

March 5, 2018

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

RE: Reply Comments of the Minnesota Department of Commerce and the Minnesota Pollution Control Agency
Docket Nos. E999/CI-07-1199 and E999/DI-17-53

Dear Mr. Wolf:

Attached are the reply comments of the Minnesota Department of Commerce and the Minnesota Pollution Control Agency (Agencies) in the following matter:

In the Matter of Establishing an Updated 2018 Estimate of the Costs of Future Carbon Dioxide Regulation on Electricity Generation under Minn. Stat. § 216H.06.

After reviewing the comments filed in response to the Agencies' January 19, 2018 recommendation, the Agencies affirm that we continue to recommend that the Minnesota Public Utilities Commission (Commission) establish the range of likely costs of CO₂ regulation at \$5 to \$25 per ton of CO₂ emitted, to be used in electric resource acquisition proceedings for planning year 2025 and beyond.

Sincerely,

/s/ KATE O'CONNELL
Manager, Energy Planning & Advocacy
Commerce Department

/s/ FRANK KOHLASCH
Manager, Environmental Analysis & Outcomes
Pollution Control Agency

KO/FK/lt
Attachment

Before the Minnesota Public Utilities Commission

Reply Comments of the Minnesota Department of Commerce/ Minnesota Pollution Control Agency

Docket Nos. E999/CI-07-1199 and E999/DI-17-53

I. BACKGROUND

On January 19, 2018, the Minnesota Department of Commerce and the Minnesota Pollution Control Agency (Agencies) submitted their *Analysis and Recommendations* (Recommendation) to the Minnesota Public Utilities Commission (Commission) after soliciting stakeholder input. The Agencies' recommendation is for the Commission to establish the range of likely costs of carbon dioxide (CO₂) regulation at \$5 to \$25 per ton of CO₂ emitted, to be used in electric resource acquisition and planning proceedings for planning year 2025 and beyond.

On January 23, 2018, the Commission issued a *Notice of Comment Period* (Notice) soliciting comment on the following topics:

- Should the Commission adopt the Agencies' recommendations?
- If not, what CO₂ values should the Commission set for the range of costs of future carbon dioxide regulation on electricity generation?
- In setting the likely range of costs of future CO₂ regulation, should the Commission consider a state- or regional-level cost of compliance as opposed to a national-level cost of compliance (such as the national CO₂ price developed by Synapse Energy Economics, Inc. in its March 2016 forecast)?
- Are there other issues or concerns related to this matter?

The Notice also requested the following from utilities that participated in the stakeholder process:

- In the initial comment period, utilities referenced third party forecasting services as a basis to set CO₂ Values in this case. Did any utility retain a third party vendor to produce a utility-specific and/or national compliance cost for the EPA Clean Power Plan? Is any utility aware of compliance cost estimates that could inform a state- or regional-regulatory scope?
- Using an average of 2010-2012 operations as a baseline, and using the most recently approved integrated resource plan (IRP) for forward-looking projections, please provide the utility's total emissions reductions and carbon-intensity on the utility's

system. Please provide projections through the last year of the utility's most recently approved IRP.

Several stakeholders filed comments by the February 19, 2018 comment deadline:

- Clean Energy Organizations (CEO);¹
- Minnesota Large Industrial Group (MLIG);²
- Minnesota Power;
- Northern States Power Company, doing business as Xcel Energy (Xcel Energy);
- Otter Tail Power Company (Otter Tail Power); and
- Great River Energy.

II. AGENCIES' RESPONSE TO COMMENTS

A. REGULATORY COST RANGE

Xcel Energy, Great River Energy, and Otter Tail Power supported the Agencies' recommended cost range of \$5 to \$25.

Minnesota Power supported averaging multiple third-party vendors' forecast data to establish the cost range. As noted in the Agencies' Recommendation, acquiring third-party vendor forecasts would be costly. Therefore, the Agencies took a blended approach, basing the lower end of the range on current carbon dioxide market prices (from the Regional Greenhouse Gas Initiative, or RGGI³) and the high end of the range on Synapse Energy Economics, Inc.'s most recent carbon dioxide price forecast (which is publicly available at no cost). However, should the Commission prefer Minnesota Power's suggested approach, the Department of Commerce would be willing to obtain the forecasts, if authorized under Minn. Stat. § 216B.62, subd. 8.

