



414 Nicollet Mall  
Minneapolis, MN 55401

September 22, 2017

—Via Electronic Filing—

Daniel P. Wolf  
Executive Secretary  
Minnesota Public Utilities Commission  
121 7<sup>th</sup> Place East, Suite 350  
St. Paul, MN 55101

RE: COMMENTS  
ESTIMATED COSTS OF FUTURE CARBON DIOXIDE REGULATION ON  
ELECTRICITY GENERATION  
DOCKET NOS. E999/CI-17-53

Dear Mr. Wolf:

Northern States Power Company, doing business as Xcel Energy, submits these comments in response to the August 22, 2017 Request for Comments by the Minnesota Pollution Control Agency and Minnesota Department of Commerce, Division of Energy Resources (together, the Agencies). Per the Request for Comments, we are filing our Comments in Docket No. E999/CI-17-53 only, but are serving our Comments on both the E999/CI-17-53 and E999/CI-07-1199 service lists.

The Agencies request comment on the following topics:

- Approaches that could be used within the next few months to develop updated regulatory cost value ranges for CO<sub>2</sub> emissions.
  - If existing carbon trading markets are used as a reference, should only markets located in the U.S./North America be considered or should all global values be considered.
- A reasonable year in which utilities can be expected to incur regulatory CO<sub>2</sub> emission costs, given the United States Supreme Court's stay of the Clean Power Plan (CPP) implementation and the US Environmental Protection Agency's (EPA) stated intention to replace the CPP as well as other considerations.
- Whether there is a basis for the Commission to re-assess its decision to apply only the regulatory cost value or the externality value, but not both, to emissions in a given planning year.
- Whether there is a basis for the Commission to re-assess how the regulatory

cost value and the externality value ranges are applied, and what options the Commission should consider.

In summary, we believe we are in a period of particularly significant uncertainty around carbon regulation that makes it difficult to approximate potential future regulatory costs – or the point at which they may take effect. We believe however, the current regulatory cost range of \$9 to \$34 applied starting in 2022 may no longer be reasonable. If the Commission were to base its regulatory cost range on the North American carbon trading markets, the range would be in the area of approximately \$5 to \$12. We believe a start year of 2025 may be reasonable, given the current uncertainty around the CPP or its replacement. With respect to the intersection of regulatory costs and externalities values, we believe that the principles that underlie the Commission’s determination that regulatory costs and externality values should not be applied additively remain the same – and therefore, the Commission should preserve that foundational concept.

Prior to addressing the Notice questions, we briefly review the statutory context and the Commission’s historic treatment of both regulatory and externality costs for CO<sub>2</sub>.

## **A. Statutory Context and History**

### *1. Approach to CO<sub>2</sub> Regulatory Cost Estimation*

Minn. Stat. § 216H.06 requires the Commission to “establish an estimate of the likely range of costs of future carbon dioxide regulation on electricity generation.” When the CO<sub>2</sub> regulatory cost range was first established in 2007, and in updates since, the range has been conceptually based on estimated carbon abatement costs and/or CO<sub>2</sub> allowance prices in carbon markets then in existence – or anticipated soon to be in existence.

In first establishing the range in 2007, the Commission chose \$4 to \$30 per ton, based in part on modeled analysis of CO<sub>2</sub> allowance prices under the various national cap-and-trade bills then under consideration in Congress. The Commission cited in its rationale “pending and proposed state and federal legislation for CO<sub>2</sub> regulation, with particular attention to estimates of the likely costs per ton of CO<sub>2</sub> that may result from such legislation and the likely effective dates,” as well as the Midwest Governors Association’s Midwest Greenhouse Gas Accord.<sup>1</sup> At the time, both federal cap-and-trade legislation and the Midwest Greenhouse Gas Accord envisioned carbon markets

---

<sup>1</sup> See ORDER ESTABLISHING ESTIMATE OF FUTURE CARBON DIOXIDE REGULATION COSTS, *In the Matter of Establishing an Updated Estimate of the Costs of Future Carbon Dioxide Regulation on Electricity Generation Under Minn. Stat. § 216H.06*, Docket No. E999/CI-07-1199. (December 21, 2007) (2007 Order).

as the primary compliance mechanism.

