



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

Otter Tail Power Company)	Case No. PU-13-79
Environmental Cost Recovery Rider)	
Tariff)	
Montana-Dakota Utilities Co., a Division of MDU)	Case No. PU-13-83
Resources Group, Inc.)	
Environmental Cost Recovery Rider)	
Rates)	
Otter Tail Power Company)	Case No. PU-13-84
Environmental Cost Recovery Rider)	
Rates)	
Montana-Dakota Utilities Co., a Division of MDU)	Case No. PU-13-85
Resources Group, Inc.)	
Environmental Cost Recovery Rider)	
Tariff)	

OAH File No. 20130326

DIRECT TESTIMONY
OF
THOMAS R. BRAUSE
ON BEHALF OF
OTTER TAIL POWER COMPANY

August 26, 2013

28 PU-13-85 Filed 09/17/2013 Pages: 7
Exhibit OTP-7 from Sept. 16 formal hearing
Otter Tail Power Company

30 PU-13-84 Filed 09/17/2013 Pages: 7
Exhibit OTP-7 from Sept. 16 formal hearing
Otter Tail Power Company

30 PU-13-83 Filed 09/17/2013 Pages: 7
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29 PU-13-79 Filed 09/17/2013 Pages: 7
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1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Thomas R. Brause. My business address is 215 South Cascade Street,
3 Fergus Falls, Minnesota 56537.

4

5 **Q. BY WHOM ARE YOU EMPLOYED AND WHAT IS YOUR POSITION?**

6 A. I am employed by Otter Tail Power Company (“Otter Tail” or the “Company”) as its
7 Vice President, Administration. My current duties include providing direction for Otter
8 Tail’s Federal and State Regulatory Services and Market Planning.

9

10 **Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS AND EXPERIENCE.**

11 A. I have a Bachelor of Arts Degree in Computer Science and a minor in Mathematics from
12 Minnesota State University Moorhead. I’ve worked for Otter Tail for over 35 years.
13 During my first 21 years, I worked in various Information Technology roles. In 1999, I
14 became Director, Human Resources, Information Technology and Safety. Since 2004, I
15 have been Vice President, Administration.

16

17 **Q. HAVE YOU TESTIFIED IN OTHER PROCEEDINGS BEFORE REGULATORY
18 BODIES?**

19 A. Yes. I have previously presented testimony before this Commission and the Public
20 Utility Commissions of South Dakota and Minnesota.

21

1 **Q. FOR WHOM ARE YOU PROVIDING TESTIMONY?**

2 A. I am providing testimony on behalf of Otter Tail.

3

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

5 A. The purpose of my testimony is to explain generally Otter Tail's request in this matter
6 and to explain why the costs and expenses that have been and will be incurred by Otter
7 Tail for the Air Quality Control System ("AQCS") at the Big Stone Plant are prudent.
8 Otter Tail is also providing pre-filed Direct Testimony from three additional witnesses:

- 9 • Mr. Mark Rolfes, Manager, Generation Development, will describe the Big Stone
10 AQCS project, the cost estimates for the project, and management activities relating
11 to the project;
- 12 • Mr. Mark Thoma, Manager, Environmental Services, will describe the Regional
13 Haze Rules and the best available retrofit technology ("BART") determination for
14 Big Stone Plant. He will explain how the AQCS project includes the BART
15 technologies, and specifically how the selected catalytic reduction ("SCR")
16 technology is required under the BART determination;
- 17 • Mr. Peter Beithon, Manager, Regulatory Recovery, will describe Otter Tail's
18 proposed Environmental Cost Recovery Rider, Rate Schedule 13.08 ("ECRR"), and
19 how it complies with North Dakota Century Code Section 49-05-04.2(1).
20 Mr. Beithon will also explain the ECRR rate calculations.

21

1 **Q. HAS OTTER TAIL’S INVESTMENT IN THE BIG STONE AQCS BEEN**
2 **REVIEWED BY THE COMMISSION IN ANY PRIOR PROCEEDING?**

3 A. Yes, in Case No. PU-11-165, the Commission approved an Advanced Determination of
4 Prudence for the project. In its Findings of Fact, Conclusions of Law and Order dated
5 May 9, 2012 in that proceeding, the Commission found “the continued operation of Big
6 Stone is prudent and a least-cost alternative to securing alternative generation.”
7

8 **Q. IN THAT ORDER, THE COMMISSION STATED NO DETERMINATION WAS**
9 **MADE “REGARDING THE PRUDENCE OF USING EITHER SCR OR SNCR**
10 **TECHNOLOGY IN THE AQCS.” WHAT NOX CONTROL TECHNOLOGY IS**
11 **INCLUDED IN THE AQCS?**

12 A. As described in Mr. Thoma’s testimony, the South Dakota Regional Haze State
13 Implementation Plan (“SIP”) requires the installation of SCR technology for the Big
14 Stone Plant’s NOx control. Accordingly, SCR is the NOx control technology included in
15 the AQCS suite of air quality controls.
16

17 **Q. IS INSTALLATION OF THE AQCS EQUIPMENT REQUIRED TO CONTINUE**
18 **OPERATION OF THE BIG STONE PLANT?**

19 A. Yes. As described in the testimony of Mr. Thoma, the plant could not operate using coal
20 as its fuel source after April 26, 2017, without the environmental upgrades adopted in the
21 South Dakota SIP. The AQCS project upgrades are required to comply with the South
22 Dakota SIP. The South Dakota SIP was established under the U.S. Environmental

1 Protection Agency's Regional Haze Rule (40 CFR, Part 51). The Regional Haze Rule
2 was promulgated by the U.S. EPA under the Clean Air Act, 41 U.S.C. Section 7479.
3

4 **Q. COULD THE BIG STONE PLANT OWNERS HAVE INSTEAD INSTALLED**
5 **SNCR OR SOFA AS THE NO_x CONTROL TECHNOLOGY?**

6 A. No. Not if the owners wanted to continue operation of the Big Stone Plant after April
7 2017. As I indicated above, the South Dakota SIP prescribed SCR as the BART for NO_x
8 control at Big Stone.
9

10 **Q. IS IT FAIR AND REASONABLE THAT OTTER TAIL'S NORTH DAKOTA**
11 **CUSTOMERS SHOULD BE REQUIRED TO PAY FOR THE COST OF THESE**
12 **ENVIRONMENTAL CONTROLS, INCLUDING THE SCR?**

13 A: Yes. The Commission has already concluded that the continued operation of the Big
14 Stone plant is prudent, and installation of the SCR is required by law to continue
15 operation of the plant. Furthermore, Otter Tail's customers have been receiving the
16 benefit of electricity from this cost-effective base load generation facility since it was
17 constructed and it is, therefore, fair and reasonable that the price they pay for the
18 electricity generated by the facility includes the costs of compliance with the laws
19 applicable to operation of the facility. As explained by Mr. Thoma, the South Dakota
20 SIP's inclusion of SCR as BART is a result of the application of the Regional Haze Rules
21 to the specific cyclone boiler technology and subbituminous fuel used at the Big Stone
22 Plant. As explained in Mr. Thoma's testimony, the SCR is the standard for cyclone

1 boilers using subbituminous coal as fuel. Also, as Mr. Thoma points out, no similar
2 plants in the U.S. will continue operating beyond 2018 with just an SNCR.

3

4 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

5 **A. Yes, it does.**