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September 30, 2011

**VIA ELECTRONIC FILING**

**Lisa M. Agrimonti**  
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Hon. Beverly Jones Heydinger  
Administrative Law Judge  
Office of Administrative Hearings  
600 North Robert Street  
PO Box 64620  
St. Paul, MN 55164-0620

**Re: In the Matter of the Application of Northern States Power  
Company, a Minnesota corporation, for a Certificate of Need for  
Two High Voltage 115 kV Transmission Lines in the Midtown  
Area of South Minneapolis, Hennepin County  
MPUC Docket No. E002/CN-10-694**

Dear Beverly:

Enclosed for electronic filing are the direct testimonies and schedules of Northern States Power Company, a Minnesota corporation, as follows:

1. Direct Testimony of Paul J Lehman and Schedule 1;
2. Direct Testimony of Pamela J. Rasmussen and Schedule 1; and
3. Direct Testimony of Scott Zima and Schedules 1, 2 and 3.

If you have questions or need additional information, please contact me at 612-977-8656.

Sincerely,

*s/Lisa Agrimonti*

Lisa Agrimonti

cc: Service List

Direct Testimony and Schedules  
Paul J Lehman

**STATE OF MINNESOTA  
OFFICE OF ADMINISTRATIVE HEARINGS  
FOR THE PUBLIC UTILITIES COMMISSION**

IN THE MATTER OF THE APPLICATION OF  
NORTHERN STATES POWER COMPANY, A  
MINNESOTA CORPORATION, FOR A  
CERTIFICATE OF NEED FOR TWO HIGH  
VOLTAGE 115 kV TRANSMISSION LINES IN  
THE MIDTOWN AREA OF SOUTH  
MINNEAPOLIS, HENNEPIN COUNTY

PUC DOCKET NO. E002/CN-10-694

TESTIMONY OF

Paul J Lehman

On Behalf of

APPLICANT

NORTHERN STATES POWER COMPANY, A MINNESOTA CORPORATION

September 30, 2011

Exhibit \_\_\_\_\_

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1                                   **I.       INTRODUCTION AND QUALIFICATIONS**

2

3   **Q.     PLEASE STATE YOUR NAME AND YOUR BUSINESS ADDRESS.**

4   A.    My name is Paul J Lehman and my business address is 414 Nicollet Mall, Minneapolis,  
5        Minnesota 55401.

6

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

8   A.    I am employed by Xcel Energy Services Inc. (“XES”), the service company provider for  
9        Northern States Power Company, a Minnesota corporation (“Xcel Energy” or “Company”),  
10       and my current position is Manager of Regulatory Administration.

11

12   **Q.     PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL**  
13       **EXPERIENCE.**

14   A.    I received a Bachelor of Science in Electrical Engineering from the University of Minnesota  
15        in 1977. After receiving my degree, I began my career at the Company as a Planning  
16        Engineer in its Power Supply Planning department. In 1980, I became the Superintendent  
17        of Transmission Planning for Northern States Power Company, a Wisconsin corporation  
18        (“NSPW”), responsible for all power supply planning efforts for the NSPW’s transmission  
19        needs in Wisconsin. In 1984, I moved to the Energy Supply Planning department of the  
20        Company with various responsibilities and titles, centered on planning activities associated  
21        with the Company’s generating plants. In 1990, I became the Manager of a new department  
22        within the Company, Power Contracts, with responsibility for all the contracting activities  
23        for the power supply business needs of the Company.

24

25        In 1991, I became Manager, Electric Rate Design and was responsible for all the retail  
26        electric design activities and requirements for the Company. In 2000, I became an internal  
27        consultant providing services to other areas of the Company on pricing and regulatory  
28        issues. In 2008, I assumed my current position. My resume is attached as Schedule 1.

1 **Q. FOR WHOM ARE YOU TESTIFYING?**

2 A. I am testifying on behalf of Xcel Energy, the applicant for a Certificate of Need in this  
3 proceeding.  
4

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

6 A. The purpose of my testimony is to provide information regarding 2011 system loads  
7 occurring on the Upper Midwest NSP Service Territory (“NSP System”), which includes  
8 parts of Minnesota, North Dakota, South Dakota, Wisconsin and Michigan.  
9

10 **Q. WHAT SCHEDULES ARE ATTACHED TO YOUR TESTIMONY?**

11 A. Schedule 1: CV of Paul J Lehman  
12

13 **Q. ARE YOU AVAILABLE TO PROVIDE TESTIMONY IN SUPPORT OF PARTICULAR SECTIONS**  
14 **OF THE CERTIFICATE OF NEED APPLICATION?**

15 A. Yes. I was responsible for preparing the Certificate of Need Application and can generally  
16 answer questions regarding chapters 1 (Introduction and Summary), 2 (Project Description),  
17 and 6 (Engineering Design, Construction and Right-of-Way Acquisition).  
18

19 **II. UPDATED LOAD INFORMATION, NSP SYSTEM**  
20

21 **Q. IN THE CERTIFICATE OF NEED APPLICATION, THE COMPANY PROVIDED ACTUAL PEAK**  
22 **LOADING INFORMATION FOR THE NSP SYSTEM. WHAT ADDITIONAL DATA IS NOW**  
23 **AVAILABLE?**

24 A. The Company has now compiled a preliminary determination of the actual peak data for the  
25 NSP System for 2011.  
26

27 **Q. PLEASE DESCRIBE THE ACTUAL NSP SYSTEM PEAK LOAD SERVED IN 2011.**

28 A. On July 20, 2011, the Company served the most load it has ever served on its NSP System.  
29 The actual load served on that day at 5 p.m. reached 9,544 MW.  
30

1 **Q. HOW DOES THIS ACTUAL PEAK LOAD SERVED COMPARE TO HISTORICAL PEAK LOAD**  
2 **SERVED BY THE NSP SYSTEM?**

3 A. As I said, this level of peak load served set a record for the NSP system and exceeded the  
4 previous record for actual peak load served set in 2010 by 413 MW (the actual peak load  
5 served by the NSP System in 2010 was 9,131 MW). By comparison, the actual peak load  
6 served by the NSP system in 2006 was 9,027 MW.

7  
8 **Q. WERE NEW PEAK LOADS REACHED IN OTHER AREAS THIS SUMMER?**

9 A. Yes. The peak load served on the Midwest Independent Transmission System Operator,  
10 Inc.'s system which includes 12 states and Manitoba, Canada, reached an all-time peak on  
11 July 20, 2011 at approximately 104 gigawatts.

12  
13 **Q. UP TO THIS POINT YOU HAVE SPOKEN OF ACTUAL PEAK LOAD SERVED, IS THIS THE**  
14 **ONLY LEVEL OF LOAD FOR THE NSP SYSTEM THAT NEEDS TO BE CONSIDERED?**

15 A. No. In addition to the level of load actually served by the NSP System, the Company also  
16 needs to be aware of the level of load that could potentially be served by the system.

17  
18 **Q. PLEASE EXPLAIN THE DISTINCTION BETWEEN THESE TWO TERMS.**

19 A. The actual level of load served is a measure of the actual load that the system was required to  
20 serve, whereas the potential level of load that could be served is an estimate of what the  
21 system may have actually served if the Company had not taken steps to reduce load on the  
22 system (customer load interruption). In using land speed trials for a car as an analogy, the  
23 actual level of load served would be similar to the fastest speed a car actually reached during  
24 its test runs while the potential level of load served would be similar to the speed the  
25 designers of the car estimate the car could achieve if everything happened as designed.

26  
27 **Q. HAS THE COMPANY EVALUATED THE POTENTIAL LOAD LEVEL FOR THE NSP SYSTEM?**

28 A. Yes. For 2011, the Company estimates that the maximum potential load level on the NSP  
29 system was 9,792 MW. This level is the Company's best estimate of what the load on the  
30 system would have been if the Company had not called for customer load interruption at the  
31 time.

