RESPONSE OF ENTERGY NUCLEAR VERMONT YANKEE, LLC, AND
ENTERGY NUCLEAR OPERATIONS, INC., TO THE WINDHAM REGIONAL
COMMISSION’S SECOND SET OF INFORMATION REQUESTS

This is the response of Entergy Nuclear Vermont Yankee, LLC ("ENVY"), and Entergy Nuclear Operations, Inc. ("ENO"), (ENVY and ENO will be referred to collectively as "Entergy VY") to the Windham Regional Commission’s ("WRC") Second Set of Information Requests. Entergy VY is filing one complete copy of their responses with the Board, with two copies served on WRC (plus an electronic copy) and one copy served on each other party of record.

GENERAL OBJECTIONS:

1. Entergy VY objects to any request for information or production of documents that is or are subject to the attorney-client privilege, constitute work product, are protected under state or federal law, are proprietary or confidential, constitute draft and/or non final documents and/or constitute communications containing or concerning same. Consistent with the foregoing, Entergy VY has not provided any such documents, including, without limitation, documents from inside or outside counsels’ files.

2. Entergy VY objects to requests that seek information concerning matters of plant operation and/or radiological safety matters subject to regulation by the NRC that, due to federal preemption, are not subject to regulation by the State of Vermont. A fuller description of the reasons and bases for this objection is contained in Entergy VY’s Motion for a Declaratory Ruling Prescribing Scope of Proceeding, filed June 21, 2012.

3. Entergy VY objects to requests that are overbroad or unduly burdensome to the extent that they (a) are cumulative; (b) call for the production of documents not in the possession, custody or control of Entergy VY or their expert witnesses; (c) call for the review, compilation or production of publicly-available documents that could be obtained by the requesting party in a less burdensome manner, including on a public website; or (d) call for the review, compilation and/or production of documents already in WRC’s possession, custody or control; or (e) call for the review, compilation and/or production of a voluminous number of documents, e.g., of...
questionable relevance and/or at a significant expense. Consistent with the foregoing, Entergy VY shall not undertake to produce any such documents unless expressly stated to the contrary.

4. Entergy VY objects to any requests for documents or information beyond the scope of this tribunal's jurisdiction, including without limitation to the extent that (a) primary jurisdiction rests more properly with, and/or actually has been exercised by, another agency or tribunal; or (b) the document, legal issue or factual information in question has been otherwise determined by another agency or tribunal of competent jurisdiction.

5. Each of these General Objections shall be incorporated by reference into the below-referenced objections and responses as if expressly restated therein. Entergy VY does not hereby waive any objections and reserves the right to later raise any additional, available objection.
Q.WRC:EN.2-1: In the first round of discovery WRC asked about the monitoring costs for storage of SNF in the spent fuel pool and in dry casks. Entergy VY responded, in part, by stating "...The monitoring costs for wet storage are not specifically identified in Exhibit EN-TLG-2 since pool operations are concurrent with spent fuel pool off-loading activities (to the DOE and/or ISFSI) and decommissioning (DECON) or plant layup activities (SAFSTOR). Pool operating costs are included at approximately $760,000 per year..." WRC is interested in the potential annual costs of storing SNF in the pool through the period of SAFSTOR as an alternative to storage in dry casks. (Please see WRC:EN.1-MT-14)

a) Please identify the annual cost for maintaining SNF in wet storage throughout the projected period of SAFSTOR, keeping in mind that the costs of decommissioning and SAFSTOR options will determine if and when the station can be fully remediated and the land returned to alternative productive use as envisioned by the docket 6545 MOU.

b) If the total operating cost for the spent fuel pool and all needed support is projected to be approximately $760,000 per year through any period of SAFSTOR, please state that clearly.

A.WRC:EN.2-1: OBJECTION. The requests seeks information concerning matters of plant operation and/or radiological safety subject to regulation by the NRC that, due to federal preemption, are not subject to regulation by the State of Vermont. A fuller description of the reasons and bases for this objection is contained in Entergy VY’s Motion for a Declaratory Ruling Prescribing Scope of Proceeding, filed June 21, 2012. Objection further to the extent this request would require preparation of an analysis that TLG Services has not prepared.

Without waiving any objection, Entergy VY responds:

a) TLG did not analyze such a scenario, i.e., the cost of storing SNF in the pool through the period of SAFSTOR, as an alternative to storage in dry casks.

b) Pool-operating costs (direct expenses) of approximately $760,000 per year were included in the estimates. This does not include all the other costs to maintain the site (e.g., labor, security, insurance, fees, etc.) during pool operations.

Person Responsible for Response: William A. Cloutier, Jr.
Title: Manager, Decommissioning Services
Date: October 3, 2012
In the first round of discovery WRC asked if ISO-NE or any other power purchasing entity determined that the VY Station will remain a reliable producer of electricity through the entire 20 year term of the proposed CPG. Entergy VY responded by saying “Yes” and then stated “ISO-NE includes the VY Station in its forecasts of reliability, and assumes that the VY Station will be operating and an available source of power during the 20-year renewal period of continued operation.” (Please see WRC:EN.1-MP-6)

a) Please provide a specific source for this stated assumption and all available supporting documentation.

