# POLICY ISSUE (INFORMATION)

October 26, 2011

SECY-11-0149

FOR: The Commissioners

FROM: Eric J. Leeds, Director Office of Nuclear Reactor Regulation

<u>SUBJECT</u>: SUMMARY FINDINGS RESULTING FROM THE STAFF REVIEW OF THE 2010 DECOMMISSIONING FUNDING STATUS REPORTS FOR OPERATING POWER REACTOR LICENSEES

# PURPOSE:

This paper informs the Commission of the Nuclear Regulatory Commission (NRC) staff's findings from the review of the 2010 decommissioning funding status (DFS) reports for operating power reactor licensees. The DFS reports are required under Title 10 of the *Code of Federal Regulations* (10 CFR) 50.75(f)(1). The 2010 DFS reports were due to the NRC by March 31, 2011, reflecting information as of December 31, 2010.

### BACKGROUND:

In 1988, the NRC established requirements to assure that decommissioning of all licensed facilities will be accomplished in a safe and timely manner and that adequate licensee funds will be available for this purpose. "Decommission" means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits (1) release of the property for unrestricted use and termination of the license; or (2) release of the property under restricted conditions and termination of the license. For reactor licensees, the costs of spent fuel management, site restoration, and other costs not related to termination of the license are not included in the financial assurance for decommissioning.

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The requirements for reactor licensees are stated in 10 CFR § § 50.33(k), 50.75, and 50.82. Reactor licensees must certify they provide not less than a minimum prescribed amount of financial assurance for decommissioning. The amount to be provided must be adjusted annually to account for cost escalation.

In 1998, the NRC amended the financial assurance rules to respond to the anticipated rate deregulation of the power generating industry. The amendments provided additional methods and flexibility for reactor licensees to provide financial assurance. The NRC required licensees to periodically submit a DFS report in order to obtain the information necessary to monitor the status of decommissioning funds. The Office of Nuclear Reactor Regulation's Office Instruction LIC-205, Revision 4, "Procedures for NRC's Independent Analysis of Decommissioning Funding Assurance for Operating Power Reactors," dated December 2010, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML103410283) describes the analysis performed by the NRC staff to determine if the licensee has provided adequate decommissioning financial assurance.

# DISCUSSION:

The NRC staff has reviewed the information in the 2010 DFS reports for all 104 operating nuclear power reactors, reflecting power reactor ownership by single or multiple licensees. A table summarizing all reviews<sup>1</sup> performed by the NRC staff is enclosed and also available at ADAMS Accession No. ML112410047.

### Results of NRC Staff's Review:

The NRC staff's review resulted in the following findings:

- The amount accumulated, as of December 31, 2010, for all operating power reactor licensees totaled \$40.4 billion. The total amount accumulated represents a 29 percent increase from the total amount accumulated reported in the 2008 DFS reports (\$31.3 billion).
- As of December 31, 2010, 99 of the 104 operating nuclear power reactor licensees were providing decommissioning funding assurance, as stipulated in 10 CFR 50.75. The 5 power reactor licensees that were not providing the full amount of decommissioning funding assurance, as of December 31, 2010, were: Beaver Valley Power Station, Unit 1 (BVPS 1); Limerick Generating Station, Unit 1 (Limerick 1); Palisades Nuclear Plant (Palisades); Perry Nuclear Power Plant (Perry); and Prairie Island Nuclear Plant, Unit 1 (Prairie 1).
- BVPS 1, Perry, and Palisades provided information to resolve their shortfalls in conjunction with their 2010 DFS reports. BVPS 1 and Perry committed to increase the amount of their supplemental parent company guarantees (PCGs); the PCGs were submitted 90 days after the receipt of the DFS reports. Palisades submitted information

<sup>&</sup>lt;sup>1</sup> Also within the summary table, are ADAMS Accession Nos. for all of the individual reviews, by power reactor.

showing its decommissioning trust fund balance had increased sufficiently to meet the requirements as of the date of its DFS report submittal. The shortfall for Prairie 1 was resolved in June 2011 when it received approval of its application for license renewal, the effect of which was to extend the period of time for the fund to grow.<sup>2</sup>

The licensee for Limerick 1 has not provided a resolution for the shortfall in its 2010 DFS report. (Limerick 1 also reported a shortfall as of December 31, 2008. During the 2008 DFS report process, the licensee stated that it would seek rate relief, if necessary, from the Pennsylvania Public Utilities Commission in 2013 for Limerick 1). As of Oct. 2011, after two rounds of RAI's, no voluntary shortfall resolution has been offered by Limerick 1. The NRC staff is pursuing all available options. The NRC staff will follow-up with the licensee to determine its plan for resolution of the December 31, 2010 shortfall.

