BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger	Chair
Nancy Lange	Commissioner
Dan Lipschultz	Commissioner
John A. Tuma	Commissioner
Betsy Wergin	Commissioner

In the Matter of Northern States Power Company's Petition for Approval of its 2016–2018 Triennial Nuclear Plant Decommissioning Accrual

ISSUE DATE: October 5, 2015

DOCKET NO. E-002/M-14-761

ORDER APPROVING NUCLEAR DECOMMISSIONING STUDY, ASSUMPTIONS, AND ANNUAL ACCRUAL, AND SETTING FILING REQUIREMENTS

PROCEDURAL HISTORY

Every three years since 1987,[1] the Commission has undertaken complete review of the financial plan to decommission the Monticello and Prairie Island Nuclear Generating Facilities. In the intervening years, Northern States Power Company, d/b/a Xcel Energy, (Xcel or the Company), files an annual letter discussing the financial performance of funds accrued for the eventual decommissioning.

On December 1, 2014, Xcel submitted its triennial filing detailing its nuclear decommissioning plans and assumptions for the 2016–2018 time period, along with supporting materials, including a decommissioning study and requests for changes to investment assumptions for the Nuclear Decommissioning Trust (the Trust).

On March 31, 2015, Xcel filed its most recent annual letter detailing its nuclear decommissioning fund accruals and performance.

On April 1, 2015, the Minnesota Department of Commerce, Division of Energy Resources (the Department), the City of Red Wing, Legalectric, Inc., the Prairie Island Indian Community, and the Prairie Island Nuclear Generating Plant Study Group filed comments in response to Xcel's petition.

On May 1, 2015 Xcel filed reply comments.

[1] The Commission required periodic, comprehensive reviews prior to 1987, but less frequently. *In the Matter of the Petition of Northern States Power Company for Depreciation Certification for Expected Decommissioning Costs for the Monticello and Prairie Island Nuclear Steam Generating Facilities*, Docket No. E-002/D-86-604, Findings of Fact, Conclusions of Law and Order (October 27, 1987) (requiring comprehensive review every three years rather than every five).

On May 11, 2015, the Department filed a response to Xcel's reply comments, again recommending a different investment mix and asserting that Xcel lacked adequate incentive to invest the Trust appropriately.

On August 27, 2015, the Commission met to consider the matter.

FINDINGS AND CONCLUSIONS

I. Background

Xcel operates two nuclear generating plants in Minnesota and the Commission requires periodic review of the utility's plans for the plants' eventual decommissioning. The Monticello Nuclear Generating Plant has been operating since September 8, 1970 under a license that is set to expire in 2030. The second plant, Prairie Island Nuclear Generating Plant (Units 1 and 2), is operated under licenses that expire in 2033 for Unit 1 and 2034 for Unit 2.

Xcel seeks Commission approval of its triennial nuclear decommissioning study, and of accrual and investment plans for its nuclear decommissioning fund for 2016 through 2018.

The primary purpose of this periodic review is to determine a reasonable estimate of the cost to decontaminate and remove the nuclear facilities at the end of their operating lives. Based on that cost estimate, the Commission approves accrual and investment plans intended to establish a fund sufficient to pay decommissioning costs when incurred. Historically, the Commission has sought to ensure rates charged for generation reasonably reflect the expected cost to decontaminate and decommission the facilities, spread over the expected lives of the plants.

In 2011, the Minnesota Legislature directed the Company to include in its decommissioning accrual filing a cost analysis assuming used nuclear fuel will be stored in the state for 60 years, 100 years, and 200 years.[2] This is the second decommissioning filing subject to this requirement.

II. Summary of Commission Action

In this order, the Commission will approve the Company's decommissioning study and annual accruals for 2016 through 2018. The Commission will also approve certain investment portfolio actions and assumptions the Commission has concluded are appropriate for the nuclear decommissioning fund, and will require the Company to propose appropriate benchmarks and performance assessment methods for investment performance. Finally, the Commission will establish requirements for future triennial filings.

III. Xcel's Triennial Decommissioning Filing

In its current triennial decommissioning filing, Xcel requested that the Commission:

- approve its decommissioning study and assumptions as a reasonable estimate of the amount of funds necessary to support decommissioning at the end of the nuclear facilities' operating lives;

[2] Minn. Stat. § 216B.2445, subd. 1(b).

