

LINDQUIST & VENNUM P.L.L.P.

4200 IDS CENTER
80 SOUTH EIGHTH STREET
MINNEAPOLIS, MN 55402-2274
TELEPHONE: 612-371-3211
FAX: 612-371-3207

IN DENVER:
600 17TH STREET, SUITE 1800 SOUTH
DENVER, CO 80202-5441
TELEPHONE: 303-573-5900
FAX: 303-573-1956

ATTORNEYS AT LAW

www.lindquist.com

TODD J. GUERRERO
612/371-3258
tguerrero@lindquist.com

April 25, 2008

VIA FEDERAL EXPRESS & EMAIL

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:

Enclosed for filing in the above matter please find an original and seven copies of the follow-up supplemental rebuttal testimony of James Heidell along with an 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
cc: Attached Service List (w/encl.)

CASE NOS. PU-06-481 & PU-06-482

BEFORE THE NORTH DAKOTA PUBLIC SERVICE COMMISSION

IN THE MATTER OF THE APPLICATION BY OTTER TAIL POWER CORPORATION D/B/A

OTTER TAIL POWER COMPANY

AND

MONTANA-DAKOTA UTILITIES CO., A DIVISION OF MDU RESOURCES GROUP, INC.

FOR AN ADVANCED DETERMINATION OF PRUDENCE

FOR THE BIG STONE II GENERATING PLANT

SUPPLEMENTAL PREFILED REBUTTAL TESTIMONY

OF

JAMES HEIDELL

PA CONSULTING GROUP

APRIL 25, 2008



BIG STONE II
PARTNERS IN GENERATION

SUPPLEMENTAL PREFILED REBUTTAL TESTIMONY OF JAMES HEIDELL

TABLE OF CONTENTS

I. INTRODUCTION 1

II. PURPOSE OF SUPPLEMENTAL TESTIMONY 1

III. RESPONSE TO MR. DEASON’S QUESTION REGARDING THE ROLE OF
THE PTC 1

BEFORE THE NORTH DAKOTA PUBLIC SERVICE COMMISSION
SUPPLEMENTAL PREFILED REBUTTAL TESTIMONY OF JAMES HEIDELL

I. INTRODUCTION

Q: Please state your name and business address.

A: James Heidell, 1700 Lincoln Street, Suite 4600, Denver, CO.

Q: Did you previously submit testimony in this proceeding?

A: Yes, I submitted MDU Exhibits 210-212 and MDU Exhibits 214-215.

II. PURPOSE OF SUPPLEMENTAL TESTIMONY

Q: What is the purpose of your supplemental testimony?

A: The purpose of this testimony is to present supplemental analysis to answer a question raised by Advocacy Staff Witness Mr. Terry Deason in his April 9, 2008 supplemental pre-filed testimony. The analysis was not completed in time for inclusion in my April 23, 2008 pre-filed rebuttal testimony. In my rebuttal testimony I indicated that I would complete the analysis necessary to answer the question about whether assuming the continuation of the federal production tax credit (PTC) would change the results of Scenarios III and IV presented in my March 10, 2008 supplemental testimony (MDU Exhibit No. 214).

III. RESPONSE TO MR. DEASON'S QUESTION REGARDING THE ROLE OF THE PTC

Q: Would inclusion of the PTC change the results of the analysis in Scenarios III and IV?

A: No. I modified the Scenarios III and IV from my March 10 testimony to assume that the PTC is extended through 2014 and the Strategist[®] model identified the same optimal solution (Least Cost Resource Mix) for the two scenarios (with and without off-system sales) as was identified in the table on pages 2 and 3 of my March 10 testimony.

Q: Please describe what changes were made to Scenarios III and IV to test the impact of assuming the extension of the PTC?

A: I modified the cost of the wind options available in 2010 – 2014 to reflect the assumption that the PTC is extended. This resulted in lowering the levelized cost of wind approximately 22% for each of these five options. In addition, I increased the amount of wind that could be selected. The model was allowed to add up to 94.5 MW of wind in each year through 2014 and then an additional 126.5 MW for the period of 2015 – 2025. The wind was limited to these, albeit significant, amounts in order to limit the number of permutations that the model would otherwise consider, for the reasons I explained in my March 10, 2008 testimony.

Q: Do the changes in assumptions reflect a change in your testimony regarding the PTC and amount of wind that can be integrated into the Montana-Dakota system?

A: No. The alternative assumptions were developed and analyzed for the purpose of answering Mr. Deason's question regarding whether the model results for Scenarios III and IV provided in my March 10, 2008 would change if one assumed that the PTC was extended.

Q: Would you please summarize your results?

