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10 CFR 50.54  
10 CFR 50.75

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

Prairie Island Nuclear Generating Plant, Unit 2  
Docket 50-306  
License No. DPR-60

Irradiated Fuel Management Plan and Preliminary Decommissioning Cost Estimates for  
Prairie Island Nuclear Generating Plant (PINGP)

- References:
1. Nuclear Management Company, LLC (NMC) letter to US Nuclear Regulatory Commission (NRC), "Irradiated Fuel Management Plan and Preliminary Decommissioning Cost Estimates for Prairie Island Nuclear Generating Plant (PINGP)", dated August 8, 2008, Accession Number ML082260425.
  2. Northern States Power Company – Minnesota (NSPM) letter to the NRC, "Supplement to Irradiated Fuel Management Plan and Preliminary Decommissioning Cost Estimates for Prairie Island Nuclear Generating Plant (PINGP) (TAC Nos. MD9492, MD9493, MD9494, and MD9495)", dated January 19, 2009, Accession Number ML090210156.
  3. NRC letter to NSPM, "Prairie Island Nuclear Generating Plant, Units 1 and 2 -Safety Evaluation RE: Spent Fuel Management Program and Preliminary Decommissioning Cost Estimate (TAC Nos. MD9492, MD9493, MD9494, and MD9495)", dated June 1, 2009, Accession Number ML091200541.
  4. NSPM letter to the NRC, "Supplement to Irradiated Fuel Management Plan and Preliminary Decommissioning Cost Estimates for Prairie Island Nuclear Generating Plant (PINGP) (TAC Nos. MD9492, MD9493, MD9494, and MD9495)", dated March 12, 2009, Accession Number ML090760499.

References (continued)

5. Northern States Power Company – Minnesota (NSPM) letter to the NRC, "Decommissioning Funding Status Reports", dated March 31, 2009, Accession Number ML090910082.

Pursuant to 10 CFR 50.54(bb), a licensee shall "submit written notification to the 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 Secretary of Energy for its ultimate disposal in a repository." Additionally, 10 CFR 50.75(f)(3), "Reporting and Recordkeeping for Decommissioning Planning" states, "each power reactor licensee shall at or about 5 years prior to the projected end of operations submit a preliminary decommissioning cost estimate which includes an up-to-date assessment of the major factors that could affect the cost to decommission." In Reference 1, as supplemented by References 2 and 4, NMC\* submitted the Irradiated Fuel Management Plan and the PINGP Preliminary Decommissioning Cost Estimate for PINGP Units 1 and 2.

The NRC safety evaluation (Reference 3) stated, "Although the licensee provided cost information for both Unit 1 and Unit 2, the expiration of the operating license for PINGP Unit 2 is not until October 29, 2014. Therefore, due to possible significant changes in cost and the decommissioning trust fund (DTF) balance by the time Unit 2 reaches 5 years before expiration of its license, the NRC staff's assessment is based on and covers only Unit 1." NSPM fulfillment of the requirements of 10 CFR 50.54(bb) and 10 CFR 50.75(f)(3) for PINGP Unit 2 is provided by Attachment 1 to Reference 1, entitled, "Decommissioning Cost Analysis for Prairie Island Nuclear Generating Plant, August 2008, by TLG Services, Inc", as supplemented by Reference 2, Reference 4, and this letter and enclosure. This cost analysis is the most recently completed and remains a valid estimate of future decommissioning costs for Unit 2.

Enclosure 1 reviews the Trust Fund Balance which includes a biennial comparison and an update of the Trust Fund Balance in Reference 5, current as of July 31, 2009 for both Unit 1 and Unit 2. In addition Enclosure 1 reviews changes to the Annual Contribution. Finally, Enclosure 1 provides a review of changes to the real rate of return and includes a sufficiency of funds analysis for Unit 2 to update Reference 2, current as of July 31, 2009.

If there are any questions or if additional information is needed, please contact Mr. Dale Vincent, P.E., at 651-388-1121.

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\* On September 22, 2008, NMC transferred its operating authority to Northern States Power Company, a Minnesota Corporation (NSPM), doing business as Xcel Energy. By letter dated September 3, 2008, NSPM assumed responsibility for actions and commitments previously submitted by NMC.

Summary of Commitments

This letter contains no new commitments and no revisions to existing commitments.

A handwritten signature in black ink, appearing to read "Mark A. Schimmel". The signature is fluid and cursive, with a large initial "M" and "S".

