

# Grundy County Regional Energy Profile

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## Nuclear

Illinois leads all states in nuclear power capacity and electricity generation, accounting for 10% of the national total. Nuclear power accounts for nearly half of all Illinois power generations, including a 49.2% share at more than 95 million megawatt hours in 2009.

The three plants highlighted below represented 55.7% of the total Illinois nuclear energy portfolio in 2009 (U.S. Energy Information Administration, 2010).

- **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
  - 2010 Net Generation: 14.6 million MWh
  - 2010 Capacity Factor: 95.1%
  - Current licenses extend through 2030 and 2031
  - Power for 1.5 million homes (Exelon Corporation, 2011)
- **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 2010 output of 19 million MWh
  - Combined 4.6 million homes served (Exelon Corporation, 2011) (2011)
- **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)



## **Energy Transmission Assets**

- Rock Island Clean Line
- To deliver 3,500 megawatts of wind energy from plains states to eastern consumers
- 765kV transmission line, 1 of only 4 in the nation



## **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 fats and crude and refined oils for feedstock (Renewable Energy Group, Inc., 2010)



## **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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