

DRAFT B – Advisory Opinion on second ISFSI at VY Site
For discussion at 2.25.16 NDCAP Meeting

Nuclear Decommissioning Citizens Advisory Panel
Advisory Opinion

A Second Independent Spent Fuel Storage Installation Storage Pad Should Be Constructed in the Location Currently Proposed by Entergy Vermont Yankee

BACKGROUND:

Entergy Nuclear Vermont Yankee (ENVY) has proposed an expanded Independent Spent Fuel Storage Installation (ISFSI) at the VY station. This proposal is for a second ISFSI pad to be constructed 30 feet to the west of the existing ISFSI beginning in mid-2016 to facilitate the completion of the transfer of all fuel from the spent fuel pool to the ISFSI by the end of 2020. In December 2015, ENVY announced plans to accelerate the initiation of the fuel transfer process by two years, beginning in 2017.

The Nuclear Decommissioning Citizens Advisory Panel acknowledges that dry fuel storage is an acceptable alternative to wet storage and supports ENVY's plans to transfer all spent fuel to the ISFSI by the end of 2020.

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 has committed to fund the construction of the second ISFSI pad as designed, procurement of dry storage systems and transfer of the fuel from the spent fuel pool to the ISFSI totaling approximately \$145 million from external credit lines, rather than from the Nuclear Decommissioning Trust Fund.

ENVY states that it 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. In its pre-filed witness testimony in PSB Docket No. 8300, ENVY states those disadvantages include the potential for increased radiation dose to members of

the public and additional aesthetic impacts to neighboring residential properties. In addition, ENVY notes that 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 beyond 2020.

On January 29, 2016, the U.S. Nuclear Regulatory Commission (NRC) issued a letter documenting its review of the Post Shutdown Decommissioning Activities Report (PSDAR) and Decommissioning Cost Estimate (DCE) submitted by ENVY. The PSDAR and DCE provided estimated dates for the initiation and completion of major decommissioning activities, including Preparations for Dormancy, Dormancy, Preparations for Decommissioning, Decommissioning, and Site Restoration. These estimated dates were based on various planning assumptions, including assumed dates concerning the removal of spent fuel from the Vermont Yankee site by the U.S. Department of Energy (DOE). After conducting a comprehensive review of the PSDAR and DCE, the NRC staff found, among other things, that: (1) ENVY had adequately described the activities associated with the major decommissioning periods; (2) ENVY's schedule for decommissioning activities is adequate to achieve VY license termination within 60 years of permanent cessation of operations, as required by NRC regulations; and (3) ENVY's DCE was reasonable.

NDCAP is concerned with site restoration, including the timing thereof, a process which will begin after radiological decommissioning is completed and, as described in ENVY's PSDAR, is considered the last phase in the sequence of the overall decommissioning process. The impact of the proposed ISFSI pad on the eventual reuse of the Vermont Yankee site is an issue that is currently being considered and will be addressed by the PSB in Docket No. 8300. Additionally, restoration of the entire Vermont Yankee site cannot be completed until all used fuel is removed by the US DOE. Therefore it is imperative that, separate from other actions, Congress acts to find a solution for the timely removal of used fuel from Vermont Yankee.

RECOMMENDATION:

The Vermont Nuclear Decommissioning Citizens Advisory Panel recommends approval of the construction of a second ISFSI storage pad in the location as proposed by ENVY in its petition for a certificate of public good in Docket No. 8300 to ensure the timely, cost-effective transfer of fuel from wet to dry storage starting in 2017 and completion by the end of 2020, provided that relevant regulatory bodies obtain reliable assurances that:

1. The existence of the Dry Fuel Storage (DFS) casks in the proposed location will not unduly delay the commencement of site restoration,

2. Any site restoration activities that can be conducted while the DFS casks remain in their current and proposed locations will be borne by the Site Restoration Fund and if required supplemented by the owner of the property, and
3. **The presence of Dry Fuel Storage (DFS) casks in the proposed location will not inhibit demolition or restrict the methodologies available for demolishing the Reactor Building and/or structures adjacent to the stored spent fuel such that site restoration will be unduly delayed beyond the schedule provided in the Vermont Yankee PSDAR. Under NRC regulations, in the event the presence of the DFS casks will cause an undue delay in the demolition of the Reactor Building and/or structures, ENVY, or any subsequent owner of the property, will be required to update the PSDAR and DCE as well, if there are resulting significant increases in costs. ENVY or any subsequent owner of the property will be responsible for providing any additional funds needed to maintain the site consistent with applicable regulations in effect at the time, including, for example, funds or damages recovered from the U.S. Department of Energy.**

Furthermore, because full site restoration cannot be completed until the removal of the used fuel from the site, NDCAP further recommends that Vermont Congressional delegation take immediate legislative actions that will facilitate DOE acceptance and removal of spent fuel from Vermont Yankee and the State of Vermont, as expeditiously as possible.

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