

33 South Sixth Street, Suite 4200 Minneapolis, Minnesota 55402 main 612.373.8800 fax 612.373.8881 www.stoel.com

June 26, 2014

Andrew P. Moratzka *Direct (612) 373-8822* apmoratzka@stoel.com

#### **VIA E-FILING**

Dr. Burl W. Haar Minnesota Public Utilities Commission 121 7th Place East, Suite 350 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 Minnesota Large Industrial Group's Comment in response to the Minnesota Public Utilities Commission's Notice of Comment dated June 16, 2014, with regard to the docket mentioned above.

Very truly yours,

STOEL RIVES LLP

/s/ Andrew P. Moratzka

Andrew P. Moratzka

APM/kap Enclosure

cc: Service List

### STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

121 7th Place East, Suite 350 St. Paul, MN 55101-2147

In the Matter of a the Investigation into Environmental and Socioeconomic Costs under MINN. STAT. § 216B.2422, subd. 3

PUC Docket No. E999/CI-00-1636

MLIG COMMENT

The Minnesota Large Industrial Group ("MLIG"), a continuing ad hoc consortium of large industrial end-users of electricity in Minnesota, spanning multiple utilities and functioning to represent large industrial interests before regulatory and legislative bodies, submits the following reply comment in the above referenced docket.

#### I. INTRODUCTION

On February 10, 2014, the Minnesota Public Utilities Commission (the "Commission") issued its order reopening the externalities investigation. The Reopening Order sets forth the following four pollutants that will be reviewed as part of a contested case: PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub>. Prior to the Commission's formal referral to the Office of the Administrative Hearings, the Reopening Order required the Minnesota Department of Commerce - Division of Energy Resources (the "Department") and the Minnesota Pollution Control Agency (the "MPCA," together with the Department, the "Agencies") to convene a stakeholder meeting to discuss the scope of the contested case investigation. The Agencies convened a stakeholder meeting on April 24, 2014. MLIG participated in that stakeholder meeting and submitted a brief summary of its recommendations in a letter filed in this docket on May 9, 2014. Consistent with the Reopening Order, the Agencies submitted their report and recommendations on June 10, 2014 (the "Agencies' Report"). In response, the Commission issued a notice of comment on June 16,

<sup>&</sup>lt;sup>1</sup> In the Matter of a the Investigation into Environmental and Socioeconomic Costs under MINN. STAT. § 216B.2422, subd. 3, Docket No. E999/CI-00-1636, ORDER REOPENING INVESTIGATION AND CONVENING STAKEHOLDER GROUP TO PROVIDE RECOMMENDATIONS FOR CONTESTED CASE PROCEEDING (February 10, 2014) (the "Reopening Order").

2014 (the "Notice"), seeking comments from stakeholders on the Agencies' Report by June 26, 2014. MLIG submits this comment in response to the Notice.

#### II. COMMENT

In the Notice, the Commission seeks input on a variety of topics, including the Agencies' proposed adoption of the federal Social Cost of Carbon ("SCC") estimates established by the Interagency Working Group ("IWG"), the Agencies' proposal to exclude EPA regulatory and other compliance costs from the externality value for CO<sub>2</sub>, whether a particular model or approach should be utilized in the contested case, and any other issues regarding scope of the contested case. MLIG expresses no opinion on the particular model utilized in the impending contested case process for review of criteria pollutants and addresses the remaining issues in the sections below.

## A. It is Inappropriate for the Commission to Adopt an SCC Value as the CO<sub>2</sub> Externality Value

The Agencies claim that the SCC is a credible estimate of an externality value for CO<sub>2</sub> and should be adopted for use under section 216B.2422 subd. 3 of the Minnesota Statutes. MLIG respectfully disagrees and opposes use of the SCC estimates in this manner for two reasons. First, making that determination prior to a contested case proceeding is inconsistent with the Reopening Order. Second, the Department appeared to acknowledge in the value of solar docket that the SCC was not necessarily appropriate for use in this docket. Third, the SCC estimates are currently the subject of intense debate. Finally, it bears emphasis that there is already a significant price/ton for CO<sub>2</sub> that is used in utility resource acquisition dockets.

