Vermont Yankee Economic and Fiscal Impact Study Project

February 5, 2010

Introduction

Over the past year, a group of energy and economic experts from government and industry have come together to develop a set of consensus energy and economic impact analyses associated with the continued operation or closure of the Vermont Yankee Nuclear Power Station ("VY" or "Vermont Yankee"). The analytic group engaged in this process consists of energy consultants hired by the General Assembly's Joint Fiscal Committee, State economists hired by Vermont's two largest utilities (with prior permission and approval for their participation in this project by the Joint Fiscal Committee and Agency of Administration), economists and power planners from the Department of Public Service, and power planning experts from the State's two largest utilities, Central Vermont Public Service and Green Mountain Power. [1] The group is developing a set of consensus estimates associated with four different scenarios regarding the future power supply for Vermont. The State economists will use these estimates to assess the impact of these scenarios on the State's economy. The economists' report will be available to the General Assembly in its deliberations regarding future power supply options for the State, including deliberations associated with Vermont Yankee's future. The economic model used to derive these results will also be available to the legislature, DPS, other State entities and the participating utilities, at cost, in the event they would like to run model simulations with differing input assumptions.

The Power Cost Estimates and Economic Impact Report

The consensus estimates analyze in detail the economic and fiscal impact of four possible future power supply scenarios. The four scenarios represent stakes in the ground at the corners of what the analytic group considered a reasonable field of

[1] *Participants in creation of the consensus power cost estimates were: Joint Fiscal Committee consultants Ezra D. Hausman and William Steinhurst of Synapse Energy Economics, Inc.; State economists and their firms, sponsored by the utilities, Jeffrey Carr and Lawrence Copp of Economic & Policy Resources, Inc., and Tom Kavet and Nic Rockler of Kavet, Rockler & Associates, LLC; Vermont Department of Public Service economists and power planners David Lamont and George Nagle; and utility power planning experts, Stephen Page of CVPS and Douglas Smith of GMP.*

possibilities representing the consensus assumptions underlying the power cost estimates.

The four scenarios include:

A) The "Reference" scenario, which assumes Vermont Yankee does not operate beyond 2012, renewable energy and efficiency efforts continue at a plausible development pace under current law, and Vermont utilities purchase power at market forecast prices to meet load demands beyond existing committed resource supplies (such as current contracts and utility-owned generation).
B) The "Green" scenario, which assumes VY does not operate beyond 2012 and the state adopts very aggressive legislative and agency support for aggressive renewables development and energy efficiency expenditures.
C) The "VY relicense" scenario, which assumes VY continues to operate beyond 2012 and state utilities purchase reduced quantities of power from the plant at market prices, given that the terms of the December, 2009 offer provided by Entergy to the VT PSB have yet to be finalized. Revenues from the Revenue Sharing Agreement ("RSA") are assumed to be credited to ratepayers at the 55% level.
D) The "Hybrid" scenario, combines the aggressive renewables development and energy efficiency expenditures of scenario B, and adjusted (reduced) levels of VY purchased power beyond 2012 by Vermont utilities relative to scenario C.

With the consensus power cost estimates as starting points, the economists will use economic models to assess the impact on the Vermont economy of these alternative power supply scenarios. This work will give the General Assembly and others analyzing this issue a tool with which to test varying assumptions about the future.

The economists will use the consensus power scenarios to analyze economic and fiscal impacts in depth, including effects on income, jobs, gross state product, state revenues and costs, and retail electric rates.

Background

In 2002, with the approval of the Vermont Public Service Board (PSB), Entergy Nuclear Vermont Yankee LLC ("ENVY") purchased VY from its owners.[2] In connection with this transaction, the new owner agreed to submit itself to the jurisdiction of the PSB Certificate of Public Good process should it seek authority to operate the plant beyond the March 21, 2012 expiration date of its current NRC operating license.

In early 2008, ENVY applied to the PSB pursuant to 30 V.S.A. sec. 248(e) for permission to operate VY until 2032.

[2] See PSB Docket No. 6545 and related documents.

In the interim, Vermont law was amended, in Act No. 160 of 2006 to say that the PSB "may not issue a final order or certificate of public good until the General Assembly determines that operation will promote the general welfare and grants approval for that operation." This law applies in any PSB proceeding involving extension of ENVY's authority to operate in Vermont. 30 V.S.A. sec. 248(e)(2).

Act No.160 of 2006 consolidated the General Assembly's existing authority over spent fuel storage at VY with its new authority to approve continued operation. In so doing, the General Assembly in Section 1 of the Act said:

(d) It is appropriate that the spent fuel storage issue be framed and addressed as a part of the larger societal discussion of broader economic and environmental issues relating to the operation of a nuclear facility in the state, including an assessment of the potential need for the operation of the facility and its economic benefits, risks, and costs; and in order to allow opportunity to assess alternatives that may be more cost-effective or that otherwise may better promote the general welfare.

In order to provide itself with the information necessary to make the "assessment" referred to in this legislative language, the General Assembly added the following provision to Act. No. 192 of 2008:

Sec. 5.012.2. JOINT FISCAL COMMITTEE – NUCLEAR ENERGY ANALYSIS (Sec. 2.031)

(a) The joint fiscal committee may authorize or retain consultant services to assist the general assembly in any proceeding commenced under 30 V.S.A. § 248(e).

(b) Consultants retained pursuant to subsection (a) of this section shall work under the direction of a special committee consisting of the chairs of the house and senate committees on natural resources and energy and the joint fiscal committee.

(c) The public service board shall allocate expenses incurred pursuant to subsection (a) of this section to the applicant or the public service company or companies involved in those proceedings and such allocation and expense may be reviewed by the public service board pursuant to 30 V.S.A. § 21.

Pursuant to this authority, after reviewing several responses to its request for proposals, the Joint Fiscal Committee in the summer of 2008 hired Synapse Energy Economics, Inc., of Cambridge, MA, as consultants to the General Assembly with respect to the continued operation of VY.

In their normal course of business, CVPS and GMP (serving 80% of Vermont's electricity demand) and the Vermont Department of Public Service independently conducted economic analyses of Vermont's electric power supply options for the future. The future of VY has been a significant variable in this work.

The Joint Fiscal Committee, already familiar with using consensus estimates to model state revenue expectations, considered the creation of a consensus estimate regarding future power supply costs in various scenarios. Included in these discussions with the Joint Fiscal Committee Chair and staff were representatives of the Department of Public Service, Synapse, CVPS and GMP.

These parties agreed that a consensus estimate could provide additional value to their individual efforts and initiated joint meetings in late summer of 2008. A rigorous 16 month cooperative process followed, including retention of additional consultants (LaCapra Associates) to create a New England-wide dispatch model to analyze the likely wholesale market cost of electricity delivered to Vermont under the defined scenarios. A report assessing the consensus impact on electric rates and the overall Vermont economy of the defined scenarios will be prepared by the State economists who participated in the power cost estimate process.