

Surrebuttal Testimony
Mark A. Hervey

State of Minnesota
Before the Office of Administrative Hearings
For the Minnesota Public Utilities Commission

*In the Matter of a Petition by Excelsior Energy Inc. for Approval of a Power
Purchase Agreement Under Minn. Stat. § 216B.1694, Determination of Least
Cost Technology, and Establishment of a Clean Energy Technology Minimum
Under Minn. Stat. § 216B.1693*

OAH Docket No. 12-2500-17260-2
PUC Docket No. E6472/M-05-1993

Rate Impacts

October 31, 2006

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1 **I. INTRODUCTION**

2
3 Q. PLEASE STATE YOUR NAME.

4 A. My name is Mark A. Hervey.

5
6 Q. HAVE YOU PROVIDED DIRECT TESTIMONY IN THIS CASE?

7 A. Yes. I provided Direct Testimony regarding the incremental impact on
8 Minnesota electric rates if Xcel Energy entered into the 603 MW power
9 purchase agreement (“Mesaba 1 PPA”) proposed in this proceeding.

10
11 **II. PURPOSE**

12
13 Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY IN THIS
14 PROCEEDING?

15 A. I respond to the Rebuttal Testimony of Mesaba 1 LLC’s witness Joseph
16 Cavicchi. Specifically, I discuss:

- 17 • development of a rate impact analysis,
18 • inclusion of capital structure and transmission costs, and
19 • the difference between the Strategist present value revenue
20 requirements (“PVERR”) analysis and an annual revenue requirements
21 analysis.

22
23 Q. HAS MR. CAVICCHI’S REBUTTAL TESTIMONY CAUSED YOU TO CHANGE THE
24 RATE IMPACT ANALYSIS YOU PROVIDED IN YOUR DIRECT TESTIMONY?

25 A. No. As explained in my Direct Testimony, to determine the incremental rate
26 impact of the Mesaba 1 PPA, I compared the generation revenue
27 requirements associated with our approved Resource Plan to the generation

1 revenue requirements associated with the Mesaba 1 PPA. I included the
2 impact that the Mesaba 1 PPA would have on Xcel Energy's capital structure
3 and the transmission revenue requirements associated with delivery of Mesaba
4 Unit 1's output to Xcel Energy's system. My analysis is consistent with the
5 way the Minnesota Public Utilities Commission (the "Commission") sets
6 rates. I continue to estimate that in the first full year under the Mesaba 1
7 PPA, rates would be between 8 and 12 percent higher than under our
8 approved Resource Plan.

9 10 **III. ASSESSMENT**

11 12 **A. Rate Impact Analysis**

13 Q. DO YOU AGREE WITH MR. CAVICCHI THAT HIS ALTERNATIVE CALCULATION
14 RESULTING IN A ONE-HALF PERCENT RATE IMPACT FROM THE MESABA 1 PPA
15 IS "MORE APPROPRIATE, LOGICAL, AND STRAIGHTFORWARD?"

16 A. No. First, Mr. Cavicchi's analysis is based on a number of significant cost
17 adjustments that reduce the incremental cost of the Mesaba 1 PPA. For
18 example, Mr. Cavicchi's analysis does not include the transmission-related
19 costs and the costs related to capital structure impacts that were included in
20 my analysis. I explain why these adjustments are inappropriate later in my
21 Surrebuttal Testimony. In addition, his analysis reflects adjustments that
22 Maria Scheller made to the fuel costs and capital costs used in the Strategist
23 modeling of the cost impact of the Mesaba 1 PPA. The Surrebuttal
24 Testimony of Ms. Elizabeth Engelking addresses these adjustments.

25
26 Second, Mr. Cavicchi disregards how rates are set by the Commission. He
27 fails to follow the "test year" method of isolating the cost of an element of

1 service in a given year, in this case the Mesaba 1 PPA, and then determining
2 the rate increase required to recover the revenue requirements for that cost.

3
4 Q. WHAT IS THE “TEST YEAR” APPROACH YOU FOLLOWED IN YOUR RATE IMPACT
5 ANALYSIS?

6 A. The Commission employs the “test year” approach to setting rates. Under
7 this approach, all the costs of service a utility will incur within a one year
8 period are identified, along with the return allowed on those costs, to
9 determine the revenue requirement necessary to recover the utility’s costs and
10 allowed return. The test year can be a calendar year or a non-calendar 12-
11 month period. In either event, the costs included are only those that are
12 expected to occur within the chosen test year. Individual costs from past
13 years are not moved forward into the test year, nor are costs from future years
14 included in the test year. To do so would violate the test year concept. The
15 test year approach is also used to isolate the rate impact of adding a particular
16 cost item that is not currently recovered in a utility’s rates. The revenue
17 required in a particular year to recover the added costs is determined and then
18 converted to the percent increase in current customer rates necessary to
19 recover the revenue requirement.

20
21 Q. HOW DOES MR. CAVICCHI’S RATE IMPACT ANALYSIS VIOLATE THE TEST YEAR
22 CONCEPT?

23 A. He reduces the PPA’s total twenty-year cost difference over our Resource
24 Plan to its net present value, and then annualizes the recovery as an annuity (a
25 levelized amount) over twenty years to arrive at his estimated rate impact for
26 the Mesaba 1 PPA. Mr. Cavicchi’s analysis is not a rate impact analysis. It is
27 an analysis that is often used to determine how to understand the cost of a

1 particular item, particularly in relation to another item, but it is not used to
2 determine how that item's cost would be recovered from customers in a
3 utility's rates.