The MLIG did not address the regulatory cost range, but did advocate for no change to the value range during the stakeholder process.

¹ CEO is composed of the following organizations: Fresh Energy, Wind on the Wires, Sierra Club, Union of Concerned Scientists, and Minnesota Center for Environmental Advocacy.

² MLIG is composed of the following companies: ArcelorMittal USA (Minorca Mine); Blandin Paper Company; Boise Paper, a Packaging Corporation of America company, formerly known as Boise, Inc.; Enbridge Energy, Limited Partnership; Gerdau Ameristeel US, Inc. (St. Paul facility); Hibbing Taconite Company; Mesabi Nugget Delaware, LLC; Sappi Cloquet, LLC; United States Steel Corporation (Keetac and Minntac Mine); United Taconite, LLC; USG Interiors, LLC (Cloquet and Red Wing facilities); and Verso Corporation.

³ RGGI is one of two current major North American cap-and-trade carbon markets; the other is the Western Climate Initiative (WCI). Of these two markets, the RGGI has tended to have lower CO₂ clearing prices.

The CEO recommended that the value range be “based on the floor and ceiling prices of allowances in the North American cap and trade programs”⁴ However, “floor and ceiling prices” referred to are actually regulatory trigger points. If auction prices hit the low end (the floor), the regulatory body will withhold allowances from being sold in the auction. Withholding allowances is intended to achieve additional emission reductions in the event of lower than anticipated emission reduction costs. At the high end (the ceiling), the trigger price is the minimum price at which allowances are offered for sale by the regulatory agency (these allowances are separate from, and in addition to, the CO₂ allowances allocated to the emitters). So the ranges proposed by the CEO are not actually carbon dioxide trading prices, but only tools for the regulators to influence the allowance market should the actual prices go too high or too low.

The Agencies do not support basing the Commission’s cost of carbon dioxide regulation range on regulatory trigger prices. As noted in our recommendation, we support using Synapse price forecasts, particularly for the high end of the range, since the Synapse forecasts are publicly available and have a high degree of credibility. The Agencies recognize that today’s allowance prices may not reflect future prices. However, as the Agencies explained in the Recommendation, there is no non-cost alternative that provides objective and readily-available forecasted values. Thus, the Agencies used a blended approach, using both current trading market values and the Synapse forecasted values.

The CEO also recommended that the adopted value range should escalate based on the escalation factors used in the cap-and-trade programs to set the regulatory trigger points. Setting aside the Agencies’ objection to using regulatory trigger points as proxies for regulatory cost values, the Agencies looked to historical auction prices in an attempt to discern a trend that would indicate an appropriate escalation rate to apply to the regulatory cost range to be established by the Commission. Table 1 below shows historical auction clearing prices for both the RGGI and the California Cap-and-Trade markets.

⁴ This recommendation is not consistent with the CEO’s input during the stakeholder process. During the stakeholder process the CEO recommended that the externality values be used as a surrogate to the cost of carbon dioxide regulation values, and alternatively, to base the cost of carbon dioxide regulation on up-to-date carbon dioxide pricing forecasts, like the Synapse forecast. If based on a carbon dioxide price forecast, the CEO suggested that the range could be based on “either the Synapse mid-range carbon price forecast, or a range of prices corresponding with Synapse’s range of projections.”