A: Yes. For reference sake I refer to the modified Scenario III as Scenario V and the modified Scenario IV as Scenario VI. The difference between Scenarios V and VI is that Scenario VI includes the assumption of off-system sales (the same assumption differences between Scenarios III and IV). I have summarized the results in the same format that I used in my pre-filed supplemental testimony filed on March 10.

Essentially, Scenarios V and VI demonstrate that the least cost resource mix does not change even after assuming the extension of the federal production tax credit. The least cost resource mix continues to include 125 MWs of Big Stone II, along with approximately 87 MWs of natural gas combustion turbines after 2015 primarily for serving peak load.

EXPANSION PLAN SUMMARY

Scenario ¹	III	IV	V	VI
KEY INPUTS				
BSP II Increment ¹	25 MW with maximum of 125 MW	25 MW with maximum of 125 MW	25 MW with maximum of 125 MW	25 MW with maximum of 125 MW
PTC's	Expiration 1/1/2009	Expiration 1/1/2009	Expiration 1/1/2015	Expiration 1/1/2015
Wind Capacity Factor ²	38%	38%	38%	38%
Off-System Sales	No	Yes	No	Yes
LEAST COST RESOURCE MIX (In addition to Diamond Willow and conservation)				
Year/MW/Resource	2012 / 43.5 MW / CT		2012 / 43.5 MW / CT	
	2013 / 75 MW / BSP II	2013 / 125 MW / BSP II	2013 / 75 MW / BSP II	2013 / 125 MW / BSP II
	2016 / 50 MW / BSP II	2016 / 43.5 MW / CT	2016 / 50 MW / BSP II	2016 / 43.5 MW / CT
	2020 / 43.5 MW / CT	2020 / 43.5 MW / CT	2020 / 43.5 MW / CT	2020 / 43.5 MW / CT
Net Present Value - 2007 \$(000)	2,124,493	2,051,745	2,124,493	2,051,745
NEXT COST RESOURCE MIX WITHOUT BSII (In addition to Diamond Willow and conservation)				
Year/MW/Resource	2013 / 130.5 MW / CT	2013 / 130.5 MW / CT	2010 / 31.5 MW / Wind	2011 / 31.5 MW / Wind
			2013 / 87 MW / CT	2013 / 87 MW / CT
			2014 / 43.5 MW / CT	2013 / 31.5 MW / Wind
				2014 / 43.5 MW / CT
	2016 / 116 MW / IGCC	2016 / 116 MW / IGCC	2016 / 43.5 MW / CT	2016 / 43.5 MW / CT
			2022 / 43.5 MW / CT	2023 / 43.5 MW / CT
Net Present Value - 2007 \$(000)	2,363,530	2,312,366	2,336,355	2,312,451

1. Big Stone II modeled as a 500 MW unit in all scenarios
2. There was no binding constraint on the amount of wind that Strategist® could add to the resource plan

Q: Does this conclude your testimony?

A: Yes.

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 A. Swenson, of the City of Minneapolis, County of Hennepin, in the State of North Dakota, being duly sworn on oath says: that on the 25th day of April, 2008, she served the following:

James Heidell Supplemental Prefiled Rebuttal Testimony; and
An Affidavit of Service.

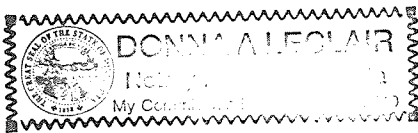
A copy has also been served upon the attached service list via electronic mail and U.S. Mail.

Kristen A Swenson

Subscribed and sworn to before me
this 25th day of April, 2008.

Donna Aleclair

Notary Public



STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

SERVICE LIST

Otter Tail Corporation, Advance
Determination of Prudence
Application

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

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

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

Donald R. Ball
Vice President – Regulatory Affairs
Montana-Dakota Utilities Co., a Division of
MCU Resources Group, Inc.
400 N 4th Street
Bismarck, ND 58501
Don.Ball@MDU.com

Daniel S. Kuntz
Assistant General Counsel
Montana-Dakota Utilities, Co., a Division of
MDU Resources Group, Inc.
P.O. Box 5650
Bismarck, ND 58506-5650
Dan.kuntz@mduresources.com

John W. Breen Jr.
Attorney and Counselor at Law
717 Williams Street
Bismarck, ND 58501-2483
Jwbreen2@bis.midco.net

Mark Trechock
Dakota Resource Council
P.O. Box 1095
Dickinson, ND 58602-1095
mark@drcinfo.com

David Schlissel
Synapse Energy Economics
22 Pearl Street
Cambridge, MA 02139
dschlissel@synapse-energy.com

Carrie La Seur
Plains Justice
319 3rd Street NW
Mount Vernon, IA 52314

Mark Bring
Associate General Counsel
Otter Tail Corporation
215 S. Cascade Street
Fergus Falls, MN 56538-0496
mbring@ottertail.com