



Omaha Public Power District

March 30, 2020

LIC-20-0007

10 CFR 50.75

10 CFR 50.82

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Fort Calhoun Station, Unit No. 1
Renewed Facility Operating License No. DPR-40
NRC Docket No. 50-285

Fort Calhoun Station
Independent Spent Fuel Storage Installation
NRC Docket No. 72-054

Subject: Fort Calhoun Station, Unit No. 1, 2020 Annual Decommissioning Funding / Irradiated Fuel Management Status Report

References:

1. Letter from OPPD (T. Burke) to USNRC (Document Control Desk), "Certification of Permanent Cessation of Power Operations," dated August 25, 2016 (LIC-16-0067) (ML16242A127)
2. Letter from OPPD (T. Burke) to USNRC (Document Control Desk), "Certification of Permanent Removal of Fuel from the Removal of Fuel from the Reactor Vessel," dated November 13, 2016 (LIC-16-0074) (ML16319A254)
3. Letter from OPPD (M. J. Fisher) to USNRC (Document Control Desk), "Fort Calhoun Station, Unit No. 1, Post-Shutdown Decommissioning Activities Report," dated December 16, 2019 (LIC-19-0007)(ML19351E355)

In accordance with 10 CFR 50.75(f)(1), 10 CFR 50.82(a)(8)(v), 10 CFR 50.82(a)(8)(vi), and 10 CFR 50.82(a)(8)(vii), Omaha Public Power District (OPPD) is submitting the annual status of decommissioning funding, status of funding for managing irradiated fuel, and the financial assurance status report.

In References 1 and 2, OPPD certified permanent cessation of power operation and permanent removal of fuel from the reactor vessel for the Fort Calhoun Station, Unit 1, (FCS). In Reference 3, OPPD submitted its Post-Shutdown Decommissioning Activities Report (PSDAR) containing a site-specific Decommissioning Cost Estimate (DCE) pursuant to 10 CFR 50.82(a)(4)(i) and 10 CFR 50.82(a)(8)(iii)..

Enclosure 1 provides the 2020 Annual Decommissioning Funding / Irradiated Fuel Management Status Report.

No commitments to the NRC are made in this letter.

If you should have any questions about the enclosed reports, please contact Mr. Bradley H. Blome, Director Licensing & Regulatory Assurance, at 402-533-6041.

Respectfully,

A handwritten signature in cursive script, appearing to read "Mary J. Fisher".

Mary J. Fisher
Vice President, Energy Production & Nuclear Decommissioning

MJF/cac

Enclosures:

1. 2020 Annual Decommissioning Funding / Irradiated Fuel Management Status Report
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- c: S. A. Morris, NRC Regional Administrator, Region IV
J. D. Parrott, NRC Senior Project Manager
C. D. Steely, NRC Senior Health Physicist, Region IV

ENCLOSURE 1

OMAHA PUBLIC POWER DISTRICT

FORT CALHOUN STATION UNIT NO.1

2020 ANNUAL DECOMMISSIONING FUNDING STATUS REPORT

As of December 31, 2019

**OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN STATION UNIT NO. 1
2020 ANNUAL DECOMMISSIONING FUNDING STATUS REPORT
as of December 31, 2019**

10 CFR 50.75 (f) and 50.82(8)

As required by 10 CFR 50.75 (f) and 50.82(8), OPPD reports the following information:

A. Current Decommissioning Cost Estimate

As required by 10 CFR 50.82, OPPD completed a site-specific Decommissioning Cost Estimate (DCE), contracting with Energy Solutions LLC for the preparation of the report. The study was performed under the DECON decommissioning alternative method. Based on the DCE (completed with 2019 data), the total estimated cost to decommission Fort Calhoun Station Unit No. 1 is **\$1,037,139,000** in 2019 dollars. Of that total cost estimate, the current site-specific cost estimate for license termination expenses (LTE) of Fort Calhoun Station Unit No. 1 is **\$651,160,000**, the current separate estimate of site restoration is **\$42,789,000** and the current separate estimate of spent fuel management costs is **\$343,190,000**.

The total cost estimate reported in 2018 dollars was **\$1,213,203,000** in the DCE, using the SAFSTOR decommissioning alternative method as required by 10 CFR 50.82(a)(8)(iii). The cost estimate included monies anticipated to be spent for operating license termination (radiological remediation), interim spent fuel storage and site restoration activities.