Table 1: Historical CO₂ Allowance Prices

RGGI Historical Auction Clearing Prices ⁵		California Cap-and-Trade Auction Settlement Prices ⁶	
Auction Date	Clearing Price	Auction Date	Settlement Price
12/06/2017	\$3.80	Nov-17	\$15.06
09/06/2017	\$4.35	Aug-17	\$14.75
06/07/2017	\$2.51	May-17	\$13.80
03/08/2017	\$3.00	Feb-17	\$13.57
12/07/2016	\$3.55	Nov-16	\$12.73
09/07/2016	\$4.54	Aug-16	\$12.73
06/01/2016	\$4.53	May-16	\$12.73
03/09/2016	\$5.25	Feb-16	\$12.73
12/02/2015	\$7.50	Nov-15	\$12.73
09/09/2015	\$6.02	Aug-15	\$12.52
06/03/2015	\$5.50	May-15	\$12.29
03/11/2015	\$5.41	Feb-15	\$12.21
12/03/2014	\$5.21	Nov-14	\$12.10
09/03/2014	\$4.88	Aug-14	\$11.50
06/04/2014	\$5.02	May-14	\$11.50
03/05/2014	\$4.00	Feb-14	\$11.48
12/04/2013	\$3.00	Nov-13	\$11.48
09/04/2013	\$2.67	Aug-13	\$12.22
06/05/2013	\$3.21	May-13	\$14.00
03/13/2013	\$2.80	Feb-13	\$13.62
12/05/2012	\$1.93	Nov-12	\$10.09

As can be seen from Table 1, allowance prices fluctuate from year to year, and also within each year. There is no consistent or regular progression, particularly for RGGI prices. While there may be support for applying escalation factors to regulatory trigger prices within a cap-and-trade regime, there does not appear to be support in this record for a particular escalation rate to apply to the Commission's regulatory cost value range. The Agencies note that, although the Commission has not prescribed use of an escalation factor to apply to the cost of future carbon dioxide regulation values, escalation factors, typically the current inflation rate, are often applied to carbon dioxide regulation values in utility capacity expansion modeling runs.

The Agencies conclude that the CEO has not shown that it would be appropriate for the Commission to apply to the cost of future carbon dioxide regulation range the escalation factors used by the cap-and-trade programs to establish future regulatory trigger points. Further, there is no need for the Commission to prescribe an escalation factor, since

⁵ Source: www.rggi.org/Auctions/Auction-Results/Prices-Volumes

⁶ Source: www.arb.ca.gov/cc/capandtrade/auction/results_summary.pdf

participants in electric resource planning proceedings are free to propose a supportable escalation factor of that participant's choice.

The Commission requested comments on whether the utilities were aware of any regulatory cost estimates developed in preparation for the federal Environmental Protection Agency's (EPA) Clean Power Plan (CPP) that could be used to inform the Commission's decisions in this matter. Xcel Energy noted the following:

Therefore some state- and regional-level CPP carbon price forecasts are available, and we are willing to summarize them if the Commission desires. However, we believe they would not be useful to consider as a basis for the Commission's CO₂ regulatory cost range at present. EPA has proposed to repeal the CPP, and it is unclear what regulatory approach will replace it. Regardless, few expect the CPP to be enacted in the form finalized in October 2015 and modeled by the organizations mentioned in the footnote. We therefore do not recommend state or regional CO₂ pricing based on the CPP, and we support the Agencies' recommendation to use a broad range from \$5 to \$25 pending greater regulatory clarity.

Minnesota Power noted that the Synapse forecast has not been updated since March of 2016, and indicated that Minnesota Power does purchase up-to-date third-party forecast data for resource planning purposes. Minnesota Power concluded that a national-level forecast is reasonable because Minnesota's electric utility facilities are dispatched according to interconnected regional power markets such as the Midcontinent Independent System Operator (MISO). Minnesota Power did not offer a value range based on its purchased third-party forecast data.

Otter Tail Power indicated that it did not retain a third-party vendor to assess CPP compliance costs and noted that third-party estimates may not be accurate predictors of the cost of complying with a future CPP-like rulemaking. Otter Tail Power concluded that "a national-level cost of compliance is a realistic scenario."

After reviewing the comments submitted in response to the Agencies' Recommendation, the Agencies continue to recommend a value range of \$5 to \$25.

B. DATE OF APPLICATION

Xcel Energy and Great River Energy agree with the Agencies that CO₂ regulation is unlikely to impose costs on utilities before 2025.

