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VIA E-FILING

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**Re: In the Matter of Utility Renewable Energy Cost Impact Reports Required by
Minnesota Statutes §216B.1691, Subd. 2e
Docket No. E-999/CI-11-852**

Dear Dr. Haar:

Enclosed please find the Joint Comment of the Minnesota Large Industrial Group and Minnesota Chamber of Commerce.

If you have any questions, please contact me.

Very truly yours,

Stoel Rives LLP

/s/ Andrew P. Moratzka

Andrew P. Moratzka

APM:kap
Enclosure
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STATE OF MINNESOTA
BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION
121 Seventh Place East, Suite 50
St. Paul, Minnesota 55101-2147

In the Matter of Utility Renewable Energy Cost Impact Reports Required by Minnesota Statutes Section 216B.1691, Subd. 2e.	Docket No. E-999/CI-11-852
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**JOINT COMMENT OF THE MINNESOTA LARGE INDUSTRIAL
GROUP AND MINNESOTA CHAMBER OF COMMERCE**

The Minnesota Large Industrial Group (“MLIG”)¹ and Minnesota Chamber of Commerce (“Chamber”)² (collectively, Joint Business Intervenors, or “JBI”), appreciate the opportunity to provide a comment in response to the Notice of Comment Period on Cost Impact Reports (the “Notice of Comment”) issued by the Minnesota Public Utilities Commission (the “Commission”) on November 6, 2013. The Notice of Comment solicited stakeholder input on the following two topics: (i) Commission Staff’s proposed guiding principles for electric utilities renewable energy cost impact reports, and (ii) Commission Staff’s proposed format for a uniform reporting system. JBI believes the themes surrounding these issues were addressed, at least partially, in its comment filed on October 1, 2012 (“JBI 2012 Comment”). JBI submits this comment to supplement and clarify its intentions in the JBI 2012 Comment.

¹ MLIG is an ad hoc consortium of large industrial customers in the State of Minnesota spanning several utilities and paying in excess of \$360 million annually for electric rates.

² The Chamber represents over 2,400 business locations throughout the state of Minnesota. As the voice of Minnesota businesses on statewide policy issues, the Chamber’s main goal is to make Minnesota’s business environment competitive relative to other states and nations. Energy is a critical component to a successful business environment. Therefore, a focal point of the Chamber’s policy is ensuring Minnesota has reliable and competitively priced energy rates.

I. INTRODUCTION

In 2011, Minnesota enacted a new law requiring each electric utility to submit a filing detailing the rate impact of complying with section 216B.1691 of the Minnesota Statutes, commonly known as the Minnesota Renewable Energy Standard (“RES”). According to the new law, the rate impact analysis must consider all RES-related activities, including energy purchases, generation-related costs, and transmission improvements. Minnesota utilities subject to this new law filed their reports as required on or before October 25, 2011. JBI greatly appreciates the utilities’ efforts in complying with the new law. On January 25, 2012, the Minnesota Department of Commerce – Division of Energy Resources (the “Department”) submitted an initial comment. On October 1, 2012, JBI submitted an initial comment.³ Since that time, the Commission has not taken any action in this docket.

In the Notice of Comment, the Commission seeks stakeholder input on the general guiding principles and uniform reporting system for the utilities’ renewable energy standard cost impact reports. JBI welcomes Commission’s Staff’s continued solicitation of stakeholder input. As explained in detail below, JBI believes all of the suggestions set forth in the JBI 2012 Comment can be tailored to fit within the two topics set forth in the Notice of Comment. JBI looks forward to continued dialogue in this docket.

II. ANALYSIS

As utilities continue increasing the share of renewable generation in their respective overall generation mixes to comply with RES and the recently passed solar energy standard (“SES”), the utilities must correspondingly increase their respective share of natural gas fired generation to reliably serve their customers. Peaking capacity and renewable generation both result in increasing price volatility and risk – the former due to its limited run time and use of natural gas fuel and the latter due to its intermittent and unpredictable nature of its output and the use of natural gas to make it firm.⁴ There are also several other costs that need to be included in

³ In the Matter of Utility Renewable Energy Cost Impact Reports Required by Minnesota Statutes Section 216B.1691, Subd. 2e., Commission Docket No. E-999/CI-11-852 (“RES Impact Analysis Docket”), COMMENT OF JOINT BUSINESS INTERVENORS (October 1, 2012) (“JBI 2012 Comment”).

