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

In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in Minnesota PUC Docket No. E-002/GR-13-868

OAH Docket No. 68-2500-31182

# CLEAN ENERGY INTERVENORS PROPOSED FINDINGS OF FACT, AND CONCLUSIONS OF LAW

## **ISSUES ADDRESSED**

## INCLINING BLOCK RATE ("IBR") STIPULATION

Is the IBR Stipulation supported by substantial evidence and in the public interest?

#### CUSTOMER CHARGE INCREASE

Have proponents of an increased customer charge demonstrated that it is justified, consistent with Minnesota statutory policy on rate design, and in the public interest?

#### DECOUPLING PROPOSAL

Is the proposed Revenue Decoupling Mechanism ("RDM") supported by substantial evidence, consistent with Minnesota statutory policy on rate design and the criteria for decoupling, and in the public interest?

## **RECOMMENDATIONS**

#### IBR STIPULATION

Clean Energy Intervenors recommend that the Commission adopt the IBR Stipulation.

#### CUSTOMER CHARGE INCREASE

Clean Energy Intervenors recommend that the Commission reject the request for an increase in the customer charge for residential and small general service customers.

#### DECOUPLING PROPOSAL

Clean Energy Intervenors recommend that the Commission adopt the RDM for residential and small general service customers.

# PROPOSED FINDINGS OF FACT

#### IBR STIPULATION

- 1. The Clean Energy Intervenors proposed that the Commission adopt an Inclining Block Rate structure. The proposed IRB was developed by Paul Chernick. Mr. Chernick is an expert in rate design. He is the President of Resource Insight, Inc., an energy consulting firm and has provided expert testimony on utility economics in hundreds of cases.<sup>1</sup>
- 2. An IBR for electricity consists of two or more energy prices, with a lower price charged for the first kWh block in each month, and a higher price charged in each subsequent kWh block. If a customer uses less than the cutoff for the first kWh block in a month, it is charged only the first-block rate; if the customer uses more than the first-block cutoff it is charged the first-block rate for the first-block kWh, and the second-block rate for any additional kWh.<sup>2</sup>
- 3. The basic motivation of an IBR is to encourage and reward conservation, by offering lower prices for smaller-use customers and higher marginal prices for the larger-use consumers who have more opportunities for conservation and energy efficiency. An IBR reinforces existing incentives for customer conservation, and decreases the payback period for energy efficiency and distributed generation investment by customers.<sup>3</sup>
- 4. An IBR encourages conservation because customers whose consumption includes at least some usage in an energy block with a price higher than the average flat rate will have a higher incentive to conserve, and that incentive applies to all the customer's consumption, not just the kilowatt-hours in the high-priced blocks.<sup>4</sup>
- 5. Mr. Chernick provided an example demonstrating that the conservation incentive for large-use customers is greater because an avoided kWh saves the customer the higher-block charge. The IBR allows for higher conservation incentives, without increasing revenues, and, at the same time, decreases rates for a majority of customers.<sup>5</sup>
- 6. Inclining blocks are consistent with traditional objectives for rate design.<sup>6</sup>
- 7. IBRs are used by several other utilities. Minnesota Power has used an IBR for many years. Xcel's subsidiary in Colorado uses a two-block IBR. Mr. Chernick identified 55 other utilities in 29 U.S. and Canadian jurisdictions that have residential inclining-block rates.<sup>7</sup>

<sup>&</sup>lt;sup>1</sup> Exh. 282 (Exhibit PLC-1, Chernick Direct).

<sup>&</sup>lt;sup>2</sup> Exh. 280 at 3 (Chernick Direct).

<sup>&</sup>lt;sup>3</sup> *Id.* at 3-4.

<sup>&</sup>lt;sup>4</sup> *Id.* at 4.

<sup>&</sup>lt;sup>5</sup> *Id.* at 4-5.

<sup>&</sup>lt;sup>6</sup> *Id.* at 6-7.

<sup>&</sup>lt;sup>7</sup> *Id.* at 8.

