

Entergy Nuclear Vermont Yankee §248(e)(2) Issues Summary

Entergy Nuclear Vermont Yankee (ENVY) owns the Vermont Yankee Nuclear Power Station (VYS) in Vernon, and has been granted all necessary permits to operate this station through March 20, 2012 when its current operating license expires. Continued operation of the plant after the end of this initial license period is subject to several governmental and regulatory actions, including approval by the Vermont Legislature. Specifically, the General Assembly must take affirmative action before the Public Service Board (PSB) would be authorized to issue a “Certificate of Public Good” for continued operation. (The PSB would also have to find that the plant’s operation “will promote the general good of the state” and meet a number of specific criteria.) This requirement for legislative approval stems from the provisions of Act 160 (2006) and is codified under Title 30, Chapter 5, Section 248 (e)(2) as follows:

No nuclear energy generating plant within this state may be operated beyond the date permitted in any certificate of public good granted pursuant to this title, including any certificate in force as of January 1, 2006, unless the general assembly approves and determines that the operation will promote the general welfare, and until the public service board issues a certificate of public good under this section. If the general assembly has not acted under this subsection by July 1, 2008, the board may commence proceedings under this section and under 10 V.S.A. chapter 157, relating to the storage of radioactive material, but 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.

Synapse Energy Economics has been retained by the Vermont Legislature to assist in the identification and analysis of issues in order to assist the Legislature in its deliberations on this matter. Synapse will monitor relevant proceedings, issue reports, and provide expert analysis as needed for the Legislature’s benefit. This document provides a preliminary listing of issues, identified by Synapse in conversations with interested parties and legislative leaders. It is intended to be a working document, subject to modification and amplification as new information comes to light or is required.

It is important to note that the Legislature does NOT have authority over the relicensing of the plant—this is under federal jurisdiction. The Legislature also does not have the authority to issue or deny a CPG, which is an action taken by the Public Service Board (PSB). However, under the terms shown above the PSB may not issue a final order granting such a certificate without prior approval of the General Assembly.

Following is the preliminary list of issues as identified by Synapse, in consultation with members of the Special Committee established by Act 192, sec 5.012.2 of 2008.

	Issue	Ref.	Summary
Background / General	Action required under Act 160	Act 160, 30 V.S.A. §248(e)	<p>Act 160 amended §248 to require an affirmative vote of Legislature before the PSB may issue a new Certificate of Public Good for VYS.</p> <ul style="list-style-type: none"> Act 160 indicates that "explicit approval of the General Assembly expressed in law" is required; §248 text (amended by Act 160) mandates that the Legislature "...determines that operation will promote the general welfare and grants approval for that operation."
	Key Agencies and Jurisdiction	Atomic Energy Act, Act 160, 30 V.S.A. §248	<p>The Nuclear Regulatory Commission (NRC) has the authority over <i>license</i> renewal. ENVY needs a renewed license from the NRC (Federal) to operate VYS beyond March 20, 2012. The NRC has jurisdiction over radiological health and safety.</p> <p>A final NRC decision on the license renewal is expected early in 2009.</p> <p>The Vermont Public Service Board (PSB) must also issue a new <i>Certificate of Public Good</i> to ENVY in order for the plant to operate beyond that date. This process is currently underway as PSB Docket 7440.</p> <p>The PSB must ensure that the facility will serve the general welfare of Vermont ratepayers, and generally considers economic, reliability, and environmental impacts. Some environmental impacts may be preempted.</p> <p>The Vermont Legislature must grant approval before the PSB may issue a new certificate to ENVY, or issue a final order in the certification proceeding. The legislature has no authority over the (Federal) license renewal process.</p> <p>the Legislature's purview includes the general welfare of the state and long-term economic development. There may be limits on legislative authority regarding radiological health and safety issues.</p> <p>The Vermont Department of Public Service (DPS) is responsible for representing the interests of the public before the PSB.</p>

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Reliability and ratepayer impacts	Power Purchase Agreements (PPAs)	PSB Docket 6545	<p>Today utilities buy some power from VYS for \$41/MWh under PPAs, expiring no later than March 21, 2012. New PPAs are being negotiated for post-relicensing period.</p> <ul style="list-style-type: none"> • What will be the price, risk, and other terms of replacement PPAs? • What risk will ratepayers have for VYS outages? • What are the costs and benefits to Vermonters of VYS power sold out of state and/or at market rates? • <i>How should these issues affect the legislature's decision?</i>
	Revenue Sharing Agreement	PSB Docket 6545	<p>A "revenue sharing agreement" for the first ten years of the relicense period provides for a 50/50 split between ENVY and pre-2002 owners of revenues exceeding \$61/MWh (annual average), escalated annually.</p> <ul style="list-style-type: none"> • What are the likely benefits to ratepayers of this agreement? • What are the tax and credit implications of this agreement? • <i>How should these issues affect the legislature's decision?</i>
	Vermont Electricity Market		<ul style="list-style-type: none"> • What is the capability of in-state and regional generation and energy efficiency to meet Vermont's needs, and at what cost? • Are there transmission constraints that affect the ability replace VYS power with power from other sources? • What are the vulnerabilities in the Vermont electric system with and without VYS? • <i>How should these issues affect the legislature's decision?</i>
	New England Market		<ul style="list-style-type: none"> • What is the role/significance of VYS in the regional electricity market? • How would regional prices and reliability be affected by a shutdown? • <i>How should these issues affect the legislature's decision?</i>
	Disposition of DOE Settlement Funds		<p>A payment of settlement funds is likely for the Department of Energy's failure of to collect and dispose of spent fuel, as promised, starting in 1998.</p> <ul style="list-style-type: none"> • Would these funds accrue to ratepayers, or to ENVY shareholders? • How is this disposition of funds to be accomplished? • <i>How will this issue affect the legislature's decision?</i>