⁴ While natural gas prices are low at present, it is likely that the growing demand for natural gas fired generation will result in higher natural gas prices. Furthermore, utilities do not have long term natural gas contracts to hedge the risk of volatile natural gas prices.

order to calculate the total costs of intermittent renewable generation resources. These total costs, which cover the activities to comply with RES and SES, should be compared with the benefits provided by renewable generation.

To be clear, JBI does not favor one type of generation over another. JBI simply advocates for the cost impact analysis to be as accurate and objective as possible. All costs, including back-up and integration costs, as well as impacts associated with the risks and benefits of implementing RES and SES must be considered. Only by requiring an objective and consistent analysis from the utilities can the Commission impartially implement section 216B.1691, subd. 2e of the Minnesota Statutes. In response to the Notice of Comment, JBI agrees that guiding principles and a uniform reporting system are a critical first step. JBI offers its specific comments in response to the Notice of Comment below after providing an overview of this docket to date.

A. Statutory and Docket Overview

Minnesota law now requires:

Each electric utility must submit to the commission and the legislative committees with primary jurisdiction over energy policy a report containing an estimation of the *rate impact of activities* of the electric utility necessary to comply with this section. The rate impact estimate must be for wholesale rates and, if the electric utility makes retail sales, the estimate shall also be for the impact on the electric utility's retail rates. *Those activities include, without limitation, energy purchases, generation facility acquisition and construction, and transmission improvements.* An initial report must be submitted within 150 days of May 28, 2011. After the initial report, a report must be updated and submitted as part of each integrated resource plan or plan modification filed by the electric utility under section 216B.2422.⁵

The Chamber, utilities, MLIG, and other stakeholders met in the summer of 2011 to discuss the appropriate timeframe for this analysis. Parties agreed impacts of meeting renewable obligations should be studied from 2007 forward. But it appears from the initial filings of the utilities that parties disagree on how to best conduct both the historical impact analysis and future impact analysis.

⁵ MINN. STAT. § 216B.1691 subd. 2e (emphasis added).

From its perspective, the JBI 2012 Comment requested the utilities to structure the statutorily required RES impact analysis as follows:

- Increasing amounts of renewable resources in a utility’s generation portfolio introduces more volatility and risk, which needs to be discussed and monetized by utilities to more realistically estimate the impact of activities to meet RES;
- With respect to the historical analysis, utilities should calculate actual costs by comparing the savings from the wholesale market (derived by summing the product of hourly output and hourly market prices) against amounts recovered for “activities” to comply with renewable energy mandates (*e.g.*, amounts are recovered in the RES rider and transmission cost recovery rider, as well as cycling costs included in O&M for existing resources, curtailment costs, revenue sufficiency guarantee costs and any other wind integration costs.);
- With respect to the future analysis, utilities should address the limitations of the current modeling software via the following analyses:
 - Use alternative models that include power flow as a supplement to address the issue of curtailment and capture costs of additional transmission infrastructure;
 - Use chronological models to accommodate wind variability more accurately and conduct sensitivity analysis to identify the variance of wind generation;
 - Exclude unrealistic assumptions, such as a non-existent carbon price adder, from any model; and
 - Monetize fuel price variability risk.

JBI believes these suggestions fit neatly within the Commission Staff’s proposed guiding principles.

B. Topic I: Commission Staff’s Proposed Guiding Principles

In the Notice of Comment, Commission Staff proposes the following four general guiding principles:

- 1) *Foster transparency*, by using publicly available (or aggregated) information;

2) *Support consistency, coordination and non-burdensome administration*, by utilizing utilities' integrated resource planning, electric transmission planning, financial statements, FERC filings, tariffs and other already produced reports, documents or models including the biennial compliance reports required under Minn. Stat. §216B.1691, Subd. 3(a); annual qualifying facilities reports (e.g., Docket 13-09);

3) *Provide realistic representation of baseline, actual (to date) and future expected costs for achieving and maintaining standard compliance*, by using clearly identified and validly supported inputs, with limitations specifically noted; and

4) *Enable comparison across utilities*, by using similar methodologies with easy to understand illustrations including narrative explanations of estimated rate impact of standard compliance for wholesale and retail rates, as applicable.

