STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 6953

Petition of Entergy Nuclear Vermont Yankee,	)
LLC, pursuant to 30 V.S.A. § 248(j) for a	)
Certificate of Public Good for Authority to	)
Construct a Security Barrier System at the	)
Vermont Yankee Nuclear Power Plant in the	)
Town of Vernon	)

Order entered: 7/9/2004

I. INTRODUCTION

On May 6, 2004, the Vermont Public Service Board ("Board") received a petition from Entergy Nuclear Vermont Yankee, LLC ("Entergy VY") for a certificate of public good ("CPG") pursuant to 30 V.S.A. § 248(j) to construct a security-barrier system and related security enhancements ("Project") on the site of its electric-generation station, the Vermont Yankee Nuclear Power Plant ("Station" or "Vermont Yankee"), in Vernon, Vermont.

The proposed Project, as described in the petition filed in this proceeding, is the construction of a security-barrier system consisting of a concrete-block security barrier with two vehicle-access gates, two related gravel-access roads, two new security towers, and new security lighting. In addition, the Project includes the relocation and replacement of an underground fuel storage tank currently located inside the Protected Area with a similar-size above-ground tank to be located outside the Protected Area. Entergy VY also seeks approval for security fencing and four security towers constructed by Vermont Yankee Nuclear Power Corporation in 2002 to meet additional requirements imposed by the Nuclear Regulatory Commission ("NRC") in direct response to the events of September 11, 2001.

On June 21, 2004, the Board received a petition from Entergy VY proposing "to construct a parking lot and . . . and the relocation of a certain portion of the security barrier system, or "SBS," which is pending before the Board in Docket No. 6953". Docket No. 6976 petition at 1.

The findings and approvals contained in this Order and CPG pertain only to the plans and information submitted in this proceeding (Docket No. 6953), and the relocation (more appropriately, a change in design) of a certain portion of the SBS will be addressed in Docket No. 6976.

Pursuant to 30 V.S.A. § 248(j), the Board determined that the proposed facilities are of limited size and scope, the petition does not raise a significant issue with respect to the substantive criteria established by 30 V.S.A. § 248, and that the public interest is satisfied by the procedures authorized by subsection 248(j). Notice of the filing in this docket was sent on May 10, 2004, to all parties specified in 30 V.S.A. § 248(a)(4)(C) and all other interested parties. The notice stated that any party wishing to submit comments as to whether the petition raises a significant issue with respect to the substantive criteria of 30 V.S.A. § 248 needed to file comments with the Board on or before June 10, 2004. In addition, notice was published in the *Brattleboro Reformer* on May 13 and May 20, 2004, stating that any party wishing to submit comments as to whether the petition raises a significant issue with respect to the substantive criteria of 30 V.S.A. § 248 needed to file comments with the Board on or before June 10, 2004.

On June 10, 2004, comments were received from the Vermont Department of Public Service ("DPS" or "Department"), which stated:

> The Department has reviewed the filing. The facilities are of limited size and scope, and do not raise significant issues with respect to the substantive criteria of 30 V.S.A. § 248. Additionally, the public interest is satisfied by the procedures authorized by subsection 248(j). The proposed project is designed to address security enhancements to comply with Nuclear Regulatory Commission requirements. Because the project is directed at security enhancements at the plant, the Department affirmatively supports the project as designed.

No other comments were received.

The Board has reviewed the petition and accompanying documents and agrees that, pursuant to 30 V.S.A. § 248(j), a CPG should be issued without the notice and hearings otherwise required by 30 V.S.A. § 248.

II. FINDINGS

Project Description

1. Entergy VY owns and operates the Vermont Yankee Nuclear Power Plant in Vernon, Vermont, which is an electric-generation facility. McElwee pf. at 1.

2. To comply with United States Nuclear Regulatory Commission ("NRC") requirements, Entergy VY proposes to construct the Project on land owned by Entergy VY within the Station's Owner Controlled Area ("OCA") and surrounding the Protected Area ("PA"). The Project consists of a concrete-block security-barrier system, approximately 3,200 feet in length, approximately four feet high (except where otherwise indicated on Exhibit Entergy-1) and approximately five feet wide, with two vehicle-access gates and two small, gravel-access roads. *Id.* at 1, 3-4; findings 4-16, below.

3. In addition to the Project, as described in finding 2, above, Entergy VY seeks approval for the proposed construction of two security towers, security lighting, security fencing, and replacement of an underground fuel storage tank located within the Protected Area with a similar above-ground tank to be located outside the Protected Area near the receiving building. Entergy VY also seeks approval for security fencing and four security towers constructed by Vermont Yankee Nuclear Power Corporation in 2002 to meet additional requirements imposed by the Nuclear Regulatory Commission ("NRC") in direct response to the events of September 11, 2001. Petition at 1; McElwee pf. at 1-3; findings 17-41, below.

