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April 15, 2008

VIA EMAIL & FEDERAL EXPRESS

Illona Jeffcoat-Sacco
Executive Secretary
North Dakota Public Service Commission
State Capitol
Bismarck, ND 58505

**Re: Montana Dakota Utilities Co., and Otter Tail Corporation; Advance Determination of Prudence, Big Stone II Generating Station
Case Nos. PU-06-481 and PU-06-482**

Dear Ms. Jeffcoat-Sacco:

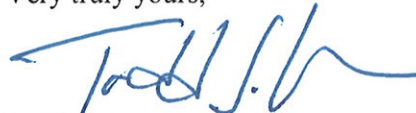
On behalf of Applicants Otter Tail Corporation and Montana-Dakota Utilities Co., enclosed for filing in the above matter please find an original along with seven copies of the following:

1. Applicants' Motion to Strike Portions of the Supplemental Direct Testimony of David A. Schlissel; and
2. Affidavit of Service.

Please direct any questions to Montana-Dakota's Mr. Daniel Kuntz (701-530-1016), Otter Tail's Mr. Mark Bring (218-998-7152), or to the undersigned.

Thank you for your consideration.

Very truly yours,



Todd J. Guerrero

TJG/kas

c: Attached Service List (email and regular mail, w/enclosures)

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Otter Tail Corporation and Montana-Dakota Utilities Company, a Division of MDU Resources Group, Inc., Advance Determination of Prudence Application

APPLICANTS' MOTION TO STRIKE PORTIONS OF THE SUPPLEMENTAL DIRECT TESTIMONY OF DAVID A. SCHLISSEL and MEMORANDUM IN SUPPORT OF MOTION TO STRIKE

Case Nos. PU-06-481, PU 06-482

MOTION TO STRIKE

PLEASE TAKE NOTICE that pursuant to N. D. R. Civ. P. 12(f) and North Dakota Century Code § 49-02-23, Applicants Otter Tail Corporation (“Otter Tail”) and Montana-Dakota Utilities Co. (“Montana-Dakota”) (collectively “Applicants”) hereby move for an Order striking portions of the April 9, 2008 supplemental direct pre-filed written testimony of David A. Schlissel submitted in the above matter on behalf of intervenors Dakota Resource Council and Mark Trechock (collectively “DRC”). The portions of the testimony that Applicants move to strike are highlighted in the attached Exhibit A.

MEMORANDUM IN SUPPORT OF MOTION TO STRIKE

A. Background.

North Dakota Century Code § 49-02-23 provides as follows:

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.*

(Emphasis added).

Based on the statute, Applicants brought a motion *in limine* on April 10, 2007 seeking to prevent the DRC from submitting evidence regarding the cost of complying with future regulations concerning CO₂ emissions. On April 24, 2007, the Administrative Law Judge granted Applicants' request, indicating his intent to stick to a "strict application of [N.D.C.C. § 49-02-23]." ALJ Order dated April 24, 2007 and accompanying letter, attached as Exhibit B ("April Order").

In his May 31, 2007 direct testimony, Mr. Schlissel ignored the April Order with respect to a significant portion of his testimony. Instead, despite the clear direction of the statute, Mr. Schlissel's May 31 testimony argued extensively that Applicants should have applied a range of CO₂ "regulatory risk" values as part of their resource planning evaluation, such as the "Low," "Mid," and "High" CO₂ price scenarios proposed by Mr. Schlissel.

On June 11, 2007, Applicants moved to strike portions of the May 31, 2007 direct testimony as being incompatible with N.D.C.C. § 49-02-23 and the April Order. The ALJ agreed with Applicants and therefore disallowed the portions of Mr. Schlissel's testimony that stated "numerical costs or quantified values . . . assigned to represent the alleged costs of complying with future environmental laws or regulations that have not yet been enacted." ALJ Order dated June 22, 2007, attached as Exhibit C ("June Order").

B. As With the Prior Rulings, Evidence of the Alleged Costs of Complying with Future Environmental Laws or Regulations is Barred By N.D.C.C. § 49-02-23.

In portions of his April 9, 2008 supplemental direct testimony, DRC's David Schlissel again ignores the statute and ALJ's prior rulings by submitting a great deal of testimony

regarding why he believes that Applicants should have used CO₂ regulatory risk values in their updated resource planning modeling, notwithstanding the statute's clear direction to the contrary.

Because, as with his May 31, 2007 testimony, the portions of Mr. Schlissel's testimony as highlighted in Exhibit A are incompatible with the N.D.C.C. § 49-02-23 and the ALJ's previous rulings on this issue, the testimony should be stricken.

CONCLUSION

For the reasons stated above, the Applicants respectfully request that portions of Mr. Schlissel's supplemental direct testimony, as indicated in Exhibit A, be stricken and not be admitted as evidence in this proceeding.

Dated: April 15, 2008.

Respectfully submitted,

MDU Resources Group, Inc.

Otter Tail Corporation

By: _____

Daniel S. Kuntz

Its: Associate General Counsel

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Attorneys for Applicants

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF NORTH DAKOTA**

In the Matter of the Application by Otter Tail Power Corporation, d/b/a Otter Tail Power Company for an Advance Determination of Prudence for the Big Stone II Generating Plant)	Case No. PU-06-481
And)	and
In the Matter of the Application of Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc. for an Advance Determination of Prudence of Montana-Dakota's Participation & Ownership Interest in the Big Stone II Generating Station)	Case No. PU-06-482

**Supplemental Direct Testimony of
David A. Schlissel
Synapse Energy Economics, Inc.**

**On Behalf of
Mark Trechock
and
Dakota Resource Council**

APRIL 9, 2008

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1 **Q. What consideration have OTP and MDU given in their supplemental**
2 **testimony to the risks associated future project capital cost increases and the**
3 **potential for restrictions on future CO₂ emissions?**

4 A. OTP has only given very limited consideration to the potential for future increases
5 in the cost of building the Big Stone II Project. MDU has not given any
6 consideration in its economic modeling analyses to the potential that the cost of
7 building Big Stone II will increase further. Neither company has given any
8 consideration in their modeling analyses in this proceeding to the risks associated
9 with future CO₂ emissions.

10 **Q. Is this a reasonable approach?**

11 A. No. Higher CO₂ prices and increased Project construction costs or additional
12 schedule delays, on their own or in combination, will impact the Project's
13 economics relative to other alternatives and may make the proposed Big Stone II
14 Project uneconomic for of OTP and/or MDU. The important reason to prepare
15 sensitivities is to determine what changes in construction costs and/or CO₂ prices
16 would make the Project uneconomic and then to evaluate how likely those
17 changes are. Unfortunately, OTP and MDU did not prepare these critical analyses.
18 This is imprudent. Risk and uncertainty are inherent in all enterprises. They do
19 not go away merely because they are ignored in economic analyses.

20 **Q. Have other companies provided sensitivity analyses for key input parameters**
21 **in their Integrated Resource Plans or in the modeling analyses presented in**
22 **support of requests to build and operate new generating facilities?**

23 A. Yes. We have seen such sensitivity analyses for key input parameters in many of
24 the power plant cases in which we have been involved in recent years.

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1 **Q. How should OTP and MDU have reflected the potential for further increases**
2 **in the cost of the Big Stone II Project in their modeling analyses?**

3 A. In order to more fully evaluate the risks of continuing with the proposed project,
4 OTP and MDU should have prepared sensitivity studies that examined the relative
5 economics of the Big Stone II Project against alternatives assuming that the
6 capital cost of the project is substantially higher than they now estimate and that
7 the Project may not be in-service in June 2013.