Mark A. Schimmel  
Site Vice President  
Prairie Island Nuclear Generating Plant, Units 1 and 2  
Northern States Power Company - Minnesota

Enclosures (1)

cc: Administrator, Region III, USNRC  
Project Manager, PINGP, USNRC  
Resident Inspector, PINGP, USNRC

## Enclosure 1

### 1. Nuclear Regulatory Commission (NRC) Minimum and Funding Status

The NRC minimum decommissioning financial assurance requirement for the Prairie Island Nuclear Generating Plant (PINGP) as reported in Reference 1 of this Enclosure and set forth in 10 CFR 50.75 (c) is approximately \$345.7 million for Unit 1 and \$345.7 million for Unit 2. As of July 31, 2009, the PINGP decommissioning trust funds balances were \$333.7 million for Unit 1 and \$357.8 for Unit 2. The trust fund monies will be used for radiological decommissioning and irradiated fuel management. However, inclusion of irradiated fuel costs in this submittal is not intended to acknowledge that these costs will ultimately be borne by Northern States Power Company, a Minnesota corporation (NSPM, doing business as Xcel Energy, since some (or all) are expected to be the responsibility of the U.S. Department of Energy as a result of the breach of the Standard Contract of Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste.

The following table, Table 1, includes comparisons of the radiological decommissioning, spent fuel management, and site restoration segmentation of the trust fund balances for PINGP Unit 1 and Unit 2 calculated for the beginning of 2008 and 2009. The current funding status ending in July of 2009 shows a significant improvement of the funds that exceeds the NRC minimum for Unit 2.

**Table 1: Trust Fund Balances**

<b><u>PINGP Unit 1</u></b>	<b>2008</b>	<b>2009</b>	<b>July 2009</b>
Radiological Decommissioning	370,245,731	305,379,191	333,676,530
Spent Fuel Management	24,146,461	19,916,034	21,761,513
Site Restoration	8,048,820	6,638,678	7,253,837
<b>Total</b>	<b>402,441,012</b>	<b>331,933,903</b>	<b>362,691,880</b>

  

<b><u>PINGP Unit 2</u></b>	<b>2008</b>	<b>2009</b>	<b>July 2009</b>
Radiological Decommissioning	387,142,205	327,830,502	357,804,725
Spent Fuel Management	30,111,059	25,497,927	27,829,257
Site Restoration	12,904,741	10,927,684	11,926,824
<b>Total</b>	<b>430,158,005</b>	<b>364,256,113</b>	<b>397,560,806</b>

## 2. Annual Contributions

In 2009, based on a ruling by the Minnesota Public Utilities Commission, these funds are not being supplemented with any annual Company contributions for radiological decommissioning. Adjustments to the annual contribution require approval of multiple state public utilities commissions and will be pursued to recover any projected shortfall. The following annual contributions table, Table 2, shows the approximate accrual segmentation for radiological decommissioning, spent fuel management, and site restoration for PINGP Unit 1 and Unit 2.

**Table 2: Annual Contributions**

<b><u>PINGP Unit 1</u></b>	<b>2008</b>	<b>2009</b>
Radiological Decommissioning	11,254,252	0
Spent Fuel Management	2,262,688	650,534
Site Restoration	1,279,421	365,926
<b>Total</b>	<b>14,796,361</b>	<b>1,016,460</b>

  

<b><u>PINGP Unit 2</u></b>	<b>2008</b>	<b>2009</b>
Radiological Decommissioning	12,655,613	0
Spent Fuel Management	4,218,637	947,421
Site Restoration	1,972,830	443,799
<b>Total</b>	<b>18,847,080</b>	<b>1,391,220</b>

## 3. Sufficiency of Funds Analysis

Although the Minnesota Public Utilities Commission discontinued the annual supplement, the Commission approved a decommissioning plan that included a 2.89 percent cost escalation rate and a 6.30 percent earnings rate on external funds. The table below, Table 3, demonstrates that the approved 3.41 percent rate of return applied to the current balance reconcile when contributions and earnings are added and the annual costs are subtracted. The projected balance at the end of decommissioning is more than adequate to cover the costs of radiological decommissioning. The 3.41 percent rate of return begins with the 2010 projection.

