

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

**Montana-Dakota Utilities Co., a Division of MDU
Resources Group, Inc.
Environmental Cost Recovery
Rates**

Case No. PU-13-83

**Montana-Dakota Utilities Co., a Division of MDU
Resources Group, Inc.
Environmental Cost Recovery
Tariff**

Case No. PU-13-85

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

December 18, 2013

Appearances

Commissioners Brian P. Kalk, Randy Christmann and Julie Fedorchak.

Daniel S. Kuntz, Associate General Counsel, P.O. Box 5650, 1200 West Century Avenue, Bismarck, ND 58506-5650, appearing on behalf of Montana-Dakota Utilities Co.

Ryan Norrell, Legal Counsel, Public Service Commission, State Capitol, 600 E. Boulevard Avenue, Bismarck, ND 58505, appearing on behalf of Public Service Commission Advocacy Staff.

Illona Jeffcoat-Sacco, General Counsel, Public Service Commission, State Capitol, 600 E. Boulevard Avenue, Bismarck, North Dakota 58505, appearing on behalf of the Public Service Commission Advisory Staff.

Allen C. Hoberg, Administrative Law Judge, Office of Administrative Hearings, 2911 North 14th Street, Bismarck, ND 58503 as Procedural Hearing Officer.

Preliminary Statement

On February 11, 2013, Montana-Dakota Utilities Company, a Division of MDU Resources Group, Inc., (Montana-Dakota), a co-owner of the Big Stone power Plant (Big Stone), filed an Environmental Cost Recovery Rider (ECRR) Tariff that provides for an adjustment in rates to recover jurisdictional capital costs and associated operating expenses incurred to comply with the federal environmental mandates at Big Stone and to recover the costs associated with any future environmental projects, Case No. PU-13-85. Also on February 11, 2013, Montana-Dakota filed rate adjustments under the ECRR Tariff

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to recover the costs of the environmental upgrades to Big Stone for the period from December 31, 2012, through March 2014, over the 12 months beginning April 2013, Case No. PU-13-83.

On May 31, 2013, Montana-Dakota updated its application in Case No. PU-13-83 to reflect the revised budget for the Big Stone environmental upgrades.

On July 10, 2013, the Commission consolidated the Montana-Dakota cases, PU-13-83 and PU-13-85 and two related Otter Tail Power Company (Otter Tail) cases, PU-13-79 and PU-13-84, for hearing and issued a Notice of Hearing, scheduling the hearing on the four cases for September 16, 2013.

Four issues were identified in the Notice regarding Montana-Dakota's and Otter Tail's proposed environmental cost recovery tariffs.

1. Should the commission approve each environmental cost recovery tariff?
 - a. Does each tariff allow the respective public utility to recover on a timely basis its investment in capital costs and associated operating expenses incurred to meet federal environmental mandates not reflected in the utility's general rate schedule?
 - b. Does each tariff allow a return on the respective public utility's investment made to meet federal environmental mandates at the level approved in the utility's most recent general rate case?
 - c. Does each tariff provide a current return on construction work in progress to meet federal environmental mandates provided the cost recovery from retail customers of the allowance for funds used during construction is not sought through any other means?
 - d. Does each tariff terminate cost recovery after the respective public utility's costs and expenses to meet federal environmental mandates have been recovered fully or have been reflected in the utility's general rate tariffs?

The Notice also set forth the following issues to be considered in regard to each company's environmental cost recovery rate adjustment.

1. Should the commission approve each environmental cost recovery rate adjustment?
 - a. Does each rate adjustment comply with the respective tariff?
 - b. Are each utility's incurred costs and expenses to meet federal environmental mandates reasonable and prudent?

The Commission held the consolidated hearing on September 16, 2013, as scheduled in the Commission Hearing Room, State Capital, 12th floor, Bismarck, North Dakota.

Having allowed all interested persons an opportunity to be heard, and having heard, reviewed and considered all testimony and evidence presented, the Commission makes the following:

