

Closure of the Kewaunee Power Station – Summary of the Situation
Compiled by KCEDC and Kewaunee County UWEX
As of November 1, 2012

A. About the Kewaunee Power Station

1. Located in the town of Carlton in Kewaunee County on Lake Michigan about 35 miles southeast of Green Bay, about 100 miles north of Milwaukee.
2. Began commercial operation in 1974; one Westinghouse pressurized water reactor.
3. The Kewaunee reactor is one of three operating reactors in the state, with the other two located five miles away at Point Beach Nuclear Plant.
4. Counting Kewaunee, there are 104 power reactors licensed in the United States.
5. Kewaunee will be the first reactor to retire since 1997 when the 67 MW reactor Big Rock Point located in Charlevoix, MI shut down. The Zion nuclear plant – just across the Illinois line from Kenosha County – was also shuttered in 1998.
6. The Kewaunee reactor generates 556 megawatts of electricity, or enough to supply about 140,000 homes.
7. Provides about 20 percent of Green Bay-based Wisconsin Public Service Corp. (WPS's) electricity, also sells to Alliant Energy Corp., Madison.
8. 59% of Kewaunee Power Station's output goes to WPS; 41% goes to Alliant Energy Corp.
9. Dominion acquired the station in July 2005 from Wisconsin Public Service.
10. 650 Full Time employees, swells to 900 during outages every 18 months
 - o 142 Kewaunee County (22%)
 - o 260 Manitowoc (40%)
 - o 221 Brown (34%)
11. Types of positions: Engineers, Operators, Maintenance, Security, Office, Chemists, Radiations Specialists, Services Support – IT, Accounting
12. Dominion will offer incentives to employees to stay until the shutdown to ensure staffing. They are offering severance packages and Employee Assistance Programs.
13. High-paying professional jobs –Avg. Wage?

B. About Dominion

1. Virginia-based Dominion is among the nation's largest producers of energy.
2. In 2005, Dominion bought Kewaunee with the hope of acquiring more nuclear plants in the upper Midwest.
3. They intended to purchase Point Beach nuclear plant five miles south, however that plant was sold by Wisconsin Energy Corp. to NextEra Energy Resources Inc. of Florida.
4. In February 2011, the NRC (Nuclear Regulatory Commission) renewed the station's operating license for an additional 20 years, until 2033.
5. Late last year, Alliant Energy Corp., Madison, said it had ended negotiations with Dominion about a power purchase deal. The remainder of the power is sold to Green Bay-based Wisconsin Public Service Corp.
6. April 2011, Dominion put the plant up for sale – unable to find a buyer
7. October 22, 2012 - Dominion publicly announced plans to close and decommission the Kewaunee Power Station
8. In the 2nd Quarter 2013 the station is expected to cease power production, pending a grid reliability review by the Midwest Independent Transmission System Operator (MISO)

C. Reported reasons for closure:

1. Lack of economies of scale; Kewaunee only has one reactor
2. Dominion was not able to move forward with plan to grow nuclear fleet in the Midwest. It operates six reactors at three nuclear plants in Virginia and Connecticut. Kewaunee's one reactor in Wisconsin is isolated from the other operations.
3. Expiration of power purchase agreements in 2013
4. The agreements by which Dominion sells the plant's electricity to other utilities expire in December 2013, and prices are too low to be profitable.
5. Low Midwest power prices are tied to domestic natural gas production

D. Decommissioning

1. Dominion will stop generating electricity in about six months, accompanied by phased layoffs.
2. Following station shutdown, Dominion plans to meet its obligations to the two utilities that purchase Kewaunee's generation through market purchases until the power purchase agreements expire in December 2013. WPS & Alliant
3. Facts for Decommissioning Nuclear Power Plants <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/decommissioning.html>
4. Safety is top priority during the remaining period of power generation, as the station is shut down, and throughout the decommissioning process.
5. The station will remain under the oversight of the Nuclear Regulatory Commission (NRC) throughout the decommissioning process.
6. Within 30 days of the decision to cease operations permanently, a nuclear power plant licensee must notify the NRC in writing. The notification must contain the date when the power generation operations stopped or will stop.
7. Licensees may choose from three decommission strategies; Dominion has chosen SAFSTOR which involves a nuclear facility being maintained and monitored in a condition that allows the radioactivity to decay. Afterwards, it is dismantled and the property is decontaminated.
8. The licensee must remove the fuel from the reactor and submit a written certification to the NRC confirming its action. There is no time limit specified before the fuel must be removed or the corresponding certification received by the NRC. Once this certification has been submitted, the licensee is no longer permitted to operate the reactor or to put fuel into the reactor vessel.
9. No later than two years after permanent cessation of operations, the licensee must submit a Post-Shutdown Decommissioning Activities Report (PSDAR) to the NRC and the state of Wisconsin.
10. Under federal law, reactors that are decommissioned must be returned to "greenfield status" within 60 years.
11. According to NRC regulations, a trust or some other financial mechanism must be set up to cover all decommissioning costs of decommissioning the facility.
12. Dominion's most recent Form 10-K filing with the Securities Exchange Commission estimated decommissioning at \$680M, but the figure doesn't reflect potential future recovery of spent fuel cost.
13. As of December 2011, the Kewaunee decommissioning trust had fund of approximately \$517M.

E. Economic Impact

1. Permanent closure of the plant: Initial preliminary estimates of direct economic impact to labor income in the region are over \$100 Million. This does not include indirect business-to-business activity, or induced impact (the multiplier effect) associated with labor spending wages in the local economy, which estimates the total effect to over \$500 Million dollars to the three County region.
2. The decommissioning process itself will produce a significant temporary economic impact, which is yet to be estimated.
3. Net economic impact on regional economy is unknown.
4. Kewaunee County receives an estimated \$720,000 annually in Utility Aid under the Shared Revenue Formula. This amount will phase out in a step-down process over 4-5 years. In addition, Dominion provides over \$100,000 annually to help support Kewaunee County Emergency Management functions.
5. The Town of Carlton currently has no Town tax levy. It will need to raise the levy in future years. The Town of Carlton receives about \$400,000 in Utility Aid from the Shared Revenue Formula, which offsets \$185,000 in County taxes.
6. The City of Kewaunee receives \$18,000 annually for fire protection.