8 For example, OTP and MDU could have prepared sensitivity analyses in their
9 modeling analyses that reflected capital costs that are 10, 20 percent and/or 40
10 percent higher than their current estimated costs for the Big Stone II Project. It is
11 not unreasonable to expect such additional cost increases at the Project in light of
12 the industry-wide experience and the expectation that worldwide demand will
13 continue to be a driving force for rising prices.

14 **Q. Have OTP and MDU performed sensitivities around the current Big Stone II**
15 **cost estimates, as Mr. Rolfes testifies?**⁷³

16 A. MDU has not presented any sensitivities to this Commission or the Minnesota
17 PUC that have reflected any higher costs for the Big Stone II Project than the
18 currently estimated construction cost. OTP has presented a single scenario in this
19 proceeding that reflects a minor 10 percent increase in the Project's construction
20 cost. **However, OTP biases the analysis by failing to include any significant CO₂**
21 **prices in its modeling, as I will discuss in the next section of this testimony.**

22 **Q. Is it reasonable to expect that market conditions also will lead to increases in**
23 **the estimated costs of other supply-side alternatives such as natural gas-fired,**
24 **wind or biomass facilities?**

25 A. Yes. However, it is not necessarily reasonable to expect that all of the alternative
26 technologies will experience the same cost increases as a coal-fired project like

⁷³ OTP/MDU Exhibit 324, at page 5, line 16, to page 6, line 6.

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1 to the system). We will consider production increases from
2 renewable and low carbon generation as part of the Enhanced
3 Diligence process and assess their impact on proposed financings
4 of certain new fossil fuel generation.

5 ▪ ***Conventional and advanced generation.*** In addition to cost
6 effective energy efficiency, renewables and low carbon distributed
7 generation, investments in conventional or advanced generating
8 facilities will be needed to supply reliable electric power to the US
9 market. This may include power from natural gas, coal and nuclear
10 technologies. Due to evolving climate policy, investing in CO₂-
11 emitting fossil fuel generation entails uncertain financial,
12 regulatory and certain environmental liability risks. It is the
13 purpose of the Enhanced Diligence process to assess and reflect
14 these risks in the financing considerations for certain fossil fuel
15 generation. We will encourage regulatory and legislative changes
16 that facilitate carbon capture and storage (CCS) to further reduce
17 CO₂ emissions from the electric sector.

18 **Q. Do OTP and MDU already have the financing for their proposed**
19 **participation in the Big Stone II Project?**

20 A. I believe that the answer is no. Neither company yet has the financing for its
21 proposed share of the Big Stone II Project.

22 **Q. What was the basis for the \$9/ton CO₂ price used by OTP in its recent**
23 **modeling analyses in the Minnesota PUC CON Dockets?**

24 A. OTP has said that it used a \$9/ton CO₂ price based on a recommendation by the
25 Department of Commerce concerning interim CO₂ prices to be used for resource
26 planning until the Minnesota Commission adopts a final set of required CO₂
27 prices.⁷⁹ It is my understanding that this \$9/ton figure initially came from a 2003
28 settlement reached by Xcel Energy concerning the proposed Comanche power
29 plant in Colorado.

⁷⁹ See, for example, Applicants' Exhibit 116 in Minnesota CON Dockets Nos. CN-05-619 and TR-05-1275, at page 16, lines 13-14.

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1 **Q. Was the manner in which OTP applied the \$9/ton CO₂ cost consistent with**
2 **how Xcel Energy has used that price?**

3 A. No. Xcel Energy has escalated the \$9/ton price at the rate of inflation starting in
4 the year 2010. As a result, the price remained constant in 2010 dollars. As I noted
5 above, OTP applied a \$9/ton cost starting in 2013 and did not increase that cost in
6 line with inflation. Consequently, the CO₂ prices that were used in the past by
7 Xcel Energy subsequent to the Comanche Settlement were substantially higher
8 than the CO₂ prices now being used by OTP.

9 **Q. Does Xcel Energy continue to use a \$9/ton CO₂ price, escalated at the rate of**
10 **inflation, in its resource planning?**

11 A. Xcel Energy only uses the \$9/ton CO₂ price in its resource planning as the low
12 end of a wide range of future CO₂ prices. This range includes a mid case CO₂
13 price of \$20/ton starting in 2010 and escalating at 2.5 percent per year and high
14 and low scenarios of \$9/ton and \$40/ton also starting in 2010 and escalating at the
15 rate of inflation.⁸⁰

16 **Q. Is the \$9/ton CO₂ price forecast used by OTP in its recent Big Stone II**
17 **modeling analyses in the Minnesota PUC CON Dockets reasonable in light of**
18 **the uncertainty surrounding future CO₂ costs and the stringent reductions in**
19 **CO₂ emissions that would be required under the global warming bills that**
20 **have been introduced in the current U.S. Congress?**

21 A. No. As Xcel Energy indicates, a \$9/ton CO₂ price may be reasonable as the lower
22 end of a broad range of CO₂ prices being considered in resource planning
23 analyses. But it not reasonable as the highest CO₂ price to use when developing a
24 least cost, least risk resource plan. Given all of the uncertainties surrounding
25 future greenhouse gas regulations and costs, it is prudent to consider a broad

⁸⁰ Northern States Power Company, *2007 Resource Plan*, Docket No. E002/RP-07 ___, December 14, 2007, at page 4-4.

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1 range of CO₂ price forecasts in resource planning, not just a single price trajectory
2 or the narrow range of prices between \$0/ton and \$9/ton.

3 Also, the \$9/ton CO₂ prices assumed by OTP did not provide a significant
4 economic incentive for the development and retrofitting of carbon capture and
5 sequestration technologies on coal plants like Big Stone II because that price
6 would be substantially below the currently estimated costs of carbon capture and
7 sequestration.

8 **Q. How does the \$9/ton CO₂ price used by OTP compare to the expected prices**
9 **of CO₂ emissions allowances under the legislation currently being considered**
10 **in the U.S. Congress?**

11 A. Figure 4 below compares the CO₂ price used by OTP in its recent modeling
12 analyses in the Minnesota CON Dockets to the projected prices of CO₂ emissions
13 allowances developed in recent studies of the prices that would be needed to
14 achieve the emissions reduction targets in global warming legislation that has
15 been introduced in the current Congress. These studies include:

- 16 ■ Analyses of Senate Bill S.280, the current McCain-Lieberman proposal,
17 by the U.S. Environmental Protection Agency (“EPA”) and the Energy
18 Information Administration of the U.S. Department of Energy (“EIA”).⁸¹
19 The EPA examined seven different scenarios reflecting a range of
20 assumptions concerning such important factors as the levels of offsets that
21 would be allowed and the assumed levels of nuclear generation. The EIA
22 examined eight different scenarios. Figure 5 shows the range of levelized
23 costs in the scenarios studied by the EPA and the EIA.
- 24 ■ An Assessment of U.S. Cap-and-Trade Proposals was recently issued by
25 the MIT Joint Program on the Science and Policy of Global Change. This
26 Assessment evaluated the impact of the greenhouse gas regulation bills
27 that are being considered in the current Congress.⁸² The range of CO₂