1  
2 **Q. HAVE YOU EVALUATED HOW THE ESTIMATED POTENTIAL LOAD LEVEL OF 2011**  
3 **COMPARES TO HISTORIC LEVELS OF ESTIMATED POTENTIAL LOAD ON THE NSP**  
4 **SYSTEM?**

5 A. Yes. In 2006, the estimated potential load on the NSP System was 9,859 MW. This level  
6 still stands as the highest level of estimated potential load on the NSP System. Therefore,  
7 the estimated potential load level for 2011 was less than 1% below the all time maximum  
8 estimated potential load of 2006.

9  
10 **III. CONCLUSION**  
11

12 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

13 A. Yes.  
14

4288530v1

**MR. PAUL J LEHMAN**  
**Manager, Regulatory Administration**  
**414 Nicollet Mall, Minneapolis, Minnesota**

---

**CURRENT RESPONSIBILITIES (August 2008 – Present)**

Manage regulatory projects related to transmission facilities for Xcel Energy.

**PREVIOUS EMPLOYMENT (Northern States Power Company)**

|  |             |
|--|-------------|
| Pricing Consultant   | 2000 - 2008 |
| Manager, Electric Rate Design                                      | 1991 – 2000 |
| Manager, Power Contracts   | 1990 – 1991 |
| Various positions, Energy Supply Planning                          | 1984 – 1990 |
| Including Superintendent, Power Systems Development                |             |
| And Superintendent, Bulk Power Planning                            |             |
| Superintendent, Transmission Planning                              | 1980 – 1984 |
| Planning Engineer, Power Supply Planning and Transmission Planning | 1977 – 1980 |

**PREVIOUS TESTIMONY**

| <u>Jurisdiction</u> | <u>Subject</u>  | <u>Docket/Case No.</u> |
|---------------------|---|------------------------|
| Minnesota           | Rate Design   | E002/GR-05-1428        |
| Colorado            | Rate Design   | 04S-164E               |
| Minnesota           | Rate Design and Cost Allocation                         | E002/GR-92-1185        |
| Minnesota           | Legislative Committee Hearings on Wind Generation       | NA                     |
| Minnesota           | Power Purchase and Cogeneration Litigation              | E002/GR-91-001         |
| Minnesota           | Joint Petition of Dakota County and Winona County       | E002/CG-88-489         |
| North Dakota        | Rate Design and Cost Allocation                         | PU-400-92-399          |
| North Dakota        | Rules Governing Cogeneration and Small Power Production | PU-439-89-374          |
| Wisconsin           | Advance Plan 5  | 05-EP-5                |
| Wisconsin           | Advance Plan 4  | 05-EP-4                |
| Wisconsin           | Advance Plan 3  | 05-EP-3                |



## EDUCATION

|  |      |
|--|------|
| University of Minnesota – Institute of Technology  | 1977 |
| Bachelor of Science in Electrical Engineering  |      |
| University of Minnesota – Continuing Education and Extension                               | 1992 |
| Pricing for Profits Strategies and Tactics   |      |
| University of Minnesota – Carlson School of Management                                     | 1997 |
| Strategic Pricing Program  |      |
| Professional Pricing Society   | 1999 |
| Fundamentals and Advanced Workshops of the Professional Pricing Skills Certificate Program |      |
| University of Wisconsin, Madison – College of Engineering                                  | 2001 |
| EI Transmission Pricing School   |      |

## PROFESSIONAL REGISTRATIONS AND ASSOCIATIONS

Registered Professional Engineer in Minnesota and Wisconsin  
Member, Institute of Electrical and Electronic Engineers

## ARTICLES OR PAPERS PUBLISHED OR PRESENTED

Paul J. Lehman, et al, "MAPP Bulk Transmission Outage Data Collection and Analysis", IEEE Transactions on Power Apparatus and Systems, Volume PAS-103, Number 1, January 1984, p. 213-221.

Paul J. Lehman, et al, "Effects of Pooling Weather Associated MAPP Bulk Transmission Outage Data on Calculated Forced Outage Rates", IEEE Transactions on Power Apparatus and Systems, Volume PAS-103, Number 8, August 1984, p. 2345-2351.

Paul J. Lehman, et al, "Analysis of Pooling 345 kV Transmission Outage Data Between the Mid-Continent Area Power Pool and Northeast Utilities", IEEE Transactions on Power Apparatus and Systems, Volume PAS-104, Number 9, September 1985, p. 2427-2435.

Paul J. Lehman, et al, "The Procedure Used in the Probabilistic Transfer Capability Analysis of the MAPP Region Bulk Transmission System", IEEE Transactions on Power Apparatus and Systems, Volume PAS-104, Number 11, November 1985, p. 3013-3019.

Paul J. Lehman, et al, "The Effects of Terminal Complexity and Redundancy on the Frequency and Duration of Forced Outages", IEEE Transactions on Power Apparatus and Systems, Volume PWRS-2, Number 4, November 1987, p. 856-863.

Direct Testimony and Schedule  
Pamela J. Rasmussen

**STATE OF MINNESOTA  
OFFICE OF ADMINISTRATIVE HEARINGS  
FOR THE PUBLIC UTILITIES COMMISSION**

IN THE MATTER OF THE APPLICATION  
OF NORTHERN STATES POWER  
COMPANY, A MINNESOTA  
CORPORATION, FOR A CERTIFICATE OF  
NEED FOR TWO HIGH VOLTAGE 115  
KV TRANSMISSION LINES IN THE  
MIDTOWN AREA OF SOUTH  
MINNEAPOLIS, HENNEPIN COUNTY

PUC DOCKET No. E002/CN-10-694

TESTIMONY OF

Pamela J. Rasmussen

On Behalf of

APPLICANT

NORTHERN STATES POWER COMPANY, A MINNESOTA CORPORATION

September 30, 2011

Exhibit \_\_\_\_\_

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1                   **I.       INTRODUCTION AND QUALIFICATIONS**

2

3   **Q.     PLEASE STATE YOUR NAME AND EMPLOYMENT ADDRESS.**

4   A.    My name is Pamela Jo Rasmussen and my business address is 1414 West  
5       Hamilton Avenue, Post Office Box 8, Eau Claire, Wisconsin 54702-0008.

6

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

8   A.    I am employed as Manager, Siting and Land Rights, with Xcel Energy Services  
9       Inc. (“XES”), the service company provider for Northern States Power  
10      Company, a Minnesota corporation (“Xcel Energy”).

11

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

13   A.    I received a Bachelor’s degree from the University of Wisconsin – Eau Claire in  
14       1987 with majors in Business Administration and Biology. Since 1989, I have  
15       worked for Xcel Energy in the land rights, regulatory compliance, and  
16       environmental and permitting areas of the Company. My primary job  
17       responsibilities include land rights and permit activities for Xcel Energy  
18       covering Northern States Power Company-Minnesota and Northern States  
19       Power Company-Wisconsin for electric transmission line and substation  
20       projects in Minnesota, North Dakota, South Dakota, Wisconsin and Michigan.  
21       In addition, I direct the acquisition, management and transfer of land rights and  
22       real property for both companies’ gas, electric, transmission and distribution  
23       systems. I am also responsible for staff who prepare assessments of project  
24       environmental impacts, assembling of all necessary environmental information  
25       required for permit approvals and recommending methods to minimize  
26       construction impacts for all transmission and substation proposals. My resume  
27       is attached as Schedule 1.

