



ENVIRONMENTAL LAW & POLICY CENTER
Protecting the Midwest's Environment and Natural Heritage

February 20, 2014

VIA E-FILING

Burl W. Haar
Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101-2147

Re: In the Matter of Establishing a Distributed Solar Value Methodology under Minn. Stat. §216B.164, subd. 10 (e) and (f), PUC Docket Number/s: E999/CI-14-65

Dear Dr. Haar,

Enclosed herewith in connection with the above matter please find the *Joint Reply Comments of Environmental Law and Policy Center (ELPC), Fresh Energy (FE), Interstate Renewable Energy Council, Inc. (IREC), Institute for Local Self-Reliance (ILSR), Izaak Walton League of America (IWLA), SunEdison, LLC (SE), and the Vote Solar Initiative (VSI)*. Please do not hesitate to contact me with any questions.

Sincerely,

s/ Allen Gleckner
Allen Gleckner
Staff Attorney

Enclosure

Cc: Attached Service List

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In the Matter of Establishing a Distributed Solar
Value Methodology Proposal under Minn. Stat.
Section 216B.164, Subd. 10 (e) and (f)

Docket No. E999/CI-14-65

JOINT REPLY COMMENTS OF
ENVIRONMENTAL LAW & POLICY CENTER (ELPC),
FRESH ENERGY (FE), INTERSTATE RENEWABLE ENERGY
COUNCIL, INC. (IREC), INSTITUTE FOR LOCAL SELF-RELIANCE (ILSR),
IZAAK WALTON LEAGUE OF AMERICA (IWLA), SUNEDISON, LLC (SE),
AND THE VOTE SOLAR INITIATIVE (VSI)

I. Framework and Guiding Principals

Legislative Intent and Statutory Goals

As a state, Minnesota has long recognized the benefits of distributed generation. Minnesota passed the country's first net metering law over thirty years ago, and perhaps in that context it's no surprise that the state has now also passed the nation's first legislatively-enacted value of solar tariff option. Moreover, this recognition of the value that distributed generation brings – to the electricity system, society and ratepayers – is reinforced at the beginning of section 216B.164, in which the alternative rate statute resides. It states that the section:

"shall at all times be construed in accordance with its intent to give *maximum possible encouragement* to . . . small power production consistent with protection of the ratepayers and the public."¹

Reviewing parties' comments, it seems instructive to revisit the statutory requirements of the alternative tariff, specifically part (a) and (f):

- (a) A public utility may apply for commission approval for an alternative tariff that compensates customers through a bill credit mechanism **for the value to the utility, its customers, and society** for operating distributed solar photovoltaic resources

interconnected to the utility system and operated by customers primarily for meeting their own energy needs.

...

- (f) The distributed solar value methodology established by the department must, **at a minimum**, account for the value of energy and its delivery, generation capacity, transmission capacity, transmission and distribution line losses, **and environmental value**. The department may, based on known and measurable evidence of the cost or benefit of solar operation to the utility, incorporate other values into the methodology, including credit for locally manufactured or assembled energy systems, systems installed at high-value locations on the distribution grid, or other factors.²

Overall, many parties in initial comments focused on the value of distributed solar generation to the **utility**, to the exclusion of customers and society.

We note here that, under Xcel's recommended modifications to the methodology, VOST participants would be compensated at an estimated rate of \$0.071 per kilowatt-hour.³ That's over 50 percent lower than the rate modeled by CPR under the Department's Proposed Methodology. Xcel's recommendations would lower the estimated value of seven of the eight components.⁴

As stated in our initial filing, there is a particular intent behind the VOST statute: to compensate distributed solar generators for the value they deliver to utility ratepayers and society.⁵ The primarily legislative intent behind VOST is not, as Xcel suggests, to "eventually remove the cross-subsidization concerns inherent in net metering."⁶ At the very least, there is no reason to conclude that avoiding purported cross-subsidization is a higher legislative goal than fairly compensating DSG. So it is not necessarily dispositive as to methodological design.

It is true that eliminating any NEM cross-subsidy (which may be an issue at significantly higher NEM penetration levels) was generally seen as a benefit of the VOST crediting arrangement.⁷ For that reason, however, it is somewhat surprising to see that utilities are still so focused on this concern. As was noted in the Department of Commerce stakeholder process, there are numerous other existing cross-subsidies within the residential rate class.⁸ Problematically, the standard utility cross-subsidy argument also elides the methodological goal of estimating of the value that DSG provides to the utility, its

² MN Statute 216B.164 subd. 10.

³ Xcel Energy Initial Comments, Attachment A.

⁴ *Id.* (The eighth component, Avoided Plant O&M - Variable, Xcel would keep at \$0.001 per kilowatt-hour.)

⁵ Joint initial filing at 12. See also Minn. Stat. 216B.164, Subd. 10(a).

⁶ See Xcel Energy Initial Comments at 8 ("the stated purpose of the VOS tariff . . . [is] to eventually remove the cross-subsidization concerns inherent in net metering.").

⁷ See Proposed Methodology at 1. Another expected benefit of VOST is that it will allow utilities to avoid the revenue erosion that is inherent under traditional net metering.

⁸ This is due, in part, to the bundled metering of demand and energy (*i.e.*, fixed and variable utility costs), such that residential customers with below-average demand tend to subsidize customers with above-average demand.

customers, and society. In addition, depending on the ultimate value of the VOST, it may turn out that the NEM cross subsidy has been flowing the other way (*i.e.*, away from customer-generators and in favor of non-solar customers).

Establish Proper Price Signal

Xcel argues in its initial comments that it would be problematic if the VOST were set above the rates otherwise paid by commercial and industrial customers. "In that situation, a high VOST rate could significantly increase the amount of higher-cost solar on the system."⁹

We reject this reasoning, because any such requirement (or practice) that artificially caps the VOST rate would fail the basic statutory goal of providing DSG customers the value that they provide to the utility, its customers, and society. (Specifically, Xcel's approach would make VOST deliberately less attractive to commercial and industrial property owners, and so tend to discourage solar adoption and investment with no basis in whether the methodology for calculating was accurate or not.) Such a requirement would clearly fail the policy goal of fairly compensating solar generators for the value that they provide, and result in inappropriately low investments in distributed solar.

At multiple points within its initial comments, Xcel references its belief that utility-scale solar is more cost effective than distributed solar.¹⁰ As the company says on page 5,

"Currently, large-scale solar facilities provide the value of distributed rooftop solar at a lower cost."¹¹

This statement, which underpins a portion of Xcel's argument against favoring VOST, is problematic for a couple of reasons.