# 1. The Reopening Order Contemplates a Contested Case Review of the CO<sub>2</sub> Externality Value

In the Reopening Order, the Commission referred the investigation of updating externalities values to the Office of Administrative Hearings. The Commission stated:

The Commission will investigate the appropriate range of externality values for PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub>....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.<sup>2</sup>

This language specifically requires a contested case review of the four pollutants referenced as part of the investigation.

Furthermore, this contested case review was not somehow limited by the Commission's directive to the Agencies to convene a stakeholder discussion. The Reopening Order required the Agencies to "address the scope of the investigation, whether to retain an expert under Minn. Stat. § 216B.62 subd. 8, and the possible roles of an expert, should one be retained." Nothing in this language provides the Agencies with authority to pre-determine a value for any of the four pollutants, including CO<sub>2</sub>. MLIG therefore fails to understand why the Commission would now, without a contested case and in the absence of any credible record, accept the SCC as the externality value for CO<sub>2</sub>. MLIG's position is bolstered by a Commission order in a related docket.

### 2. In the Value of Solar Docket, the Commission and Department Distinguished the SCC from Use in this Docket

In recent deliberations associated with approving a value of solar ("VOS") methodology in Minnesota, the Commission considered whether to use the SCC to reflect the avoided GHG emissions associated with incremental additions of distributed solar generation. While the issue sparked considerable controversy in that proceeding, the Commission needed to identify a sufficient resolution in order to make a decision on the VOS methodology within the statutorily mandated timeline.<sup>4</sup> In distinguishing the SCC from existing externality values in Minnesota, the Department explained that the SCC values were more current and a better fit for the incremental damage calculations. In light of the need to make a determination, the Commission

<sup>&</sup>lt;sup>2</sup> The Reopening Order, at 5 (emphasis added).

<sup>&</sup>lt;sup>3</sup> The Reopening Order, pg. 5, ordering para. 2.

<sup>&</sup>lt;sup>4</sup> Minn. Stat. §216B.164, subd. 10(e)(requiring the Commission to "approve, modify with the consent of

ultimately approved the VOS methodology that included the SCC but expressly limited the use of the SCC in that docket.<sup>5</sup> In the VOS Order, the Commission explains:

The Commission is currently re-evaluating its environmental externality costs. The Commission only decides here the narrow question of whether the values recommended by the Department reasonably fulfill the statutory mandate for a Value of Solar methodology. Approval of the Department's methodology and the values it contains *does not prejudge the outcome of that investigation*, or any other pending or future Commission proceeding.<sup>6</sup>

Further, the Department explained that average cost analysis was separate and distinct from marginal cost analysis, which was the focus of the VOS methodology. In the VOS Order, the Commission summarized the Department's position as follows:

The Department stated in its supplemental comments, and again at the Commission meeting, that the marginal nature of the Social Cost of Carbon values was the key reason to recommend them over other suggested values. Marginal values pertain to the incremental cost of an additional unit of emissions. *The Department described the difference between values articulating marginal costs and values articulating average costs to be like "apples and oranges."* The Department also supported its choice by arguing that the chosen values are more up-to-date.<sup>7</sup>

It is not clear how the Department can now assert that the SCC is appropriate, without contested case review, for use in this docket. In addition to concerns about the difference between marginal and incremental cost calculations, the Commission also explained that it "would ordinarily prefer values that underwent a local vetting process." At the time, however, the Commission had a statutory deadline in which to make a decision on the VOS methodology and knew that the values in question would soon be subject to a local vetting process in this docket. In any event, the Commission's statement in the VOS Order that adoption of the SCC would not "prejudge the outcome" of the Reopening Order suggests the Commission intended the SCC and

<sup>&</sup>lt;sup>5</sup> In the Matter of Establishing a Distributed Solar Value Methodology under Minn. Stat. § 216B.164, subd. 10(e), Docket No. E999/M-14-65, ORDER APPROVING DISTRIBUTED SOLAR VALUE METHODOLOGY (April 1, 2014) ("Value of Solar Order").

<sup>&</sup>lt;sup>6</sup> Value of Solar Order, at 12 (emphasis added).

