Entergy Nuclear

Review of New and Significant Information

Vermont Yankee Nuclear Power Station

TABLE OF CONTENTS

1.0 Introduction

Entergy did not identify any new and significant information for environmental issues listed in 10 CFR Part 51, Subpart A, Appendix B, Table B-1, during the preparation of the Vermont Yankee Nuclear Power Station (VYNPS) Environmental Report (ER). Entergy considers its' existing in-house process for reviewing and evaluating environmental issues adequate in identifying new and significant information. This process ensured that new and significant environmental information related to renewal of the VYNPS license was identified, reviewed and addressed as appropriate.

2.0 Existing Environmental Review Process

Entergy has an ongoing assessment process for identifying and evaluating new and significant information that may affect programs at the Entergy Nuclear (EN) sites, including those related to license renewal matters. This process is directed by the EN nuclear corporate support group responsible for environmental matters, with assistance from Environmental Focus Group members composed of technical personnel from the Entergy Nuclear Northeast (ENN) and Entergy Nuclear South (ENS) sites. A summary of this process is as follows:

- Issues relative to environmental matters are identified as follows:
  - Participation in industry utility groups (i.e., EEI, EPRI, NEI & USWAG). Attachment 1 provides of a list of those industry groups.
  - Participation in non-utility groups (i.e., Institute of Hazardous Materials Management & National Registry of Environmental Professionals).
  - Routine interface with regulatory agencies and other Entergy business units (Fossil, Transmission and Distribution).
  - Routine reviews of proposed regulatory changes. Attachment 2 provides a list of regulatory agencies monitored.
  - Review of changes to plant system processes, procedures or plant equipment evaluated by Nuclear Management Manual Procedures EN-LI-100 (Process Applicability Determinations), EN-LI-101 (10CFR50.59 Review Program) and EN-EV-115 (Environmental Reviews and Evaluations).
  - Entergy Nuclear Environmental Focus Group meetings.
- Environmental issues are then reviewed and evaluated initially for potential applicability and impacts by the Entergy Nuclear corporate support group. If the issue is applicable to Entergy, it is then evaluated further by the Environmental Focus Group that consist of technical personnel involved in environmental compliance, environmental monitoring, environmental planning, and natural resource management

issues. For those issues applicable, changes are made to the program and implemented in accordance with site and/or corporate procedures. For Entergy Nuclear, these changes are made by the site Chemistry groups and/or Environmental Focus Group members who has primary responsibility for ensuring compliance with environmental regulations and for enhancement of the systems related to environmental issues.

3.0 Review of Environmental Issues Prior to ER Submittal

As discussed above, Entergy's existing environmental review process is considered adequate to identify and capture new and significant information. However, additional reviews were conducted by Entergy Nuclear in order to ensure that any potential new and significant information was identified and included in the VYNPS Environmental Report. These measures are as follows:

4.0 Supplemental Environmental Impact Statement Reviews

Entergy reviewed Supplemental Environmental Impact Statement's (SEIS's) associated with other license renewal applications to determine if there were new and significant information identified for those plants that may be applicable to VYNPS. A list of the SEIS's reviewed is shown in Attachment 3. During review of the SEIS's, three issues (groundwater degradation, power uprate effects & radiation exposure during license renewal term) were identified by the NRC as potential new and significant information as shown below and were further analyzed in the SEIS. Entergy's response to these three specific issues is also discussed below. Entergy's review of other SEIS submittals identified no new and significant information.

1. Donald C. Cook Nuclear Plant, Units No. 1 & 2 (NUREG-1437 - Supplement 20)

There were two permitted locations where discharge occurs to groundwater. The Cook Nuclear Plant (CNP) facility is authorized to discharge a maximum of 2.4 million gallons per day of process wastewater and a maximum of 60,000 gallons per day of treated sanitary wastewater to two absorption ponds for process wastewater and two sewage lagoons for sanitary wastewater.

The turbine room sump accumulates process wastes from the secondary side. These wastes are neutralized, if necessary, and discharged to absorption ponds approximately 825 ft southeast of the plant. The larger of the two ponds is a 1.4-acre pond and the overflow pond is 0.7 acre, and is connected to the larger pond by a small stream. Discharge into the larger pond is sufficient to keep it full and overflowing to the overflow pond. The combined approximate capacity of the two ponds is 6 million gallons.

The sewage treatment plant discharges treated sanitary effluent to two sewage lagoons that are used alternately. The sewage lagoons are much smaller than the absorption ponds and are located above and immediately east of the absorption ponds. These two wastewater disposal systems use the natural soil column to provide treatment.

Discharges flow downward through the soil to the groundwater, which ultimately discharges into Lake Michigan. These permitted discharges have created a groundwater mound that has superimposed a radial flow pattern on the regional flow towards Lake Michigan. Five groundwater monitoring wells are specified in the permit for compliance monitoring. The groundwater monitoring program has shown that wastewater disposal has been in compliance with permit requirements and with national drinking water standards, although there has been an increase above background for total dissolved solids and sulfate.

Groundwater from the absorption ponds has migrated to the southern plant boundary, but has not exceeded primary drinking water standards. A restrictive covenant has been recorded in Berrien County to ensure that groundwater impacted by the seepage from the absorption ponds would not be withdrawn for any purpose from beneath approximately 207 acres in the southwestern portion of the CNP property. There are no operable groundwater production wells and there are no consumptive uses of groundwater at CNP.

Tritium has been detected periodically in groundwater at monitoring wells across the CNP site. However, the authorization to discharge to groundwater does not contain criteria for tritium, and no sample has exceeded the drinking water standard of 20,000 pCi/L.

On the basis of this information, the staff concludes that although the impacts to groundwater quality that would result from continued disposal of wastewater to onsite absorption ponds and sewage lagoons during the license renewal period are considered a new issue, they would be SMALL and, therefore, not significant. Further mitigation is not warranted.

