

DE 14-238

Comments

of

NHPUC DEC08'14 PM 2:22

Pentti J. Aalto

NH PUC DE 14-238  
PSNH Generating Assets

PJA Energy Systems Design LLC

720 Bachelder Rd

Pembroke NH 03275

603 485 2559

[pjaesd@comcast.net](mailto:pjaesd@comcast.net)

December 8, 2014

Currently, PSNH recovers its generation costs through sales to its default customers and sales to the market. Customers in competitive markets do not pay for PSNH generators under normal conditions; however, they appear to remain a backstop to pay stranded cost if power plants are sold or retired. When market prices for gas and electricity are high, recovery of fixed costs is adequate, because PSNH's operating costs are relatively low and less volatile, and customers return to default service. Low gas prices, on the other hand, reduce market prices so that coal is less competitive for longer periods in the year. The reduced earnings in the market transfer more burden to default customers, putting pressure on their rates. Customers can protect themselves by migrating to competitive service. The remaining default customers are protected by the Commission's need to balance company and customer interests by limiting rate increases. The delayed recovery of the fixed costs can be a problem if it goes on for very long.

The 2013 report, in NH PUC IR 13-020, by the New Hampshire Public Utilities Commission staff and the Liberty Consulting Group found that we may be at a turning point that requires action. They explored the possibility of sale of the generating facilities and found that the book value was much higher than the market value, leading to a large potential stranded cost.

From a customer's perspective, the idea of paying as much as \$0.5 billion with nothing in exchange is unacceptable. A better way to monetize the residual value is to securitize and pay the full book value in exchange for operating income. The capacity value alone might be worth \$80,000,000 a year and would go a long way toward covering one or two hundred million dollars extra. In this model PSNH would be paid to continue operating the facilities for the benefit of all customers with net income applied against the stranded cost payments.

The 2013 study was done after a period of very low gas prices. Since then, the economy has been recovering, coal and nuclear plants are being retired and replaced with gas, transport is being electrified, LNG export facilities are under construction and oil-based heating systems are switching to gas and heat pumps. In the short run, the result has been a dramatic increase in gas consumption resulting in constrained gas transmission to New England with very high basis adjustment in the winter. In the longer-term, increased consumption and export will tend to raise prices toward world averages. At least in the near term, the hedging advantages of coal and oil can be a significant advantage to PSNH customers.

Perhaps before entering into the heroic actions of sale or securitization, we should see what adjustments can be made to default service that would allow customers entering the competitive market to voluntarily continue receiving and paying for some of the values that are available in the PSNH system. For example, the customer might pay a fixed amount say \$10.00 per kilowatt per month for a

nominal kilowatt of capacity in exchange for the revenue of one kWh at the locational price minus a preset amount. For example, if the agreed amount were 5¢ per kilowatt hour and the locational price was 3¢ the customer would receive nothing in that hour, if but if the locational price were 7¢ the customer would receive 2¢. The result would be that PSNH would continue to receive some income while the economically hedged customer went shopping in the more volatile competitive markets.

In longer-term, we will need to address ongoing carbon dioxide and thermal emissions problems and the resulting cost concerns. It may be possible to repower using alternate fuels or cycle modifications to improve efficiency and reduce cost. In addition, we have the opportunity to explore other options that may dramatically reduce energy consumption and carbon emissions. The use of waste heat for district heating would displace the carbon of heating fuel and potentially provide substantial income. For example, if the waste heat from the production of one kWh at Merrimack station displaced oil, it would be worth 15 to 20¢, several times more than the value of electricity. Other options might include using both the carbon dioxide from the exhaust and the waste heat to grow food or fuel and biomass for sequestering carbon dioxide as a soil amendment.