Louisiana Electric Generation - 2007 Update

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Electricity is available to consumers because utilities and nonutility electricity power producers operate electric generating units. The fuel sources for these generating units include fossil fuels (coal, natural gas and petroleum), uranium, and renewable fuels (water, geothermal, wind, and other renewable energy sources). Total electric power generation in the U.S. in 2005 was 4,055 billion kilowatthours (kWh). Coal was used to generate 49.7% of electricity in 2005. Nuclear generating units were the second largest contributor at 19.3%. Natural gas was used to generate 18.7% and petroleum generated 3.0% of the electricity. Of the renewables, water had the largest share at 6.5% with non-water renewables only about 2.7%. (These include geothermal, refuse, waste heat, waste steam, solar, wind, wood, blast furnace gas, batteries, and chemicals.)

Transmission Lines Carry Electricity Long Distances Power Plant Distribution Lines Generates Electricity Carry Electricity To Houses Neighborhood Transformer Transformers On Poles Step Transformer Steps Up Voltage Steps Down Voltage Down Electricity Before It For Transmission Enters Houses

Figure 1. Key Elements of the Electric Power Grid

Source: EIA

In 2005, 58% of the generating capacity in Louisiana came from electric utilities and 42% came from independent power producers (IPPs) and cogeneration. The state had a net electricity generation capacity in 2005 of 92,616,878 megawatthours (MWh).

The primary energy source for generating electricity in Louisiana is natural gas. However, of the ten largest plants (by generating capacity), five use natural gas as the primary energy source (Willow Glen, Nine Mile Point, Little Gypsy, Acadia Energy Center, Michoud), three use coal (Big Cajun 2, R. S. Nelson, Rodemacher) and two are nuclear generating plants (Waterford 3, Riverbend).

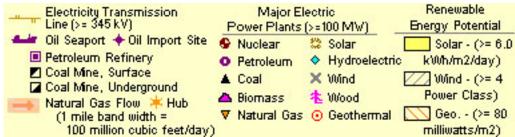
The top five retailers of electricity are investor-owned utilities: Entergy Louisiana Inc., Entergy Gulf States Inc., Cleco Power LLC, Southwestern Electric Power Co., and Entergy New Orleans Inc. Louisiana has approximately 2,176,000 retail customers and the average retail price is 8.03 cents per kilowatthour.

Entergy has not decided to build a nuclear unit, but it is positioning itself to have the option to build a nuclear unit. Entergy Nuclear has signed a project development agreement with GE-Hitachi Nuclear to order reactor components and is on schedule to submit a combined construction and operating license application for its Grand Gulf nuclear site in Mississippi by the end of 2007 and a second application for its River Bend site in Louisiana in mid-2008.¹



Figure 2. Major Electric Power Plants in Louisiana

LEGEND:



Source: EIA

All of this data was secured from the Energy Information Administration (EIA) web site (URL: http://www.eia.doe.gov) and uses the statistics available as of 2005. The full report "Louisiana Electric Generation – 2007 Update" will be available on the DNR website (URL: http://www.dnr.louisiana.gov/tad) in September 2007.

¹ URL: http://www.entergy-nuclear.com/news room/newsrelease.aspx?NR ID=1017, accessed 8/16/07.