Entergy's Response: Sanitary wastewaters at the VYNPS facility are discharged to septic fields regulated via Indirect Discharge Permit ID-9-0036-2 by the State of Vermont. VYNPS is in compliance with this Permit. As a condition of the Permit, several monitoring wells are placed around these fields and monitored for constituents outlined in the Permit. Chlorides have been detected in wells near roadways due to the use of rock salt during snowfall events and *e. coli* has recently been detected. Based on conversation with the State of Vermont, there are no concerns with these issues based on the dilution ratio of the river water since onsite groundwater movement is toward the river.

In conjunction with VYNPS's septic field system, solids are removed from the septic tanks and land applied to two onsite fields (north & south). This activity is regulated via VYNPS Solid Waste Management Facility Certification #F9906-A1. VYNPS is also in compliance with this Permit. These fields are equipped with monitoring wells and VYNPS is required to test the groundwater, waste, soil and plant tissue. Based on test results, there have been no issues associated with the groundwater or indication of contamination. Therefore, impacts to groundwater are SMALL and the GEIS conclusion remains valid.

In addition, VYNPS currently has monitoring wells around the house heating boiler to monitor the affects of an underground diesel fuel oil storage tank leak that occurred

several years ago. This tank has since been removed and replaced with a double-walled aboveground storage tank. The wells are monitored on a monthly basis to detect the presence of measurable free product. If free product is measured, then it is removed and managed appropriately. Wells without measurable free product are tested annually for VOC content. VYNPS submits an annual report to the VDEC describing the results of this monitoring program. There have been no concerns raised by the VDEC in regard to groundwater contamination from this event. In addition, groundwater movement to the river is inhibited (i.e., localized) since it is blocked by Turbine Building wall. Therefore, impacts to groundwater are SMALL and the GEIS conclusion remains valid.

2. Browns Ferry Nuclear Power Plant, Units 1, 2 & 3 (NUREG-1437 - Supplement 21)

The staff identified one potential area that required further analysis. Category 1 issues were established by the GEIS after a review of data from existing operating nuclear plants. The analysis established an envelope of impact for each of the Category 1 issues that were based on the impacts that were identified at nuclear power plants throughout the United States at the time the GEIS was prepared. TVA has applied for extended power uprate (EPU) for the three Brown Ferry Nuclear (BFN) units. These EPUs would eventually increase thermal power levels from the initially licensed levels of 3293 MW(t)/unit to 3952 MW(t)/unit. This represents a total power increase of 20 percent. Once the uprate has been achieved, BFN will have a combined total power level of 11,856 MW(t), and will become the largest nuclear power plant in the United States.

For this reason, the staff determined that there is a potential that, at the uprated power level, BFN may no longer be within the envelope of impacts defined by the GEIS, as amended, for some Category 1 issues. If the potential impacts are beyond the defined envelope, the generic conclusions concerning these Category 1 issues may no longer be valid, and the power uprate could therefore represent new and significant information regarding some of the Category 1 issues. Category 2 issues are not a concern in this regard because all applicable Category 2 issues are evaluated on a site-specific basis for each facility undergoing license renewal.

To address this concern, the staff examined each of the 54 Category 1 issues applicable to BFN and determined that 34 of the Category 1 issues could be influenced by the station thermal power level. The staff then evaluated each of the 34 issues to determine if increasing the unit power level above the levels considered during the development of the GEIS would affect the specific generic conclusions. After evaluating all 34 issues the staff determined that the generic conclusions reached in the GEIS are still valid and that no additional analysis or evaluation of these issues is necessary.

Entergy's Response: If power uprate is approved, the VYNPS thermal power level will increase from 1,593 MWt to 1,912 MWt (~20%). This increase in thermal power level is only for one unit and is a small percentage of the BFN levels [11,856 MW(t)] that was further analyzed by the NRC. In addition, environmental impacts from the VYNPS power uprate were evaluated during the Certificate of Public Good process and were found to be minimal. The NRC's analysis of the BFN thermal power level increase concluded that the

impacts were SMALL and that the conclusions in the GES still remain valid. Therefore, the proposed power uprate at VYNPS is within the envelope of impacts defined by the GEIS and no new and significant information exists.

3. Millstone Power Station, Units 2 & 3 (NUREG-1437 - Supplement 22)

Radiation exposure issues for the license renewal term are Category 1 issues. During the scoping process and the comment period on the draft SEIS, members of the public (1) expressed concern about the possible impacts on human health from exposure to radiation from Millstone's effluents and (2) cited a number of documents to support their concerns. The NRC Staff reviewed these documents as potential new and significant information regarding the Category 1 radiation exposure issues. Based on the review, the NRC concluded that the information provided during the scoping process and comment period on the draft SEIS was not new and significant with respect to the findings of the GEIS on the health effects to the public from radiological effluent releases due to Millstone operations.

Entergy's Response: The NRC concluded that no new and significant information exists for this issue. In addition, there is no indication that the conservative dose limits established by the NRC will not continue to be met by VYNPS during the license renewal term. Based on conversation with VYNPS Chemistry personnel (Steve Skibniowsky), calculated doses from gaseous radiological releases are well within the conservative limits established by the NRC and there are no liquid radiological releases at the facility. NRC dose limits are conservative and supported by the EPA and international agencies such as ICRP, United Nations Scientific Committee on the Effects of Ionizing Radiation and the European Commission on Radiation Protection. Therefore, Entergy agrees with NRC's conclusion regarding no new and significant information.

5.0 Regulatory Consultations

During preparation of the VYNPS ER, Entergy consulted with the state, county and federal agencies listed below. During these consultations, no new and significant information related to Category 1 issue findings arose or was identified by Entergy.

- Vermont Natural Resources Board
- Vermont Department of Fish and Wildlife
- Vermont State Historic Preservation Office
- Vermont Agency of Natural Resources
- Vermont Department of Environmental Conservation
- Vermont Department of Agriculture, Food & Markets

- Brattleboro Town Treasurer
- Vernon Town Treasurer
- U.S. Fish and Wildlife Service (Northeast Region)

6.0 Review of Category 1 Issues Not Applicable to VYNPS

A review was performed of the Category 1 environmental issues in regard to applicability to VYNPS. Entergy has determined that, of the 69 Category 1 issues, 10 do not apply to VYNPS because they apply to design or operational features that do not exist at the facility. In addition, because Entergy does not plan to conduct any refurbishment activities, the NRC findings for the 7 Category 1 issues that apply only to refurbishment do not apply. Category 1 issues not applicable to VYNPS are shown below.