# Resolution of issues not closed out in SECY-09-0146:

- 27 reactor units had shortfalls that were identified in SECY-09-0146, "2009 Summary of Decommissioning Funding Status Reports For Nuclear Power Reactors", dated October 6, 2009, (ADAMS Accession No. ML092580041).
- The NRC staff has worked with the licensees of the 27 units and all outstanding shortfalls have been resolved.
- The 27 units' shortfalls were resolved in the following manner: one unit received license renewal, supplemented with a PCG; four units achieved sufficient market recovery of their decommissioning trust funds to meet the requirements; one unit used a supplemental PCG; nine units relied on earnings credits projected through a safe storage period; three units relied on earnings credits projected through a safe storage period plus a supplemental PCG; eight units obtained rate relief; and one unit planned to seek rate relief, if necessary.

A non-cited violation was issued for one reactor unit for underreporting the value of securities held in a decommissioning trust fund (ADAMS Accession No. ML110610635). In another instance, a pre-decisional enforcement conference was held to discuss apparent violations with respect to a DFS report submitted in 2009; however; after further evaluation, the NRC staff concluded that no violation occurred (ADAMS Accession No. ML110280410).

### Additional information regarding the 2011 DFS Report Review

Since the 2008 DFS reports, submitted in March 2009, the staff conducted three public meetings, held an instructional session at the 2010 Regulatory Information Conference, and participated in a Commission public meeting on decommissioning financial assurance. The staff updated its office instructions to incorporate lessons learned and issued revised regulatory guidance. The licensees improved the quality of the information provided in the 2011 DFS reports submittals.

<sup>&</sup>lt;sup>2</sup> The ADAMS Accession Nos. for the additional reviews can be found in the enclosure in the notes section.

## CONCLUSION:

Based on the information provided by the licensees in the 2010 decommissioning funding status reports, with one exception, licensees either did not have shortfalls as of December 31, 2010, or resolved the shortfalls as of the date of this summary. The NRC staff will follow up with the licensee that has not resolved its shortfall.

### COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objection.

# /RA/

Eric J. Leeds, Director Office of Nuclear Reactor Regulations

Enclosure: 2010 DFS Reports – Summary Table

<u>Cat</u>	<u>Plant Name</u>		<u>MWth</u>	<u>Termination</u> <u>Date</u> <u>as of</u> <u>3/31/2011</u>	<u>NRC Minimum</u> <u>Formula</u>	<u>Site Specific</u> Cost Estimate	Certifying to Site Specific Cost Estimate (Note 1)	Projected Decommissioning Funding Amount including pro rata credit	Difference in NRC Minimum Formula and Projected Trust Fund Amount	How Shortfall was resolved	DFS report analysis (ADAMS Accession Number)
1	Arkansas Nuclear One, Unit 1	PWR	2568	5/21/2034	\$433,939,112	not provided	N/A	\$703,281,063	\$269,341,952		ML112351069
1	Arkansas Nuclear One, Unit 2	PWR	3026	7/17/2038	\$451,858,957	not provided	N/A	\$660,450,544	\$208,591,587		ML112351088
2H	Arnold (Duane) Energy Center	BWR	1912	2/21/2034	\$553,138,619	\$603,358,000	Yes	\$524,063,546	SAFSTOR		ML112351089
2	Beaver Valley Power Station, Unit 1	PWR	2900	1/29/2036	\$461,324,311	not provided	N/A	\$410,149,735	(\$51,174,576)	Parent Company Guarantee (Note 2)	ML112351092
2H	Beaver Valley Power Station, Unit 2	PWR	2900	5/27/2047	\$461,324,311	not provided	N/A	\$626,831,483	\$165,507,172		ML112351099
2	Braidwood Station, Unit 1	PWR	3586	10/17/2026	\$472,417,086	\$615,495,000	Yes	\$334,099,624	SAFSTOR		ML112351218
2	Braidwood Station, Unit 2	PWR	3586	12/18/2027	\$472,417,086	\$672,827,000	Yes	\$373,237,042	SAFSTOR		ML112351223
1	Brown's Ferry Nuclear Power Station, Unit 1	BWR	3458	12/20/2033	\$608,918,683	not provided	N/A	\$800,335,005	\$191,416,322		ML112351225
1	Brown's Ferry Nuclear Power Station, Unit 2	BWR	3458	6/28/2034	\$608,918,683	not provided	N/A	\$767,268,160	\$158,349,477		ML112351230
1	Brown's Ferry Nuclear Power Station, Unit 3	BWR	3458	6/2/2036	\$608,918,683	not provided	N/A	\$766,615,128	\$157,696,445		ML112351237
1	Brunswick Steam Electric Plant, Unit 1	BWR	2923	9/8/2036	\$587,750,866	not provided	N/A	\$714,435,157	\$126,684,291		ML112351240
1	Brunswick Steam Electric Plant, Unit 2	BWR	2923	12/27/2034	\$587,750,866	not provided	N/A	\$744,636,056	\$156,885,190		ML112351241
2	Byron Station, Unit 1	PWR	3586	10/31/2024	\$472,417,086	\$604,059,000	Yes	\$356,164,249	SAFSTOR		ML112351244
2	Byron Station, Unit 2	PWR	3586	11/6/2026	\$472,417,086	\$656,548,000	Yes	\$360,126,674	SAFSTOR		ML112351245
1	Callaway Plant	PWR	3565	10/18/2024	\$472,417,086	\$600,281,737	Yes	\$801,596,353	SAFSTOR		ML112351246
2	Calvert Cliffs Nuclear Power Plant, Unit 1	PWR	2737	7/31/2034	\$440,551,456	\$602,303,000	Yes	\$358,490,407	SAFSTOR		ML112351250
2	Calvert Cliffs Nuclear Power Plant, Unit 2	PWR	2737	8/13/2036	\$440,551,456	\$601,447,000	Yes	\$484,378,388	SAFSTOR		ML112351252
1	Catawba Nuclear Station, Unit 1	PWR	3411	12/5/2043	\$466,847,886	not provided	N/A	\$794,679,013	\$327,831,127		ML112351256
1	Catawba Nuclear Station, Unit 2	PWR	3411	12/5/2043	\$466,847,886	not provided	N/A	\$798,758,696	\$331,910,810		ML112351259
2	Clinton Power Station	BWR	3473	9/29/2026	\$616,079,083	\$795,863,000	Yes	\$566,786,129	SAFSTOR		ML112351262