A. WRC:EN.2-2: OBJECTION. The request seeks information concerning matters of plant operation and/or radiological safety subject to regulation by the NRC, as well as information concerning matters of system reliability subject to regulation of FERC and ISO-New England that, due to federal preemption, are not subject to regulation by the State of Vermont. A fuller description of the reasons and bases for this objection is contained in Entergy VY’s Motion for a Declaratory Ruling Prescribing Scope of Proceeding, filed June 21, 2012. Without waiving any objection, Entergy VY responds:


Person Responsible for Response: Marc Potkin
Title: Vice President Power Marketing
Date: October 3, 2012
Q.WRC:EN.2-3: Question WRC:EN.1-MT-5 was a multipart question that sought the officers of Entergy Nuclear Vermont Investment Company, LLC, Entergy Nuclear Holding Company #3, LLC, and Entergy Nuclear Holding Company, and the number of persons employed by each. WRC appreciates the list of officers provided in response.

a) Having already identified the officers of each entity, please state the number of persons employed by each of the above listed entities.

A.WRC:EN.2-3:

a) Entergy Nuclear Vermont Investment Company, LLC, does not have any persons employed other than its officers. Entergy Nuclear Holding Company #3, LLC, does not have any persons employed other than its officers. Entergy Nuclear Holding Company does not have any persons employed other than its officers.

Person Responsible for Response: T. Michael Twomey
Title: Vice President, Entergy VY
Date: October 3, 2012
Q.WRC:EN.2-4: In the first round of discovery WRC asked Mr. Tranen to consider his prefiled written testimony (A.18) in which he stated that Vermont Yankee “could not adversely affect system stability and reliability,” and then asked him to “...address conditions noted in the VELCO 2012 Vermont Long-Range Transmission Plan on pages 22, 24, and 27 in which the operation of Vermont Yankee aggravates overload conditions.” Mr. Tranen responded, in part, by stating “…While subsequent studies, such as the VELCO 2012 study, may indicate that overloads could occur under certain conditions, those overloads are not specifically linked to the VY Station.” (Please see WRC:EN.1-JT-4 and WRC:EN.1-JT-5, and the 2012 Vermont Long Range Transmission Plan available at: http://www.velco.com/LongRange/Documents/2012LRTP_final_to_PSB.pdf)

a) Please review pages 22, 24, and 27 of the VELCO Long-Range Transmission Plan taking note of the language used in the text block titled “When Deficiency Occurs,” and the description of the overloads that are aggravated when Vermont Yankee is running. Are the overload conditions identified by the VELCO study “linked to the VY Station?”

b) Please explain.

A.WRC:EN.2-4: OBJECTION. The request seeks information concerning matters of system reliability subject to the regulation of FERC and ISO-New England that, due to federal preemption, are not subject to regulation by the State of Vermont. A fuller description of the reasons and bases for this objection is contained in Entergy VY’s Motion for a Declaratory Ruling Prescribing Scope of Proceeding, filed June 21, 2012. Without waiving any objection, Entergy VY responds:

a) No.

b) The overload conditions are linked to west-east flows over transmission. These overloads are aggravated by the operation of all generation west of the lines that are overloaded, including the Vermont Yankee Nuclear Power Station (the “VY Station”). The same statement in the VELCO report could be made for any generation west of the overload.

Person Responsible for Response: Jeffrey Tranen
Title: Senior Vice President, Compass Lexecon
Date: October 3, 2012
Q.WRC:EN.2-5: In the first round of discovery WRC asked how the continued operation of the VY Station would conform to the 2006 Windham Regional Plan. The questions were specifically addressed to Mr. Harry Dodson who declined to provide complete answers, stating that his testimony “...addresses the aesthetic impacts of the continued operation of the VY Station and review of town and regional plan areas primarily applicable to scenic resources. I have not studied, nor am I qualified to answer, questions about facility operation, permitting and licensing issues related to radioactivity and reliability or public health and safety issues.” (Please see WRC:EN.1-HD-4 and WRC:EN.1-HD-5)

Given that Mr. Dodson does not believe he is qualified to answer the questions, please provide a response from an alternative witness that can answer questions WRC:EN.1-HD-4 and WRC:EN.1-HD-5 and address:


b) How permanent spent fuel storage will be handled in a way that meets plan policy #1 (HLRW, page 95), which states, “Encourage a requirement that permanent spent nuclear fuel (SNF) storage be resolved prior to any consideration of extending or reviewing the operating license of Vermont Yankee.”

c) Identify how Entergy VY plans to meet the standard advocated in policy #2 (HLRW, page 95), which states, “Support increased local and regional public involvement regarding all SNF permitting and licensing decisions.”

d) Address Low Level Radioactive Waste (LLRW) plan policies 1-2 (page 95) and compare and contrast the standard for LLRW storage at out-of-state facilities used by Entergy VY with standards applied to in-state storage, and identify how out-of-state standards meet the requirements of Regional Plan Policies.

e) Identify how the petition and supporting testimony and exhibits filed in docket 7862, and the preemption claims of Entergy VY that seek to limit discussion of multiple issues and concerns, meet the standard of Regional Plan Policy 4.6(4)(d) on page 47, which requires energy generation projects to, “Effectively and adequately address all issues related to facility operation and reliability...”

