). Installed capacity is determined by the highest value on the generator nameplate in megawatts rounded to the nearest tenth. The maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer and expressed in megawatts (MW).

Attribute Definition Source: EIA

Attribute:

Attribute Label: Total_MW

Attribute Definition: The maximum output, as measured in alternating current (AC), commonly expressed in megawatts (MW), that generating equipment can supply to system load, as demonstrated by a multi-hour test, at the time of summer peak demand (period of June 1 through September 30.) This output reflects a reduction in capacity due to electricity use for station service or auxiliaries.

Attribute:

Attribute Label: Coal_MW

Attribute Definition: Net summer capacity of coal-fired electric generators in megawatts (MW).

Attribute Definition Source: EIA

Attribute:

Attribute Label: NG_MW

Attribute Definition: Net summer capacity of natural gas fired electric generators in megawatts (MW).

Attribute Definition Source: EIA

Attribute:

Attribute Label: Crude_MW

Attribute Definition: Net summer capacity of petroleum-fired electric generators in megawatts (MW).

Attribute Definition Source: EIA

Attribute:

Attribute Label: Bio_MW

Attribute Definition: Net summer capacity of biomass electric generators in megawatts (MW).

Attribute Definition Source: EIA

Attribute:

Attribute Label: Hydro_MW

Attribute Definition: Net summer capacity of hydroelectric generators in megawatts (MW).

Attribute Definition Source: EIA

Attribute:

Attribute Label: HydroPS_MW

Attribute Definition: Net summer capacity of pumped-storage hydroelectric generators in megawatts (MW).

Attribute Definition Source: EIA

Attribute:

Attribute Label: Nuclear_MW

Attribute Definition: Net summer capacity of nuclear power electric generators in megawatts (MW).

Attribute Definition Source: EIA

Attribute:

Attribute Label: Solar_MW

Attribute Definition: Net summer capacity of solar powered electric generators in megawatts (MW).

Attribute Definition Source: EIA

Attribute:

Attribute Label: Wind_MW

Attribute Definition: Net summer capacity of wind turbine electric generators in megawatts (MW).

Attribute Definition Source: EIA

Attribute:

Attribute Label: Geo_MW

Attribute Definition: Net summer capacity of geothermal powered electric generators in megawatts (MW).

Attribute Definition Source: EIA

Attribute:

Attribute Label: Bat_MW

Attribute Definition: Net summer capacity of battery powered electric generators in megawatts (MW).

Attribute Definition Source: EIA

Attribute:

Attribute Label: Other_MW

Attribute Definition: Net summer capacity of electric generators powered by other energy sources not specified in the other categories in megawatts (MW). These include energy storage technologies (e.g., compressed air, batteries, and fly wheels), purchased steam, waste heat not directly attributed to a fuel source, and tire-derived fuels.

Attribute Definition Source: EIA

Attribute:

Attribute Label: source_desc

Attribute Definition: Energy sources and corresponding net summer capacities for the power plant.

Attribute Definition Source: EIA

Attribute:

Attribute Label: tech_desc

Attribute Definition: The type(s) of technology (prime mover). The engine, turbine, water wheel, or similar machine that drives an electric generator; or, for reporting purposes, a device that converts energy to electricity directly (e.g., photovoltaic solar and fuel cells).

Attribute Definition Source: EIA

Attribute:

Attribute Label: Source

Attribute Definition: The EIA source surveys for the power plants map data.

Attribute Definition Source: EIA

Attribute:

Attribute Label: Period

Attribute Definition: The reporting period (currency) of the data (yyyymm).

Attribute Definition Source: EIA

Attribute:

Attribute Label: Latitude

Attribute Definition: The latitude of the power plant in decimal degrees calculated in ArcMap using GCS: WGS 84 (EPSG:4326)

Attribute Definition Source: EIA

Attribute:

Attribute Label: Longitude

Attribute Definition: The longitude of the power plant in decimal degrees calculated in ArcMap using GCS: WGS 84 (EPSG:4326)

Attribute:

Attribute Label: Shape

Attribute Definition: Feature geometry.

Attribute Definition Source: Esri

Attribute Domain Values:

Unrepresentable Domain: Coordinates defining the features.

Metadata Reference Information:

Metadata Date: 20240910

Metadata Standard Name: FGDC Content Standard for Digital Geospatial Metadata

Metadata Standard Version: FGDC-STD-001-1998

Metadata Time Convention: local time

Metadata Use Constraints: None (public use)