



**Entergy Nuclear Northeast**

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March 21, 2007

BVY 07-007

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**Subject: Vermont Yankee Nuclear Power Station  
License No. DPR-28 (Docket No. 50-271)  
Report pursuant to 10 CFR 50.54(bb)**

10 CFR 50.54(bb) requires Vermont Yankee (VY) submit, five years before expiration of the operating license, the program by which VY intends to manage and provide funding for the management of all irradiated fuel until title to the irradiated fuel is transferred to the Secretary of Energy. VY's operating license is scheduled to expire on March 21, 2012.

Attachment 1 includes the report pursuant to 10 CFR 50.54(bb) titled "Vermont Yankee Nuclear Power Station - Program for Maintenance of Irradiated Fuel."

It should be noted that VY has submitted an application for License Renewal pursuant to 10 CFR 54. Based on this, VY requests that the NRC schedule the review of this information following a final decision on the License Renewal application.

This letter contains no regulatory commitments.

We trust that the information provided is adequate; however should you have any question or require additional information, please contact Mr. David Mannai at (802) 258- 5422.

Sincerely,

A handwritten signature in black ink, appearing to read "Ted A. Sullivan", written over a horizontal line.

Ted A. Sullivan  
Site Vice President  
Vermont Yankee Nuclear Power Station

Attachment 1 "Program for Maintenance of Irradiated Fuel"

cc: next page

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cc: Mr. Samuel J. Collins, Regional Administrator (w/o Attachments)  
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BVY 07-007  
Docket No. 50-271

Attachment 1

Vermont Yankee Nuclear Power Station

Program for Maintenance of Irradiated Fuel

## **Attachment 1**

### **Vermont Yankee Nuclear Power Station Program for Maintenance of Irradiated Fuel**

#### **Background and Introduction**

As stated in the cover letter, Entergy Nuclear Vermont Yankee, LLC (Entergy VY or the Company) is seeking renewal of the operating license for the Vermont Yankee Nuclear Power Station (Vermont Yankee), currently set to expire on March 21, 2012. However, pursuant to 10 CFR 50.54(bb), licensees of nuclear power plants that are within five years of the expiration of the reactor operating license shall submit written notification to the Nuclear Regulatory Commission for its review and preliminary approval of the program by which the licensee intends to manage and provide funding for the management of all irradiated fuel at the reactor following permanent cessation of operation of the reactor until title to the irradiated fuel and possession of the fuel is transferred to the U.S. Department of Energy (DOE) for ultimate disposal.

A site-specific estimate of the cost to decommission the Vermont Yankee nuclear unit was recently prepared.<sup>[1]</sup> The analysis evaluated eight possible decommissioning scenarios, reflecting differences in the decommissioning alternative or approach selected, the expected operating license, as well as when the DOE could be expected to complete the transfer of spent fuel from the site. The analysis was prepared for the Vermont Public Service Board for financial planning purposes and as evidence of Entergy VY's financial ability to store spent nuclear fuel the site.<sup>[2]</sup> It was based upon the assumptions stated within the referenced document, recognizing that additional and detailed planning and engineering will be required to refine the scenario(s) and execute the selected method of decommissioning at the time operations cease.

Entergy VY is submitting this plan to comply with the requirements of 10 CFR 50.54(bb). Entergy VY has not determined or committed to a specific decommissioning approach for Vermont Yankee. However, for purposes of demonstrating the adequacy of funding to meet regulatory requirements, the SAFSTOR decommissioning option has been selected and evaluated based on the current license expiration date (Scenario 5 in the referenced decommissioning analysis). Entergy VY reserves the right to choose the ultimate decommissioning option in accordance with its business needs, recognizing that the chosen option will meet the NRC requirements for decommissioning funding.

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<sup>1</sup> "Decommissioning Cost Analysis for the Vermont Yankee Nuclear Power Station," Document No. E11-1559-002, Rev. 0, January 2007.

<sup>2</sup> Docket No. 7082: Petition of Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. for a certificate of public good to construct a dry-fuel-storage facility at the Vermont Yankee Nuclear Power Station, in Vernon, Vermont, January 10, 2007.