- 8. It is widely agreed that customers respond to price signals and that price affects consumption. The percentage change in load resulting from a 1% increase in price is referred to as "elasticity." 8
- 9. The price signal at work in an IBR is the cost of a kWh in the highest block of a customer's consumption. The incentive to conserve will depend on how high that cost is set. The effect of IBRs on consumption has been demonstrated. For example, Xcel's Colorado subsidiary estimated that its IBR resulted in summer savings of about 1.9% in 2010 and 4.4% in 2011 and 4% in 2012.
- 10. Mr. Chernick concluded that a conservative range of price elasticity over one to four years might be -0.1 to -0.3. Longer-term effects may be twice as high.
- 11. The IBR proposed by CEI is based on the following guidelines:
  - a. Retaining the existing revenue level by season.
  - b. Excluding the non-summer use of space-heating customers to avoid burdening large space-heating customers, who may have limited options in the near term.
  - c. Maintaining the existing customer charge.
  - d. Using no more than 4 pricing blocks.
  - e. Limiting to about 15% the bill reduction for customers with use of half that of the average customer.
  - f. Slightly reducing the bill for a customer with average use.
  - g. Increasing the bill for a very large customer (defined as one with four times the average use) by about 20%.
  - h. Increasing the marginal price, averaged over all kWh use, by about 20%. 10
- 12. The CEI proposal is a four-block structure for winter and summer 11:

Table 1: Design of Summer IBR, all Residential Sales

| Block | Price<br>Change | Block<br>Price | Block<br>kWh's | Bills<br>ending in<br>Block<br>(1,000s) | MWh<br>billed | MWh<br>influenced |
|-------|-----------------|----------------|----------------|---|---------------|-------------------|
| 1     | -30%            | 6.070¢         | 0-350          | 1,015                                   | 1,364,819     | 213,547           |
| 2     | 10%             | 9.538¢         | 351-700        | 1,346                                   | 909,211       | 700,448           |
| 3     | 20%             | 10.405¢        | 700–1,200      | 1,217                                   | 627,968       | 1,117,010         |
| 4     | 46%             | 12.684¢        | >1,200         | 660                                     | 416,921       | 1,287,915         |

<sup>9</sup> *Id.* at 13; Exh. 288 (Exhibit PLC-7, Chernick Direct).

<sup>&</sup>lt;sup>8</sup> Id at 13

<sup>&</sup>lt;sup>10</sup> *Id.* at 17-18.

<sup>&</sup>lt;sup>11</sup> *Id.* at 18–19.

Table 2: Design of Winter IBR, non-heating Residential Sales

| Block | Price<br>Change | Block<br>Price | Block<br>kWh's | Bills<br>ending in<br>Block<br>(1,000s) | MWh<br>billed | MWh<br>influenced |
|-------|-----------------|----------------|----------------|---|---------------|-------------------|
| 1     | -25%            | 5.545¢         | 0-300          | 2,051                                   | 2,158,681     | 374,927           |
| 2     | 10%             | 8.132¢         | 301-600        | 2,624                                   | 1,374,880     | 1,165,701         |
| 3     | 20%             | 8.872¢         | 602-1,000      | 1,965                                   | 877,799       | 1,514,549         |
| 4     | 28%             | 9.434¢         | >1,000         | 1,245                                   | 820,847       | 2,177,030         |

- 13. Home heating customers are exempted from the proposed IBR. 12
- 14. The proposed IBR is estimated to result in load reduction of 2% to 6% over the first few years of the IBR, based on the elasticity of -0.1 to -0.3. This is similar to the effect estimated by Xcel's Colorado subsidiary.<sup>13</sup>
- 15. The effect of the proposed IBR on customer bills will vary depending on whether or how much of Xcel's proposed rate increase is granted.
- 16. The proposed IBR, if applied to existing rates, would result in bill reductions for the majority of residential customers. Average residential consumption is 771 KWh in summer and 654 KWh in winter. The median customer uses 640 kWh in the summer and 514 kWh in the winter. The IBR breakeven point (i.e., the point at which a customer would experience an increase in its bill under the IBR as compared to a flat rate) is 1050 kWh/month in the summer and 825 kWh/month in winter. Thus, even those using above average amounts of electricity would see no increase under the proposed IBR if rates were held constant.<sup>14</sup>
- 17. The IBR rate structure proposed by CEI would result in substantial savings to Xcel's low-income customers. The Low Income Home Energy Assistance Program ("LIHEAP") population uses, on average, less energy than the general population; the average low-income household uses less energy, on average, than the LIHEAP population. On an annual basis, the IBR generates bill savings to both the low-income and to the LIHEAP customer base. 16
- 18. The breadth of the affordability benefit of the IBR is significant because the benefit reaches a large number of low-income consumers. While some low-income customers, as measured using LIHEAP as a proxy, have usage that places them above the breakeven point, i.e., the point at which their bills will be larger under an IBR than with a flat rate,

<sup>&</sup>lt;sup>12</sup> *Id*.

