STATE OF VERMONT
PUBLIC SERVICE BOARD

Petition of Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc., For a Certificate of Public Good Pursuant to 30 V.S.A. § 248 and 10 V.S.A. § 6522 to Construct a Second Independent Spent Fuel Storage Installation (“ISFSI”) at the Vermont Yankee Nuclear Power Station

PSB Docket No. 8300

SUPPLEMENTAL PREFILED TESTIMONY AND EXHIBITS OF JOHN GOODELL
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Q1. Please state your name and occupation.
A1. My name is John Goodell. I am a civil engineer with the firm of SVE Associates (SVE).

Q2. Are you the same John Goodell that submitted prefiled testimony in this matter on June 30, 2014.
A2. Yes, I am.

Q3. What is the purpose of your testimony?
A3. The purpose of my supplemental testimony is to update the plans for the second Independent Spent Fuel Storage Installation (or “ISFSI”) storage pad project (the “Second ISFSI” or the “Project”) to account for changes to the Project since the Petition was filed on June 30, 2014.

Q4. Are you providing any exhibits with your testimony?
A4. Yes. First, I am providing three updated site plans. The first plan, which I sponsor as Exhibit EN-JG-7, shows the proposed Second ISFSI storage pad and related improvements in detail. The second plan, which I sponsor as Exhibit EN-JG-8, shows the location of the Second ISFSI storage pad, the 200 kW diesel generator and the barrier wall in relation to the entire site. The third plan, which I sponsor as Exhibit EN-JG-9 (sheets E1 and E2), shows the revised generator location on the Erosion Control Site Plan and adds a requirement for the work to be completed in accordance with the Vermont Low Risk Site Handbook for Erosion Prevention and Sediment Control. In addition to the revised plans I am also providing a copy of the revised Notice of Intent (NOI) form for the Vermont Individual Stormwater Permit Application which reflects the changes in impervious area for the new generator layout. I sponsor the revised NOI form as Exhibit EN-JG-10.

Q5. Aside from the alterations to the 200 kW diesel generation and addition of the barrier wall, have you made any other changes to the site plans?

A5. I have not made any other changes to the Second ISFSI storage pad site plan, Exhibit EN-JG-7. However, I have updated the site conditions represented in the locational site plan, Exhibit EN-JG-8. Several buildings or structures have been removed from the site following its permanent cessation of operations in December 2014. The locational site plan, Exhibit EN-JG-8, depicts the site conditions as of April 9, 2015.
Q6. Has the Erosion Control Plan been changed as a result of the Project changes?
A6. Yes. The revised generator location and barrier increase the total ground disturbance for
the project to 1.07 acres. Under the National Pollutant Discharge Elimination System
(NPDES), construction sites with greater than 1 acre of ground disturbance are required
to obtain a permit for stormwater runoff. Entergy Nuclear Vermont Yankee is currently in
the process of obtaining permit coverage under the Vermont Construction General Permit
3-9020. A specific requirement for the work to be completed in accordance with the
Vermont Low Risk Site Handbook for Erosion Prevention and Sediment Control has been
added to the Erosion Control Plan to reflect the requirements of the Vermont
Construction General Permit 3-9020 for low risk sites.

Q7. Does the Vermont Individual Stormwater Permit application submitted for the Project
need to be revised to account for the changes to the 200 kW diesel generator and addition
of the barrier wall?
A7. Yes. The revised generator location and barrier increase the amount of new impervious
surface added by the project to the VY Site from 4,500 square feet to 5,350 square feet.
Entergy Nuclear Vermont Yankee is in the process of revising the VT Operational
Stormwater Permit application to reflect this minor change.

Q8. Does the addition of the barrier wall to the Project plans require any additional truck
trips?
A8. Yes. Construction of the barrier system for the generator is expected to increase the number of truck visits for the Project from 420 to 450 truck visits (for an increase in truck trips from 840 to 900).

Q9. Does the addition of 60 truck trips affect your previous conclusion that the Project will not cause unusual congestion or unsafe conditions with respect to transportation?

A9. No. As before, the level of traffic associated with this Project is well below that seen during previous refueling outages and other projects at the Vermont Yankee Station. No special traffic requirements are necessary other than local traffic management around the construction site.

Q10. Do you have any other updates to make to your testimony at this time?