## **Spent Fuel Management Strategy**

Completion of the decommissioning process is highly dependent upon the DOE's ability to remove spent fuel from the site in a timely manner. DOE's repository program assumes that spent fuel allocations will be accepted for disposal from the nation's commercial nuclear plants, with limited exceptions, in the order (the "queue") in which it was removed from service ("oldest fuel first allocation"). The Company's current spent fuel management plan for the Vermont Yankee spent fuel is based upon 1) a 2017 start date for repository operations, consistent with the DOE's License Application Schedule for Yucca Mountain released in 2006, and 2) the DOE's expectations for spent fuel receipt as delineated in the "Acceptance Priority Ranking & Annual Capacity Report," DOE/RW-0567, last updated in July 2004. Optimally, the Company projects that fuel could be removed from the site as early as 2042, if the oldest fuel allocation receives the highest priority and the geologic repository is able to achieve the DOE's stated annual rate of transfer (3,000 metric tons of uranium/ year).<sup>3]</sup>

The NRC requires (in 10 CFR 50.54(bb)) that licensees establish a program to manage and provide funding for the caretaking of all irradiated fuel at the reactor site until title of the fuel is transferred to the DOE. Interim storage of the spent fuel, until the DOE has completed the transfer, will be in the reactor building storage pool and/or at an Independent Spent Fuel Storage Installation (ISFSI) located on the Vermont Yankee site.

An ISFSI is currently being constructed within the protected area (PA) to support continued plant operations. Depending upon the shutdown date and DOE's performance, this facility may not have sufficient capacity to support decommissioning operations. For example, in a scenario where the plant ceases operation in 2012, a second, supplemental ISFSI will likely be required to accommodate all the assemblies discharged over the operating period of the reactor. For financial planning purposes, the cost to construct this new facility is included within the decommissioning cost reported for the SAFSTOR scenario.

In the assumed scenario, 3,719 assemblies are generated through the end of currently licensed operations in 2012. To maintain core off-load capability, ten casks are loaded during operations (680 assemblies) and placed on the PA ISFSI pad. A new, larger pad is constructed at the north end of the site (within the owner controlled area) to permit post-shutdown dry fuel storage. The ten casks are relocated to this new pad in early 2015. The assemblies stored in the reactor building's spent fuel storage pool at the time of shutdown (3,039 assemblies) are loaded into multi-purpose canisters (MPCs) and moved into storage casks on the new pad by late 2017. Under this scenario, the nuclear unit is placed in safe-storage until such time that all fuel is removed from the site. During the dormancy period, the MPCs are periodically off-loaded into a DOE transport cask such that all 55 canisters are removed from the site by the year 2042. A discussion of the site-specific considerations for the management of spent fuel at Vermont Yankee may be found in Section 3.4 of the referenced decommissioning analysis.

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<sup>3</sup> In addition to the satisfactory resolution of current and pending legal challenges and the elimination or amendment of the administrative limit on the repository's total capacity. The Company's analysis assumes, for purposes only of this report, that the Company does not employ DOE spent fuel disposal contract allowances for up to 20% additional fuel designation for shipment to DOE each year.

In the event that Vermont Yankee does cease operations in 2012, Entergy VY will continue to comply with existing NRC licensing requirements, including the operation and maintenance of the systems and structures needed to support continued operation of the spent fuel pool and ISFSI(s), as necessary, under the decommissioning scenario ultimately selected. In addition, Entergy VY will also comply with applicable license termination requirements in accordance with 10 CFR 50.82 with respect to plant shutdown and post-shutdown activities including seeking such NRC approvals and on such schedules as necessary to satisfy these requirements consistent with the continued storage of irradiated fuel.

### **Spent Fuel Management and the SAFSTOR Decommissioning Option**

The total cost to decommission Vermont Yankee, including placing the unit into safe-storage at the conclusion of its currently scheduled operating license (2012), storing and managing spent fuel until such time that the DOE can complete the transfer of spent fuel, and the Company can decommission the nuclear unit and restore the site, is estimated at \$803.7 million (2006 nominal dollars), based upon the recent, site-specific analysis. The total cost comprises 1) costs associated with the termination of the reactor operating license, 2) costs assigned to the caretaking and transfer of the spent fuel, and 3) the restoration of the site following its release for unrestricted use. The individual estimates for these three activities are reported as \$457.5 million, \$304.8 million and \$41.5 million, respectively, in 2006 dollars.

Table 1 provides a schedule of estimated expenditures (costs in 2006 nominal dollars, in the projected year of expenditure) for the license termination cost component. Table 2 provides a similar schedule for the estimated spent fuel management costs with Table 3; a combined total of the first two tables.