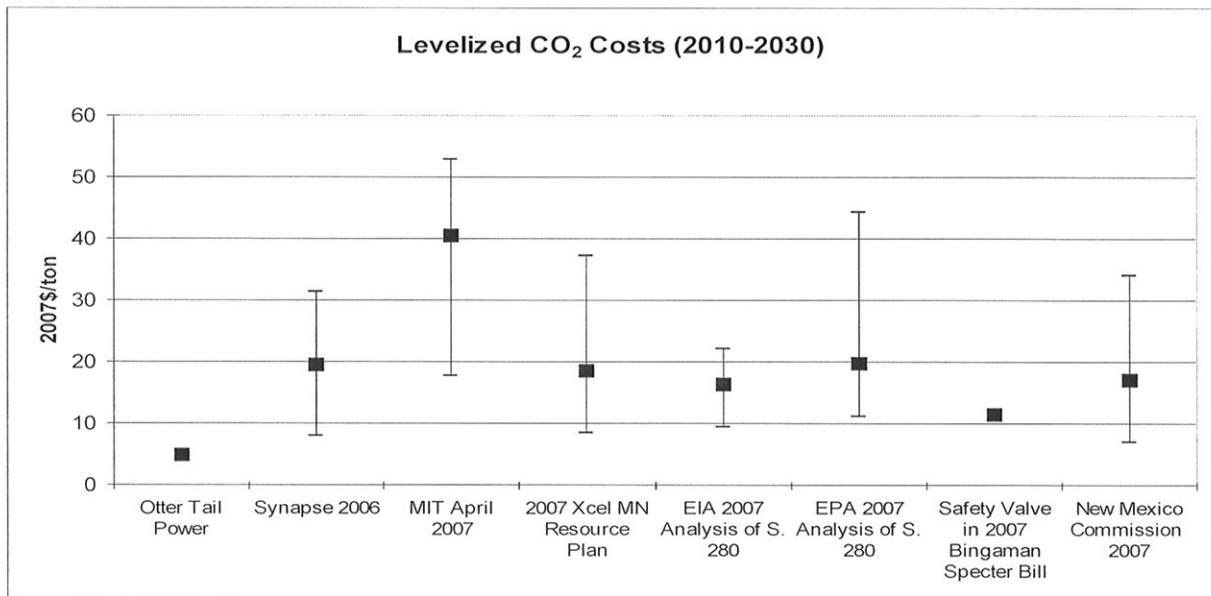
⁸¹ *Energy Market and Economic Impacts of S. 280, the Climate Stewardship and Innovation Act of 2007*. Energy Information Administration, July 2007, Supplement to the Energy and Markets Impacts of S. 280, Energy Information Administration, October 2007, and *EPA Analysis of the Climate Stewardship and Innovation Act of 2007, S. 280 in 110th Congress*, July 16, 2007.

⁸² Twenty nine scenarios were modeled in the April 2007 MIT *Assessment of U.S. Cap-and-Trade Proposals*. These scenarios reflected differences in such factors as emission reduction targets (that is, reduce CO₂ emissions 80% from 1990 levels by 2050, reduce CO₂ emissions 50% from 1990

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- 1 costs for the three core scenarios studied by MIT are shown in Figure 5.
2 These three scenarios analyzed (1) a reduction of greenhouse gas
3 emissions of 80 percent from current levels by 2050; (2) a reduction of
4 greenhouse gas emissions of 50 percent from current levels by 2050; and
5 (3) stabilization of CO₂ emissions at year 2008 levels.
- 6 ■ The safety valve prices in Senate Bill S. 1766, the Low Carbon Economy
7 Act introduced in July 2007 by Senators Bingaman and Specter. The
8 safety valve price in this proposal starts at \$12/ton in 2012 and escalates at
9 a real rate of 5 percent per year.

10 **Figure 4: The CO₂ Prices Used by OTP Compared to the Expected**
11 **Prices Under Legislation in the Current Congress and the**
12 **Synapse CO₂ Price Forecasts**



13

levels by 2050, or stabilize CO₂ emissions at 2008 levels), whether banking of allowances would be allowed, whether international trading of allowances would be allowed, whether only developed countries or the U.S. would pursue greenhouse gas reductions, whether there would be safety valve prices adopted as part of greenhouse gas regulations, and other factors.

In general, the ranges of the projected CO₂ prices in these scenarios were higher than the range of CO₂ prices in the Synapse forecast. For example, twelve of the 29 scenarios modeled by MIT projected higher CO₂ prices in 2020 than the high Synapse forecast. Fourteen of the 29 scenarios (almost half) projected higher CO₂ prices in 2030 than the high Synapse forecast.

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1 Figure 4 also includes the range of CO₂ prices that Xcel Energy has announced
2 that it will use for resource planning⁸³ and the range of CO₂ prices that the New
3 Mexico Public Regulation Commission has directed that utilities use in their
4 electric resource planning. Finally, Figure 4 includes, on a levelized basis, the
5 Synapse forecasts of CO₂ prices that I discussed in my May 31, 2007 Direct
6 Testimony.

7 Thus, on a levelized basis, the CO₂ price used by OTP is lower than even the
8 lower ends of the ranges of CO₂ prices forecast by the EPA, EIA and MIT based
9 on the legislative proposals in the current U.S. Congress and even the safety valve
10 prices in Senate Bill S. 1766, the Bingaman-Specter global warming legislation.
11 The CO₂ price used by OTP also is below the lower ends of the ranges of CO₂
12 prices recently adopted for resource planning by Xcel Energy and the New
13 Mexico Public Regulation Commission.

14 In contrast, the Synapse CO₂ price forecasts are consistent with all of these CO₂
15 prices forecasts.

16 **Q. What CO₂ prices has the Minnesota Public Utilities Commission recently**
17 **adopted for resource planning?**

18 A. The Minnesota Commission has adopted a range of CO₂ prices from \$4/ton to
19 \$30/ton. However, the Commission has not yet issued an Order which indicates
20 the rate of inflation that should be applied to those costs. As a result, I did not
21 include those prices in Figure 4 above. Nevertheless, it is clear that the
22 Commission's range of CO₂ prices would extend significantly above the \$9/ton
23 cost assumed by OTP even if the costs remained flat in nominal terms and did not
24 increase, even just at the rate of inflation.

⁸³ Public Service Company of Colorado, *2007 Colorado Resource Plan*, Volume 2 Technical Appendix, at page 2-30.

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1 **Q. Is it credible to assume, as MDU does, that CO₂ costs will be zero, that is,**
2 **there will be no federal regulation of CO₂ emissions at any time during the**
3 **expected 40 to 60 year operating life of the Big Stone II Project?**

4 A. No. Given the proposals being considered in Congress, public concern and
5 scientific developments, it simply is not credible to project or assume that there
6 will be no federal regulation of greenhouse gas emissions at any time over the
7 next 40 to 60 years or that the Big Stone II Project will be grandfathered or
8 allocated free allowances for all of its CO₂ emissions.