Though federal cap-and-trade legislation failed to pass Congress, and the Midwest Greenhouse Gas Accord disbanded soon thereafter, carbon trading remained the carbon regulatory approach most often proposed in the years that followed. This remained the case when the EPA proposed the CPP under section 111(d) of the Clean Air Act. The CPP allowed states to create – and most states, including Minnesota, actively contemplated creating – carbon trading markets operating in mass-based (CO<sub>2</sub> allowance) or rate-based (Emission Rate Credit) terms. Thus in the most recent update of the regulatory cost range in August 2016, the Commission placed its primary focus on the CPP, and maintained the range of \$9 to \$34 per ton partly in consideration of the CO<sub>2</sub> allowance prices estimated in CPP modeling efforts.<sup>2</sup>

The planning year when the regulatory cost range must be applied has likewise been based on the first compliance year of anticipated CO<sub>2</sub> regulation – the year utilities and their customers are expected to incur compliance costs. When the range was first established, the Commission chose 2012 based on the first compliance year under federal cap-and-trade legislation then under consideration.<sup>3</sup> When the range was last updated, the Commission chose 2022 based on the first compliance year of the CPP.<sup>4</sup>

## 2. *Relationship between CO<sub>2</sub> Regulatory and Externality Costs*

Two distinct Minnesota statutes require the Commission to establish both regulatory and externality costs for CO<sub>2</sub>, as follows:

- Minn. Stat. § 216H.06, Emissions Consideration in Resource Planning. *By January 1, 2008, the Public Utilities Commission shall establish an estimate of the likely range of costs of future carbon dioxide regulation on electricity generation. The estimate, which may be made in a commission order, must be used in all electricity generation resource acquisition proceedings. The estimates, and annual updates, must be made following informal proceedings conducted by the commissioners of commerce and pollution control that allow interested parties to submit comments.*

---

<sup>2</sup> See ORDER ESTABLISHING 2016 AND 2017 ESTIMATE OF FUTURE CARBON DIOXIDE REGULATION COSTS, *In the Matter of Establishing an Updated Estimate of the Costs of Future Carbon Dioxide Regulation on Electricity Generation Under Minn. Stat. § 216H.06*, Docket No. E999/CI-07-1199. (August 5, 2016) (2016 Order).

<sup>3</sup> 2007 Order.

<sup>4</sup> 2016 Order. The CPP was stayed by the U.S. Supreme Court at the time the Commission made this update, and the Commission was aware that if the CPP were upheld by the courts, the Supreme Court stay could result in the start of CPP compliance being pushed back. However, because it was unknown whether or by how much compliance might be delayed, the Commission reasonably used 2022 as the first year utilities could incur CPP compliance costs.

- Minn. Stat. § 216B.2422, subd. 3., Environmental Costs. *The commission shall, to the extent practicable, quantify and establish a range of environmental costs associated with each method of electricity generation. A utility shall use the values established by the commission in conjunction with other external factors, including socioeconomic costs, when evaluating and selecting resource options in all proceedings before the commission, including resource plan and certificate of need proceedings.*

The statutory language, along with past Commission Orders, indicates that the values established under the two Statutes are intended to represent different things. The values established under Minn. Stat. § 216H.06 represent the estimated costs utilities may actually incur to comply with future CO<sub>2</sub> regulations. These potential costs are considered in resource planning and acquisition to guide the selection of resources and prevent the selection of resources that might appear to be least-cost without CO<sub>2</sub> regulation – but may not be if regulation goes into effect. The values established under Minn. Stat. § 216B.2422 are intended to represent estimated societal damages from climate change attributable to an incremental ton of CO<sub>2</sub> emissions. Those damages are assumed to occur regardless of whether CO<sub>2</sub> is regulated.