### **Cost Considerations**

The significant contributors to the cost of spent fuel management in the SAFSTOR scenario are identified in Table 4.<sup>[4]</sup> As shown, costs are included for the design and construction of the ISFSI, the relocation of the spent fuel from the pool to the ISFSI pad, and eventual transfer of the fuel to the DOE. Table 5 provides an annual schedule for the Table 4 expenditures. Note that the \$94.2 million, shown in Tables 4 and 5, reflect the direct costs associated with constructing an ISFSI, procuring and loading dry storage canisters, and transferring fuel to the DOE. This cost is a subset of the \$304.8 million (spent fuel costs) estimate identified in Table 2. The differential comprises the management, security and other administrative and site support costs assigned to the spent fuel management effort over the 30-year post-operations storage period (from 2012 to 2042). It must also be noted that these figures will vary based on actual DOE performance, including the actual cask provisions and requirements that DOE settles upon. At this time, DOE has not identified any transport casks or requirements. Therefore, there is considerable uncertainty as to the actual costs that will have to be incurred. Major scheduling milestones are identified in Table 6.

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<sup>4</sup> Direct costs only, excluding plant caretaking costs during the dormancy period.

Entergy VY is currently constructing an ISFSI to support continued plant operations. The cost to construct this ISFSI, located within the protected area and to the north of the Reactor Building, is not reflected within the decommissioning analysis since it will be in service prior to 2012. However, the decommissioning analysis does address the disposition of the ten storage casks expected to be placed on the pad prior to current license expiration in 2012.

At shutdown, the spent fuel pool is expected to contain freshly discharged assemblies from the most recent refueling cycles. Over the next five and one-half years the assemblies are packaged into MPCs for transfer to dry storage. It is assumed that the five and one-half years provides the necessary cooling period for the final core to meet the decay heat requirements for the dry cask storage system. During this period, the spent fuel storage and handling facilities are reconfigured so that the preparation for safe-storage can proceed on the remaining plant systems. The cost allocated to the isolation of the spent fuel pool is estimated at \$9.2 million, based upon experience at Maine Yankee. Once the pool is emptied, the reactor building and the spent fuel storage and handling facilities are readied for long-term storage.

The evaluated SAFSTOR scenario includes the construction of a new ISFSI. Construction is assumed to occur such that the facility is available at the beginning of first quarter 2015.<sup>[5]</sup> The cost estimated for this activity is \$28.4 million.<sup>[6]</sup> The estimate is based on the cost to build the current PA ISFSI and includes site improvements, the ISFSI pad, transporter path, and security systems and support facilities. The ten casks stored on the PA ISFSI are expected to be relocated to the new pad by the end of the first quarter 2015. Over the subsequent two and one-half years, Entergy VY anticipates loading 45 MPCs with the assemblies remaining in the reactor building's spent fuel pool. The MPCs will then be placed in storage casks on the new ISFSI.

In the absence of identifiable DOE cask requirements, the design and capacity of the new ISFSI is based upon a commercial dry cask storage system. The MPC has a capacity of 68 fuel assemblies at a unit cost of approximately \$705,000. An additional cost of \$292,000 is allocated for the concrete storage overpack.

An average cost of \$274,500 was estimated for the labor and equipment to load, seal and transfer each MPC from the storage pool to the ISFSI. A cost of \$76,000 was estimated for the final transfer of the MPC at the ISFSI into a DOE transport cask (50% of the cost incurred for transferring the spent fuel into a dry storage canister).

Operation of the spent fuel pool is discontinued in 2017 after the fuel has been transferred to dry storage. ISFSI operations continue throughout the dormancy period until such time that the DOE is able to complete the transfer of the Vermont Yankee fuel to a federal repository (currently anticipated to be in 2042).

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<sup>5</sup> A summary of significant milestones is shown in Table 6.

<sup>6</sup> 15% contingency is included in the spent fuel related costs, consistent with the site-specific decommissioning analysis.

Prior to transferring all fuel to dry storage, the annual cost to maintain the plant and the ISFSI in safe-storage, and packaging and transfer fuel to the ISFSI is approximately \$31.5 million. Dormancy activities include operations and maintenance of the spent fuel pool, procuring, loading and transferring MPCs, a 24-hour security force, preventive and corrective maintenance on security systems, area lighting, general building maintenance, heating and ventilation of buildings, routine radiological inspections of contaminated structures, maintenance of structural integrity, and a site environmental and radiation monitoring program.