<sup>&</sup>lt;sup>13</sup> *Id.* at 20.

<sup>&</sup>lt;sup>14</sup> *Id.* at 20-21.

<sup>&</sup>lt;sup>15</sup> Exh. 234 at 17 (Colton Direct).

<sup>&</sup>lt;sup>16</sup> *Id.* at 19.

- most of those customers exceed the breakeven point by a narrow margin. There are very few LIHEAP customers (e.g., 0.1% in summer) in the highest usage block.<sup>17</sup>
- 19. Overall, the proposed IBR meets the policy objective of providing affordability. While the IBR is "over-inclusive" in that it is not solely targeted at low-income customers, a problem with targeted assistance programs is that they are "under-inclusive." Many household that are eligible for LIHEAP, for example, do not receive the assistance. The Commission has noted in the past that it is "better to perhaps err on the side of over-inclusiveness, to ensure that those who need the benefit of a discounted rate continue to receive it."
- 20. Four parties Xcel, CEI, Energy CENTS Coalition, and SRA entered into a Stipulation with regard to the IBR proposal ("the IBR Stipulation"). The Stipulation requests the Commission to order Xcel to file the proposed IBR along with any alternative it may wish to offer in a separate docket. The Department of Commerce ("Department") would convene stakeholder meetings to discuss the IBR proposal(s) and the Commission would make a decision on an IBR based on this record along with any additional evidence and comments developed in the second docket.
- 21. The Department of Commerce supports the Stipulation and has agreed to play the role envisioned for it in the Stipulation.
- 22. The Office of the Attorney General ("OAG") opposes the IBR proposal and also opposes the IBR Stipulation.
- 23. The IBR Stipulation does not require any specific outcome and is, essentially, an extension of the existing proceeding that will allow the parties to more fully evaluate an IBR. The Stipulation itself says that the new docket will address issues and concerns raised by the parties "without limitation." The IBR Stipulation does not prejudice or disadvantage any party compared to where it would be without the Stipulation.
- 24. The IBR Stipulation will allow the parties to evaluate the IBR proposal(s) in light of the revenue requirement ordered in this case, which will provide for a better understanding of customer impacts comparing the IBR and flat rates.
- 25. Substantial evidence has been developed in this record to show that an IBR would have conservation benefits and is consistent with the statutory objectives of rate design.
- 26. A separate docket and additional time for parties to address specific concerns with the IBR that have been or may be raised will provide the Commission with a more robust record for deciding whether to adopt an IBR.

<sup>&</sup>lt;sup>17</sup> Exh. 239 at 4-5 (Colton Surrebuttal).

<sup>&</sup>lt;sup>18</sup> Id at 19

<sup>&</sup>lt;sup>19</sup> Docket GR-08-415 Findings of Fact, Conclusions of Law, and Order, at 74.

<sup>&</sup>lt;sup>20</sup> Exh. 135 (IBR Stipulation).

27. The IBR Stipulation is supported by substantial evidence and is in the public interest.

#### CUSTOMER CHARGE INCREASE

28. Xcel proposes to increase the fixed charge (or "customer charge") for residential and small general service customers as described below<sup>21</sup>:

| Service                       | Current | Xcel<br>Proposed | Cost    | DOC<br>Proposed |
|-------------------------------|---------|------------------|---------|-----------------|
| Residential - Overhead        | \$8.00  | \$9.25           |         | \$8.50          |
| Residential - Underground     | \$10.00 | \$11.25          | \$15.86 | \$10.50         |
| Res. Electric Heat-Overhead   | \$10.00 | \$11.25          | average | \$10.50         |
| Res. Electric Heat - Undergrd | \$12.00 | \$13.25          |         | \$12.50         |
| Small General Service         | \$10.00 | \$11.50          | \$16.84 | \$10.50         |