To-date, the Commission has been clear that regulatory and externality estimates are not to be applied additively. When asked by intervenors in the original regulatory costs proceeding to clarify that the CO<sub>2</sub> regulatory values would not apply in addition to (then already existing) CO<sub>2</sub> externality values, the Commission agreed there was merit in clarifying – stating the following:<sup>5</sup>

*The Commission finds merit in this clarification. While the calculation of externality values under § 216B.2422 is not directly comparable to the estimate of regulatory costs under § 216H.06, they both reflect steps to account for the burdens that CO<sub>2</sub> emissions impose on third parties. When a utility calculates the cost of emitting another ton of CO<sub>2</sub> in any given year, therefore, it would be inappropriate to use both the CO<sub>2</sub> externality value and the CO<sub>2</sub> regulatory cost estimate. But utilities should continue to apply the Commission's CO<sub>2</sub> externality values otherwise...*

*In estimating costs associated with CO<sub>2</sub> emissions for the purpose of analyzing electricity generation resources, a utility need not apply CO<sub>2</sub> externality costs derived pursuant to § 216B.2422, subdivision 3, to CO<sub>2</sub> emitted in any year to which the utility applies the CO<sub>2</sub> regulation costs derived pursuant to Minnesota Statutes § 216H.06.*

To apply the regulatory and externality values additively would imply that regulation

---

<sup>5</sup> 2007 Order at pages 4 and 11.

has not internalized any of the externalized damages, which seems contrary to a core principle of environmental economics that environmental regulation is intended to correct market failures (here, by internalizing externalized costs).

Since 2007, the Commission has set both regulatory and externality values and required utilities to only apply one or the other to all CO<sub>2</sub> emissions in a given planning year. With the continued uncertainty of CO<sub>2</sub> regulation, we have complied with this requirement in resource proceedings by applying the CO<sub>2</sub> *externality* values in all planning years until the year we are required to begin applying the CO<sub>2</sub> *regulatory* values. We then apply the CO<sub>2</sub> regulatory values (the midpoint of the range as a base assumption, and sensitivities at the low and high bookends), and cease applying the CO<sub>2</sub> externality values.<sup>6</sup>

## **B. Questions posed by the Agencies**

1. *What approaches could be used within the next few months to develop updated regulatory cost value ranges for CO<sub>2</sub> emissions?*

As we noted previously, with the CPP under review and likely to be rescinded by the EPA, we are currently in a period of significant uncertainty as to the form of CO<sub>2</sub> regulation that may replace the CPP.<sup>7</sup> Considering these uncertainties, we believe it may no longer be appropriate to use estimated allowance prices or compliance start dates under the CPP as the basis for the Commission's CO<sub>2</sub> regulatory costs.

We believe it is reasonable to assume the power sector will be subject to further CO<sub>2</sub> regulation, so it is appropriate to set the estimate CO<sub>2</sub> regulatory costs at something greater than zero. However, we do not see an obvious alternative basis for estimating CO<sub>2</sub> regulatory costs under the current uncertainty. We agree with the Agencies' suggestion that it may be reasonable to use CO<sub>2</sub> allowance prices in existing carbon markets as an interim proxy – not because we are confident carbon markets will, or will not, be an available compliance option in future regulations, rather simply because there is no obvious alternative. Further, these prices are publicly available and

---

<sup>6</sup> See for example, Appendix – Strategist Modeling and Outputs Updates, pages 2-3 of the Xcel Energy 2016-2030 *Upper Midwest Resource Plan – Supplement*, Docket No. E002/RP-15-21 (March 16, 2015).

