Vermont House and Senate Natural Resources and Energy Committees

Vermont Yankee Decommissioning Update

February 11, 2015
VY Current Plant Status

- Vermont Yankee (VY) ceased power operations on December 29, 2014 after 633 days of continuous power operation – a record for the VY site.

- On January 12, 2015, all nuclear fuel removed from the reactor and placed in the Spent Fuel Pool (SFP).

- VY certified to the NRC that the reactor was defueled and confirmed its intention to permanently cease operations.

- VY exited the NRC Reactor Oversight Process (ROP) and commenced the decommissioning inspection program on January 20, 2015.

- The focus of VY and its employees continues to be their ongoing commitment to safety.
Significant Milestones Since the August 2013 Announcement

- Negotiated a Settlement Agreement with the State benefitting both parties, including:
  - $25M Site Restoration Fund
  - $5M+ Clean Energy Development Fund
  - $10M Economic Development Fund
  - Commitment to begin major decommissioning work after Nuclear Decommissioning Trust is adequately funded


- Meetings among Vermont Agency for Natural Resources (VANR), Department of Health (DOH), and VY technical staff to discuss current site conditions and future plans.
Significant Milestones Since the August 2013 Announcement (cont’d)

- Issued Site Assessment Study (SAS) on October 17, 2014, which included:
  - Decommissioning Cost Estimate (DCE)
  - Draft PSDAR
  - Historical Site Assessments (Radiological & Non-Radiological)

- Post-Shutdown Decommissioning Activities Report (PSDAR) Submitted to NRC on December 19, 2014.

- Withdrawals from the Nuclear Decommissioning Trust (NDT) Commenced in February 2015.

- Post-Shutdown Emergency Plan (E-Plan) License Amendment Request (LAR) Approved by NRC on February 4, 2015.
Commitment to Vermont Yankee Employees

- Consistent and unwavering commitment to employees since shutdown announcement.

- Staffing reductions will occur at key milestones during transition to SAFSTOR based upon safe, secure, and regulatory compliant post-shutdown operations.

- Workforce reduced by 186 (89 employees from VT, 69 from NH, 28 from MA) on January 19, 2015 to support the current SAFSTOR organization and Emergency Response Organization (ERO).
  - 67 employees transferred within Entergy
  - 119 employees either left Entergy or were retirement eligible

- Entergy provided retention, severance, and relocation benefits
# Staffing Transition to Decommissioning

<table>
<thead>
<tr>
<th>Operation</th>
<th>Dormancy Preparation</th>
<th>SAFSTOR</th>
</tr>
</thead>
</table>

## Organizations

**Site Operation**
- Operation Safety
- ~550 Personnel

**Decom Planning**

**Wet Fuel (Hot) Management**
- ~316 Personnel

**Wet Fuel (Cool) Management**
- ~127 Personnel

**Dry Fuel Management**
- ~58 Personnel

**1st ISFSI Pad Full; 2nd Pad Needed**
Current Spent Fuel Pool Storage

- The Spent Fuel Pool currently stores the majority of fuel used at VY.

- Thirteen (13) Dry Cask Storage Casks are safely loaded and stored on the first of two planned ISFSI pads.

- An application for a second ISFSI pad has been submitted to the Public Service Board (PSB) seeking a Certificate of Public Good (CPG).

- A total of fifty-eight (58) Dry Cask Storage Casks will house 3,880 spent fuel assemblies on the two pads.

- Current plan is to transfer all spent fuel to Dry Cask Storage by late 2020.
Independent Spent Fuel Storage Installation (ISFSI)
Focused on Safe Transition to Dry Fuel and Dormancy

- Continued Compliance with the Settlement Agreement/MOU
- Decommissioning Preparation Activities
  - System Draining/Lay-Up
  - Building Power Removal to “Cold and Dark”
  - Security Modifications
- Select Structure/Building Removal
- Ongoing Environmental Monitoring
- Establishment of Site Restoration Standards with the State of Vermont
- Completion of Second ISFSI Pad and Transfer of Spent Fuel from Pool to Pad
Groundwater Strontium 90 Laboratory Data – Vermont DOH and NRC/ORISE

\[ \text{pCi/L}^* \]

* \text{pCi/L} \text{ – picocuries per liter}

pico = one trillionth

EPA Limit

NRC LLD