<sup>&</sup>lt;sup>7</sup> *Id.* (emphasis added).

<sup>&</sup>lt;sup>8</sup> Value of Solar Order, at 12.

alternatives to be vetted in a contested case investigation. And there are additional concerns with the SCC that the Agencies neglected to mention.

#### 3. The 2013 SCC is Currently Under Review

The Agencies' Report implies that the SCC is a well-established, fully-vetted method for estimating carbon damages that can readily be used in Minnesota's resource planning endeavors. However, MLIG believes the Agencies' Report fails to adequately reflect recent uncertainty concerning the SCC. And MLIG questions whether it is appropriate to incorporate values used in federal rulemaking in our State resource planning analysis.

The initial SCC values were established in 2010 and published in a document entitled Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 ("2010 Technical Support Document"). The IWG summarized the SCC values in a table in the 2010 Technical Support Document. This table is reproduced below.

Social Cost of CO<sub>2</sub>, 2010 - 2050 (in 2007 dollars)

Discount Rate	5%	3%	2.5%	3%
Year	Avg	Avg	Avg	95th
2010	4.7	21.4	35.1	64.9
2015	5.7	23.8	38.4	72.8
2020	6.8	26.3	41.7	80.7
2025	8.2	29.6	45.9	90.4
2030	9.7	32.8	50.0	100.0
2035	11.2	36.0	54.2	109.7
2040	12.7	39.2	58.4	119.3
2045	14.2	42.1	61.7	127.8
2050	15.7	44.9	65.0	136.2

The above table demonstrates that the SCC values are highly dependent on the assumed discount rate.

<sup>&</sup>lt;sup>9</sup> Available at http://www.epa.gov/oms/climate/regulations/scc-tsd.pdf

In May 2013, the IWG released an Update to the 2010 Technical Support Document. <sup>10</sup> The Update contained the following revised discount table:

Revised Social Cost of CO<sub>2</sub>, 2010 - 2050 (in 2007 dollars per metric ton of CO<sub>2</sub>)

Discount Rate	5.0%	3.0%	2.5%	3.0%
Year	Avg	Avg	Avg	95th
2010	11	33	52	90
2015	12	38	58	109
2020	12	43	65	129
2025	14	48	70	144
2030	16	52	76	159
2035	19	57	81	176
2040	21	62	87	192
2045	24	66	92	206
2050	27	71	98	221

The document was again updated in November 2013.<sup>11</sup> The November Update contains the following revised discount table:

Revised Social Cost of CO<sub>2</sub>, 2010 – 2050 (in 2007 dollars per metric ton of CO<sub>2</sub>)

Discount Rate Year	5.0% Avg	3.0% Avg	2.5% Avg	3.0% 95th
2010	11	32	51	89
2015	11	37	57	109
2020	12	43	64	128
2025	14	47	69	143
2030	16	52	75	159
2035	19	56	80	175
2040	21	61	86	191
2045	24	66	92	206
2050	26	71	97	220

<sup>&</sup>lt;sup>10</sup> Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866, May 2013 ("2013 Technical Update"). Available at: <a href="http://www.whitehouse.gov/sites/default/files/omb/inforeg/social">http://www.whitehouse.gov/sites/default/files/omb/inforeg/social</a> cost of carbon for ria 2013 update.pdf

<sup>&</sup>lt;sup>11</sup> Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866, November 2013 ("November 2013 Technical Update"). Available at: http://www.whitehouse.gov/sites/default/files/omb/assets/inforeg/technical-update-social-cost-of-carbon-for-regulator-impact-analysis.pdf.

The SCC estimates in the 2013 Technical Updates again depend heavily on the assumed discount factor. Most concerning are the increases in SCC. Looking at the 3% discount factor, which is the discount factor supported by the Agencies, the 2015 SCC value in 2007 dollars increased from \$24 to \$37 (or 54%) and the 2020 SCC value in 2007 dollars increased from \$26 to \$43 (or 65%). For this reason alone, MLIG is not surprised parties are objecting to the 2013 Technical Update.