Category 1 Issues Not Applicable to VYNPS		
Issue	**GEIS Section(s)**	**Comment**
SURFACE WATER QUALITY, HYDROLOGY AND USE (FOR ALL PLANTS)		
1. Impacts of refurbishment on surface water quality	3.4.1	No refurbishment activities planned.
2. Impacts of refurbishment on surface water use	3.4.1	No refurbishment activities planned.
3. Altered salinity gradients	4.2.1.2.2 & 4.4.2.2	VYNPS located on freshwater body.
4. Altered thermal stratification of lakes	4.2.1.2.3 & 4.4.2.2	VYNPS not located on a lake.
AQUATIC ECOLOGY (FOR ALL PLANTS)		
5. Refurbishment	3.5	No refurbishment activities planned.
GROUNDWATER USE AND QUALITY		
6. Impacts of refurbishment on groundwater use and quality	3.4.2	No refurbishment activities planned.
7. Groundwater quality degradation (saltwater intrusion)	4.8.2.1	VYNPS located on freshwater body.
8. Groundwater quality degradation (Ranney Wells)	4.8.2.2	VYNPS does not use Ranney wells.
9. Groundwater quality degradation (cooling ponds in salt marshes)	4.8.3	VYNPS located on freshwater body.
HUMAN HEALTH		
10. Radiation exposures to the public during refurbishment	3.8.1	No refurbishment activities planned.
11. Occupational radiation exposures during refurbishment	3.8.2	No refurbishment activities planned.

Category 1 Issues Not Applicable to VYNPS (continued)		
Issue	**GEIS Section(s)**	**Comment**
TERRESTRIAL RESOURCES		
12. Cooling pond impacts on terrestrial resources	4.4.4	VYNPS does not use cooling ponds.
13. Power line right-of-way management (cutting and herbicide application)	4.5.6.1	All power lines at VYNPS exist on site property from plant to switchyard.
14. Bird collisions with cooling towers	4.5.6.2	VYNPS does not use natural draft towers.
15. Floodplains and wetland on power line right of way	4.5.7	All power lines at VYNPS exist on site property from plant to switchyard and none cross regulated floodplains or wetlands.
SOCIOECONOMICS		
16. Aesthetic impacts (refurbishment)	3.7.8	No refurbishment activities planned.
LAND USE		
17. Power line right-of-way	4.5.3	All power lines at VYNPS exist on site property from plant to switchyard.

7.0 Review of Category 1 Issues Applicable to VYNPS

For the remaining 52 Category 1 issues applicable to VYNPS, Entergy performed additional reviews to ensure that the conclusions of the Generic Environmental Impact Statement (GEIS) remained valid. A discussion of the review of Category 1 issues applicable to VYNPS is as follows:

7.1 Surface Water, Hydrology and Aquatic Ecology

Category 1 Issues Applicable to VYNPS	
Issue	**GEIS Section(s)**
SURFACE WATER QUALITY, HYDROLOGY AND USE (FOR ALL PLANTS)	
1. Altered current patterns at intake and discharge structures	4.2.1.2.1, 4.3.2.2 & 4.4.2
2. Temperature effects on sediment transport capacity	4.2.1.2.3 & 4.4.2.2
3. Scouring caused by discharged cooling water	4.2.1.2.3 & 4.4.2.2
4. Eutrophication	4.2.1.2.3 & 4.4.2.2
5. Discharge of chlorine or other biocides	4.2.1.2.4 & 4.4.2.2
6. Discharge of sanitary wastes and minor chemical spills	4.2.1.2.4 & 4.4.2.2

Category 1 Issues Applicable to VYNPS (continued)	
Issue	**GEIS Section(s)**
SURFACE WATER QUALITY, HYDROLOGY AND USE (FOR ALL PLANTS)	
7. Discharge of other metals in waste water	4.2.1.2.4, 4.3.2.2 & 4.4.2.2
8. Water use conflicts (plants with once-through cooling systems)	4.2.1.3
AQUATIC ECOLOGY (FOR ALL PLANTS)	
9. Entrainment of phytoplankton and zooplankton	4.2.2.1.1, 4.3.3 & 4.4.3
10. Cold shock	4.2.2.1.5, 4.3.3 & 4.4.3
11. Thermal plume barrier to migrating fish	4.2.2.1.6 & 4.4.3
12. Distribution of aquatic organisms	4.2.2.1.6 & 4.4.3
13. Premature emergence of aquatic insects	4.2.2.1.7 & 4.4.3
14. Gas supersaturation (gas bubble disease)	4.2.2.1.8 & 4.4.3
15. Low dissolved oxygen in the discharge	4.2.2.1.9, 4.3.3 & 4.4.3
16. Losses from predation, parasitism, and disease among organisms exposed to sublethal stresses	4.2.2.1.10 & 4.4.3
AQUATIC ECOLOGY (FOR ALL PLANTS)	
17. Stimulation of nuisance organisms	4.2.2.1.11 & 4.4.3
18. Accumulation of contaminants in sediments or biota	4.2.1.2.4, 4.3.3, 4.4.3 & 4.4.2.2
Aquatic Ecology (for plants with cooling tower based heat dissipation systems)	
19. Entrainment of fish and shellfish in early life stages	4.3.3
20. Impingement of fish and shellfish	4.3.3
21. Heat shock	4.3.3

Items 1 through 21 - Based on review of VYNPS's current NPDES Permit VT0000264 (VDEC Permit No. 3-1199) and the NPDES Fact Sheet dated October 2005, no conditions have been placed in the Permit nor were there any concerns raised that would invalidate the conclusions reached in the GEIS. In addition, based on Entergy's participation in industry utility and non-utility groups, interface activities with the Vermont Department of Environmental Conservation (VDEC), routine reviews of proposed regulatory changes, review of VYNPS annual biological monitoring reports, field observations, discussions with VYNPS Chemistry (Lynn DeWald) and EN Environmental Focus Group meetings, there have been no issues identified that would invalidate conclusions reached in the GEIS. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Specific notes regarding the above Category 1 "Surface Water, Hydrology and Aquatic Ecology" issues, but which are not new and significant information and do not change the conclusions in the GEIS, are as follows:

- **(Item 4)** – Eutrophication is typically confined to lakes and is uncommon in rivers. Based on conversation with VYNPS Chemistry personnel (Lynn DeWald), there has been no evidence of an occurrence in the vicinity of VYNPS.