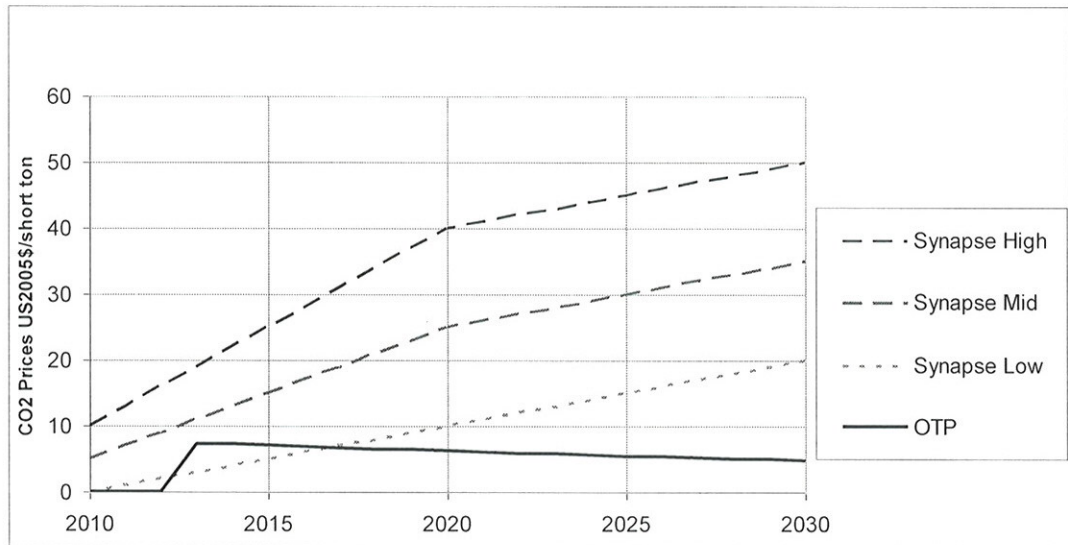
9 **Q. How do the Synapse CO₂ price forecasts compare to the annual CO₂ prices**
10 **used by OTP in its recent modeling analyses in the Minnesota CON Dockets?**

11 A. The annual Synapse CO₂ price forecasts and the CO₂ prices used by OTP, in
12 constant 2005 dollars, are shown in Figure 5 below:

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1
2

Figure 5: Synapse and OTP CO₂ Price Forecasts in Constant 2005 Dollars



3

4 **Q. Are the Synapse CO₂ price forecasts shown in Figure 5 based on any**
5 **independent modeling?**

6 A. Yes. Although Synapse did not perform any new modeling to develop our CO₂
7 price forecasts, our CO₂ price forecasts were based on the results of independent
8 modeling prepared at the Massachusetts Institute of Technology (“MIT”), the
9 Energy Information Administration of the Department of Energy (“EIA”), Tellus,
10 and the U.S. Environmental Protection Agency (“EPA”).

11 **Q. What factors will affect the cost of CO₂ emissions allowances?**

12 A. Table 3 below lists a number of factors that will affect projected allowance prices.

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1 **Table 3: Factors That Will Affect Emissions Allowance Prices**

Assumption	Increases Prices if...	Decreases Prices if...
"Base case" emissions forecast	Assumes high rates of growth in the absence of a policy, strong and sustained economic growth	Lower forecast of business-as-usual emissions
Complimentary policies	No investments in programs to reduce carbon emissions	Aggressive investments in energy efficiency and renewable energy independent of emissions allowance market
Policy implementation timeline	Delayed and/or sudden program implementation	Early action, phased-in emissions limits
Reduction targets	Aggressive reduction target, requiring high-cost marginal mitigation strategies	Minimal reduction target, within range of least-cost mitigation strategies
Program flexibility	Minimal flexibility, limited use of trading, banking and offsets	High flexibility, broad trading geographically and among emissions types including various GHGs, allowance banking, inclusion of offsets perhaps including international projects
Technological progress	Assume only today's technology at today's costs	Assume rapid improvements in mitigation technology and cost reductions
Emissions co-benefits	Ignore emissions co-benefits	Includes savings in reduced emissions of criteria pollutants

2

3 In particular, Synapse anticipates that technological innovation will temper
4 allowance prices in the out years of our forecast.

5 **Q. Could carbon capture and sequestration be a technological innovation that**
6 **might temper or even put a ceiling on CO₂ emissions allowance prices?**

7 A. Yes.

8 **Q. Do OTP and MDU believe that there is currently a commercially viable**
9 **technology for carbon capture and sequestration from pulverized coal plants**
10 **like the proposed Big Stone II Project?**

11 A. OTP and MDU provided the following answer when asked whether they believe
12 that there currently is a commercially viable technology for post-combustion
13 carbon capture and sequestration for pulverized coal power plants:

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1 **Q. Have OTP and MDU included any costs associated with carbon capture and**
2 **sequestration in either the estimated Big Stone II Project construction cost or**
3 **in their new modeling analyses?**

4 A. I am not aware of any significant costs for carbon capture and sequestration in the
5 most recent, that is July 2006, Big Stone II Project construction cost estimate.
6 There also is no evidence that OTP and MDU have included any costs associated
7 with carbon capture and sequestration in their recent modeling analyses.

8 **Q. Do you believe that the Synapse CO₂ price forecasts remain valid despite**
9 **being based, in part, on analyses from 2003-2005 which examined legislation**
10 **that was proposed in past Congresses?**

11 A. Yes. Synapse believes it is important for the Minnesota PUC to rely on the most
12 current information available about future CO₂ emission allowance prices, as long
13 as that information is objective and credible. The analyses upon which Synapse
14 relied when we developed our CO₂ price forecasts were the most recent analyses
15 and technical information available when Synapse developed its CO₂ price
16 forecasts in the Spring of 2006. However, new information shows that our CO₂
17 prices remain valid even though the original bills that comprised part of the basis
18 for the forecasts expired at the end of the Congress in which they were
19 introduced.

20 Many of the new greenhouse gas regulation bills that have been introduced in the
21 current Congress would require much steeper reductions in greenhouse gas
22 emissions than would have been required under the bills that had been introduced
23 in Congress at the time we developed our Synapse CO₂ price forecasts. It is
24 reasonable to expect that the increased stringency of current bills will lead to
25 higher CO₂ emission allowance prices. Thus, if anything, our Synapse CO₂ price
26 forecasts may be too low given the increased stringency of the current bills being
27 considered in Congress. The higher forecast natural gas prices that are being
28 forecast today, as compared to the natural gas price forecasts from 2003 or 2004,
29 also can be expected to lead to higher CO₂ emissions allowance prices.

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1 **Q. How much additional CO₂ would the Big Stone II Project emit into the**
2 **atmosphere?**

3 A. A 500MW Big Stone II would emit approximately 3.7 million tons of CO₂
4 annually. A 580 MW Big Stone II would emit approximately 4.3 million tons of
5 CO₂ each year.

6 **Q. What impact would assuming the Synapse range of CO₂ costs have on the**
7 **total cost of power for OTP and MDU from the Big Stone II Project?**

8 A. The increases in the cost of power from the Big Stone II Project from using the
9 Synapse range of CO₂ prices, on a levelized basis, are shown in Table 4, below.
10 The base costs, without CO₂ prices, are taken from the testimony of OTP/MDU
11 witness Greig. These figures are for a 500 MW sized Big Stone II Project. The
12 percentage increases would be slightly higher for a 580 MW sized plant.

13 **Table 4: OTP and MDU – Increased Cost of Power from Big Stone II**
14 **Project Assuming Synapse CO₂ Price Forecasts**

	Big Stone II Project Levelized Cost (2013-2032) (\$/MWh)	Percentage Increase
\$0/ton CO ₂ Price	\$77.65	
Synapse Low CO ₂ Price	\$88.13	13%
Synapse Mid CO ₂ Price	\$101.27	30%
Synapse High CO ₂ Price	\$138.03	47%

15
16 **6. The New Modeling Analyses Presented by OTP and MDU Do Not**
17 **Show that the Big Stone II Project is Part of a Least Cost Plan for**
18 **Either Company**

19 **Q. Have you had a reasonable opportunity to review the new modeling analyses**
20 **presented by OTP and MDU in this proceeding?**

21 A. No. We have received the workpapers and supporting computer files for these
22 new analyses within the past week or so. That has not been enough time to
23 evaluate the analyses fully.

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1 alternatives than Big Stone II using state-of-the-art capacity expansion and
2 resource planning models such as the Strategist model used by MDU.