After publication of the 2013 Technical Updates, the OMB received concerns from a number of organizations that prompted OMB to formally seek comments on the 2013 Updates. The comment period closed on February 26, 2014 and no formal response to comments has been issued. See OMB Docket: OMB-2013-0007. A review of comments in the OMB Docket reveals, among other concerns, significant issues raised about methodological flaws in the preparation of the SCC estimates, a lack of full transparency and access to all of the modeling data, and a lack of cautionary, limiting language in the 2013 Technical Updates regarding the use of the estimates. 12 The 2010 version, for example, did include cautionary statements about what the SCC estimates were intended to be used for and what they may not be. 13

The SCC is not appropriate for simple adoption as the Minnesota externalities value for CO<sub>2</sub>. The purpose of the SCC estimates is to "allow agencies to incorporate the social benefits of reducing (carbon dioxide) CO<sub>2</sub> emissions into cost-benefit analyses of regulatory actions that impact cumulative global emissions." As indicated above, the potential range for SCC estimates is very broad and its purpose is to help evaluate federal regulatory decisions as required under Executive Order 12866. Given the stated purpose of the SCC estimates, it is not appropriate to simply apply the SCC estimates to state-level resource planning. The SCC's range of estimated costs include damages occurring around the globe. It may be that a CO<sub>2</sub> externality value in Minnesota focus more heavily on damages that are more particular to Minnesota or the surrounding region.

<sup>&</sup>lt;sup>12</sup> See, Xcel Energy Comments to OMB on SCC, ID No. OMB-2013-0007-0129 (Feb. 26, 2014), available at: http://www.regulations.gov/#!documentDetail:D=OMB-2013-0007-0129

<sup>&</sup>lt;sup>13</sup> See, Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis - Under Executive Order 12866, February 2010 ("2010 TSD").

14 2013 Technical Update, supra n. 5 at 2 (emphasis added).

Furthermore, the SCC estimates include a range of discount rates, likely because of the dramatic impact discount rates have on the cost estimates over time. The Department and MPCA recommend simply selecting the midpoint discount rate values. However, MIT economist Robert Pindyck has cautioned that "certain inputs (e.g. the discount rate) are arbitrary, but have huge effects on the SCC estimates the models produce." The arbitrary selection of a discount rate in this context could adjust an externality estimate of CO<sub>2</sub> by *five times the amount*. Thus it is additionally concerning that the Agencies propose taking a range of values and applying only one particular set in Minnesota.

Adopting the mid-point SCC estimate as a Minnesota CO<sub>2</sub> externality value could unacceptably and inaccurately translate into much higher direct electricity costs being borne by Minnesota residents and businesses than is warranted or envisioned under Minnesota's resource planning process. For example, an additional issue that should be addressed in the contestedcase process is the concept of emissions leakage. To be sure, using increased externalities values (which would include the SCC) in a resource planning model will artificially bias the supply side solution against fossil-fueled generation, which could ultimately result in a Plan that is not the least cost to ratepayers. The increased rates for energy-intensive nation and international tradeexposed industries, like the members of MLIG, whose cost of energy ranges from 25%-30% of the overall cost of production, could result in a loss of market share or shift of production to other countries that have less restrictive environmental regulations. This could result in raw materials leaving Minnesota for environmentally unfriendly manufacturing processes and lower cost labor in other countries, with the final product returning to Minnesota for purchase and use. The net effect could thus be increased global CO<sub>2</sub> emissions. This is an issue that should not be glossed-over via wholesale adoption of the SCC. MLIG emphasizes that unlike the VOS proceeding, where the Commission could not afford the time to develop and vet locally updated values for CO<sub>2</sub>, the Commission has reopened this docket for that very task and should devote the necessary time and resources to properly fulfill such an important undertaking.

<sup>&</sup>lt;sup>15</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).