A.WRC:EN.2-5: OBJECTION. The request seeks information concerning matters of plant operation and/or radiological safety subject to regulation by the NRC, as well as information concerning matters of system reliability subject to regulation of FERC and ISO-New England that, due to federal preemption, are not subject to regulation by the State of Vermont. A fuller description of the reasons and bases for this objection is contained in Entergy VY’s Motion for a Declaratory Ruling Prescribing Scope of Proceeding, filed June 21, 2012. Without waiving any objection, Entergy VY responds:
a) See A.WRC:EN.2-5b through 5d.

b) The 2006 Windham Regional Plan’s policy to “encourage” a requirement that permanent SNF storage be resolved prior to consideration of extending the operation of the Vermont Yankee Station “would be clearly impermissible” to the extent such encouragement seeks “to regulate the … operation of a nuclear power plant.” *Pacific Gas & Elec. Corp. v. State Energy Res. Conserv. & Dev. Comm’n*, 461 U.S. 190, 212 (1983). The requirement is also impermissible if it is based even in part upon radiological safety concerns which are within the NRC’s exclusive authority. *Id.; Entergy Nuclear Vermont Yankee, LLC v. Shumlin*, 828 F. Supp. 2d 183, 220-21 (D. Vt. 2012) (“the test for preemption … is whether the matter on which the state asserts the right to act is in any way regulated by the federal government,” quoting *Pacific Gas & Elec.*, 461 U.S. at 212-13 [internal quotations omitted, emphasis added]). The Windham Regional Plan’s “High Level Radioactive Waste” Policy #1 (page 95) addresses an issue that the NRC regulates pursuant to its exclusive federal authority. The plan does not identify any non-preempted state authority upon which the policy purports to be based. For that reason, Entergy VY cannot determine what asserted legal basis, if any, there may be for the policy and what the policy legally requires of it beyond its compliance with the SNF storage requirements of the NRC.

c) Entergy VY supports public involvement in permitting and licensing decisions for spent-nuclear fuel (“SNF”) through the public’s participation in the public-access processes provided by the U.S. Nuclear Regulatory Commission (the “NRC”) and the U.S. Department of Energy (the “DOE”) (including, where appropriate, the judicial-review process of decisions by these agencies), the legislative processes of the United States Congress, and the public-access opportunities provided by bodies like the Blue Ribbon Commission on America’s Nuclear Future.

d) The safe and effective storage, transportation and disposal of Entergy VY’s low-level radioactive waste is ensured through the regulations of the NRC, the DOE and the U.S. Department of Transportation, which have exclusive authority in these areas. With regard to the disposal of low-level radioactive waste, Vermont and Texas are parties to a compact under which a disposal facility for low-level radioactive waste has been authorized and is now in operation in Andrews, Texas. *See www.anr.state.vt.us/dec/geo/radwaste.htm*. The compact is administered by the Texas Low Level Radioactive Waste Disposal Compact Commission, which includes two commissioners from Vermont. The Vermont commissioners have presumably ensured that the standards at that facility are consistent with the standards applicable to in-state storage in Vermont to the extent reasonably practicable. Entergy VY has entered into a contract with Waste Control Specialists, the operator of the Andrews, Texas facility, to dispose of its low-level radioactive waste at that facility. Because there is a cost associated with disposing of such waste under that contract, Entergy VY has an economic incentive to minimize the generation of low-level radioactive waste.

e) Entergy VY will operate the VY Station in accordance with the operating requirements of the NRC and with the system-reliability requirements of the Federal Energy Regulatory
Commission (the “FERC”) as implemented by ISO-New England, both of which have exclusive authority in these respective areas. Windham Regional Plan policy 4.6(4)(d) addresses areas that the NRC and FERC regulate pursuant to their respective, exclusive federal authority. The plan does not identify any non-preempted state authority upon which the policy purports to be based. For that reason, Entergy VY cannot determine what asserted legal basis, if any, there may be for the policy and what the policy legally requires of it beyond its compliance with the requirements of the NRC and FERC.

Person Responsible for Response: T. Michael Twomey
Title: Vice President, Entergy VY
Date: October 3, 2012
Q.WRC:EN.2-6: In the first round of discovery WRC asked for a list of the eleven nuclear plants owned by Entergy Corporation, and a list of the local, state, and NRC regulatory restrictions (if any) that prohibit the storage of spent nuclear fuel generated by Vermont Yankee. Entergy VY responded by stating “Entergy VY expects that it will only be able to transfer the VY Station’s SNF to an interim or permanent DOE storage facility. None of the licenses for the foregoing plants authorize the storage of spent nuclear fuel from the Vermont Yankee Station at those sites.” (Please see WRC:EN.1-WC-8 and WRC:EN.1-MT-8)

a) Please identify any and all regulations that prohibit storage of SNF generated at Vermont Yankee at each of the other plants owned by Entergy VY, keeping in mind that the docket 6545 MOU requires Entergy VY “...must use its commercial best efforts to assure that the spent fuel is removed from VYNPS site in a reasonable manner and as quickly as possible rather than stored at VYNPS...”