3 Thus, OTP has not presented any sensitivity analyses in this proceeding to
4 examine the impact of a construction cost increase of more than ten percent, the
5 implementation of federal CO₂ regulations, or changes in such key input
6 assumptions as the Project's in-service date, fuel prices, coal supply disruptions,
7 or the cost of building and operating alternatives. As I have shown in Sections 4
8 and 5 above, there is considerable uncertainty regarding the ultimate capital cost
9 of the Big Stone II Project and future costs associated with CO₂ emissions. The
10 IRP-Manager modeling presented by OTP witness Morlock ignores almost all of
11 this uncertainty and basically assumes that future CO₂ prices will be zero or less
12 and that the final cost of the Big Stone II Project will not be more than ten percent
13 higher than OTP's current cost estimate.

14 All that the modeling analysis discussed by Mr. Morlock shows is that the IRP-
15 Manager model selects the Big Stone II Project as part of a least cost plan if the
16 company's assumptions about plant costs, schedule, CO₂ prices, fuel prices, etc.,
17 are correct. There is no assessment of whether the Project would continue to be
18 part of a least cost plan if any key variables, such as CO₂ costs vary, even in a
19 modest way, from the company's assumed values or if the plant's construction
20 cost increases by more than 10 percent.

21 In his new modeling analysis, Mr. Morlock also makes a number of revised
22 assumptions that increase the costs of the alternatives to the Big Stone II Project.
23 This disadvantages those alternatives in his new analyses. For example, he has
24 increased the cost of transmission for the non-wind alternatives, such as natural
25 gas-fired plants, to \$250/kW. At the same time that he adjusted upwards the costs
26 of alternatives, Mr. Morlock used the currently estimated cost for the Big Stone II
27 Project that includes a 5 percent reduction due to unspecified savings in the
28 generation portion of the project.

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1 **Q. What is your conclusion regarding OTP recent modeling analyses?**

2 A. OTP has not presented credible evidence that its participation in the Big Stone II
3 Project is prudent in that it provides a lower cost and lower risk option than a
4 portfolio of alternatives that would include energy efficiency, renewable resources
5 and, to the extent necessary, some natural gas-fired capacity.

6 **6.B. MDU**

7 **Q. Have you identified any flaws or biases in the modeling analyses presented in**
8 **the Supplemental Testimony of MDU witness Heidell?**

9 A. Yes. Based on our evaluations in the Minnesota PUC CON Dockets and the
10 limited opportunity we have had in this proceeding, we have identified a number
11 of significant flaws in the modeling analyses presented by MDU witness Heidell:

- 12 ■ MDU failed to evaluate the impact of further increases in the construction
13 cost and further delays in the completion of the Big Stone II Project.
- 14 ■ MDU failed to reflect any CO₂ prices whatsoever, let alone look at a
15 reasonable range of possible CO₂ prices.
- 16 ■ MDU failed to prepare any sensitivities whatsoever for such other key
17 input assumptions as coal and gas prices, Big Stone II's operating
18 performance, or the capital costs of CT and CCGT alternatives to the
19 Project.
- 20 ■ MDU also assumed very high capital costs for the CC and wind
21 alternatives. For example:

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¹⁰³ Applicants' Response to Joint Intervenors' Information Request No. 250 in the Minnesota PUC CON Dockets.

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1 Other companies and commissions also have assumed significantly lower capital
2 costs for new CC and CT capacity than MDU. For example, a report for the
3 Maryland Public Service Commission in November 2007 recommended using
4 capital costs of \$670/kW for CT capacity and \$950/kW for CC capacity.¹⁰⁸ In
5 addition, the equipment prices in the Gas Turbine World 2007-2008 GTW
6 Handbook also are significantly lower than the capital costs used by MDU would
7 suggest.

8 **Q. Mr. Heidell presents four scenarios in his Supplemental Testimony in this**
9 **proceeding. Do the capital costs of the Big Stone II project vary in these**
10 **analyses?**

11 A. No. All four scenarios assumed the current Big Stone II capital cost and COD.
12 Consequently, MDU has not presented any scenario which reflects higher Big
13 Stone II construction costs or any further delays in the Project's in-service date.

14 **Q. Does Mr. Heidell reflect any CO₂ costs in any of these four scenarios?**

15 **A. No. He assumes a \$0 cost for CO₂ in each of these scenarios.**

16 **Q. How then do the scenarios differ?**

17 A. As shown on page 2 of MDU Exhibit 214, the first two scenarios, Scenarios I and
18 II, assumed higher wind capacity factors and an extension of the wind Production
19 Tax Credits through the end of 2012. In his new modeling analyses for this
20 proceeding Mr. Heidell has assumed a lower wind capacity factor in Scenarios III
21 and IV and has advanced the expiration of the wind PTC by four years to January
22 1, 2009. He also has assumed significant higher wind capital costs in Scenarios III
23 and IV. In addition, he has made a number of other changes in Scenarios III and
24 IV that are discussed at pages 15 through 21.

¹⁰⁸ *Analysis of Options for Maryland's Energy Future*, prepared for the Maryland Public Service Commission by Kaye Scholer LLP, Levitan & Associates, Inc., and SEMCAS Consulting Associates, November 30, 2007, at page 82.

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1 **Q. Did Mr. Heidell present any of these scenarios in his testimony in the**
2 **Minnesota PUC CON Dockets last fall?**

3 A. Yes. Mr. Heidell presented the first two scenarios, which he now calls Scenarios
4 I and II, in the Minnesota PUC CON Dockets.

5 **Q. Were you able to evaluate the Strategist modeling analyses that Mr. Heidell**
6 **presented in the Minnesota PUC CON Dockets and to rerun the Strategist**
7 **model to correct for the flaws you found?**

8 A. Yes.

9 **Q. What did you observe in the results of the modeling Scenarios that Mr.**
10 **Heidell presented in the Minnesota PUC CON Dockets?**

11 A. We found that in MDU's own base case runs, with both the 500 MW and 580
12 MW sized Projects, Big Stone II was the more expensive option during the
13 nearer-term period through 2026. It was only in the more distant, and
14 consequently the more speculative, future, that the Strategist model presented Big
15 Stone II as a lower cost option, even with all of Mr. Heidell's flaw assumptions.

16 **Q. What were the results when you reran Mr. Heidell's modeling Scenarios to**
17 **reflect more reasonable assumptions?**

18 A. In the Minnesota PUC CON Dockets we ran a number of scenarios to see whether
19 the Strategist model would include any of the Big Stone II Project if we included
20 the Synapse CO₂ price forecasts or if we increased the Project's current estimated
21 cost by a minor amount, that is, ten percent.

22 The amount of Big Stone II Project capacity selected by the Strategist model in
23 each of the scenarios we examined are shown in Table 5 below. The MDU base
24 case results for the 500 MW and 580 MW Big Stone II Projects are included for
25 comparison purposes:

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Table 5: Synapse MDU Modeling Results – MWs of the Big Stone II Project selected by Strategist Model

Scenario	MW of Big Stone II Selected
MDU 500MW Base Case with \$0/ton CO ₂ Price	116
MDU 500MW Base Case + \$9/ton CO ₂ Price Escalated at 2.5% Per year	0
MDU 500MW Base Case + Synapse Low CO ₂ Price	0
MDU 500MW Base Case + 10% Higher BSII Capital Cost	0
MDU 580 MW Base Case with \$0/ton CO ₂ Price	116
MDU 580MW Base Case + 10% Higher BSII Capital Cost	0
MDU 580MW Base Case + Synapse Low CO ₂ Price + Model Allowed to Select Big Stone II in 23 MW Increments	23

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Thus, the Strategist model did not include any capacity from a 500 MW sized Big Stone II Project in its lowest cost plan when we assumed either (1) any CO₂ price of \$9/ton or higher or (2) a 10 percent escalation in the current Big Stone II Project capital cost.