## 4. The Commission Should Also Address the Impact of this Decision on the Regulatory Cost of Carbon Dioxide Docket

As the Commission is aware, a range of \$9/ton - \$34/ton for CO<sub>2</sub> emissions is assumed as of the year 2019 for electric generation resource acquisition proceedings. <sup>16</sup> MLIG understands that some parties, including the Agencies, believe this cost is focused on future regulatory costs as opposed to externalities costs. For purposes of the issues surrounding the proposed use of the SCC, MLIG emphasizes that the Regulatory CO<sub>2</sub> Cost Docket, if ignored while the SCC is adopted, could have significant and far reaching impacts on resource planning. If the Agencies' recommended approaches in this docket and the Regulatory CO<sub>2</sub> Cost Docket are combined, the price/ton for CO<sub>2</sub> emissions by 2019 could be in excess of \$75/ton. MLIG does not believe it would be prudent or fair to accept such a high value without further discussion and analysis in a contested case proceeding.

#### B. It Would be Inappropriate for the Commission to Specify Now that Compliance Costs are Irrelevant to the Externalities Values

The Agencies assert that "The Commission could specify that any externality values proposed by parties should be damage values, not compliance costs, willingness-to-pay/accept, or other value types. The damage value approach aligns with existing values and past Commission decisions." However, compliance costs need to be part of the equation because regulatory action on a particular pollutant generally aims to limit or internalize negative externalities. In the value of solar docket, the Department appeared to acknowledge that compliance costs are a component of the externalities values. In supplemental comments, the Department stated "The avoidance of environmental externality damages benefit the utility and its customers through the *avoidance of compliance costs* that they would need to pay to achieve the same pollution result, as well as benefiting society (which include the utility's customers) in reduced environmental damages they would otherwise incur." The reverse should also be true

<sup>&</sup>lt;sup>16</sup> In the Matter of Establishing an Estimate of the Costs of Future Carbon Dioxide Regulation on Electricity Generation Under Minn. Stat. § 216H.06, Docket No. E999/CI-07-1199 ("Regulatory CO<sub>2</sub> Cost Docket"), ORDER ESTABLISHING 2014 AND 2015 CARBON DIOXIDE REGULATION COSTS (April 28, 2014).

<sup>17</sup> The Agencies' Report, at 15.

<sup>&</sup>lt;sup>18</sup> In the Matter of Establishing a Distributed Solar Value Methodology under Minn. Stat. § 216B.164, subd. 10(e), Docket No. E999/M-14-65, SUPPLEMENTAL COMMENT OF THE MINNESOTA DEPARTMENT OF COMMERCE, DIVISION OF ENERGY RESOURCES, at 7 (March 11, 2014).

: the costs of complying with regulation should reduce the externality damages associated with the particular pollutant or activity that is the focus of the regulation.

MLIG agrees that compliance costs should be evaluated as part of the contested case process. This is especially true for carbon regulation. EPA has recently proposed carbon mitigation regulations for new, modified and existing power plants that would impose significant compliance costs on sources to achieve extensive reductions in greenhouse gas emissions.<sup>19</sup> Given the very recent U.S. Supreme Court decision in *Utility Air Regulatory Group v. Environmental Protection Agency*, No. 12-1146, slip op. (June 23, 2014), on the regulations governing new sources, and the very recent proposal of regulations governing existing and modified sources, there will continue to be significant changes to carbon regulation and emissions in the near future. Adopting at the state level the federal SCC estimates, without more thorough consideration of the mitigation benefits of these evolving federal regulations, would be premature.

### C. Until Additional Information is Available, the Scope of this Docket Could be Limited to a Review of PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>x</sub>

MLIG recognizes and appreciates that this investigation comes at a time when there is a significant regulatory burden on the Commission and the Department.<sup>20</sup> To account for this fact and the significant regulatory changes referenced above, while adhering to the Reopening Order, MLIG suggests that the Commission could temporarily stay the analysis of the externality value for CO<sub>2</sub>. Doing so would be a reasonable approach for four reasons. First, the Reopening Order does not set a deadline for the investigation. Therefore, the Commission is not presently tied to revise the externality value for CO<sub>2</sub> at the same time it revises PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>. Second, a delay would provide the opportunity for the SCC debate and EPA's proposed CO<sub>2</sub> regulations to develop further, which could help streamline future discussions and analysis. Third, parties to this proceeding would be able to focus exclusively on the criteria pollutants, which would help

<sup>&</sup>lt;sup>19</sup> EPA, Standards of Performance for Greenhouse Gas Emissions From New Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 1429 (Jan. 8, 2014); EPA, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34829 (June 18, 2014); EPA, Carbon Pollution Standards for Modified and Reconstructed Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34959 (June 18, 2014).