A.WRC:EN.2-6: OBJECTION. The request seeks information concerning matters of plant operation and/or radiological safety subject to regulation by the NRC that, due to federal preemption, are not subject to regulation by the State of Vermont. A fuller description of the reasons and bases for this objection is contained in Entergy VY’s Motion for a Declaratory Ruling Prescribing Scope of Proceeding, filed June 21, 2012. Without waiving any objection, Entergy VY responds:

a) ENVY only owns the VY Station so it assumes that the statement “each of the other plants owned by Entergy VY” refers to plants owned by Entergy VY’s affiliates.

The Atomic Energy Act (“AEA”) authorizes the NRC to regulate the storage and disposal of SNF. Pacific Gas & Elec. Corp. v. State Energy Res. Conserv. & Dev. Comm’n, 461 U.S. 190, 217-18 (1983); Bullcreek v. NRC, 359 F. 3d 536, 538 (D.C. Cir. 2004). The AEA states that “no person may transfer or receive in interstate commerce, transfer, deliver, receive possession of or title to” any source material or special nuclear material and that “[n]o person may transfer in interstate commerce, ... transfer, acquire own, possess” any byproduct material, except as licensed by the NRC. 42 U.S.C. §§ 2077, 2092, 2111.

Entergy VY’s NRC license for the VY Station does not authorize Entergy VY to “transfer in interstate commerce” or to “transfer” its SNF to other plants owned by Entergy VY’s affiliates. See Exhibit EN-TMT-2. Even if Entergy VY were able to obtain a license from the NRC for such transfer, it could not transfer SNF from the VY Station to these other plants for storage because the NRC licenses for these other plants do not authorize them “to receive in interstate commerce” or to “receive possession of” or “acquire” or “possess” SNF from the VY Station. “The general license [for storage of SNF in an ISFSI at a site] is limited to that spent fuel which the general licensee is authorized to possess at the site under the specific license for the site.” 10 C.F.R. § 72.212.

The Atomic Energy Act, 42 U.S.C. § 2282, and 10 C.F.R. §50.110 provide penalties for violations of the licenses that the NRC issues.
Person Responsible for Response: L. Jager Smith, Jr.
Title: Legal Counsel for Entergy VY
Date: October 3, 2012
Q.WRC:EN.2-7: In the first round of discovery WRC asked Entergy VY to “...identify what, if any, additional authorization Entergy VY would require from the NRC to reduce the density of the spent fuel pool by shifting SNF to dry casks” and “...identify specifically which NRC regulations, if any, prohibit Entergy VY from shifting SNF from the spent fuel pool to dry casks.” Entergy VY declined to provide any answer to these questions and instead stated an objection related to federal preemption. Testimony of Mr. Hoffman and Mr. Colomb provided by Entergy VY in docket 7440 is inconclusive with regard to what, if any, NRC regulations restrict or allow system modifications or movement of SNF from wet to dry storage, and WRC is seeking clarification (see WRC Reply Brief in docket 7440, pages 6-7). WRC has argued consistently that movement of SNF from wet storage to dry storage while the Station is operating will provide a financial benefit to the decommissioning fund that would hasten the point at which the Station could be fully remediated and the site returned to an alternative productive use. WRC has not and is not seeking information related to nuclear safety, and is simply asking what, if any, NRC regulations cover the issue at hand because these costs will have a direct effect on the orderly development of the region. In responding to WRC:EN.1-WC-21 William Cloutier appears to agree in part with the WRC financial analysis, stating “...Typically costs, such as moving spent fuel from the pool to the ISFSI during operations, are costs avoided during decommissioning. While the Vermont Yankee Station is operating, spent-nuclear-fuel ("SNF") management costs are treated as operating costs (subject to recovery from DOE) and have no effect on the balance of the decommissioning trusts. Following the plant’s shutdown, ENVY will no longer have a revenue stream so I expect that funds would be withdrawn from the trusts to pay for SNF management and that Entergy VY will continue to file claims with the DOE for reimbursement of such expenses.” (Please see WRC:EN.1-WC19 and WRC:EN.1-WC-20 and WRC:EN.1-21)

a) Please identify what, if any, additional authorization Entergy VY would require from the NRC to reduce the density of the spent fuel pool by shifting SNF to dry casks.

b) Please identify specifically which NRC regulations, if any, prohibit Entergy VY from shifting SNF from the spent fuel pool to dry casks.