- 29. The Department of Commerce supports a smaller increase in the customer charge (\$0.50 rather than \$1.25).
- 30. All other parties offering testimony or argument on the customer charge opposed any increase. Those parties include CEI, EnergyCENTS Coalition ("ECC"), OAG, AARP, and SRA.
- 31. Increasing the customer charge has the effect of reducing the conservation incentive.<sup>22</sup> Reducing the conservation incentive is contrary to state rate making policy.<sup>23</sup>
- 32. Xcel and the Department point to the "customer related revenue requirement" from the Class Cost of Service Study ("CCOSS"), which Xcel calculated to be \$15.82/month, to justify the increase in customer charge. Xcel and the Department state that the increase is justified as a "move toward cost."<sup>24</sup>
- 33. There are several problems with using the "customer related revenue requirement" from the CCOSS as a basis for designing rates:
  - a. First, the CCOSS is intended to assist with cost allocation between classes, not rate design. 25
  - b. Second, this computation only measures embedded costs, not marginal costs, and hence is of little relevance for rate design. There is little if any marginal distribution cost related to the typical residential customer.
  - c. Third, even if the embedded costs from the cost-of-service study were relevant for rate design, the \$15.82 computation includes distribution costs that are not driven by the number of customers.<sup>26</sup>

<sup>24</sup> Exh. 420 at 6 (Peirce Direct).

<sup>&</sup>lt;sup>21</sup> Exh. 420 at 12 (Peirce Direct).

<sup>&</sup>lt;sup>22</sup> Exh. 280 at 26-27 (Chernick Direct).

<sup>&</sup>lt;sup>23</sup> Minn. Stat. § 216B.03

<sup>&</sup>lt;sup>25</sup> Evidentiary Hearing Transcript, Vol. 4, at 104-105 (Ouanes Cross Examination).

<sup>&</sup>lt;sup>26</sup> Exh. 280, at 28 (Chernick Direct).

- d. Fourth, the CCOSS is an *average* cost. The Department and Xcel have compared this average cost to de-averaged revenues (what customers pay) to allege an intraclass subsidy. Their argument is conceptually flawed.<sup>27</sup>
- 34. The customer charge is intended to cover the cost of connecting and maintaining an additional customer on Xcel's system. To the extent principles of rate design would encourage a "move toward cost" it would be the cost of connecting and maintaining an additional customer on Xcel's system.
- 35. When Xcel calculated the average cost of only those embedded expenses related to connecting and maintaining an additional customer on its system, the average cost was \$6.51/month.<sup>29</sup> This average customer cost is lower than the current customer charge.
- 36. The decoupling mechanism removes any need for the company to recover its authorized nonfuel costs through the customer charge because decoupling allows full recovery of those authorized costs. An increased customer charge, therefore, depresses the conservation incentive without providing any additional assurance that Xcel will recover its non-variable costs.

#### RDM PROPOSAL

- 37. The goal of decoupling in Minnesota is threefold: (1) to remove a utility's disincentive to promote conservation and energy efficiency (termed the "throughput incentive"); (2) to be designed to determine whether a decoupling strategy achieves energy savings; and (3) to do so while avoiding adverse impacts on customers.<sup>30</sup>
- 38. Without a decoupling mechanism in place, Xcel has a throughput incentive. The utility recovers most of its authorized nonfuel costs of service through volumetric charges on electricity. As a result, increases or reductions in consumption will affect recovery of these costs, even though the costs themselves do not vary with consumption. When sales fall, Xcel may not be able to fully recover these fixed costs, and when sales increase it may end up collecting more. Because of this throughput incentive, the utility may be motivated to work against energy efficiency, even despite policies promoting it. <sup>31</sup>
- 39. Decoupling addresses utility throughput incentives by using modest rate adjustments to prevent fluctuations in sales from resulting in over- or under-recovery of the commission-authorized costs of serving customers.

<sup>&</sup>lt;sup>27</sup> ECC Reply Brief at 6-7.

<sup>&</sup>lt;sup>28</sup> Exh. 420 at 14 (Peirce Direct); Exh 148 (Information Request MCEA -1, answered by Sue Peirce) (customer cost is "the full cost of connecting and keeping a customer on the system (including connecting to the system along with ongoing metering, billing, customer service and repair)")

<sup>&</sup>lt;sup>29</sup> Exh. 280 at 28 (Chernick Direct).

<sup>&</sup>lt;sup>30</sup> Department Initial Brief at 191-196.

<sup>&</sup>lt;sup>31</sup> Exh. 109 at 2-4 (Hansen Direct); Exh. 290 at 2-3 (Cavanagh Direct).