JBI supports adoption of these four general principles. In addition, JBI believes its proposals set forth in the JBI 2012 Comment are consistent with these principles. To be sure, JBI selected what it believed to be the most straightforward, publicly available information for utilities to use in assessing historical costs of adding renewable generation. To achieve realistic representation of maintaining future compliance, JBI recommends minor modifications to the utilities' future resource planning analysis. JBI describes below how its recommendations fit within the Commission Staff's proposed uniform reporting system.

C. Topic II: Commission Staff's Proposed Format for Uniform Reporting System

In the Notice of Comment, Commission Staff created a table with corresponding questions and comments on which stakeholders have been invited to comment. Consistent with the Notice of Comment, JBI responds to the questions and comments in light of its support for Commission Staff's proposed general guiding principles.

1. 2005 Start Date

JBI appreciates Commission Staff's proposed starting point of 2005. As noted above, however, JBI recalls all parties agreeing upon a 2007 start date for calculating the impacts of RES. If costs incurred to meet renewable energy obligations under section 216B.1691 subd. 2

(“REO”) are also considered, which is a reasonable approach, then JBI agrees 2005 is an appropriate start date.

2. REO Expenditures

Commission Staff asks a number of questions regarding REO expenditures. Many of these questions appear to be directed at utilities. JBI will allow the utilities to respond to these questions and reserves the right to address the utilities’ responses in a reply comment.

JBI can, however, address whether REO expenditures should be included in the renewable energy rate impact analysis. The cost analysis is to be performed to estimate “the rate impact of activities of the electric utility necessary to *comply with this section.*”⁶ These activities include meeting REO, RES, and the newly enacted SES. Therefore, it is appropriate to include REO and SES expenditures within the analysis.

3. RES Expenditures

JBI agrees with Commission Staff that the required reporting activities include, “without limitation, energy purchases, generation facility acquisition and construction, and transmission improvements.”⁷ As we discuss in greater detail below, it is critical for the Commission to require strict compliance with the statute by mandating information on infrastructure investments to support REO, RES, and SES. Whether the expenditures to meet REO, RES, and SES should be calculated and reported separately is addressed below.

4. Accounting for REO, RES, and SES Expenditures

JBI looks forward to receiving information from the utilities regarding present efforts to account and calculate expenditures to meet REO, RES, and SES. Given that both the Commission and members of the legislature will receive this information, JBI believes the information should be in as useful a format as possible. To that end, JBI supports breaking the investments out by category (REO, RES, and SES) as set forth in Table 1 of the Notice of Comment.

⁶ MINN. STAT. § 216B.1691 subd. 2e (emphasis added).

⁷ MINN. STAT. § 216B.1691 subd. 2e.

It is also important for the Commission and legislators to understand the short-term and long-term impacts of meeting the REO, RES, and SES. Providing only short-term or only long-term costs would only provide half of the picture and could lead to misinterpretation of the results. JBI therefore supports requiring the utilities to include both levelized and annualized costs.

5. Combining REO, RES, and SES Expenditures

JBI is uncertain of the value of further differentiating investments under section 216B.1691 of the Minnesota Statutes. JBI looks forward to reviewing responses from the utilities and may have further comment at that time.

6. Best Available Source From Which to Calculate the Non-Renewable Generation Revenue Requirement

JBI has three concerns with relying on a utility's rate case to calculate and report the non-renewable generation revenue requirement. First, there is a better method to conduct the historical analysis. Second, the timing of rate case filings is unpredictable, making use of that process for reporting in the future equally unpredictable. Third, it is unclear what value there is in evaluating the ratio of renewable vs. non-renewable costs in a vacuum as proposed in Row G of Table 1 in the Notice of Comment. JBI's comments below address its proposed method for historical calculations and lists suggestions for the future calculation. JBI looks forward to continued dialogue on this issue and may comment further after reviewing suggestions from the other stakeholders.

a. Historical Analysis – Actual Impacts of Meeting the Requirements of Section 216B.1691 of the Minnesota Statutes

Historical impacts can be calculated by comparing the actual costs with the actual benefits of each renewable resource. That way, the utilities can provide an objective assessment. JBI again emphasizes it does not question past decisions approving renewable projects – JBI recognizes that past decisions were based on market dynamics applicable at that time. Since the statutory requirement is to provide impacts, it necessitates comparing actual costs to the benefits to assess whether customers are currently paying a premium or saving on a net basis by implementing the RES.