1  
2 **Q. FOR WHOM ARE YOU TESTIFYING?**

3 A. I am testifying on behalf of Xcel Energy, the Applicant in this proceeding.  
4 Xcel Energy is seeking a Certificate of Need to construct the two new 115 kV  
5 transmission lines and two new substations in the Midtown area (“Hiawatha  
6 Project”).  
7

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

9 A. The purpose of my testimony is to provide information regarding the  
10 Company’s efforts to acquire the lands necessary to construct the two new  
11 proposed substations on the sites that were recommended by the  
12 Administrative Law Judge Beverly Heydinger in her October 8, 2010 Findings  
13 of Fact, Conclusions and Recommendation for the Hiawatha Project (“ALJ  
14 Report”).  
15

16 **Q. WHY IS THE COMPANY WORKING ON ACQUISITION AT THIS TIME?**

17 A. For the Midtown North site, we began acquisition efforts this summer due to  
18 unforeseen circumstances—the condemned and unoccupied triplex was sold  
19 for refurbishment. The Hiawatha West site is now owned by the Minnesota  
20 Department of Transportation (“Mn/DOT”) and it is our understanding that  
21 Hennepin County Metro Transit has plans to upgrade and reutilize the rail spur  
22 currently located on the site by the winter of 2012 to provide for light rail car  
23 delivery. Consequently, we have been meeting with Mn/DOT and Metro  
24 Transit regarding using the site for both light rail and the substation.  
25

1 **Q. ARE YOU AVAILABLE TO PROVIDE TESTIMONY IN SUPPORT OF PARTICULAR**  
2 **SECTIONS OF THE APPLICATION?**

3 A. Yes. I am sponsoring chapters 7 (Transmission Line Operating  
4 Characteristics), 8 (Environmental Information) and Appendix E (cultural  
5 resources).  
6

7 **Q. WHAT SCHEDULES ARE ATTACHED TO YOUR TESTIMONY?**

8 A. Schedule 1: CV of Pamela J. Rasmussen  
9

## 10 **II. SUBSTATIONS**

11

12 **Q. WHAT SITES DID THE ALJ RECOMMEND FOR THE TWO SUBSTATIONS?**

13 A. For the Midtown Substation on the west end of the Project, the ALJ  
14 recommended the Midtown North site at 29<sup>th</sup> Street (Midtown Greenway) and  
15 Oakland Avenue. For the Hiawatha Substation on the east end of the Project,  
16 the ALJ recommended the Hiawatha West site at 28<sup>th</sup> Street and Hiawatha  
17 Avenue. (ALJ Report, p. 97).  
18

19 **Q. WHAT PROPERTIES HAS THE COMPANY ACQUIRED FOR THE MIDTOWN**  
20 **NORTH SITE?**

21 A. The Midtown North site is comprised of the Company owned-former Oakland  
22 Substation at 2840 Oakland Avenue, a triplex located at 2833 Portland Avenue  
23 and a vacant lot at 28411 Portland Avenue. The Company purchased the  
24 triplex property on May 23, 2011 after learning that the property had been sold  
25 by the owner bank to an individual who began working on the triplex. The  
26 Company has also had preliminary discussions with the owner of the Brown  
27 Campbell site.

1  
2 **Q. PLEASE DESCRIBE THE COMPANY'S ON-GOING COORDINATION EFFORTS**  
3 **WITH MN/DOT AND METRO TRANSIT.**

4 A. We have had several meetings with Mn/DOT and Metro Transit to discuss the  
5 technical details of a substation on the site as well as Metro Transit's rail line  
6 requirements. We have also had preliminary discussions about the potential  
7 transfer of the property by Mn/DOT to accommodate both uses. These  
8 discussions are ongoing and no specific agreement has been reached.

9  
10 **III. CONCLUSION**  
11

12 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

13 A. Yes.  
14

4291458v1

# Pamela Jo Rasmussen

## WORK EXPERIENCE

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### **Xcel Energy Services, Inc. – Northern States Power Company** **22 years experience**

- **Manager, Siting & Land Rights, 2008-present**
- **Supervisor, Siting & Permitting, 2003 - 2008**
- **Permitting Analyst; Team Lead, Permitting Analyst, 1990 - 2003**
- **Licensing Coordinator, 1989 - 1990**
- Manages land rights and permit activities for NSP-Minnesota and NSP-Wisconsin, for electric transmission line and substation projects in Minnesota, North Dakota, South Dakota, Wisconsin and Michigan.
- Directs the acquisition, management and disposal of land rights and real property for the Companies' gas, electric, transmission & distribution systems.
- Directs liaison with government agencies and public during construction project permitting which includes public involvement, permit development and permit compliance.
- Responsible for staff who prepare assessments project environmental impacts, assembling of all necessary environmental information required for permit approvals as well as recommendations to minimize construction impacts for all transmission and substation projects.
- Has presented on a variety of environmental issues at EEI, EPRI and other industry conferences on avian issues regarding transmission lines, public involvement and multi-state permitting processes.
- Leader in promoting company environmental stewardship efforts for the transmission area and land management. Led Xcel Energy efforts to sign the first voluntary MOU with the U.S. Fish & Wildlife Service to develop bird protection plans for all Xcel Energy's operating companies which are in effect.
- Member of NSPW hydro relicensing team that secured new licenses for seven NSPW hydropower facilities.

## EDUCATION

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- **University of Wisconsin – Eau Claire, WI**, Bachelor of Business Administration degree, December, 1987. Magna Cum Laude, University Honors Program. Biology and Business Administration Majors
- Fundamentals in Electric Power Certificate, May 1995

## ORGANIZATIONS/INTERESTS/ACTIVITIES

---

- Xcel Energy United Way Committee (1994 to present)
- Xcel Energy Earth Day Committee (Circle of Excellence Team in 2008)
- NSPW Employees' Association (1993 to 1995)
- International Right-of-Way Association
- Friends of Beaver Creek Reserve, Board of Directors (1997 to present), President (2005 to 2009)
- Beaver Creek Foundation, Board (2010 to present)
- Eau Claire Community Beautification Association (2005 to 2009)

## PROFESSIONAL DEVELOPMENT

---

- Xcel Energy Leadership Pipeline, 2007-2008
- Leadership Eau Claire, 2004
- NSP Corporate Finance Seminar, 1991

▪ [pamela.jo.rasmussen@xcelenergy.com](mailto:pamela.jo.rasmussen@xcelenergy.com)

▪ work: 715.737.4661



Direct Testimony and Schedules  
Scott Zima

**STATE OF MINNESOTA**  
**OFFICE OF ADMINISTRATIVE HEARINGS**  
**FOR THE PUBLIC UTILITIES COMMISSION**

IN THE MATTER OF THE APPLICATION  
OF NORTHERN STATES POWER  
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PUC DOCKET No. E002/CN-10-694

TESTIMONY OF

Scott Zima

On Behalf of

APPLICANT

NORTHERN STATES POWER COMPANY, A MINNESOTA CORPORATION

September 30, 2011

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1                   **I.       INTRODUCTION AND QUALIFICATIONS**

2

3   **Q.   PLEASE STATE YOUR NAME AND YOUR BUSINESS ADDRESS.**

4   A.   My name is Scott Zima and my business address is 8701 Monticello Lane,  
5       Maple Grove, Minnesota 55369.

6

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

8   A.   I am employed as a Principal Specialty Engineer by Northern States Power  
9       Company, a Minnesota corporation (“Xcel Energy” or the “Company”).

10

11   **Q.   PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND**  
12       **PROFESSIONAL EXPERIENCE.**

13   A.   I earned a Bachelor of Science degree in Electrical Engineering from Iowa  
14       State University in 1979. I joined Xcel Energy’s predecessor in 1984 and have  
15       been employed by the Company since that time. Throughout my career, I have  
16       been employed in various engineering positions throughout the Company  
17       including, as a Distribution Engineer, as a Manager of Distribution Engineering  
18       Services and as a Principal Engineer for the Area Engineering department.  
19       Since 2006, I have been employed by Xcel Energy as a Principal Engineer in  
20       the Distribution Planning department and as team leader of the NSPM  
21       planning team. My responsibilities include technically supporting the  
22       construction and operation of distribution infrastructure improvements. I am  
23       also responsible for forecasting loads for Minneapolis and Edina to develop  
24       five-year electric distribution forecasts and for scheduling and coordinating  
25       major capacity projects.