First, the initial clause is demonstrably false. Large, central-station solar can only provide a *subset* of the VOST value components. For example, customer-side solar generally reduces congestion and line losses at the distribution and transmission levels, relative to central-station solar.¹² Utility scale solar also often requires expensive upgrades to the transmission system which is not only costly for ratepayers but also is almost always adamantly opposed by local ratepayers impacted by the transmission lines. While not a cost that can be measure, local opposition to increased transmission line build-outs can be avoided using distributed resources particularly when sited on disturbed lands including landfills. As another example, VOST will help mobilize private, non-utility capital towards meeting the state's 1.5 and 10 percent solar goals.

⁹ Xcel Energy initial comments at 6.

¹⁰ For example, in the quote directly above, Xcel refers to distributed solar as "higher-cost solar." *Id.*

¹¹ *Id.*

¹² See Proposed Methodology at 19 - 20, 30 - 33.

Second, the cost assertion is not supported by any evidence or showing. Moreover, the point seems a bit irrelevant and inapt to the determination of a fair VOST methodology. Utility-scale solar may well turn out to be cheaper, on a dollar-per-kilowatt-hour basis. But that is not a valid reason for adopting a VOST methodology that under-values or under-compensates distributed solar.

As the Legislature indicated through the adoption of net metering expansion, community solar gardens, and the VOST itself, there is value in having many approaches to solar deployment. We thus believe the Commission should strive to make all of these approaches successful, and in so doing help reduce all costs as the market grows and matures towards the state's 10 percent solar goal.

Ratemaking vs. Resource Planning

As Xcel points out in its initial comments, many of its concerns with the Proposed Methodology stem from the fact that methodology “differs from precedent and guidance in our [Xcel’s] resource planning process”¹³

This concern appears to have at least two sub components. First, the Proposed Methodology sometimes diverges from the *status quo* methodology currently used in resource planning:

We should remain consistent with precedent or guidance from the resource planning process, as those approaches for the basis of real resource decisions and have benefited from years of application and review.¹⁴

Second, Xcel wants to be sure that assumptions used in VOST ratemaking are not automatically imported into future resource planning processes:

To the extent changes are recommended to major planning assumptions, such as the long-term natural gas forecast and avoided carbon emissions value, those changes should be evaluated as part of a formal and comprehensive regulatory process that considers the broader implications of such changes.¹⁵

As was noted in the Dept. of Commerce stakeholder process, however, the VOS tariff is a combination of both ratemaking and resource planning – “two important processes that are traditionally discrete efforts with different time frames and cost perspectives.” It is thus necessary to avoid “confusing or conflating perspectives that should be held separate from each other, and that consequently improperly apply energy planning concepts” when the ratemaking perspective is more appropriate.

¹³ Xcel Energy initial comments at 2.

¹⁴ Xcel Energy initial comments at 5.

¹⁵ Xcel Energy initial comments at 5.

Through its Proposed Methodology, the Department has implicitly distinguished those areas of the methodology for which ratemaking principals should predominate. Now it is up to the Commission to determine whether the Department struck the right balance between ratemaking and resource planning perspectives.

We support the Department's proposed balance, as it appropriately satisfies the VOST statute's command for:

[A]n alternative tariff ***that compensates customers through a bill credit mechanism for the value to the utility, its customers, and society for operating distributed solar photovoltaic resources interconnected to the utility system and operated by customers primarily for meeting their own energy needs.***¹⁶

In other words, the statute is primarily directed towards appropriately compensating customer-generators and allowing said customers to meet their own energy needs. While it is true that these systems will be interconnected to the utility, and will deliver solar energy to the utility, the primary purpose is to allow customers to meet their own energy needs. It does seem reasonable to expect that, as DSG approaches significant penetration levels (e.g., 5-10 percent or higher), it may begin to impact the utility resource planning processes. However, we do not believe it is necessary to resolve potential longer-term resource planning issue in order to approve the VOST methodology.

Specifically responsive to Xcel's two concerns, noted above: (1) We do not believe the legislature adopted a VOST statute merely to perpetuate or enshrine *status quo* utility resource planning practices and assumptions within the solar rate valuation context. (2) We do not read the Proposed Methodology as requiring changes to the resource planning process. Rates are not the direct outcome of resource planning, rather they are a partial derivative of resource planning efforts. The impact of VOST is not outside of the standard changes to load and resource forecasts that occur between resource planning efforts as a result of normal customer behaviors. Further, if there were changes to the resource planning process outside of the normal adjustments from integration of any load-side resource (such as Energy Efficiency, Distributed Solar or Demand Response), then those changes are more appropriately addressed in the Resource Planning arena.

Finally, it's worth keeping in mind that the Legislature has specified a fairly strict timeline for establishing the VOST methodology. Under the statute, the Department was given until January 31, 2014 to develop a proposed methodology (which they did).¹⁷ The Commission then has 60 days, under the statute, to approve, modify, or disapprove the VOST methodology.¹⁸

For these reasons, we respectfully suggest that Xcel's concerns regarding the potential impact of the VOST methodology on the resource planning process would be better addressed in other, more relevant dockets.

¹⁶ Minn. Stat. 216B.164, Subd. 10(a) (emphasis added).

¹⁷ Minn. Stat. 216B.164, Subd. 10(e).

¹⁸ *Id.*

II. Avoided Generation, Transmission, and Distribution Capacity Costs

In terms of establishing a fleet shape analysis (e.g., in support of determining an appropriate capacity value), it is important to develop a legitimate solar generation curve comprised of aggregating many systems. Use of a few systems (e.g. under 10 systems as in Colorado) results in an undervaluation of DSG capacity value.

The Proposed Methodology ties capacity value to the Midcontinent Independent Systems Operator (MISO). Xcel also points to MISO.¹⁹ As was noted in the Department's stakeholder process, "Generation capacity is being added to the MISO system every year, and thus capacity has value every year."²⁰ This is an important point when considering the capacity contribution of the DG resources, as it has been argued that a capacity payment should only be made once the utility demonstrates a need for a new capital generation resource. While the next marginal unit for Xcel's capacity construction might not occur until closer towards 2017, it is important to note that utilities frequently are going to the market for spot-purchases and short-term capacity contracts to cover any imbalances. For this reason, the DG resources truly are deferring these market capacity transactions.

We also observe that it may be appropriate, in certain situations, to peg the utility's avoided capacity value to a non-MISO capacity figure. For example, in a case where the utility is planning to add generation that is more costly than MISO capacity (e.g., due to transmission congestion concerns or other factors).

Minnesota Power and Otter Tail Power Company both raise vague claims regarding concerns regarding safety and reliability of DG resources. We respectfully disagree with these assertions as all interconnected distributed generation resources, including solar PV resources, must meet Minnesota's interconnection standards which are designed to ensure safe and reliable operation of distributed generation. We encourage the Commission to explore ways to implement improvements to Minnesota's interconnection standards. Minnesota currently receives a 'C' in *Freeing the Grid* for its interconnection procedures. Such a grade indicates that the procedures are "[a]dequate for interconnection, but systems incur higher fees and longer delays than necessary. Some systems will likely be precluded from interconnection because of remaining barriers in the interconnection rules."²¹ Therefore an evaluation of community solar garden interconnection procedures may be appropriate.

