Direct Testimony and Schedules
Michael A. Peppin

Before the South Dakota Public Utilities Commission
State of South Dakota

In the Matter of the Application of Northern States Power Company
for Authority to Increase Rates for Electric Service in South Dakota

Docket No. EL12-____
Exhibit___(MAP-1)

Class Cost of Service Study
and
Selected Rate Design

June 29, 2012

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Schedules

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Michael A. Peppin. My business address is 414 Nicollet Mall, 7th Floor, Minneapolis, Minnesota, 55401.

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

A. I am employed by Northern States Power Company – Minnesota (NSPM) operating company of Xcel Energy, Inc. My title is Principal Pricing Analyst. I am providing testimony on behalf of Northern States Power Company.

Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS AND EXPERIENCE.

A. My qualifications include more than 30 years of experience with the Company in the areas of market research and cost-of-service analysis. A detailed statement of my qualifications and experience is provided as Exhibit___(MAP-1), Schedule 1.

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

A. The purpose of my testimony is to present the Company's proposed Class Cost of Service Study (CCOSS) and selected items from the Company's proposed rate design. Company witness Mr. Steven V. Huso will present the remainder of the Company's proposed rate design changes.

Q. MR. PEPPIN, PLEASE LIST EACH OF THE COST OF SERVICE AND RATE DESIGN TOPICS YOU WILL ADDRESS IN YOUR TESTIMONY.

A. The topics I will address are as follows:

- Class Cost of Service Study Results

- Selected Rate Design Revision – Voltage Discounts

II. CLASS COST OF SERVICE STUDIES

A. Proposed Class Cost of Service Study

Q. HOW DOES THE COMPANY'S PROPOSED CCOSS COMPARE WITH THAT APPROVED BY THE SOUTH DAKOTA PUBLIC SERVICE COMMISSION IN THE COMPANY'S LAST GENERAL ELECTRIC RATE CASE, DOCKET NO. EL11-019?

A. The Company's proposed CCOSS reflects pro forma 2011 data, but no changes have been made in the cost-study process or allocation methods approved by the Commission in the last general electric rate case.

Q. MR. PEPPIN, HAS THE COMPANY PROVIDED ANY OTHER DOCUMENTS EXPLAINING HOW ITS CCOSS IS DEVELOPED?

A. Yes. The Company has provided a document titled "Guide to Class Cost of Service Study." This document is included with my testimony as Exhibit___(MAP-1), Schedule 2. It provides a primer on how the CCOSS was conducted, including the processes of cost functionalization, classification and allocation. These basic processes are common to all embedded cost studies. This Guide also describes how each of the cost allocation factors was developed and identifies the cost items to which each allocator is applied.

Q. PLEASE SUMMARIZE THE RESULTS OF THE PROPOSED CCOSS.

A. Table 1 below provides a summary of the CCOSS results at the class level. More information is shown on Exhibit___(MAP-1), Schedule 3. The detailed CCOSS output is shown on Exhibit___(MAP-1), Schedule 4, and on Exhibit___(NSP-1), Statement O, located in Volume 1.

Table 1 below shows the resulting class cost responsibilities (as opposed to proposed revenue responsibilities, which are addressed by Mr. Huso). These CCOSS results indicate what change from present rates would be necessary to result in equal rates of return on investment for each class (i.e. the increase in rates necessary to produce equalized rates of return).

Table 1

Summary of Class Cost of Service Study ($000)

UNADJUSTED COST RESPONSIBILITIES

		Total	Resid.	Non-Demand	Demand	Street Ltg
[1]	Unadjusted Rate Revenue Reqt (CCOSS page 2, line 2)	187,420	81,463	9,820	94,290	1,846
[2]	Incr Misc Chrgs & Late Pay (CCOSS page 7, line 21+ line 23)	0	0	0	0	0
[3]	Unadjusted Operating Revenues (line 2 + line 3)	187,420	81,463	9,820	94,290	1,846
[4]	Present Rates (CCOSS page 2, line 3)	168,052	70,525	9,026	86,802	1,699
[5]	Unadjusted Deficiency (line 3 - line 4)	19,368	10,939	794	7,488	147
[6]	Defic / Pres (line 5 / line 4)	11.5%	15.5%	8.8%	8.6%	8.6%
[7]	**Ratio: Class % / Total %**	**1.00**	**1.35**	**0.76**	**0.75**	**0.75**

CAPACITY COST RESPONSIBILITIES FOR INTERRUPTIBLE RATE DISCOUNTS

		Total	Resid	Non-Demand	Demand	Street Ltg
[8]	Interruption Rate Discounts (CCOSS page 2, line 6)	2,700	1,089	23	1,588	0
[9]	Interruption Capacity Costs (CCOSS page 2, line 7)	2,700	1,247	123	1,321	8
[10]	Revenue Requirement Shift (line 9 - line 8)	0	159	100	(266)	8

ADJUSTED COST RESPONSIBILITIES: TY 2011

		Total	Resid	Non-Demand	Demand	Street Ltg
[11]	Adjusted Rate Revenue Reqt (line 1 + line 10)	187,420	81,622	9,920	94,024	1,854
[12]	Incr Misc Chrgs & Late Pay (CCOSS page 7, line 21+ line 23)	0	0	0	0	0
[13]	Adjusted Operating Revenues (line 11 + line 12)	187,420	81,622	9,920	94,024	1,854
[14]	Present Rates (line 4)	168,052	70,525	9,026	86,802	1,699
[15]	Adjusted Deficiency (line 13 - line 14)	19,368	11,098	894	7,222	155
[16]	Defic / Pres Rates (line 15 / line 4)	11.5%	15.7%	9.9%	8.3%	9.1%
[17]	**Ratio: Class % / Total %**	**1.00**	**1.37**	**0.86**	**0.72**	**0.79**

Table 1 replicates Exhibit__(MAP-1), Schedule 3. Schedule 3 also provides for comparison purposes, the class revenue allocations proposed by Mr. Huso.