B. Current Decommissioning Fund Balance

The total OPPD Decommissioning Fund(s) balance as of December 31, 2019 was **\$549,034,772**. OPPD maintains two separate trust accounts, one for the NRC minimum decommissioning amount as outlined in 10 CFR 50.75 (c) and one for other costs including additional radiological, site restoration and spent fuel management as determined by the consultant cost study. As of December 31, 2019, the balance in the fund for the NRC minimum decommissioning amount was **\$317,041,026**. As of December 31, 2019, the balance in the funds accumulated for other decommissioning costs was **\$231,993,746**.

The two trust funds are not commingled and the funds accumulated for the additional decommissioning cost are not included as funds for the NRC minimum decommissioning amount. The funds accumulated for the additional decommissioning costs including additional radiological, site restoration and spent fuel management are available for radiological decommissioning without prior approval by a State regulatory authority and are not subject to disapproval for radiological decommissioning by a State regulatory authority.

C. Annual Decommissioning Collections

There were no annual collections for 2016. The annual collections for 2017, 2018 and 2019 were \$147,469,000, \$156,000,000 and \$143,004,000, respectively. The total expected future collections for decommissioning are \$540,994,067 beginning in 2020 as shown in Attachment B, Column 1. The revenue source for collections is OPPD "cost-of-service" electric rates.

D. Rates Used to Escalate Decommissioning Costs and Fund Balances

The rates used for the escalation of the site-specific DCE and earnings rates on the Decommissioning Fund through the completion of decommissioning are shown in Attachment C. Congressional Budget Office data provided the basis for the DCE inflation rate forecasts. Decommissioning costs are inflated using a blending of the Congressional Budget Office's forecasts for Consumer Price Index, All-Urban and Employment Cost Index, Total Private Compensation. Decommissioning trust earnings are projected using Barclay's forecasted yield on 5-year Treasury notes.

E. Contracts to Help Fund Decommissioning

OPPD does not have any contracts pursuant to 10 CFR 50.75 (e)(1)(ii)(C) and is not relying on contracts with a "non-bypassable charge" to fund decommissioning.

F. Modifications to Method of Providing Financial Assurance

There have been no modifications to OPPD's method of providing financial assurance since the decommissioning funding plan began in 1982 and continued pursuant to NRC Regulations in 1990.

Decommissioning Funding Status Report
 OMAHA PUBLIC POWER DISTRICT

ATTACHMENT A

Summary Information as of December 31, 2019
 10 CFR 50.82 (a) (8) (v)-(vii)

Decommissioning Trust Fund Balances 50.75(f)(1) 50.82(a)(8)(v)(A)

Year	Type of Trust	Fund Balance	Comments
2019	Decommissioning Trust '90 Plan	\$ 317,041,026	As of 12/31/19
2019	Decommissioning Suppl '92 Plan	\$ 231,993,746	As of 12/31/19
		\$ 549,034,772	

Other Financial Assurance Methods Being Relied Upon 50.75(f)(1)

NONE

Prior Years Decommissioning Expenditures 50.82(a)(8)(v)(A)

Year	Decom Expenditures	Spent Fuel	Total	Comments
2016	\$ 574,826	\$ -	\$ 574,826	2016 Cost in as Spent Dollars
2017	\$ 115,251,711	\$ 4,475,227	\$ 119,726,938	2017 Cost in 2017 Dollars
2018	\$ 83,845,046	\$ 30,408,102	\$ 114,253,148	2018 Cost in 2018 Dollars
2019	\$ 72,491,721	\$ 17,382,073	\$ 89,873,794	2019 Cost in 2019 Dollars
TOTAL	\$ 272,163,304	\$ 52,265,402	\$ 324,428,706	

Prior Year Expenditures Variance to Estimated Cost 50.82(a)(8)(v)(B)

Year	Decom Expenditures	Spent Fuel	Total	Comments
2019 Estimated	\$ 102,837,779	\$ 20,699,670	\$ 123,537,449	
2019 Actual	\$ 72,491,721	\$ 17,382,073	\$ 89,873,794	
Variance	\$ 30,346,058	\$ 3,317,597	\$ 33,663,655	

Variance: Due to timing difference of accruals versus actuals, and projects delayed for weather related situations.