- **(Item 5)** - The VYNPS NPDES Permit has established limits for the discharge of chlorine and other biocides. Based on data reviews, there has been no exceedance of these limits.

- **(Item 6)** - Sanitary wastewaters at the VYNPS facility are discharged to septic fields regulated via Indirect Discharge Permit ID-9-0036-2 by the State of Vermont. VYNPS is in compliance with this Permit.

- **(Item 7)** - Condenser tubing at VYNPS is comprised of copper. The VYNPS NPDES Permit requires monitoring for copper, iron and zinc in the river but does not establish any limits. Based on review of annual monitoring reports, there has been no indication of an upward trend for these metals in the river.

- **(Item 8)** – Vermont Water Quality Standards (Section 3-01.B.1) establishes a streamflow protection guideline of no more than 5% diminished flow at the 7Q10 stream flow rate, which VYNPS complies. During the analysis of water use conflicts associated with cooling towers (see Section 4.1 of VYNPS ER), impacts were found to be SMALL. In addition, during the regulatory consultation process with the VDEC, no concerns were raised by the agency regarding conflicts with other offstream or instream water users.

- **(Item 9)** - VYNPS has conducted phytoplankton and zooplankton studies in previous years. However, these studies have been discontinued due to the fact that there was no discernible indication of an impact from plant operations.

- **(Item 10)** – Based on conversation with VYNPS Chemistry personnel (Lynn DeWald), there have been no known incidences of cold shock that occurred at the discharge structure.

- **(Items 11 & 12)** - Studies at VYNPS have shown that the facility's thermal discharge does not constitute a barrier to migrating fish and that the geographic distribution of aquatic organisms has not been reduced. However, the VDEC has requested that a two year study of the effect of the thermal plume discharge on salmon smolt out-migration be conducted. Language regarding the request for this study will be placed in the renewed VYNPS NPDES Permit.

- **(Item 14)** VYNPS has a discharge-aerating structure which allows rapid mixing of the effluent with the receiving waters. Therefore, gas supersaturation is minimized. In addition, based on conversation with VYNPS Chemistry personnel (Lynn DeWald), there have been no known incidences of gas bubble disease occurring at the VYNPS discharge structure.

- **(Item 15)** - Based on monitoring studies and conversation with VYNPS Chemistry personnel (Lynn DeWald), there have been no issues associated with low dissolved oxygen in the discharge.

- **(Item 16)** - Based on monitoring studies, there has been no indication that predator-prey interactions have been altered.

- **(Item 17)** - Based on monitoring studies and conversation with VYNPS Chemistry personnel (Lynn DeWald), there has been no stimulation of nuisance organisms such as zebra mussels, asiatic clams or shipworms.

- **(Items 19, 20 & 21)** Based on monitoring studies, cooling tower impacts as it relates to entrainment and impingement of fish and heat shock are localized at VYNPS and have not reduced the overall fish population.

7.2 Groundwater Use and Quality

Category 1 Issues Applicable to VYNPS	
Issue	**GEIS Section(s)**
GROUND-WATER USE AND QUALITY	
1. Groundwater use conflicts (potable and service water; plants that use <100 gpm)	4.8.1.1

Item 1 – At VYNPS, potable water is supplied to various locations from four onsite wells. These wells are classified as non-transient, non-community public water systems and are permitted and regulated by the State of Vermont. Based on current and previous monitoring associated with these wells and interface with the State of Vermont, there has been no concerns regarding a cone of depression extending beyond the site boundary. In addition, as discussed in Section 2.3 of the VYNPS ER, the groundwater table can be expected to slope toward the river since the river is the natural low point and drainage channel for the region. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

7.3 Terrestrial Resources

Category 1 Issues Applicable to VYNPS	
Issue	**GEIS Section(s)**
TERRESTRIAL RESOURCES	
1. Cooling tower impacts on crops and ornamental vegetation	4.3.4
2. Cooling tower impacts on native plants	4.3.5.1
3. Bird collision with power lines	4.5.6.2
4. Impacts of electromagnetic fields on flora and fauna (plants, agricultural crops, honeybees, wildlife, livestock)	4.5.6.3

Items 1 & 2 - Based on visual field observations and conversations with VYNPS Chemistry personnel (Steve Skibniowsky), there have been no impacts on crops, ornamental vegetation or native plants on-site or in the vicinity of the site due to salts or other effects (e.g., icing, increased humidity) resulting from cooling-tower operation. VYNPS mechanical towers utilize freshwater, are equipped with drift eliminators and are not operated year round. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 3 – With the exception of two lines going from the plant to the 345 kV and 115 kV switchyards, transmission lines are part of the New England transmission grid. Based on conversation with VYNPS Chemistry personnel (Steve Skibniowsky), there have been no observed incidences of bird collisions associated with the two lines going from the plant to the switchyards. In addition, there are no imposed regulatory monitoring requirements associated with these two lines. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 4 - Entergy's Customer Services Group (Margaret Snow) monitors current studies on the effects of electromagnetic fields (EMF). Although EMF studies are ongoing such as the one published by the National Institute of Environmental Health Sciences & National Institutes of Health (Electric and Magnetic Fields Associated with the Use of Electric Power – June 2002), there is currently no evidence that would invalidate the conclusions reached in the GEIS or present new and significant information.

