

New England Electrical Transmission Lines
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1. Intro

Existing electrical transmission lines and those planned through 2022 for the New England coastal region. A transmission line is a structure that forms a path for directing the transmission of electric power. When interconnected with each other, transmission lines become transmission networks typically referred to as "power grids". This data depicts transmission lines existing in the New England area (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont). These lines are all connected to substations (facilities that switch, change, and/or regulate electric voltage) using points of the New England Substations layer. Substations transform voltage from high to low, or the reverse, or perform any of several other important functions. Between the generating station and consumer, electric power may flow through several substations at different voltage levels.

2. Purpose

To support coastal and ocean planning and other activities pursuant to the Energy Policy Act, Coastal Zone Management Act, Magnuson-Stevens Fishery Conservation and Management Act, National Environmental Policy Act, Rivers and Harbors Act and the Submerged Lands Act.

3. Sources

- http://www.iso-ne.com/nwsiss/grid_mkts/key_facts/iso-geo-diagram-2012-final-non-ceii.pdf

4. Data Design

Name of Feature Class	New England Electrical Transmission Lines
Number of Unique Features	1016
Storage format and type	ArcGIS File Geodatabase - simple feature class - vector polyline
Geographic Coordinate System	WGS_1984_Web_Mercator_Auxiliary_Sphere

5. Data Content

ISO 19115 Topic Category Keywords: oceans, structure, utilitiesCommunication

None: energy, power, transmission, substation

Place Names Keywords: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, United States, Vermont

Maximum scale of intended use is 1:80,000.

5. Data Dictionary

Field	state	voltage
Alias	State	Voltage Transmission
Type	Text	Text
Length	25	20
Desc.	State location	Electric potential measured in kilovolts (kV)

6. Data Process

- To be sure that you are using the most current map, visit:
http://www.iso-ne.com/nwsiss/grid_mkts/key_facts/
And click on New England Geographic Transmission Map Through 2022.
The map used for this copy is located at:
http://www.iso-ne.com/nwsiss/grid_mkts/key_facts/iso-geo-diagram-2012-final-non-ceii.pdf
- Heads up digitize using ESRI OpenStreetMap and Imagery Basemaps at a 1:40,000 scale using the ISO-NE map as a guide.

7. Quality Process

All known features acquired.

Original content was acquired from authoritative sources.

No new testing was done to cross reference or confirm otherwise the field or geometry values.

Spatial and attribute properties are believed to be complete, although attribute information has been simplified. Geometric thresholds from original data are preserved. No tests have been completed for exhaustiveness.

These data are intended for coastal and ocean planning. Not for navigation.

Use restrictions: NOT FOR NAVIGATION.