A10. No, not at this time.
CONSTRUCTION SEQUENCE

6. Complete final grading of site, place topsoil and permanently vegetate, landscape and mulch.

7. Prior to the work, silt fences and construction fencing shall be installed as shown on plans.

8. Crushed Gravel or Stone shall be removed before fertilizing, seeding and mulching. Winter Rye seeds shall be mulched whether final grading has been completed. On any exposed earth covered with snow, the snow shall be raked away to expose soil prior to seeding, fertilizing and mulching. All disturbed areas of the site shall be seeded and mulched by October 15, regardless of whether final grading has been completed. On any exposed earth covered with snow, the snow shall be raked away to expose soil prior to seeding, fertilizing and mulching.

9. Stone Check Dam shall be removed before fertilizing, seeding and mulching. Winter Rye seeds shall be mulched whether final grading has been completed.

10. Final grading shall be completed as shown on the erosion control plan. Silt fence shall be removed as they accumulate and placed in areas where further erosion is unlikely.

11. Temporary stone & block inlets shall be removed before final grading and placed in areas where further erosion is unlikely.

12. Stone check dam shall be in place by October 15.

SPECIAL REQUIREMENTS FOR LATE SEASON/WINTER EROSION CONTROL

(October 15 to May 1)

1. All disturbed areas shall be protected by a temporary erosion control blanket as shown on the erosion control plan.

2. All disturbed areas shall be protected by a temporary erosion control blanket as shown on the erosion control plan.

3. Crushed Gravel or Stone shall be removed before fertilizing, seeding and mulching. Winter Rye seeds shall be mulched whether final grading has been completed.

4. Stone Check Dam shall be removed before fertilizing, seeding and mulching. Winter Rye seeds shall be mulched whether final grading has been completed.

5. Stone check dam shall be in place by October 15.

6. All disturbed areas shall be protected by a temporary erosion control blanket as shown on the erosion control plan.

FERTILIZING, SEEDING, AND MULCHING

7. All disturbed areas shall be fertilized, seeded and mulched as required for erosion control.

8. Crushed Gravel or Stone shall be removed before fertilizing, seeding and mulching. Winter Rye seeds shall be mulched whether final grading has been completed.

9. Stone Check Dam shall be removed before fertilizing, seeding and mulching. Winter Rye seeds shall be mulched whether final grading has been completed.

10. Stone check dam shall be in place by October 15.

11. All disturbed areas shall be protected by a temporary erosion control blanket as shown on the erosion control plan.

EROSION CONTROL BLANKET

12. All disturbed areas shall be protected by a temporary erosion control blanket as shown on the erosion control plan.

13. Crushed Gravel or Stone shall be removed before fertilizing, seeding and mulching. Winter Rye seeds shall be mulched whether final grading has been completed.

14. Stone Check Dam shall be removed before fertilizing, seeding and mulching. Winter Rye seeds shall be mulched whether final grading has been completed.

15. Stone check dam shall be in place by October 15.

16. All disturbed areas shall be protected by a temporary erosion control blanket as shown on the erosion control plan.

SPECIAL REQUIREMENTS FOR LATE SEASON/WINTER EROSION CONTROL

(October 15 to May 1)

1. All disturbed areas shall be protected by a temporary erosion control blanket as shown on the erosion control plan.

2. All disturbed areas shall be protected by a temporary erosion control blanket as shown on the erosion control plan.

3. Crushed Gravel or Stone shall be removed before fertilizing, seeding and mulching. Winter Rye seeds shall be mulched whether final grading has been completed.

4. Stone Check Dam shall be removed before fertilizing, seeding and mulching. Winter Rye seeds shall be mulched whether final grading has been completed.

5. Stone check dam shall be in place by October 15.
INDIVIDUAL STORMWATER DISCHARGE PERMIT APPLICATION

1. Applicant Name(s): **Entergy Nuclear Vermont Yankee, LLC**
2. Is this NOI being submitted in connection with a subdivision? ☐ Yes ☒ No
3. Address of Applicant(s): **320 Governor Hunt Road
   Vernon, VT 05354**
4. Telephone Number: **802-258-5526**
5. Fax: **802-258-5525**
6. E-mail: **ldewald@entergy.com**
7. Project Name: **Entergy VY Second Dry Fuel Storage Pad**
8. Project Location Address: **320 Governor Hunt Road**

9. Project Location Coordinates (center of project): Latitude: 42°46'47.05"
    Longitude: 072°30'50.08"
10. Act 250 Permit Number (if applicable): **N/A**
11. Existing Stormwater Permit Number related to this project (if any): **4213-9015**
12. Number of discharge points for the project: **1**
13. Receiving Water(s): **Connecticut River**

14. If your project will discharge to a stormwater impaired water you will need to provide a sediment off-set for your project. Please contact the stormwater program to discuss this requirement.

