

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Otter Tail Corporation
Advance Determination of Prudence
Application

Case No. PU-06-481

Montana-Dakota Utilities Co., a Division of MDU
Resources Group, Inc.
Advance Determination of Prudence
Application

Case No. PU-06-482

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER

August 27, 2008

Appearances

Commissioners Susan E. Wefald, Kevin Cramer and Tony Clark.

Todd J. Guerrero, Attorney at Law, Lindquist and Venum, P.L.L.P., 4200 IDS Center, 80 South Eighth Street, Minneapolis, MN 55402 and Mark Bring, Associate General Counsel, Otter Tail Corporation, 215 South Cascade Street, Fergus Falls, MN 56537, on behalf of Otter Tail Corporation.

Daniel S. Kuntz, Associate General Counsel, MDU Resource Group, Inc., PO Box 5650, Bismarck, ND 58506-5650, on behalf of Montana-Dakota Utilities Co.

William Binek, Chief Counsel, Public Service Commission, State Capitol, 600 E Boulevard Ave., Bismarck, North Dakota 58505, on behalf of the Public Service Commission advocacy staff.

Jack William Breen Jr., Attorney-at-Law, 717 Williams Street, Bismarck, ND 58501-2483 and Carrie LaSeur, Attorney-at-Law, 319 3rd St NW, Mount Vernon, IA 52314 on behalf of Intervenors Mark Trechock and Dakota Resource Council.

Al Wahl, Administrative Law Judge, Office of Administrative Hearings, 1701 North Ninth Street, Bismarck, North Dakota 58501-1882.

Preliminary Statement

On November 14, 2006, Otter Tail Corporation doing business as Otter Tail Power Company (Otter Tail) filed an application under North Dakota Century Code Section 49-05-16 for advance determination of prudence of Otter Tail's participation and ownership interest in the Big Stone II Generating Plant, Case No. PU-06-481.

On November 15, 2006, Montana-Dakota Utilities Co. (Montana-Dakota) filed an application under North Dakota Century Code Section 49-05-16 for advance determination of prudence of Montana-Dakota's participation and ownership interest in the Big Stone II Generating Plant, Case No. PU-06-482 (collectively 2007 Applications).

On December 1, 2006, Otter Tail and Montana-Dakota (Applicants) each filed direct testimony in support of its application.

On December 29, 2006, the Commission issued a Notice of Filing and Notice of Intervention Deadline in both cases setting February 15, 2007 as the intervention deadline.

On January 10, 2007, the Commission issued a Notice of Hearing scheduling a hearing for April 17, 2007. The Commission identified the following issues in its Notice of Hearing:

1. Whether the resource addition is reasonable and prudent.
2. Whether the applicants have need for additional generating resources.
3. What alternatives exist for meeting additional generation needs?

On January 24, 2007, the Commission issued a Notice of Public Input Sessions. The Commission held Public Input Sessions on February 5, 2007 in Bismarck and February 12, 2007 in Jamestown.

On February 15, 2007, Mark Trechock, as a ratepayer and as Staff Director of the Dakota Resource Council (DRC) and DRC filed a Petition to Intervene in both dockets.

On February 23, 2007, the Commission granted the Petition to Intervene.

On March 7, 2007, the Commission issued a Notice of Rescheduled Hearing scheduling the hearing for May 29, 2007.

On April 10, 2007, the Applicants filed a Motion in Limine to Exclude Evidence on Environmental Externality Values and Request to Amend Scheduling Order.

A Prehearing Conference was held on April 20, 2007, to hear oral argument of, consider, and rule upon Applicants' Motion in Limine and to revise the schedule for testimony, briefs, hearing dates, and proposed orders.

The Administrative Law Judge Al Wahl (ALJ) granted the Motion in Limine on April 25, 2007, prohibiting the introduction of any evidence of “environmental externality values.”

Intervenors waived the requirement for the Commission to issue an order within seven months of filing on April 30, 2007. Otter Tail waived the requirement on May 1 and Montana-Dakota on April 30.

The Commission issued a second Notice of Rescheduled Hearing on May 16, 2007, scheduling the hearing for June 26, 2007.

On May 31, 2007, Commission Advocacy Staff and the Intervenors filed direct testimony in both cases.

On June 13, 2007, the Applicants moved to strike portions of the testimony of David A. Schlissel. On June 22, 2007, the ALJ issued his Order Upon Motion to Strike.

The Commission held a hearing on both cases June 26, 27, and 28, 2007, in the Commission Hearing Room. The ALJ presided at the hearing.

On September 17, 2007, the Applicants wrote to the Commission and advised that two of the Big Stone II co-owners, Great River Energy and Southern Minnesota Municipal Power Agency, had withdrawn from the project and requested that the matter be suspended until the Applicants could re-analyze the situation and determine how to proceed.

On January 21, 2008, the Applicants wrote to the ALJ and requested that supplemental hearings be held on the Applicants’ prudency application.

On February 1, 2008, the ALJ issued an Order Scheduling Proceedings for Supplemental Hearings, establishing dates for the submission of pre-filed written testimony and scheduling three days of hearing beginning April 28, 2008.

On March 10, 2008, the Applicants filed Supplemental Direct Testimony in support of its application (2008 Applications).

On April 15, 2008, the Applicants filed a motion to strike portions of the pre-filed testimony of Intervenors’ witness David A. Schlissel. On April 22, 2008, the ALJ granted Applicants’ Motion in part.

The Commission held a hearing on both cases, PU-06-481 and PU-06-482, on April 28, 29, and 30, in the Commission Hearing Room. The ALJ presided at the hearing.

Advance Determination of Prudence and Environmental Externality Laws

North Dakota Century Code Section 49-05-16 provides that a public utility proposing to construct an energy conversion facility for the purpose of ensuring reliable electric service to its customers may file an application with the Public Service Commission for an advance determination that an electric resource addition is reasonable and prudent. Section 49-05-16 states:

Advance determination of prudence. A public utility proposing to construct, lease, or make improvements to an energy conversion facility, renewable energy facility, transmission facility, or proposed energy purchase contract from another entity or person for the purpose of ensuring reliable electric service to its customers may file an application with the Commission for an advance determination of prudence regarding the proposal. The Commission may order that expenses associated with investigating the application made by the public utility for prudence of a resource addition be paid by the public utility in accordance with section 49-02-02.

1. The Commission may issue an order approving the prudence of an electric resource addition if:
 - a. The public utility files with its application a projection of costs to the date of the anticipated commercial operation of the electric resource addition;
 - b. The Commission provides notice and holds a hearing, if appropriate, in accordance with section 49-02-02; and
 - c. The Commission determines that the resource addition is reasonable and prudent. For facilities located or to be located in this state the Commission, in determining whether the resource addition is reasonable and prudent, shall consider the benefits of having the energy conversion facility, renewable energy facility, transmission facility, or facility generating the energy to be purchased located in this state.
2. The Commission order must be rendered no later than seven months after the public utility files its application requesting a prudence determination of an electric resource addition.
3. A resource addition approved by the Commission is subject to annual reporting requirements until commercial operation of the resource addition.
4. The Commission's order determining prudence of the resource adjustment is binding for ratemaking purposes.
5. If at any time following an initial Commission order, the Commission, following a subsequent hearing, determines that continuation of a project is no longer prudent or that its prior order should be modified, the public utility may recover in its rates, and in a timely manner consistent with the public utility's financial obligations, the amounts the public utility already has expensed, incurred, or obligated on a project, including interest expense and

a return on equity invested in the project up to the time the new order is entered even though the project may never be fully operational or used by the public utility to serve its customers.

