

## June 26, 2014 **VIA E-FILING**

Dr. Burl W. Haar Executive Secretary Minnesota Public Utilities Commission 350 Metro Square Building 121 Seventh Place East St. Paul, MN 55101-2147

Re: In the Matter of the Investigation into Environmental and Socioeconomic Costs Under Minn. Stat. §216B.2422, subd. 3.

Docket No.: E-999/CI-00-1636

Dear Dr. Haar:

Enclosed for filing please find comments by the Minnesota Chamber of Commerce in the above-referenced docket.

Sincerely,

/e/ Benjamin L. Gerber Benjamin L. Gerber Manager, Energy Policy

/e/ Tony Kwilas
Tony Kwilas
Director, Environmental Policy

**Enclosures** 

cc: Service List

STATE OF MINNESOTA

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of the Investigation into Environmental and Socioeconomic Costs Under Minn. Stat. §216B.2422, subd. 3.

Docket No. E-999/CI-00-1636

MINNESOTA CHAMBER OF COMMERCE REPLY COMMENTS

I. INTRODUCTION

The Minnesota Chamber of Commerce ("Chamber") appreciates the opportunity to comment on the merits of adopting the Agencies' recommendation to use the federal social cost of carbon ("SCC") and not send the issue to a contested case hearing. The Chamber represents over 2,300 businesses throughout the state of Minnesota. As the voice of Minnesota business on statewide policy issues, the Chamber's main goal is to make Minnesota's business environment competitive relative to other states and nations. Energy is a critical component of a competitive and successful business environment. Therefore, a focal point of the Chamber's policy is ensuring Minnesota has competitively priced, reliable and environmentally sound energy rates.

II. COMMENTS

The Chamber originally filed comments on November 8, 2013 in this docket opposing reopening the investigation due to Minnesota's aggressive and early adoption of nation-leading environmental policies that already consider the impacts of carbon and other pollutants during the utility planning and investment process.<sup>1</sup> The Chamber, however, did agree as a matter of

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<sup>&</sup>lt;sup>1</sup> See MINN. STAT. §216B.1691 (2013) (Minnesota's aggressive renewable energy standard that requires all electric utilities in the state to procure 25 percent of their total retail electric sales from "eligible energy technology" by 2025 and for Xcel energy to procure 30-percent of their total retail electric sales from "eligible energy technology" by 2020. See also MINN. STAT. §216B.241 (2013) (setting aggressive energy conservation goals of 1.5% savings per

procedure with the Commission that given the complexity and significance of the issues in this docket, the only way to resolve the matter is through a contested case proceeding.<sup>2</sup> Outstanding substantive concerns and the incomplete nature of the SCC process at the federal level must prevent the Commission from adopting the SCC at this time. It is of the utmost importance to the Chamber that any state regulatory decision—especially a decision on pricing externalities that will affect resource decisions and involve significant risks to ratepayers—receive substantive Minnesota stakeholder input and process through a formal proceeding.<sup>3</sup>

### A. Procedural grounds support rejecting the Agencies' recommendation to adopt the SCC.

Accepting the SCC on a permanent or interim basis is procedurally inappropriate at this time. The February 10, 2014 order clearly outlines that the Department of Commerce, Division of Energy Resources ("DER") and Pollution Control Agency ("PCA") shall organize a stakeholder group to address: the scope of the investigation; whether to retain an expert; and what role an expert should play if retained.<sup>4</sup> However, nowhere in the order does it state that the investigation will leave out any environmental cost values—especially CO<sub>2</sub>.<sup>5</sup> While the Commission does state the stakeholder group shall determine the scope, leaving out the single most important and significant calculation as suggested by the DER and PCA would be a drastic deviation from the clear intent found in the Commission's order.<sup>6</sup>

year). See also MINN. STAT. §§216B.68-216B.688 (2013) (setting tough restrictions on power plant mercury emissions). See also MINN. STAT. §216B.164 (2013) (making Minnesota a national leader in cogeneration, net metering, and small power production).