<sup>&</sup>lt;sup>20</sup> In fact, MLIG raised this issue as a concern in this docket in its November 8, 2013, comment to the Commission.

limit the required investment for parties to participate in this proceeding and limit the number of

experts retained by the Agencies. Fourth, proceeding in this fashion would not preclude the

Commission from considering CO<sub>2</sub> in the resource planning process. As noted above, the

Commission is already assuming a price/ton for CO<sub>2</sub> emissions in resource acquisition

proceedings. There should therefore be some comfort that utilities, stakeholders, and the

Agencies will supply the Commission with information on the impact of a range of costs for CO<sub>2</sub>

emissions in resource acquisition proceedings. Although any number of dates may be

appropriate for parties to revisit this issue, MLIG suggests that July 1, 2015, would be fair.

III. CONCLUSION

MLIG appreciates the Commission's solicitation of input on these important issues.

Since the outset of this proceeding, MLIG has questioned the wisdom of expending valuable and

limited resources on issues that are presently in significant flux. Understanding that the

Commission has elected to reopen the externalities discussion, MLIG urges the Commission to

move deliberately in updating a price/ton for CO<sub>2</sub> emissions and criteria pollutants.

Date: June 26, 2014

Respectfully submitted,

/s/ Andrew P. Moratzka

Andrew P. Moratzka (#0322131)

Kevin D. Johnson (#023901X)

Stoel Rives LLP

33 South Sixth Street, Suite 4200

Minneapolis, MN 55402

Tele: 612-373-8822

Fax: 612-373-8881

76419791.6 0064592-00016

11

#### CERTIFICATE OF SERVICE

I, Kathy Prestidge, hereby certify that I have this day, served a true and correct copy of the following documents to all persons at the addresses indicated below or on the attached list by electronic filing, electronic mail, courier, interoffice mail or by depositing the same enveloped with postage paid in the United States Mail at Minneapolis, Minnesota.

Minnesota Large Industrial Group's Comment in Response to the Minnesota Public Utilities Commission's Notice of Comment dated June 16, 2014

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

/s/ Kathy Prestidge	
Kathy Prestidge	

Dated this 26th day of June, 2014.

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Derek		@winthrop.com	stine, P.A.	h Sixth Street ite 3500 nneapolis, v	Φ	No	OFF_SL_0-1636_1
Christopher	Anderson	canderson@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022191	Electronic Service	No.	OFF_SL_0-1636_1
Julia	Anderson	Julia.Anderson@ag.state.m n.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_0-1636_1
Derek	Bertsch	derek.bertsch@mrenergy.c	Missouri River Energy Services	3724 West Avera Drive PO Box 88920 Sioux Falls, SD 57109-8920	Electronic Service	ON.	OFF_SL_0-1636_1
Brian R.	Bjella		Fleck, Mather & Strutz, Ltd.	400 E. Broadway, Suite 600 P.O. Box 2798 Bismarck, ND 58502	Paper Service	No.	OFF_SL_0-1636_1
Michael	Bradley	mike.bradley@lawmoss.co m	Moss & Barnett	Suite 4800 90 S 7th St Minneapolis, MN 55402-4129	Electronic Service	ON.	OFF_SL_0-1636_1
Jon	Brekke	jbrekke@grenergy.com	Great River Energy	12300 Elm Creek Boulevard Maple Grove, MN 553694718	Electronic Service	No.	OFF_SL_0-1636_1
Kipp	Coddington	N/A	Kazmarek Mowrey Cloud Laseter LLP	1317 Vincent Place McLean, VA 22101	Paper Service	ON.	OFF_SL_0-1636_1
George	Crocker	gwillc@nawo.org	North American Water Office	PO Box 174 Lake Elmo, MN 55042	Electronic Service	ON.	OFF_SL_0-1636_1
Leigh	Currie	lcurrie @mncenter.org	Minnesota Center for Environmental Advocacy	26 E. Exchange St., Suite 206 St. Paul, Minnesota 55101	Electronic Service	No.	OFF_SL_0-1636_1