6. There is a rebuttable presumption that an energy conversion facility, renewable energy facility, transmission facility, or facility generating the energy to be purchased which is located in the state is prudent.

North Dakota Century Code Section 49-02-23 governs the use, by the Commission or the electric utility, of environmental externality values when considering electric resources or electric rates. Section 49-02-23 states:

Consideration of environmental externality values prohibited.

The Commission may not use, require the use of, or allow electric utilities to use environmental externality values in the planning, selection, or acquisition of electric resources or the setting of rates for providing electric service. Environmental externality values are numerical costs or quantified values that are assigned to represent either:

1. Environmental costs that are not internalized in the cost of production or the market price of electricity from a particular electric resource; or
2. The alleged costs of complying with future environmental laws or regulations that have not yet been enacted.

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

The Parties

1. Otter Tail Corporation is a Minnesota corporation authorized to do business in the State of North Dakota as a foreign corporation. Otter Tail is doing business in the State of North Dakota as a public utility. Otter Tail operates an integrated electric system in portions of Minnesota, North Dakota, and South Dakota. Approximately 43% of Otter Tail's customers are in North Dakota.

2. Montana-Dakota Utilities Co., a division of MDU Resources Group, Inc., is a Delaware corporation authorized to do business in the State of North Dakota as a foreign corporation. Montana-Dakota is doing business in the State of North Dakota as a public utility. Montana-Dakota operates an integrated electric system in portions of Montana, North Dakota, and South Dakota. Approximately 65% of Montana-Dakota's customers are in North Dakota.

3. DRC is an environmental group organized in the state of North Dakota and a ratepayer of Montana Dakota Utilities Co. Mark Trechock is Staff Director of the DRC and is a ratepayer of Montana-Dakota.

The Proposed Resources

4. In the 2007 Applications, Otter Tail and Montana-Dakota along with five other utilities proposed to construct a 630 MW nominal capacity supercritical, pulverized-coal electric generating plant (Big Stone II) to be located adjacent to the existing plant in Big Stone City, South Dakota. The existing Big Stone I site is approximately two miles northwest of Big Stone city, 1.7 miles from the nearest point of Big Stone lakeshore, and approximately two miles from the Minnesota border. In the 2008 Applications, Otter Tail and Montana-Dakota along with three other utilities are proposing to construct a 500 MW nominal capacity supercritical, pulverized-coal electric generating plant at the Big Stone I site.

5. The proposed energy conversion facility will not be located in North Dakota so the rebuttable presumption in N.D.C.C. Section 49-05-16 (6) does not apply, and under North Dakota Century Code Section 49-05-16 (1) (c) the Commission need not consider the benefits of locating the proposed resource facility in North Dakota.

6. In the 2007 Applications, Otter Tail and Montana-Dakota each planned to contribute 19.33 percent of Big Stone II, which is 121.8 megawatts (MW) nominal capacity each. Otter Tail and Montana-Dakota would also each contribute 19.33 percent of the proposed transmission facilities. In the 2008 Applications, Otter Tail currently proposes to own up to 130 MW, and Montana-Dakota proposes to own up to 133 MW. These amounts could change slightly if the plant size increases from 500 to 580 MW. Otter Tail's resource planning indicates a need for up to 170 MW of capacity.

7. The Applicants testified that Big Stone II would cost approximately \$1.272 billion with an on-line date of mid-2013.

8. The co-owners also propose to construct two new high voltage transmission lines to interconnect Big Stone II to the transmission grid. A 48-mile line from Big Stone 230 kilovolt (kV) Substation to the Morris Substation near Morris, Minnesota, line to be constructed at 230 kV. A 90-mile line from Big Stone 345 kV Substation to Granite Falls, Minnesota, to be constructed at 345 kV but operated initially at 230 kV.

9. The proposed transmission facilities will not be located in North Dakota so there is not a rebuttable presumption under N.D.C.C. Section 49-05-16 (6) that the facilities are prudent.

10. The Applicants state that the transmission interconnection and delivery service facilities would cost approximately \$249 million, with an in-service date of early 2013.

11. Big Stone II is designed to be a baseload facility. A baseload facility is one that is intended to be operated 24 hours a day, 365 days per year. A baseload facility is dispatchable, therefore, output can be controlled to meet system needs. Big Stone II is expected to have an 88 percent capacity factor.

12. Fuel for Big Stone II would be Powder River Basin (PRB) sub-bituminous coal from a number of mines located in Wyoming and Montana, the same fuel and fuel source used at Big Stone I.

13. Applicants propose that Big Stone II and Big Stone I share one wet flue gas desulfurization system (wet scrubber) to control sulfur dioxide emissions. Big Stone II will also incorporate a fabric filter house to control small particle emissions and mercury and a selective catalytic reduction to control emissions of nitrogen dioxide.

14. The co-owners intend to own Big Stone II as tenants in common, with each utility having an undivided interest in the entire project. Under an Operating and Maintenance Agreement, Otter Tail would operate and maintain Big Stone II. The agreement allows for future change of an operating agent if the owners choose.

Otter Tail's Need for Electric Resources

15. Otter Tail is a winter peaking utility but its baseload capacity needs are driven by summer season demand.

16. As of the June 2007 hearings, Otter Tail served the electric requirements of its customers with approximately 700 MW of company-owned generation resources including approximately 244 MW of summer capacity from Big Stone I; approximately 149 MW of summer capacity from the Coyote Station near Beulah, North Dakota; approximately 143 MW of summer capacity from the Hoot Lake Station near Fergus Falls, Minnesota; peaking units totaling 43 MW of summer capacity at Jamestown, North Dakota; a unit at Lake Preston, South Dakota totaling 19.74 MW of summer capacity; a unit at Solway, Minnesota totaling 45 MW of summer capacity; approximately 4.2 MW of small baseload hydro in Minnesota; and several smaller diesel units that total approximately 3 MW of summer capacity.

17. Otter Tail resources also include 2 MW of coal-fired generation from western North Dakota, approximately 85 MW nameplate capacity of wind generation, and a number of customer-owned diesel units under contract for peaking duty totaling approximately 8.4 MW of summer capacity.

18. Otter Tail also contracts for 50 MW of Manitoba Hydro capacity. This contract expires in 2011. Otter Tail witness Brian Morlock testified that Manitoba Hydro informed Otter Tail that it no longer has capacity and energy to provide Otter Tail so an additional purchase of power from Manitoba Hydro is not an option under consideration.