<sup>&</sup>lt;sup>2</sup> In re Investigation into Environmental and Socioeconomic Costs under Minn. Stat. §216B.2422, subd. 3., E-999/CI-00-1636, Order Reopening Investigation and Convening Stakeholder Group to Provide Recommendations for Contested Case Proceeding (February 10, 2014) at 5 ("Order").

<sup>&</sup>lt;sup>3</sup> See id.

<sup>&</sup>lt;sup>4</sup> See id.

<sup>&</sup>lt;sup>5</sup> See id.

<sup>&</sup>lt;sup>6</sup> See id.

The Order does state that the group shall recommend whether the matter referred to the Office of Administrative Hearings ("OAH") should investigate, "other issues—including whether to investigate the costs of methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride." Not specifically including CO<sub>2</sub> as an optional value in the Order, the Commission undoubtedly anticipated the contested case proceeding at OAH would include a full investigation of CO<sub>2</sub> costs.<sup>8</sup>

The Chamber remains concerned that the Commission could even entertain the idea of adopting the SCC without a contested case proceeding. One need not look further than the clear language and intent in the Commission's Order to support this concern:

The Commission agrees that because of the significance and complexity of the issues involved, the investigation will likely require more than twelve months to resolve. The Commission will not adopt a deadline for the investigation at this time. The Commission also concurs that the significant and complex issues raised by this investigation would be best resolved in the context of a contested case proceeding. The Commission will therefore refer the investigation to the Office of Administrative Hearings. 9

Unlike the SCC process at the federal level, a contested case proceeding would provide parties with a formal process to create a fact-based record and opportunity to review and question the evidence brought forward.

Adopting the SCC as an interim value without the ability for Minnesotans to provide substantial testimony and information is also inappropriate. This decision will affect hundreds of millions of dollars in capital and infrastructure investments that will influence rates for years to come. The current Commission adopted externality values updated for inflation still allow for the Commission and interested parties to understand how these cost sensitivities affect

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<sup>&</sup>lt;sup>7</sup> See id.

<sup>&</sup>lt;sup>8</sup> See id.

<sup>&</sup>lt;sup>9</sup> See id. (emphasis added).

decisions.<sup>10</sup> Meanwhile, prior to conclusion of the contested case, interested parties including the DER, PCA, or any other party can run models using the SCC and introduce them into the record if they so choose.

# B. Significant outstanding substantive concerns and the incomplete nature of the SCC process at the federal level prevent the Commission from adopting the SCC at this time.

The SCC is still subject to significant public input and is not settled and not accepted, especially among members of the business community. Of significant note is the admission of President Obama's former cabinet member and SCC group organizer, Cass R. Sunstein that the technical support document ("TSD") was not peer reviewed. Neither the 2010 TSD nor the 2013 update was subject to peer review in advance, though an interim version was subject to public comment in 2009. The DER and PCA acknowledge in their comments that the SCC is still an ongoing endeavor and not a final product. While the three-month public comment period ended February 26, 2014, the federal agencies still have not issued a formal response to the public comments.

It is not necessary to dispute—in part or in whole—the existence of anthropogenic climate change to recognize there is still significant uncertainty regarding what the cost and real

<sup>&</sup>lt;sup>10</sup> See Order.

<sup>&</sup>lt;sup>11</sup> Cathy Cash, *OMB's 'Social Cost of Carbon' Raises Concerns*, ELECTRIC CO-OP TODAY, March 11, 2014, <a href="http://www.ect.coop/public-policy-watch/energy-environment/social-cost-of-carbon-not-ready-for-prime-time/67555">http://www.ect.coop/public-policy-watch/energy-environment/social-cost-of-carbon-not-ready-for-prime-time/67555</a> ("If federal regulations are based in part on a social cost of carbon, which cannot be accurately measured, the result will be arbitrary increases to the cost of energy for consumers,' said Jay Morrison, NRECA vice president for regulatory issues. "Federal regulators would risk imposing real costs on Americans based on uncertain benefits from rules derived from these untested analyses."").