1	Columbia Generating Station	BWR	3486	12/20/2023	\$464,320,048	not provided	N/A	\$937,386,920	\$473,066,871		ML112351263
1	Comanche Peak Steam Electric Station, Unit 1	PWR	3458	2/8/2030	\$466,847,886	not provided	N/A	\$591,058,414	\$124,210,528		ML112351264
1	Comanche Peak Steam Electric Station, Unit 2	PWR	3458	2/2/2033	\$466,847,886	not provided	N/A	\$716,340,429	\$249,492,543		ML112351265
1	Cook (Donald C.) Nuclear Power Plant, Unit 1	PWR	3304	10/25/2034	\$468,256,216	not provided	N/A	\$834,370,641	\$366,114,425		ML112351268
1	Cook (Donald C.) Nuclear Power Plant, Unit 2	PWR	3468	12/23/2037	\$472,417,086	not provided	N/A	\$835,305,502	\$362,888,416		ML112351273
1	Cooper Nuclear Station	BWR	2419	1/18/2034	\$573,962,092	\$574,906,000	Yes	\$936,000,504	Site-Specific DECON		ML112351282
1	Crystal River Nuclear Plant, Unit 3	PWR	2609	12/3/2016	\$435,543,290	not provided	N/A	\$668,659,510	\$233,116,220		ML112351284
2	Davis-Besse Nuclear Power Station	PWR	2817	4/22/2017	\$448,974,400	not provided	N/A	\$522,731,762	\$73,757,362		ML112351286
1	Diablo Canyon Nuclear Power Plant, Unit 1	PWR	3411	11/2/2024	\$472,584,981	\$583,900,000	Yes	\$1,517,182,480	Site-Specific DECON		ML112351291
1	Diablo Canyon Nuclear Power Plant, Unit 2	PWR	3411	8/26/2025	\$472,584,981	\$546,500,000	Yes	\$1,954,934,289	Site-Specific DECON		ML112351295
2	Dresden Nuclear Power Station, Unit 2	BWR	2957	12/22/2029	\$596,058,795	not provided	N/A	\$744,094,318	\$148,035,523		ML112360120
2	Dresden Nuclear Power Station, Unit 3	BWR	2957	1/2/2031	\$596,058,795	not provided	N/A	\$776,574,163	\$180,515,368		ML112360124
1	Farley (Joseph M.) Nuclear Plant, Unit 1	PWR	2775	6/25/2037	\$442,038,255	not provided	N/A	\$601,611,145	\$159,572,889		ML112360126
1	Farley (Joseph M.) Nuclear Plant, Unit 2	PWR	2775	3/31/2041	\$442,038,255	not provided	N/A	\$631,713,220	\$189,674,964		ML112360128
1	Fermi (Enrico) Atomic Power Plant, Unit 2	BWR	3430	3/20/2025	\$967,014,283	not provided	N/A	\$1,766,864,483	\$799,850,199		ML112360130
2	Fitzpatrick (James A.) Nuclear Power Plant	BWR	2536	10/17/2034	\$590,202,975	not provided	N/A	\$926,437,721	\$336,234,746		ML112360132
1	Fort Calhoun Station	PWR	1500	8/9/2033	\$396,830,352	\$477,199,000	No	\$549,225,913	\$152,395,561		ML112360141
2	Ginna (Robert E.) Nuclear Power Plant	PWR	1775	9/18/2029	\$415,889,465	\$623,221,000	Yes	\$412,204,509	SAFSTOR		ML112360144
1	Grand Gulf Nuclear Station	BWR	3898	11/1/2024	\$608,918,683	not provided	N/A	\$1,005,567,890	\$64,351,042		ML112370012
1	Harris (Shearon) Nuclear Power Plant	PWR	2900	10/24/2046	\$446,929,043	not provided	N/A	\$1,626,691,701	\$1,179,762,658		ML112370014
1	Hatch (Edwin I.) Nuclear Plant, Unit 1	BWR	2804	8/6/2034	\$582,920,111	not provided	N/A	\$683,860,887	\$100,940,776		ML112370016
1	Hatch (Edwin I.) Nuclear Plant, Unit 2	BWR	2804	6/13/2038	\$582,920,111	not provided	N/A	\$708,642,036	\$125,721,925		ML112370018
2	Hope Creek Nuclear Power Station	BWR	3840	4/11/2026	\$628,251,763	provided	Yes	\$567,072,990	SAFSTOR		ML112370020