To assess actual costs, JBI believes it is appropriate to compare the amounts collected by each utility against savings from the wholesale market. To ensure that we accurately assess those costs recovered by utilities related to renewable energy, each utility should sum base rate recovery and rate rider (*e.g.*, the RES rider and transmission cost recovery rider) recovery, making sure to include cycling costs in the O&M for existing resources caused by intermittent generation, ancillary services, curtailment costs, revenue sufficiency guarantee costs and any other renewable integration costs.⁸ The savings from the wholesale market can be easily derived by summing the product of hourly output and hourly market prices.

b. Future Analysis – Estimated Long Term Impacts

The new mandate to calculate the costs of renewable generation includes a requirement to build the cost of renewable generation into future integrated resource plans.⁹ For this reason, it may be difficult to look to a historical rate case as a source for information. It may be that a rate case could be a point in time from which the cost of non-renewable generation could start, but that analysis would have to be supplemented by new information available in the integrated resource plan.

Furthermore, the Commission needs to address deficiencies with the present modeling. Utilities and the Department use the Strategist model in the integrated resource planning process to identify the type of resources needed to satisfy their load obligations and policy mandates. As the Commission knows, the Strategist model is a preliminary capacity expansion planning tool, limited in its ability to model intermittent resources. As a result of its limitations, the inherent uncertainty and unpredictability associated with wind resources is not fully recognized. In light of this fact, MISO uses the Strategist (or EGEAS) model to run the preliminary analysis. It then utilizes a chronological model that includes power flow called Promod to evaluate its transmission plan identified from Strategist in more detail.¹⁰

The results of the model used by the Department and the utilities are driven by numerous assumptions that become outdated quickly. JBI notes the following limitations that need to be rectified prior to assessing the cost impacts of renewable generation using Strategist:

⁸ Eventually, utilities may need to also include stranded costs due to premature retirement of fossil-fired generation.

⁹ MINN. STAT. § 216B.1691 subd. 2e.

¹⁰ EGEAS is a similar model as Strategist.

1. **Model does not include transmission system:** The Strategist Model is static – it cannot model power flow and assumes that there are no transmission constraints. This assumption is problematic because in reality, wind is often curtailed due to transmission constraints. For example, the following table shows the number of wind curtailments and the associated MWh curtailed for 2009-2011.

Table 3: MISO Curtailments¹¹

	2009	2010	2011
Number of Curtailments	1,141	2,117	2,034
Estimated MWh Curtailed	292,000	824,000	720,000

Thus, by assuming a constraint free system, the modeling results over-predict wind generation and related savings.¹² Furthermore, there are no costs associated with network transmission upgrades included in the model. This results in a significant under prediction of costs because wind generation is often located in remote areas away from load and requires significant transmission infrastructure to make it deliverable. JBI recommends that alternative models that include power flow should be used as a supplement to address the issue of curtailment and capture costs of additional transmission infrastructure.

2. **Renewable output variability risk is ignored:** Because renewable generation is largely weather dependent, it is inherently unpredictable. This fact is also not adequately represented in the Strategist model, which also contributes to an understatement of the true costs. For example, the wind profile in the Strategist model utilizes hourly data for a week per month and assumes this same pattern for each month. This is problematic and results in erroneous savings estimates for the following reasons:
 - a. It mutes the volatility inherent in wind generation. This results in ignoring costs that necessarily result from the volatility and therefore, over-predicts savings. For example, there are costs associated with cycling existing units to accommodate wind that are

¹¹ *April 2012 Wind Curtailments and DIR Update*, Kris Ruud, RSC, pg. 8 (May 23, 2012).

¹² For example, the issue of transmission constraints severely limited the wind output associated with Alliant’s Whispering Willows wind farm. Because the savings are directly related to the amount of output produced, lesser actual output than what is estimated necessarily implies lesser savings.

overlooked and wind generates electricity when there is a surplus of supply resulting in negative prices.

- b. There are challenges associated with forecasting wind on an intra-day basis much less an inter-day or 25 year basis. Therefore, it is unreasonable to assume that the output for one week per month can be used as a template across the remaining weeks of the month.
- c. No sensitivity is conducted with respect to wind profile or output generated. This is problematic because the cost effectiveness of wind generation is highly dependent on the assumed capacity factor. It is also problematic because wind generation is generally off-peak.

JBI recommends that utilities use chronological models, such as Promod, to accommodate wind variability more accurately. Furthermore, sensitivity analyses should be used to identify the variance surrounding wind output. Such variances should be monetized and included in the analysis to recognize the risk associated with wind variability and unpredictability.