4. The security-barrier system ("SBS") will extend from the current OCA fence on the northeast side of the property, around the 345 kV switchyard, across a portion of the existing employee parking area, across the existing access road, up to the side of the west cooling tower, between the cooling towers, and back to the OCA fence on the southeast side of the property. McElwee pf. at 4.

5. Entergy VY designed the location of the SBS to comply with NRC orders and still maintain accessibility to critical components and structures within the OCA. *Id.*

6. The SBS will be comprised of precast or poured-on-site concrete blocks that are approximately four feet high, approximately five feet wide and up to sixteen feet long; these dimensions may vary slightly depending upon the specific location where the blocks are

installed, the surface conditions that exist where they are to be installed, and transportation limitations. *Id.*; Boemig pf. at 11.

7. Where pre-cast barriers do not fit well within the topography of the planned barrier route, barriers will be installed by building a form and pouring concrete in place; the same drainage and ground preparation and support process will be used with this type of installation. McElwee pf. at 4.

8. The SBS will be constructed on an existing parking lot, grassy areas and existing access roadways within the OCA. The SBS blocks will be placed directly on existing surface (grass, gravel, pavement, concrete, etc.). Minor surface preparation may be performed to provide a good bearing surface underneath each block. Additional site preparation will be performed where necessary to provide adequate drainage and surface water runoff. *Id.* at 4; Boemig pf. at 11.

9. The blocks will be spaced apart to allow surface water to flow between and around the blocks. McElwee pf. at 5; Boemig pf. at 11.

10. The blocks will be constructed with lifting eyes to allow placement using a mobile crane; this will allow the blocks to be temporarily moved in the event that future work activities require the blocks to be moved. McElwee pf. at 5.

11. Personnel-access points will be installed where necessary to allow access to equipment and other plant structures. *Id.*

12. Two vehicle-access points will be installed – one at the north end of the SBS and one at the south end of the SBS–as shown on Exhibit Entergy-1. The north vehicle-access point will have two manually-operated vehicle gates, or "active barriers"; the south vehicle-access point will have two electrically-operated vehicle gates. *Id.*; Boemig pf. at 12; exh. Entergy-1.

13. Power to the electrically-operated active barriers will be provided from existing Entergy VY buildings and structures; barrier operation will be controlled by Entergy VY security personnel. Trenching will be required to install power and control circuits from existing Entergy VY buildings and structures to the electrically-operated gates. Boemig pf. at 12; McElwee pf. at 5.

14. Two small, gravel-access roads will be constructed adjacent to each vehicle-access point to maintain site and emergency vehicles access, as shown on Exhibit Entergy-1. McElwee pf. at 5; Boemig pf. at 12; exh. Entergy-1.

15. At the north vehicle access, the roadway will be constructed inside the SBS from the existing road, and will travel east approximately 145 feet to the road leading to the plant-ventilation stack and low-level, waste-storage pad. At the south vehicle access, the roadway will be constructed outside the SBS from the existing plant access road, and will travel east along the SBS, and then south to an existing road running adjacent to the west cooling tower, and will be approximately 335 feet in length. McElwee pf. at 5-6; Boemig pf. at 12.

16. The Project will prevent unauthorized vehicular access into portions of the OCA and provide additional security at the Station. McElwee pf. at 9.

17. In accordance with commissioning and NRC requirements, Entergy VY has had to maintain a security fence around the PA. *Id.* at 2.

18. In 2002, in direct response to the events of September 11, 2001, and to meet additional requirements imposed by the NRC, Vermont Yankee Nuclear Power Corporation installed four security towers, a second 12-foot high chain-link security fence inside the existing security fence, and a four-foot high nuisance fence outside the existing security fence. *Id.* at 2, 6; Boemig pf. at 13-14.

19. Entergy VY plans to construct two additional security towers and add limited security lighting to meet its ongoing obligation to comply with NRC security requirements. McElwee pf. at 2, 6-8; Boemig pf. at 12-14.

20. Entergy VY plans to install the two new security towers by September 1, 2004, to provide sufficient time to train its security force on the new equipment, as well as on new defense strategies, prior to a scheduled NRC review in early October. McElwee pf. at 10.

21. The existing and proposed security towers are approximately eight feet wide, ten feet long, and nine feet high and are mounted on support structures constructed with galvanized, structural-steel shapes (tube steel, channels, beams, etc.). *Id.* at 6; Boemig pf. at 13; Exh. Entergy-2.