# 2010 Decommissioning Funding Status reports - Summary Table

Cat	<u>Plant Name</u>		<u>MWth</u>	<u>Termination</u> <u>Date</u> <u>as of</u> <u>3/31/2011</u>	<u>NRC Minimum</u> <u>Formula</u>	<u>Site Specific</u> Cost Estimate	Certifying to Site Specific Cost Estimate (Note 1)	Projected Decommissioning Funding Amount including pro rata credit	Difference in NRC Minimum Formula and Projected Trust Fund Amount	How Shortfall was resolved	DFS report analysis (ADAMS Accession Number)
2	Indian Point, Unit 2	PWR	3216	9/28/2013	\$474,086,454	\$696,200,000	Yes	\$424,838,985	SAFSTOR		ML112370023
2	Indian Point, Unit 3	PWR	3216	12/12/2015	\$474,086,454	\$836,445,000	Yes	\$584,566,060	SAFSTOR		ML112370033
2	Kewaunee Nuclear Power Plant	PWR	1772	12/21/2033	\$407,599,662	not provided	N/A	\$849,314,910	\$441,715,248		ML112370036
2	LaSalle County Station, Unit 1	BWR	3546	4/17/2022	\$616,079,083	\$683,505,000	Yes	\$465,946,096	SAFSTOR		ML112370039
2	LaSalle County Station, Unit 2	BWR	3489	12/16/2023	\$616,079,083	\$670,100,000	Yes	\$473,311,815	SAFSTOR		ML112370042
1	Limerick Generating Station, Unit 1	BWR	3458	10/26/2024	\$628,251,763	not provided	N/A	\$528,210,057	(\$100,041,706)	No resolution provided	ML112370045
1	Limerick Generating Station, Unit 2	BWR	3458	6/22/2029	\$628,251,763	not provided	N/A	\$771,619,849	\$143,368,086		ML112370048
1	McGuire (William B.) Nuclear Station, Unit 1	PWR	3411	6/12/2041	\$466,847,886	not provided	N/A	\$848,939,081	\$382,091,195		ML112370138
1	McGuire (William B.) Nuclear Station, Unit 2	PWR	3411	3/3/2043	\$466,847,886	not provided	N/A	\$1,115,233,893	\$648,386,007		ML112370144
2	Millstone Nuclear Power Station, Unit 2	PWR	2700	11/25/2045	\$453,247,005	not provided	N/A	\$672,140,593	\$218,893,588		ML112370148
2H	Millstone Nuclear Power Station, Unit 3	PWR	3411	9/8/2030	\$481,884,726	not provided	N/A	\$803,050,157	\$321,165,431		ML112370149
1	Monticello Nuclear Generating Plant	BWR	1775	9/8/2030	\$547,511,763	not provided	N/A	\$732,369,861	\$184,858,098		ML112370152
2	Nine Mile Point Nuclear Station, Unit 1	BWR	1850	8/22/2029	\$561,470,928	\$766,578,000	Yes	\$583,283,235	SAFSTOR		ML112370153
2H	Nine Mile Point Nuclear Station, Unit 2	BWR	3467	10/31/2046	\$628,251,763	\$889,163,000	Yes	\$664,620,021	SAFSTOR		ML112370154
1	North Anna Power Station, Unit 1	PWR	2940	4/1/2038	\$448,494,095	not provided	N/A	\$508,974,662	\$60,480,567		ML112370155
1	North Anna Power Station, Unit 2	PWR	2940	8/21/2040	\$448,494,095	not provided	N/A	\$516,084,655	\$67,590,561		ML112370156
1	Oconee Nuclear Station, Unit 1	PWR	2568	2/6/2033	\$433,939,112	not provided	N/A	\$493,066,983	\$59,127,872		ML112370157
1	Oconee Nuclear Station, Unit 2	PWR	2568	10/6/2033	\$433,939,112	not provided	N/A	\$499,331,287	\$65,392,176		ML112371757
1	Oconee Nuclear Station, Unit 3 Ovster Creek Nuclear Power Plant	PWR BWR	2568	7/19/2034	\$433,939,112	not provided	N/A N/A	\$729,189,311	\$295,250,199		ML112371761 ML112371763
2	Palisades Nuclear Plant	PWR	1930 2565	3/24/2031	\$564,821,604 \$438,996,952	not provided	N/A	\$914,963,751 \$434,867,608	\$350,142,147 (\$4,129,343)	Trust fund increase by report submittal (Note 3)	ML112371763 ML112371764
1	Palo Verde Nuclear Generating Station, Unit 1	PWR	3990	6/1/2025	\$472,584,981	\$529,232,000	Yes	\$1,128,962,969	\$599,730,969		ML112371774
	Palo Verde Nuclear Generating Station, Unit 2	PWR	3990	4/24/2026	\$472,584,981	\$578,116,000	Yes	\$1,240,898,826	\$662,782,826		ML112371777
1	Palo Verde Nuclear Generating Station, Unit 3	PWR	3990	11/25/2027	\$472,584,981	\$640,406,000	Yes	\$1,431,413,298	\$791,007,298		ML112371779
1	Peach Bottom Atomic Power Station, Unit 2	BWR	3514	8/8/2033	\$628,251,763	not provided	N/A	\$743,773,488	\$115,521,724		ML112371783
1	Peach Bottom Atomic Power Station, Unit 3	BWR	3514	7/2/2034	\$628,251,763	not provided	N/A	\$785,190,309	\$156,938,545		ML112371784
2H	Perry Nuclear Power Plant	BWR	3758	3/18/2026	\$616,079,083	not provided	N/A	\$596,845,222	(\$19,233,861)	Parent Company Guarantee (Note 4)	ML112371790
2	Pilgrim Station	BWR	2028	6/8/2012	\$568,926,182	not provided	N/A	\$713,712,434	\$144,786,252		ML112371799
2	Point Beach Nuclear Plant, Unit 1	PWR	1540	10/5/2030	\$398,414,074	not provided	N/A	\$413,379,634	\$14,965,560		ML112371802
2	Point Beach Nuclear Plant, Unit 2	PWR	1540	3/8/2033	\$398,414,074	not provided	N/A	\$408,658,874	\$10,244,799		ML112371805
1	Prairie Island Nuclear Plant, Unit 1	PWR	1677	8/9/2013	\$403,838,322	not provided	N/A	\$403,080,365	(\$757,957)	Obtained License Extension (Note 5)	ML112371809
1	Prairie Island Nuclear Plant, Unit 2	PWR	1677	10/29/2014	\$403,838,322	not provided	N/A	\$438,446,316	\$34,607,994		ML112371815
2H	Quad Cities Station, Unit 1	BWR	2957	12/14/2032	\$596,058,795	not provided	N/A	\$767,516,417	\$171,457,622		ML112371817
2H	Quad Cities Station, Unit 2	BWR	2957	12/14/2032	\$596,058,795	not provided	N/A	\$834,446,571	\$238,387,776		ML112371820
1	River Bend Station (Regulated)	BWR	3091	8/29/2025	\$416,199,528	not provided	N/A	\$542,772,902	\$126,573,374		ML112371825
2	River Bend Station (Non-Regulated)	BWR	3091	8/29/2025	\$178,371,226	not provided	N/A	\$313,103,638	\$134,732,411		ML112371825
1	Robinson (H.B.) Plant, Unit 2	PWR	2339	7/31/2030	\$424,979,189	not provided	N/A	\$887,704,526	\$462,725,337		ML112371829
1	Salem Nuclear Generating Station, Unit 1	PWR	3459	8/13/2016	\$481,884,726	not provided	N/A	\$531,495,097	\$49,610,371		ML112371832
1	Salem Nuclear Generating Station, Unit 2	PWR	3459	4/18/2020	\$481,884,726	not provided	N/A	\$523,385,673	\$41,500,947		ML112371834
1	San Onofre Nuclear Generating Station, Unit 2	PWR	3438	2/16/2022	\$472,584,981	\$1,148,800,000	Yes	\$1,967,090,535	SAFSTOR		ML112371893
1	San Onofre Nuclear Generating Station, Unit 3	PWR	3438	11/15/2022	\$472,584,981	\$1,136,100,000	Yes	\$2,265,678,306	SAFSTOR		ML112371902
2H	Seabrook Nuclear Power Station	PWR	3648	3/15/2030	\$481,884,726	\$508,677,000	No	\$785,475,709	\$303,590,983		ML112371904