19. Otter Tail's forecast indicates energy requirements increasing annually from approximately 4,500,000 MWh in 2008 to approximately 5,000,000 MWh in 2014.

20. Otter Tail's forecast indicates a winter season capacity deficit of 15 MW in 2007 and increasing to approximately 160 MW by 2012 and 193 MW by 2014. The capacity deficit is increasing due to a combination of events, including system load growth, the expiration of certain purchased power contracts, and the closing of a customer owned generator. Morlock testified that Otter Tail has been selected to provide power to the new Tharaldson Ethanol Project which could require as much as 22 MW peak demand.

Montana-Dakota's Need for Electric Resources

21. Montana-Dakota is a summer peaking utility but its peak is for a very short time period.

22. Montana-Dakota currently serves the electric requirements of its customers with approximately 366 MW of coal generation from five units, and approximately 110 MW of gas or gas and oil fired combustion turbines for peaking requirements. In addition, it has purchase agreements for summer capacity up to 100 MW.

23. Montana-Dakota had a long-term power purchase agreement with Basin Electric Power Cooperative for 66.4 MW of generation that expired October 31, 2006.

24. Montana-Dakota operates a 20 MW wind farm in Montana.

25. For purposes of performing its base case resource expansion analysis, Montana-Dakota used an average annual load growth during the 2006 to 2025 period of 0.94% and an average annual energy growth of 0.96%.

26. Montana-Dakota currently has a capacity deficit of approximately 83 MW between its forecasted summer peak obligation during 2007 and its owned generation capacity. Montana-Dakota is currently meeting that capacity deficit through a capacity purchase agreement that could be extended through 2012. The capacity deficit will be approximately 113 MW by 2013. MDU is currently meeting any energy deficits through purchases in the Midwest Independent Transmission Operator (MISO) energy market as needed.

Common Need for Electric Resources

27. At times, both utilities currently experience capacity deficits.

28. The cost of energy from the MISO market can be uncertain and has been high for both on-peak and off-peak demand. In January and February 2002, the average price was \$20/MWh of energy. In 2007, the average price was close to \$80 per MWh. This is indicative of supply deficiencies in the MISO region.

29. There was no dispute among the parties concerning the need for additional electric system resources to ensure reliable electric service to customers of Otter Tail and Montana-Dakota.

30. The Commission finds that both Otter Tail and Montana-Dakota have a need for additional electric system resources to ensure reliable electric service to customers.

Electric Resource Alternatives

31. Both Otter Tail and Montana Dakota engage in long-term planning to identify likely courses of action to continue providing reliable, low-cost electricity to meet the electric energy needs of their customers. This planning considers load forecast, all existing supply, demand-side management and conservation assets, the financial structure of the utility, and available supply, demand-side management, and energy conservation alternatives.

32. Both Otter Tail Power and Montana-Dakota have implemented various conservation and demand-side management programs to reduce the amount of energy that is used and the generating capacity that would otherwise be required. These programs include load management incentives, rebates, discounts, and other conservation promotions.

Otter Tail Electric Resource Alternatives

33. Morlock testified that, in developing its 2005 resource plan, Otter Tail contacted all utilities in the Otter Tail area to determine whether they would have generation that could be provided in response to an RFP. The answer, other than electricity from Manitoba Hydro, was no. Otter Tail also contacted a number of independent power producers that declined to offer a generation resource proposal.

Otter Tail Demand-side Management (DSM) and Conservation

34. Otter Tail includes demand-side management and conservation efforts in its forecasting and resource planning. Resource planning performs a side-by-side consideration of demand-side and supply-side resources to identify the most economic plan.

35. Approximately 13% (or more) of the capacity needs in the company's 2005 Resource Plan for the 2006 to 2020 planning period, sometimes referred to as the 2006 to 2019 planning period, is identified as coming from conservation and DSM measures.

36. Otter Tail's 2005 Resource Plan includes implementation of about 67 MW of conservation and DSM, all in Minnesota. Otter Tail has projected an incremental annual DSM energy savings over the 2006-2020 planning period of about 8 million to 11 million kWh annually.

37. Otter Tail made a late-filed exhibit that identifies several DSM programs selected for implementation prior to Big Stone II during the 2006 to 2020 planning period. Those programs total a 21.6 kW demand savings potential.

38. Otter Tail has indicated it will be implementing additional conservation measures not only in Minnesota, but in North Dakota and South Dakota as well.

39. The Commission finds that DSM and conservation must be important parts of a resource plan for Otter Tail in North Dakota.

Montana-Dakota Electric Resource Alternatives

40. Montana-Dakota considered several supply options at the loss of the 66.4 MW contract with Basin Electric. The options considered included an extension of the Basin Electric contract, a lignite plant at Gascoyne, a new 43.5 MW gas peaking resource, participation in Big Stone II, RFP for supply, a combination of energy-efficiency programs, and purchases from the MISO market.

41. In 2004, Montana-Dakota issued a Request for Proposal (RFP) to fill the void left by the expiration of the contract with Basin Electric. Montana-Dakota received three responses of which one was a qualified bid. Montana-Dakota stated it rejected the bid because it only offered a small portion of the needed capacity.

42. In 2006, Montana-Dakota issued another RFP for baseload coal capacity and energy for the 25 to 35-year periods beginning June 1, 2011, and June 1, 2016. Montana-Dakota received two proposals. Montana-Dakota stated it rejected one because it did not meet Montana-Dakota's requirements and the other due to uncertain delivery.

43. Montana-Dakota's expansion modeling in 2003 selected gas turbines. Montana-Dakota did not consider this a viable option due to cost to customers.

44. Montana-Dakota requested PA Consulting Group, Inc. (PA) to perform a capacity expansion modeling analysis to help evaluate an overall optimal resource plan for Montana-Dakota.

45. The record indicates PA based its expansion analysis upon input assumptions from a variety of resources including Montana-Dakota, PA, and the joint project sponsors.

46. The record indicates the expansion analysis completed by PA was an independent analysis prepared on behalf of Montana-Dakota; assumptions were not jointly developed with Otter Tail or other project co-owners.

47. The record indicates PA's expansion analysis assumed no off-system sales from Big Stone II in its test for the least cost mix of resource alternatives.

Montana-Dakota Demand-side Management and Conservation

48. Montana-Dakota includes demand-side management and conservation efforts in its forecasting and resource planning. Resource planning performs a side-by-side consideration of demand-side and supply-side resources to identify the most economic plan.

49. Montana-Dakota has implemented interruptible rates and launched a number of DSM programs, including a program promoting high-efficiency residential air conditioning and a commercial lighting retrofit program estimated to provide a demand reduction of 11 MW as reflected in Montana-Dakota forecasted requirements. Montana-Dakota has identified nine separate programs, including appliance rebates for new efficient appliances, expanded interruptible service arrangements, and commercial air conditioner cycling efforts, that it has implemented or is in the process of implementing in its integrated electric system, including North Dakota, and that are expected to provide additional annual demand reductions of 13.8 MW. Montana-Dakota states that annual energy reductions of approximately 6 million kWh are associated with all the measures.