7.4 Air Quality

Category 1 Issues Applicable to VYNPS	
Issue	**GEIS Section(s)**
AIR QUALITY	
1. Air quality effects of transmission lines	4.5.2

Item 1 – Based on review of Section 4.5.2 of the GEIS, several studies have quantified the amount of ozone generated and concluded that the amount produced by even the largest lines in operation (765 kV) is insignificant. The VYNPS transmission lines going from the plant to the switchyard are well within the bounds defined in the GEIS. Based on interactions with the VDEC, there are no regulatory required ozone monitoring programs associated with the two VYNPS transmission lines nor have there been any regulatory concerns raised. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

7.5 Land Use

Category 1 Issues Applicable to VYNPS	
Issue	**GEIS Section(s)**
LAND USE	
1. Land use (License Renewal Period)	3.2

Item 1 – VYNPS currently has no plans to increase land use beyond that currently used for plant operational support purposes (i.e., dry cask spent fuel storage, temporary staging areas & parking). In addition, as discussed in Section 3.3 of the VYNPS ER, no refurbishment activities were identified. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

7.6 Human Health

Category 1 Issues Applicable to VYNPS	
Issue	**GEIS Section(s)**
HUMAN HEALTH	
1. Microbiological organisms (occupational health)	4.3.6
2. Noise	4.3.7
3. Radiation exposures to public (license renewal term)	4.6.2
4. Occupational radiation exposures (license renewal term)	4.6.3

Item 1 – Based on consultation with the Vermont Department of Health (Alberta Knorr in October 2004), there is no indication that a human health exposure problem exists with thermophilic pathogens in the Connecticut River. In addition, testing conducted by VYNPS on the Connecticut River and in the cooling towers and conversation with VYNPS Chemistry personnel (Lynn DeWald) has not indicated any issues associated with microbiological organisms. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 2 – Based on discussion with Entergy Nuclear Safety personnel (Lisa Stockwell), there are no current or proposed Occupational Safety and Health Administration requirements regarding monitoring noise levels at the site boundary. In addition, there have been no public complaints regarding noise levels at the VYNPS site based on conversation with site Chemistry personnel (Lynn DeWald & Steve Skibniowsky). Since VYNPS plant operational noise levels will be typically less than that of the VYNPS construction activity and no plant changes are anticipated during license renewal that would increase noise levels, no problems are anticipated. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 3 – Review of the 2003 and 2004 VYNPS Annual Radioactive Effluent Release Reports shows that reported doses are well within design objectives and are only a small percentage of the design objectives. Based on discussion with VYNPS Chemistry personnel (Steve Skibniowsky), there are no planned changes other than power uprate and associated hydrogen water chemistry that could potentially affect radiation doses. However, any increase in dose due to hydrogen water chemistry will still be within the design objectives.

As a note, the State of Vermont also established dose limits for plant after the plant became operational and limits are below that established by the NRC. Although an increase in hydrogen water injection may challenge dose limits established at the site boundary by the State of Vermont, necessary measures would be taken to ensure that the limits were not exceeded.

As discussed in Section 3.3 of the VYNPS ER, no refurbishment activities were identified. In addition, the VYNPS license renewal application describes the program for managing aging of systems and equipment. Since current doses are well below design objectives, no refurbishment activities have been identified during the license renewal period, and programs will be in place for managing aging systems and equipment, radiation doses are expected to remain well below design objectives during the license renewal period. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 4 – Based on conversation with VYNPS Chemistry personnel (Steve Skibniowsky), there are no planned changes in plant practices or operations that would cause occupational doses to exceed the regulatory limits established by the NRC. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

7.7 Socioeconomics

Category 1 Issues Applicable to VYNPS	
Issue	**GEIS Section(s)**
SOCIOECONOMICS	
1. Aesthetic impacts of transmission lines (license renewal term)	4.5.8
2. Public services: public safety, social services, and tourism and recreation	4.7.3, 4.7.3.3, 4.7.3.4 & 4.7.3.6
3. Public services, education (license renewal term)	4.7.3.1
4. Aesthetic impacts (license renewal term)	4.7.6

Item 1 – With the exception of two lines going from the plant to the 345 kV and 115 kV switchyards, transmission lines are part of the New England transmission grid and are not owned or operated by Entergy. The two lines going from the plant to the switchyards do not cross recreation or historic areas and do not present any erosion control issues.

Previous operational experience and conversation with site Chemistry personnel (Lynn DeWald & Steve Skibniowsky) has not yielded any public complaints regarding the aesthetics of the VYNPS transmission lines. In addition, no concerns were raised by the Vermont State Historic Preservation Office regarding these lines during Entergy's consultation process with the agency. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Items 2 & 3 – Based on review of Section 3.5 of the VYNPS Environmental Report, no additional staff was identified as being needed during the license renewal term. Although the GEIS estimated that an additional 60 employees would be necessary for operation during the period of extended operation, Entergy did not identify the need to add significant new aging management programs for VYNPS. In addition, based on Section 3.5 of the VYNPS ER, the number of workers required on-site for normal plant outages during the period of the renewed license is expected to be consistent with the numbers of additional workers used for past outages. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 4 – Much consideration and effort went into minimizing the impacts to aesthetic when VYNPS was built (i.e., trees were planted around mechanical cooling towers). Previous operational experience and conversation with site Chemistry personnel (Lynn DeWald & Steve Skibniowsky) has not yielded any public complaints regarding the aesthetics of VYNPS plant structures. Entergy's review during the license renewal application process identified no needed changes in plant design as a result of license renewal. In addition, no concerns were raised by the Vermont State Historic Preservation Office regarding VYNPS current structures during Entergy's consultation process with the agency. As a note, Entergy has hired a professional landscape architect to evaluate the aesthetic affects of the spent fuel storage pad and associated walls to block the view of the casks. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

7.8 Postulated Accidents

Category 1 Issues Applicable to VYNPS	
Issue	**GEIS Section(s)**
POSTULATED ACCIDENTS	
1. Design-Basis Accidents (DBAs)	5.3.2 & 5.5.1

Item 1 – Based on conversation with Entergy's Business Development representative (Mike Stroud), there were no issues identified by the license renewal team during the evaluation of the VYNPS structures and components that would change the existing plant design and performance criteria when reviewed against the VYNPS license. Therefore, current design and performance criteria will be maintained during the license renewal term and the GEIS conclusion remains valid.