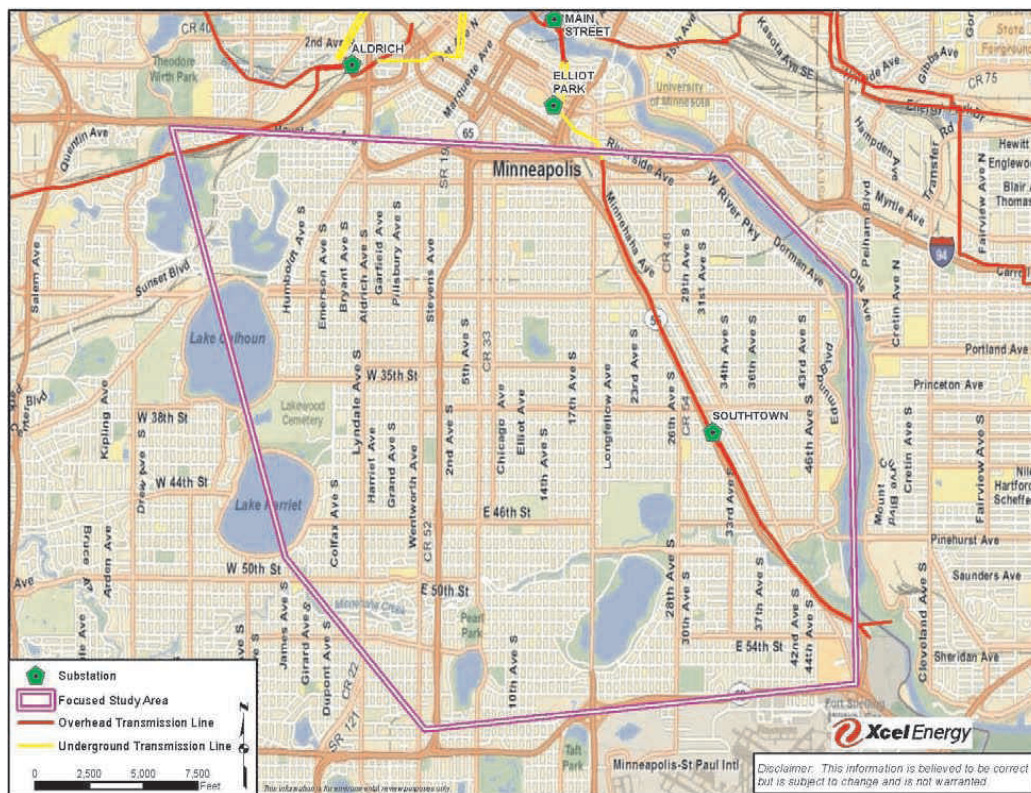
1 In 2009, I retired from the U.S. Army Reserves as a Colonel. Prior to my  
2 retirement, I was deployed in support of Operation Iraqi Freedom from March  
3 2007 to May 2008. During my deployment, I served as the division Chief of  
4 Network Operations for the 1<sup>st</sup> Theater Sustainment Command. My resume is  
5 attached as **Schedule 1**.

6  
7 **Q. FOR WHOM ARE YOU TESTIFYING?**

8 A. I am testifying on behalf of Xcel Energy, the applicant for a Certificate of Need  
9 in this proceeding.

10  
11 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

12 A. The purpose of my testimony is to provide updated information regarding peak  
13 demand in the Focused Study Area shown below:



1  
2 **Q. WHAT SCHEDULES ARE ATTACHED TO YOUR TESTIMONY?**

3 A. Schedule 1: CV of Scott Zima

4 Schedule 2: Feeder Circuit Loads, Focused Study Area, 2000-2028

5 Schedule 3: Greater Study Area-Substation Transformer Loads (including  
6 Southtown Substation Transformers), 2000-2028  
7

8 **Q. ARE YOU AVAILABLE TO PROVIDE TESTIMONY IN SUPPORT OF PARTICULAR**  
9 **SECTIONS OF THE CERTIFICATE OF NEED APPLICATION?**

10 A. Yes. I am testifying in support of chapters 3 (electrical system overview), 4  
11 (distribution load serving need analysis) and 5 (other alternatives) and  
12 Appendix A (South Minneapolis Electric Distribution Delivery System Long-  
13 Term Study).  
14

15 **II. UPDATED LOAD INFORMATION, FOCUSED STUDY AREA**  
16

17 **Q. IN THE CERTIFICATE OF NEED APPLICATION, THE COMPANY PROVIDED**  
18 **ACTUAL PEAK LOADING INFORMATION FOR FEEDERS IN THE FOCUSED**  
19 **STUDY AREA AND THE TRANSFORMERS AT THE SOUTH TOWN SUBSTATION**  
20 **THROUGH 2009. WHAT ADDITIONAL DATA IS NOW AVAILABLE?**

21 A. The Company has now compiled actual peak data for 2010 and preliminary  
22 peak information for 2011.  
23

24 **Q. PLEASE DESCRIBE THE PEAKS FOR 2010 AND 2011.**

25 A. The feeders in the Focused Study Area reached actual non-coincident peak  
26 loading of 323 MW in 2010 and 336 MW in 2011. The three Southtown  
27 Substation transformers peaked at 167 MW in 2010 and 179 MW in 2011. For

1 2011, the 39 feeder peaks in the Focused Study Area and the 3 Southtown  
2 Substation transformer peaks generally coincided with the electrical system  
3 peaks that occurred on the NSP System over the course of several days on July  
4 18, 19 and 20, 2011. The NSP System is comprised of parts of Minnesota,  
5 Wisconsin, North Dakota, South Dakota and Michigan.

6  
7 **Q. HOW DO THESE PEAKS COMPARE TO HISTORICAL PEAKS EXPERIENCED IN**  
8 **THE FOCUSED STUDY AREA?**

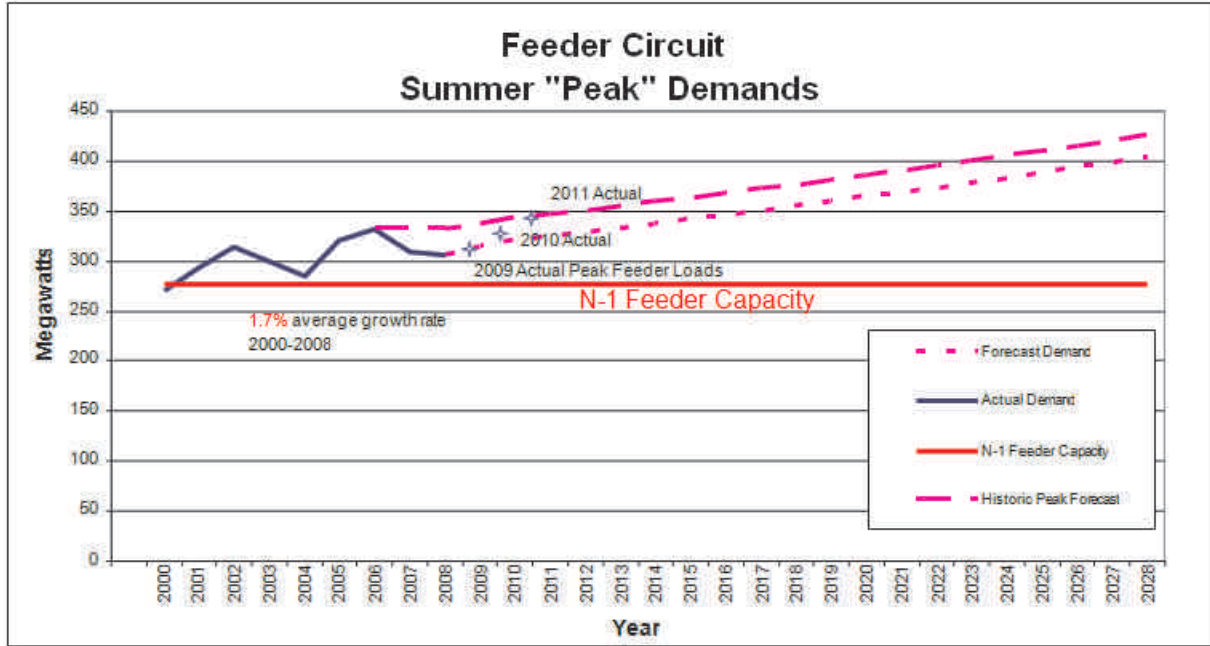
9 A. These peaks are very close to the all time peaks reached in 2006. That year  
10 feeder peak loading was 331 MW. For the Southtown Substation transformers,  
11 the peak was 183 MW.