- 3. **Unrealistic assumptions are included in the Model:** The Commission appears to support the inclusion of a \$21.50/ton carbon price adder effective in 2017 of utilities' integrated resource plans. This is an unrealistic assumption because no carbon legislation exists today. The effective date should be delayed until 2020 and possibly 2022 as asserted by industry experts.¹³ The impact of including a carbon price adder assumption is that it biases the results towards adding certain types of generation, when in reality such resources may not result in the least cost plan. In addition, it results in monetizing "avoided carbon" benefits associated with renewable generation when no such value presently exists.
- 4. **Fuel price variability risk is ignored:** The price of fuel such as natural gas changes on an intra-day basis. Yet, the integrated resource planning models ignore this variability.

¹³ See *In re Establishing an Estimate of the Costs of Future Carbon Dioxide Regulation on Electricity Generation under Minn. Stat. §216H.06*, PUC Docket No. E999/CI-07-1199, COMMENTS OF INTERSTATE POWER AND LIGHT CO., pg. 2 (March 9, 2012) (using 2022 start date); *In re Establishing an Estimate of the Costs of Future Carbon Dioxide Regulation on Electricity Generation under Minn. Stat. §216H.06*, PUC Docket No. E999/CI-07-1199, COMMENTS OF OTTER TAIL POWER CO., pg. 2 (March 9, 2012) (using 2020 start date); and *In re Establishing an Estimate of the Costs of Future Carbon Dioxide Regulation on Electricity Generation under Minn. Stat. §216H.06*, PUC Docket No. E999/CI-07-1199, COMMENTS OF NORTHERN STATES POWER CO., pg. 1 (March 9, 2012) (using 2020 start date).

While there are sensitivity analyses conducted to ascertain the impacts of dramatic increases to fuel prices, there is no explicit recognition of the risk associated with volatile fuel prices. For example, to the extent that natural gas price assumptions are overstated, the subsequent fuel cost savings associated with wind generation will also be overstated. JBI recommends that the fuel price variability risk be monetized in order to provide a more accurate and realistic representation of RES impacts.

For the foregoing reasons, JBI concludes that the long term forecasting methods as currently configured, over predict savings associated with renewable generation and under-predict costs. In order to obtain a more realistic assessment of renewable generation related costs and associated benefits, JBI recommends the utilities and Commission address the above concerns. JBI hopes to continue a dialogue on these topics to set the standards for more accurate resource plan filings. Only after the recommendations are implemented are the long term cost impacts of renewable generation more practically gauged and meaningful.

7. Comments on Proposed Uniform Reporting System

JBI greatly appreciates Commission Staff's efforts at assembling a straightforward uniform reporting system. While we want to keep the reporting process streamlined, easy-to-understand, and administratively efficient, we want to ensure all costs and benefits are reported. To this end, we respectfully request that additional rows be added, as appropriate, to account for the information requested above. Also, we are unsure of the value of Row G in Table 1 of the Notice of Comment. Absent information on the available capacity or annual energy production related to the expenditures in Rows E and F, it would be difficult to interpret the ratio in Row G.

In addition, JBI emphasizes that the uniform reporting process should not be static. JBI respectfully requests updates with each resource plan filing. Specifically, JBI recommends that the utilities track the investments in the following manner. First, the actual impacts should be calculated consistent with JBI's recommendations above.¹⁴ Second, the actual impacts for years that were previously part of a forecast should be compared against the forecasted costs. JBI understands that forecasted costs will rarely, if ever, match actual costs. But the utility should explain any significant discrepancy between a forecast and actual costs. Third, the future costs

¹⁴ *Supra*, pg. 7-8.

should be calculated in a manner consistent with JBI's recommendations above.¹⁵ Deviations from this method could be justified if forecasts prove to be inaccurate. This is another benefit of comparing forecast costs to actual costs - the actual costs can serve as a check on future forecasts.¹⁶

8. Supply Side Expenditure Option

JBI interprets the last row to seek comments on how to assess what costs the utility would have prudently incurred absent the renewable energy mandates in section 216B.1691 of the Minnesota Statutes. In this regard, JBI believes that the resource planning analysis, if conducted in a manner to address the concerns set forth above, can provide a relatively accurate cost comparison. Furthermore, the analysis to be conducted can include scenarios where the renewable generation is (a) forced in the model to comply with the mandates and (b) offered as resource in the model and allow the model to choose it if economic. The differences in the results will provide an assessment of what would have occurred without the mandate.