50. The Commission finds that DSM and conservation must be important parts of a resource plan for Montana-Dakota in North Dakota.

Big Stone II Energy Facility

Facility Cost

51. Black and Veatch, engineer and construction manager for the Big Stone II Project, was retained in the summer of 2005 to develop plant system design, provide engineering and construction services, and obtain competitive quotations on five major plant components (boiler, turbine, fabric filter, wet scrubber, and chimney). A project cost estimate was prepared after the definition of plant arrangements and configuration were developed in sufficient detail, and after the design criteria for all equipment and material were developed and agreed to by the Big Stone II co-owners.

52. Equipment costs include materials and services for all plant components. Construction contracts include labor, materials, and services necessary to erect the plant equipment. Indirect costs include owner's costs including engineering and construction management as well as escalation and reserves allocation.

53. The cost estimate prepared by Black and Veatch was based on the following:

- Pricing of all major equipment and systems including receipt of detailed competitive bids for five major components and indicative price quotes for approximately 17 other major pieces of equipment and systems.

- Estimates of cost and quantity of individual construction commodities.
- Estimates of cost and quantity of individual construction labor hours. Local labor rates for the various union crafts (building trades) were obtained and used.
- Estimates of project indirect costs including engineering, construction management, unit startup, property tax, financing, insurance, contingencies, and others as required.
- Inclusion of all other co-owner costs including transmission costs as well as for the Big Stone II personnel and other indirect costs.

54. In the summer of 2006, Black & Veatch was retained by the co-owners to provide an up-to-date estimate of the costs of Big Stone II. Cost increases were attributed to global growth in demand for generating plants, increased cost of fabricated materials and specialty engineered equipment, construction commodity cost increases, and labor rate escalation.

55. Montana-Dakota witness Rita Mulkern testified that once Big Stone II goes online, a reduction in its fuel costs is expected.

56. The Applicants testified that the Big Stone II project will be executed on a multiple contract basis, with approximately 110 specific contracts.

57. The Commission finds that both Otter Tail and Montana-Dakota have filed a projection of costs to the date of anticipated commercial operation for the proposed electric resource additions as required under North Dakota Century Code Section 49-05-16.

58. The applicants examined two plant sizes as part of their updated analysis – a 500 MW facility and a 580 MW facility. A 500 MW facility is estimated to cost \$1.272 billion. A 580 MW plant is estimated to cost \$1.411 billion.

Transmission Alternatives

59. The existing transmission system limited capacity to add new generation sources. Planning for interconnection of Big Stone II to the electric transmission grid began with a Preliminary Screening Study to evaluate eleven different options for interconnecting Big Stone II to the electric transmission grid. The study was designed to compare alternatives on the basis of capital cost, reliability, system power losses, and impacts to known constrained interfaces in the region. The eleven alternatives were narrowed to five, and then ultimately to two alternatives - (1) a new line from Big Stone to Morris, Minnesota, and a new line from Big Stone to Granite Falls, Minnesota, or (2) a new line from Big Stone to Willmar, Minnesota, and a new line from Big Stone to Granite Falls, Minnesota.

60. The co-owners then submitted a generation interconnect request to MISO and MISO asked Otter Tail Power to perform an Interconnection Study. The Interconnection

Study showed that either of the two options would work to interconnect the Big Stone Plant provided proper system enhancements were made within the direct area of the interconnection. Both of the options involved construction of new lines at 230 kV capability. The co-owners prefer the Big Stone to Morris option over the Big Stone to Willmar option (along with a Big Stone to Granite Falls line that is part of either option). Compared to the Willmar line, the Morris line is shorter, less costly, has lower line losses, and utilizes an existing transmission line corridor.

61. The new transmission lines would improve stability and reliability in the region. Constructing the Granite Falls line at 345 kV capability would provide more stability and reliability than at 230 kV. The Applicants propose to design the Granite Falls line to be capable of operating at 345 kV but will initially operate at 230 kV.

62. The Granite Falls initial operation at 230 kV is adequate to provide for interconnection of Big Stone II and Big Stone I. While the 230 kV capability of the Granite Falls line appears to have greater benefit to local utilities, the incremental capability of a 345 kV Granite Falls line appears to have greater system-wide or regional benefit.

63. The Applicants estimate the incremental cost of constructing a 345 kV Granite Falls line rather than a 230 kV Granite Falls line is \$25 million to \$30 million. The allocation of the transmission costs will be according to a MISO tariff approved by the Federal Energy Regulatory Commission. The allocation of transmission line costs has not been finalized.

64. Otter Tail's witness Timothy Rogelstad testified that MISO agrees with the proposal for the 230 kV Big Stone to Morris line and the 345 kV Big Stone to Granite Falls.

65. Rogelstad testified that the change in size of the Big Stone II facility does not affect the need for the proposed transmission interconnection lines. Any generation facility larger than 150 MW at the Big Stone II site would require more than a 115 kV transmission system.

66. The Commission finds that the proposal to construct the 230 kV Big Stone to Morris line and the proposal to construct the Big Stone to Granite Falls line with 230 kV capacity are each reasonable and prudent for purposes of interconnecting the proposed Big Stone II to the electric transmission grid.

67. The Commission finds that the proposal to construct the Big Stone to Granite Falls line with 345 kV capacity will enhance the potential for development of generation resources on a regional basis and is prudent and reasonable.

Fuel Supply

68. Fuel for Big Stone II would be PRB sub-bituminous coal. PRB coal is the fuel currently used by Big Stone I. The PRB is the world's largest single deposit of low-sulfur coal. The Applicants testified that PRB coal is the lowest cost delivered coal for electric generators. With the addition of Big Stone II, coal delivery requirements to the Big Stone plants will more than double. Approximately 4-7 coal trains will be required per week once Big Stone II is in operation.

69. Burlington Northern Santa Fe Railway (BNSF) is the only company that transports coal to the Big Stone site. In 2006, coal deliverability problems, such as structural failure of rail roadbeds, required that Big Stone I use its reserve coal inventory, and eventually, Big Stone I had to curtail operations. Standard coal inventory at Big Stone I is approximately 30 days.

70. Applicants' late filed exhibit discloses that the cost to Otter Tail's customers associated with coal supply disruptions to Big Stone I in 2006 was estimated at \$2,836,500 in total. The cost to Montana-Dakota's customers associated with those disruptions was estimated at \$1,018,000 in total.

71. The record indicates that, in response to coal delivery problems, BNSF has added locomotives, coal cars, additional rail, and other infrastructure, has upgraded other facilities, and increased the number of shipments. BNSF invested more than \$300 million in 2005 and more than \$600 million in 2006.