- approve an annual accrual, to meet the needs of the Company's 60-Year spent fuel scenario, of approximately $14.0 million for decommissioning and $2.0 million for end-of-life (EOL) nuclear fuel starting January 1, 2016, for the calendar years 2016 through 2018, while maintaining the current approved amount for 2015; and
- apply a portion of future settlement payments received from the United States Department of Energy (DOE) to the accrual, eliminating the need to begin charging customers to fund the deficit, and crediting the remainder of the settlement funds to customers.

Xcel also requested that the Commission approve the following changes to fund-investment assumptions:

- discontinue contributions to the Escrow Fund and transfer the fund balance to a Qualified Trust fund;
- transition investments to bonds six years before needed to fund decommissioning cash flows rather than the seven years as previously assumed; and
- change the investment mix and the authority to update the mix as needed for the Qualified Trust and report updates to the portfolio mix in the annual compliance filings.

In its filing, the Company submitted analyses assuming used fuel will be stored in the state for 36, 60, 100, and 200 years after shutdown. As part of the 100- and 200-year scenarios, the Company assumed the storage dry casks would be replaced every 50 years, though the Company stated that "recent activities by the Nuclear Regulatory Commission (NRC) indicate that cask life is at least 60 years and might be 100 years, or longer."

Xcel requested that the 2015 accrual remain as set in the previous triennial proceeding, and that a new accrual analysis be used for 2016–18. The Company calculated and recommended an annual accrual in 2016–18 of $14,030,831 ($13,392,226 for Monticello, $49,264 for Prairie Island Unit 1, and $589,341 for Prairie Island Unit 2) based on a 60-year decommissioning period. It also recommended an additional accrual of $2,020,602 for managing unused fuel in the reactors at the time of decommissioning.

Consistent with the most recent triennial plan order,[3] the Company also included discussions of 2014 DOE settlement funds, recovery of spent-fuel management costs, the 2012 Federal Government Accountability Office report on NRC oversight of decommissioning funds, the risk of premature decommissioning, and investment performance of decommissioning fund investments between 2012 and 2014.

IV. Transfer of Escrow Fund to Qualified Trust Fund

Xcel proposed to discontinue contributions to the Escrow Fund and transfer the fund balance to a Qualified Trust Fund. The change would eliminate the tax-related performance drag the Escrow Fund has on the overall return on investment. The Department assessed this proposal and agreed

[3] *In the Matter of the Petition of Northern States Power Company d/b/a Xcel Energy for Approval of the 2012–2014 Triennial Nuclear Plant Decommissioning Accrual*, Docket No. E-002/M-11-939, Order Approving Nuclear Decommissioning Plan and Modifying Refund Plan (December 4, 2012).

with the Company's analysis that tax differences between the two types of funds, together with the long time before the funds would be needed, justified the change.

The Commission agrees. Qualified Nuclear Decommissioning Trusts receive favorable tax treatment that will improve fund performance. The Commission will therefore approve transferring the fund from escrow to a qualified trust.

V. Timeframe for Storage in Minnesota

In the previous decommissioning proceeding, the Company proposed a 36-year timeframe for storage and removal of spent nuclear fuel, but the Commission concluded that 36 years was too optimistic. The timeframe for removal depends on a federal solution for permanent storage/disposal of the waste, and in 2011 there was little evidence that removal within 36 years was plausible. The Commission approved a 60-year period, noting the delays in federal progress toward identifying a final home for spent fuel.

Xcel's decommissioning study contemplates storage for 36, 60, 100, and 200 years after shutdown, and the Company has proposed an accrual calculation based on the 60-year scenario. Several commenters challenged the assumptions in Xcel's study, and advocated for a longer timeframe or a larger accrual to accommodate unanticipated contingencies. The Department supported using the 60-year scenario for accrual calculation.

The Commission will again approve Xcel's calculation based on the 60-year scenario. There has been little objective progress toward a permanent federal disposal solution, but the record does not establish that the outlook for progress has gotten substantially worse. The Commission concludes that the 60-year scenario remains the best match for the reasonably likely storage period and satisfies the need for adequate accrual of decommissioning funds.

As required by Minn. Stat. § 216B.2445, the Company will still include 60-, 100-, and 200-year scenarios in its next filing. And the Commission will again require the Company's scenarios to assume certain recasking expenses in order to provide a fuller picture of the possible costs of long-term storage. These required scenarios are not intended to be exclusive of other scenarios the Company may wish to provide to inform the Commission's decision making.