22. The four security towers installed in 2002 are located on support structures that are no taller than 25 feet above grade, for a total height of 34 feet or less above grade; the two security towers that will be installed in 2004 are similar in design and appearance to the 2002 security towers, and are located on support structures that are no taller than 37 feet above grade, for a total height of 46 feet or less above grade. McElwee pf. at 6; Boemig pf. at 13; exh. Entergy-2.

23. Each security tower is set on a reinforced concrete foundation, with stairs and access landings, as appropriate, constructed from galvanized, structural-steel shapes to provide access to each of the security towers from inside of the PA. McElwee pf. at 7; Boemig pf. at 13; exh. Entergy-2.

24. The approximate area to be excavated for each new security tower's foundation and footings will be 25 feet wide, 25 feet long, and 6 feet deep, with sloped sides to meet applicable safety requirements; upon completion, the area will be backfilled and regraded. McElwee pf. at 7; Boemig pf. at 14.

25. Trenching will be required from existing Entergy VY buildings and structures to bring power and communications to the new security towers; upon installation of the underground conduit and cabling, the trench will be backfilled and regraded. McElwee pf. at 7; Boemig pf. at 14.

26. The additional fencing installed in 2002 included a 12-foot chain-link fence with barbed wire at the top inside the existing security fence and a four-foot-high chain-link nuisance fence outside the existing fence, both of which follow the existing security fence; Exhibit Entergy-2 provides a picture of the existing and new security fencing. McElwee pf. at 2, 6; Boemig pf. at 14; exh. Entergy-2.

27. The proposed security lighting includes a total of six 30-foot light poles, two 20-foot light poles and ten 15-foot light poles. The lights consist of three 30-foot light poles with two 400W high-pressure sodium lights mounted on each pole at the north end of the barrier system; three 30-foot light poles with two 400W high-pressure sodium lights mounted on each pole at the south end of the barrier system; two 20-foot light poles, with two 400W high-pressure sodium lights mounted on each pole on the west side of the barrier system; and eight 15-foot light poles at the vehicle-access points – four light poles at the south point and four light poles at the north

point – with a 150W high-pressure sodium light mounted on each pole. McElwee pf. at 7-8; Boemig pf. at 12-13; exh. Entergy-1.

28. Each light pole will be installed on a concrete foundation. McElwee pf. at 8; Boemig pf. at 13.

29. Trenching will be performed between the light poles and existing buildings and structures to bring power to the lights. McElwee pf. at 8; Boemig pf. at 13.

30. The proposed lighting will be angled downward, when possible, to minimize the effect, if any, to surrounding neighbors. McElwee pf. at 7.

31. The closest neighbor's house to the new lighting (at its closest point) will be approximately one hundred fifty feet away. *Id.*

32. The proposed security lighting will not substantially increase the amount or impact of lighting already visible from outside the Station site. *Id.* at 8; Boemig pf. at 13.

33. Finally, as part of the security enhancements at the Station, Entergy VY also plans to close a 1,000-gallon gas underground storage tank currently located within the PA, and replace it with a similar above-ground tank located outside the PA near the receiving building, in accordance with relevant Vermont Agency of Natural Resources ("ANR") and Department of Labor and Industry regulations. McElwee pf. at 2, 9; Boemig pf. at 5, 14; exhs. Entergy-1, 3.

34. The Project includes removal of a number of trees within the OCA and installation of security lighting to provide visibility in the new SBS-restricted area and to comply with NRC requirements. McElwee pf. at 6-8; Boemig pf. at 12-13.

35. The number and location of trees that will be removed will be limited to the extent necessary for the Station to meet security needs and NRC requirements; the trees that will be removed are within the OCA, including all trees inside the SBS. McElwee pf. at 6; Boemig pf. at 12; exh. Entergy-1.

36. The Project is one of a number of heightened security measures that Entergy VY has implemented, and is implementing, to enhance the Station's security against sabotage or terrorist attack and in response to requirements imposed by the NRC. McElwee pf. at 9.

37. The NRC has modified existing security requirements and imposed additional security requirements on all nuclear facilities as a result of the terrorist attacks of 2001 and the continuing generalized high-threat-level environment. *Id.*

38. The NRC's final guidance has only recently become available to licensed facilities; the nuclear industry, along with the Nuclear Energy Institute ("NEI"), have just completed the required review of the NRC guidance and agreed to appropriate site modifications; Entergy VY sent this agreement, outlining Entergy VY's compliance with NRC orders, to the NRC by letter dated April 28, 2004. *Id.*

39. By order of the NRC, all work necessary to meet the security requirements must be completed no later than October 29, 2004. *Id.*

40. Entergy VY plans to complete the remaining physical modifications, and complete security officer training on those modifications, in time to utilize the new defensive strategies during the NRC review in early October. *Id.* at 10.