III. CONCLUSION

JBI appreciates the opportunity to continue the dialogue on this important issue. JBI supports many of the proposals contained in the Notice of Comment. JBI believes, however, that certain modifications to the uniform reporting process are necessary to ensure that the Commission receives accurate cost reports consistent with Minnesota law.

¹⁵ *Supra*, pg. 8-9.

¹⁶ One potential pitfall in forecasting analysis is the useful life of wind turbines. There are a variety of studies on this topic, some supporting a useful life shorter than 25 years, some supporting a useful life longer than 25 years. Clearly, the forecasting should be updated if the useful life of wind turbines is significantly shorter or longer than anticipated.

Dated: December 20, 2013

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On Behalf of Minnesota Large Industrial Group

Dated: December 20, 2013

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On Behalf of Minnesota Chamber of Commerce

CERTIFICATE OF SERVICE

I, Marion Lemke, hereby certify that I have this day served a true and correct copy of the following document 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.

JOINT COMMENT OF THE MINNESOTA LARGE INDUSTRIAL GROUP AND MINNESOTA CHAMBER OF COMMERCE

In the Matter of Utility Renewable Energy Cost Impact Reports Required by Minnesota Statutes
Section 216B.1691, Subd. 2e
Docket No. E-999/CI-11-852

Dated this 20th day of December, 2013.

/s/ Marion Lemke

Marion Lemke

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Jessy	Hennesy	jessy.hennesy@avantener gy.com	Avant Energy	220 S. Sixth St. Ste 1300 Minneapolis, Minnesota 55402	Electronic Service	No	SPL_SL_11- 852_Interested Parties
Ashley	Houston			120 Fairway Rd Chestnut Hill, MA 24671850	Paper Service	No	SPL_SL_11- 852_Interested Parties
Lori	Hoyum	lhoyum@mnpower.com	Minnesota Power	30 West Superior Street Duluth, MN 55802	Electronic Service	No	SPL_SL_11- 852_Interested Parties
Casey	Jacobson	cjacobson@beppc.com	Basin Electric Power Cooperative	1717 East Interstate Avenue Bismarck, ND 58501	Electronic Service	No	SPL_SL_11- 852_Interested Parties
Eric	Jensen	ejensen@wla.org	Izaak Walton League of America	Suite 202 1619 Dayton Avenue St. Paul, MN 55104	Electronic Service	No	SPL_SL_11- 852_Interested Parties

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Nancy	Kelly	bademallnancyk@eurekare cycling.org	Eureka Recycling	2828 Kennedy Street NE Minneapolis, MN 55413	Paper Service	No	SPL_SL_11- 852_Interested Parties
Julie	Ketchum	N/A	Waste Management	20520 Keokuk Ave Lakeville, MN 55044	Paper Service	No	SPL_SL_11- 852_Interested Parties
Hank	Koegel	hank.koegel@edf-re.com	EDF Renewable Energy	10 2nd St NE Ste 400 Minneapolis, MN 55413-2652	Electronic Service	No	SPL_SL_11- 852_Interested Parties
Douglas	Larson	dlarson@dakotaelectric.co m	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	SPL_SL_11- 852_Interested Parties
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	SPL_SL_11- 852_Interested Parties
Mark	Lindquist	N/A	The Minnesota Project	57107 422nd St New Ulm, MN 56073-4321	Paper Service	No	SPL_SL_11- 852_Interested Parties
Pam	Marshall	pam@energycents.org	Energy CENTS Coalition	823 7th St E St. Paul, MN 55106	Electronic Service	No	SPL_SL_11- 852_Interested Parties
Mike	McDowell		Heartland Consumers Power District	PO Box 248 Madison, SD 570420248	Paper Service	No	SPL_SL_11- 852_Interested Parties
Dave	McNary	N/A	Hennepin County DES	701 Fourth Avenue South suite 700 Minneapolis, MN 55415-1842	Paper Service	No	SPL_SL_11- 852_Interested Parties