¹⁹ Xcel Energy initial comments at 9-10 ("The avoided capacity investment credit . . . needs to be based on Midcontinent Independent Systems Operator (MISO) capacity accreditation practices in place at that time.")

²⁰ CR Planning Comments on Value of Solar Tariff Methodology Workshop (September 20, 2013) at 2.

²¹ Freeing the Grid: About the Grades, <http://freeingthegrid.org/#education-center/about-the-grades-2>.

III. Avoided Fuel Cost: Avoided Cost of Price Volatility Risk

Xcel also takes issue with the inclusion of a fuel hedge value in the methodology, arguing that there is no consensus on how to value the fuel hedge value of solar energy resources and asserting that the Xcel does not currently incur any fuel hedging costs under its current business practices.

As Xcel acknowledges, it is widely recognized that solar energy resources provide a hedge to ratepayers against volatile natural gas prices and, therefore, are properly included within the methodology as a benefit to Xcel's customers as contemplated under Minn. Stat. Sec. 216B.164, Subd. 10(a) and under Subd. 10(f) as being "known." Moreover, while three options offered by the Department to calculate the value of this particular benefit are not based on consensus findings of any particular group of stakeholders, these options were extensively discussed at the workshops and are based on the expertise of the Department's consultants. Thus, these options meet the statutory requirements for inclusion within the VOST methodology.

The fact that Xcel ignores in this discussion is that Xcel currently handles fuel price volatility by passing fuel price changes directly to its ratepayers through the fuel cost adjustment (FCA) rider. In other words, Xcel's customer's currently bear the risk of fuel price volatility so resources that mitigate this risk are providing a known and measureable benefit to Xcel's customers. Accordingly, this benefit appropriately belongs within the VOST framework proposed by the Department.

IV. Avoided Environmental Costs

As we stated in our initial comments, the VOST statute unambiguously requires the inclusion of an environmental value component, and allows for the methodology to include benefits to society.²² Our groups have long held this position, as evidence by ELPC's October 2013 letter to Deputy Commissioner Bill Grant (Department of Commerce, Division of Energy Resources) laying out the case for this construction.

We make this point again because, in its initial comments, Xcel appears to be operating under the misperception that the VOST statute allows only for the inclusion of environmental benefits that flow to the utility.²³ As we have argued, and as the Department has indicated (in its Proposed Methodology), the statute requires consideration of environmental attributes to the utility, its customers and society. Based on this, we continue to support the inclusion of avoided criteria air pollutants and carbon pollution that are currently included in the methodology.

²² Joint Initial Comments of ELPC, FE, IREC,ILSR, IWLA, SE, and VSI (Feb. 13, 2014) at 11. We also noted that CO₂ and air pollution benefits are generally "known and measurable." We did not, however, mean to imply that the "known and measurable" requirement necessarily applies to this value component. Under a plain reading of the statute, it does not.

²³ See, e.g., Xcel Energy initial comments at 12 ("Externalities should not be included in the VOS rate because they are not costs that are incurred by the utility system").

Several parties expressed concern about including a value component accounting for carbon costs, and specifically use of the Federal interagency Social Cost of Carbon (SCC) value to serve as that carbon value.

First, we strongly support the inclusion of an environmental value subcomponent for the avoided carbon value that distributed solar generation brings to utilities, customers and society. Federal rules to limit carbon pollution from fossil fuel plants are underway. Moreover, Minnesota has a state goal of reducing carbon emissions at least 80% by 2050 economy-wide, and is in danger of missing the first statutory benchmark towards that goal in 2015. The benefits that solar distributed generation provides in helping utilities to reduce their carbon emissions and the state to meet its statutory goal are correctly included in the Value of Solar methodology.

Secondly, we strongly support the use of the Social Cost of Carbon used by 13 federal agencies as a means of measuring that value. The Social Cost of Carbon, which estimates how much damage one ton of carbon emitted today causes now and in the future, is itself a conservative estimate of the cost of climate change to our economy. In fact, **some of the most important economic and human health costs of carbon pollution are not included in the Social Cost of Carbon.** Of particular significance to Minnesota, costs not included in the SCC include impacts to many of Minnesota's natural resource-based industries, including agriculture, forest products and tourism, and health costs, which manifest as respiratory and cardiovascular illnesses. Considerable economic damages resulting from climate change not calculated in the social cost of carbon include costs due to problems that can be made worse and occur more frequently because of climate change, including:

- drought;
- forest fires;
- smog (and associated respiratory illnesses);
- power outages;
- increased food prices (due to drought); and
- forest dieback from pest infestations.

If anything, the values derived from the social cost of carbon in fact underestimate the human health costs and economic damages caused by carbon pollution. As such, we believe the social cost of carbon figures are an eminently reasonable, conservative estimate of carbon costs.

Xcel Energy, in its initial comments, attempts to argue against using the social cost of carbon (SCC) on a number of grounds. We do not find their arguments persuasive. Apart from eschewing statutorily required societal benefits and deferring to resource planning, Xcel argues that Minnesota stakeholders have not "had a chance to weigh in and fully test and vet the value."²⁴ But, as we noted in our initial comments, there has been a very robust and well-structured VOST stakeholder process, which is now continuing in this Commission docket. Indeed, the legislature required this sort of VOST stakeholder process, required that

²⁴ Xcel Energy initial comments at 11.

the VOST include environmental benefits, and set definite deadlines for completion of the methodology.

Additionally, the statute clearly lays out the Department's ability to modify the VOST value elements in subsequent years, and the annual VOST filing process seems to address Xcel's concern that "the SCC is currently subject to public comment, which could result in changes to the value or its application."²⁵

Finally, we note that a number of other commenters pointed to additional environmental value sub-components that could (ideally) be incorporated into the VOST methodology over time.²⁶ As a practical matter, it may not currently be possible to reduce each of these avoided environmental / societal costs to a dollar-per-kilowatt-hour figure. And yet, it is hard to deny that there are other environmental benefits to DSG beyond avoided CO₂ and traditional air pollutants.

The practical upshot is that under the Proposed Methodology, solar generators will continue to be under-compensated relative to the real environmental value they provide to society. We offer this as a counterpoint to Xcel's assertion that the Proposed Methodology would somehow over-compensate solar generators.

V. Avoided SES Compliance Costs (Solar Renewable Energy Credits)

Consistent with our initial comments, we again recommend that the Commission amend the proposed methodology to include a value component for the Avoided SES Compliance Cost that ensures customer-generators receive fair SREC compensation.

