

# Grundy County Regional Energy Profile

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## Nuclear

Illinois leads the nation in electricity generation from nuclear power and accounts for one-eighth of the national's total nuclear power generation. In 2018, 52% of net electricity generation in Illinois was produced by the state's 6 nuclear power plants with their 11 reactors. Nuclear power accounts for nearly half of all Illinois power generations, including a 47.8% share at more than 96 million megawatt hours in 2010. The three plants highlighted below represented 55.1% of the total Illinois nuclear energy portfolio in 2010 (U.S. Energy Information Administration, 2019).

- **Dresden Generating Station**
  - Nation's first full-scale private nuclear plant, began operation in 1960
  - Unit 2 is capable of generating 869 MW; Unit 3, 871MW
  - 2016 Net Generation: 15.4 million MWh
  - 2016 Capacity Factor: 95.3%
  - Current licenses extend through 2029 and 2031
  - Power for 1.5 million homes (Exelon Corporation, 2017)
- **Braidwood and LaSalle County Generating Stations**
  - Located 1 mile east and 3 miles west of Grundy County respectively
  - Each is a 2-reactor facility with 2016 output of 19 million MWh
  - Combined 4.3 million homes served (Exelon Corporation, 2017)
- **General Electric Nuclear Fuel Storage Facility**
  - Pool Storage Facility operating adjacent to Dresden Nuclear
  - NRC license extended to 2022

 **Wind**

- **Horizon Wind Energy Top Crop I Wind Farm**
  - Spans Grundy, Livingston and LaSalle Counties
  - 68 GE 1.5 MW turbines; 102 MW total capacity
  - Provides enough power for 28,000 homes
  - Contracted to sell to Commonwealth Edison in 2012; currently selling output in regional wholesale market (Horizon Wind Energy LLC, 2011)
- **Horizon Wind Energy Top Crop II Wind Farm**
  - Located wholly within Grundy County
  - 132 GE 1.5 MW turbines; 198 MW total capacity
  - Provides enough power for 54,000 homes
  - Currently selling output to Constellation Energy (Horizon Wind Energy LLC, 2011)

 **Natural Gas Processing**

- **Aux Sable Liquid Products**
  - Capable of processing 2.1 billion cubic feet per day of natural gas
  - Daily extracting and fractionating capabilities of 102,000 barrels per day of NGL products (Aux Sable USA)
  - Terminus of the Alliance Pipeline extending from British Columbia across multiple natural gas delivery points

 **Natural Gas Power Generation**

- **Kendall Power**
  - Located 1 mile north of Grundy County line in Minooka
  - Combined-cycle facility with a capacity of 1,160 MW (SNC-Lavalin, 2005)



## Alternative Fuel

- **Renewable Energy Group (REG) Seneca, LLC**
  - Biodiesel producer capable of 60 million gallons per year
  - Utilizes high and low free fatty acid feedstocks (Renewable Energy Group, Inc., 2019)



## Oil Refining

- **ExxonMobil Joliet Refinery**
  - Located 3 miles east of Grundy County line in Channahon
  - 24<sup>th</sup> highest operable capacity refinery in the United States at 238,600 bbl/d (U.S. Energy Information Administration, 2011)

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