Q. IN TABLE 1, YOU SHOW "ADJUSTED" AND "UNADJUSTED" COST RESPONSIBILITIES. PLEASE SUMMARIZE WHAT THIS DISTINCTION MEANS.

A. The distinction between "adjusted" and "unadjusted" cost responsibilities relates to how the "cost" of interruptible capacity is reflected in the CCOSS. The method used to reflect those costs is the same as that used in the Company's last general electric rate case, Docket No. EL11-019.

Unadjusted cost responsibilities are those that were historically used as the indicators of class cost responsibilities. However, as the size of the Company's interruptible programs grew, it became clear that these traditional unadjusted cost responsibilities did not properly account for the fact that interruptible rate discounts are really the "cost" of this particular source of generation peaking capacity. Therefore, the Company modified the CCOSS to produce adjusted cost responsibilities. The adjusted cost responsibilities appropriately account for the cost of this particular source of peaking capacity. Doing so is appropriate and important, because interruptible rate discounts (lost revenues) are a real cost of service arising from this particular alternative source of peaking capacity.

Q. PLEASE ELABORATE ON WHY INTERRUPTIBLE RATE DISCOUNTS ARE A COST OF GENERATION PEAKING CAPACITY.

A. As the Company indicated in previous rate cases, the economic essence of a utility's "obligation to serve" is to provide low-cost reliable firm electric service. Interruptible "service" is really firm service, attached to which is an after-the-fact purchased-power contract provision. Through this contract provision, the Company has the option to buy back (from willing customers) all or part of their "regulatory entitlement" to firm service. The resulting

capacity purchase transactions occur when, and if, doing so is a cost-effective source of peaking capacity, which helps the Company obtain a reliable power-supply portfolio at the lowest cost. This means interruptible rate discounts are really power-supply costs, and they need to be recognized as such in the CCOSS.

Q. HOW DID YOU RECOGNIZE THIS COST IN THE CCOSS?

A. To accomplish this interruptible capacity cost accounting, the Company has added lines to the CCOSS model.

1. Line 8 on Table 1 above and Exhibit___(MAP-1), Schedule 3, labeled "Interruption Rate Discounts," shows the amount of the total interruptible discount originating from each class.
2. Line 9 on page Table 1 above and Exhibit___(MAP-1), Schedule 3, labeled "Interruption Capacity Cost," shows how this interruptible-capacity cost is allocated to the classes using the applicable generation capacity cost allocation factor.
3. The resulting Line 11 on Table 1 above and Exhibit___(MAP-1), Schedule 3, labeled "Adjusted Rate Revenue Requirement," shows the appropriate cost of service for determining class cost responsibilities.

Q. PLEASE EXPLAIN HOW THE RESULTS OF THE COMPANY'S PROPOSED CCOSS ARE USED IN DEVELOPING THE PROPOSED RATES.

A. The Company uses the proposed CCOSS as the basis for evaluating and refining its rate structure. Mr. Huso uses it as a guide in determining the proposed class revenue responsibilities and for determining the proposed rate design for each tariff. The Company's proposed revenue allocation is provided on Exhibit___(MAP-1), Schedule 3, lines 18 through 23.

III. SELECTED RATE DESIGN REVISIONS: VOLTAGE DISCOUNTS

Q. WHAT REVISIONS DO YOU PROPOSE TO THE VOLTAGE DISCOUNTS THAT ARE A PART OF THE C&I DEMAND TARIFFS?

A. The results of the 2011 pro forma CCOSS indicates that no change in the demand charge discounts is warranted (as shown on Exhibit___(MAP-1), Schedule 5, page 1, lines 4 and 6). However, as shown on Exhibit __ (MAP-1), Schedule 5, page 2, columns 4 and 6, an increase in energy charge discounts is appropriate to move rates closer to the cost of service.

Table 2 below summarizes the cost analysis provided in Exhibit___(MAP-1), Schedule 5. It compares the pro forma 2011 costs to the present and proposed voltage discounts.

Table 2

Voltage Discount Analysis

C&I Voltage Discounts - Demand			
Rate	**Primary**	**Transmission Transformed**	**Transmission**
Revenue Req	**$0.648**	**$1.26**	**$1.90**
Present	**$0.70**	**$1.40**	**$2.00**
Midpoint	**$0.67**	**$1.33**	**$1.95**
Proposed	**$0.70**	**$1.40**	**$2.00**
C&I Voltage Discounts - Energy			
Rate	**Primary**	**Transmission Transformed**	**Transmission**
Revenue Req	**0.1120¢**	**0.2703¢**	**0.2896¢**
Present	**0.10¢**	**.25¢**	**0.27¢**
Proposed	**0.11¢**	**0.27¢**	**0.29¢**

IV. CONCLUSION

Q. MR. PEPPIN, PLEASE PROVIDE A SUMMARY OF THE CONCLUSIONS FROM YOUR TESTIMONY.

A. In summary, based on the results of the CCOSS, the major customer classes have the following revenue deficiencies, stated as a percentage of present revenues:

- Residential Customers 15.7%
- Commercial Non Demand Customers 9.9%
- Commercial and Industrial Demand Billed Customers 8.3%
- Lighting 9.1%

The Company also proposes the following changes to the Energy voltage discounts:

Voltage Level	VOLTAGE DISCOUNTS – ENERGY PER KWH	
	Current Discount	Proposed Discount
Primary	**$0.0010**	**$0.0011**
Transmission Transformed	**$0.0025**	**$0.0027**
Transmission	**$0.0027**	**$0.0029**

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.