<sup>7</sup> The CPP was stayed by the U.S. Supreme Court on February 9, 2016, and remains stayed. On March 28, 2017 President Trump signed an Executive Order directing EPA to review and, if appropriate, suspend, revise, or rescind the CPP. (Executive Order 13783, 82 Fed. Reg. 16,093, *Promoting Energy Independence and Economic Growth* (Mar. 28, 2017)). The D.C. Circuit Court has granted a request from EPA to hold CPP litigation in indefinite abeyance while EPA reconsiders the rule; EPA has made clear it intends to review, repeal, and may or may not replace the CPP. EPA on April 4, 2017 published a Notice announcing its review of the CPP (82 Fed. Reg. 16,329, 16,330 (Apr. 4, 2017)), and on June 8, 2017 submitted a proposed rule entitled *Review of the Clean Power Plan* to the White House Office of Management and Budget. As of this writing, EPA has not yet released any proposed rule to the public.

frequently updated.

Specifically, the existing markets in North America – California/Quebec and the Regional Greenhouse Gas Initiative (RGGI) – could serve as a guide. CO<sub>2</sub> allowance auction results are published quarterly for both markets. The table below summarizes the auction clearing prices over the last two years.

Market	Auction No.	Date of Auction	Clearing Price	
			\$/metric tonne	\$/short ton
California/ Quebec <sup>8</sup>	12	8/15/2017	\$14.75	\$13.38
	11	5/16/2017	\$13.80	\$12.52
	10	2/22/2017	\$13.57	\$12.31
	9	11/15/2016	\$12.73	\$11.55
	8	8/16/2016	\$12.73	\$11.55
	7	5/18/2016	\$12.73	\$11.55
	6	2/17/2016	\$12.73	\$11.55
	5	11/17/2015	\$12.73	\$11.55
	4	8/18/2015	\$12.52	\$11.36
			<i>Average over last two years:</i>	<b>\$11.92</b>
RGGI <sup>9</sup>	37	9/8/2017	<i>The RGGI Market operates in short tons</i>	\$4.35
	36	6/7/2017		\$2.53
	35	3/8/2017		\$3.00
	34	12/7/2016		\$3.55
	33	9/7/2016		\$4.54
	32	6/1/2016		\$4.53
	31	3/9/2016		\$5.25
	30	12/2/2015		\$7.50
	29	9/9/2015		\$6.02
		<i>Average over last two years:</i>	<b>\$4.59</b>	

Based on the two-year averages of these markets (i.e. not giving undue weight to any single allowance auction, since various factors cause allowance prices to fluctuate between auctions), we believe the Commission could reasonably set an interim CO<sub>2</sub> regulatory cost range at around **\$5 to \$12** per short ton. This would imply a new CO<sub>2</sub> regulatory cost midpoint of **\$8.50** per short ton. We believe this would be a reasonable interim update of the CO<sub>2</sub> regulatory cost range to use, pending greater clarity on what CO<sub>2</sub> regulatory framework may replace the CPP at the federal, state or

<sup>8</sup> California/Quebec market CO<sub>2</sub> allowance auction results are posted on the California Air Resources Board website at <https://www.arb.ca.gov/cc/capandtrade/auction/auction.htm#auction>. The *Summary of Auction Settlement Prices and Results* shows results from all auctions to date. See the “Current Auction Settlement Price” column, which gives the clearing price in that auction for current-vintage allowances. The California market operates in metric tonnes, so we have provided the equivalent \$/short ton in the table based on 0.907 metric tons = 1 short ton.

<sup>9</sup> RGGI market CO<sub>2</sub> allowance auction results are posted on the RGGI website at [http://rggi.org/market/co2\\_auctions/results](http://rggi.org/market/co2_auctions/results), under “Allowance Prices and Volumes (by Auction).”

regional levels.

The world's largest carbon market is the European Union's Emission Trading System, which was originally established in 2005 and is currently in its third phase. European Emission Allowances (EUA) in the latest auction sold at €6.90 per metric tonne according to the European Energy Exchange – or about \$7.53 per short ton at current exchange rates.<sup>10</sup> Since this falls solidly in the range for the North American markets outlined above, while we believe it provides some validation, we do not see a need for the Commission to further consider carbon markets outside North America.