Remaining Decommissioning Estimated Cost 50.82(a)(8)(v)(B) / (vii)(B)

Year	Decom Expenditures	Spent Fuel	Total	Comments
2020	\$ 693,949,000	\$ 343,190,000	\$ 1,037,139,000	Estimated in 2019 Dollars

Decommissioning Criteria Upon Which the Estimate is Based 50.75(f)(1) 50.82(a)(8)(v)(B)

DECON

Any Modification to Method of Providing Financial Assurance 50.75(f)(1) 50.82(a)(8)(v)(C)

No

Any Material Changes to Trust Agreement Since Previous Report 50.75(f)(1) 50.82(a)(8)(v)(D)

No

Need for Additional Financial Assurance 50.75(f)(1) 50.82(a)(8)(vi) (vii)(C)

See Attachment B, Column 1, Annual Decommissioning Fund Collections

OMAHA PUBLIC POWER DISTRICT
 FORT CALHOUN STATION UNIT NO. 1
 2019 ANNUAL DECOMMISSIONING FUNDING STATUS REPORT

ATTACHMENT B

Decommissioning Fund Annual Collections, Earnings, Expenditures and Balances

Year	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
	Total Annual Decommissioning Fund Collections ¹						Earnings on Trust Funds
2019							
2020	\$ 112,552,000	\$ 9,055,253	\$ 109,586,935	\$ 29,406,991	\$ -	\$ 317,041,026	\$ 231,993,746
2021	\$ 121,148,000	\$ 10,238,682	\$ 94,192,352	\$ 8,141,701	\$ 4,354,100	\$ 321,473,010	\$ 210,175,089
2022	\$ 143,271,000	\$ 12,208,632	\$ 96,745,326	\$ 8,384,522	\$ 4,483,958	\$ 332,614,247	\$ 269,598,207
2023	\$ 164,023,067	\$ 13,601,940	\$ 116,063,424	\$ 8,626,836	\$ 12,812,910	\$ 300,418,503	\$ 341,915,789
2024	\$ -	\$ 12,850,791	\$ 152,259,972	\$ 8,867,195	\$ 10,918,794	\$ 153,339,596	\$ 329,799,526
2025	\$ -	\$ 9,682,019	\$ 137,840,406	\$ 9,105,204	\$ 15,845,590	\$ 17,533,697	\$ 312,496,244
2026	\$ -	\$ 8,101,641	\$ 13,829,692	\$ 10,447,616	\$ 359,718	\$ 3,974,786	\$ 309,519,771
2027	\$ -	\$ 8,319,649	\$ -	\$ 10,718,828	\$ -	\$ 4,082,105	\$ 307,013,273
2028	\$ -	\$ 8,740,083	\$ -	\$ 10,996,122	\$ -	\$ 4,198,853	\$ 304,640,487
2029	\$ -	\$ 9,156,624	\$ -	\$ 11,279,746	\$ -	\$ 4,325,658	\$ 302,390,559
2030	\$ -	\$ 9,088,113	\$ -	\$ 11,570,642	\$ -	\$ 4,456,293	\$ 299,777,396
2031	\$ -	\$ 9,008,632	\$ -	\$ 11,869,229	\$ -	\$ 4,590,873	\$ 296,782,219
2032	\$ -	\$ 8,917,614	\$ -	\$ 12,175,717	\$ -	\$ 4,729,518	\$ 293,385,471
2033	\$ -	\$ 8,814,469	\$ -	\$ 12,490,321	\$ -	\$ 4,872,349	\$ 289,566,787
2034	\$ -	\$ 8,698,582	\$ -	\$ 12,813,260	\$ -	\$ 5,019,494	\$ 285,304,964
2035	\$ -	\$ 8,569,313	\$ -	\$ 13,144,761	\$ -	\$ 5,171,083	\$ 280,577,927
2036	\$ -	\$ 8,425,996	\$ -	\$ 13,485,056	\$ -	\$ 5,327,250	\$ 275,362,700
2037	\$ -	\$ 8,267,937	\$ -	\$ 13,834,384	\$ -	\$ 5,488,132	\$ 269,635,370
2038	\$ -	\$ 8,117,649	\$ -	\$ 12,654,331	\$ -	\$ 5,653,874	\$ 264,932,947
2039	\$ -	\$ 7,975,685	\$ -	\$ 12,982,560	\$ -	\$ 5,824,621	\$ 259,755,325
2040	\$ -	\$ 7,819,390	\$ -	\$ 13,319,519	\$ -	\$ 6,000,525	\$ 254,079,292
2041	\$ -	\$ 7,648,062	\$ -	\$ 13,665,446	\$ -	\$ 6,181,740	\$ 247,880,692
2042	\$ -	\$ 7,460,975	\$ -	\$ 14,020,585	\$ -	\$ 6,368,429	\$ 241,134,392
2043	\$ -	\$ 7,257,369	\$ -	\$ 14,385,188	\$ -	\$ 6,560,756	\$ 233,814,247
2044	\$ -	\$ 7,036,456	\$ -	\$ 14,759,513	\$ -	\$ 6,758,890	\$ 225,893,055
2045	\$ -	\$ 6,797,417	\$ -	\$ 15,143,825	\$ -	\$ 6,963,009	\$ 217,342,529
2046	\$ -	\$ 6,539,397	\$ -	\$ 15,538,398	\$ -	\$ 7,173,292	\$ 208,133,245
2047	\$ -	\$ 6,261,510	\$ -	\$ 15,943,512	\$ -	\$ 7,389,925	\$ 198,234,610
2048	\$ -	\$ 5,962,833	\$ -	\$ 16,359,456	\$ -	\$ 7,613,101	\$ 187,614,812
2049	\$ -	\$ 5,642,406	\$ -	\$ 16,786,525	\$ -	\$ 7,843,017	\$ 176,240,778
2050	\$ -	\$ 5,299,233	\$ -	\$ 17,225,026	\$ -	\$ 8,079,876	\$ 164,078,125
2051	\$ -	\$ 4,932,275	\$ -	\$ 17,675,271	\$ -	\$ 8,323,888	\$ 151,091,117
2052	\$ -	\$ 4,540,456	\$ -	\$ 18,137,583	\$ -	\$ 8,575,269	\$ 137,242,608
2053	\$ -	\$ 4,122,654	\$ -	\$ 18,612,292	\$ -	\$ 8,834,242	\$ 122,493,996
2054	\$ -	\$ 3,677,707	\$ -	\$ 19,099,740	\$ -	\$ 9,101,037	\$ 106,805,169
2055	\$ -	\$ 3,204,403	\$ -	\$ 19,600,276	\$ -	\$ 9,375,888	\$ 90,134,445
2056	\$ -	\$ 2,701,487	\$ -	\$ 20,114,260	\$ -	\$ 9,659,040	\$ 72,438,519
2057	\$ -	\$ 1,923,215	\$ -	\$ 36,829,856	\$ -	\$ 9,950,743	\$ 37,240,176
2058	\$ -	\$ 854,474	\$ -	\$ 37,794,137	\$ -	\$ 10,251,255	\$ (0)
2059	\$ -	\$ 152,491	\$ 10,403,746	\$ -	\$ -	\$ (0)	\$ (0)
2060	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (0)	\$ (0)
	\$ 540,994,067	\$ 287,673,518	\$ 730,921,854	\$ 598,005,434	\$ 48,775,069		