Otter Tail Power indicated its preference for a starting date of 2028, but agreed that it does not oppose using 2025 as recommended by the Agencies.

Minnesota Power supports application of the cost of carbon dioxide regulation values beginning 2026, based on “proprietary industry resources, as well as the anticipated lead-time required for implementation of a federal regulation for CO₂.”

The CEO recommended a starting date of 2022, since it believes that the EPA’s December 28, 2017 Advance Notice of Proposed Rulemaking “suggests federal regulations may be in place sooner than the Agencies project.” The CEO also noted that the political landscape could change as soon as 2021.

The Agencies continue to conclude that an application start date of 2025 is supportable. While a later application date may be likely, the Agencies chose to select the earliest likely date that utilities can expect to incur costs to regulate CO₂ emissions. The Agencies do not recommend that the Commission maintain the 2022 date, given that 2022 was set at the time CPP implementation seemed imminent.

C. RELATIONSHIP WITH ENVIRONMENTAL COST OF CO₂

Except for the CEO, all commenters agreed that it is appropriate to maintain the Commission’s current method of applying the environmental cost values and the cost of future carbon dioxide regulation values in resource planning proceedings (i.e., that the environmental cost values be applied in the years prior to the years in which the cost of future carbon dioxide regulation values are applied).

The CEO proposed that “externality costs in excess of regulatory costs must be included when assessing the full societal costs of a plan.” More specifically, the CEO stated that “in each year when a Commission-adopted externality value is greater than the regulatory value for that year, the utility should provide an externality sensitivity run that includes those extra societal costs.” Further, the CEO requested that the Commission require utilities to include the regulatory values in the utility’s base, or reference case.

The Agencies agree that the Commission should have all of the information it needs when making resource acquisition and planning decisions. Further, the Agencies are not opposed to the Commission providing direction as to what it wants utilities to provide in resource acquisition and planning proceedings. The Commission recognizes the importance of ensuring that sufficient sensitivity runs are provided. As Xcel Energy noted:⁷

The Commission’s January 3, 2018 Order in Docket No. CI-14-643 requires consideration of Low, High, and zero externality

⁷ Xcel Energy Comments, footnote 8, page 5.

sensitivities: “Combining the higher discount rate with the shorter time horizon generates the lowest practicable estimate of CO₂ costs. Combining the lower discount rate with the longer time horizon generates the highest practicable estimate. By considering resource plans prepared with these costs – along with a scenario that excludes consideration of externality costs – the Commission will gain insight into the magnitude of the CO₂ related stakes in any resource choice.” Order at page 32.

Typically, the utility, the Department of Commerce, and sometimes other participants⁸ conduct modeling runs of their choice. Xcel Energy explained how it chooses sensitivity runs as follows:⁹

Sensitivities are used in resource planning to represent a reasonable range of possible outcomes to test the robustness of the Reference Case. Our principles in choosing sensitivities include: 1) a broader range of sensitivities provides greater decisional value for the Commission and stakeholders; 2) sensitivities that are very close to the Reference Case provide little added value; 3) the overall number of sensitivities should be reasonable, considering there will also be sensitivities for many other variables and input assumptions.

The Agencies agree that what matters is that a complete and well-thought-out analysis of “a reasonable range of possible outcomes” is crucial to resource acquisition and planning decisions. The Agencies would not object to specific required modeling runs should the Commission decide that particular runs will provide decisional value; however it is difficult to conclude that the modeling runs involving a mix of regulatory and environmental cost values as suggested by the CEO would provide decisional value (it would be very similar to a run using the high end of the externality value range for all years). As the analysis progresses, the modeling run results can inform the analyst as to what additional sensitivities to run. To the extent a participant anticipates that a particular sensitivity run will provide value, the participant should provide it, or request that it be provided.

Therefore, the Agencies conclude that it is not necessary for the Commission to prescribe specific sensitivities or alter the existing guidance; which provides for use of the regulatory cost values or externality values, but not both, in each year of the planning period. The Agencies note that the CEO’s request that the Commission require utilities to include regulatory cost values in the base or reference case is misplaced, since there will be model runs, likely several,

⁸ See Direct Testimony of Anna Sommer on behalf of Minnesota Center for Environmental Advocacy, Fresh Energy, Wind on the Wires, and Sierra Club in Docket No. E015/AI-17-568.