<sup>12</sup> Cass R. Sunstein, *On Not Revisiting Official Discount Rates: Institutional Inertia and the Social Cost of Carbon*,

<sup>&</sup>lt;sup>12</sup> Cass R. Sunstein, *On Not Revisiting Official Discount Rates: Institutional Inertia and the Social Cost of Carbon*, Regulatory Policy Program Working Paper RPP-2013-21, Mossavar-Rahmani Center for Business and Government, Harvard Kennedy School, Harvard University, <a href="http://www.hks.harvard.edu/var/ezp">http://www.hks.harvard.edu/var/ezp</a> site/storage/fckeditor/file/RPP 2013 21 Sunstein.pdf.

<sup>13</sup> See id

<sup>&</sup>lt;sup>14</sup> See In re Investigation into Environmental and Socioeconomic Costs under Minn. Stat. §216B.2422, subd. 3., E-999/CI-00-1636, Comments of the Minnesota Department of Commerce, Division of Energy Resources and the Minnesota Pollution Control Agency (June 10, 2014) at 11 ("DER/PCA Recommendation"). <sup>15</sup> See id.

impacts will be on society due to a changing climate.<sup>16</sup> Models are only as good as their inputs. Thus, peer review and data analysis is essential before authorities make significant resource decisions premised on any model. Unfortunately, interested parties were not able to scrutinize the models used to calculate the SCC.<sup>17</sup>

The lack of opportunity for formal stakeholder input available through a contested case proceeding to challenge the data and modeling used to develop the SCC is especially concerning given the recent history of significant discrepancies among climate cost impact models. MIT economist Robert Pindyck notes:

A plethora of integrated assessment models (IAMs) have been constructed and used to estimate the social cost of carbon (SCC) and evaluate alternative abatement policies. "**These models have crucial flaws that make them close to useless as tools for policy analysis:** certain inputs (e.g. the discount rate) are arbitrary, but have huge effects on the SCC estimates the models produce; the models' descriptions of the impact of climate change are completely ad hoc, with no theoretical or empirical foundation; and the models can tell us nothing about the most important driver of the SCC, the possibility of a catastrophic climate outcome."

Supporting Pindyck's statements and uncertainty in general around climate cost impact modeling is that the new SCC values estimated for 2020 in 2007 dollars using the key discount rate of 3% is \$43, approximately 65% higher than the same 2010 value of \$26.3. From 2008 to 2013, the SCC has increased multiple times—in some cases by over 600%—from \$7 a ton in a 2008

http://regulatorystudies.columbian.gwu.edu/files/downloads/Social%20Cost%20of%20Carbon\_IWG%20tables.pdf

<sup>&</sup>lt;sup>16</sup> Robert Pindyck, (2013) "Climate Change Policy: What Do the Models Tell Us?" *Journal of Economic Literature*, Vol. 51, No. 3, September 2013 at 860-72.

<sup>&</sup>lt;sup>17</sup> Joint Comments from the U.S. Chamber of Commerce et al., to Office of Mgt. & Budget, *Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866* (Feb. 26, 2014) at 13 ("U.S. Chamber Comments"), available at <a href="https://www.uschamber.com/comment/comments-omb-social-cost-carbon">https://www.uschamber.com/comment/comments-omb-social-cost-carbon</a>; accord Edison Electric Institute, to Office of Mgt. & Budget, *Technical Support Document: Technical Update of the Social Cost of Carbon for* 

Regulatory Impact Analysis Under Executive Order 12866 (Feb. 26, 2014), available at <a href="http://www.eei.org/issuesandpolicy/testimony-filings-briefs/Documents/140226SheaOmbSocialCostCarbon.pdf">http://www.eei.org/issuesandpolicy/testimony-filings-briefs/Documents/140226SheaOmbSocialCostCarbon.pdf</a>

<sup>&</sup>lt;sup>18</sup> Robert S. Pindyck, *Climate Change Policy: What do the Models Tell Us?*" (Nat'l Bureau of Econ. Research, Working Paper No. 19244, July 2013 (emphasis added) (*quoted in* U.S. Chamber Comments at 22).