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The Strategist model also did not include any capacity from a 580 MW sized Big Stone II Project when we increased the Project's capital cost by 10 percent. The model selected only 23 MW of the Big Stone II Project when we reran the Company's base case with our Synapse Low CO₂ prices and allowed the model to select capacity from the Project in 23 MW increments.

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1 **Q. In the scenarios where you increased the capital cost of the Big Stone II**
2 **Project by 10 percent, did you also increase the capital costs of the**
3 **alternatives by a comparable amount?**

4 A. No. As I noted earlier, MDU already had assumed extremely high capital costs for
5 the combined cycle and combustion turbine alternatives. It was not necessary or
6 appropriate to further increase the costs of these alternatives when we increased
7 the cost of the Big Stone II Project. The costs for combined cycle and combustion
8 turbine facilities assumed by MDU already accounted for any escalation above
9 their reasonable values based on current market prices or the Black and Veatch
10 projections.

11 **Q. What alternative capacity did the Strategist model add for MDU in those**
12 **scenarios in which it did not select any of the Big Stone II Project?**

13 A. Essentially the Strategist selected more wind and more CT capacity in place of the
14 Big Stone II Project. The specific alternative capacity selected in our modeling
15 scenarios is shown in Table 6 below.

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1
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Table 6: Alternative Capacity Selected for MDU by the Strategist Model in Lowest Cost Plans in Synapse Analyses

Year	MDU 500MW Base Case + \$9/ton CO ₂ Price (Escalated)	MDU 500MW Base Case + Synapse Low CO ₂ Price	MDU 500MW Base Case + 10% Higher BSII Capital Cost	MDU 580MW Base Case + 10% Higher BSII Capital Cost	MDU 580MW Base Case + Synapse Low CO ₂ Price + BSII Increments
2007					
2008	DSM	DSM	DSM	DSM	DSM
2009	DSM	DSM	DSM	DSM	DSM
2010	Wind (30.6 MW)	Wind (30.6 MW)	Wind (30.6 MW)	Wind (30.6 MW)	Wind (30.6 MW)
2011	Wind (61.2 MW) CT (87 MW)	Wind (61.2 MW) CT (87 MW)	Wind (61.2 MW) CT (87 MW)	Wind (61.2 MW) CT (87 MW)	Wind (61.2 MW) Xcel Contract (105 MW)
2012	Wind (30.6 MW)	Wind (30.6 MW)	Wind (30.6 MW)	Wind (30.6 MW)	CT (43.5 MW) Wind (30.6 MW) Wind (30.6 MW)
2013					BS2 (23.2 MW)
2014					CT (43.5 MW)
2015					
2016					
2017	CT (43.5 MW)	CT (43.5 MW)	CT (43.5 MW)	CT (43.5 MW)	
2018					
2019					
2020					
2021					CT (43.5 MW)
2022					
2023					
2024	CT (43.5 MW)	CT (43.5 MW)	CT (43.5 MW)	CT (43.5 MW)	
2025					
2026					

3

4 **Q. Have you been able to evaluate in detail or to rerun the Scenarios III and IV**
 5 **presented by Mr. Heidell in his Supplemental Testimony?**

6 **A.** No. As noted above, we have found that he continues to rely exclusively on the
 7 current Big Stone II construction cost estimate, **does not include any CO₂ costs,**
 8 and also does not perform any sensitivity analyses to reflect possible changes in
 9 key input assumptions. Mr. Heidell also includes high capital costs for combined
 10 cycle and combustion turbine natural gas-fired capacity and for new wind

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1 resources. He also assumes that the wind Production Tax Credit will expire on
2 January 1, 2009.

3 **Q. Do you have any comment on the testimony by MDU witness Stomberg that**
4 **a substantial direct tax on CO₂ emissions or a high allowance price in a cap-**
5 **and-trade system, would change the results of MDU's modeling?¹⁰⁹**

6 A. The results of our modeling described above show that even a moderate CO₂
7 allowance price or tax would change the results of MDU's modeling and show
8 that Big Stone II is not part of a least cost plan.

9 **Q. Do you have any comment on Ms. Stomberg's claim that any costs attached**
10 **to coal as part of climate change regulation will almost certainly increase the**
11 **cost of natural gas going forward and that would change the results of**
12 **modeling analyses of the Big Stone II Project?¹¹⁰**

13 A. It is possible that natural gas demand could be higher due to CO₂ emission
14 regulations and, as a result, natural gas prices could be expected to be somewhat
15 higher than otherwise would be the case. However, the effect is very complicated
16 and will depend on a number of factors such as how much new natural gas
17 capacity is built as a result of the higher coal-plant operating costs due to the CO₂
18 emission allowance prices, how much additional DSM and renewable alternatives
19 become economic and are added to the U.S. system, the levels and prices of any
20 incremental natural gas imports, and changes in the dispatching of the electric
21 system. Indeed, depending on future circumstances there may be some periods in
22 which the prices of natural gas may be lower as a result of CO₂ regulations. Thus
23 it is very difficult to determine, at this time, the amount by which natural gas
24 prices might be raised due to CO₂ emission regulations.

25 **In their most recent analyses that have included CO₂ emissions allowance prices,**
26 **the Big Stone II Applicants have included relatively low CO₂ prices and relatively**

¹⁰⁹ MDU Exhibit 213, at [page 7, lines 1-4.

¹¹⁰ MDU Exhibit 213, at page 7, lines 6-9/

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1 high increases in natural gas prices as result of CO₂ regulation. For example, the
2 analyses presented in OTP/MDU Exhibits 26 and 327 use relatively low CO₂
3 emissions allowance prices but increase natural gas prices in every year of the
4 analysis by approximately 17 percent. The analyses of likely future CO₂
5 regulation that have been produced by such objective sources as the U.S. EPA, the
6 Energy Information Administration of the U.S. DOE, and the MIT Joint Program
7 on the Science and Policy of Climate Change within the past few years do not
8 show that large of an impact on natural gas prices in all years even in scenarios
9 which eventually end up with substantially higher CO₂ emissions allowance
10 prices. This is true even in those scenarios which do not assume significant
11 increases in the amounts of generation from new nuclear or biomass facilities.

12 **7. The analysis presented by Applicant Witness Greig Does Not Show**
13 **that Participation in the Big Stone II Project is Prudent**

14 **Q. Your May 31, 2007 Direct Testimony concluded that the Commission should**
15 **not rely on the levelized cost analysis presented by OTP/MDU witness Rolfes**
16 **because that analysis was significantly flawed and biased in favor of the Big**
17 **Stone II Project.¹¹¹ Are the new levelized analyses presented by OTP/MDU**
18 **witness Grieg similarly flawed and biased in favor of the Project?**

19 **A. Yes. The levelized analyses presented by Mr. Greig in OTP/MDU Exhibits 326**
20 **and 327 are biased in favor of the Big Stone II Project in the following ways:**

- 21 ▪ Mr. Greig does not assume any low cost energy efficiency in his CCGT +
22 Wind alternative. Consequently, Mr. Greig's levelized analysis does not
23 show that the Big Stone II Project is a lower cost option than energy
24 efficiency. Indeed, the addition of low cost energy efficiency would lower
25 the cost of the CCGT + Wind option as compared to Big Stone II.
- 26 ▪ Mr. Greig only considered a very low and narrow range of future CO₂
27 prices, that is, from \$0/ton to \$9/ton. As I have demonstrated in Section 4
28 above, this is significantly below a more reasonable range of CO₂ prices
29 that should be used in resource planning.