Findings of Fact

1. Montana-Dakota is a Division of MDU Resources Group, Inc., a Delaware corporation, duly authorized to provide electric service to retail customers in North Dakota.
2. Big Stone is a 475 megawatt (MW) coal-fired electric generation plant located near Big Stone City, South Dakota. Big Stone is co-owned by NorthWestern Corporation d/b/a NorthWestern Energy, Montana-Dakota and by Otter Tail Power Company.
3. In 1999, the United States Environmental Protection Agency (EPA) promulgated the Regional Haze Rule (40 CFR, Part 51 Subpart P) under the Clean Air Act, 41 U.S.C. Section 7479. Pursuant to the EPA's Regional Haze Rule, the South Dakota Department of Environmental and Natural Resources (DENR) established the South Dakota Haze State Implementation Plan (SD Haze SIP) that became effective on May 29, 2012. Under the SD Haze SIP, the owners are required to install Air Quality Control Systems (AQCS) equipment at Big Stone to reduce emissions of sulfur dioxide (SO₂) and Nitrogen Oxide (NO_x). The AQCS equipment is required based on a Best Available Retrofit Technology (BART) determination adopted by the DENR. The BART determination requires that the AQCS include flue gas desulfurization (FGD) for SO₂ reduction, a baghouse for particulate matter control, and selective catalytic reduction (SCR) with separated overfire air for NO_x reduction. The project also includes an activated carbon injection system for the control of mercury emissions.
4. In Case No. PU-11-163 the Commission approved Montana-Dakota's request for an Advanced Determination of Prudence (ADP) for the AQCS project. In its Findings of Fact, Conclusions of Law and Order in those proceedings dated May 9, 2012, the Commission found "In comparison to generation alternatives, the continued operation of the Big Stone Plant is prudent." (Conclusion of Law paragraph 2).
5. The Commission conditioned the Big Stone ADP in Case No. PU-11-163 by stating "No determination is made in this order regarding the prudence of using either SCR or Selective Non-Catalytic Reduction (SNCR) technology". (Order paragraph #1).
6. In Case No. PU-11-163, the record evidence showed that technologies other than SCR were evaluated as part of the SD Haze SIP process for NO_x Control at the Big Stone Plant, including SNCR and other technologies.

7. Evidence at the September 16, 2013 hearing also showed that because the BART determination was specific to Big Stone, its particular design and operational characteristics were important to the BART determination. In particular, Big Stone burns subbituminous coal and is a cyclone boiler. These were critical characteristics for the NOx determination because, in contrast to lignite coal, SCR is a feasible technology for plants burning subbituminous coal. The fact Big Stone is a cyclone boiler is also an important factor since the inherent design of these boilers typically results in higher baseline levels of NOx as compared to pulverized coal (PC) boilers.

8. SCR is the standard NOx control for coal plants in the United States similar to Big Stone -- large cyclone boilers burning subbituminous coal. As identified in the testimony of Mark Thoma, through a query of EPA databases conducted by Mark Thoma, 19 of 29 large cyclone boilers burning subbituminous coal in the U.S. (excluding Big Stone) already have SCR installed. Of the ten that do not have SCR, three have recently shut down, two plan to shut down around the time the Big Stone SCR will be operational, and the remaining five have installed rich reagent injection technology (RRI), which is a technology that was evaluated for Big Stone but did not achieve the same level of NOx reductions as the SCR.

9. Under the Clean Air Act and the EPA's Regional Haze Rule, the Big Stone owners are required to install the AQCS as expeditiously as practicable, but no later than five years from EPA's publication of the rule in the Federal Register, or April 26, 2017.

10. Montana-Dakota's May 31, 2013 filing reflected a reduced total cost estimate for the project of \$405 million. Montana-Dakota explained that project contracts have been finalized for procurement of approximately 90 percent of the project costs. With a large percentage of the costs now under contract, the total capital budget was revised down from \$491 million to \$405 million. The new budget is 17.5 percent lower than the original budget.

11. Montana-Dakota's ownership share in Big Stone is 22.7 percent, and Montana-Dakota's North Dakota customers are responsible for approximately 71.3 percent of Montana-Dakota's costs. The costs originally forecasted to be recovered from Montana-Dakota's North Dakota customers were \$79 million and are now forecast at \$65.5 million.

12. The cost reduction is a result of the following four factors:

- A. Design/engineering modifications account for approximately 45 percent of the reduction.
- B. The project delivery method, timing and market conditions account for approximately 35 percent of the reduction.
- C. Otter Tail has taken on the duties of construction management for the project and this change accounts for approximately 13 percent of the reduction.

D. Because of the overall reductions, the contingency amount for the project is also reduced, which accounts for about 7 percent of the budget reduction.

13. When the project is completed and the final costs are known, Montana-Dakota will provide the Commission sufficient information to enable the Commission to perform a final reasonableness review of costs incurred in the execution of the project. The true-up mechanism of Montana-Dakota's ECRR rates is designed to ensure that the company only recovers 100% of its costs. Should the Commission later find a discrepancy or determines a cost was imprudent or unreasonable, the ECRR rate can be adjusted going forward.

14. The proposed ECRR rates filed by Montana-Dakota comply with Montana-Dakota's proposed tariff.

15. The proposed Montana-Dakota, Rate 57 ECRR Tariff will allow Montana-Dakota to recover on a timely basis its capital investment and associated operating expenses prudently incurred to meet federal environmental mandates not reflected in existing rates.