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Issues for Vermont	Taxation, Economic Impacts	Act 160 studies	<p>ENVY is a significant taxpayer, a source of Clean Energy Development Fund (CEDF) and an employer in the state. It is also a source of local property taxes. Replacement resources (including increased efficiency) would also have employment and tax benefits for the state; power imports would not.</p> <ul style="list-style-type: none"> • What are ENVY employment, income tax, property tax, and other economic costs and benefits? • What are corresponding costs and benefits of possible replacement resources, including energy efficiency? • How will closure affect CEDF funding? • <i>How should these issues affect the legislature's decision?</i>
	Spent Fuel, Low-Level Radio-active Waste	PSB dry cask docket, Act 160, Docket 6545	<p>Spent fuel is now in storage pool and in dry casks. According to the MOU, ENVY is to use "commercial best efforts" to find permanent storage (6545 MOU ¶11)</p> <ul style="list-style-type: none"> • What are plans for spent fuel disposition during relicense and post-shutdown periods? • How will spent fuel ultimately be removed from Vermont? • What are ENVY's plans for disposal of low-level waste? • <i>How should these issues affect the legislature's decision?</i>
	Costs of a Major Accident or Failure		<ul style="list-style-type: none"> • Who would be responsible for costs of a major accident at VYS? • What are ENVY's financial obligations under the Price Anderson, if an accident were to occur at another U.S. plant? • What assurance does Vermont have that contingency funds will be available for VYS when and if needed? (i.e., will not have been previously used for another Entergy facility.) • <i>How should these issues affect the legislature's decision?</i>
	Decommissioning	6545, SEC filing by Entergy	<p>ENVY has a decommissioning fund (funded by ratepayers prior to sale to Entergy) which is intended to cover the cost of eventual decommissioning of the plant.</p> <ul style="list-style-type: none"> • What is the status of ENVY's decommissioning fund, relative to likely/possible decommissioning costs? Who bears responsibility if the fund is inadequate? • What scenarios of decommissioning are being examined (including SAFESTOR), and what are the implications of various option for Vermont? • <i>How should these issues affect the legislature's decision?</i>
	Carbon Emissions		<p>Vermont benefits from a low-carbon energy mix under RGGI, and low carbon energy production is likely to have a premium value under future federal carbon legislation.</p> <ul style="list-style-type: none"> • How will ratepayers' access to the financial benefits of low carbon generation be affected with and without VYS? • <i>How should these issues affect the legislature's decision?</i>

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Process	Relicensing (Federal)		<ul style="list-style-type: none"> • A decision on the relicensing process expected in early 2009. The NRC has never denied an application for a nuclear plant license renewal, although they have required upgrades and operational improvements. • The Legislature may also want to consider preparation for a second relicensing application in 2032.
	State-Sponsored Reliability Assessment (Act 189)	Act 189	<p>The DPS and a Public Oversight Panel were asked to work collaboratively on the ongoing audit. Final report expected February 27. Issues include:</p> <ul style="list-style-type: none"> • What was the nature of the process? • Did Entergy cooperate fully with the Panel? • Did the DPS cooperate with the Panel? • What are the results? • <i>How should the outcome of this process affect the legislature's decision?</i>
	Fact Finding and Public Engagement Process (Act 160)	Act 160	<p>Act 160 mandates a "fact finding" and a "Public Engagement Process" regarding continued operation and other matters by the DPS. The report is expected to be released in late 2008. Issues include:</p> <ul style="list-style-type: none"> • Have the studies met statutory requirements? • Is the legislature satisfied that they have the best possible information concerning all the issues covered in statute? • What are the results of the fact finding and public engagement processes? • <i>How should the outcome of this process affect the legislature's decision?</i>
	Corporate Restructuring	PSB Docket 7404	<p>Restructuring docket evidentiary record is closed and briefs have been submitted, but no final order has been issued. Even with an affirmative order in this docket, it is possible that Entergy will not move quickly on the restructuring as proposed due to credit issues. Issues around corporate restructuring include:</p> <ul style="list-style-type: none"> • Will new owner and financial guarantees provide sufficient backing and credit to address any contingencies? Could there be competition from other facilities for these resources? • Will new entity be present and financially competent to complete decommissioning, which may be delayed decades after the plant closes? • <i>How should these issues affect the legislature's decision?</i>
	Timing		<p>The Legislature must act before the DPS may issue a final order or a CPG. The PSB's schedule for concluding the CPG docket (7440) has not been set.</p> <ul style="list-style-type: none"> • What information does the legislature need to make a decision, and when will the legislature have this information? • What are the cost, risk, and credit implications of delaying action? • Are there cost and risk implications for utilities that increase if the CPG decision is delayed? How might this affect utility credit ratings? • <i>How should these issues affect the legislature's process?</i>