<sup>&</sup>lt;sup>19</sup> See id. at 5-6. See also Federal Government Estimates of the Social Cost of Carbon, The George Washington University Columbian College of Arts & Sciences Regulatory Studies Center,

Department of Transportation analysis to the November 2013 updated number of \$43.<sup>20</sup> Even the most ardent supporter of climate science and economic cost impact modeling ought to find these discrepancies alarming.

There are two fundamental flaws in the DER and PCA recommendation that the Commission adopt the SCC: that it is unlikely the state could hire credible expert(s) that would develop significantly different values than the SCC; and, that hiring an expert and going through a contested case would be "duplicative." Allowing parties to hire experts and present evidence through a formal proceeding gives them due process and the opportunity to present data and provide substantive feedback and analysis on the evidence formally introduced into the proceeding. Simply assuming it is unlikely the state and other interested parties could hire a credible expert is inappropriate.

Official public comments to OMB on the SCC provide numerous examples of studies and literature that dispute the accuracy and integrity of the SCC that could become part of the official record in a Minnesota contested case proceeding. A study by NERA looking at the Integrated Assessment Models ("IAM") damage functions found that because the, "damage estimate is a central input to the SCC estimates, the large uncertainty in the damage function translates into uncertainty in the SCC estimates that could be correspondingly large." The modelers even

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<sup>&</sup>lt;sup>20</sup> U.S. Chamber Comments at 5; See Interagency Working Group on Social Cost of Carbon, United States Government, Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 (May 2013; revised Nov. 2013) ("2013 Estimate"). See also Interagency Working Group on Social Cost of Carbon, United States Government, Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 (February 2010) at 4 ("2010 Estimate").
<sup>21</sup> See DER/PCA Recommendation at 11.

<sup>&</sup>lt;sup>22</sup> ANNE E. SMITH, ET. AL, NERA ECONOMIC CONSULTING, A Review of Damage Functions Used in Estimating the Social Cost of Carbon, 1, 36 (2014) available at

https://www.uschamber.com/sites/default/files/documents/files/2.26.14-

<sup>%20</sup>Attachments%20for%20Comments%20on%20the%20Social%20Cost%20of%20Carbon.pdf

seem willing to acknowledge the models extensive limitations, "'providing reliable estimates of the damages from climate change over the long run has proven extremely difficult." <sup>23</sup>

The National Rural Electric Cooperative Association ("NRECA") cites a study that concludes that even in the unlikely case experts agree on the basic calculations in a given model, intergenerational costs and benefits may lie within a wide range making it difficult for, "crisp policy recommendations," on long term investments.<sup>24</sup> The assumptions that drive the IAMs, "are steeped in uncertainty and subjectivity."<sup>25</sup> The multiple layers of assumptions inherent in the SCC analysis compound the uncertainty and subjectivity.<sup>26</sup>

The SCC fails to produce values that meet the high level of certainty necessary to drive substantial policy and regulatory decisions. <sup>27</sup> "[E]ven minor disagreements among modelers over the parameters to be included in models can lead to significant differences in the resulting policy recommendations. This suggests that estimated present values of the economic damages from these models are likely to be so imprecise as to provide only minimal guidance to policymakers considering the SCC over a period of time encompassing hundreds of years." Therefore, the resulting imprecise and uncertain results from the SCC violate OMB guidelines. <sup>29</sup> Examples from the NERA and NRECA comments are just a few of the numerous examples that establish

<sup>&</sup>lt;sup>23</sup> See id. (citing WILLIAM NORDHAUS & PAUL SZTORC, DICE 2013R: INTRODUCTION AND USER'S MANUAL, (2d ed. 2013) available at <a href="http://www.econ.yale.edu/~nordhaus/homepage/documents/DICE Manual 100413r1.pdf">http://www.econ.yale.edu/~nordhaus/homepage/documents/DICE Manual 100413r1.pdf</a>).