72. Commission Advocacy Staff, through witness Terry Deason, recommended the implementation of certain internal operational measures to enhance timely and efficient coal delivery. Deason indicated that Otter Tail undertook many of these measures for Big Stone I and that the measures may be part of Otter Tail's ongoing coal delivery procedures. These measures include:

- Closely monitoring train cycle times (the amount of time it takes a train to move from the load to Big Stone and back to placement for loading).
- Forecasting a schedule of train loadings for each month and for each set of equipment, based upon the burn requirements for each plant, communicate the schedule to the railroad, and monitoring loading to determine if the schedule is being met.
- Implementing a system to manage train deliveries and monitoring the scheduled time of arrival compared to actual, and
- Determining a target number of cars per unit train and monitoring actual number compared to the target.

73. Advocacy Staff recommended that Otter Tail be required to conduct a study of the number of rail cars necessary to serve Big Stone II and do a cost/benefit analysis of whether any additional rail cars should be lightweight aluminum railcars. The results of

this study would be filed with the Commission for review before the commercial operation of Big Stone II.

74. Applicants testified that the standard coal inventory maintained at Big Stone II would be between 30 and 45 days. Deason recommended that Otter Tail perform a study to compare the cost of maintaining coal inventory at 45 days with the cost and likelihood of curtailments from inadequate fuel deliveries. The results of this study, along with the Otter Tail's recommendations would be filed with the Commission for review before the commercial operation of Big Stone II. The cost of 15 days additional coal inventory would be shared by the Big Stone II co-owners. Otter Tail's and Montana-Dakota's contribution to that cost would be approximately \$600,000 each. Deason testified that the carrying cost of this amount, including income taxes, would be less than \$100,000 per year. Otter Tail's incremental cost of replacement power during the 2006 curtailment period was \$1 million to \$1.7 million.

75. Otter Tail and Montana-Dakota expressed overall agreement with Advocacy Staff's recommendations and commit to provide the filings and performing the studies.

76. Deason concluded that advance prudence for Big Stone II should be conditioned upon the recommendations.

77. The Commission finds that the recommendations of Advocacy Staff are reasonable and appropriate.

Fuel Transportation Cost

78. Otter Tail witness Ward Uggerud indicated that approximately 65 to 70 percent of the delivered cost of fuel for the Big Stone plants is transportation cost. Otter Tail is currently purchasing BNSF coal delivery under a tariff price filed with the Surface Transportation Board. Uggerud testified that the cost assumptions for Big Stone II are predicated on the tariffed BNSF rate in place at the time of filing.

79. Otter Tail power has challenged BNSF rates for transporting coal before the Surface Transportation Board thus showing a willingness to advocate for the best interests of its customers.

80. Applicants' witness Thomas Crowley testified that he had independently prepared a delivered coal price forecast for the Big Stone II plant. Crowley's forecast was lower than Applicants' 2007 forecast.

81. Applicants stated that the current tariff rates for rail transportation reflect the maximum rate allowed by the Surface Transportation Board. Big Stone II is a captive shipper solely reliant on BNSF for rail transportation of PRB coal. Applicants believe that if BNSF attempted to unreasonably increase these transportation rates, the STB would act as a backstop and allow Applicants to seek relief.

82. Crowley presented an independent rail rate transportation forecast to address the expected future cost of rail transportation of PRB coal to Big Stone II. In developing the forecast, Mr. Crowley considered the rail rate itself, the assumed fuel surcharge BNSF will apply to the rail rate, and the cost of acquiring and maintaining rail cars for the transport of coal from the PRB.

83. Crowley also presented an independent price forecast based on his experience in pricing in coal markets. The forecast considers future demand for coal as well as the impact on demand for PRB coal vis a vis anticipated Clean Air Act, mercury and likely carbon dioxide regulation. The forecast also considers PRB capacity and production limitations, employment growth and inflation.

84. The Commission finds that it is reasonable to conclude the Applicants have accurately forecast the future delivered cost of fuel for Big Stone II.

Future Carbon Regulation

85. A concern raised primarily by Intervenors is that the Applicants failed to consider the costs associated with future regulation of carbon emissions.

86. The parties agree that the U.S. Congress may, at some time in the future, establish regulations for the control of carbon dioxide from power plants around the country burning coal and other fossil fuels. However, neither we nor the Applicants can predict what those regulations will require.

87. Montana-Dakota witness Andrea Stomberg testified that there are currently no known commercial or economical applications for post-combustion removal of carbon dioxide from supercritical pulverized coal electric generating plants.

88. In accordance with North Dakota Century Code Section 49-02-23, Applicants have not utilized prohibited environmental externality values for carbon dioxide regulation in this proceeding. However, they have considered the possibility of future carbon dioxide regulation. While the Commission is prohibited from considering quantitative environmental externality values, the Commission can consider the possibility of carbon regulation in a qualitative manner.

89. Supercritical and ultra-supercritical technologies for coal-fired generation are more efficient than previous technologies for coal-fired plants, using less coal per unit of electricity generated. In addition, the Applicants plan to include various forms of renewable generation and various conservation and demand-side management programs in their future resource mix. Implementing these plans will help reduce coal consumption and therefore carbon dioxide output.

90. MDU witness James Heidell testified that, demand for electricity is relatively inelastic so, when the price goes up, consumers don't change their use very much. Should the cost of coal-fired generation increase as a result of carbon dioxide

regulations, the demand for electricity from other forms of generation such as gas-fired generation will increase, as will the commodity price of gas. Deason testified that upward pressure on natural gas prices by carbon dioxide regulations is already being manifested to some degree by the number of coal units that have been cancelled and partially replaced by additional gas-fired generation, causing greater demand on existing natural gas supplies. The Commission finds that regulation of carbon dioxide would likely result in an increase in the cost of coal-fired electric energy and that it would also increase the costs of most kinds of generation. The Commission gives weight to the fact that economic risks associated with regulation of carbon dioxide are significant. Also, the Commission recognizes, as did Deason, that carbon dioxide regulation will likely impact not only the price of natural gas but also change the cost comparisons between generation technologies.

Other Big Stone II Energy Facility Findings

91. Otter Tail commits to credit any off-system sales margins, that are associated with assets that are included in the rate base, to its customers directly in proportion to the margins obtained on those sales. In accordance with the Commission's rate order in Case No. PU-399-03-296, Montana-Dakota credits 85% of asset-backed, off-system sales margins to its customers.

92. Big Stone II has not gone through financial close.

Alternative Electric Facilities and Technologies

93. Montana-Dakota and Otter Tail, along with the other co-owners, examined a number of technologies for generating electricity before proposing a supercritical pulverized coal plant at Big Stone. In 2005 the co-owners hired Burns & McDonnell to evaluate in detail several generation technologies, including subcritical pulverized coal, supercritical pulverized coal, natural gas-fired combined cycle gas turbine and combustion turbine, gas-fired combined cycle gas turbine plus wind, integrated coal gasification combined cycle, and 100% biomass (only 50 MW). The Big Stone II co-owners also considered such renewable options as hydro, solar, geothermal, landfill gas, fuel cells, and micro-turbines.

94. Burns & McDonnell was retained to perform the analysis again in October 2006 after the co-owners had obtained Black & Veatch's 2006 cost estimate for the more refined Big Stone II design. The September 2005 report was entitled "Analysis of Baseload Generation Alternatives" and the October 2006 report was entitled "Revised Analysis of Baseload Alternatives."