As noted in our initial filing, in quantifying the utility's avoided SES compliance costs, it is important to understand what is necessary to achieve compliance with the solar energy standard. The cost to comply with the SES is "the cost of adoption . . . a dynamic number [that] is impacted by how much compliance has been achieved and should be based off the current market proxies, such as Solar*Rewards or other nationally established market proxies."²⁷

For this reason, it should be relatively straightforward to initially estimate the utility's avoided SES compliance costs due to VOST – assuming the Commission establishes or approves SREC compensation rates, or is able to otherwise arrive at a reasonable market proxy price. As new SREC prices change over time, the VOST can be updated through the annual recalculation and filing procedure.

²⁵ Xcel Energy initial comments at 11.

²⁶ See Comments of Rebecca Lundberg at 1 (avoided natural-gas-production benefit), William and Nancy Bauer at 1 (avoided waste-heat warming of rivers and water bodies), Amy Blumenshire (benefits to human health), and Dr. Kannan Seshadri at 1 (avoided environmental-cleanup costs).

²⁷ Joint Initial Comments at 15.

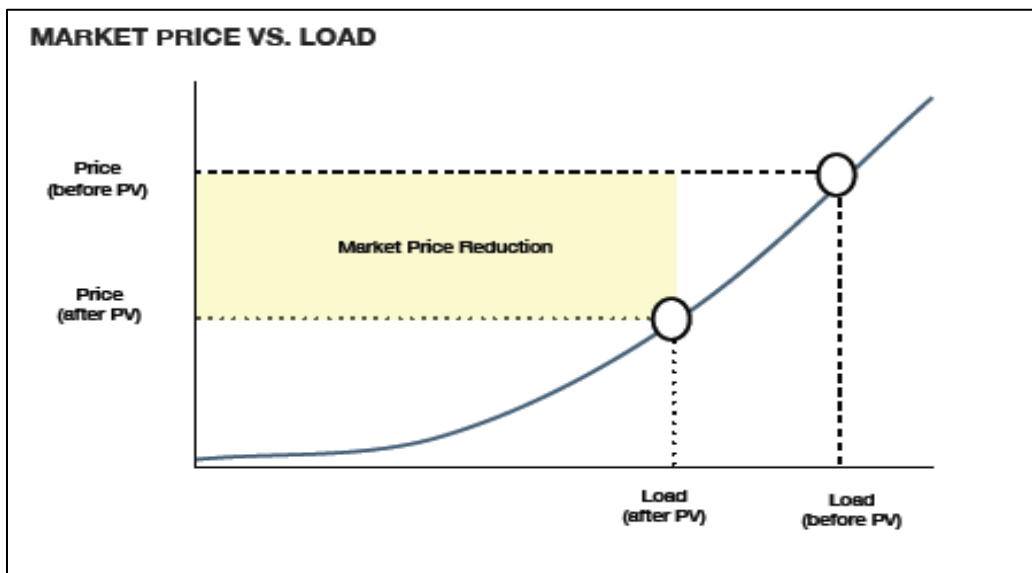
As we have stated, “avoided environmental costs and avoided compliance costs are two distinct value components” that together comprise the full SREC value.²⁸ Thus, in order to avoid potential double-compensation for avoided environmental costs, it may be necessary to subtract that value component from standard SREC prices and/or market proxy prices in order to arrive at a reasonable dollar-per-kilowatt-hour estimate of the compliance-value component SRECs transferred under VOST.

VI. Additional Placeholder for Value of “Market Price Reduction”

As stated in our initial comments, we recommend that the Commission include a “placeholder” for utility-avoided wholesale energy costs that can be attributed to DSG within the utility service territory.²⁹

Some stakeholders may question whether the inclusion of this avoided cost would result in double counting – after all, the Proposed Methodology already includes avoided energy market costs (in the form of avoided fuel costs and avoided plant O&M costs).³⁰ However, as explained in the Rocky Mountain Institute (RMI) September 17, 2013 presentation to the Department of Commerce and VOST stakeholders, those components only account for reduced energy purchases and generation.

RMI explained the distinction with the help of this diagram, which demonstrates a shift in the utility’s wholesale demand curve due to VOST:³¹



²⁸ *Id.* at 14.

²⁹ Joint initial comments at 17.

³⁰ See e.g., Proposed Methodology, Table 1 at 4 (showing the basis of included value components).

³¹ Diagram from September 17, 2013 RMI presentation, at 76.

In this diagram, the avoided cost due to reduced energy purchases is represented by the quadrilateral area under the demand curve between “Load (before PV)” and “Load (after PV)”. The larger the reduction in load due to DSG, the larger this area and the greater the avoided costs.

As shown, however, there is a second type of cost savings due to DSG, labeled as “Market Price Reduction” on RMI’s diagram. This cost savings is due to the fact that wholesale power prices in the MISO market increase with increasing system load. Distributed PV reduces system load, which results in lower wholesale prices for all wholesale buyers – including the utility. We do not believe that the Proposed Methodology currently accounts for this avoided cost to the utility, hence our recommendation that the Commission insert a placeholder into the methodology so that this value component to be specified in the future.

VII. Economic Development Benefit Value

We find MnSEIA's comments on this potential VOST component to be persuasive.³² We thus recommend the inclusion of an economic development value component, using a tax-revenue based methodology like the one described in Clean Power Research’s report on *The Value of Distributed Solar Electric Generation to New Jersey and Pennsylvania*.³³

ELPC, FE, IREC, and VSI have previously commented on the importance of including an economic development value in the VOST methodology.³⁴ The sticking point has, however, been the awkward phrasing used to describe this value component in the statute:

The department may, based on known and measurable evidence of the cost and benefit of solar operation to the utility, incorporate . . . credit for locally manufactured or assembled energy systems³⁵

At first glance, any costs or benefits of locally manufactured and installed solar PV systems would appear to accrue to local manufacturers, installers, and their employees and the local community – not to the utility. But we do not believe it is appropriate to construe the statutory in a way that makes this language inoperable. Rather, the Commission should, if possible, read this language as operable in light of the overarching statutory goal.

MnSEIA’s interpretation of this language renders it operable, by noting that existing “Economic Development” and “Load Retention” rates already recognize and quantify a utility benefit created by rate-enable growth in the local economy.

³² See MnSEIA initial comments at 1-3.

³³ Perez, Norris, and Hoff, *The Value of Distributed Solar Electric Generation to New Jersey and Pennsylvania* (November 2012), at 9 and 45.

³⁴ See ELPC, FE, IREC and VSI October 8, 2013 comments in Response to the Department of Commerce Questions at 11-12 (“installing distributed solar PV creates local jobs and businesses at higher rates than conventional generation translating to tax revenue benefits for all taxpayers”).

³⁵ Minn. Stat. 216B.164, Subd. 10(f).

The Commission has already approved several Xcel Energy (Xcel) rate programs to incentivize new business and retain or expand businesses that are beneficial to all rate payers. . . . These include Xcel's Area Development Rider, the Business Incentive and Sustainability Rider and the Competitive Response Rider. In analyzing *these new riders in the GR 12-961 docket the ALJ (OAH 68-2500-30266) noted Xcel's comments "... that the allocation of these costs should reflect the fact that adding and retaining load will allow the Company to spread overhead costs more broadly, which benefits all customers by lowering their average cost of service."*³⁶

As a practical matter, distributed solar generation (DSG) does confer an economic development benefit on the utility and its ratepayers, and we believe this should be reflected in the VOST methodology.