- 40. Decoupling is a rate design that is consistent with Minnesota's policy objective of encouraging conservation to the maximum reasonable extent.<sup>32</sup>
- 41. The purpose of Xcel's proposed RDM is to remove the utility's disincentive to promote energy efficiency.<sup>33</sup> Xcel expects that if approved, the RDM will allow the utility to continue supporting an aggressive energy efficiency portfolio.<sup>34</sup>
- 42. The purpose of Xcel's Conservation Improvement Program incentive ("CIP Incentive") is to encourage the utility to meet certain thresholds of energy efficiency performance. The CIP Incentive is calculated based on bill savings and provides the utility a portion of the energy savings achieved in a given year based on a certain level of achievement. The CIP Incentive is not intended to compensate Xcel for lost revenues.<sup>35</sup>
- 43. It is the Department's position that decoupling would work in conjunction with a shared savings incentive mechanism.<sup>36</sup>
- 44. It is the Department's position that the RDM would remove Xcel's throughput incentive, regardless of whether or not it is designed to normalize revenues for weather. It is also the Department's opinion that the RDM has been effectively designed to determine whether a decoupling strategy achieves energy savings.<sup>37</sup>
- 45. Unlike Xcel's proposed increase in the fixed customer charge, the RDM would maintain a rate structure that continues to encourage customers to conserve.<sup>38</sup>
- 46. Half the states in the nation have adopted decoupling mechanisms for at least one electric In total, 52 electric utilities and 28 natural gas utilities have and/or gas utility. decoupling.<sup>39</sup>
- 47. A nationwide review of decoupling mechanisms and energy efficiency performance suggests a strong association between the two, with seven out of the 10 states that led the nation in per-capita investment in residential electric energy efficiency programs in 2011 implementing decoupling for at least one utility. 40

<sup>&</sup>lt;sup>32</sup> *Id.* at 6-7.

<sup>&</sup>lt;sup>33</sup> Exh. 109 at 2-9 (Hansen Direct); Exh. 42 at 3-5 (Sundin Rebuttal); Exh. 290 at 7-8 (Cavanagh Direct); Exh. 294 at 3-4 (Cavanagh Rebuttal).

<sup>&</sup>lt;sup>34</sup> Exh. 109 at 8 (Hansen Direct); Transcript of Evidentiary Hearings, Vol. 3 at 95-96, 107-108 (Hansen Cross-Examination); Transcript of Evidentiary Hearings, Vol. 1 at 153-156; 163-166 (Sundin Cross-Examination and Redirect).

<sup>&</sup>lt;sup>35</sup> Transcript of Evidentiary Hearings, Vol. 1 at 163-166 (Sundin Redirect).

<sup>&</sup>lt;sup>36</sup> Exh. 417 at page 37:4-5 (Davis Direct).

<sup>&</sup>lt;sup>37</sup> Exh. 417 (Davis Direct at 18:1-13); Evidentiary Hearing Transcripts, Vol. 4 at 140:24-25, 141-142:1-7.

<sup>&</sup>lt;sup>38</sup> Exh. 290 at 8-9 (Cavanagh Direct).

<sup>&</sup>lt;sup>39</sup> Exh. 290 at 4 (Cavanagh Direct); Exh. 291 (Cavanagh Direct, Exh. A); Exh. 109 at 5-6 and Schedule 2 (Hansen Direct).

<sup>&</sup>lt;sup>40</sup> Exh. 290 at 11:1-10 (Cavanagh Direct).