41. The sole purpose of the Project is to enhance security at the Station. *Id.*

Orderly Development of the Region

[30 V.S.A. § 248(b)(1)]

42. The Project will not unduly interfere with the orderly development of the region, with due consideration having been given to the recommendations of the municipal and regional planning commissions, the recommendations of municipal legislative bodies, and the land-conservation measures contained in the plan of any affected municipality. This finding is supported by findings 43 through 55, below.

43. By letter dated April 28, 2004, Entergy VY provided the Town of Vernon Planning Commission with plans for the construction of the Project. McElwee pf. at 11.

44. By letter dated April 28, 2004, the Vernon Planning Commission stated that it had agreed to waive the 45-day notice pursuant to 30 V.S.A. § 248(f) and had determined that the Project will not unduly interfere with the orderly development of the region or overburden municipal and governmental services in the Town of Vernon. *Id.* at 11; exh. DM-3.

45. At its meeting held on May 3, 2004, the Vernon selectboard voted that the Project will not unduly interfere with the orderly development of the region and will not overburden

municipal and governmental services in the Town of Vernon. McElwee pf. at 11; Boemig pf. at 10; exh. DM-2.

46. The Vernon Town Plan, which was adopted on November 3, 2003, is intended to be a policy document that provides guidelines to ensure that decisions made at the local, regional and state levels are in concert with the values and goals expressed in the plan. McElwee pf. at 11; exh. DM-4 at 2.

47. The Vernon Town Plan specifically cites the Station, its contribution to the community's tax base and its provision of varied employment opportunities as being largely responsible for Vernon's rural independence and self-sufficiency. McElwee pf. at 12; exh. DM-4 at 17.

48. The Vernon Town Plan states the town's policy to encourage land uses that help to protect river corridors, scenic highways and roads, scenic views and other scenic resources. McElwee pf. at 12; exh. DM-4 at 33.

49. The Project will not adversely affect river corridors, scenic highways and roads, scenic views or other scenic resources. The Project will be sited near Entergy VY's electric-generation facility, which is industrial in character, consists of concrete and metal sidings and includes transmission lines, towers and transformers. The Project will not adversely affect the view of the Connecticut River corridor. The Project is not located on a scenic highway or road. McElwee pf. at 12.

50. On April 13, 2004, and April 29, 2004, Entergy VY provided the Windham Regional Commission ("WRC") with plans for the Project. *Id.* at 13.

51. By letter dated April 29, 2004, James P. Matteau, Executive Director of the WRC, stated that the Project will not have an adverse aesthetic effect and will not unduly interfere with the orderly development of the region. The WRC further waived the 45-day notice requirement of subsection 248(f). McElwee pf. at 13; exh. DM-5.

52. The Windham Regional Plan, which was adopted in December 2001, is intended to provide continuing guidance for change in the Windham region. McElwee pf. at 13; exh. DM-6 at 2.

53. The Windham Regional Plan is designed to be used by the WRC, town planning commissions, selectboards, state agencies, landowners and citizens to provide guidance for local

planning and development initiatives, guide basic decisions for planning programs at the WRC, serve as a basis for evaluation and review of developments and subdivisions proposed under Act 250, and assist in determining compatibility of agency plans affecting land use with regional and local planning and development priorities. McElwee pf. at 13; exh. DM-6 at 3.

54. The Windham Regional Plan acknowledges the role the Station plays in providing (at the time the Plan was drafted) 33% of Vermont's annual electrical requirements. Vermont Yankee provides 38% and 36% of the electricity supplied to Vermont customers by Central Vermont Public Service Corporation ("CVPS") and Green Mountain Power Corporation ("GMP"), respectively. McElwee pf. at 14; exh. DM-6 at 65.

55. The Project is consistent with the policies of the Vernon Town Plan and the Windham Regional Plan. McElwee pf. at 14.

Need for Present and Future Demand for Service

[30 V.S.A. § 248(b)(2)]

56. The Project will not affect power generation or transmission, and therefore, this criterion is not applicable. *Id.* at 14-15.

System Stability and Reliability

[30 V.S.A. § 248(b)(3)]

57. Because the Station, and the transmission lines that serve it, will not change if the Project is constructed, system stability and reliability will not be affected. *Id.*

Economic Benefit to the State

[30 V.S.A. § 248(b)(4)]

58. The Project will not have an adverse economic effect. This finding is supported by findings 59 and 60, below.

59. The Project represents a substantial capital investment in Vermont that will be entirely borne by Entergy VY. McElwee pf. at 15.

60. Because it will enhance security for the Station, which is described above as a committed resource supplying one-third of Vermont's electric supply, the Project will have an economic benefit to the state and its residents. *Id.* at 15-16; finding 54, above.

