

## **Ryegate Power Station**

### **Overview**

The Ryegate Power Station is a 20.5-megawatt wood biomass plant constructed in 1992. The facility is jointly owned by ENGIE (66 percent) and Duke Energy (33 percent). The plant currently operates under the structure of 30 V.S.A. § 8009, which was enacted as part of Act 47 of 2011. Section 8009 requires Vermont's distribution utilities to purchase the electrical power generated at the plant for a ten-year period beginning on November 1, 2012. The statute directed the Public Utilities Commission (PUC)(formerly known as the Public Service Board) to set the rate to be paid by the distribution utilities in accordance with a number of specified factors. In October 2012 the PUC established a base rate of \$0.10 per kWh (when levelized over the ten-year period). This rate is subject to automatic adjustment per a formula devised by the PUC that reflects changes in the cost of biomass (wood chips) used to fuel the plant. The PUC subsequently approved a Power Purchase Agreement (PPA) between the Ryegate plant's owners and VEPP, Inc., a nonprofit organization that pursuant to section 8009 acts as the purchasing agent for the distribution utilities.

### **Economic Impact**

- There are 21 full time employees at Ryegate with more than \$1.8 million annually in salary and benefits.
- Approximately 250 individuals are directly employed in the production of wood chips supplied to the plant.
- In the past 12 months, 47 different logging companies have provided Ryegate with wood.
- The plant generates \$390,000 per year in property taxes.
- Ryegate purchases approximately 250,000 tons of wood annually, paying out \$7 million annually to the forest products industry.

### **Environmental**

- All of the logging activity associated with supplying the plant with wood chips are done under the supervision of a forester on staff at the plant and the Vermont Department of Fish & Wildlife.

- The Ryegate plant distributes more than 4,000 tons of wood ash per year that is used in many beneficial recycling programs, such as organic fertilizer for farmers.
- Ryegate qualifies for Renewable Energy Certificates (RECs) in the New Hampshire and Connecticut renewable energy trading markets. Under the 2012 agreement with VEPP, Inc., Vermont's utilities (and by extension Vermont's ratepayers) benefit from the sale of these RECs.
- A \$7.1 million Selective Catalytic Reduction (SCR) emissions system was installed at the plant in 2014 cut NOx (nitrous oxide) emissions by 50 percent. As a result, the plant became eligible for RECs that are much more valuable than what the plant previously qualified for. Per a PUC approved agreement with the distribution utilities the increase in the value of the RECs is shared with the plant's owners on a sliding scale in order to recover the cost of the SCR system. 90% of the value of those RECs are currently provided to the distribution utilities.

## **2016 Comprehensive Energy Plan Recommendation**

The 2016 Comprehensive Energy Plan recommends that Vermont “*retain the two Vermont power plants fueled with wood as a valuable part of the forest products economy and our state energy mix, work to use the waste heat, and upgrade efficiency as technology becomes available.*”<sup>1</sup>

## **Capital Expenditures**

From 2014 to 2019 Ryegate has invested more than \$10.8 million in capital expenditures and anticipates spending an additional \$2.01 million through 2025.

---

<sup>1</sup> (Page 359, 2016 Comprehensive Energy Plan  
[https://outside.vermont.gov/sov/webservices/Shared%20Documents/2016CEP\\_Final.pdf](https://outside.vermont.gov/sov/webservices/Shared%20Documents/2016CEP_Final.pdf))