<u>Cat</u>	<u>Plant Name</u>		<u>MWth</u>	<u>Termination</u> <u>Date</u> <u>as of</u> <u>3/31/2011</u>	<u>NRC Minimum</u> <u>Formula</u>	<u>Site Specific</u> <u>Cost Estimate</u>	<u>Certifying to</u> <u>Site Specific Cost</u> <u>Estimate</u> (Note 1)	Projected Decommissioning Funding Amount including pro rata credit	Difference in NRC Minimum Formula and Projected Trust Fund Amount	How Shortfall was resolved	DFS report analysis (ADAMS Accession Number)
1	Sequoyah Nuclear Plant, Unit 1	PWR	3455	9/17/2020	\$466,847,886	not provided	N/A	\$579,176,642	\$112,328,756		ML112371905
1	Sequoyah Nuclear Plant, Unit 2	PWR	3455	9/15/2021	\$466,847,886	not provided	N/A	\$580,769,907	\$113,922,021		ML112371906
1	South Texas Project, Unit 1	PWR	3853	8/20/2027	\$466,847,886	not provided	N/A	\$565,599,946	\$98,752,060		ML112371908
1	South Texas Project, Unit 2	PWR	3853	12/15/2028	\$466,847,886	not provided	N/A	\$636,097,851	\$169,249,965		ML112371909
1	St. Lucie Plant, Unit 1	PWR	2700	3/1/2036	\$439,103,783	\$534,825,000	No	\$1,230,922,217	\$791,818,434		ML112371910
1	St. Lucie Plant, Unit 2	PWR	2700	4/6/2043	\$439,103,783	\$517,410,000	No	\$1,354,915,082	\$915,811,299		ML112371914
1	Summer (Virgil C.) Nuclear Station	PWR	2900	8/6/2042	\$446,929,043	not provided	N/A	\$472,128,433	\$25,199,391		ML112380102
1	Surry Power Station, Unit 1	PWR	2587	5/25/2032	\$434,682,511	not provided	N/A	\$455,811,772	\$21,129,261		ML112371917
1	Surry Power Station, Unit 2	PWR	2587	1/29/2033	\$434,682,511	not provided	N/A	\$465,171,467	\$30,488,956		ML112380108
2H	Susquehanna Steam Electric Station, Unit 1	BWR	3952	7/17/2042	\$628,251,763	not provided	N/A	\$748,479,284	\$120,227,521		ML112380116
2H	Susquehanna Steam Electric Station, Unit 2	BWR	3952	3/23/2044	\$628,251,763	not provided	N/A	\$848,112,155	\$219,860,392		ML112371918
2	Three Mile Island Nuclear Station, Unit 1	PWR	2568	4/19/2034	\$447,915,983	not provided	N/A	\$834,917,528	\$387,001,545		ML112380013
1	Turkey Point Station, Unit 3	PWR	2300	7/19/2032	\$423,453,263	\$449,543,000	No	\$961,079,404	\$537,626,141		ML112380014
1	Turkey Point Station, Unit 4	PWR	2300	4/10/2033	\$423,453,263	\$483,444,000	No	\$1,097,862,809	\$674,409,546		ML112380015
2	Vermont Yankee Power Station	BWR	1912	3/21/2012	\$564,067,702	not provided	N/A	\$815,557,902	\$251,490,200		ML112380016
1	Vogtle (Alvin W.) Nuclear Plant, Unit 1	PWR	3625	1/16/2047	\$466,847,886	not provided	N/A	\$543,908,953	\$77,061,067		ML112380018
1	Vogtle (Alvin W.) Nuclear Plant, Unit 2	PWR	3625	2/9/2049	\$466,847,886	not provided	N/A	\$619,942,994	\$153,095,108		ML112380020
1	Waterford Generating Station, Unit 3	PWR	3716	12/18/2024	\$466,847,886	not provided	N/A	\$514,032,722	\$47,184,836		ML112380022
1	Watts Bar Nuclear Plant, Unit 1	PWR	3459	11/9/2035	\$466,847,886	not provided	N/A	\$583,886,166	\$117,038,280		ML112380023
1	Wolf Creek Generating Station	PWR	3565	3/11/2045	\$472,417,086	\$551,144,760	Yes	\$1,078,399,453	SAFSTOR		ML112380024