Aesthetics, Historic Sites, Air and Water Purity,

the Natural Environment and Public Health and Safety

[30 V.S.A. § 248(b)(5)]

61. The Project as proposed will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment, and public health and safety. This finding is supported by findings 62 through 66, below, which address public safety, and by findings 67 through 142, below, which address the criteria specified in 10 V.S.A. §§ 1424(a)(d) and 6086(a)(1)-(8)(A) and (9)(k).

62. The Project will have no adverse effect on the existing Station or its transmission lines. McElwee pf. at 16.

63. The Project is required to meet NRC requirements. *Id.*

64. The Project is one of a number of heightened security measures that Entergy VY has implemented and will implement to enhance the Station's security against sabotage or terrorist attack. *Id.*

65. The primary purpose of the Project is to further secure the Station and prevent unauthorized vehicular access into portions of the OCA. *Id.*

66. As further described below, the Chief of the Vernon Fire Department and the Chief of the Vernon Police Department have reviewed the Project plans and determined that the Project will not have an adverse effect on the public health and safety. *Id.*; exhs. PB-5, PB-6.

Outstanding Resource Waters

[10 V.S.A. § 1424(a)(d)]

67. There are no watercourses in the vicinity of the Project that have been designated as outstanding resource waters. Boemig pf. at 3; exh. PB-2.

Water and Air Pollution

[10 V.S.A. § 6086(a)(1)]

68. The Project as proposed will not result in undue water and air pollution. This finding is supported by findings 69 though 91, below.

69. The Project will not result in air-pollution levels that create a threat to public health or a nuisance for nearby neighbors. There will be no sources of emissions other than minimal dust during construction. Boemig pf. at 3.

70. Dust will be controlled during construction by quickly seeding and mulching non-roadway areas when completed and through the use of water-spray trucks as necessary. *Id.*

71. There are no other sources of air emissions from the Project. *Id.*

72. The Project will not result in water pollution and will comply with applicable regulations adopted by the Departments of Environmental Conservation and Health. *Id.*

Headwaters

[10 V.S.A. § 6086(a)(1)(A)]

73. The Project is not in a headwaters area. Specifically, the Project area is not the headwaters of applicable waters as characterized by steep slopes and shallow soils and has a drainage area greater than 20 square miles. *Id.* at 4.

74. The Project area is not over 1,500 feet in elevation – the elevation is approximately 252 feet – and is not the watershed of a public-water supply designated by the Vermont Department of Health. *Id.*

75. The Project area is not a significant aquifer-recharge area. *Id.*

Waste Disposal

[10 V.S.A. § 6086(a)(1)(B)]

76. The Project does not involve the disposal of waste. *Id.*

77. The Project will not generate industrial or manufacturing wastewater, chemicals, pesticides, batteries, radiation, hazardous wastes or any other harmful or toxic substances. *Id.*

78. The Project will not involve the injection of waste materials or any harmful or toxic substances into groundwater or wells. *Id.*

79. Closure of the existing underground-storage tank and replacement with a new above-ground storage tank will not result in the disposal of any wastes and will comply with all applicable standards of the VANR and the Vermont Department of Labor and Industry, respectively. *Id.* at 5.

Water Conservation

[10 V.S.A. § 6086(a)(1)(C)]

80. This criterion is not applicable since the Project will not have water-supply or wastewater connections, and therefore no additional water will be used as a result of the Project. *Id.*

Floodways, Streams, and Shorelines

[10 V.S.A. §§ 6086(a)(1)(D), (E) &(F)]

81. The Project site is outside of the 100-year floodway and outside of the floodway fringe. *Id.*; exh. PB-3.

82. The Project as proposed will have no impact on the natural condition of the Connecticut River or its shoreline. This finding is supported by findings 83 through 90, below.

83. There are no streams in the Project area; the closest river shoreline is the Connecticut River. Boemig pf. at 6.

84. Ends of the security barrier system will abut the current OCA fence on the northeast and southeast sides of the property. *Id.*

85. The OCA fence is approximately 30 to 50 feet from the shoreline on the north and south ends of the barrier. *Id.*

86. The Project will have no impact on the natural condition of the Connecticut River, its shoreline, vegetation or stability. *Id.*

87. The Station is a secure site, so no access to the water for recreation is presently provided from the property. *Id*.

88. Aside from the security towers and additional security lighting, the Project will not likely be visible from the Connecticut River because it will be screened from view by the existing vegetation along the riverbank. *Id*.

89. Depending on vegetation growth, the Project may be visible from a boat in certain locations of the Connecticut River. *Id*.

90. The visual character of the Project site will be in keeping with the industrial nature and existing lighting of the Station. *Id*.

Wetlands

[10 V.S.A. § 6086(a)(1)(G)]

91. Based on a review of the National Wetlands Inventory Mapping, there are no significant wetlands in the area of the Project. *Id.* at 7; exh. PB-4.