VI. Investment Assumptions, Performance and Benchmarks

A. Positions of the Parties

The Company requested Commission approval to transition investments to bonds six years before decommissioning—the previous assumption had been that transition would occur seven years prior to decommissioning. The result of the changed assumption would be to assume a slightly higher investment performance and, the Company argues, without adding significant risk.

Xcel also requested approval to target an investment mix of 50% public equities, in contrast to the current target of 33%. The Company argued that the mix would be risk- and return- appropriate for the decommissioning fund, making it prudent and in the best interest of ratepayers.

The Department did not agree with the Company's proposed changes, and asserted that the incentives for Xcel's management of the fund do not currently encourage it to pursue the right risk/reward ratio. According to the Department, fund performance has lagged relevant investment benchmarks. The Department argued that because Xcel can recover any performance shortfall from ratepayers it may choose lower-return investments than are appropriate for a fund of this nature. It also criticized the Company's use of active fund management, arguing that doing so increased investment costs without a commensurate benefit.

The Department recommended that the Commission require the Company to re-evaluate its investment mix with the purpose of reducing investment fees and increasing return. It further recommended that the Company be required to report annually on fund performance, with a comparison to a benchmark portfolio, and be required to adjust accruals for significant investment underperformance.

Xcel disputed the Department's proposed investment benchmark, contending that it reflected an inappropriate investment strategy for the decommissioning fund. The Company also defended its use of active investment management, asserting that the strategy was cost-effective and made available certain investment choices and risk portfolios that passive fund investment could not take advantage of.

B. Commission Action

The Commission will approve the Company's proposed investment assumption and portfolio changes.

The Commission is persuaded not to impose at this time on the Company's investment strategies. As the Company explained at the Commission meeting, because of fund structure and other limitations, the historic performance of the fund is not necessarily illustrative of the performance of the Company's proposed strategy. But the Commission agrees with the Department's view that an appropriate benchmark to evaluate investment performance is needed, and that the Company should expect that fund performance will not just be evaluated, but regulated to ensure investment incentives and performance are consistent with ratepayer interests.

Accordingly, the Commission will require the Company to propose an appropriate benchmark or benchmarks, and methods for assessing and remedying underperformance (or rewarding overperformance). The Commission will require these be provided in the Company's next annual decommissioning filing, so that by the time of the next triennial review the Commission and the parties will have had the opportunity to observe and comment on the proposal's suitability prior to putting a performance standard into effect. Additionally, if the Company proposes future assumption changes related to the transition to bonds, the Commission will require more detailed analysis supporting the proposal.

VII. Department of Energy Settlement Proceeds

Through contracts with Xcel, the federal government assumed responsibility for spent nuclear fuel and high-level radioactive waste. Xcel has entered a Settlement Agreement with the DOE allowing Xcel to recover damages through 2016 for the federal government's failure to take possession of spent nuclear fuel as agreed. In the most recent triennial review, the Commission required Xcel to discuss in this filing options for handling 2014 settlement funds, such as returning them to ratepayers or applying them to the decommissioning fund.[4] Xcel stated that the

[4] Order Approving Nuclear Decommissioning Plan and Modifying Refund Plan at 10–11 (December 4, 2012).

Minnesota jurisdictional portion of the 2014 settlement fund was approximately $24.4 million. It proposed applying $14.2 million to decommissioning accrual, and holding the remainder in escrow until addressed in a rate case.

But commenting parties offered alternative uses for the settlement proceeds. Some proposed that all available and future settlement funds be applied to the decommissioning accrual, and in its Reply Comments, the Company agreed in part. The Company disagreed with commenters who proposed that the Company should continue to recover accrual amounts *in addition* to applying the settlement funds, stating that doing so would likely result in overfunding and a mismatch between the set of customers who benefit and the set of customers who pay. The Company also disagreed with a Prairie Island Indian Community proposal to use some of the funds to study long-term impacts of storage on host communities, stating that it would be premature.

The Commission addressed the use of the 2013 and 2014 settlement payments in the Company's most recent rate case, where the funds were used for rate relief.[5] The Commission will address the handling of future settlement proceeds by requiring the Company to propose an approach in its next rate case filing, which is anticipated before the end of 2015, or in a filing no later than 120 days from the date of this order.

VIII. Future Triennial Filing Requirements

Finally, the Commission will establish requirements for the contents of the next triennial filing to address concerns raised by commenting parties and to ensure the focus, depth, and quality of information is appropriate for this comprehensive periodic review.