VIII. Conclusion

We appreciate the opportunity to provide these reply comments regarding the Department's proposed value of solar rate methodology.³⁷

Very truly yours,

/s/ Allen Gleckner
Allen Gleckner

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³⁶ MnSEIA initial comments at 2 (emphasis in original).

³⁷ Counsel for IREC has given undersigned counsel authorization to sign these comments on IREC's behalf.

CERTIFICATE OF SERVICE

I, Allen Gleckner, hereby certify that I have this day served a true and correct copy of the foregoing document to all persons at the addresses indicated below or on the attached list by electronic filing, electronic mail, interoffice mail or by depositing said documents in the United States Mail, postage prepaid, in Chicago, Illinois.

In the Matter of Establishing a Distributed Solar Value Methodology under Minn. Stat. §216B.164, subd. 10 (e) and (f)

Docket Number E-999/M-14-65

Dated this 20th day of February, 2014.

s/ Allen Gleckner

Allen Gleckner

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Jon	Brekke	jbrekke@grenergy.com	Great River Energy	12300 Elm Creek Boulevard Maple Grove, MN 553694718	Electronic Service	No	SPL_SL_14-65_Interested Parties
Mark B.	Bring	mbring@otpc.com	Otter Tail Power Company	215 South Cascade Street PO Box 496 Fergus Falls, MN 565380496	Electronic Service	No	SPL_SL_14-65_Interested Parties
Christina	Brusven	cbrusven@fredlaw.com	Fredrikson & Byron, P.A.	200 S 6th St Ste 4000 Minneapolis, MN 554021425	Electronic Service	No	SPL_SL_14-65_Interested Parties
Michael J.	Bull	N/A	Center for Energy and Environment	212 Third Avenue North, Suite 560 Minneapolis, MN 55401	Paper Service	No	SPL_SL_14-65_Interested Parties
Jessica	Burdette	jessica.burdette@state.mn.us	Department of Commerce	85 7th Place East Suite 500 St. Paul, MN 55101	Electronic Service	No	SPL_SL_14-65_Interested Parties

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Joel	Cannon	jcannon@tenksolar.com	Tenk Solar, Inc.	9549 Penn Avenue S Bloomington, MN 55431	Electronic Service	No	SPL_SL_14-65_Interested Parties
Tammie	Carino	tcarino@GREnergy.com	Great River Energy	12300 Elm Creek Blvd. Maple Grove, MN 55369-4718	Electronic Service	No	SPL_SL_14-65_Interested Parties
Douglas M.	Carnival		McGrann Shea Anderson Carnival	Straugn & Lamb 800 Nicollet Mall, Suite 2600 Minneapolis, MN 554027035	Paper Service	No	SPL_SL_14-65_Interested Parties
John J.	Carroll	jcarroll@newportpartners.com	Newport Partners, LLC	9 Cushing, Suite 200 Irvine, California 92618	Electronic Service	No	SPL_SL_14-65_Interested Parties
Aakash	Chandarana	Aakash.Chandara@xcenergy.com	Xcel Energy	414 Nicollet Maill 5th Floor Minneapolis, MN 55401	Electronic Service	No	SPL_SL_14-65_Interested Parties
Steve W.	Chriss	Stephen.chriss@walmart.com	Wal-Mart	2001 Southeast 10th St. Bentonville, AZ 72716-5530	Paper Service	No	SPL_SL_14-65_Interested Parties
Kenneth A.	Colburn	kcolburn@symbioticstrategies.com	Symbiotic Strategies, LLC	26 Winton Road Meredith, NH 32535413	Electronic Service	No	SPL_SL_14-65_Interested Parties
Steve	Coleman	scoleman@appliedenergyinnovations.org	Applied Energy Innovations	4000 Minnehaha Ave S Minneapolis, MN 55406	Electronic Service	No	SPL_SL_14-65_Interested Parties
George	Crocker	gwillc@nawo.org	North American Water Office	PO Box 174 Lake Elmo, MN 55042	Electronic Service	No	SPL_SL_14-65_Interested Parties
Mark F.	Dahlberg	markdahlberg@nweco.com	Northwestern Wisconsin Electric Company	P.O. Box 9 104 South Pine Street Grantsburg, WI 548400009	Electronic Service	No	SPL_SL_14-65_Interested Parties

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Lisa	Daniels	lisadaniels@windustry.org	Windustry	201 Ridgewood Avenue Minneapolis, MN 55403	Paper Service	No	SPL_SL_14-65_Interested Parties
Jeffrey A.	Daugherty	jeffrey.daugherty@centerpointenergy.com	CenterPoint Energy	800 LaSalle Ave Minneapolis, MN 55402	Electronic Service	No	SPL_SL_14-65_Interested Parties
Chris	Davis	christopher.davis@state.mn.us	Department of Commerce	Suite 500 85 Seventh Place East St. Paul, MN 551012198	Electronic Service	No	SPL_SL_14-65_Interested Parties
Dustin	Denison	dustin@appliedenergyinnovations.org	Applied Energy Innovations	4000 Minnehaha Ave S Minneapolis, MN 55406	Electronic Service	No	SPL_SL_14-65_Interested Parties
James	Denniston	james.r.denniston@xcelenergy.com	Xcel Energy Services, Inc.	414 Nicollet Mall, Fifth Floor Minneapolis, MN 55401	Electronic Service	No	SPL_SL_14-65_Interested Parties
Curt	Dieren	cdieren@dgrnet.com	L&O Power Cooperative	1302 South Union Street PO Box 511 Rock Rapids, IA 51246	Electronic Service	No	SPL_SL_14-65_Interested Parties
Ian	Dobson	ian.dobson@ag.state.mn.us	Office of the Attorney General-RUD	Antitrust and Utilities Division 445 Minnesota Street, BRM Tower St. Paul, MN 55101	Electronic Service	Yes	SPL_SL_14-65_Interested Parties
Dan	Donkers	N/A	Saint Paul - Ramsey County Public Health	Environmental Health Section 2785 White Bear Ave. Suite 350 Maplewood, MN 55109	Paper Service	No	SPL_SL_14-65_Interested Parties
Bill	Droessler	N/A	Izaak Walton League of America-MWO	1619 Dayton Ave Ste 202 Saint Paul, MN 55104	Paper Service	No	SPL_SL_14-65_Interested Parties