A.WRC:EN.2-7a & b: OBJECTION. The request seeks information concerning matters of plant operation and/or radiological safety subject to regulation by the NRC that, due to federal preemption, are not subject to regulation by the State of Vermont. A fuller description of the reasons and bases for this objection is contained in Entergy VY’s Motion for a Declaratory Ruling Prescribing Scope of Proceeding, filed June 21, 2012. Without waiving any objection, Entergy VY responds:

The Holtec HI-STORM casks to which SNF at the VY Station is transferred are licensed by the NRC under 10 C.F.R. Part 72, Subpart L. 65 Fed. Reg. 25,241 (2000). Entergy VY is only authorized to load SNF into these casks in conformance with the specifications in the Certificate of Compliance approved by the NRC for these casks. 10 C.F.R. § 72.212. The Certificate of Compliance must include specifications on, among other things, the "minimum acceptable cooling time of the spent fuel prior to storage in the spent fuel storage cask." 10 C.F.R.
§ 72.236(a). The Certificate of Compliance holder must also submit to the NRC a Final Safety Analysis Report ("FSAR") based on the safety analysis submitted with the Certificate of Compliance application and any commitments developed during the NRC's review process. 10 C.F.R. § 72.248(a). Holtec's FSAR for its casks provides a computation methodology for determining the minimum cooling times before SNF can be transferred into the casks. See HI-STORM Final Safety Analysis Report (FSAR), Chapter 12, Operating Controls and Limits (http://pbadupws.nrc.gov/docs/ML1011/ML101110044.pdf).

Entergy VY's transfer of SNF from the spent-fuel pool into casks is limited by the requirements set forth in the FSAR and incorporated into the Certificate of Compliance for the Holtec casks. The Atomic Energy Act, 42 U.S.C. § 2282, and 10 C.F.R. §50.110 provide penalties for any SNF transfer in violation of these limitations. In order to transfer SNF into casks outside of these limitations in the FSAR and Certificate of Compliance, Entergy VY would require the NRC's approval of a new Certificate of Compliance (with corresponding revisions to the FSAR) based on further analysis by Holtec and the NRC's finding based on that analysis that the limitations on the casks in the existing FSAR and Certificate of Compliance could be exceeded while "reasonably maintain[ing] confinement of radioactive material under normal, off-normal, and credible accident conditions." 10 C.F.R. § 72.236(l).

In any event, earlier transfer of SNF into casks, even if allowable with the license limitations for the casks or by an amendment of those limitations, would not, as WRC apparently seeks, "hasten the point at which the VY Station could be fully remediatted and the site returned to an alternative productive use." That is because the spent-fuel pool would have to remain in operation at least until the SNF from the last fuel load from operation has cooled sufficiently to be transferred into casks (i.e., until the "minimum acceptable cooling time of the spent fuel prior to storage in the spent fuel storage cask" for this last fuel load under 10 C.F.R. § 72.236(a) has been met). Because transfer of SNF from previous fuel loads to casks would not shorten this minimum acceptable cooling time for the last fuel load, it would not advance the time when the spent-fuel pool could be decommissioned and dismantled.

Earlier transfer of SNF into casks during plant operation would also not provide any material financial benefit to the decommissioning fund. That is because the costs of SNF transfer to casks and storage during the decommissioning period will be recoverable from DOE as a result of its breach of its contract to take delivery of the VY Station's SNF. See A.DPS:EN.1-96.

Person Responsible for Response: L. Jager Smith, Jr.
Title: Legal Counsel for Entergy VY
Date: October 3, 2012
Q.WRC:EN.2-8: In the first round of discovery WRC asked Mr. Cloutier to "...explain in detail why TLG Services calculated projected property taxes for the period of SAFSTOR and DECON based on the assumption the property would be assessed as vacant land (EN-TLG-2, Section 3, page 20). Please explain why a large industrial plant occupying prime industrial land and employing dozens of workers will be taxed as "vacant land." Please provide a list of all other nuclear plants that have been taxed as vacant land through an extended period of SAFSTOR or decommissioning. Please provide a list of all other sites where spent nuclear fuel is stored that have been assessed and taxed as "vacant land." Mr. Cloutier stated "The tax assessment was provided by Entergy to TLG for use in the decommissioning estimates." (Please see WRC:EN.1-WC-26)

a) Please identify which person and/or corporate entity identified by Mr. Cloutier as "Entergy" provided the proposed tax assessment.

b) Please provide any and all documentation that supports categorizing a large industrial plant occupying prime industrial land and employing dozens of workers as "vacant land."

c) Please provide a list of all other sites that Entergy is aware of where spent nuclear fuel is stored that have been assessed and taxed as "vacant land."

A.WRC:EN.2-8:

a) The tax assessment was provided along with other corporate overhead information by Ms. Sidnette Turnage, Senior Staff Financial Analyst of Entergy Services, Inc.

b) No documentation was provided with the tax-assessment value.

c) TLG Services does not have any information on the tax basis for spent-fuel-storage sites.

Person Responsible for Response: William A. Cloutier, Jr.
Title: Manager, Decommissioning Services
Date: October 3, 2012
Q.WRC:EN.2-9: In the first round of discovery WRC asked about the disposal of legacy wastes, and why those costs were attributed to the decommissioning trust. Mr. Cloutier stated "...The disposal of legacy wastes (e.g., retired components in storage or other waste material specifically identified by the plant) can be included, if its disposition is not already funded by some other (than decommissioning) account. The items in the third bullet (Exhibit EN-TLG-2, Section 3, page 18, 3.5.4) were identified by Entergy VY for inclusion with the decommissioning waste stream." (Please see WRC:EN.1-WC-39)

a) Please identify exactly what the disposal costs will be for each of these items.

b) Please identify any other legacy wastes for which disposal costs will be shifted to the decommissioning trust, along with those costs.

c) To provide us with a better understanding of what costs might be deferred to decommissioning, and on what basis, please explain why legacy wastes that are available for permanent disposal while the Station is operating should be held on-site until the Station ceases operating, and disposal costs then charged to the decommissioning trust.

