

DRAFT DRAFT DRAFT

Nuclear Decommissioning Citizens Advisory Panel
DRAFT Advisory Opinion for Discussion at 11.12.15 NDCAP Meeting
Submitted on 10.15.15

A Second Independent Spent Fuel Storage Installation Storage Pad Should Be Constructed in the Location Proposed by Entergy Vermont Yankee in Public Service Board Docket No. 8300

BACKGROUND:

Currently, the Vermont Public Service Board has before it an open docket for the approval of an expanded Independent Spent Fuel Storage Installation (ISFSI) at the VY station. The proposal before the Board is for a second ISFSI pad to be constructed 30 feet to the west of the existing ISFSI.

It is widely acknowledged that dry fuel storage is an acceptable alternative to wet storage, and no parties to that docket oppose the ISFSI construction.

Consistent with the above, ENVY's Site Assessment Study (SAS), prepared in October 2014 as part of the settlement agreement negotiated with State agencies, stated that

“...we believe that moving all of the VYNPS spent nuclear fuel into robust dry fuel storage containers on a seismically-hardened Independent Spent Fuel Storage Installation (ISFSI) in the short term is in the best interest of all parties, and that will be our primary focus over the next several years.” (SAS, October 2014, page 1)

ENVY's decommissioning and spent fuel management plans assume the eventual acceptance of VY's spent nuclear fuel by the US Department of Energy (DOE) for final disposal at a yet to be licensed permanent federal repository, pursuant to DOE's contractual obligations to ENVY. The DOE has been in breach of its contractual obligations since January 1, 1998.

ENVY and State agency plans are based in part on the assumption that the DOE will remove spent fuel on a schedule consistent with the agency's current strategy for managing the nation's spent nuclear fuel, as stated in DOE's Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste (<http://www.energy.gov/sites/prod/files/Strategy%20for%20the%20Management%20and%20Disposal%20of%20Used%20Nuclear%20Fuel%20and%20High%20Level%20Radioactive%20Waste.pdf>) In this regard the SAS states that

“...ENVY assumes the [US Department of Energy] DOE will start transferring spent fuel from the site beginning in 2026 and will complete removal of all fuel from VYNPS in 2052.” (SAS, October 2014, page 24)

It should also be noted that the Blue Ribbon Commission on America's Nuclear Future recommends the development of Consolidated Interim Storage facilities that would give priority to the acceptance of spent fuel from permanently shutdown sites, and that two organizations have now submitted letters of intent to the U.S. Nuclear Regulatory Commission (NRC) to submit license applications to construct and operate two such storage facilities.

Costs for the construction of the second ISFSI pad, procurement of dry storage systems and transfer of the fuel from the spent fuel pool to the ISFSI will be funded by two revolving credit facilities totaling approximately \$145 million. ENVY plans to repay borrowings on these credit facilities with funds recovered from the DOE for breach of its contract to remove spent nuclear fuel from the VY Station.

ENVY considered several alternative locations for a second ISFSI elsewhere on the VY Station site, including making that second ISFSI a single consolidated storage site for all of VY's spent nuclear fuel (including the fuel now stored on the existing ISFSI pad). However, each of the other potential locations that were evaluated has distinct disadvantages, as compared to the current proposed location. As described in ENVY's pre-filed witness testimony in Docket No. 8300, those disadvantages include increased radiation dose to members of the public and additional aesthetic impacts to neighboring residential properties. In addition, constructing an ISFSI at another location on the VY Station site would significantly delay the transfer of spent fuel from the spent fuel pool to dry cask storage.

[NOTE TO PANEL: The original draft advisory opinion reflects the statements and opinions expressed in the Docket No. 8300 testimony submitted on behalf of the Windham Regional Planning Commission. If ENVY is not able to complete construction of the second ISFSI storage pad before the end of 2017, the dry-cask loading campaign may be delayed. Based on ENVY's current Decommissioning Cost Estimate, there would likely be a significant financial impact if completion of the transfer of all fuel into dry storage was delayed beyond 2020, because ENVY would be unable to reduce or eliminate certain costs associated with continued spent fuel pool operations. ENVY expects that these costs would be paid out of the plant's nuclear decommissioning trust fund, delaying the time when major decommissioning activities could begin.]

SUGGESTED RECOMMENDATION:

In light of the above considerations, the Vermont Nuclear Decommissioning Citizens Advisory Panel recommends that the Public Service Board approve the construction of a second ISFSI storage pad, as proposed by ENVY in its petition for a certificate of public good in Docket No. 8300.