12  
13 **Q. IN YOUR 2008 SOUTH MINNEAPOLIS ELECTRIC DISTRIBUTION DELIVERY**  
14 **SYSTEM LONG-TERM STUDY, YOU PROVIDED DEMAND FORECASTS FOR**  
15 **THE FOCUSED STUDY AREA FROM 2009 TO 2028. HOW HAVE THE ACTUAL**  
16 **NUMBERS COMPARE TO YOUR FORECAST FOR FEEDERS?**

17 A. The actual loads for 2010 and 2011 have been within the range of loading I  
18 forecasted. As part of the study, I identified a 1.7 percent historical peak load  
19 growth rate from 2000 to 2008 and then created two future load forecasts from  
20 2009 to 2020 for the Focused Study Area. Both forecasts applied a 1.3 percent  
21 annual growth rate which reflects a lower growth rate than the historic growth  
22 rate.

23  
24 I first applied the 1.3 percent rate from the 2006 peak load level of 331 MW. I  
25 then applied the same 1.3 percent rate from the 2008 peak of 307 MW to create  
26 a more conservative forecast. The actual loads experienced in the years 2008,  
27 2009 and 2010 are within these two forecasts:

1



2

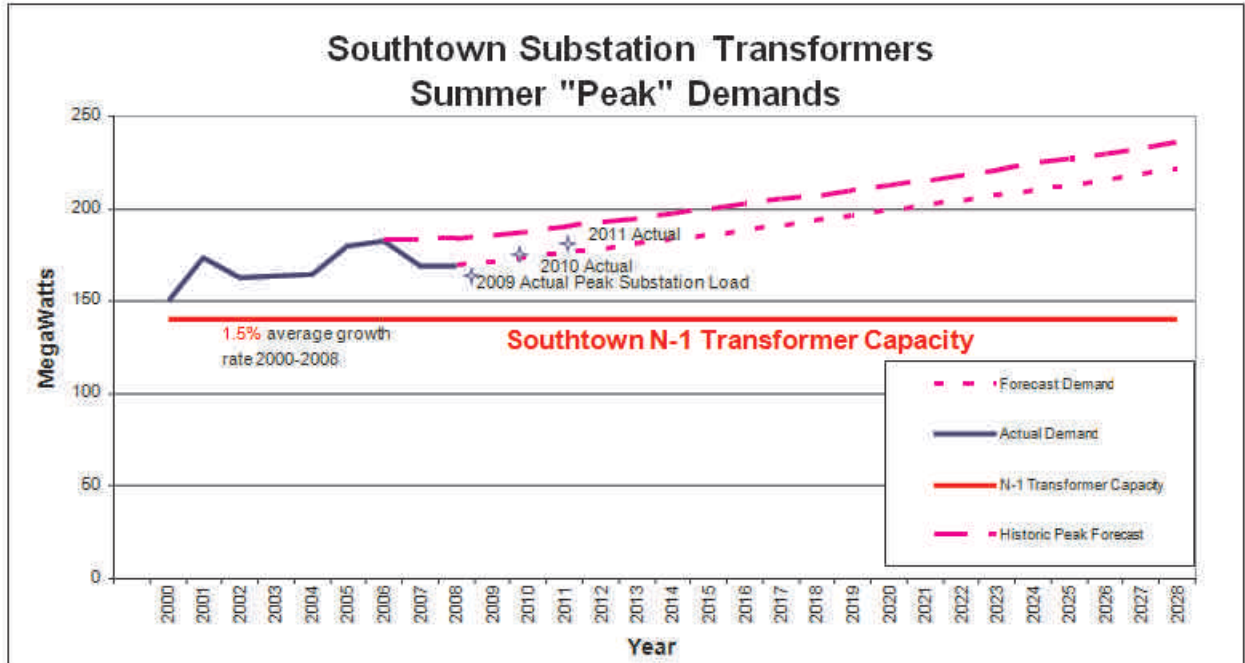
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4 **Q. WERE ACTUAL TRANSFORMER LOADS AT THE SOUTHTOWN SUBSTATION**  
 5 **ALSO WITHIN THE LOADING RANGES YOU FORECAST?**

6 A. Yes. As I did with feeder circuits, in my study I developed two forecasts for  
 7 Southtown Substation transformers based on the historical growth rate from  
 8 2000 to 2008 (1.5 percent adjusted for load transfers). I first applied the 1.3  
 9 percent rate from the 2006 peak load level of 183 MW. I then applied the same  
 10 1.3 percent conservative forecast from the 2008 peak of 173 MW to create a  
 11 more conservative forecast. The actual loads for 2009, 2010 and 2011  
 12 approximate these two forecasts:

13





**Q. HAVE YOU UPDATED THE EXCEL SPREADSHEETS IN APPENDIX B AND APPENDIX D TO YOUR STUDY TO REFLECT THE LOADING VALUES FOR 2009 THROUGH 2011?**

A. Yes. They are attached to my testimony as Schedule 2 (loading on feeder circuits for the Focused Study area) and Schedule 3 (loading on Greater Study Area transformers, including Southtown Substation transformers).

**Q. HAVE YOU EVALUATED HOW THE LOAD LEVELS EXPERIENCED IN 2011 AFFECT THE STATED NEED FOR THIS PROJECT?**

A. Yes. As stated in our application, the load levels experienced in 2006 exceeded the capability of the distribution system under contingency by 55 MW. Because the peak loading experienced in 2011 was similar to the level experienced in 2006 (5 MW higher in peak feeder loading and within 4 MW of peak transformer loading), the 2011 load levels experienced reaffirm the need for this project based on the level of system deficiency experienced in 2006.



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### III. CONCLUSION

**Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

A. Yes.

4291455v1

## **SCOTT B. ZIMA, P.E.**

### **EXPERIENCE: Xcel Energy, 8701 Monticello Lane, Maple Grove, MN 55369.**

**Oct 2006 to Mar 2007, May 2008 to Present - Principal Engineer, Distribution Capacity Planning, Maple Grove.**

- Distribution Capacity planning to identify risks, develop mitigations, secure funding, and technically support the construction and operation of distribution infrastructure improvements.
- Accurately forecast loads for Minneapolis, and Edina to develop a five-year electric distribution forecast.
- Schedule, coordinate and plan for major capacity projects. Distribution engineering subject matter expert for the \$15 million plus south Minneapolis infrastructure project.

**Mar 2007 to May 2008 – Colonel, US Army Reserve.** Deployed in Support of Operation Iraqi Freedom. Division Chief, Network Operations–1<sup>st</sup> Theater Sustainment Command.

- Leads, plans, monitors operation and continuity of US Army strategic communication for Full Spectrum Operations across the 27 countries of southwest Asia to the horn of Africa.
- Developed, implemented, and refined processes to ensure effective continuous communication supporting 7500 logistics soldiers responsible to deliver every commodity (food, water, fuel, etc.) required by of force of 160,000 in support of combat operations.
- Developed and evolved knowledge management for the Theater Logistics Headquarters to document, store, and present critical information in support of logistics operations.
- Developed, secured funding, and project managed a \$2.5 million project to build the state-of-the-art Logistics Operation Center for 1<sup>st</sup> Theater Sustainment Command.

**Oct 2000 to Jun 2006 Principal Engineer, Area Engineering, Minneapolis, Eau Claire.**

- Professional Engineering (PE) review and screen projects of 8 assigned designers to ensure highest value projects proceed and the work meets engineering standards.
- Detail engineering for Minneapolis network; establishing a new network in 2002.
- Reliability engineering for Minneapolis area, which includes about 260,000 customers, 16 substations and 250 plus feeder circuits
- Forecast and manage capital budget expenditures for new business and reconstruction for Minneapolis area totaling about \$12 million annually. Approves projects over \$25,000.
- Initiated and worked as part of a team to prioritize cable projects across Xcel North.