A.WRC:EN.2-9:

a) The cost to dispose of the items referenced in Exhibit EN-TLG-2, Section 3, page 18 (subsection 3.5.4), are identified in Appendices C, D and E as line items “Operational Waste” (resins), “Hazardous Waste” (small volumes of mixed waste solvents and battery acid) and “Retired Low Pressure Turbine Rotors.”

b) No other material and/or components were identified for inclusion as legacy waste (i.e., for disposal during decommissioning).

c) TLG does not have any information that would support the decision to defer the disposal of the turbine rotors. It is TLG’s understanding that resins can be stored for purposes of allowing the shorter-lived radionuclides to decay and that some of the hazardous-waste items (e.g., battery acid) will be in service up to the time of shutdown.

Person Responsible for Response: William A. Cloutier, Jr.
Title: Manager, Decommissioning Services
Date: October 3, 2012
Q.WRC:EN.2-10: In the first round of discovery WRC asked if Entergy was making a decommissioning commitment to remove all structures, regardless of depth. The Entergy response said, in part, "The MOU states that “the site will be restored by removal of all structures and, if appropriate, regrading and reseeding of the land.” The docket 6545 MOU does not include a requirement that Entergy VY remove all structures and foundations regardless of depth." (Please see WRC:EN.1-MT-11)

a) Please explain why Entergy is defining the term "all structures" as only those structures at and above three feet of depth.

b) Please explain Entergy’s definition of the term "removal" as applied to structures within the site.

c) Please describe in detail the process by which the decision to remove only structures at a depth of three feet or less was arrived at and how that complies with the straightforward MOU requirement to “remove all structures.”

d) Please provide any documents that support the Entergy contention that the language in the MOU requiring the removal of “all structures” means something other than the axiomatic definition agreed to by all Parties in docket 6545.

A.WRC:EN.2-10: OBJECTION. The request is objectionable in that it calls for a legal interpretation of the 2002 MOU.

Without waiving any objection, Entergy VY responds:

a) See A.WRC:EN.2-10c.

b) See A.WRC:EN.2-10c.

c) The Board’s order approving Entergy VY’s acquisition and operation of the VY Station and approving the 2002 MOU (except provisions not relevant here) relied upon the September 2001 decommissioning study prepared by TLG Services for Vermont Yankee Nuclear Power Corporation. Docket No. 6545, (6/13/2002) at 63. That study stated:

This cost study presumes that non-essential structures and site facilities will be dismantled as a continuation of the decommissioning activity. Foundations and exterior walls are removed to a nominal depth of three feet below grade. The three-foot depth allows for the placement of gravel for drainage, as well as topsoil, so that vegetation can be established for erosion control.

See Attachment A.WRC:EN.2-10d, at Section 2, Page 11 of 18. The Board’s Order does not take issue with that assumption or reflect any objection to that assumption by any party to the MOU or, for that matter, any other party in Docket No. 6545.
The assumption in TLG’s decommissioning study that structures would be removed to a depth three feet below grade is consistent with general industry practice prior to the time that the 2002 MOU was agreed to by the parties as well as the practice that was followed for the decommissioning and dismantlement of other nuclear plants in New England.


The DPS, one of the signatories to that MOU, has stated: “The Department recommends that site restoration include removal of all above ground structures and all below ground structures to a depth of at least three feet below grade....” Brief of the Vermont Department of Public Service, Docket No. 7440 (July 17, 2009) at 40. The DPS’s statement appears to confirm its understanding, as a party to the 2002 MOU, that the MOU only required Entergy VY to remove structures to a depth of three feet below grade.

Entergy VY notes that for the decommissioning and dismantlement of wind projects, the Board only requires the removal of concrete and other structures to a depth of not less than two feet below grade. See Docket No. 7508, Order of 12/9/2011 at 5; Docket No. 7628, Order of 5/31/2011, at 145.


Person Responsible for Response: T. Michael Twomey
Title: Vice President, Entergy VY
Date: October 3, 2012
Q.WRC:EN.2-11: In the first round of discovery WRC asked about the lifecycle GHG emissions, specifically as those GHG emissions relate to spent fuel management. Dr. Lester responded to the question, in part, by stating "...In the longer run, no GHG emissions can be attributed to dry storage of spent fuel, since cooling of the spent fuel at that point is accomplished by passive heat-removal mechanisms, with no associated energy requirements or imputed carbon-dioxide emissions." (Please see WRC:EN.1.RL-4)

a) Please identify the annual electrical and other energy needs of the Station and the ISFSI, including security lighting, after cessation of operations.

b) Please identify what the GHG effects will be for each year the Station remains in SAFSTOR, and for each year the spent nuclear fuel remains on site.

A.WRC:EN.2-11:

a) Electrical and other energy costs for the VY Station and the ISFSI for the various decommissioning phases are identified in Appendices C, D and E of Exhibit EN-TLG-2 as either line items "Plant energy budget" and/or "ISFSI Operating Costs."

b) Neither Entergy VY nor TLG has assessed the GHG impacts related to SAFSTOR dormancy and/or spent fuel management.