<sup>&</sup>lt;sup>24</sup> National Rural Electric Cooperative Association, to Office of Mgt. & Budget, Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 (Feb. 26, 2014) at 8 ("NRECA Comments"), available at

http://www.nreca.coop/wpcontent/uploads/2013/10/NRECACommentsonSCCFebruary262014.pdf (citing Mark C. Freeman and Ben Groom, *How Certain are we about the certainty-equivalent long term social discount rate?*" (Centre for Climate Change Economics and Policy, Working Paper No. 138, October 2013), available at <a href="http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2014/02/WP138-How-certain-about-certainty-equivalent-long-term-social-discount-rate.pdf">http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2014/02/WP138-How-certain-about-certainty-equivalent-long-term-social-discount-rate.pdf</a>).

<sup>&</sup>lt;sup>25</sup> See NRECA Comments at 2-3.

<sup>&</sup>lt;sup>26</sup> See id.

<sup>&</sup>lt;sup>27</sup> See id.

<sup>&</sup>lt;sup>28</sup> See id.

<sup>29</sup> See id.

uncertainty around the SCC; consequently, requiring the Commission to establish a contested case proceeding to determine the appropriate carbon externality value for Minnesota.

If the Commission or other parties decide to hire a consultant, it may very well be the case that the consultant uses the SCC as a building block to evaluate and substantiate their proposal. Thus, it is not the case that any work done by a state consultant or consultant hired by an independent party is duplicative of existing SCC information. Moreover, if the Commission does not provide a formal contested case proceeding to update the carbon externality value, parties adversely affected by this decision or a future decision incorporating the SCC will likely raise due process arguments on appeal. Whether these arguments will be successful is irrelevant. What is relevant is the fact that such a decision would create a situation that will ultimately require more resources and time than simply allowing parties to voice their concerns via the contested case process.

Nothing precludes the Department or any other party from submitting the SCC documents to the administrative law judge as their official position in a contested case proceeding. Moreover, before the conclusion of a contested case proceeding at the OAH and a final determination by the Commission, parties to any proceeding can calculate and introduce into the record scenarios using the SCC. Therefore, a contested case proceeding at the OAH will result in more thorough and rigorously vetted information upon which the Commission may base its final decision.

#### III. CONCLUSION

The Chamber respectfully requests that for the aforementioned reasons the Commission:

Not adopt the Agencies' recommendation to use the federal social cost of carbon as
the CO<sub>2</sub> value and instead send the issue to a contested case hearing at the Office of
Administrative Hearings.

DATED: June 26, 2013

Respectfully submitted,

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#### **AFFIDAVIT OF SERVICE**

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|--------------------|---|
|                    | ) |
| COUNTY OF RAMSEY   | ) |

Joan Harmon, being first duly sworn on oath, deposes and says she served the attached Comments of the Minnesota Chamber of Commerce in Docket No.: E-999/CI-00-1636 via e-filing to the Minnesota PUC as well as those requesting electronic service on the service list and to all others on the service list via U.S. Mail at the city of St. Paul.

/s/Joan Harmon Joan Harmon

Subscribed and sworn to before me this 26<sup>th</sup> day of June, 2014.