¹¹¹ At page 67, lines 21-25.

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1 However, it has been renewed on a number of occasions and may again be
2 renewed by the Congress in or before 2013. In any event, I agree with OTP that
3 the Production Tax Credit will be in effect through at least 2013. For this reason,
4 Mr. Greig’s scenarios that assume no PTC should be given little or no weight.

5 **Q. Are you aware of any investor owned utilities in the Midwest that have**
6 **assumed that the wind Production Tax Credit will be available in 2013?**

7 A. Yes. I have not made an exhaustive search but I have seen that Xcel Energy has
8 assumed that the Production Tax Credit will be extended through 2015 in its
9 recently filed 2007 Resource Plan filing.¹¹²

10 **Q. Have you recalculated Mr. Greig’s analysis to correct for each of the flaws**
11 **that you have identified above?**

12 A. No. **However, we have recalculated Mr. Greig’s analysis to reflect the set of**
13 **Synapse CO₂ price forecasts.**

14 **Q. What were the results of your recalculation of Mr. Greig’s levelized analysis**
15 **using the Synapse CO₂ price forecasts?**

16 A. The results of our recalculation of Mr. Greig’s analysis changing only the
17 assumed CO₂ prices from the \$0/ton and \$9/ton figures used by Mr. Greig to the
18 Synapse Low, Mid and High price forecasts are shown in Tables 7, 8, and 9
19 below.

20 **Table 7: Greig Analysis with Synapse Low CO₂ Price Forecast**

	500 MW		580 MW
	CCGT + Wind (\$/MWh)	Big Stone II (\$/MWh)	Big Stone II (\$/MWh)
Greig Gas Cost - \$1.00/MMBTU	\$85.53	\$87.72	\$85.36
Greig Gas Cost - \$0.50/MMBTU	\$87.16	\$87.72	\$85.36
Greig Base Gas Cost	\$88.94	\$87.72	\$85.36
Greig Gas Cost + \$0.50/MMBTU	\$91.05	\$87.72	\$85.36
Greig Gas Cost + \$1.00/MMBTU	\$93.46	\$87.72	\$85.36

21

¹¹² At page 4-4.

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1 **Table 8: Greig Analysis with Synapse Mid CO₂ Price Forecast**

	CCGT + Wind	500 MW Big Stone II	580 MW Big Stone II
	(\$/MWh)	(\$/MWh)	(\$/MWh)
Greig Gas Cost - \$1.00/MMBTU	\$88.43	\$103.27	\$101.07
Greig Gas Cost - \$0.50/MMBTU	\$90.37	\$103.27	\$101.07
Greig Base Gas Cost	\$92.77	\$103.27	\$101.07
Greig Gas Cost + \$0.50/MMBTU	\$95.22	\$103.27	\$101.07
Greig Gas Cost + \$1.00/MMBTU	\$97.72	\$103.27	\$101.07

3 **Table 9: Greig Analysis with Synapse High CO₂ Price Forecast**

	CCGT + Wind	500 MW Big Stone II	580 MW Big Stone II
	(\$/MWh)	(\$/MWh)	(\$/MWh)
Greig Gas Cost - \$1.00/MMBTU	\$92.08	\$120.00	\$117.90
Greig Gas Cost - \$0.50/MMBTU	\$94.50	\$120.00	\$117.90
Greig Base Gas Cost	\$97.00	\$120.00	\$117.90
Greig Gas Cost + \$0.50/MMBTU	\$99.50	\$120.00	\$117.90
Greig Gas Cost + \$1.00/MMBTU	\$102.00	\$120.00	\$117.90

5 Thus, changing only the CO₂ prices makes both the 500 MW and the 580 MW
 6 sized Big Stone II Project options significantly more expensive than the CCGT +
 7 Wind alternative in each of the natural gas price scenarios with the Synapse Mid
 8 and High CO₂ price forecasts. With the Synapse Low CO₂ price Forecast, the
 9 CCGT + Wind and 500 MW Big Stone II Project are close in price with low
 10 natural gas prices; the 500 MW Big Stone II Project has a slightly lower levelized
 11 cost with higher natural gas prices. Finally, with the Synapse Low CO₂ price
 12 Forecast, the 580 MW has a lower cost than the CCGT + Wind option except that
 13 the levelized cost of the 580 MW coal and CCGT + Wind alternatives narrows
 14 with lower natural gas prices .

15 **Q. Why have you included the Greig Gas Cost - \$0.50/MMBTU and Greig Gas**
 16 **Cost - \$1.00/MMBTU natural gas prices in your recalculation of Mr. Greig’s**
 17 **levelized analysis?**

18 **A.** I included the two lower natural gas prices in my recalculation of Mr. Greig’s
 19 levelized analysis to reflect the great uncertainty surrounding future natural gas



OFFICE OF ADMINISTRATIVE HEARINGS

STATE OF NORTH DAKOTA
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Allen C. Hoberg
DIRECTOR

April 24, 2007

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Bismarck, ND 58501

Mr. William W. Binek
Public Service Commission
600 East Boulevard Avenue, Dept. 408
Bismarck, ND 58505-0480

Dear Counsel:

Enclosed is an order granting the applicants' motion in limine. After completing a draft of the order and further thought, and notwithstanding our discussion and any statement I made to the contrary, it seems to me better not to make any further provision of the order for the application of the statute. Surely, everyone understands my intention for the strict application of the statute, and if there will be any argument for any particular offer of evidence I think it will be better for us all to consider the provision of the statute rather than any provision of the order.

I understand that counsels' disagreements for discovery have been and will be resolved by counsel. Accordingly, the interveners' motion to compel responses to disclosure requests is deemed withdrawn.

I understand that the parties and the Commission will agree for a revised schedule for testimony, briefs, and proposed orders. Accordingly, the applicants' and interveners' motions to amend the schedule are deemed withdrawn.

It seems to me unnecessary to otherwise issue a prehearing order. I only reiterate my understanding that, in addition to any other identification, the exhibits will be identified as follows: The exhibits offered on behalf of Otter Tail Corporation will be marked "OTC" followed by a dash and a number; e.g., "OTC-1." The exhibits offered on behalf of Montana Dakota Utilities Co. will be marked "MDU" followed by a dash and a number in the same manner. The exhibits offered on behalf of Dakota Resource Council and Mark Trechock will be marked "I" followed

Mr. Gerhardson, Mr. Kuntz, Ms. La Seur, Mr. Breen, and Mr. Binek
April 24, 2007
Page 2

by a dash and a number in the same manner. Notwithstanding that there will be identical exhibits offered for both cases, duplicate exhibits will be filed in each case. (I understand that counsel will attempt to have duplicate exhibits marked with the same number, and I expect that Commission staff will find that helpful.)

I also reiterate my request to the applicants to provide me with a list of the witness they expect to call, in the anticipated order of their testimony, and showing the name of counsel for the direct examination of the witness. And, on further thought, Ms. Le Seur, if you and Mr. Breen will divide the examination of your witnesses, please do the same. (As I think I mentioned, your list is only for my convenience for the conduct of the hearing. It is not a commitment to call witnesses in the order listed or to call any witness listed.)

As we discussed, the applicants will open, followed by the interveners and the Commission's advocacy staff, but the Commissioners also get to put their oar in—generally as they wish, of course. Routinely, I will ask the Commissioners for questions upon the completion of the cross-examination of a witness and upon the completion of any redirect and recross. I will ask the Commissioners for questions upon the completion of each counsel's argument. Upon the completion of argument and the Commissioners' questions, I will ask each counsel and the Commissioners if there is "anything further for the record." That is not an invitation for further argument, but rather the last chance to resolve any problem which might reasonably be resolved then while everyone is present. It is also an opportunity for the Commissioners to ask further questions, and, of course, in that event we will address any further question, each counsel in turn.