7.9 Uranium Fuel Cycle and Waste Management

Category 1 Issues Applicable to VYNPS	
Issue	**GEIS Section(s)**
URANIUM FUEL CYCLE AND WASTE MANAGEMENT	
1. Offsite radiological impacts (individual effects from other than the disposal of spent fuel and high-level waste)	6.1, 6.2.1, 6.2.2.1, 6.2.2.3, 6.2.3, 6.2.4 & 6.6
2. Offsite radiological impacts (collective effects)	6.1, 6.2.2.1, 6.2.3 & 6.2.4
3. Offsite radiological impacts (spent fuel and high-level waste disposal)	6.1, 6.2.2.1, 6.2.3 & 6.2.4
4. Non-radiological impacts of the uranium fuel cycle	6.1, 6.2.2.6, 6.2.2.7, 6.2.2.8, 6.2.2.9, 6.2.3, 6.2.4 & 6.6
5. Low-level waste storage and disposal	6.1, 6.2.2.2, 6.4.2, 6.4.3, 6.4.3.1, 6.4.3.2, 6.4.3.3, 6.4.4, 6.4.4.1, 6.4.4.2, 6.4.4.3, 6.4.4.4, 6.4.4.5, 6.4.4.5.1, 6.4.4.5.2, 6.4.4.5.3, 6.4.4.5.4 & 6.4.4.6
6. Mixed waste storage and disposal	6.4.5.1, 6.4.5.2, 6.4.5.3, 6.4.5.4, 6.4.5.5, 6.4.5.6, 6.4.5.6.1, 6.4.5.6.2, 6.4.5.6.3 & 6.4.5.6.4
7. Onsite spent fuel	6.1, 6.4.6, 6.4.6.1, 6.4.6.2, 6.4.6.3, 6.4.6.4, 6.4.6.5, 6.4.6.6, 6.4.6.7 & 6.6
8. Nonradiological waste	6.1, 6.5, 6.5.1, 6.5.2, 6.5.3 & 6.6
9. Transportation	6.1, 6.3.1, 6.3.2.3, 6.3.3, 6.3.4 & 6.6

Item 1 – There are no operational changes planned during the license renewal period that would alter the conclusions reached in the GEIS for individual offsite radiological impacts. Impacts would continue to remain at the levels they were during pre-license renewal years and would be theoretical due to the extremely low doses that do not pose a significant adverse impact. Based on conversation with EN Nuclear Support representative (Mark Carver) who is responsible for radwaste disposal issues, he was not aware of any additional studies or information that would change the NRC's conclusion. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 2 – Entergy is not aware of any conclusive studies or information that would change NRC's conclusion. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 3 – Based on conversation with an Entergy Nuclear representative (Mark Carver) responsible for spent fuel and high-level waste disposal issues, he was unaware of any issues within the industry regarding offsite radiological impacts from spent fuel and high-level waste disposal. Entergy understands that a standard has been proposed by the Environmental Protection Agency and that the proposed standard is a public document and that it speaks for itself in terms of what radionuclide releases are allowed. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 4 – Entergy reviewed the environmental impacts of decommissioning of VYNPS (see Section 7.4 of the VYNPS ER). These impacts were expected to be comparable to those environmental impacts described in the GEIS for impacts to: land use, water, air quality, ecological resources, human health, social and economic structure, waste management, aesthetics, and cultural resources. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 5 – Based on conversation with an Entergy Nuclear representative (Mark Carver) responsible for the oversight of radwaste disposal, VYNPS is shipping all classes of low level radioactive waste with no immediate plans to store until necessitated by Barnwell's closure in June 2008. Disposal capacity for Class "A" waste will continue with the availability of the Envirocare Facility in Utah. Due to the current political climate in South Carolina, the issue of keeping Barnwell open for Class "B" & "C" waste beyond mid 2008 is not being sought by any private interest groups. The Texas Compact (which Vermont is the only remaining co-member) is currently on-schedule to license and construct a waste disposal facility by early 2009. After Barnwell closes and until the Texas Compact facility is open, storage along with potential use of waste processors for volume reduction would be the only viable options available for Class "B" and "C" wastes. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 6 – Based on Section 3.3 of the VYNPS ER, no refurbishment activities were identified. Therefore, no additional mixed waste generation would occur during extended operations from refurbishment. In addition, due to controls placed on chemical usage at the VYNPS site by Entergy Nuclear's NMM Procedure EV-112 (Chemical Control Program), quantities of generated mixed waste have been minimal, and when generated, would be shipped off-site within the allowed storage time to avoid permitted storage requirements. VYNPS minimizes and properly manages mixed wastes in accordance with Entergy Nuclear NMM Procedures EV-104 (Waste Minimization) and EV-106 (Waste Management Program) that will continue to exist during the license renewal term. No issues regarding generation, storage or disposal have been identified. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 7 – Storage of spent fuel in an Independent Spent Storage Installation is already in the planning phase at VYNPS. VYNPS's preliminary evaluation has concluded that radiological and nonradiological impacts were insignificant. Although it is anticipated that an offsite disposal facility would become available in the future, VYNPS

has sufficient onsite capacity to accommodate dry cask fuel storage during the license renewal period based on conversation with Mark Carver (Entergy Nuclear Radwaste Specialist). Based on this conversation, VYNPS could safely accommodate spent fuel from VYNPS operations on-site for an additional twenty tears via dry cask storage. Although VYNPS would probably utilize land outside the Protected Area for dry cask fuel storage, areas that would be utilized for this additional storage would occur on previously disturbed land. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 8 - Based on discussions with VYNPS Chemistry personnel (Lynn DeWald), there are currently no plans to change operational practices during the license renewal period that would alter the conclusions reached in the GEIS. VYNPS's NPDES Permit VT0000264 (VDEC Permit No. 3-1199) regulates the discharge of wastewaters such as blowdown, water treatment, floor and yard drains, stormwater runoff. In addition, RCRA nonradiological wastes are minimized and properly managed in accordance with EN's NMM Procedures EV-104 (Waste Minimization) and EV-106 (Waste Management Program). These procedures will continue to exist during the license renewal term and incorporate changing regulatory requirements as they arise. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 9 – Based on review of Addendum 1 to the GEIS and Sections Section 14.6.2.5.2 of the VYNPS Updated Final Safety Analysis Report, VYNPS meets the fuel enrichment and burnup conditions set forth in Addendum 1 to the GEIS. In addition, there are no plans to change plant operational practices based on discussions with VYNPS personnel. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