After all fuel has been transferred to dry storage, the annual cost to maintain the plant and the ISFSI in safe-storage, and transfer fuel to the DOE is estimated at approximately \$6.4 million. Dormancy activities include a 24-hour security force, preventive and corrective maintenance on security systems, area lighting, general building maintenance, heating and ventilation of buildings, routine radiological inspections of contaminated structures, maintenance of structural integrity, and a site environmental and radiation monitoring program.

### **Decommissioning**

Once the spent fuel is removed from the site, decommissioning operations would commence. The ISFSI is scheduled to be decommissioned along with the nuclear plant facilities. It is assumed that once the MPCs containing the spent fuel assemblies have been removed, any required decontamination performed on the storage modules (some minor activation is assumed) and the license for the facility terminated, the modules can be dismantled using conventional techniques for the demolition of reinforced concrete. The concrete storage pad can then be removed and the area regraded. The cost estimated to decontaminate the ISFSIs to the extent necessary to release the facilities for conventional demolition is estimated at \$2.9 million. Conventional demolition of the remaining overpacks and pads and restoration of the affected area of the site is estimated at \$502,000.

### **Financial Assurance**

Assuming a 3% annual growth in the liability, an after-tax rate of return of 5.59% would be required to meet the distribution requirements identified in Table 3. At a 4% annual rate of growth in the liability, the required rate of return required increases to 6.62%.

The decommissioning trust fund balance for Vermont Yankee was reported at \$416.5 million as of December 31, 2006. Since Entergy VY acquired Vermont Yankee on July 31, 2002, on an after-tax basis, funds in the decommissioning trust have grown at an annual rate of 6.73%. At this rate, assuming liability growth at 4% or less, sufficient funds would be available to decommission Vermont Yankee (including caretaking of the spent fuel) under the scenario described.

### **Additional Considerations**

As stated previously, Entergy VY is seeking renewal of the operating license for Vermont Yankee. With the potential for an additional 20 years of fund growth, there is a corresponding

and significant decrease in the earning requirements. For example, assuming the plant operates until 2032 and is then placed into SAFSTOR (Scenario 6 in the referenced analysis), the rate of return required is closer to 4%, assuming a 3% annual growth in the liability.

**Table 1**  
**Estimated License Termination Costs**  
(thousands of 2006 dollars)

Year	Labor	Equip & Matls	Energy	Burial	Other	Total
2012	27,572	545	688	40	2,809	31,654
2013	26,673	4,121	594	1,353	3,439	36,180
2014	36	240	0	33	252	560
2015	36	240	0	33	252	560
2016	36	241	0	33	253	562
2017	36	240	0	32	252	560
2018	36	240	0	31	251	558
2019	36	240	0	31	251	558
2020	36	240	0	31	252	559
2021	36	240	0	31	251	558
2022	36	240	0	31	251	558
2023	36	240	0	31	251	558
2024	36	240	0	31	252	559
2025	36	240	0	31	251	558
2026	36	240	0	31	251	558
2027	36	240	0	31	251	558
2028	36	240	0	31	252	559
2029	36	240	0	31	251	558
2030	36	240	0	31	251	558
2031	36	240	0	31	251	558
2032	36	240	0	31	252	559
2033	36	240	0	31	251	558
2034	36	240	0	31	251	558
2035	36	240	0	31	251	558
2036	36	240	0	31	252	559
2037	36	240	0	31	251	558
2038	36	240	0	31	251	558
2039	36	240	0	31	251	558
2040	36	240	0	31	252	559
2041	36	240	0	31	251	558
2042	113	242	2	31	258	647
2043	28,382	1,102	851	61	2,797	33,193
2044	48,097	14,114	832	29,333	11,531	103,907
2045	39,845	8,506	682	23,790	8,313	81,137
2046	35,175	3,784	638	13,963	4,986	58,547
2047	35,175	3,784	638	13,963	4,986	58,547
2048	19,826	1,671	278	3,356	12,782	37,913
2049	79	0	0	0	0	79
2050	37	0	0	0	0	37
	261,970	44,591	5,204	86,767	58,949	457,480