Person Responsible for Response: William A. Cloutier, Jr.
Title: Manager, Decommissioning Services
Date: October 3, 2012
Q.WRC:EN.2-12: In the first round of discovery WRC asked Mr. Cloutier to “...identify how many spent fuel assemblies will be in wet and dry storage at each point through 2082.” Entergy provided a charted projection of spent fuel assemblies after 2032 in response to WRC:EN.1-WC-18. Entergy provided a similar chart in docket 7440 on June 19, 2009 identified as “attachment 2,” titled “Entergy VY Draft Spent Fuel Loading Schedule.” That schedule projected the number of assemblies in wet and dry storage until 2032, and was updated by letter at least once on September 15, 2010.

a) Please provide a current projection of spent fuel assemblies in wet and dry storage through 2032.

b) Please provide at least two alternative densities as requested in WRC:EN.1-WC-21, and throughout docket 7440

c) Please identify what the effect on the decommissioning fund will be if the costs associated with moving fuel to achieve the alternative densities are treated as operating expenses rather than attributed to decommissioning.

A.WRC:EN.2-12: OBJECTION. The request seeks information concerning matters of plant operation and/or radiological safety subject to regulation by the NRC that, due to federal preemption, are not subject to regulation by the State of Vermont. A fuller description of the reasons and bases for this objection is contained in Entergy VY’s Motion for a Declaratory Ruling Prescribing Scope of Proceeding, filed June 21, 2012. Objection further to the extent this request requires preparation of an analysis that has not been performed by TLG or Entergy VY. Without waiving any objection, Entergy VY responds:

a) Please see the following tables for the projections relied upon for the decommissioning-cost estimates (with and without DOE pickup during plant operations).

**On-site Spent Fuel Inventories Assuming 2020 DOE Start Date**
*(end of year)*  

<table>
<thead>
<tr>
<th>Year</th>
<th>Pool</th>
<th>ISFSI</th>
<th>Accepted by DOE</th>
<th>Total</th>
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On-site Spent Fuel Inventories Assuming No DOE Pickup During Plant Operations (end of year)

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<thead>
<tr>
<th>Year</th>
<th>Pool</th>
<th>ISFSI</th>
<th>Accepted by DOE</th>
<th>Total</th>
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<tr>
<td>2015</td>
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<td>3,672</td>
<td>0</td>
<td>5,319</td>
</tr>
</tbody>
</table>

1,647 3,672 0 5,319
b) As stated in A.WRC:EN.1-WC-21, TLG has not prepared an analysis of alternative densities.

c) As stated in A.WRC:EN.1-WC-21: "Typically costs, such as moving spent fuel from the pool to the ISFSI during operations, are costs avoided during decommissioning."

Person Responsible for Response: William A. Cloutier, Jr.
Title: Manager, Decommissioning Services
Date: October 3, 2012
Q.WRC:EN.2-13: Discovery question NEC:EN.1-7(a) asks about replacement of the condenser. Entergy responded by stating "Entergy VY does not have a specific plan or schedule to replace or re-tube the main condenser at this time...A place-holder for this project has been included in the Vermont Yankee 15-year, long-term financial plan; however, neither the scope nor the funding has been approved at this time." When testifying in docket 7440 on May 26, 2009, Michael Colomb confirmed that the condenser would not be reliable through the projected 20-year CPG period, stating "Our ongoing monitor of the condition of the condenser tells us that it would not be reliable through the 20-year license extension period, therefore, we would have to replace it sometime in that period. That's currently slated for I believe 2013/2014 time frame." (see transcript page 115, line 16)

a) Please identify when the “placeholder” replacement of the condenser (as listed in NEC:EN.1-7) is now planned within the requested 20-year CPG period and 15-year long-term financial plan and what, if any, events contributed to delaying the replacement beyond Mr. Colomb’s stated estimate in Docket 7440.

A.WRC:EN.2-13: OBJECTION. The request seeks information concerning matters of plant operation and/or radiological safety subject to regulation by the NRC that, due to federal preemption, are not subject to regulation by the State of Vermont. A fuller description of the reasons and bases for this objection is contained in Entergy VY’s Motion for a Declaratory Ruling Prescribing Scope of Proceeding, filed June 21, 2012. Without waiving any objection, Entergy VY responds:

Mr. Colomb responded in May 2009 based on the expectation that the VY Station would receive an amended CPG in the near future. Without CPG approval, Entergy VY evaluated alternate approaches to maintain condenser reliability and condenser-tube integrity for an interim period. Entergy VY’s search revealed an EPRI-recommended process for thin-coating heat-exchanger tubes that is being used in the industry to extend condenser-tube life. Entergy VY applied this coating process to the tubes in the north condenser during the Fall 2011 refueling outage.

a) Entergy VY plans to use the interim solution until the CPG is approved, and the main condenser refurbishment work can be appropriately scheduled and executed.