7.10 Decommissioning

Category 1 Issues Applicable to VYNPS	
Issue	**GEIS Section(s)**
DECOMMISSIONING	
1. Radiation doses	7.3.1 & 7.4
2. Waste management	7.3.2 & 7.4
3. Air quality	7.3.3 & 7.4
4. Water quality	7.3.4 & 7.4
5. Ecological resources	7.3.5 & 7.4
6. Socioeconomic impacts	7.3.7 & 7.4

Item 1 – VYNPS's current radiation protection practices and NRC regulatory oversight will ensure that radiation doses are managed and regulated during the decommissioning period in accordance with specified practices and standards. In regard to public health

protection, VYNPS would be required to continue to meet the same permissible exposure levels established by the NRC during the decommissioning period. Based on Entergy's decommissioning experience (Maine Yankee), there were no radiation dose issues encountered that would invalidate the NRC's conclusions. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 2 – VYNPS is considerably smaller than the 1000-MW(e) reactor referenced in Section 7.3.2 of the GEIS. In addition, based on conversation with an Entergy Nuclear representative (Mark Carver), extending VYNPS operations by an additional twenty years would not increase decommissioning waste volumes, so the ratio of decommissioning waste volume to operating waste volume would be even lower. Although it is anticipated that the volume of Class "C" waste would not increase to any appreciable extent, the Envirocare facility in Utah is proposing to expand its capabilities by submitting a Class "B & C" license application to the state of Utah. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 3 – Emission equipment currently regulated under VYNPS Air Contaminant Source Registration Certificate WM2335 that is in place for supporting VYNPS operations would be discontinued, thereby, decreasing overall site emissions. Based on site tours, air quality impacts from operation of motor vehicles during this period would be small due to adequate pavement of roads on and near the VYNPS site. Finally, decommissioning activities and associated potential of radioactive airborne release are currently regulated under NRC requirements and will continue to be regulated during the license renewal term. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 4 - The VYNPS workforce during the decommissioning period will be considerably less than that of the operational period. Therefore, there will be no increased demand on the VYNPS's existing sanitary sewer operations regulated under Indirect Discharge Permit ID-9-0036-2. In addition, VYNPS will continue to be subjected to erosion and spill prevention management requirements imposed by state and/or federal agencies during the decommissioning period. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 5 – Based on site tours, laydown and waste storage areas are already present on-site and are assumed to be adequate to manage decommissioning activities. Therefore, no land disturbance is anticipated. VYNPS will continue to be subjected to erosion and spill prevention management requirements imposed by state and/or federal agencies during the decommissioning period. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

Item 6 - Since the VYNPS workforce during the decommissioning period is expected to be considerably less than that of the operational period, no increased socioeconomic demands should occur. Although a lesser workforce could potentially impact the local economy, these impacts would be essentially similar whether that action was taken in year 60 or in year 40. Therefore, no new and significant information was identified and the conclusions in the GEIS remain valid.

8.0 Document Reviews

During preparation of the VYNPS Environmental Report, several documents were reviewed by the license renewal team. Although not inclusive, typical documents reviewed during this process are shown in Attachment 4.

Attachment 1

Industry Participation

Issue	Industry Group	Committee Name
		Topic: General Policy
Environmental Policy	EEI	Environmental Executive Advisory Committee
Auditing	EEI	Environmental Auditing Task Force
Emerging Issues	EEI	Emerging Issues Team
EMF	EEI	EMF Steering Committee/Task Force
Environmental Science R & D	EPRI	EPRI Environment Market Segment Council
		Topic: Air
Federal Air Policy	Class of '85	Class of '85
Air Science R & D	EPRI	Air Quality Heath & Risk Assessment
Climate Change	EEI	Global Climate Change Subcommittee
NOx Control R & D	EPRI	G/O Boiler & Combustion NOx Control Target Committee
SO2 Allowance	EEI	SO2 Allowance Trading Work Group
		Topic: Ecological Resources
Gulf of Mexico	GOMP_BC	GOMP Business Council
Natural Resources	EEI	Natural Resources Management Subcommittee
Natural Resources	EEI	NRMS Biologists Task Force
Vegetation Mgmt.	EEI	NRMS Vegetation Management Task Force
Endangered Species	EEI	
Wetlands	USWAG	Section 404 Task Force
		Topic: Spill Response
EPCRA	EEI	EPCRA Subcommittee

Attachment 1

Industry Participation

Issue	Industry Group	Committee Name
		Topic: Water
Federal Water Policy	USWAG	Policy Committee
Legal Counsel	USWAG	USWAG Counsel
Analytical Procedures	USWAG	Analytical Procedures Committee
Biological Testing	USWAG	Bioavailable Metals Working Group
Cooling Systems	USWAG	Cooling Systems Committee
Effluent Guidelines	USWAG	Effluent Guidelines Committee
Hydroelectric	USWAG	Hydroelectric Task Force
Stormwater	USWAG	Non-Point/Storm Water Task Force
Water Quality	USWAG	Water Quality Committee
		Topic: Waste
Federal Waste Policy	USWAG	USWAG Policy Committee
DOT	USWAG	USWAG DOT Task Force
Ash Management	USWAG	Ash Management & Solid Waste Committee
Ash Use	USWAG	USWAG Ash Use Task Force
Oil Ash	USWAG	USWAG Oil Ash Work Group
Low Volume & Mixed Waste	USWAG	USWAG Low Volume Waste Committee
Remediation	USWAG	USWAG Remediation Committee
Rulemaking	USWAG	USWAG RCRA Rulemaking Task Force
PCB's	USWAG	USWAG PCB Committee
Spill Cleanup	USWAG	USWAG Spill Cleanup Task Force
Superfund	EEI	Superfund Subcommittee
Tanks	USWAG	USWAG Tanks Subcommittee
Treated Wood	USWAG	USWAG Treated Wood Task Force