Thank you for your assistance, counsel, and please do not hesitate to e-mail me if I have overlooked anything or if you have any question or suggestion for the conduct of the hearing.

Sincerely,

A handwritten signature in black ink, appearing to read "Al Wahl", with a long horizontal line extending to the right.

Al Wahl
Administrative Law Judge

AW/lmw

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

OAH File No. 20070100

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

ORDER GRANTING MOTION IN LIMINE

Otter Tail Corporation and Montana-Dakota Utilities Co. having jointly moved for an order in limine prohibiting Dakota Resource Council from presenting any evidence of environmental externality values for the consolidated hearings of these cases, and the motion having been considered with the advice of counsel upon a prehearing conference held April 24, 2007, it is

Ordered, that no party shall offer for the consolidated hearings of these cases any evidence of "environmental externality values" as defined and prohibited by the provisions of N.D.C.C. § 49-02-23.

Dated at Bismarck, North Dakota, this 24th day of April, 2007 .

State of North Dakota
Public Service Commission

By: 

Al. Wahl, Administrative Law Judge
Office of Administrative Hearings
1707 North 9th Street
Bismarck, North Dakota 58501
Telephone: (701) 328-3260

STATE OF NORTH DAKOTA
WORKFORCE SAFETY AND INSURANCE

OAH File No. 20070100

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

CERTIFICATE OF SERVICE

The undersigned certifies that true and correct copies of the **ORDER GRANTING**

MOTION IN LIMINE were sent by regular mail on the 24th day of April, 2007, to:

Bruce Gerhardson
Associate General Counsel
Otter Tail Corporation
PO Box 496
Fergus Falls, MN 56538-0496

Daniel S. Kuntz
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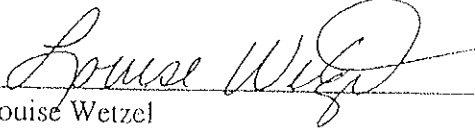
John W. Breen, Jr.
Plains Justice
717 Williams Street
Bismarck, ND 58501

and that a true and correct copy of the above document was mailed, inside mail, at the State

Capitol on the 24th day of April, 2007, to:

William W. Binek
Public Service Commission
600 East Boulevard Avenue, Dept. 408
Bismarck, ND 58505-0480

OFFICE OF ADMINISTRATIVE HEARINGS
Al. Wahl, Administrative Law Judge



Louise Wetzel

**STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION**

OAH File No. 20070100

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

ORDER UPON MOTION TO STRIKE

Otter Tail Corporation and Montana-Dakota Utilities Co. (collectively “Applicants”) have jointly moved for an order striking portions of the direct testimony of David A. Schlissel (“Schlissel”) filed on behalf of the Dakota Resource Counsel and Mark Trechock (collectively “Intervenors”) in the above matter upon the grounds that it is, in part, prohibited by the Order Granting Motion In Limine issued for these matters dated April 24, 2007; and that it is, in part, inadmissible as hearsay or speculation. The Applicants have filed with their motion a copy of Schlissel’s direct testimony, marked “Exhibit A,” with the parts of his testimony objected to as prohibited by the order highlighted in orange, and the parts of his testimony objected to as hearsay or speculation highlighted in green and blue, respectively. Exhibit A for the Applicant’s motion is adopted and incorporated by reference for this order.

Having considered the Applicants’ motion and the Intervenors’ response, and considering that N.D.C.C. § 49-02-23 specifically and only prohibits “environmental externality values” as

numerical costs or quantified values that are assigned to represent the alleged costs of complying with future environmental laws or regulations that have not yet been enacted, it is

Ordered, that the Applicants' motion for an order striking portions of the testimony of David A. Schlissel, as prohibited by the Order Granting Motion In Limine issued for these matters, shown highlighted in orange in Exhibit A, is granted, excepting the following portions of that testimony which do not specifically state numerical costs or quantified values and shall therefore be allowed:

- p. 3, ll. 11–14, ending with the word “so”;
- p. 6, ll. 4–6;
- p. 7, l. 13 and l. 17;
- p. 22, all;
- p. 23, all;
- p. 24, all;
- p. 25, all;
- p. 26, all;
- p. 28, all;
- pp. 30–38, all, but not including p. 38, ll. 1–6;
- p. 39, ll. 11–20;
- p. 49, all;
- p. 50, ll. 1–14 and l. 15 ending with the word “No”;
- p. 55, all;
- p. 57, all;

and also excepting the following portions of Exhibit DAS-4 for the testimony of Schlissel highlighted in orange which for the same reason shall be allowed:

- pp. 37–38, § 6;
- p. 39, § 6.1, but not including the first two sentences of the second paragraph;

- pp. 39–40, § 6.2, but not including the fourth and fifth sentences of the third paragraph, the last sentence of the fifth paragraph, and Table 6.1;
- pp. 41–44, § 6.3, but not including Figure 6.2, p. 44, through the end of the section;
- pp. 46–50, § 6.4; and
- p. 53, § 7.

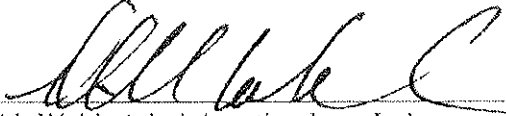
Further considering the Applicants' motion and Intervenors' response, and considering that Applicants do not dispute Schlissel's qualifications to testify as an expert witness, that his advice and opinions are all within the scope of expert testimony in accordance with N.D.R.Ev. 703 upon a foundation that the facts and data he relies upon for his advice and opinions is of the type relied upon by experts for their advice and opinions for the consideration and determination of issues such as those presented for these consolidated hearings, and N.D.R.Ev. 704 and 705, and that the commissioners and the persons who are the Commission's staff for these matters are each specially informed and well able to evaluate the advice and opinions of Schlissel for these consolidated hearings, it is

Ordered, that the Applicants' motion for an order striking portions of the testimony of Schlissel objected to as hearsay or speculation shown highlighted in green and blue, respectively, in Exhibit A, is denied; subject, however, to provision of the foundation required by N.D.R.Ev. 703.

Dated at Bismarek, North Dakota, this 22 nd day of June, 2007.

State of North Dakota
Public Service Commission

By: _____


Al. Wahl, Administrative Law Judge
Office of Administrative Hearings
1707 North 9th Street
Bismarek, North Dakota 58501
Telephone: (701) 328-3260

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

OAH File No. 20070100

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

CERTIFICATE OF SERVICE

The undersigned certifies that true and correct copies of the **ORDER UPON MOTION**

TO STRIKE were sent by electronic mail on the 22nd day of June, 2007, to:

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OFFICE OF ADMINISTRATIVE HEARINGS
Al. Wahl, Administrative Law Judge



Al. Wahl

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Otter Tail Corporation, Advance
Determination of Prudence
Application

AFFIDAVIT OF SERVICE

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

Case Nos. PU-06-481, PU 06-482

Kristen Swenson, being sworn, says that on April 15, 2008, a copy of the following documents:

1. Applicants' Motion to Strike Portions of the Supplemental Direct Testimony of David A. Schlissel; and
2. Affidavit of Service

have been served upon the attached service list via United Stated Mail.

Kristen A. Swenson

Subscribed and sworn to before me
this 15th day of April, 2008.

Donna A LeClair

Notary Public



STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Otter Tail Corporation, Advance
Determination of Prudence
Application

SERVICE LIST

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

Case Nos. PU-06-481, PU 06-482

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