95. In the fall of 2007, Burns & McDonnell was asked to conduct another update of its analysis to reflect the fact that two of the utilities had withdrawn from the project and the remaining utilities were considering the possibility of downsizing the plant. In its November 2007 report entitled "Updated Economic Evaluation of Baseload Generation Alternatives," Burns & McDonnell evaluated six different generation options, including a

500 MW supercritical pulverized-coal plant, a 580 MW supercritical pulverized-coal plant, and a 500 MW combined cycle gas turbine with wind purchases. The report concludes that, on a life-cycle basis considering capital and operating costs, Big Stone Unit II represents the lowest cost baseload generation operation

96. The Burns & McDonnell estimate of the levelized busbar cost per kWh over the 2013 to 2031 period for Big Stone II is \$77.65 per megawatt-hour or 7.765 cents per kilowatt-hour. The busbar cost for a combined cycle gas turbine with wind purchases was 11 % higher.

Ultra-supercritical Plant Technology

97. The difference between a supercritical pulverized coal plant and an ultra-supercritical pulverized coal plant is related to the operating pressure and temperature of the steam cycle and the resulting efficiency of the plant. The boiler of a supercritical plant has an operating temperature of approximately 1,085 degrees Fahrenheit at a pressure of approximately 3,800 pounds per square inch. A new supercritical plant has a thermal efficiency of approximately 38 percent and a heat rate of 8,988 British Thermal Units (BTUs) per kilowatt-hour. An ultra-supercritical plant boiler operates with higher temperatures than a supercritical plant and at pressures near 1,400 degrees Fahrenheit for a one percent gain in efficiency compared to a supercritical plant boiler.

98. Montana-Dakota witness Duane Steen testified that the cost of an ultra-supercritical plant could be \$2 million to \$10 million higher than that of a supercritical plant.

99. The record shows that there are approximately 160 existing supercritical plants in the United States and over 500 worldwide. There are approximately 15 ultra-supercritical plants operating worldwide, most are in Japan where the fuel delivery cost is very high. The ultra-supercritical plants in operation today do not have long-term operating experience.

100. The Big Stone II co-owners are considering the choice between the ultra-supercritical technology and the supercritical technology for the Big Stone II project and that decision will not adversely affect the basic design of the plant.

Wind Generation

101. The Applicants testified that the cost difference for an investor owned utility between wind and other forms of generation is utility specific and project specific.

102. Electricity from wind driven generation facilities is not currently considered a resource for baseload energy. Baseload resources are required to be dispatchable, meaning that they can be scheduled to run at a specified load for a given duration. Since the wind blows intermittently and at different velocities, wind power cannot be dispatched like a coal plant can.

103. The record discloses that wind turbines are typically capable of achieving capacity factors in the range of 30-40 percent. A coal plant like Big Stone II approaches a 90 percent capacity factor. In the Mid-Continent Area Power Pool, wind generation is generally accredited, for capacity reserve purposes, between 5 and 20 percent. At 20 percent, at least 300 megawatts of wind generation capacity must be installed in order to provide 60 megawatts of baseload resource.

104. Morlock testified that Otter Tail's resource planning accredits wind generation about 15 percent capacity in the summer peak month and 20 percent in the winter peak month.

105. Burns & McDonnell's analysis assumes the co-owners would not own wind turbines, but would have power purchase agreements for 600 megawatts of wind. Burns & McDonnell assumes no extension of the federal production tax credit but did do a sensitivity analysis that includes extension of the federal production tax credit. Burns & McDonnell assumes a price of \$60 per megawatt-hour for wind and assumes no costs for transmission.

106. Under a renewable portfolio standard in the State of Montana for 2010, Montana-Dakota constructed the Diamond Willow wind project, a 20 MW wind farm in Montana. Steen stated that the Montana-Dakota's least-cost planning model would not pick wind generation as a least cost resource option. He indicated that Montana-Dakota forced wind generation to be part of the planned resource mix.

107. The record indicates that the cost of wind generation is approximately \$2,000 per kilowatt. Wind generation would require transmission facilities that accommodate approximately 100 percent of the wind generation capacity even though the wind generation is credited only a 20 percent capacity factor.

108. Otter Tail's resource plan includes about 160 MW of new wind resources. Otter Tail has a number of agreements to purchase power in place now. Montana-Dakota entered into agreements to purchase wind power in the past few years but the projects were never completed.

109. DRC witness David Schlissel testified that Otter Tail has biased the results to the disadvantage of wind by failing to properly consider the production tax credit and by limiting the amount of wind the model could determine. Mr. Schlissel also testified that assuming that any future wind power would be purchased rather than owned biased the results against wind.

110. PA's model used in the optimal resource study for Montana-Dakota allowed up to almost 200 MW for analysis. PA's analysis included two wind resources installed by 2012 and prior to Big Stone II and the model continued to select the same resources including Big Stone II.

111. Schlissel testified that Otter Tail and Montana-Dakota have not studied the amount of wind their systems could accommodate given their existing gas peaking plants.

Gas-Fired Generation + Wind Generation

112. Applicants' witness Jeff Greig, representing Burns & McDonnell, testified that Burns & McDonnell compared Big Stone II and two baseload alternatives, incorporating wind into the comparison. Greig testified that the Big Stone II coal-fired project was compared with a gas-fired combined-cycle gas turbine (CCGT) generation supplemented with wind to reduce the need to dispatch higher cost gas generation when wind is available. Greig described the alternative as gas-fired capacity with supplemental non-firm wind to lower energy costs.

113. In a CCGT plant, the gas turbine generator generates electricity and heat from the turbine exhaust that is recovered to produce steam used by a steam turbine for electric generation.

114. Greig concluded that the proposed Big Stone II was the lower cost baseload alternative compared with the CCGT + Wind alternative with or without the extension of the federal production tax credit included in the cost of wind.

115. For purposes of analyzing CCGT + Wind, the Burns & McDonnell analysis assumes a gas cost of \$7.60 per million BTU. Burns & McDonnell calculated a busbar cost for CCGT + Wind of \$80.78 per megawatt-hour. CCGT + Wind costs approximately \$900 per kilowatt.

116. Even though a CCGT + Wind is not currently the least cost resource, the resource planning activities by Otter Tail and Montana-Dakota indicate that wind generation should be a part of the future addition of generation resources for both companies.

Gas-Fired Generation

117. Heidell testified that the lowest cost system expansion option for Montana-Dakota, according to the PA expansion analysis, is to add Big Stone Unit II in 2011 and add combustion turbines in 2014 and 2021.

118. Natural gas plants are more expensive to operate than supercritical coal plants and the cost of natural gas has been more volatile than the cost of coal. Further, operation and maintenance costs for gas plants tend to be higher than coal plants due to continued turbine-cycling stresses.

119. Gas-fired generation, whether it is considered as a replacement for Big Stone II or for use in CCGT + Wind is more costly than Big Stone II.