Attachment 2

Regulatory Agencies Monitored

1. Chemical Safety and Hazard Investigation Board
2. Department of Commerce
3. Department of Defense
4. Department of Energy
5. Department of Health & Human Services (Center for Disease Control & Prevention)
6. Department of Homeland Security (Coast Guard)
7. Department of Interior (Fish and Wildlife Service)
8. Department of Justice
9. Department if Labor
10. Department of Transportation
11. General Services Administration
12. Environmental Protection Agency
13. Nuclear Regulatory Commission
14. Arkansas Department of Environmental Quality
15. Louisiana Department of Environmental Quality
16. Massachusetts Department of Environmental Protection
17. Mississippi Department of Environmental Quality
18. New York Department of Environmental Conservation
19. Vermont Agency of Natural Resources

Attachment 3

Previous SEIS Reviews

1. Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Calvert Cliffs Nuclear Power Plant (NUREG-1437, Supplement 1)
2. Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Oconee Nuclear Station, Units 1, 2 & 3 (NUREG-1437, Supplement 2)
3. Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding the Arkansas Nuclear One, Unit 1 (NUREG-1437, Supplement 3)
4. Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Edwin I. Hatch Nuclear Plant, Units 1 and 2 (NUREG-1437, Supplement 4)
5. Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Turkey Point Plant, Units 3 and 4 (NUREG-1437, Supplement 5)
6. Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 6 - Regarding Surry Power Station, Units 1 and 2 (NUREG-1437, Supplement 6)
7. Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 7 - North Anna Power Station, Units 1 and 2 (NUREG-1437, Supplement 7)
8. Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 8 – Regarding McGuire Nuclear Station, Units 1 and 2 (NUREG-1437, Supplement 8)
9. Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 9 - Regarding Catawba Nuclear Station, Units 1 and 2 (NUREG-1437, Supplement 9)
10. Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 10 - Regarding Peach Bottom Atomic Power Station, Units 2 and 3 (NUREG-1437, Supplement 10)
11. Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 11 - Regarding St. Lucie Units 1 and 2 (NUREG-1437, Supplement 11)
12. Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 12 - Regarding Fort Calhoun Station, Unit 1 (NUREG-1437, Supplement 12)
13. Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 13 - Regarding H.B. Robinson Steam Electric Plant, Unit No. 2 (NUREG-1437, Supplement 13)
14. Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 14 - Regarding R.E. Ginna Nuclear Power Plant (NUREG-1437, Supplement 14)

Attachment 3

Previous SEIS Reviews

15. Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 15 - Regarding Virgil C. Summer Nuclear Station (NUREG-1437, Supplement 15)
16. Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 16 - Regarding Quad Cities Nuclear Power Station (NUREG-1437, Supplement 16)
17. Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 17 - Regarding Dresden Nuclear Power Station, Units 2 and 3 (NUREG-1437, Supplement 17)
18. Generic Environmental Impact Statement for License Renewal of Nuclear Plants Supplement 18 - Joseph M. Farley Nuclear Plant, Units 1 and 2 (NUREG-1437, Supplement 18)
19. Generic Environmental Impact Statement for License Renewal of Nuclear Plants Supplement 19 – Arkansas Nuclear One, Unit 2 (NUREG-1437, Supplement 19)
20. Generic Environmental Impact Statement for License Renewal of Nuclear Plants Supplement 20 – Donald C. Cook Nuclear Plant, Units No. 1 and 2 (NUREG-1437, Supplement 20)
21. Generic Environmental Impact Statement for License Renewal of Nuclear Plants Supplement 21 – Browns Ferry Nuclear Plant, Units 1, 2 and 3 (NUREG-1437, Supplement 21)
22. Generic Environmental Impact Statement for License Renewal of Nuclear Plants Supplement 22 – Millstone Power Station, Units 2 and 3 (NUREG-1437, Supplement 22)
23. Generic Environmental Impact Statement for License Renewal of Nuclear Plants Supplement 23 – Point Beach Nuclear Plant, Units 1 and 2 (NUREG-1437, Supplement 23)
24. Generic Environmental Impact Statement for License Renewal of Nuclear Plants Supplement 24 – Nine Mile Point Nuclear Station, Units 1 and 2 - Draft Report for Comment (NUREG-1437, Supplement 24)
25. Generic Environmental Impact Statement for License Renewal of Nuclear Plants Supplement 25 – Brunswick Steam Electric Plant, Units 1 and 2 - Draft Report for Comment (NUREG-1437, Supplement 25)

Documents Reviewed (Typical)

Air Contaminant Source Registration Certificate WM2335

Air Permit Correspondence to ADEQ

Annual Chemical Inventory Reports

Annual Radioactive Effluent Release Reports

Annual Radiological Environmental Operating Reports

Condition Reports (2004 & 2005)

Criterion 8, 10 V.S.A., Chapter 151 (Act 250)

Downstream Movement of Atlantic Salmon Smolts (*Salmo salar* Linnaeus) in Vernon Pool, April 1990 (P. C. Downey, N. R. Staats & R. C. Binkerd)

Ecological Studies of the Connecticut River Vernon, Vermont (Report 32), May 2003 (Normandeau Associates, Inc.)

Entergy Nuclear Annual Environmental Program Report (2004 & 2005)

Final Environmental Statement Related to the Operation of Vermont Yankee Nuclear Power Corporation (Docket No. 50-271), July 1972

Generic Environmental Impact Statement for License Renewal of Nuclear Plants (GEIS), Volumes 1 and 2 (NUREG-1437)

Indirect Discharge Permit ID-9-0036-2

NMM Procedure EN-EV-115, Environmental Reviews and Evaluations

NMM Procedure ENN-LI-100, Process Applicability Determinations

NMM Procedure ENN-LI-101, 10CFR50.59 Review Process

NPDES Correspondence to VDEC

NPDES Fact Sheet

NPDES Monthly Discharge Monitoring Reports

NPDES Permit VT0000264 (VDEC Permit No. 3-1199)

Documents Reviewed (Typical)

NPDES Renewal Application

Public Water System Permit to Operate (COB Water System) 20559

Public Water System Permit to Operate (Main Plant Water System) 8332

Public Water System Permit to Operate (NEOB Water System) 20738

Solid Waste Management Facility Certification F9906-A1

Title 30 Section 248, Certificate of Public Good ("CPG")

Underground Storage Permit 806

Additional Documents (Refer to references in the VYNPS Environmental Report)