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Valerie	Means	valerie.means@lawmoss.com	Moss & Barnett	Suite 4800 90 South Seventh Street Minneapolis, MN 55402	Electronic Service	No	SPL_SL_11-852_Interested Parties
Brian	Meloy	brian.meloy@leonard.com	Leonard, Street & Deinard	150 S 5th St Ste 2300 Minneapolis, MN 55402	Electronic Service	No	SPL_SL_11-852_Interested Parties
Peder	Mewis	Peder.Mewis@senate.mn	Senate Energy, Util and Telecom Committee	Room 322, State Capitol 75 Rev. Dr. Martin Luther King Jr. Blvd. St. Paul, MN 55155-1606	Electronic Service	No	SPL_SL_11-852_Interested Parties
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David	Moeller	dmoeeller@allte.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	SPL_SL_11-852_Interested Parties
Andrew	Moratzka	apmoratzka@stoel.com	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	SPL_SL_11-852_Interested Parties
Carl	Nelson	crelson@mncee.org	Center for Energy and Environment	212 3rd Ave N Ste 560 Minneapolis, MN 55401	Electronic Service	No	SPL_SL_11-852_Interested Parties
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Mary Beth	Peranteau	mperanteau@wheelerlaw.com	Wheeler Van Stickle & Anderson SC	Suite 801 25 West Main Street Madison, WI 5370333398	Electronic Service	No	SPL_SL_11- 852_Interested Parties
Kent	Ragsdale	kenragsdale@alliantenergy.com	Alliant Energy-Interstate Power and Light Company	P. O. Box 351 200 First Street, SE Cedar Rapids, IA 524060351	Electronic Service	No	SPL_SL_11- 852_Interested Parties
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Kevin	Reuther	kreuther@mncenter.org	MN Center for Environmental Advocacy	26 E Exchange St, Ste 206 St. Paul, MN 551011667	Paper Service	No	SPL_SL_11- 852_Interested Parties
Trudy	Richter	trichter@ranow.com	Minnesota Resource Recovery Assn.	477 Selby Avenue St. Paul, MN 55102	Paper Service	No	SPL_SL_11- 852_Interested Parties
Craig	Rustad	crustad@minnkota.com	Minnkota Power	1822 Mill Road PO Box 13200 Grand Forks, ND 582083200	Electronic Service	No	SPL_SL_11- 852_Interested Parties
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Raymond	Sand	rms@dairynet.com	Dairyland Power Cooperative	P. O. Box 8173200 East Avenue South LaCrosse, WI 546020817	Electronic Service	No	SPL_SL_11- 852_Interested Parties

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Matthew J.	Schuerger P.E.	mjsreg@earthlink.net	Energy Systems Consulting Services, LLC	PO Box 16129 St. Paul, MN 55116	Electronic Service	No	SPL_SL_11-852_Interested Parties
Robert H.	Schulte	rhs@schulteassociates.com	Schulte Associates LLC	15347 Boulder Pointe Road Eden Prairie, MN 55347	Electronic Service	No	SPL_SL_11-852_Interested Parties
Dean	Sedgwick	N/A	Itasca Power Company	PO Box 457 Bigfork, MN 56628-0457	Paper Service	No	SPL_SL_11-852_Interested Parties
Andrew	Seri	aseri@bepc.com	Basin Electric Power Cooperative	1717 E Interstate Ave. Bismarck, ND 58503-0564	Electronic Service	No	SPL_SL_11-852_Interested Parties
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James M.	Strommen	jstrommen@kennedy-graven.com	Kennedy & Graven, Chartered	470 U.S. Bank Plaza 200 South Sixth Street Minneapolis, MN 55402	Electronic Service	No	SPL_SL_11-852_Interested Parties

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Eric	Swanson	eswanson@winthrop.com	Winthrop Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	SPL_SL_11- 852_Interested Parties
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Darryl	Tveitbakk		Northern Municipal Power Agency	123 Second Street West Thief River Falls, MN 56701	Paper Service	No	SPL_SL_11- 852_Interested Parties
Roger	Warehime	warehimer@owatonautilities.com	Owatona Public Utilities	208 South WalnutPO Box 800 Owatona, MN 55060	Electronic Service	No	SPL_SL_11- 852_Interested Parties
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Robyn	Woeste	robynwoeste@alliantenergy.com	Interstate Power and Light Company	200 First St SE Cedar Rapids, IA 52401	Electronic Service	No	SPL_SL_11- 852_Interested Parties
Thomas J.	Zarembo		WHEELER, VAN SICKLE & ANDERSON	Suite 801 25 West Main Street Madison, WI 537033398	Paper Service	No	SPL_SL_11- 852_Interested Parties