Integrated Gasification Combined Cycle Technology

120. Integrated Gasification Combined Cycle (IGCC) plants gasify coal and then burn the synthesis gas in a combustion turbine. Heat from the gasification process and exhaust from the combustion turbine are used to create steam that powers a steam turbine-generator

121. Stomberg testified that IGCC plants are being proposed around the country and that there are two IGCC plants in the United States functioning commercially for generation of electricity. Ms. Stomberg testified that the IGCC technology is in the developmental stage and may become more economical in the future.

122. The 2005 Burns & McDonnell states that, based on a relatively short operating history, the current generation of IGCC facilities has operational and reliability issues.

Manitoba Hydro

123. Otter Tail currently has a purchase contract for 50 megawatts of Manitoba Hydro generation that will expire in 2010. Otter Tail's integrated resource planning included the selection of a purchase from Manitoba Hydro but found Big Stone II cheaper and preferable. The model also found some demand-side management programs less expensive than a Manitoba Hydro purchase and some demand-side management programs more expensive than a Manitoba Hydro purchase.

124. Schlissel suggests that a Manitoba Hydro purchase is essentially the same cost as Big Stone II. By only including data through 2020, Otter Tail says Schlissel ignores significant cost differentials between the costs of the two alternatives and makes the Manitoba Hydro proposal look more cost effective than it is over a longer period of time.

Alternative Electric Facilities and Technologies Finding

125. The Commission finds that it is reasonable and prudent for the Applicants to select either a supercritical or ultra-supercritical pulverized coal baseload electric generating station in combination with demand-side management and energy conservation programs that prove more cost effective than such plant.

Alternative Electric Facility Sites

126. The Big Stone co-owners conducted an initial screening and identified 38 potential sites in Minnesota, South Dakota, and North Dakota, the primary service territories that will be served by the new generating plant. Eight primary locations were selected based on infrastructure for coal delivery, electric transmission from the plant, and water resources for generating facility operation. Two of those sites were eliminated because of nearby residences and lack of available land.

127. The six sites selected for further consideration by project participants were:

- Big Stone, Grant County, South Dakota
- Coyote, Mercer County, North Dakota
- Fargo, Cass County, North Dakota
- Dickinson, Wright County, Minnesota
- Glenham, Walworth County, South Dakota
- Utica Junction, Yankton County, South Dakota

128. The criteria and criteria weighting used to evaluate and score the sites were:

- Water Supply – 20%
- Fuel Lines – 20%
- Transmission – 20%
- Environmental – 15%
- Air Quality – 15%
- Other – 10%

129. The Big Stone site received the highest weighted score mostly due to existing infrastructure. The Applicants' testified that the existing pump house and pipeline used for Big Stone I are adequate to supply the cooling water needed for Big Stone II without any changes. With the exception of some concern during drought years, Big Stone Lake, the water source for Big Stone I, has adequate water availability. The existing rail line and coal unloading facilities are adequate for Big Stone II without any modifications. For solid waste, an existing disposal area has adequate storage for both units for a number of years.

130. The site benefits also include existing roadways and existing plant staff. Use of existing transmission corridors will minimize the impact of transmission additions.

131. The Applicants explained that Big Stone I and Big Stone II will share a single common wet scrubber for controlling SO₂ emissions. With the proposed single scrubber, sulfur dioxide emissions may be less from the two units than the current sulfur dioxide emissions from Big Stone I.

132. The Commission has a major concern that coal delivery to the Big Stone site is by a single rail carrier.

133. The Applicants considered the possibility of building a new generating facility at the Coyote Station site in North Dakota. They state the site is viable for generation expansion and has an adequate water supply through a pipeline from the Missouri River. The Coyote site received a lower rating for air space, water supply, and highway access.

134. Deason testified that the low ratings for air space, water supply, and highway access may be unwarranted. He increased the scores and recalculated the site rating to find that the Coyote site attains the second highest score and only 12.6 points below the Big Stone site. He testified that if more weight were given to the fuel lines criteria (fuel

delivery competition), the Big Stone site advantage over the Coyote site is reduced to less than 5 points.

135. Deason concluded that the Coyote site should remain a viable candidate site for future generation.

136. Montana-Dakota considered the option of participating in the Lignite Vision 21 Program. The goal of the Lignite Vision 21 Program is to construct a coal-fired electrical generating plant in North Dakota employing North Dakota coal and the latest clean-coal technology. The North Dakota Industrial Commission has matching funds available up to \$10 million for the investigation and construction of a lignite-fired plant. Montana-Dakota worked with other utilities to investigate the feasibility of a 500 MW lignite fired plant at Gascoyne, North Dakota.

137. Unable to locate a utility interested in joining in a 500 MW lignite facility in North Dakota, Montana-Dakota considered downsizing a lignite plant to 175 MW. However, Montana-Dakota determined that a 175 MW coal-fired generating facility at the Gascoyne site would be more expensive than a plant at the Big Stone site, which offers existing unit train coal unloading facilities, water treatment, roads, mobile equipment, control room, operators and maintenance employees and a fuel oil system.

138. In 2006, Strategist® modeling used by Montana-Dakota determined that Big Stone II would be approximately 30% less costly than a Gascoyne plant.

139. The Commission finds that it is reasonable and prudent to construct a baseload generating facility at the Big Stone site.

Additional Staff Recommendations

140. Advocacy Staff recommended that the Commission condition a determination of advance prudence on certain other reporting requirements. He recommended the Applicants make periodic informational filings concerning their progress in obtaining necessary approvals, permits and licenses from other regulatory bodies and that they notify the Commission when construction commences.

141. Advocacy Staff suggests that the Applicants file, consistent with North Dakota Century Code Section 49-05-16 (3), a forecasted budget by year for all construction-related costs. Included in the filing should be information on the results of RFP for all major plant components. Subsequent reports should be filed that include an analysis of deviations between actual and budget, and explanations of changes in forecasts. Advocacy Staff also advises that, if at any time the co-owners determine that the prudence, economic viability of continuation of the project is in jeopardy, there should be an immediate filing indicating the reasons for such determination.

142. Deason concluded that advance prudence granted for Big Stone II should be conditioned upon the recommendations.

143. The Commission finds that the recommendations of Advocacy Staff are reasonable and appropriate.

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

Conclusions of Law

1. The Commission has jurisdiction over this proceeding.
2. Otter Tail and Montana-Dakota have each filed an application for advance determination of prudence for electric resource additions under North Dakota Century Code Section 49-05-16 that included a projection of costs to the date of the anticipated commercial operation of the proposed electric resource additions.
3. The Commission provided notice and held a hearing in accordance with North Dakota Century Code Sections 49-02-02 and 49-05-16.
4. Otter Tail and Montana-Dakota have need for additional electric baseload resource and electric transmission facilities to ensure reliable electric service to their customers.
5. Otter Tail's and Montana-Dakota's proposed electric generation and transmission resource additions, 19.33 percent each of Big Stone II and associated transmission, are reasonable and prudent to ensure reliable electric service to their customers under North Dakota Century Code Section 49-05-16, subject to the conditions in the order.
6. The binding effect of this Order for system-wide ratemaking purposes for each Applicant under North Dakota Century Code Section 49-05-16 (4) is limited to 19.33 percent of Big Stone II and associated transmission.
7. System-wide ratepayer liability under North Dakota Century Code Section 49-05-16 (5) is limited to the 19.33 percent of Big Stone II and transmission facilities associated with each Applicant.
8. The proposed resource additions will not be located in North Dakota so the Commission need not consider the benefits of locating the resource additions in this state under North Dakota Century Code Section 49-05-16(1)(c).
9. The rebuttable presumption in North Dakota Century Code Section 49-05-16 (6) does not apply.