15. Have or will you be submitting an application for coverage under a construction discharge permit also? ☒ Yes ☐ No ☐ Not Applicable

16. The following items must be included in your application materials for your application to be considered complete. Be certain to use the most up-to-date forms by downloading them directly from our webpage. Submitted applications using out-of-date forms may be rejected.

   ☐ Narrative
   - Provide the information requested on the “Application Narrative Instructions”

   ☐ Schedule A(s) and Standard Treatment Practices (STPs)/Credit worksheets
   - Complete and attach a copy of Schedule A for each discharge point from the project.
   - Complete and attach STP/Credit/Waiver worksheets for each STP/Credit/Waiver listed on the Schedule A for each discharge point, as well as any necessary WQx/Re. calculation sheets.

   ☐ Maps/Site Plans (11” x 17” preferred, all maps must have legend, scale bar and north arrow)

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1 If the applicant is a business, the business must be registered with the Secretary of State.

2 Includes, but is not limited to, residential or commercial subdivisions, condominiums or industrial parks.
- Topographic map showing the location of the site, points of discharge, discharge points and receiving water(s).
- Soils map (with HSGs), overlaid with site outline.
- If existing impervious/stormwater treatment systems are present, include a site plan of existing conditions.
- Proposed conditions site plan, with existing impervious, redeveloped impervious and new (expanded) impervious clearly identified in the legend, labeled discharge points, and labeled locations of STPs or Credits.
- A detail sheet containing all applicable STPs for your project and demonstrating adherence to the design criteria for the STPs.
- Credit design detail sheet ("typical") when and where credits requiring specific design criteria will be used to meet standards.

- Runoff Modeling (where applicable)
  - Pre-development/existing conditions sub-watershed delineations with labels and labeled points of interest/discharge points, overlaid over existing site plan with contours.
  - Pre-development/existing conditions model schematic.
  - Post-development/proposed conditions sub-watershed delineations with labels and labeled study points/discharge points, overlaid over proposed site plan with contours.
  - Post-development/proposed conditions model schematic.
  - Sub-watershed information (area and curve number assignment) for pre and post scenarios.
  - Time of concentration calculations for pre and post scenarios.
  - Runoff calculations for each element in the model.
  - Calculation time span adjusted to include entire volume of runoff.
  - Modified CN calculations if Water Quality (< 0.9") storm was modeled.

- Additional Supporting Information
  - Any information/calculations required by STP/Credit/Waiver worksheets

17. Include a check for the appropriate permit fees:

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative processing fee ($120.00)</td>
<td>$120.00</td>
</tr>
<tr>
<td>Application review fee ($430 x 0.49 impervious acre²)</td>
<td>$210.70</td>
</tr>
</tbody>
</table>

Total Permit Fees (Check= 89299): $340.00

The minimum fee total is $340.00.

Date of application: June 23, 2014
18. DESIGNER CERTIFICATION: I hereby certify that the design-related information submitted with this application for coverage under General Permit 3-9015 was prepared under my direction or supervision and that the information is, in the exercise of my reasonable professional judgment, true, accurate and complete. I also hereby certify that the stormwater collection, treatment and control system design submitted with this application complies with DEC's Stormwater Management Rule and the Vermont Stormwater Management Manual.

SVE Associates - John E. Goodell, P.E.
Print or Type Name

19. OWNER / OPERATOR CERTIFICATION: I hereby certify that I have read General Permit 3-9015 and agree to abide by its terms.

Christopher Wamser
Print or Type Name

Note: Submission of a Notice of Intent does not confer coverage under General Permit 3-9015. A permit must be deemed technically complete and the applicant must receive a signed authorization to discharge before the discharge of regulated stormwater from impervious surfaces requiring coverage is authorized.