i						C H	
First Name	Last Name			a) I	Delivery Method	View I rade Secret	service List Name
Brian	Draxten	bhdraxten@otpco.com	Otter Tail Power Company	P.O. Box 496 215 South Cascade Street Fergus Falls, MN 565380498	Electronic Service reet	No	OFF_SL_0-1636_1
Kristen	Eide Tollefson	HealingSystems@earthlink. Rnet	R-CURE	P O Box 129 Frontenac, MN 55026	Paper Service	No	OFF_SL_0-1636_1
Sharon	Ferguson	sharon.ferguson@state.mn .us	Department of Commerce	85 7th Place E Ste 500 Saint Paul, MN 551012198	Electronic Service	Yes	OFF_SL_0-1636_1
Benjamin	Gerber	bgerber@mnchamber.com	Minnesota Chamber of Commerce	400 Robert Street North Suite 1500 St. Paul, Minnesota 55101	Electronic Service	No.	OFF_SL_0-1636_1
Darrell	Gerber		Clean Water Action Alliance of Minnesota	308 Hennepin Ave. E. Minneapolis, MN 55414	Paper Service	No	OFF_SL_0-1636_1
David P.	Geschwind	dp.geschwind@smmpa.org	Southern Minnesota Municipal Power Agency	500 First Avenue SW Rochester, MN 55902	Electronic Service	No	OFF_SL_0-1636_1
Elizabeth	Goodpaster	bgoodpaster@mncenter.or	MN Center for Environmental Advocacy	Suite 206 26 East Exchange Street St. Paul, MN 551011667	Electronic Service	No	OFF_SL_0-1636_1
Penny	Gottier Fena	N/A	American Lung Association	490 Concordia Avenue St. Paul, MN 55103	Paper Service	No	OFF_SL_0-1636_1
Burl W.	Haar	burl.haar@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_0-1636_1
Eric	Jensen	ejensen@iwla.org	Izaak Walton League of America	Suite 202 1619 Dayton Avenue St. Paul, MN 55104	Electronic Service	No	OFF_SL_0-1636_1

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Larry	Johnston	lw.johnston@smmpa.org	SMMPA	500 1st Ave SW	Electronic Service	No	OFF_SL_0-1636_1
				Rochester, MN 55902-3303			
Jane	Justice	jjustice@winthrop.com	Winthrop & Weinstine, P.A.	225 South Sixth Street Suite 3500 Minneapolis, MN 55402	Paper Service	NO.	OFF_SL_0-1636_1
Neil	Kennebeck		Dairyland Power Cooperative	PO Box 817 3200 East Avenue South LaCrosse, WI 546020817		No	OFF_SL_0-1636_1
Frank	Kohlasch	frank.kohlasch@state.mn.u s	MN Pollution Control Agency	520 Lafayette Rd N. St. Paul, MN 55155	Electronic Service	ON.	OFF_SL_0-1636_1
Jeffrey L.	Landsman	jlandsman@wheelerlaw.co m	Wheeler, Van Sickle & Anderson, S.C.	Suite 801 25 West Main Street Madison, WI 537033398	Electronic Service	No	OFF_SL_0-1636_1
Mark R.	Leaman	Z/A	Calpine Corporation	717 Texas St, Ste 1000 Houston, TX 77002-2743	Paper Service	No.	OFF_SL_0-1636_1
Valerie Matthews	Lemieux	clemieux@lemieuxlaw.com	Valerie Matthews Lemieux Law Corporation	102-500 Tache Avenue Winnipeg, MB R2H 0A2 CANADA	Paper Service	NO NO	OFF_SL_0-1636_1
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_0-1636_1
Michael	Loeffler	mike.loeffler@nngco.com	Northern Natural Gas Co.	CORP HQ, 714 1111 So. 103rd Street Omaha, NE 681241000	Electronic Service	No	OFF_SL_0-1636_1