While we believe an interim proxy based on the North American carbon trading markets is preferable, given the particular level of present uncertainty, we acknowledge the Commission may prefer to make more of an incremental change. For example, the Commission could “blend” the current \$9 to \$34 range with the \$5 to \$12 markets range to derive a range of approximately \$7 to \$23 per short ton – and a midpoint of \$15.

2. *What is a reasonable date (year) in which utilities can be expected to incur regulatory CO<sub>2</sub> emission costs?*

At the time of the most recent update to the Commission's CO<sub>2</sub> regulatory cost values, it was reasonable to assume the CPP would be the regulatory mechanism, and compliance would begin in 2022. That is no longer the case. The EPA has made clear it intends to review and likely rescind the CPP rule, with or without replacement. This decision is expected to be challenged in the courts; both the litigation and the rulemaking to rescind and/or replace the CPP will likely be lengthy.

Since the CPP is a final rule, the rulemaking process – whether or not EPA promulgates a replacement or merely repeals the CPP – will require publication of a proposed rule, public comment, and finalization of a new rule. This process could take two years or more from when EPA releases a proposed repeal/replacement rule. If EPA elects not to promulgate a replacement, no regulation will go into effect in 2022. If EPA replaces the CPP with a new rule, then provides a similar amount of time for states to develop implementation plans and a similar compliance timeline as was provided in the CPP, the start of compliance will likely be later than 2022.

Although it is not possible today to know exactly when utilities may incur CO<sub>2</sub> regulatory compliance costs, we believe it will likely be later than 2022 – and that **2025** would be a reasonable proxy for the Commission to set as the year to begin applying

---

<sup>10</sup> <https://www.eex.com/en/market-data/environmental-markets/auction-market/european-emission-allowances-auction#/2017/09/08>.

the CO<sub>2</sub> regulatory range. We see this as an interim measure pending greater clarity. As more information becomes available on future federal, state or regional carbon policy, the Commission has an established process to revise the range and/or the start year accordingly.

3. *Should the Commission reassess its decision to apply only the regulatory cost value or the externality value, but not both, to emissions in a given planning year?*

No. The Commission should not reassess its decision to not apply the regulatory costs and externalities values additively. We believe the reasons underlying the Commission's original decision to apply the costs/values separately remain valid and thus should be preserved.

4. *What options should the Commission consider for how the regulatory cost value and the externality value ranges are applied?*

We believe the greatest value comes from considering a range of costs over the planning period – given that the financial modeling aspect of resource decisions is just one of many involved in making long-term resource decisions. Today, utilities apply the regulatory costs and externalities values in *base assumptions* and *sensitivities* in a “pre-regulatory cost” period and a “regulatory cost” period. In terms of base assumptions, we believe utilities should continue the current practice of applying externalities values up to the point at which regulatory costs are expected – then apply the midpoint of the regulatory cost range for the duration of the planning period. During the pre-regulatory cost period, utilities should use the low externalities value as the base assumption, and test it with the high externalities value sensitivity.<sup>11</sup>

Sensitivities are intended to test the robustness of a plan, and can provide valuable information from which to consider a range of potential outcomes. In the post-regulatory cost period, utilities could model all data points as sensitivities – meaning a high and low regulatory cost and the high and low externalities values. We believe however, the greatest decisional value comes from a modeling broad range – or a single high and low bookend – rather than several incremental values within the broad range. This approach would:

- Provide the widest range of potential impacts for decision-making,
- Preserve the foundational concept that only one of the costs/values applies at a point in time, and