**Dec 1993 to Oct 2000 Principal Engineer, Project Management.**

- Validating plans and screening projects to insure highest value projects proceed.
- Developing and implementing 30 to 40 substation, transmission, and distribution projects with total cost over \$25 million annually. As part of the team, met team goal of managing \$170 million capital budget to within 5% each year for seven years.
- Refining work management tools for more effective project management.
- Working closely with resource managers, construction supervisors, designers and crews to ensure projects are accomplished in a timely and cost effective manner.
- Developing and Implementing operating budget by function for distribution sustainment with a total cost over \$10 million annually since 1999.

**Aug 1991 to Nov 1993 Manager Distribution Engineering Services.**

- Oversight, Engineering and Planning, for 6 Electric Utility Regions.
- Developing engineering and analysis tools for reliability improvement.

- Teamed to initiate, document, and implement feeder tune-ups.
- Developing next steps for mapping automation based on operating needs.

**Aug 1989 to Jul 1991 *Planning and Engineering Supervisor, Brooklyn Center.***

- Distribution engineering, construction scheduling, planning and capital budget (\$8 million).
- Resolved materials problems for faulty, long lead time, and high dollar.
- Supervised regional planner, assistant engineer, and 2 designers for detailed engineering. Worked closely with field supervisors and construction crews.
- Project engineer for distribution automation pilot project to control/monitor field switches (presented to Edison Electric Institute and published in T&D 89-90).

**Aug 1987 to Aug 1989 *Software Project Manager, Information Technology***

Led a cross functional team of crews, engineers, and management to develop, test, train, document, and implement the load monitoring and work scheduling software (Power Equipment Management). Delivered on time and under budget.

**May 1986 to Dec 1988 *Distribution Engineer, Distribution Standards & Engineering.***

- Project manager for software systems (Crew Dispatch and Reliability Data capture). Expanded system use from Minneapolis, St Paul to five states. Trained users and wrote User Manual.
- Led cross functional teams to develop policies, implement procedures, provide training and technical consulting to address engineering issues including: new cost effective residential design procedures for underground construction (presented results to the Edison Electric Institute in Oct 1987); computerized mapping system and Neutral to Earth Voltage issues.

**Dec 1985 to May 1986 *Operations Engineering, St. Paul Electric Service.***

Engineering and the operation of NSP substations and feeders, capacitor controls, voltage problem investigations, and outage restoration.

**Apr 1985 to Dec 1985 *Division Engineering, Minneapolis Division.***

Led team to consolidate and write the NSP Network Planning and Design Guide. Planning, engineering, and budgeting for feeder load relief. Worked with designers, customer service representatives, and crews for network and area engineering.

**United States Army, Commissioned Officer, Multiple locations.**

**Jun 2009 *Army Reserve, Colonel (Retired)***

**Nov 1979 to Jun 2009 *Army Reserve, Colonel***

Thirty plus years experience in various command and staff positions including:

Jun 2008 to Jun 2009 – Director of Force Management –88<sup>th</sup> Regional Readiness Command – Force Management – Leads planning and implementation for actions across 19 mid-west and western states as the Army Reserve transforms from cold war structure to a modular structure in support of the Global War on Terrorism.

Feb 2007 to May 2008 – Division Chief, Network Operations, Command, Control, Communications, Computers, Information –1<sup>st</sup> Theater Sustainment Command – Leads, plans, monitors operation and continuity of communications, computers, and knowledge management for Full Spectrum Operations across the 27 countries of southwest Asia to the horn of Africa.

Aug 2005 to Feb 2007 – Deputy Director of Force Management –88<sup>th</sup> Regional Readiness Command – Staff Officer – Force Management – Leads planning and implementation for actions across 6 midwest states affecting 32 Battalions, 242 units total as the Army Reserve transforms from cold war structure to Global War on Terrorism structure.

Jun 2003 to Aug 2005 - Battalion Commander, Combat Engineer Battalion. Full time staff of 33 with 685 soldiers in 5 companies across 6 locations in WI and MI. Responsible for all actions including training, personnel actions, deployments and redeployments. Deployed more than 400 soldiers to Iraq and Afghanistan.

Sep 2001 to Jun 2003 – Brigade Deputy Commander – Staff of 56 with responsibility for 2500+ soldiers, 13 full time staff, in 4 Battalions across the state of Minnesota.

May 2000 to Jun 2001 - Brigade Director of Operations and Plans with a staff of 8 to plan and execute operations and training for a 2500+ member brigade.

May 1998 to May 2000 – Division Chief - Force Integration, 88<sup>th</sup> Region – Leads staff of 8 responsible for implementing unit stationing actions for 250+ units across 6 states.

#### **Nov 1984 to May 1998 Army Reserve Major and Captain**

Jun 1996 to May 1998 – Division Operations and Training Officer, 88<sup>th</sup> RRC

Feb 1993 to Jun 1996 - Resource Management Officer, US Army Information Sys Cmd

Feb 1990 to Feb 1993 – Theater Tactical Planning Officer, US Army Info Sys Cmd

Nov 1986 to Feb 1990 – Engineering Actions Officer, US Army Info Sys Cmd

Jan 1985 to May 1986 – Battalion Personnel and Admin Officer, 124<sup>th</sup> Signal Battalion

#### **Active Duty, United States Army, Commissioned Officer**

**Jun 1983 to Nov 1984** *Battalion Maintenance Officer (Captain), Signal Battalion.*

Led battalion and four company maintenance operations of 6 officers and 89 repairmen. Maintained mobile communication equipment (570 vehicles and power generation equipment) with an annual material budget of \$520,000.

Initiated operator training and equipment scheduled services to improve readiness. Negotiated changes to work practices which helped eliminate maintenance backlogs and improved quality assurance. Improved readiness from 70% to 90%.

#### **Aug 1982 to Jun 1983** *Company Executive Officer/Platoon Leader (First Lieutenant), Signal Company*

- Led company repair operations of 18 repairmen. Maintained mobile communication equipment (210 vehicles and power generation equipment) with an annual material budget of \$120,000. Initiated procedures to solve short range problems while correcting long term systemic problems.

- Led platoon of 85 soldiers and noncommissioned officers. Provided mobile field communications to the Division Commander and his primary staff. Negotiated process changes which improved field communications for division headquarters and cut installation time in half.

**Jan 1980 to Aug 1982 *Communication Officer/Platoon Leader, Armor Battalion.***

Led 25 soldiers and noncommissioned officers. Communication expert to the Armor Battalion Commander. Implemented preventive maintenance procedures.

Planned, engineered and executed effective communications during an extended desert exercise at the national training center.

**EDUCATION:** BSEE, May 1979, Iowa State University,

**CERTIFICATIONS:** Licensed Professional Engineer, State of Minnesota

**TRAINING:**

- Engineer Project Management budgeting and accounting.
- Command and General Staff Officer Course (Senior Leadership and Staff Effectiveness).
- Combined Arms Services Staff School, Effective Communication (Speaking/Writing) and Problem Solving.
- Engineer and Communications Officer Basic and Advanced Leadership Training as a US Army Officer.