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Mike	Eggl	smeier@bepc.com	Basin Electric Power Cooperative	1717 East Interstate Avenue Bismarck, ND 58503	Paper Service	No	SPL_SL_14-65_Interested Parties
Kristen	Eide Tollefson	HealingSystems@earthlink.net	R-CURE	P O Box 129 Frontenac, MN 55026	Paper Service	No	SPL_SL_14-65_Interested Parties
Rebecca	Eilers	rebecca.d.eilers@xcelenergy.com	Xcel Energy	414 Nicollet Mall, 7th Floor Minneapolis, MN 55401	Electronic Service	No	SPL_SL_14-65_Interested Parties
Betsy	Engelking	betsy@geronimoenergy.com	Geronimo Energy	7650 Edinborough Way Suite 725 Edina, MN 55435	Electronic Service	No	SPL_SL_14-65_Interested Parties
Oncu	Er	oncu.er@avantenergy.com	Avant Energy, Agent for MMPA	220 S. Sixth St. Ste. 1300 Minneapolis, MN 55402	Electronic Service	No	SPL_SL_14-65_Interested Parties
Rick	Evans	Rick.Evans@xcelenergy.com	Xcel Energy	404 Nicollet Mall Minneapolis, MN 55401	Electronic Service	No	SPL_SL_14-65_Interested Parties
John	Farrell	jfarrell@ilsr.org	Institute for Local Self-Reliance	1313 5th St SE #303 Minneapolis, MN 55414	Electronic Service	No	SPL_SL_14-65_Interested Parties
Pam	Fergen		Hennepin County Government Center CAO	A2000 300 S. Sixth Street Minneapolis, MN 55487	Paper Service	No	SPL_SL_14-65_Interested Parties
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500 Saint Paul, MN 551012198	Electronic Service	No	SPL_SL_14-65_Interested Parties
Cathy	Fogale	cfogale@otpc.com	Otter Tail Power Company	215 South Cascade Street PO Box 496 Fergus Falls, MN 56537	Electronic Service	No	SPL_SL_14-65_Interested Parties

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Nathan	Franzen	nathan@geronimoenergy.com	Geronimo Energy	7650 Edinborough Way Suite 725 Edina, MN 55435	Electronic Service	No	SPL_SL_14-65_Interested Parties
Amy	Fredregill	amy@mrets.org	Midwest Renewable Energy Tracking System, Inc.	1885 University Avenue West, #315 St. Paul, MN 55104	Paper Service	No	SPL_SL_14-65_Interested Parties
Lori	Frisk Thompson	lorift@cmpa.org	Central MN MPA	459 S Grove St Blue Earth, MN 56013	Electronic Service	No	SPL_SL_14-65_Interested Parties
Lee	Gabler	Lee.E.Gabler@xcelenergy.com	Xcel Energy	404 Nicollet Mall Minneapolis, MN 55401	Electronic Service	No	SPL_SL_14-65_Interested Parties
Gary	Garbe	Gary.Garbe@avantenergy.com	Minnesota Municipal Power Agency	200 South Sixth Street Suite 300 Minneapolis, MN 55402	Electronic Service	No	SPL_SL_14-65_Interested Parties
Edward	Garvey	garveyed@aol.com	Residence	32 Lawton St Saint Paul, MN 55102	Paper Service	No	SPL_SL_14-65_Interested Parties
Darrell	Gerber		Clean Water Action Alliance of Minnesota	308 Hennepin Ave. E. Minneapolis, MN 55414	Paper Service	No	SPL_SL_14-65_Interested Parties
Benjamin	Gerber	bgerber@mncchamber.com	Minnesota Chamber of Commerce	400 Robert Street North Suite 1500 St. Paul, Minnesota 55101	Electronic Service	No	SPL_SL_14-65_Interested Parties
Bruce	Gerhardson	bgerhardson@otpc.com	Otter Tail Power Company	PO Box 496 215 S Cascade St Fergus Falls, MN 565380496	Electronic Service	No	SPL_SL_14-65_Interested Parties
Allen	Gleckner	agleckner@elpc.org	Environmental Law & Policy Center	2356 University Ave W. Suite 403 St. Paul, Minnesota 55114	Electronic Service	No	SPL_SL_14-65_Interested Parties

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Elizabeth	Goodpaster	bgoodpaster@mncenter.org	MN Center for Environmental Advocacy	Suite 206 26 East Exchange Street St. Paul, MN 551011667	Electronic Service	No	SPL_SL_14-65_Interested Parties
Bryan	Gower	N/A	APX, Inc.	224 Airport Parkway Suite 600 San Jose, CA 95110	Paper Service	No	SPL_SL_14-65_Interested Parties
Bill	Grant	Bill.Grant@state.mn.us	Minnesota Department of Commerce	85 7th Place East, Suite 500 St. Paul, MN 55101	Electronic Service	No	SPL_SL_14-65_Interested Parties
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Timothy	Gulden	info@winonarenewableenergy.com	Winona Renewable Energy, LLC	1449 Ridgewood Dr Winona, MN 55987	Electronic Service	No	SPL_SL_14-65_Interested Parties
Burl W.	Haar	burl.haar@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service	Yes	SPL_SL_14-65_Interested Parties
Tony	Hainault	anthony.hainault@co.hennepin.mn.us	Hennepin County DES	701 4th Ave S Ste 700 Minneapolis, MN 55415-1842	Electronic Service	No	SPL_SL_14-65_Interested Parties
J Drake	Hamilton	hamilton@fresh-energy.org	Fresh Energy	408 St Peter St Saint Paul, MN 55101	Electronic Service	No	SPL_SL_14-65_Interested Parties
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Bill	Heaney	billheaney@billheaney.com	IBEW Minnesota State Council	3931 Silver Lake Rd NE St. Anthony Village, MN 55421	Electronic Service	No	SPL_SL_14-65_Interested Parties
Brandon	Heath	bheath@misoenergy.org	MISO Energy	1125 Energy Park Drive St. Paul, MN 55108-5001	Electronic Service	No	SPL_SL_14-65_Interested Parties
John	Helmers	helmers.john@co.olmsted.mn.us	Olmsted County Waste to Energy	2122 Campus Drive SE Rochester, MN 55904-4744	Electronic Service	No	SPL_SL_14-65_Interested Parties
Jared	Hendricks	hendricksj@owatonnautilities.com	Owatonna Public Utilities	PO Box 800 208 S Walnut Ave Owatonna, MN 55060-2940	Electronic Service	No	SPL_SL_14-65_Interested Parties
Annete	Henkel	mui@mutilityinvestors.org	Minnesota Utility Investors	413 Wacouta Street #230 St. Paul, MN 55101	Electronic Service	No	SPL_SL_14-65_Interested Parties
Jessy	Hennesy	jessy.hennesy@avantenergy.com	Avant Energy	220 S. Sixth St. Ste 1300 Minneapolis, Minnesota 55402	Electronic Service	No	SPL_SL_14-65_Interested Parties
Lynn	Hinkle	lhinkle@mnseia.org	Minnesota Solar Energy Industries Association	2512 33rd Ave South #2 Minneapolis, MN 55406	Electronic Service	No	SPL_SL_14-65_Interested Parties
Holly	Hinman	holly.r.hinman@xcelenergy.com	Xcel Energy	414 Nicollet Mall, 6th Floor Minneapolis, MN 55401	Electronic Service	No	SPL_SL_14-65_Interested Parties
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Ashley	Houston			120 Fairway Rd Chestnut Hill, MA 24671850	Paper Service	No	SPL_SL_14-65_Interested Parties
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Jan	Hubbard	Jan@AppliedEnergyInnovations.org	Applied Energy Innovations, LLC	4000 Minnehaha Avenue South Minneapolis, MN 55406	Paper Service	No	SPL_SL_14-65_Interested Parties
Anne	Hunt	anne.hunt@ci.stpaul.mn.us	City of Saint Paul	390 City Hall 15 West Kellogg Boulevard Saint Paul, MN 55102	Electronic Service	No	SPL_SL_14-65_Interested Parties
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Ralph	Jacobson	N/A	Innovative Power Systems, Inc.	1413 Hunting Valley Rd Ste 1 Saint Paul, MN 55109-1555	Paper Service	No	SPL_SL_14-65_Interested Parties
Casey	Jacobson	cjacobson@bepec.com	Basin Electric Power Cooperative	1717 East Interstate Avenue Bismarck, ND 58501	Electronic Service	No	SPL_SL_14-65_Interested Parties