**Table 3: Funds Analysis**

**PINGP Unit 2**

	<b>Beginning Balance</b>	<b>Payment</b>	<b>Annuity</b>	<b>Balance Before Interest</b>	<b>Assumed Interest</b>	<b>Ending Balance</b>
2009	357,804,725	-	-	357,804,725	5,083,809	362,888,534
2010	362,888,534	-	-	362,888,534	12,374,499	375,263,033
2011	375,263,033	-	-	375,263,033	12,796,469	388,059,502
2012	388,059,502	-	10,415,560	398,475,062	13,588,000	412,063,062

**PINGP Unit 2**

	<b>Beginning Balance</b>	<b>Payment</b>	<b>Annuity</b>	<b>Balance Before Interest</b>	<b>Assumed Interest</b>	<b>Ending Balance</b>
2013	412,063,062	-	10,415,560	422,478,622	14,406,521	436,885,143
2014	436,885,143	9,385,000	8,332,448	435,832,591	14,861,891	450,694,482
2015	450,694,482	58,018,000	-	392,676,482	13,390,268	406,066,750
2016	406,066,750	100,043,000	-	306,023,750	10,435,410	316,459,160
2017	316,459,160	92,856,000	-	223,603,160	7,624,868	231,228,028
2018	231,228,028	69,083,000	-	162,145,028	5,529,145	167,674,173
2019	167,674,173	43,538,000	-	124,136,173	4,233,044	128,369,217
2020	128,369,217	9,721,000	-	118,648,217	4,045,904	122,694,121
2021	122,694,121	9,694,000	-	113,000,121	3,853,304	116,853,425
2022	116,853,425	9,694,000	-	107,159,425	3,654,136	110,813,562
2023	110,813,562	9,694,000	-	101,119,562	3,448,177	104,567,739
2024	104,567,739	9,721,000	-	94,846,739	3,234,274	98,081,013
2025	98,081,013	9,694,000	-	88,387,013	3,013,997	91,401,010
2026	91,401,010	9,694,000	-	81,707,010	2,786,209	84,493,219
2027	84,493,219	9,694,000	-	74,799,219	2,550,653	77,349,872
2028	77,349,872	9,721,000	-	67,628,872	2,306,145	69,935,017
2029	69,935,017	16,282,000	-	53,653,017	1,829,568	55,482,585
2030	55,482,585	41,382,000	-	14,100,585	480,830	14,581,414
2031	14,581,414	9,499,000	-	5,082,414	173,310	5,255,725
2032	5,255,725	36,000	-	5,219,725	177,993	5,397,717
2033	5,397,717	21,000	-	5,376,717	183,346	5,560,063
2034	5,560,063	-	-	5,560,063	189,598	5,749,662
2035	5,749,662	-	-	5,749,662	196,063	5,945,725
2036	5,945,725	-	-	5,945,725	202,749	6,148,474
2037	6,148,474	-	-	6,148,474	209,663	6,358,137
2038	6,358,137	-	-	6,358,137	216,812	6,574,950
2039	6,574,950	-	-	6,574,950	224,206	6,799,156
2040	6,799,156	-	-	6,799,156	231,851	7,031,007
2041	7,031,007	-	-	7,031,007	239,757	7,270,764
2042	7,270,764	-	-	7,270,764	247,933	7,518,697
2043	7,518,697	-	-	7,518,697	256,388	7,775,085
2044	7,775,085	-	-	7,775,085	265,130	8,040,215
2045	8,040,215	-	-	8,040,215	274,171	8,314,386
2046	8,314,386	-	-	8,314,386	283,521	8,597,907
2047	8,597,907	-	-	8,597,907	293,189	8,891,096
2048	8,891,096	-	-	8,891,096	303,186	9,194,282
2049	9,194,282	-	-	9,194,282	313,525	9,507,807

**PINGP Unit 2**

	<b>Beginning Balance</b>	<b>Payment</b>	<b>Annuity</b>	<b>Balance Before Interest</b>	<b>Assumed Interest</b>	<b>Ending Balance</b>
2050	9,507,807	-	-	9,507,807	324,216	9,832,023
2051	9,832,023	-	-	9,832,023	335,272	10,167,295
2052	10,167,295	-	-	10,167,295	346,705	10,514,000
2053	10,514,000	10,514,000	-	0	0	0
<b>Total</b>		<b>537,984,000</b>			<b>151,015,707</b>	

**4. References**

1. Northern States Power Company – Minnesota (NSPM) letter to the NRC, “Decommissioning Funding Status Reports”, dated March 31, 2009, Accession Number ML090910082.