- 48. Minnesota Energy Resources Corporation has reported preliminary findings on both expanded efficiency programs and savings achieved in the wake of implementing revenue decoupling. 41
- 49. Xcel's proposed RDM applies to all residential customers and a subset of small commercial and industrial customers. 42
- 50. Xcel's proposed RDM does not apply to the large commercial and industrial customer classes. 43
- 51. Xcel's proposed RDM is designed as a "partial" mechanism that adjusts revenues to normalize for weather, thereby excluding weather effects from the calculation of annual adjustments.<sup>44</sup>
- 52. Xcel's proposed RDM caps any annual surcharges at 5 percent of base revenue, while placing no limit on any refunds. The cap is designed to be a "soft" cap in which amounts in excess of the cap are placed in a deferral account for recovery in future years. 45
- 53. Xcel's proposed RDM calculates annual adjustments for each covered customer class every twelve months by adding or subtracting the cumulative deferral to volumetric rates for the following year, resulting in either a surcharge or refund to customers. 46
- 54. Xcel modified the RDM to incorporate recommendations from other parties. As a result, the RDM is now structured to:
  - a. be implemented as a pilot over the course of three years; <sup>47</sup>
  - b. disallow RDM surcharges in a given year if Xcel has not reached a target of 1.2 percent savings through its energy efficiency programs;<sup>48</sup>
  - c. expand Xcel's annual RDM evaluation plan to include a comparison of how revenues under traditional regulation would have differed from those collected under "partial" and "full" decoupling, among other information;<sup>49</sup>
  - d. exclude fuel and all applicable riders from the calculation of surcharges up to the annual cap.  $^{50}$
- 55. Xcel and the Department dispute a handful of design elements for the RDM, including the Department's recommendations that the RDM:

<sup>45</sup> *Id.*; Evidentiary Hearing Transcripts, Vol. at 95:12-16 (Hansen Cross-Examination).

<sup>&</sup>lt;sup>41</sup> MPUC Docket No. G-007, 011/GR-10-977, Compliance Filing Revenue Decoupling Evaluation Report for 2013 at 6-7, 23 (March 31, 2014).

<sup>&</sup>lt;sup>42</sup> Exh. 109 at 9-16 (Hansen Direct).

<sup>&</sup>lt;sup>43</sup> Exh. 110 at 22 (Hansen Rebuttal).

<sup>&</sup>lt;sup>44</sup> Id.

 $<sup>^{46}</sup>$  *Id.* 

<sup>&</sup>lt;sup>47</sup> Evidentiary Hearing Transcripts, Vol. 4 at 136:10-22 (Davis Opening Statement).

<sup>&</sup>lt;sup>48</sup> *Id*.

<sup>&</sup>lt;sup>49</sup> *Id*.

<sup>&</sup>lt;sup>50</sup> Exh. 110 at 9:13-23 (Hansen Rebuttal).

- a. Not adjust revenues to normalize for weather (i.e. "full" decoupling); <sup>51</sup>
- b. cap annual surcharges at 3% of total customer group revenue, including fuel and all applicable riders;<sup>52</sup>
- c. disallow deferrals to subsequent years of any adjustments in excess of the cap (i.e., a "hard" cap). 53
- d. include additional information in the RDM evaluation plan beyond the agreed-to changes;<sup>54</sup>
- 56. Clean Energy Intervenors support Xcel's decoupling proposal. 55
- 57. 21 of the 23 electric utilities surveyed in the December 2012 Graceful Systems review of nationwide decoupling mechanisms implement "full" decoupling that does not adjust revenues for weather impacts. <sup>56</sup>
- 58. "Soft" caps on annual adjustments are present in the majority of decoupled jurisdictions. <sup>57</sup>
- 59. The RDM design feature of foregoing any surcharges in a year in which Xcel fails to reduce energy use by 1.2 percent as a result of its energy efficiency programs creates an explicit link between Xcel's energy efficiency performance and the presence of decoupling. <sup>58</sup>
- 60. It is the Department's position that the RDM's pilot approach, coupled with the additional analyses that Xcel plans to include in its annual RDM reports, provide latitude for the Commission and parties to assess decoupling in Xcel's territory. <sup>59</sup>
- 61. The OAG objects to the RDM, but if it is adopted, recommends additional modifications.<sup>60</sup>
- 62. AARP objects to the RDM, but if adopted, recommends additional modifications. 61
- 63. The Suburban Rate Authority ("SRA") does not object to the RDM as implemented on a pilot basis. 62

<sup>&</sup>lt;sup>51</sup> Exh. 110 at 4-14 (Hansen Rebuttal); Evidentiary Hearing Transcripts, Vol. 4 at 136:23-25, 137:1-2 (Davis Opening Statement).

<sup>&</sup>lt;sup>52</sup> *Id*.

<sup>&</sup>lt;sup>53</sup> *Id.*; Evidentiary Hearing Transcripts, Vol. at 95:12-16 (Hansen Cross-Examination).

<sup>&</sup>lt;sup>54</sup> Department Initial Brief at 194-196.

<sup>&</sup>lt;sup>55</sup> Exh. 290 (Cavanagh Direct); Exh. 294 (Cavanagh Rebuttal).