Conte Kyelin /s/Annette Kojetin

Annette Kojetin, Notary Public My Commission expires 1/31/2019

#### **Electronic Service Member(s)**

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| Simon              | Mrg         | mrgsimon@mrenergy.com               | Missouri River Energy Services                        | Electronic<br>Service | No |
| Sogard             | David B.    | dsogard@minnkota.com                | Minnkota Power Cooperative, Inc.                      | Electronic<br>Service | No |
| Soholt             | Beth H.     | bsoholt@windonthewires.or           | Wind on the Wires                                     | Electronic<br>Service | No |
| Swanson            | Eric        | eswanson@winthrop.com               | Winthrop Weinstine                                    | Electronic<br>Service | No |
| Thompso<br>n       | SaGonn<br>a | Regulatory.Records@xcele nergy.com  | Xcel Energy                                           | Electronic<br>Service | No |
| Thornton           | David       | J.David.Thornton@state.mn<br>.us    | MN Pollution Control Agency                           | Electronic<br>Service | No |
| Treseler           | Pat         | pat.jcplaw@comcast.net              | Paulson Law Office LTD                                | Electronic<br>Service | No |
| Warehim<br>e       | Roger       | warehimer@owatonnautiliti<br>es.com | Owatonna Public Utilities                             | Electronic<br>Service | No |
| White              | Paul        | paul.white@prcwind.com              | Project Resources Corp./Tamarac<br>Line LLC/Ridgewind | Electronic<br>Service | No |
| Woeste             | Robyn       | robynwoeste@alliantenergy<br>.com   | Interstate Power and Light<br>Company                 | Electronic<br>Service | No |
| Zaremba            | Thomas J.   | TZaremba@wheelerlaw.co              | WHEELER, VAN SICKLE &<br>ANDERSON                     | Electronic<br>Service | No |

**Paper Service Member(s)** 

| Last<br>Name          | First<br>Name | Company Name                         | Address                                                                  | Deliver<br>y<br>Metho<br>d | Vie<br>w<br>Tr<br>ade<br>Sec<br>ret |
|-----------------------|---------------|--------------------------------------|--------------------------------------------------------------------------|----------------------------|-------------------------------------|
| Bjella                | Brian R.      | Fleck, Mather & Strutz,<br>Ltd.      | 400 E. Broadway, Suite 600, P.O. Box 2798, Bismarck, ND-58502            | Paper<br>Service           | No                                  |
| Carniva<br>1          | Douglas<br>M. | McGrann Shea Anderson<br>Carnival    | Straugn & Lamb, 800 Nicollet Mall, Suite 2600, Minneapolis, MN-554027035 | Paper<br>Service           | No                                  |
| Coddin<br>gton        | Kipp          | Kazmarek Mowrey<br>Cloud Laseter LLP | 1317 Vincent Place, McLean, VA-22101                                     | Paper<br>Service           | No                                  |
| Eide<br>Tollefso<br>n | Kristen       | R-CURE                               | P O Box 129, Frontenac, MN-55026                                         | Paper<br>Service           | No                                  |