Person Responsible for Response: George Thomas
Title: Senior Project Manager
Date: September 21, 2012
Q.WRC:EN.2-14: Attachment CLF:EN.1-21 is a copy of the spent fuel contract between Vermont Yankee Nuclear Power Corporation (VYNPC) and the Department of Energy (DOE). Page 65 of this attachment is a notification of assignment filed by VYNPC, and page 66 is confirmation of that assignment filed by Entergy Nuclear Northeast/Entergy Nuclear Vermont Yankee. Both the assignment and confirmation list ENO as the agent for ENVY, and the initial assignment letter states that “...upon assignment of the Contract, the Contract will bind and inure to the benefit of ENO.”

a. Please provide any additional correspondence between DOE and ENO, ENVY, or VYNPC that qualifies, confirms, or otherwise affects the terms of the assignment or the terms of the Contract.

b. Please identify the terms of the agent agreement between ENVY and ENO.

c. Please provide a copy of any and all contracts or agreements between ENVY and ENO that describe or define the relationship and the responsibilities of ENO as the spent fuel agent for ENVY.

A.WRC:EN.2-14: OBJECTION. The request seeks information concerning matters of plant operation and/or radiological safety subject to regulation by the NRC that, due to federal preemption, are not subject to regulation by the State of Vermont. A fuller description of the reasons and bases for this objection is contained in Entergy VY’s Motion for a Declaratory Ruling Prescribing Scope of Proceeding, filed June 21, 2012. Objection further to the extent the request in Q.WRC:EN.2-14b to “identify the terms of the agent agreement” is ambiguous. Entergy VY also objects to the extent that it is unduly burdensome for it to identify and produce the filings in the company’s DOE litigation. Without waiving any objection, Entergy VY responds:

a) DOE was neither required to respond, nor in fact responded, to the notification of assignment of the SNF Standard Contract from Vermont Yankee Nuclear Power Corporation to Entergy Nuclear Vermont Yankee, LLC. Entergy VY and representatives of DOE exchanged various filings concerning that assignment in Entergy VY’s suit to recover SNF-storage costs from DOE. The U.S. Court of Federal Claims and the U.S. Court of Appeals for the Federal Circuit upheld the validity of the assignment and rejected the challenges to the assignment raised by DOE in its filings. *Entergy Nuclear Vermont Yankee, LLC v. United States*, 95 Fed. Cl. 160 (2010), *aff'd in part and rev'd in part*, 683 F. 3d 1330 (Fed. Cir. 2012). (The decisions may be found at www.uscfc.uscourts.gov/sites/default/files/WHEELERVYankee101906.pdf and www.cafc.uscourts.gov/images/stories/opinions-orders/11-5033-5034-5042.pdf.) Additional evidence of DOE’s continuing acceptance of payment from ENVY and corresponding acceptance of responsibility for taking delivery of SNF pursuant to the assigned Standard Contract was provided in A.CLF:EN.1-22.
b) See A.WRC:EN.2-14c. Entergy VY does not understand what it means to “identify the terms” of an agreement that it is being asked to produce; the terms of the agreement are evident from the agreement itself.

c) See Attachment A.WRC:EN.2-14c (Operating Agreement between ENVY and ENO).

Person Responsible for Response:  L. Jager Smith, Jr; T. Michael Twomey
Title:  Legal Counsel for Entergy VY; Vice President, Entergy VY
Date:  October 3, 2012
Q.WRC:EN.2-15: Discovery question CLF:EN.1-61 asks if the estimated costs of decommissioning stated in EN-TLG-2 include costs to remediate ground water contamination “that might occur” at the VY station. Mr. Cloutier responded by stating “No, TLG has not conducted such a study.”

a) Do the estimated expenses stated in EN-TLG-2 include site specific costs to remediate tritium contamination that is known to have occurred, as listed in answer ANR:EN.1-16 and attachment ANR:EN.1-16.1?

b) Do the estimated expenses stated in EN-TLG-2 include site specific costs to remediate contamination other than tritium that is known to have occurred? Please list any and all such contamination or if there are none please so state.

c) Please list all releases of radionuclides or non-radiological chemicals, other than tritium, that you are aware of.

A.WRC:EN.2-15:

a) No.

b) Yes, the estimates in Exhibit EN-TLG-2 include an allowance for the remediation of potentially contaminated soil. The costs are identified in Appendices C, D and E as line item “Soil Remediation.” The allowance was based upon known areas of concern as identified in Attachment A.WRC:EN.2-15c (Site Contamination Matrix), and a percentage of the soil excavated (as an allowance) during the removal of underground piping and utilities.

c) The areas impacted by releases and the major radionuclide constituents are identified in Attachment A.WRC:EN.2-15c (Site Contamination Matrix).

Person Responsible for Response: William A. Cloutier, Jr.
Title: Manager, Decommissioning Services
Date: October 3, 2012
As to objections where responsive information was provided over stated objections:

DATED at St. Johnsbury, Vermont, this 3rd day of October, 2012.

Respectfully submitted,
ENTERGY NUCLEAR VERMONT
YANKEE, LLC, AND ENTERGY
NUCLEAR OPERATIONS, INC.

By their attorneys

[Signature]

DOWNNS RACHLIN MARTIN PLLC
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Nancy S. Malmquist
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