<sup>&</sup>lt;sup>56</sup> Exh. 291 (Cavanaugh Direct, Exh. A); Exh. 109 at 5-6 and Schedule 2 (Hansen Direct).

<sup>&</sup>lt;sup>57</sup> Exh. 109 at 5-6 and Schedule 2 (Hansen Direct).

<sup>&</sup>lt;sup>58</sup> Exh. 110 at 3:16-25 (Hansen Rebuttal); Transcript of Evidentiary Hearings, Vol. 3 at 79-81 (Cavanagh Cross-Examination).

<sup>&</sup>lt;sup>59</sup> Evidentiary Hearing Transcripts, Vol. 4 at 144:12-25, 145:1-13 (Davis Cross-Examination).

<sup>&</sup>lt;sup>60</sup> OAG Initial Brief at 70; Exh. 377 at 38-39 (Nelson Rebuttal).

<sup>&</sup>lt;sup>61</sup> AARP Initial Brief at 17-18; Exh. 311 at 3 (Brockway Rebuttal).

<sup>&</sup>lt;sup>62</sup> SRA Initial Brief at 10-11.

- 64. The Minnesota Chamber takes no position on the RDM.<sup>63</sup>
- 65. The Commercial Group takes no position on the RDM.<sup>64</sup>
- 66. ICI Group takes no position on the RDM.65
- 67. Xcel's proposed RDM would not affect the underlying, commission-approved revenue requirement approved in this proceeding. With the RDM in place customers would pay exactly the approved costs of service, with surcharges or refunds acting as corrective annual true-ups. 66
- 68. AARP raises concerns about the impacts of the proposed RDM on low-use, low-income and special needs customers, the main premise of which is that these customers would be unable to overcome any surcharges applied in a given year as a result of the RDM.<sup>67</sup>
- 69. Nationally, decoupling results in rate adjustments typically about 2 percent or less of base rates and the total bill, include both surcharges and refunds.<sup>68</sup>
- 70. Xcel produced a series of examples for how the RDM may interact with residential customers' bills. The utility found that (all else equal) "low-use" customers (those who use 200 kWh or less per month) would experience lower percentage bill impacts from RDM surcharges than higher-use customers. Xcel also found that the amount of conservation required to offset a bill impact associated with the maximum allowable RDM surcharge under Xcel's proposal (5 percent of base rates) is attainable by, for example, replacing a single 60-watt incandescent light bulb with an equivalent compact fluorescent light bulb.<sup>69</sup>
- 71. Xcel's proposed RDM surcharge would be applied to the variable portion of a customer's bill. As a result any RDM surcharge would produce a smaller percentage increase for lower-use customers than for average-use and higher-use customers.<sup>70</sup>
- 72. ECC recommends one minor modification to the RDM: rather than applying the annual adjustment to the per-kWh variable charge as it is currently designed, it recommends that the RDM calculate surcharges or refunds as a percentage of Xcel's total residential

<sup>&</sup>lt;sup>63</sup> Minnesota Chamber of Commerce Initial Brief (no mention).

<sup>&</sup>lt;sup>64</sup> Commercial Group Initial Brief at 11 (no position on its approval).

<sup>&</sup>lt;sup>65</sup> ICI Group Initial Brief at 1, FN 4 (stating that issues raised with respect to the RDM have been moved to a separate docket and is not argued herein).

<sup>&</sup>lt;sup>66</sup> Exh. 417 at 8 (Davis Direct); Transcript of Evidentiary Hearings, Vol. 3 at 83-84 (Cross-Examination of Ralph Cavanagh); Department Initial Brief at 187, FN 223 (specifying the formula that Xcel proposes to calculate the deferrals).

<sup>&</sup>lt;sup>67</sup> AARP Initial Brief at 10-13.

<sup>&</sup>lt;sup>68</sup> Exh. 291 at 3-4 (Cavanagh Direct, Exh. A, Graceful Systems study).

<sup>&</sup>lt;sup>69</sup> Exh. 111 at 5-10 (Hansen Surrebuttal).

<sup>&</sup>lt;sup>70</sup> *Id.* at 10.