---

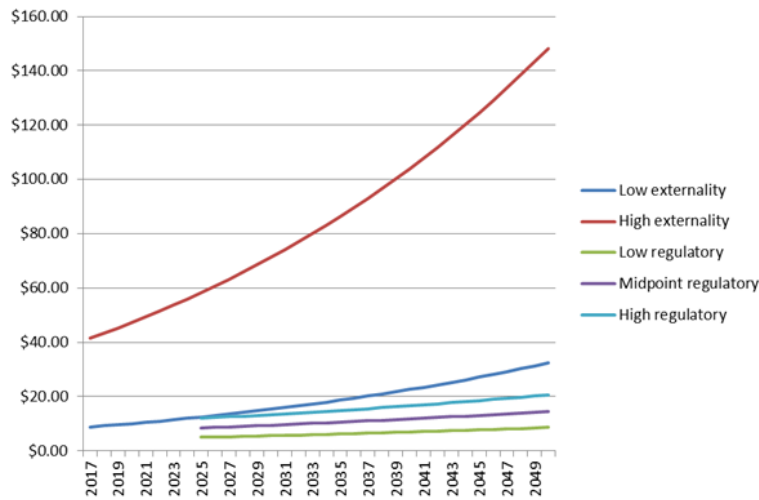
<sup>11</sup> The values as established in Compliance Filing, Fourth Affidavit of Anne E. Smith, Ph.D. with Attachment 1, IN THE MATTER OF THE FURTHER INVESTIGATION INTO ENVIRONMENTAL AND SOCIOECONOMIC COSTS UNDER MINN. STAT. § 216B.2422, SUBD. 3, Docket No. E999-CI-14-643 (August 3, 2017).



- Streamline the modeling.

Options the Commission may want to consider for the high and low sensitivities in the regulatory cost period include: (1) the high and low externality values for each respective year; (2) the high and low of the regulatory cost range that the Commission establishes; or (3) the single highest CO<sub>2</sub> cost/value and the single lowest CO<sub>2</sub> cost/value low, without regard to whether it is a regulatory cost or externality value.<sup>12</sup>

We illustrate the values in the following figure to provide context to these alternatives:



*Note: The regulatory cost range values in this illustration are representative of the average North American carbon trading markets discussed in Section B.1 of these comments, starting in 2025 as we have proposed. The Low and High CO<sub>2</sub> externality values are taken from the compliance filing cited in footnote 11, where they are given in 2015 dollars per short ton, and converted to nominal dollars per short ton. Regulatory values are also shown in nominal dollars per short ton. Both externality and regulatory values are escalated at 2.19% annually for inflation.*

All of these options would maintain the basic construct that regulatory costs and externality values are not applied additively. However, we believe the greatest informational value would come from Option (3), because it would likely represent the widest range for decision-making purposes – and, unlike the other options, it would also subsume the full regulatory cost range and the full range of externalities values. Modeling each of the data points would be administratively complex, and some of the values will “cluster” within the range, so the differences may not be meaningful for decision-making purposes. However, we recognize that this range could be quite broad, so acknowledge that the Commission may want to require that utilities model a middle point as well.

To illustrate Option (3), we use the average North American markets regulatory cost

<sup>12</sup> All of these options would be in addition to the existing requirement to model zero sensitivities for the regulatory cost and externalities value in each the pre-regulatory and regulatory cost periods.

range (starting in 2025) of \$5 to \$12 that we propose, and the 2025 high externalities value as an example:

	Pre-Regulatory Cost Period (prior to 2025)		Regulatory Cost Period (2025 and beyond)	
	Regulatory Cost	Externality Value	Regulatory Cost	Externality Value
Base Assumptions	\$0	Low	\$8.50 (mid)	\$0
Sensitivities	None	High	\$5	\$46.96*

*\* Escalating annually with established values (2015\$ per short ton as reflected in the compliance filing cited in Footnote 11).*

In summary, we propose a regulatory cost range of \$5 to \$12, which is based on the average of the North American carbon trading markets over the past two years of CO<sub>2</sub> allowance auctions. We believe 2025 is a reasonable starting year for the regulatory costs, given the present uncertainty regarding carbon regulation. The principles that underlie the Commission’s previous determination that regulatory costs and externality values should not be applied additively remain the same – and therefore, the Commission should preserve this foundational concept. Modeling the potential future impact of CO<sub>2</sub> associated with resource additions and changes should provide the Commission with a wide range of potential impacts, and be based on established high and low regulatory costs and externalities values. We believe a range based on the lowest regulatory cost and the highest externalities value will provide the greatest decisional value.