**Table 2**  
**Estimated Spent Fuel Management Costs**  
 (thousands of 2006 dollars)

Year	Labor	Equip & Matls	Energy	Burial	Other	Total
2012	2,277	6,831	0	0	4,210	13,317
2013	5,756	9,263	51	0	12,107	27,177
2014	13,331	13,432	170	0	3,981	30,914
2015	13,331	13,432	170	0	3,981	30,914
2016	13,368	13,469	171	0	3,992	30,999
2017	10,556	9,297	144	0	3,090	23,086
2018	4,470	353	85	0	1,103	6,011
2019	4,367	75	85	0	1,103	5,630
2020	4,441	242	85	0	1,106	5,874
2021	4,450	297	85	0	1,103	5,935
2022	4,450	297	85	0	1,103	5,935
2023	4,429	241	85	0	1,103	5,859
2024	4,420	186	85	0	1,106	5,798
2025	4,408	186	85	0	1,103	5,782
2026	4,408	186	85	0	1,103	5,782
2027	4,408	186	85	0	1,103	5,782
2028	4,420	186	85	0	1,106	5,798
2029	4,387	130	85	0	1,103	5,706
2030	4,408	186	85	0	1,103	5,782
2031	4,408	186	85	0	1,103	5,782
2032	4,379	75	85	0	1,106	5,645
2033	4,387	130	85	0	1,103	5,706
2034	4,387	130	85	0	1,103	5,706
2035	4,429	241	85	0	1,103	5,859
2036	4,399	131	85	0	1,106	5,722
2037	4,408	186	85	0	1,103	5,782
2038	4,408	186	85	0	1,103	5,782
2039	4,408	186	85	0	1,103	5,782
2040	4,420	186	85	0	1,106	5,798
2041	4,387	130	85	0	1,103	5,706
2042	4,479	408	85	0	1,100	6,072
2043	0	0	0	0	0	0
2044	0	0	0	0	0	0
2045	99	82	0	95	438	714
2046	134	111	0	128	592	965
2047	134	111	0	128	592	965
2048	35	31	0	30	143	238
2049	105	172	0	0	57	335
2050	50	82	0	0	27	159
	169,543	71,241	2,834	381	60,806	304,804

**Table 3**  
**Estimated Combined License Termination and Spent Fuel Management Costs**  
 (thousands of 2006 dollars)

<b>Year</b>	<b>Labor</b>	<b>Equip &amp; Matls</b>	<b>Energy</b>	<b>Burial</b>	<b>Other</b>	<b>Total</b>
2012	29,849	7,376	688	40	7,019	44,971
2013	32,429	13,384	646	1,353	15,546	63,358
2014	13,367	13,672	170	33	4,233	31,475
2015	13,367	13,672	170	33	4,233	31,475
2016	13,403	13,710	171	33	4,244	31,561
2017	10,591	9,537	144	32	3,342	23,646
2018	4,506	592	85	31	1,355	6,569
2019	4,402	315	85	31	1,355	6,188
2020	4,476	482	85	31	1,358	6,433
2021	4,485	537	85	31	1,355	6,493
2022	4,485	537	85	31	1,355	6,493
2023	4,464	481	85	31	1,355	6,417
2024	4,456	427	85	31	1,358	6,357
2025	4,444	426	85	31	1,355	6,340
2026	4,444	426	85	31	1,355	6,340
2027	4,444	426	85	31	1,355	6,340
2028	4,456	427	85	31	1,358	6,357
2029	4,423	370	85	31	1,355	6,264
2030	4,444	426	85	31	1,355	6,340
2031	4,444	426	85	31	1,355	6,340
2032	4,414	316	85	31	1,358	6,205
2033	4,423	370	85	31	1,355	6,264
2034	4,423	370	85	31	1,355	6,264
2035	4,464	481	85	31	1,355	6,417
2036	4,435	371	85	31	1,358	6,281
2037	4,444	426	85	31	1,355	6,340
2038	4,444	426	85	31	1,355	6,340
2039	4,444	426	85	31	1,355	6,340
2040	4,456	427	85	31	1,358	6,357
2041	4,423	370	85	31	1,355	6,264
2042	4,592	650	87	31	1,359	6,719
2043	28,382	1,102	851	61	2,797	33,193
2044	48,097	14,114	832	29,333	11,531	103,907
2045	39,944	8,589	682	23,884	8,751	81,851
2046	35,309	3,896	638	14,091	5,578	59,512
2047	35,309	3,896	638	14,091	5,578	59,512
2048	19,861	1,702	278	3,386	12,925	38,151
2049	184	172	0	0	57	413
2050	88	82	0	0	27	197
	431,513	115,832	8,038	87,147	119,755	762,285