- energy revenue, and the annual adjustment to bills calculated as a percentage of the customer's total energy bill.<sup>71</sup>
- 73. AARP supports ECC's recommended modification to the RDM, stating that it would benefit those customers who use the least energy.<sup>72</sup>
- 74. Clean Energy Intervenors support ECC's recommended modification to the RDM.<sup>73</sup>
- 75. Because the proposed RDM is designed to calculated deferrals and rate changes for each applicable customer group, using only changes in usage per customer within that customer group, the RDM avoids cross-class subsidies.<sup>74</sup>
- 76. There is no evidence on the record that decoupling causes customer confusion concerning their electric bills. 75
- 77. AARP's cited study conducted by Resources for the Future is nearly 10 years old and excludes most of the relevant decoupling mechanisms that have been approved to date across the nation. 76
- 78. According to a comprehensive review by the Brattle Group, revenue decoupling has had no statistically significant effect on electric utilities' cost of capital.<sup>77</sup>
- 79. It is the Department's position that decoupling does not have an effect on Xcel's return on equity ("ROE").<sup>78</sup>
- 80. AARP recommends a downward adjustment of Xcel's ROE in the event the RDM is approved.<sup>79</sup>
- 81. The Commercial Group identifies revenue decoupling as a "risk mitigation factor," but does not specifically analyze the impact of the RDM itself on the ROE.<sup>80</sup>
- 82. ICI Group recommends a downward adjustment of Xcel's ROE for reasons other than the potential approval of the RDM.<sup>81</sup>

<sup>&</sup>lt;sup>71</sup> ECC Initial Brief at 24-25

<sup>&</sup>lt;sup>72</sup> AARP Initial Brief at 18 (recommendation #8).

<sup>&</sup>lt;sup>73</sup> Clean Energy Intervenors Reply Brief at 16.

<sup>&</sup>lt;sup>74</sup> Exh. 110 at 22 (Hansen Rebuttal).

<sup>&</sup>lt;sup>75</sup> Transcript of Evidentiary Hearings, Vol. 3 at 274-275 (Nelson Cross-Examination).

<sup>&</sup>lt;sup>76</sup> Exh. 310 at 13-14 (Brockway Direct); Exh. 109 at 5-6 and Schedule 2 (Hansen Direct) (list of

decoupling mechanisms derived from Graceful Systems Study).

<sup>77</sup> Exh. 290 at 5-6 (Cavanagh Direct); Exh. 292 (Cavanagh Direct, Exh. B); Evidentiary Hearing Transcript, Vol. 4 at 69-72 (Cavanagh Cross-Examination).

<sup>&</sup>lt;sup>78</sup> Department Initial Brief at 10-11, 34-35.

<sup>&</sup>lt;sup>79</sup> AARP Initial Brief at 14-16.

<sup>&</sup>lt;sup>80</sup> Commercial Group Initial Brief at 9.

<sup>&</sup>lt;sup>81</sup> ICI Group Initial Brief at 12-15.

#### **CONCLUSIONS**

- 1. The IBR Stipulation is supported by substantial evidence and is in the public interest and should therefore be adopted.
- 2. Increasing the customer charge is contrary to the statutory mandate to design rates to encourage conservation to the maximum reasonable extent and has not otherwise been shown to be fair, reasonable or in the public interest.
- 3. Because decoupling allows Xcel full recovery of its authorized nonfuel costs, where the RDM is approved there is no need for the utility to modify the customer charge to cover these costs.
- 4. The proposed RDM would remove Xcel's utility's disincentive to promote conservation and energy efficiency.
- 5. The proposed RDM is designed to determine whether a decoupling strategy achieves energy savings.
- 6. The proposed RDM avoids adverse impacts on customers.
- 7. The proposed RDM is a rate design that encourages conservation.
- 8. The proposed RDM is supported by substantial evidence, is consistent with Minnesota statutory policy on rate design and criteria for decoupling, and in the public interest.

THIS REPORT IS NOT AN ORDER AND NO AUTHORITY IS GRANTED HEREIN.
THE MINNESOTA PUBLIC UTILITIES COMMISSION WILL ISSUE THE ORDER
WHICH MAY ADOPT OR DIFFER FROM THE FOLLOWING RECOMMENDATION.

Based on the foregoing Findings of Fact, Conclusions of Law, and the record in this proceeding, the Administrative Law Judge makes the Recommendations set forth above in this Report.

| Dated: |                          |
|--------|--------------------------|
|        | The Honorable            |
|        | Administrative Law Judge |