Sufficiency of Water and Burden on Existing Water Supply

[10 V.S.A. §§ 6086(a)(2)&(3)]

92. Since the Project will not have water-supply or wastewater connections, these criteria are not applicable to the Project. Boemig pf. at 7.

Soil Erosion

[10 V.S.A. § 6086(a)(4)]

93. The Project as designed will not result in unreasonable soil erosion or reduce the ability of the land to hold water. This finding is supported by findings 94 through 102, below.

94. The Project site is relatively flat, and there are no drainage ways or streams around the construction site. Therefore, the risk of environmental damage due to erosion is minimal. Boemig pf. at 7.

95. The Project's soil erosion-control plan is provided in Exhibit Entergy-1. *Id.*; exh. Entergy-1.

96. By following the methods outlined in the erosion control plan, the potential for discharge of sediment or erosion of the Project area will be kept to a minimum. The Project as designed will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result. Boemig pf. at 8; *see* exh. Entergy-1.

97. Changes in stormwater-runoff caused by the Project are expected to be insignificant. Boemig pf. at 8.

98. The Project will be partially constructed on existing impervious areas; approximately 22,320 square feet of new impervious area will be added to the site. *Id.*

99. On June 10, 2004, the ANR issued a Construction General Permit to discharge stormwater for the construction of a security barrier system, installation of additional site lighting, construction of 2 gravel access roads, construction of a concrete pad for a 1000-gallon above-ground gas tank, and related work. Winter construction (after October 15th) is not

authorized. Letter dated June 10, 2004, from Wallace McLean, ANR, to Jay K. Thayer, Entergy VY. The Notice of Intent to Discharge Stormwater Runoff from a Construction Site Subject to General Permit No. 3-9001 (2003) filed by Jay K. Thayer of Entergy VY, dated May 26, 2004, estimated a soil disturbance of approximately 1 acre.

100. The SBS will be constructed by placing or pouring large concrete blocks directly on the existing surface. Boemig pf. at 8, 11.

101. Minor surface preparation may be performed to establish a good bearing surface underneath some blocks on slopes and those blocks crossing drainage ways. *Id.*

102. The blocks will be spaced apart to allow water to flow between the blocks. Therefore, the existing flow of stormwater will not be significantly disrupted by the Project. *Id.*

Transportation Systems

[10 V.S.A. § 6086(a)(5)]

103. The Project will not cause unreasonable congestion or unsafe conditions with respect to local highways, which are the only transportation facilities that will be affected by the project. This finding is supported by findings 104 through 108, below.

104. Aside from a limited temporary increase in construction vehicles and delivery trucks bringing the new barrier system to the site during construction, the Project's limited traffic will not cause unusual congestion or unsafe transportation conditions. Boemig pf. at 9.

105. A portion of the Project will be constructed on an existing parking lot within the OCA, resulting in the loss of most of the parking spots within this area. *Id.*

106. Until permanent replacement parking facilities can be permitted and constructed, Entergy VY will provide temporary replacement parking within the southern end of the existing OCA, where personnel associated with outages at the Station currently park. *Id.*

107. This temporary replacement parking is located within the OCA, and therefore will not cause unusual congestion or unsafe conditions with respect to public transportation. *Id.*

108. Subject to timely issuance of appropriate permits, Entergy VY plans to construct permanent replacement parking facilities as soon as practicable. *Id.*

Educational Services

[10 V.S.A. § 6086(a)(6)]

109. The Project will have no impact on educational services. It will not change employment at Vermont Yankee, and therefore will not affect the number of children to be educated in the area. *Id.* at 10.

Municipal Services

[10 V.S.A. § 6086(a)(7)]

110. The Project will have no impact on the ability of the Town of Vernon to provide municipal services. This finding is supported by findings 111 through 116, below.

111. The Project has been reviewed with the Vernon Fire Chief, the Vernon Police Chief and the Vernon Selectboard. Boemig pf. at 10.

112. The Vernon Fire and Police Departments have found that (i) they can provide adequate fire and police protection to the Project without overburdening the Departments, and (ii) the Project will not have an undue, adverse effect on the public health and safety. *Id.*; exhs. PB-5, 6.

113. At its May 3, 2004, meeting, the Vernon Selectboard voted that the Project will not interfere with the orderly development of the region and will not overburden municipal services. McElwee pf. at 11; Boemig pf. at 10; exh. DM-2.

114. The Project will not require municipal sewer or water-supply services. Boemig pf. at 11.

115. Vermont Yankee proposes no new public road construction for the Project. *Id.*

116. The Town of Vernon will not be required to provide any additional road maintenance services as a result of the Project. *Id.*

Aesthetics, Historic Sites

and Rare and Irreplaceable Natural Areas

[10 V.S.A. § 6086(a)(8)]

117. The Project will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites or rare and irreplaceable natural areas. This finding is supported by findings 118 through 133, below.