4
5 Q. HAS XCEL ENERGY PROVIDED THE COMMISSION RATE IMPACT ANALYSES IN
6 OTHER DOCKETS THAT ARE CONSISTENT WITH THE ANALYSIS YOU PROVIDED
7 FOR THE MESABA 1 PPA?

8 A. Yes. My rate impact analysis here is consistent with the analysis done in the
9 Metropolitan Emissions Reduction Project ("MERP") docket, where the
10 Commission asked Xcel Energy to provide for its review the cost increase
11 that ratepayers would see on their monthly bills if the MERP Project were
12 approved.

13
14 **B. Capital Structure and Transmission Costs**

15 Q. WHY WERE THE TRANSMISSION AND CAPITAL STRUCTURE COSTS XCEL
16 ENERGY WOULD INCUR IF IT ENTERED INTO THE MESABA 1 PPA INCLUDED
17 IN YOUR RATE IMPACT ANALYSIS?

18 A. The Clean Energy Technology statute, Minn. Stat. § 216B.1693, specifically
19 states that in determining whether a clean energy technology is least-cost, one
20 must include the costs for transmission and other ancillary services. In
21 addition, at its July 27, 2006 hearing on transmission and other issues in this
22 proceeding, the Commission asked that the record include information on the
23 total costs that will be borne by Xcel Energy ratepayers for energy to be
24 delivered from the Mesaba plant to Xcel Energy's load. Thus, I included the
25 transmission and capital structure costs Xcel Energy would incur – and
26 ratepayers would pay for – if it were ordered to enter into the Mesaba 1 PPA.
27 As I explained in my Direct Testimony, I received the capital structure costs

1 from Mr. George Tyson, and the transmission costs from Mr. Richard
2 Gonzalez and Mr. Dean Schiro.

3
4 **C. Strategist PVRR vs. Annual Revenue Requirements Analysis**

5 Q. MR. CAVICCHI'S EXHIBIT___(AJC-6) SHOWS THAT FOR THE "BASE CASE," HIS
6 NET PRESENT VALUE CONVERSION OF YOUR REVENUE REQUIREMENTS DATA
7 FROM STRATEGIST DOES NOT MATCH THE STRATEGIST NET PRESENT VALUE
8 OF SYSTEM GENERATION COSTS PROVIDED BY MS. ENGELKING. PLEASE
9 EXPLAIN THIS.

10 A. When evaluating the total cost impact of different resource expansion plans,
11 Strategist calculates the *present value* revenue requirements for each plan. In
12 the PVRR analysis, Strategist calculates the *economic carrying charge* ("ECC")
13 for new units added in the expansion plan. The ECC has the same present
14 value as the unit's conventional revenue requirements but the ECC increases
15 over time whereas revenue requirements tend to decrease. This methodology
16 removes the bias against adding large capital-intensive projects by
17 redistributing the timing of costs. For the analysis of the rate impact of
18 different plans, Strategist follows the cost recovery methodology that is used
19 in setting rates in Minnesota. Because these are different calculations, the
20 Strategist annual revenue requirement value that I use to calculate a rate
21 impact on customers for a particular expansion plan would not likely match
22 the Strategist present value revenue requirement that Ms. Engelking uses to
23 assess the relative costs between expansion plans.

24
25 Q. DO YOU AGREE WITH MR. CAVICCHI THAT THERE ARE INCONSISTENCIES
26 BETWEEN THE STRATEGIST REVENUE REQUIREMENT DATA YOU RELIED ON
27 TO SUPPORT YOUR RATE IMPACT ANALYSIS AND THE STRATEGIST REVENUE

1 REQUIREMENT OUTPUTS PROVIDED TO MESABA 1 LLC BY MS. ELIZABETH
2 ENGELKING?

3 A. No. A review of Mr. Cavicchi's Exhibit____(AJC-6) detailing the supposed
4 inconsistencies shows that on each line in the Exhibit labeled "Hervey
5 Testimony," Mr. Cavicchi has reported a revenue requirement that I did not
6 provide to Mesaba 1 LLC in support of my rate impact analysis. Rather, it
7 reports a net present value Mr. Cavicchi developed from the revenue
8 requirements data I provided. The immediately adjacent line in the Exhibit
9 labeled "Strategist Output" then reports Mr. Cavicchi's calculation of the net
10 present value he developed from the Strategist revenue requirements provided
11 by Ms. Engelking. In all instances, Mr. Cavicchi's calculations of the net
12 present value of the data I provided match the data provided by Ms.
13 Engelking.

14 15 IV. CONCLUSION

16
17 Q. PLEASE SUMMARIZE YOUR SURREBUTTAL TESTIMONY.

18 A. Mr. Cavicchi's estimated rate impact of the Mesaba 1 PPA is based on a
19 present value analysis, which is not used by the Commission to determine an
20 item's rate impact. Thus, the estimated rate impact provided in Mr. Cavicchi's
21 Rebuttal Testimony is incorrect. My rate impact analysis for the Mesaba 1
22 PPA: (1) correctly follows the test year approach used by the Commission to
23 set rates, (2) appropriately includes the transmission and capital structure
24 costs associated with the Mesaba 1 PPA, and (3) is consistent with the
25 Strategist data used by Ms. Engelking in this proceeding. Thus, I continue to
26 estimate that in the first full year under the Mesaba 1 PPA, rates would be
27 between 8 and 12 percent higher than under our approved Resource Plan.

1

2 Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

3 A. Yes, it does.