⁹ Xcel Energy Comments, page 5.

that include the regulatory cost values whether they are labeled as the reference case or not. What matters is ensuring there are sufficient modeling runs analyzed such that the Commission is able to determine the robustness of the recommendations of the participants.

D. DURATION OF UPDATE

In its August 5, 2016 *Order Establishing 2016 and 2017 Estimate of Future Carbon Dioxide Regulation Costs*, the Commission stated the following:

The Commission finds that it makes sense at this point to establish CO₂ regulatory costs for both 2016 and 2017. Calendar year 2016 is more than half over, and there is no evidence of any events on the horizon likely to change regulatory costs before the end of the next calendar year. Given the workloads and resource constraints facing the Department and the MPCA – and given their belief that CO₂ regulatory costs are unlikely to change in 2017 – it is both reasonable and responsible not to require these agencies to conduct proceedings to recommend new carbon-regulation costs for calendar year 2017.

Similarly, in its April 28, 2014 *Order Establishing 2014 and 2015 Estimate of Future Carbon Dioxide Regulation Costs*, the Commission determined the following:

The Commission maintains its estimate of the range of likely cost of CO₂ regulation at between \$9 and \$34 per ton of CO₂ for 2014 and 2015.

Otter Tail Power recommended that the Commission-adopted range for 2018 should also apply in 2019. The Agencies do not oppose Otter Tail Power's recommendation.

III. RECOMMENDATION

The Agencies continue to recommend that the Commission establish a range of \$5 to \$25 per ton of CO₂ emitted as the likely cost of future CO₂ regulation, to be used in electric resource acquisition proceedings for planning year 2025 and beyond.

/lt

CERTIFICATE OF SERVICE

I, Sharon Ferguson, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

**Minnesota Department of Commerce
Reply Comments**

Docket No. E999/CI-07-1199 and E999/DI-17-53

Dated this 5th day of March 2018

/s/Sharon Ferguson

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Jon	Brekke	jbrekke@greenergy.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
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	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	Monsebroten	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
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
Kevin	Reuther	kreuther@mncenter.org	MN Center for Environmental Advocacy	26 E Exchange St, Ste 206 St. Paul, MN 551011667	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
Elizabeth	Wefel	eawefel@flaherty-hood.com	Missouri River Energy Services	3724 W Avera Drive PO Box 88920 Sioux Falls, SD 57109-8920	Electronic Service	No	OFF_SL_7-1199_1
Cam	Winton	cwinton@mnchamber.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
Jon	Brekke	jbrekke@grenergy.com	Great River Energy	12300 Elm Creek Boulevard Maple Grove, MN 553694718	Electronic Service	No	OFF_SL_17-53_17-53
Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron	200 S 6th St Ste 4000 Minneapolis, MN 554021425	Electronic Service	No	OFF_SL_17-53_17-53
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_17-53_17-53
Carl	Cronin	Regulatory.records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_17-53_17-53
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_17-53_17-53
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_17-53_17-53
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_17-53_17-53
Curt	Dieren	curt.dieren@dgr.com	L&O Power Cooperative	1302 S Union St Rock Rapids, IA 51246	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	Yes	OFF_SL_17-53_17-53
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_17-53_17-53