118. While the proposed security towers and additional security lighting will be marginally visible from Governor Hunt Road, the SBS and above-ground storage tank will not be readily visible outside the OCA. Boemig pf. at 14.

119. Most of the SBS will be located at the same base elevation as the plant – approximately 252 feet above sea level – which is approximately eighteen feet below the elevation of Governor Hunt Road. *Id.*

120. Existing trees along the OCA fence line will screen that portion of the Project that is located at a slightly higher elevation than Governor Hunt Road. *Id.* at 14-15.

121. The Project, other than the security towers and additional security lighting, will generally be protected from view from the Connecticut River and the east side of the OCA by the existing vegetated buffer along the river bank. *Id.* at 15.

122. The adjacent and visually dominant nuclear-power Station is industrial in character and contains concrete and metal siding with transmission lines, towers and transformers. The Station is also well lit. *Id.*

123. The concrete, steel, and metal design of the Project will be compatible with the existing appearance of the generating station. *Id.* at 15-16.

124. While portions of the Project will be marginally visible from Governor Hunt Road, the Project will not stand out because of the buffer of existing trees, the elevation at which the Project is installed, and the visual dominance of Entergy VY's generating facilities. *Id.* at 16.

125. Because the surrounding area has been largely developed, the Project will have little impact on open space in the area. *Id.*

126. In general, the Project "fits" in the context of the area, taking into account the existence of the Station, the nature of the Project surroundings, the Project's design and visibility, and the Project's impact on open space in the area. *Id.*

127. The proposed Project will be visually considered part of the existing power-plant facility and will not significantly change the character of the area. *Id.* at 17.

128. The Project does not violate a clear, written community standard intended to preserve the aesthetic and scenic or natural beauty of the area, as it complies with the scenic resources

policies of the Vernon Town Plan and the Windham Regional Plan. *Id.* at 16; McElwee pf. at 10-14.

129. Taking into account the visual dominance of the Station and the developed character of the nearby area, the Project will not offend the sensibilities of the average person. Boemig pf. at 16.

130. Entergy VY has taken generally-available mitigating steps to improve the harmony of the proposed Project with its surroundings, including maintaining the existing landscaping when possible and limiting the lighting to be installed and the number of trees to be removed to the extent necessary for the Station to meet security needs and NRC requirements. *Id.* at 16-17.

131. According to a letter dated May 5, 2004, from Everett Marshall of the Vermont Department of Fish and Wildlife Nongame and Natural Heritage Program, there are no known occurrences of rare, threatened and endangered species in the project area. The letter further states that there are several rare species associated with the Connecticut River adjacent to the project site, but no impact to these species is anticipated. Letter dated May 5, 2004, from Everett Marshall, ANR, to John Goodell, SVE Associates.

132. The site of the Project was significantly disturbed during the construction of the Station in the early 1970s. Boemig pf. at 17.

133. Because the Station's construction in the early 1970s substantially disturbed the site, no archeological review of the Project site is needed. *Id.*

Discussion

Based on the above findings, the Board finds that the proposed Project will not have an undue adverse effect on the aesthetics or scenic and natural beauty of the area. In reaching this conclusion, the Board has relied on the Environmental Board's methodology for determination of "undue" adverse effects on aesthetics and scenic and natural beauty as outlined in the so-called Quechee Lakes decision. Quechee Lakes Corporation, #3W0411-EB and 3W0439-EB, dated January 13, 1986.

As required by this decision, it is first appropriate to determine if the impact of the Project will be adverse. The Project would have an adverse impact on the aesthetics of the area if its design is out of context or not in harmony with the area in which it is located. If it is found

that the impact would be adverse, it is then necessary to determine that such an impact would be "undue." Such a finding would be required if the Project violates a clear written community standard intended to preserve the aesthetics or scenic beauty of the area, if it would offend the sensibilities of the average person, or if generally available mitigating steps would not be taken to improve the harmony of the Project with its surroundings. The Board's assessment of whether a particular project will have an "undue" adverse effect based on these standards should be significantly informed by the overall societal benefits of the project.[1]

The proposed Project will not have an adverse effect on the aesthetics of the area. The Project involves the construction of a security-barrier system at the nuclear-power Station, which is already industrial in character and contains concrete and metal siding with transmission lines, towers and transformers. The concrete, steel, and metal design of the Project will be compatible with the existing appearance of the generating station. The additional lighting proposed will not create an adverse impact because the Station is currently well lit.