### **Definition of Terms:**

Cat = Category - the licensee is categorized with respect to their qualification to use an external sinking fund as its only financial assurance method. The circumstances necessary to achieve qualification are given in 10 CFR 50.75(e)(1)(ii). In general, the licensee may use an external sinking fund if it is allowed to collect funds for decommissioning through ratemaking regulation or non-bypassable charges. Category 1 licensees are authorized to collect funds for decommissioning through ratemaking regulation or non-bypassable charges. Licensees who set their own rates are in this category. Investor owned utility licensees normally are in Category 1. Some merchant plant licensees may be placed in Category 1 if they are eligible to collect non-bypassable charges.

Category 2 licensees do not have access to funds from ratepayers or non-bypassable charges. Merchant plants normally fall into this category.

Category 2H licensees sell the output of their plant in both utility and merchant markets, and collect only part of the cost of decommissioning through ratemaking regulation or non-bypassable charges.

SAFSTOR - a licensee provided a site-specific cost estimate assuming a period of safe storage of the site before completing decommissioning Site-specific DECON - a licensee provided a site-specific cost estimate assuming immediate dismantlement/decommissioning

#### Notes:

Note 1 - A licensee is allowed to certify to a site-specific cost estimate as long as that amount is equal to or greater than the amount calculated in 10 CFR 50.75(c).

Note 2 - The NRC staff analysis with the Parent Company Guarantee for Beaver Valley, Unit 1 can be found at ADAMS Accession No. ML112380025

Note 3 - The NRC staff analysis with the 2/28/2011 trust fund balance for Palisades cand be found at ADAMS Accession No. ML112380027

Note 4 - The NRC staff analysis with the Parent Company Guarantee for Perry can be found at ADAMS Accession No. ML112380028

Note 5 - The NRC staff analysis with the NRC approved license extension for Prairie Island, Unit 1 can be found at ADAMS Accession No. ML112380032