16. The proposed Montana-Dakota ECRR Tariff provides the company with a rate mechanism that more closely aligns the recovery of the costs with the costs being incurred, rather than to defer cost recovery, accrue Allowance for Funds Used During Construction (AFUDC) and then seek recovery at the completion of the multi-year project. The costs to be recovered in the filed rates do include AFUDC that has accrued prior to the commencement of the ECRR rates.

17. The rate of return used in the calculation of the investment cost in Montana-Dakota's ECRR rates is that which was approved in Montana-Dakota's most recent general rate case for electric service.

18. Montana-Dakota will maintain a tracker account until all AQCS Project costs have been fully recovered or reflected in base rates as part of a general rate case. The tracker account information will compare Montana-Dakota's respective jurisdictional costs and the amounts recovered by Montana-Dakota through Montana-Dakota's North Dakota ECRR Tariffs. The tracker account balance for Montana-Dakota will accrue monthly carrying charges as specified in Montana-Dakota's ECRR Tariff. Carrying charges on a negative tracker balance will accrue to the benefit of retail customers and carrying charges on a positive tracker balance will accrue to Montana-Dakota.

19. Montana-Dakota will make annual filings by January 15 of each year to revise Montana-Dakota's ECRR rates to reflect Montana-Dakota's updated revenue requirement for the project. The annual filing may include, upon Commission approval, the cost of additional new federally mandated environmental projects, if any. When Montana-Dakota submits its annual filing, the tracker account will be updated so any over or under recovered amount at the end of the previous year will be reflected in the adjustment for the

upcoming year. While Montana-Dakota's ECRR Tariff will remain in effect, the rate applicable to the AQCS project will terminate once the project is completed and the investment is reflected in Montana-Dakota's general rates pursuant to a general rate case, or when all costs have been recovered, whichever is earlier.

20. Montana-Dakota allocates the revenue requirement to rate classes using the demand factor identified in Montana-Dakota's most recent general rate case and the revenue requirement within each rate class is then recovered based on energy sales.

From the foregoing Findings of Fact, the Commission makes the following:

Conclusions of Law

1. The Commission has jurisdiction in these proceedings.
2. North Dakota Century Code (N.D.C.C.) Section 49-05-04.2 provides as follows:

The commission may approve, reject, or modify a tariff filed under Section 49-05-06, which provides for an adjustment of rates to recover jurisdictional capital costs and associated operating expenses incurred by a public utility to comply with federal environmental mandates on existing electricity generating stations. For purposes of this section, federal environmental mandates are limited to any requirements under the Clean Air Act, the Clean Water Act, or any other federal law or rule designed to protect the environment. Associated operating expenses are costs incurred by the public utility to comply with the environmental mandate. The tariff must:

- a. Allow the public utility to recover on a timely basis its investment in capital costs and associated operating expenses incurred to meet federal environmental mandates not reflected in the utility's general rate schedule.
- b. Allow a return on the public utility's investment made to meet federal environmental mandates at the level approved in the utility's most recent general rate case.
- c. Provide a current return on construction work in progress to meet federal environmental mandates provided the cost recovery from retail customers of the allowance for funds used during construction is not sought through any other means.
- d. Terminate cost recovery after the public utility's costs and expenses to meet federal environmental mandates have been recovered fully or have been reflected in the utility's general rate tariffs.

3. The proposed tariff filed by Montana-Dakota complies with the provisions of NDCC Section 49-05-04.2.

4. The proposed rate adjustment filed by Montana-Dakota under the tariff complies with the provisions of NDCC Section 49-05-04.2

From the foregoing Findings of Fact and Conclusions of Law, the Commission makes the following:

Order

The Commission Orders:

1. Montana-Dakota's application to establish an Environmental Cost Recovery Rider Tariff is APPROVED
2. Montana-Dakota's application for a rate adjustment under its Environmental Cost Recovery Rider Tariff for the Big Stone Air Quality Control Systems Project to be implemented with an expected recovery period through March, 2014, is APPROVED.
3. Montana-Dakota shall coordinate with Otter Tail Power Company its Environmental Cost Recovery Rider updates so the same joint costs appear in each company's filing.
4. Montana-Dakota shall file, for Commission approval, compliance Environmental Cost Recovery Rider rate schedules consistent with this Order.
5. Montana-Dakota's cost recovery under its Environmental Cost Recovery Rider rate adjustment shall terminate after Montana-Dakota's costs for eligible projects have been fully recovered or have been reflected in Montana-Dakota's general rate tariff, whichever comes first.
6. The Findings of Fact, Conclusions of Law, and Order in this matter are based upon the facts and circumstances of this proceeding and shall not serve as precedent in any proceeding involving what environmental equipment may be required for any other generating facility for compliance with the Clean Air Act or the Regional Haze Rule.

PUBLIC SERVICE COMMISSION



Randy Christmann
Commissioner



Brian P. Kalk
Chairman



Julie Fedorchak
Commissioner