South Minneapolis STUDY

|      |                                      |  |  |  |  |  |  |  |     |     |      |  |       |  |       |       |       |       |       |       |  |  |
|------|--------------------------------------|--|--|--|--|--|--|--|-----|-----|------|--|-------|--|-------|-------|-------|-------|-------|-------|--|--|
|      | 1/2% Growth Rate % Utilization       |  |  |  |  |  |  |  | 76% | 78% | 77%  |  | 77%   |  | 78%   | 78%   | 78%   | 80%   | 82%   | 84%   |  |  |
| Peak | Difference (in kVA) from DAA to 1/2% |  |  |  |  |  |  |  | 0   | 0   | 6376 |  | 10787 |  | 13283 | 15825 | 18402 | 32569 | 48200 | 65430 |  |  |

| Greater Area - Substation Transformer Load History, Forecast |                 |           |         |              |              |              |              |              |              |              |              |              |              |           |                 |        |                             |        |        |        |        |        |         |          |
|--|-----------------|-----------|---------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|-----------------|--------|-----------------------------|--------|--------|--------|--------|--------|---------|----------|
|  | # of<br>feeders | Nameplate | Normal  | 2000<br>Peak | 2001<br>Peak | 2002<br>Peak | 2003<br>Peak | 2004<br>peak | 2005<br>Peak | 2006<br>Peak | 2007<br>Peak | 2008<br>Peak | 2009<br>Peak | 2009 Fcst | 2010<br>Actuals | 2010   | 2011<br>Actuals<br>(prelim) | 2011   | 2012   | 2013   | 2018   | 2023   | 2028    |          |
| SOUTR1   |                 |           | 71709   | 44100        | 59600        | 59100        | 65800        | 63000        | 64000        | 66260        | 56100        | 54400        | 60830        | 54683     |                 | 55323  |                             | 55974  | 56632  | 57295  | 60770  | 64456  | 68365   | 1.060651 |
| SOUTR2   |                 |           | 74099   | 49000        | 53900        | 48000        | 46300        | 55000        | 57500        | 55490        | 54714        | 55270        | 49460        | 56195     |                 | 57081  |                             | 57987  | 58904  | 59832  | 64737  | 70044  | 75786   | 1.08198  |
| SOUTR3   |                 |           | 68327   | 60400        | 63700        | 59000        | 55000        | 50000        | 62146        | 62970        | 61910        | 62850        | 56800        | 63773     |                 | 64613  |                             | 65466  | 66331  | 67209  | 71683  | 76455  | 81544   | 1.066568 |
|  |                 |           |         |              |              |              |              |              |              |              |              |              |              |           |                 |        |                             |        |        |        |        |        |         |          |
| ALDTR2   | 5               | 70000     | 71709   | 32200        | 32000        | 38000        | 36700        | 38200        | 34603        | 28970        | 29690        | 27730        | 30400        | 30192     |                 | 30576  |                             | 30965  | 31360  | 31760  | 34256  | 36948  | 39852   | 1.078589 |
| ALDTR3   | 8               | 70000     | 71709   | 55600        | 55500        | 50400        | 51000        | 40300        | 43000        | 47260        | 52960        | 49220        | 50570        | 52218     |                 | 52736  |                             | 53264  | 54180  | 54731  | 57500  | 60409  | 63465   | 1.050593 |
| ALDTR4   | 8               | 70000     | 71709   | 66400        | 71300        | 50300        | 46300        | 57000        | 58268        | 56870        | 55430        | 62880        | 60260        | 62217     |                 | 64739  |                             | 65479  | 66213  | 66956  | 70799  | 74863  | 79159   | 1.057396 |
| ELPTR1   | 6               | 47000     | 51054   | 31900        | 34300        | 34300        | 30200        | 34000        | 37785        | 33730        | 34420        | 38140        | 35910        | 34951     |                 | 35396  |                             | 35845  | 36302  | 36766  | 39186  | 41765  | 44514   | 1.065822 |
| ELPTR2   | 6               | 47000     | 51870   | 30600        | 32700        | 31400        | 29000        | 32900        | 33000        | 32520        | 36210        | 37910        | 36660        | 34307     |                 | 34649  |                             | 34995  | 35345  | 35699  | 37520  | 39434  | 41445   | 1.05101  |
| ELPTR3   | 7               | 47000     | 51054   | 29800        | 32100        | 28000        | 26000        | 33000        | 42632        | 47180        | 37031        | 42910        | 42910        | 41372     |                 | 43655  |                             | 44282  | 44920  | 45568  | 49030  | 52755  | 56763   | 1.075974 |
| SOUTR1   | 8               | 70000     | 71709   | 44100        | 59600        | 59100        | 65800        | 63000        | 64000        | 66880        | 56100        | 54400        | 60830        | 54683     | 57720           | 55323  | 55388                       | 55974  | 56632  | 57295  | 60770  | 64456  | 68365   | 1.060651 |
| SOUTR2   | 7               | 70000     | 74099   | 49000        | 53900        | 48000        | 46300        | 55000        | 57500        | 56600        | 54714        | 55270        | 49460        | 56195     | 51570           | 57081  | 61745                       | 57987  | 58904  | 59832  | 64737  | 70044  | 75786   | 1.08198  |
| SOUTR3   | 8               | 62500     | 68327   | 60400        | 63700        | 59000        | 55000        | 50000        | 62146        | 63230        | 61910        | 62850        | 56800        | 63773     | 61620           | 64613  | 65598                       | 65466  | 66331  | 67209  | 71683  | 76455  | 81544   | 1.066568 |
| SLPTR4   | 7               | 70000     | 76527   | 51400        | 44000        | 49000        | 53000        | 54800        | 62146        | 57430        | 53340        | 53840        | 52720        | 56759     |                 | 57768  |                             | 58808  | 59872  | 60951  | 66629  | 72836  | 79621   | 1.093157 |
| SLPTR5   | 7               | 70000     | 71709   | 52300        | 54700        | 48700        | 53500        | 56300        | 54000        | 45940        | 53360        | 51790        | 51480        | 54009     |                 | 55013  |                             | 56036  | 57079  | 58142  | 63773  | 69949  | 76724   | 1.096849 |
| SLPTR6   | 7               | 70000     | 71709   | 45700        | 57200        | 43900        | 46500        | 46600        | 49717        | 49710        | 41030        | 39420        | 36560        | 40818     |                 | 41578  |                             | 42349  | 43138  | 43939  | 48177  | 52824  | 57919   | 1.096452 |
| WILTR1   | 1               | 42000     | 42183   | 37600        | 42500        | 38100        | 40200        | 34800        | 42350        | 0            | 0            | 0            | 0            | 0         |                 |        |                             |        |        |        |        |        |         |          |
| WILTR2   | 1               | 42000     | 42183   | 24000        | 27000        | 22600        | 29700        | 42000        | 31270        | 0            | 0            | 0            | 0            | 0         |                 |        |                             |        |        |        |        |        |         |          |
| WILTR3   | 9               | 70000     | 71709   | 63000        | 68600        | 65800        | 65100        | 67000        | 75440        | 74810        | 63260        | 65450        | 56600        | 68576     |                 | 69633  |                             | 70707  | 71799  | 72909  | 78741  | 85040  | 91842   | 1.07999  |
| WILTR4   | 9               | 70000     | 76527   | 49000        | 57200        | 51300        | 52500        | 54700        | 55540        | 68190        | 69636        | 70690        | 61750        | 71900     |                 | 73044  |                             | 74208  | 75394  | 76602  | 82987  | 89904  | 97398   | 1.083353 |
| WILTR5   | 8               | 70000     | 76527   |              |              |              |              | 0            | 0            | 62070        | 57214        | 56052        | 57080        | 55015     |                 | 55687  |                             | 56368  | 57057  | 57756  | 61394  | 65261  | 69372   | 1.062989 |
|  |                 |           |         |              |              |              |              |              |              |              |              |              |              |           |                 |        |                             |        |        |        |        |        |         |          |
| Big Box Total  |                 |           | 1112314 | 723000       | 786300       | 717900       | 726800       | 759600       | 803397       | 791390       | 756305       | 768552       | 739990       | 776985    |                 | 791491 |                             | 802733 | 814526 | 826115 | 887182 | 952943 | 1023771 |          |
| 1/2% Growth  |                 |           |         |              |              |              |              |              |              |              | 795347       | 799324       | 803320       | 803320    |                 | 807337 |                             | 811374 | 815430 | 819508 | 840201 | 861417 | 883169  |          |
|  |                 |           |         |              |              |              |              |              |              |              |              |              |              |           |                 |        |                             |        |        |        |        |        |         |          |
| ALD  | 21              | 210000    | 215127  | 154200       | 158800       | 138700       | 134000       | 135500       | 135871       | 133100       | 138080       | 139830       | 141230       | 144627    |                 | 148051 |                             | 149708 | 151753 | 153447 | 162555 | 172220 | 182477  |          |
| ELP  | 19              | 141000    | 153978  | 92300        | 99100        | 93700        | 85200        | 99900        | 113417       | 113430       | 107661       | 118960       | 115480       | 110630    |                 | 113700 |                             | 115122 | 116567 | 118033 | 125736 | 133954 | 142723  |          |
| SOU  | 23              | 202500    | 214135  | 153500       | 177200       | 166100       | 167100       | 168000       | 183646       | 186710       | 172724       | 172520       | 167090       | 174651    | 170910          | 177017 | 182731                      | 179427 | 181867 | 184336 | 197190 | 210955 | 225696  |          |
| SLP  | 21              | 210000    | 219945  | 149400       | 155900       | 141600       | 153000       | 157700       | 165863       | 153080       | 147730       | 145050       | 140760       | 151586    |                 | 154359 |                             | 157193 | 160089 | 163032 | 178579 | 195609 | 214264  |          |
| WIL  | 26              | 210000    | 224763  | 173600       | 195300       | 177800       | 187500       | 198500       | 204600       | 205070       | 190110       | 192192       | 175430       | 195491    |                 | 198364 |                             | 201283 | 204250 | 207267 | 223122 | 240205 | 258612  |          |
| Big Total  | 110             | 973500    | 1027948 | 723000       | 786300       | 717900       | 726800       | 759600       | 803397       | 791390       | 756305       | 768552       | 739990       | 776985    |                 | 791491 |                             | 802733 | 814526 | 826115 | 887182 | 952943 | 1023771 |          |
| SOU Total  | 23              | 210000    | 214135  | 153500       | 177200       | 166100       | 167100       | 168000       | 183646       | 186710       | 172724       | 172520       | 167090       | 174651    | 170910          | 177017 | 182731                      | 179427 | 181867 | 184336 | 197190 | 210955 | 225696  |          |
| Big kW   |                 | 954030    | 1007389 | 708540       | 770574       | 703542       | 712264       | 744408       | 787329       | 775562       | 741179       | 753181       | 725190       | 761445    |                 | 775661 |                             | 786678 | 798235 | 809593 | 869438 | 933884 | 1003295 |          |
| SOU kW   |                 | 205800    | 209852  | 150430       | 173656       | 162778       | 163758       | 164640       | 179973       | 182976       | 169270       | 169070       | 163748       | 171158    | 167492          | 173477 | 179076                      | 175838 | 178230 | 180649 | 193246 | 206736 | 221182  |          |
| % Utilization-big box  |                 |           |         | 70%          | 76%          | 70%          | 71%          | 74%          | 78%          | 77%          | 74%          | 75%          | 72%          | 76%       |                 | 77%    |                             | 78%    | 79%    | 80%    | 86%    | 93%    | 100%    |          |
| No 35kV  |                 |           |         |              |              |              |              |              |              |              |              |              |              |           |                 |        |                             |        |        |        |        |        |         |          |
| 1/2% SOU Growth  |                 |           |         |              |              |              |              |              |              |              |              |              |              | 173383    |                 | 174250 |                             | 175121 | 175996 | 176876 | 181343 | 185922 | 190617  |          |
| 1/2% Big Box Growth  |                 |           |         |              |              |              |              |              |              |              |              |              |              | 772395    |                 | 776257 |                             | 780138 | 784039 | 787959 | 807856 | 828255 | 849170  |          |
| 1/2%SOU kW   |                 |           |         |              |              |              |              |              |              |              |              |              |              | 169915    |                 | 170765 |                             | 171618 | 172476 | 173339 | 177716 | 182203 | 186804  |          |
| 1/2%Big kW   |                 |           |         |              |              |              |              |              |              |              |              |              |              | 756947    |                 | 760732 |                             | 764535 | 768358 | 772200 | 791699 | 811690 | 832186  |          |
| % Utilization-big box 1/2 % growth                           |                 |           |         | 70%          | 76%          | 70%          | 71%          | 74%          | 78%          | 77%          | 74%          | 75%          | 72%          | 75%       |                 | 76%    |                             | 76%    | 76%    | 77%    | 79%    | 81%    | 83%     |          |