We appreciate the opportunity to provide these comments. We have electronically filed this document with the Minnesota Public Utilities Commission, and copied parties on the attached service list. Please contact me at (612) 330-6255 or [Nicholas.F.Martin@xcelenergy.com](mailto:Nicholas.F.Martin@xcelenergy.com) if you have any questions regarding this filing.

Sincerely,

/s/

NICHOLAS MARTIN  
MANAGER, ENVIRONMENTAL AFFAIRS

Service List

## CERTIFICATE OF SERVICE

I, Jim Erickson, hereby certify that I have this day served copies of the foregoing document on the attached list of persons.

xx by depositing a true and correct copy thereof, properly enveloped with postage paid in the United States mail at Minneapolis, Minnesota

xx electronic filing

**DOCKET No. E999/CI-17-53**

Dated this 22<sup>nd</sup> day of September 2017

/s/

---

Jim Erickson  
Regulatory Administrator

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	No	OFF_SL_7-1199_1
Jon	Brekke	jbrekke@grenergy.com	Great River Energy	12300 Elm Creek Boulevard  Maple Grove, MN 553694718	Electronic Service	No	OFF_SL_7-1199_1
Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron	200 S 6th St Ste 4000  Minneapolis, MN 554021425	Electronic Service	No	OFF_SL_7-1199_1
Carl	Cronin	Regulatory.records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7  Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_7-1199_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_7-1199_1
Stacy	Dahl	sdahl@minnkota.com	Minnkota Power Cooperative, Inc.	1822 Mill Road PO Box 13200 Grand Forks, ND 58208-3200	Electronic Service	No	OFF_SL_7-1199_1
David	Dahlberg	davedahlberg@nweco.com	Northwestern Wisconsin Electric Company	P.O. Box 9 104 South Pine Street Grantsburg, WI 548400009	Electronic Service	No	OFF_SL_7-1199_1
Curt	Dieren	curt.dieren@dgr.com	L&O Power Cooperative	1302 S Union St  Rock Rapids, IA 51246	Electronic Service	No	OFF_SL_7-1199_1
Ian	Dobson	Residential.Utilities@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_7-1199_1
Brian	Draxten	bhdraxten@otpc.com	Otter Tail Power Company	P.O. Box 496 215 South Cascade Street Fergus Falls, MN 565380498	Electronic Service	No	OFF_SL_7-1199_1

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280  Saint Paul, MN 551012198	Electronic Service	Yes	OFF_SL_7-1199_1
Karlene	Fine	kfine@nd.gov	Industrial Commission of North Dakota	14th Floor 600 E. Boulevard Avenue, Dept. 405 Bismarck, ND 58505	Electronic Service	No	OFF_SL_7-1199_1
Edward	Garvey	garveyed@aol.com	Residence	32 Lawton St  Saint Paul, MN 55102	Electronic Service	No	OFF_SL_7-1199_1
Bruce	Gerhardson	bgerhardson@otpc.com	Otter Tail Power Company	PO Box 496 215 S Cascade St Fergus Falls, MN 565380496	Electronic Service	No	OFF_SL_7-1199_1
Todd J.	Guerrero	todd.guerrero@kutakrock.com	Kutak Rock LLP	Suite 1750 220 South Sixth Street Minneapolis, MN 554021425	Electronic Service	No	OFF_SL_7-1199_1
Kimberly	Hellwig	kimberly.hellwig@stoel.com	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_7-1199_1
Casey	Jacobson	cjacobson@bepc.com	Basin Electric Power Cooperative	1717 East Interstate Avenue  Bismarck, ND 58501	Electronic Service	No	OFF_SL_7-1199_1
Joel	Larson	jl Larson@minnkota.com	Minnkota Power Cooperative, Inc.	1822 Mill Road  Grand Forks, ND 58203	Electronic Service	No	OFF_SL_7-1199_1
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St  Duluth, MN 558022093	Electronic Service	No	OFF_SL_7-1199_1