First Name	omet Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
ו או אווים	Last Name			Scalphy	Delivery Method	view Hade Seciel	Selvice List Ivalile
Douglas J.	Mackenzie	dmackenzie@campbellmar	Campbell, Marr, LLP	10 Donald Street	Paper Service	No.	OFF_SL_0-1636_1
				Winnipeg, MB R3L 1Y5			
				CANADA			
Kevin	Marquardt	Kevin.Marquardt@CenterPointEnergy.com	CenterPoint Energy	800 LaSalle Avenue, Floor 14	Electronic Service	No	OFF_SL_0-1636_1
				Minneapolis, Minnesota 55402			
Andrew	Moratzka	apmoratzka@stoel.com	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	O <sub>N</sub>	OFF_SL_0-1636_1
Steve	Morse	N/A	Minnesota Environmental Partnership	546 Rice St, Suite 100 St. Paul, MN 55103	Paper Service	9 <u>V</u>	OFF_SL_0-1636_1
Duane	Ninneman	N/A	Clean Up the River Environment	117 South 1st St Montevideo, MN 56265	Paper Service	°N	OFF_SL_0-1636_1
Margaret	Olson	maiolson@nd.gov	ND Office of Atty. Gen.	500 N. 9th St. Bismarck, North Dakota 58501-4509	Electronic Service	°N	OFF_SL_0-1636_1
Audrey	Peer	audrey,peer@centerpointe nergy.com	CenterPoint Energy	800 Lasalle Avenue - 14th Floor Minneapolis, Minnesota 55402	Electronic Service	<sup>O</sup> Z	OFF_SL_0-1636_1
Helen	Proechel	N/A		168 Erte St St. Paul, MN 55102-2941	Paper Service	O <sub>N</sub>	OFF_SL_0-1636_1
Kevin	Reuther	kreuther@mncenter.org	MN Center for Environmental Advocacy	26 E Exchange St, Ste 206 St. Paul, MN 551011667	Electronic Service	ON.	OFF_SL_0-1636_1

d Aven	First Name L	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Simon mrgsimon@mrenergy.com Missouri River Energy 3724 W. Avera Brive Schools Sogard depoint (Cooperative, Inc. Schools Sogard Schools)  Sobroit beohot@windonthewires.or Wind on the Wires 571098920  Stenders School Schools Schools Schools Schools School Schools Schools Swanson Sewanson@windthrop.com Windthrop Weinstline Cooperative Schools Schools Swanson Sewanson@windthrop.com Windthrop Weinstline Cooperative Schools		Silverthorn				Paper Service	ON	OFF_SL_0-1636_1
Simon mrgsimon@mrenergy.com Missouri River Energy (2724 W, Avera Drive Policy Policy Palls, 200 Policy Palls, 200 Policy					St. Paul, MN 551031029			
Sopard desogard@minnkota.com		Simon			C	Electronic Service	OZ.	OFF_SL_0-1636_1
Stenethjem Swanson Swa		Sogard				Electronic Service	ON ON	OFF_SL_0-1636_1
Stenehjem Steneh		Soholt	bsoholt@windonthewires.or g			Electronic Service	ON	OFF_SL_0-1636_1
Stenehjem Swanson Swan					St. Paul, MN 55104			
Swanson eswanson@winthrop.com Winthrop Weinstine 225 S 6th St Ste 3500 Capella Tower Minneapolis, MN S54024629  Thompson Regulatory.Records@xcele Xcel Energy 414 Nicollet Mall FL 7  Woeste robynwoeste@alliantenerg Interstate Power and Light Confirst St SE y.com		Stenehjem			Dept. 125 600 E. Boulevard Aven Bismarck, ND 585050040	ber Service	ON	OFF_SL_0-1636_1
Thompson Regulatory.Records@xcele Xcel Energy 414 Nicollet Mall FL 7  Minneapolis, MN  S54011993  Woeste robynwoeste@alliantenerg Interstate Power and Light Confirst St SE / y.com		Swanson			S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	OZ.	OFF_SL_0-1636_1
Woeste robynwoeste@alliantenerg Interstate Power and Light 200 First St SE y.com y.com			Regulatory.Records@xcelenergy.com			Electronic Service	ON.	OFF_SL_0-1636_1
1   A			roeste@alliantenerg		apids,	Electronic Service	<u>8</u>	OFF_SL_0-1636_1