Several of these requirements were in place for this filing, or are iterations of previous requirements. For example, the Commission will again require that a consultant prepare the Schedule C escalation analysis section and provide a statement indicating that the consultant is doing this calculation in an independent manner. The Commission will also require a re-evaluation of the 50-year recasking cost assumption to provide an additional high-cost planning scenario. The Commission believes that these details are necessary to effectively evaluate the Company's next triennial decommissioning plan filing consistent with Minn. Stat. § 216B.2445.

ORDER

1. The Commission approves Xcel's decommissioning study.
2. The Commission approves an annual accrual of $14,030,831 for decommissioning under the 60-year scenario and a $2,020,602 accrual for end-of-life nuclear fuel starting January 1, 2016 for the calendar years 2016 through 2018 while maintaining the current approved amounts for 2015.
3. The Commission approves Xcel's annual accrual allocation of $13,392,226 for Monticello, $49,264 for Prairie Island Unit 1 and $589,341 for Prairie Island Unit 2.

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[5] *In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in the State of Minnesota*, Docket No. E-002/GR-13-868, Findings of Fact, Conclusions, and Order, at 51– 53 (May 8, 2015).

4. The Commission authorizes Xcel to discontinue the Escrow Fund and to transfer (pour-over) its current balance to the Qualified Trust Fund.

5. The Commission authorizes Xcel to transition investments to bonds six years before decommissioning.

6. Xcel shall provide more detailed analysis when proposing future assumption changes related to the transition to bonds.

7. The Commission approves a change in the investment mix to a target weight of 50% equities.

8. In its next annual decommissioning filing, Xcel shall include possible benchmarks and methodologies for assessing annual performance of the Qualified Trust Fund. The filing must include, at a minimum proposals for:

    a. Annual performance benchmarks.

    b. The date the Qualified Trust Fund's achieved returns will be measured against the benchmarks.

    c. The date Xcel will make a compliance filing comparing the Qualified Trust Fund's achieved returns to the benchmarks.

    and a discussion of:

    d. The acceptable deviation level between the performance benchmarks and the Qualified Trust Fund's achieved returns. (For example: 100 basis points).

    e. The amount of any true-up, in dollars, that falls outside of the acceptable band, if applicable.

    f. The date on which the true-up would take place.

9. Within 120 days of the date of this order or in its next rate case, Xcel shall make a filing to enable the Commission to determine the appropriate method for crediting any future Department of Energy Settlement proceeds resulting from the Settlement extension.

10. The Commission approves Xcel's assessment regarding the risk of premature decommissioning.

11. The Commission accepts Xcel's property tax assumptions for purposes of calculating the 2016 decommissioning accrual.

12. In its next triennial decommissioning filing, Xcel shall:

    a. continue to provide balance sheet accounts for SFAS 143 related to nuclear decommissioning, with a brief narrative explaining the numbers provided on the ARO balance sheet for nuclear decommissioning.

    b. continue using a consultant (rather than Xcel) to prepare the Schedule C escalation analysis section and provide a statement indicating that the consultant is doing this calculation in an independent manner.

    c. develop a 60, 100 and 200-year plan for the City of Red Wing to enable Xcel to build, improve, communicate, and share an understanding of the long-term safety-related costs of spent fuel storage on host communities.

    d. discuss possible end of life nuclear cost mitigation alternatives.

e. re-examine its 50-year model recasking cost assumption and analysis, by providing two scenarios—one based on the same recasking assumptions used in this filing, and one assuming the need to replace all casks prior to being turned over to the custody of the federal government.

f. provide an updated assessment of the risk of premature decommissioning.

g. provide a detailed discussion of the status of Nuclear Regulatory Commission relicensing of casks, on the anticipated life of the casks used by Xcel, manufacturer and contractor warranties and liability obligations for the casks, the technical and regulatory barriers associated with transporting the casks used and the status of any federal storage initiatives whether permanent or temporary.

h. include a detailed explanation of the anticipated financial responsibility of utilities for the delivery of the casks into federal custody that includes descriptions of when ratepayers' and Xcel's present storage duties terminate and the cost and liabilities would shift to the federal government.

13. In its next and future triennial decommissioning filings, Xcel shall provide a more detailed break out of "spent fuel management" costs.

14. This order shall become effective immediately.

BY ORDER OF THE COMMISSION

Daniel P. Wolf
Executive Secretary

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