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Dalene	Monsebrotten	dalene@mncable.net	Northern Municipal Power Agency	123 2nd St W Thief River Falls, MN 56701	Electronic Service	No	OFF_SL_7-1199_1
Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_7-1199_1
Peter	Nelson	peter.nelson@americanexperiment.org	Center of the American Experiment	8441 Wayzata Boulevard Suite 350 Golden Valley, MN 55426	Electronic Service	No	OFF_SL_7-1199_1
David	Niles	david.niles@avantenergy.com	Minnesota Municipal Power Agency	220 South Sixth Street Suite 1300 Minneapolis, Minnesota 55402	Electronic Service	No	OFF_SL_7-1199_1
Samantha	Norris	samanthanorris@alliantenergy.com	Interstate Power and Light Company	200 1st Street SE PO Box 351 Cedar Rapids, IA 524060351	Electronic Service	No	OFF_SL_7-1199_1
Steven	Nyhus	swnyhus@flaherty-hood.com	Flaherty & Hood PA	525 Park St Ste 470 Saint Paul, MN 55103	Electronic Service	No	OFF_SL_7-1199_1
Russell	Olson	rolson@hcpd.com	Heartland Consumers Power District	PO Box 248 Madison, SD 570420248	Electronic Service	No	OFF_SL_7-1199_1
Mary Beth	Peranteau	mperanteau@wheelerlaw.com	Wheeler Van Sickle & Anderson SC	44 E. Mifflin Street, 10th Floor Madison, WI 53703	Electronic Service	No	OFF_SL_7-1199_1
Craig	Rustad	crustad@minnkota.com	Minnkota Power	1822 Mill Road PO Box 13200 Grand Forks, ND 582083200	Electronic Service	No	OFF_SL_7-1199_1

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Robert K.	Sahr	bsahr@eastriver.coop	East River Electric Power Cooperative	P.O. Box 227 Madison, SD 57042	Electronic Service	No	OFF_SL_7-1199_1
Christopher	Schoenherr	cp.schoenherr@smmpa.org	SMMPA	500 First Ave SW Rochester, MN 55902-3303	Electronic Service	No	OFF_SL_7-1199_1
Mrg	Simon	mrgsimon@mrenergy.com	Missouri River Energy Services	3724 W. Avera Drive P.O. Box 88920 Sioux Falls, SD 571098920	Electronic Service	No	OFF_SL_7-1199_1
Eric	Swanson	eswanson@winthrop.com	Winthrop & Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	OFF_SL_7-1199_1
David	Thornton	J.David.Thornton@state.mn.us	MN Pollution Control Agency	520 Lafayette Road St. Paul, MN 55101	Electronic Service	No	OFF_SL_7-1199_1
Pat	Treseler	pat.jcplaw@comcast.net	Paulson Law Office LTD	4445 W 77th Street Suite 224 Edina, MN 55435	Electronic Service	No	OFF_SL_7-1199_1
Cam	Winton	cwinton@mnychamber.com	Minnesota Chamber of Commerce	400 Robert Street North Suite 1500 St. Paul, Minnesota 55101	Electronic Service	No	OFF_SL_7-1199_1
Robyn	Woeste	robynwoeste@alliantenergy.com	Interstate Power and Light Company	200 First St SE Cedar Rapids, IA 52401	Electronic Service	No	OFF_SL_7-1199_1
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	No	OFF_SL_7-1199_1

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	No	OFF_SL_17-53_17-53
Ian	Dobson	Residential.Utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	No	OFF_SL_17-53_17-53
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_17-53_17-53
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	No	OFF_SL_17-53_17-53