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Dwight	Jelle	dkjelle@gmail.com	Best Power International, LLC	P.O. 5126 Hopkins, MN 55343	Electronic Service	No	SPL_SL_14-65_Interested Parties
Alan	Jenkins	aj@jenkinsatlaw.com	Jenkins at Law	2265 Roswell Road Suite 100 Marietta, GA 30062	Electronic Service	No	SPL_SL_14-65_Interested Parties
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Richard	Johnson	Rick.Johnson@lawmoss.com	Moss & Barnett	90 South 7th Street Suite #4800 Minneapolis, MN 554024129	Electronic Service	No	SPL_SL_14-65_Interested Parties
Larry	Johnston	lw.johnston@smpa.org	SMMPA	500 1st Ave SW Rochester, MN 55902-3303	Paper Service	No	SPL_SL_14-65_Interested Parties
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Mark J.	Kaufman	mkaufman@ibewlocal949.org	IBEW Local Union 949	12908 Nicollet Avenue South Burnsville, MN 55337	Electronic Service	No	SPL_SL_14-65_Interested Parties
Nancy	Kelly	bademailnancyk@eurekarecycling.org	Eureka Recycling	2828 Kennedy Street NE Minneapolis, MN 55413	Paper Service	No	SPL_SL_14-65_Interested Parties

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John	Kluempke	jkluempke@winlectric.com	Elk River Winlectric	12777 Meadowvale Rd Elk River, MN 55330	Electronic Service	No	SPL_SL_14-65_Interested Parties
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Jon	Kramer	jk2surf@aol.com	Sundial Solar	4708 york ave. S Minneapolis, MN 55410	Electronic Service	No	SPL_SL_14-65_Interested Parties
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Allen	Krug	allen.krug@xcelenergy.com	Xcel Energy	414 Nicollet Mall-7th fl Minneapolis, MN 55401	Electronic Service	No	SPL_SL_14-65_Interested Parties
Scott	Kurtz	Scott.J.Kurtz@xcelenergy.com	Xcel Energy	825 Rice Street St. Paul, MN 55117	Electronic Service	No	SPL_SL_14-65_Interested Parties
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Bob	Long	rlong@larkinhoffman.com	Larkin Hoffman (Silicon Energy)	1500 Wells Fargo Plaza 7900 Xerxes Ave S Bloomington, MN 55431	Paper Service	No	SPL_SL_14-65_Interested Parties
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Casey	Maccullum	casey@appliedenergyinnovations.org	Applied Energy Innovations	4000 Minnehaha Ave S Minneapolis, MN 55406	Paper Service	No	SPL_SL_14-65_Interested Parties
Susan	Mackenzie	susan.mackenzie@state.mn.us	Public Utilities Commission	Suite 350121 7th Place East St. Paul, MN 551012147	Electronic Service	No	SPL_SL_14-65_Interested Parties
Kavita	Maini	kmains@wi.rr.com	KM Energy Consulting LLC	961 N Lost Woods Rd Oconomowoc, WI 53066	Electronic Service	No	SPL_SL_14-65_Interested Parties

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Mike	McDowell		Heartland Consumers Power District	PO Box 248 Madison, SD 570420248	Paper Service	No	SPL_SL_14-65_Interested Parties
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John	McWilliams	jmm@dairynet.com	Dairyland Power Cooperative	3200 East Ave SPO Box 817 La Crosse, WI 54601-7227	Electronic Service	No	SPL_SL_14-65_Interested Parties
Valerie	Means	valerie.means@lawmoss.com	Moss & Barnett	Suite 4800 90 South Seventh Street Minneapolis, MN 55402	Electronic Service	No	SPL_SL_14-65_Interested Parties
Stacy	Miller	stacy.miller@state.mn.us	Department of Commerce	State Energy Office 85 7th Place East, Suite 500 St. Paul, MN 55101	Electronic Service	No	SPL_SL_14-65_Interested Parties
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	SPL_SL_14-65_Interested Parties
Andrew	Moratzka	apmoratzka@stoel.com	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	SPL_SL_14-65_Interested Parties

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Martin	Morud	mmorud@trunorthsolar.com	Tru North Solar	5115 45th Ave S Minneapolis, MN 55417	Electronic Service	No	SPL_SL_14-65_Interested Parties
Ben	Nelson		CMPMA	459 South Grove Street Blue Earth, MN 56013	Paper Service	No	SPL_SL_14-65_Interested Parties
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Michael	Noble	noble@fresh-energy.org	Fresh Energy	Hamm Bldg., Suite 220 408 St. Peter Street St. Paul, MN 55102	Electronic Service	No	SPL_SL_14-65_Interested Parties
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James	Pearson	james.g.pearson@xcelenergy.com	Xcel Energy	414 Nicollet Mall Minneapolis, MN 55401	Electronic Service	No	SPL_SL_14-65_Interested Parties
Mary Beth	Peranteau	mperanteau@wheelerlaw.com	Wheeler Van Sickle & Anderson SC	Suite 801 25 West Main Street Madison, WI 537033398	Electronic Service	No	SPL_SL_14-65_Interested Parties
Donna	Pickard	dpickard@aladdinsolar.com	Aladdin Solar	1215 Lilac Lane Excelsior, MN 55331	Electronic Service	No	SPL_SL_14-65_Interested Parties