IN THE MATTER OF THE  
APPLICATION OF NORTHERN  
STATES POWER COMPANY, A  
MINNESOTA CORPORATION, FOR  
A CERTIFICATE OF NEED FOR  
TWO HIGH VOLTAGE 115Kv  
TRANSMISSION LINES IN THE  
MIDTOWN AREA OF SOUTH  
MINNEAPOLIS, HENNEPIN  
COUNTY

MPUC DOCKET NO. E002/CN-10-694

### **CERTIFICATE OF SERVICE**

Jill N. Yeaman certifies that on the 30th day of September, 2011, she filed a true and correct copy of Northern States Power Company's Direct Testimonies and Schedules of Paul J. Lehman, Pamela J. Rasmussen and Scott Zima, filed today via eDocket ([www.edockets.state.mn.us](http://www.edockets.state.mn.us)). Said document(s) were also served via U.S. Mail and emailed as designated on the Official Service List on file with the Minnesota Public Utilities Commission and as attached hereto.

/s/ Jill N. Yeaman

Service List Member Information

Electronic Service Member(s)

| Last Name      | First Name    | Email                                 | Company Name                                    | Delivery Method    | View Trade Secret |
|----------------|---------------|---------------------------------------|---|--------------------|-------------------|
| Agrimonti      | Lisa          | lagrimonti@briggs.com                 | Briggs And Morgan, P.A.                         | Electronic Service | No                |
| Anderson       | Julia         | Julia.Anderson@ag.state.mn.us         | Office of the Attorney General-DOC              | Electronic Service | No                |
| Benson         | Douglas       | douglas.benson@state.mn.us            | Department of Health                            | Electronic Service | No                |
| Conover        | Corey         | corey.conover@ci.minneapolis.mn.us    | City Of Minneapolis                             | Electronic Service | No                |
| DeBleeckere    | Patricia      | tricia.debleeckere@state.mn.us        | Public Utilities Commission                     | Electronic Service | Yes               |
| Doneen         | Randall       | randall.doneen@dnr.state.mn.us        | Department of Natural Resources                 | Electronic Service | No                |
| Elwood         | Ron           | relwood@mnlsap.org                    | Legal Services Advocacy Project                 | Electronic Service | No                |
| Ferguson       | Sharon        | sharon.ferguson@state.mn.us           | Department of Commerce                          | Electronic Service | No                |
| Freeman        | Jeff          | Jeff.Freeman@state.mn.us              | DEED  | Electronic Service | No                |
| Germundson     | Travis        | travis.germundson@state.mn.us         | N/A   | Electronic Service | No                |
| Gunn           | Bradley       | bjg@mgmlp.com                         | Malkerson Gunn Martin LLP                       | Electronic Service | No                |
| Gustafson      | Eric          | eric@corcoranneighborhood.org         | Corcoran Neighborhood Organization              | Electronic Service | No                |
| Haar           | Burl W.       | burl.haar@state.mn.us                 | Public Utilities Commission                     | Electronic Service | No                |
| Hammel         | Karen Finstad | Karen.Hammel@ag.state.mn.us           | Office of the Attorney General-DOC              | Electronic Service | Yes               |
| Hart           | Eric          | hart3151@tcq.net                      | Longfellow Community Council                    | Electronic Service | No                |
| Hayashida      | Leslie        | Leslie.M.Hayashida@wellsfargo.com     | Wells Fargo & Company                           | Electronic Service | No                |
| Herring        | Valerie       | vherring@briggs.com                   | Briggs and Morgan, P.A.                         | Electronic Service | No                |
| Heydinger      | Beverly       | beverly.heydinger@state.mn.us         | Office of Administrative Hearings               | Electronic Service | Yes               |
| Heyer          | Shirley       | shirleymidtownphillips@msn.com        | Midtown Phillips Neighborhood Association, Inc. | Electronic Service | No                |
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