| Fergen          | Pam                 | Henepin County<br>Government Center<br>CAO     | A2000, 300 S. Sixth Street, Minneapolis, MN-55487                 | Paper<br>Service | No |
|-----------------|---------------------|------------------------------------------------|-------------------------------------------------------------------|------------------|----|
| Garvey          | Edward              | Residence                                      | 32 Lawton St, Saint Paul, MN-55102                                | Paper<br>Service | No |
| Gerber          | Darrell             | Clean Water Action<br>Alliance of Minnesota    | 308 Hennepin Ave. E., Minneapolis, MN-55414                       | Paper<br>Service | No |
| Gottier<br>Fena | Penny               | American Lung<br>Association                   | 490 Concordia Avenue, St. Paul, MN-55103                          | Paper<br>Service | No |
| Gower           | Bryan               | APX, Inc.                                      | 224 Airport Parkway, Suite 600, San Jose, CA-95110                | Paper<br>Service | No |
| Housto<br>n     | Ashley              | N/A                                            | 120 Fairway Rd, Chestnut Hill, MA-<br>24671850                    | Paper<br>Service | No |
| Justice         | Jane                | Winthrop & Weinstine, P.A.                     | 225 South Sixth Street, Suite 3500,<br>Minneapolis, MN-55402      | Paper<br>Service | No |
| Kenneb<br>eck   | Neil                | Dairyland Power<br>Cooperative                 | PO Box 817, 3200 East Avenue South,<br>LaCrosse, WI-546020817     | Paper<br>Service | No |
| Ketchu<br>m     | Julie               | Waste Management                               | 20520 Keokuk Ave, Lakeville, MN-55044                             | Paper<br>Service | No |
| Leaman          | Mark R.             | Calpine Corporation                            | 717 Texas St, Ste 1000, Houston, TX-77002-2743                    | Paper<br>Service | No |
| Lemieu<br>x     | Valerie<br>Matthews | Valerie Matthews<br>Lemieux Law<br>Corporation | 102-500 Tache Avenue, Winnipeg, MB-R2H 0A2 CANADA                 | Paper<br>Service | No |
| Lindqui<br>st   | Mark                | The Minnesota Project                          | 57107 422nd St, New Ulm, MN-56073-<br>4321                        | Paper<br>Service | No |
| Macken<br>zie   | Douglas<br>J.       | Campbell, Marr, LLP                            | 10 Donald Street, Winnipeg, MB-R3L 1Y5<br>CANADA                  | Paper<br>Service | No |
| McNary          | Dave                | Hennepin County DES                            | 701 Fourth Avenue South, suite 700,<br>Minneapolis, MN-55415-1842 | Paper<br>Service | No |
| Morse           | Steve               | Minnesota<br>Environmental<br>Partnership      | 546 Rice St, Suite 100, St. Paul, MN-55103                        | Paper<br>Service | No |
| Nelson          | Peter               | Center of the American Experiment              | 8441 Wayzata Boulevard, Suite 350,<br>Golden Valley, MN-55426     | Paper<br>Service | No |
| Nelson          | Ben                 | CMMPA                                          | 459 South Grove Street, Blue Earth, MN-56013                      | Paper<br>Service | No |
| Ninnem<br>an    | Duane               | Clean Up the River<br>Environment              | 117 South 1st St, Montevideo, MN-56265                            | Paper<br>Service | No |
| Olson           | Russell             | Heartland Consumers<br>Power District          | PO Box 248, Madison, SD-570420248                                 | Paper<br>Service | No |
| Osteraa<br>s    | Thomas<br>L.        | Excelsior Energy                               | 150 South 5th Street Suite 2300,<br>Minneapolis, MN-55402         | Paper<br>Service | No |

| Proeche 1       | Helen   | -                                              | 168 Erte St, St. Paul, MN-55102-2941                          | Paper<br>Service | No |
|-----------------|---------|------------------------------------------------|---------------------------------------------------------------|------------------|----|
| Reinhar<br>dt   | John C. | Laura A. Reinhardt                             | 3552 26Th Avenue South, Minneapolis, MN-55406                 | Paper<br>Service | No |
| Sedgwi<br>ck    | Dean    | Itasca Power Company                           | PO Box 457, Bigfork, MN-56628-0457                            | Paper<br>Service | No |
| Silverth<br>orn | Tim     | N/A                                            | 1096 Kilburn Street, St. Paul, MN-551031029                   | Paper<br>Service | No |
| Stenehj<br>em   | Wayne   | Office Of Attorney<br>General                  | Dept. 125, 600 E. Boulevard Avenue,<br>Bismarck, ND-585050040 | Paper<br>Service | No |
| Thomps          | Steve   | Central Minnesota<br>Municipal Power<br>Agency | 459 S Grove St, Blue Earth, MN-56013-<br>2629                 | Paper<br>Service | No |
| Tveitba<br>kk   | Darryl  | Northern Municipal<br>Power Agency             | 123 Second Street West, Thief River Falls, MN-56701           | Paper<br>Service | No |