¹ Annual Decommissioning Fund Collections for 2019 were \$143,004,000 with Decommissioning Expenditures of \$89,873,794

² Beginning in 2023, amounts needed to cover LTE expenses will be transferred to the Decommissioning Trust ('90) Fund from the Decommissioning Supplemental ('92) Fund.

³ All collections and expenditures flow through the Decommissioning Supplemental Trust through 2022. Beginning in 2023, LTE expenses are paid out of the Decommissioning Trust ('90) fund.

ATTACHMENT C

**Decommissioning Funds
Annual Inflation and Earning Rates**

<u>Year</u>	<u>Inflation Rate</u>	<u>Earnings Rate</u>
2020	2.84%	1.69%
2021	2.96%	1.90%
2022	2.98%	2.13%
2023	2.88%	2.21%
2024	2.78%	2.31%
2025	2.67%	2.41%
2026	2.61%	2.55%
2027	2.58%	2.70%
2028	2.57%	2.86%
2029	2.56%	3.02%
2030	2.56%	3.02%
2031	2.56%	3.02%
2032	2.56%	3.02%
2033	2.56%	3.02%
2034	2.56%	3.02%
2035	2.56%	3.02%
2036	2.56%	3.02%
2037	2.56%	3.02%
2038	2.56%	3.02%
2039	2.56%	3.02%
2040	2.56%	3.02%
2041	2.56%	3.02%
2042	2.56%	3.02%
2043	2.56%	3.02%
2044	2.56%	3.02%
2045	2.56%	3.02%
2046-2059	2.56%	3.02%