**Table 4**  
**Significant Cost Contributors**

Spent Fuel Management – Direct Expenditures	(2006 dollars)*
New ISFSI Construction Cost	28,365,814
Spent Fuel Transfer Facility	3,660,105
Transfer of PA Casks to New ISFSI (10)	762,522
Capital Costs of New ISFSI MPCs and Overpacks (45)	44,866,733
MPC Loading Costs (45)	5,490,158
MPC Transfer Costs from Pool to New ISFSI (45)	6,862,697
MPC Transfer Costs from New ISFSI to DOE (55)	4,193,870

\* Contingency has been added to all costs (15%)

**Table 5  
Estimated Expenditures for ISFSI Construction, Spent Fuel Packaging and Canister Transfer \***

Year	New ISFSI Construction	Fuel Transfer Facility	Transfer PA** Casks to ISFSI	ISFSI Cask Costs	Pool to ISFSI Loading	Pool to ISFSI Transfer	ISFSI to DOE Transfer	Total (\$2006)
2012	9,455,271	0	0	0	0	0	0	9,455,271
2013	9,455,271	0	0	0	0	0	0	9,455,271
2014	9,455,271	0	0	9,970,385	0	0	0	19,425,656
2015	0	0	762,522	19,940,770	1,220,035	1,525,044	0	23,448,371
2016	0	0	0	14,955,578	2,440,070	3,050,088	0	20,445,735
2017	0	3,660,105	0	0	1,830,053	2,287,566	0	7,777,723
2018	0	0	0	0	0	0	381,261	381,261
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	228,757	228,757
2021	0	0	0	0	0	0	305,009	305,009
2022	0	0	0	0	0	0	305,009	305,009
2023	0	0	0	0	0	0	228,757	228,757
2024	0	0	0	0	0	0	152,504	152,504
2025	0	0	0	0	0	0	152,504	152,504
2026	0	0	0	0	0	0	152,504	152,504
2027	0	0	0	0	0	0	152,504	152,504
2028	0	0	0	0	0	0	152,504	152,504
2029	0	0	0	0	0	0	76,252	76,252
2030	0	0	0	0	0	0	152,504	152,504
2031	0	0	0	0	0	0	152,504	152,504
2032	0	0	0	0	0	0	0	0
2033	0	0	0	0	0	0	76,252	76,252
2034	0	0	0	0	0	0	76,252	76,252
2035	0	0	0	0	0	0	228,757	228,757
2036	0	0	0	0	0	0	76,252	76,252
2037	0	0	0	0	0	0	152,504	152,504
2038	0	0	0	0	0	0	152,504	152,504
2039	0	0	0	0	0	0	152,504	152,504
2040	0	0	0	0	0	0	152,504	152,504
2041	0	0	0	0	0	0	76,252	76,252
2042	0	0	0	0	0	0	457,513	457,513
	28,365,814	3,660,105	762,522	44,866,733	5,490,158	6,862,697	4,193,870	94,201,898

\* A 15% contingency factor has been applied to all spent fuel related costs

\*\* Transfer of the 10 casks located on the ISFSI constructed within the Protected Area (PA) to support plant operations to the new ISFSI constructed at the north end of the site property

**Table 6**  
**Projected Schedule and Milestones**

Major Milestones and Fuel-Related Events	
Currently scheduled cessation of plant operations	March 2012
New ISFSI available	2015 (beginning of 1 <sup>st</sup> quarter)
Casks transferred from PA ISFSI to New ISFSI	2015 (by end of 1 <sup>st</sup> quarter)
First MPC transferred from pool to New ISFSI	2015 (3 <sup>rd</sup> quarter)
Last MPC transferred from pool to New ISFSI	2017 (3 <sup>rd</sup> quarter)
End of wet storage pool operations (66 months)	September 2017
DOE begins to receive commercial spent fuel	March 31, 2017
1 <sup>st</sup> Vermont Yankee fuel assembly removed from site	2018 (4 <sup>th</sup> quarter)
Last Vermont Yankee fuel assembly leaves site	December 2042
Decommissioning Operations Commence	December 2042
ISFSI decommissioned (concurrent with other site facilities)	April 2045 thru March 2048
ISFSI demolition (concurrent with other site facilities)	December 2048 thru June 2050