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

Order

The Commission orders:

1. Otter Tail Corporation's request for advance determination of prudence for ownership in the proposed Big Stone II for a minimum of 121.8 MW up to a maximum of 130 MW and a proportionate ownership share of the associated transmission electric resource additions is APPROVED. This approval is subject to the following condition:
 - a. Within 180 days, Otter Tail shall file for Commission approval proposals to implement the demand-side management and conservation programs identified as more economic resources than Big Stone II in Tables OTP-1 and OTP-2 of Late Filed Exhibit #7. The proposals must include proposed tariffs and supporting documentation including analytical justification for the choice of programming and level of investment, comparative program performance information between programs and between jurisdictions, and studies of methods to maximize the performance of all programs.
2. Montana-Dakota Utilities Co.'s request for advance determination of prudence for ownership in the proposed Big Stone II for a minimum of 121.8 MW up to a maximum of 133 MW and a proportionate ownership share of the associated transmission electric resource additions is APPROVED. This approval is subject to the following conditions:
 - a. Within 180 days, Montana-Dakota shall file for Commission approval proposals to implement the demand-side management and conservation programs identified as more economic resources than Big Stone II in its most recent integrated resource plan. The proposals must include proposed tariffs and supporting documentation including analytical justification for the choice of programming and level of investment, comparative program performance information between programs and between jurisdictions, and studies of methods to maximize the performance of all programs.
3. The Applicants shall file a report with the Commission, with sufficient advance notice to the Commission, on the decision of whether to build a supercritical coal unit or an ultra supercritical coal unit. The report shall include information regarding savings on fuel costs, savings on CO2 emissions, differences in costs between the two types of plants, as well as other factors included in the decision making process.
4. The binding effect of this Order for ratemaking purposes for each Applicant under North Dakota Century Code Section 49-05-16 (4) is limited to each Applicant's approved proportionate share of Big Stone II and associated transmission.
5. Any ratepayer liability under North Dakota Century Code Section 49-05-16 (5) is limited to the approved proportionate share of Big Stone II and transmission facilities associated with each Applicant.

6. The Applicants shall advise the Commission quarterly, beginning January 1, 2009, of the progress in obtaining all necessary approvals, permits, and licenses from other regulatory bodies and of the anticipated date of commencement of construction.

7. The Applicants shall advise the Commission when construction of Big Stone II actually commences.

8. Beginning January 1, 2009, the Applicants shall annually provide a forecasted budget for construction costs for the upcoming year. Beginning with the January 1, 2010 report, each report shall include the actual expenditures for the year, an analysis of any deviations from the forecasted budget, and an explanation of changes in forecasts for future years.

9. The Applicants shall immediately notify the Commission if the co-owners determine that the prudence, economic viability or continuation of the project is in jeopardy or of any decision by the Applicants not to go forward with construction of the resource additions and of any factors that jeopardize the viability or continuation of the project.

10. The Applicants shall conduct a study of the number of rail cars necessary to serve Big Stone II and do a cost benefit analysis of whether any additional railcars should be lightweight aluminum railcars. The Applicants shall submit the results of that study for Commission review before the commercial operation of Big Stone II.


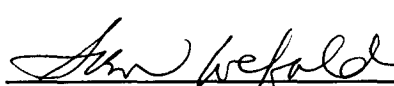

11. The Applicants shall conduct a study to calculate the costs and impacts of maintaining a higher coal inventory level of up to 45 days. The Applicants shall compare the costs of maintaining a higher level of coal with the costs and likelihood of future curtailments of shipments of coal from inadequate fuel deliveries. The Applicants shall file the results of the study, with a recommendation on the appropriate inventory level, for Commission review before the commercial operation of Big Stone II.

12. The Applicants shall implement the internal operational measures for coal delivery recommended by Advocacy Staff and identified in the Finding of Fact 72. The Applicants shall file a report indicating which of the measures have already been implemented, how these measures fit into their overall management system, and whether there is any formalized reporting of these measures. If Applicants decide not to implement these measures for Big Stone II, the report should provide justification to the Commission.

13. Otter Tail and Montana-Dakota each shall file reports, as required by North Dakota Century Code Section 49-32-04, annually on the State renewable and recycled energy objective in North Dakota Century Code Section 49-02-28. These renewable reports shall also include information on renewable and recycled energy purchased specifically within the state of North Dakota.

14. The Applicants shall continue to monitor potential carbon dioxide regulation and provide an update of the cost-effectiveness of Big Stone II prior to commencement of construction.

PUBLIC SERVICE COMMISSION

 _____ Tony Clark Commissioner	 _____ Susan E. Wefald President	 _____ Kevin Cramer Commissioner
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**CONCURRING OPINION
AND DISSENTING IN PART
Commissioner Tony Clark**

August 27, 2008

**Otter Tail Corporation
Advance Determination of Prudence
Application**

Case No. PU-06-481

**Montana-Dakota Utilities Co., a Division of MDU
Resources Group, Inc.
Advance Determination of Prudence
Application**

Case No. PU-06-482

While I am in concurrence with my fellow Commissioners with regard to the bulk of this order, I respectfully dissent from finding number 67. This finding relates to the Commission's granting prudence to the applicants' proposal to construct the Big Stone to Granite Falls line with 345 kV capacity, as opposed to 230 kV capacity. The incremental cost to this change is estimated at \$25 million to \$30 million.

My rationale for dissent is not that I can affirmatively find the extra expenditure to be imprudent. Rather, I cannot find that the applicant has met its burden of proof to establish that the expenditure is prudent.

In advocating that the Commission grant prudence for the 345 kV line, applicants state that the additional capacity will serve greater system-wide benefits. Specifically, applicants state such additional capacity will facilitate future undetermined generation projects. I am uncomfortable granting a prudence determination when applicants are unable to specifically inform the Commission of what those projects might be.

Applicants stated that a Big Stone to Granite Falls line constructed to 230 kV capacity would be perfectly well suited to enable this project with no concerns at all for reliability. The incremental cost is solely related to benefits outside the Big Stone II project that is the subject of this proceeding.

If the applicants feel that a 345 kV line is truly in the long term best interests of consumers for reasons unrelated to Big Stone II, then, by all means, they should feel free to construct it as such. However, they should then return to the Commission and seek rate recovery for the incremental cost through traditional regulatory mechanisms.



Tony Clark, Commissioner