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	No	OFF_SL_17-53_17-53
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_17-53_17-53
Edward	Garvey	garveyed@aol.com	Residence	32 Lawton St Saint Paul, MN 55102	Electronic Service	No	OFF_SL_17-53_17-53
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_17-53_17-53
Todd J.	Guerrero	todd.guerrero@kutakrock.com	Kutak Rock LLP	Suite 1750 220 South Sixth Street Minneapolis, MN 554021425	Electronic Service	No	OFF_SL_17-53_17-53
Kimberly	Hellwig	kimberly.hellwig@stoel.com	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_17-53_17-53
Lori	Hoyum	lhoyum@mnpower.com	Minnesota Power	30 West Superior Street Duluth, MN 55802	Electronic Service	No	OFF_SL_17-53_17-53
Casey	Jacobson	cjacobson@bepc.com	Basin Electric Power Cooperative	1717 East Interstate Avenue Bismarck, ND 58501	Electronic Service	No	OFF_SL_17-53_17-53
Joel	Larson	jl Larson@minnkota.com	Minnkota Power Cooperative, Inc.	1822 Mill Road Grand Forks, ND 58203	Electronic Service	No	OFF_SL_17-53_17-53

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Eric	Lindberg	elindberg@mncenter.org	Minnesota Center for Environmental Advocacy	26 E Exchange St Ste 206 Saint Paul, MN 55101	Electronic Service	No	OFF_SL_17-53_17-53
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	OFF_SL_17-53_17-53
Dalene	Monsebroten	dalene@mncable.net	Northern Municipal Power Agency	123 2nd St W Thief River Falls, MN 56701	Electronic Service	No	OFF_SL_17-53_17-53
Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_17-53_17-53
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_17-53_17-53
David	Niles	david.niles@avantenergy.com	Minnesota Municipal Power Agency	220 South Sixth Street Suite 1300 Minneapolis, Minnesota 55402	Electronic Service	No	OFF_SL_17-53_17-53
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_17-53_17-53
Russell	Olson	rolson@hcpd.com	Heartland Consumers Power District	PO Box 248 Madison, SD 570420248	Electronic Service	No	OFF_SL_17-53_17-53
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_17-53_17-53

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Kevin	Reuther	kreuther@mncenter.org	MN Center for Environmental Advocacy	26 E Exchange St, Ste 206 St. Paul, MN 551011667	Electronic Service	No	OFF_SL_17-53_17-53
Susan	Romans	sromans@allete.com	Minnesota Power	30 West Superior Street Legal Dept Duulth, MN 55802	Electronic Service	No	OFF_SL_17-53_17-53
Craig	Rustad	crustad@minnkota.com	Minnkota Power	1822 Mill Road PO Box 13200 Grand Forks, ND 582083200	Electronic Service	No	OFF_SL_17-53_17-53
Robert K.	Sahr	bsahr@eastriver.coop	East River Electric Power Cooperative	P.O. Box 227 Madison, SD 57042	Electronic Service	No	OFF_SL_17-53_17-53
Christopher	Schoenherr	cp.schoenherr@smmpa.org	SMMPA	500 First Ave SW Rochester, MN 55902-3303	Electronic Service	No	OFF_SL_17-53_17-53
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_17-53_17-53
Eric	Swanson	eswanson@winthrop.com	Winthrop & Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	OFF_SL_17-53_17-53
David	Thornton	J.David.Thornton@state.mn.us	MN Pollution Control Agency	520 Lafayette Road St. Paul, MN 55101	Electronic Service	No	OFF_SL_17-53_17-53
Pat	Treseler	pat.jcplaw@comcast.net	Paulson Law Office LTD	4445 W 77th Street Suite 224 Edina, MN 55435	Electronic Service	No	OFF_SL_17-53_17-53
Andrew	Twite	twite@fresh-energy.org	Fresh Energy	408 St. Peter Street, Ste. 220 St. Paul, MN 55102	Electronic Service	No	OFF_SL_17-53_17-53

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Elizabeth	Wefel	eawefel@flaherty-hood.com	Missouri River Energy Services	3724 W Avera Drive PO Box 88920 Sioux Falls, SD 57109-8920	Electronic Service	No	OFF_SL_17-53_17-53
Cam	Winton	cwinton@mnchamber.com	Minnesota Chamber of Commerce	400 Robert Street North Suite 1500 St. Paul, Minnesota 55101	Electronic Service	No	OFF_SL_17-53_17-53
Robyn	Woeste	robynwoeste@alliantenergy.com	Interstate Power and Light Company	200 First St SE Cedar Rapids, IA 52401	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	Yes	OFF_SL_17-53_17-53