Even if the Project did have an adverse aesthetic impact, such impact would not be undue. The Project does not violate a clear, written community standard, is not shocking or offensive, and this Project would not require mitigation because the visual appearance of the Station should not change. The Town of Vernon Planning Commission and the Windham Regional Commission were notified of the proposed Project and did not recommend any changes to the proposal. Since all construction takes place on the existing nuclear power Station site, its presence will not be shocking, and will not offend the sensibilities of the average person. For the reasons described in the paragraph above, mitigation would not be required for this Project since the proposed construction is compatible with the existing Station.

Necessary Wildlife Habitat and Endangered Species

[10 V.S.A. § 6086(a)(8)(A)]

134. The Project will not affect any necessary wildlife habitat or endangered species sites, and there are no significant natural habitats on the Project site. *Id.* at 18; finding 131, above.

135. The proposed Project site is in an area that is currently a parking lot, grassy areas and existing access roadways. Boemig pf. at 18.

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1. Docket 6884, Order of 4/21/04 at 20-21.

Development Affecting Public Investments

[10 V.S.A. § 6086(a)(9)(K)]

136. The Project will not unnecessarily or unreasonably endanger the public or quasi-public investments in any governmental public-utility facilities, services, or lands, or materially jeopardize or interfere with the function, efficiency, or safety of, or the public's use or enjoyment of or access to, such facilities, services, or lands. This finding is supported by findings 137 through 142, below.

137. The only significant impact on public investment will be on Entergy VY's facilities. Boemig pf. at 18.

138. The Project's construction and operation will not adversely affect the State's or Vernon's investments in highways. *Id.* at 19.

139. The Project is located approximately 2,500 feet away from New England Central Railroad mainline and will not affect that facility. *Id.* at 18.

140. The Project will have minimal effect on the Connecticut River, as the majority of the Project will be located away from the river and will have limited scenic and no water-quality impact on the river. *Id.*

141. The Project is located approximately 750 feet from the Vernon dam and will have no effect on the hydroelectric station located at the dam. *Id.* at 18-19.

142. The construction and use of the Project will have no permanent traffic impact on state or local highways and a very limited impact during construction. *Id.* at 19.

Least-Cost Integrated Resource Plan

[30 V.S.A. § 248(b)(6)]

143. As a wholesale utility that does not distribute electricity to the public, Entergy VY is not required to prepare or submit for approval an integrated-resource plan (or "IRP"). Consequently, this criterion is not applicable. McElwee pf. at 17; *see* Docket No. 6812, Order of 3/15/04.

Compliance with Electric Energy Plan

[30 V.S.A. § 248(b)(7)]

144. The Project is consistent with the Vermont Twenty-Year Electric Plan. On June 18, 2004, the Department issued a letter to that effect in accordance with 30 V.S.A. § 202(f).

Outstanding Resource Waters

[30 V.S.A. § 248(b)(8)]

145. The Project will not be located on or anywhere near any segment of any outstanding resource waters, as defined by the Vermont Water Resources Board. Boemig pf. at 3; exh. PB-2.

Waste to Energy Facilities

[30 V.S.A. § 248(b)(9)]

146. The Project is not a waste-to-energy facility, and therefore this criterion is not applicable. McElwee pf. at 18.

Existing or Planned Transmission Facilities

[30 V.S.A. § 248(b)(10)]

147. The Project does not require access to or use of transmission facilities, and therefore this criterion is not applicable. *Id.*

III. CONCLUSION

Based upon all of the above evidence, we conclude that the proposed construction will be of limited size and scope, the petition does not raise a significant issue with respect to the substantive criteria of 30 V.S.A. § 248, the public interest is satisfied by the procedures authorized by 30 V.S.A. § 248(j), and the proposed project will promote the general good of the state.

IV. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the State of Vermont Public Service Board that the construction by Entergy Nuclear Vermont Yankee, LLC of an approximately 3,200-foot long, approximately four-foot high and approximately five-foot wide security-barrier system with vehicle-access gates and gravel-access roads, in addition to four existing and two new security towers, additional security fencing, supplemental security lighting, and the replacement of an underground, fuel-storage tank with a similar, above-ground, fuel-storage tank at the site of its existing electric-generation facility in the Town of Vernon, Vermont, will promote the general good of the State of Vermont in accordance with 30 V.S.A. § 248, and a certificate of public good shall be issued in the matter.

Dated at Montpelier, Vermont this 9th day of July, 2004.

_____)	
)	PUBLIC SERVICE
)	
s/David C. Coen)	BOARD
)	
)	OF VERMONT
s/John D. Burke)	

OFFICE OF THE CLERK

FILED: July 9, 2004

ATTEST: s/Judith C. Whitney
Deputy Clerk of the Board

Notice to Readers: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: Clerk@psb.state.vt.us)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.