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Charlie	Pickard	cpickard@aladdinsolar.com	Aladdin Solar	1215 Lilac Lane Excelsior, MN 55331	Electronic Service	No	SPL_SL_14-65_Interested Parties
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Gayle	Prest	gayle.prest@minneapolis.gov	City of Mpls Sustainability	350 South 5th St, #315 Minneapolis, MN 55415	Paper Service	No	SPL_SL_14-65_Interested Parties
Kent	Ragsdale	kentragsdale@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_14-65_Interested Parties
Mark	Rathbun	mrathbun@greenergy.com	Great River Energy	12300 Elm Creek Blvd Maple Grove, MN 55369	Electronic Service	No	SPL_SL_14-65_Interested Parties
John C.	Reinhardt		Laura A. Reinhardt	3552 26Th Avenue South Minneapolis, MN 55406	Paper Service	No	SPL_SL_14-65_Interested Parties
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_14-65_Interested Parties
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Trudy	Richter	trichter@rranow.com	Minnesota Resource Recovery Assn.	477 Selby Avenue St. Paul, MN 55102	Paper Service	No	SPL_SL_14-65_Interested Parties
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Robert K.	Sahr	bsahr@eastriver.coop	East River Electric Power Cooperative	P.O. Box 227 Madison, SD 57042	Electronic Service	No	SPL_SL_14-65_Interested Parties
Raymond	Sand	rms@dairynet.com	Dairyland Power Cooperative	P.O. Box 8173200 East Avenue South LaCrosse, WI 546020817	Electronic Service	No	SPL_SL_14-65_Interested Parties
Richard	Savelkoul	rsavelkoul@martinsquires.com	Martin & Squires, P.A.	332 Minnesota Street Ste W2750 St. Paul, MN 55101	Electronic Service	No	SPL_SL_14-65_Interested Parties
Larry L.	Schedin	Larry@LLSResources.com	LLS Resources, LLC	12 S 6th St Ste 1137 Minneapolis, MN 55402	Electronic Service	No	SPL_SL_14-65_Interested Parties
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_14-65_Interested Parties
Kevin	Schwain	Kevin.D.Schwain@xcelenergy.com	Xcel Energy	404 Nicollet Mall Minneapolis, MN 55401	Electronic Service	No	SPL_SL_14-65_Interested Parties
Dean	Sedgwick	N/A	Itasca Power Company	PO Box 457 Bigfork, MN 56628-0457	Paper Service	No	SPL_SL_14-65_Interested Parties
Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates	Ste 122 9100 W Bloomington Frwy Bloomington, MN 55431	Electronic Service	No	SPL_SL_14-65_Interested Parties
Gary	Shaver	N/A	Silicon Energy	3506 124th St NE Marysville, WA 98271	Paper Service	No	SPL_SL_14-65_Interested Parties

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Erin	Shea	eshea@silicon-energy.com	Silicon Energy	11168 Sumter Circle Bloomington, MN 55438	Electronic Service	No	SPL_SL_14-65_Interested Parties
Doug	Shoemaker	dougs@mnRenewables.org	MRES	2928 5th Avenue South Minneapolis, MN 55408	Paper Service	No	SPL_SL_14-65_Interested Parties
Mrg	Simon	mrgsimon@mrenergy.com	Missouri River Energy Services	3724 W. Avera Drive P.O. Box 88920 Sioux Falls, SD 571098920	Electronic Service	No	SPL_SL_14-65_Interested Parties
Ken	Smith	ken.smith@districtenergy.com	District Energy St. Paul Inc.	76 W Kellogg Blvd St. Paul, MN 55102	Electronic Service	No	SPL_SL_14-65_Interested Parties
Beth H.	Soholt	bsoholt@windonthewires.org	Wind on the Wires	570 Asbury Street Suite 201 St. Paul, MN 55104	Electronic Service	No	SPL_SL_14-65_Interested Parties
Chanti	Sourignavong	chantipal.sourignavong@honeywell.com	Honeywell	1985 Douglas Drive North MN10-111A Golden Valley, MN 55422-3992	Paper Service	No	SPL_SL_14-65_Interested Parties
Ron	Spangler, Jr.	rlspangler@otpc.com	Otter Tail Power Company	215 So. Cascade St. PO Box 496 Fergus Falls, MN 565380496	Electronic Service	No	SPL_SL_14-65_Interested Parties
Byron E.	Starns	byron.starns@leonard.com	Leonard Street and Deinard	150 South 5th Street Suite 2300 Minneapolis, MN 55402	Electronic Service	No	SPL_SL_14-65_Interested Parties
Erin	Stojan Ruccolo	ruccolo@fresh-energy.org	Fresh Energy	408 Saint Peter St Ste 220 Saint Paul, MN 55102-1125	Electronic Service	No	SPL_SL_14-65_Interested Parties
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_14-65_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_14-65_Interested Parties
Thomas P.	Sweeney III	tom.sweeney@easycleanenergy.com	Clean Energy Collective	P O Box 1828 Boulder, CO 80306-1828	Paper Service	No	SPL_SL_14-65_Interested Parties
SaGonna	Thompson	Regulatory.Records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	SPL_SL_14-65_Interested Parties
Steve	Thompson		Central Minnesota Municipal Power Agency	459 S Grove St Blue Earth, MN 56013-2629	Paper Service	No	SPL_SL_14-65_Interested Parties
Pat	Treseler	pat.jcplaw@comcast.net	Paulson Law Office LTD	Suite 325 7301 Ohms Lane Edina, MN 55439	Electronic Service	No	SPL_SL_14-65_Interested Parties
Lise	Trudeau	lise.trudeau@state.mn.us	Department of Commerce	85 7th Place East Suite 500 Saint Paul, MN 55101	Electronic Service	No	SPL_SL_14-65_Interested Parties
Darryl	Tveitbakk		Northern Municipal Power Agency	123 Second Street West Thief River Falls, MN 56701	Paper Service	No	SPL_SL_14-65_Interested Parties
Kari L	Valley	kari.l.valley@xcelenergy.com	Xcel Energy Service Inc.	414 Nicollet Mall FL 5 Minneapolis, MN 55401	Electronic Service	No	SPL_SL_14-65_Interested Parties
Lisa	Veith	lisa.veith@ci.stpaul.mn.us	City of St. Paul	400 City Hall and Courthouse 15 West Kellogg Blvd. St. Paul, MN 55102	Electronic Service	No	SPL_SL_14-65_Interested Parties

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Paul	White	paul.white@prcwind.com	Project Resources Corp./Tamarac Line LLC/Ridgewind	618 2nd Ave SE Minneapolis, MN 55414	Electronic Service	No	SPL_SL_14-65_Interested Parties
Scott M.	Wilensky	scott.wilensky@xcelenergy.com	Xcel Energy	7th Floor 414 Nicollet Mall Minneapolis, MN 554011993	Electronic Service	No	SPL_SL_14-65_Interested Parties
Jason	Willett	jason.willett@metc.state.mn.us	Metropolitan Council	390 Robert St N Saint Paul, MN 55101-1805	Electronic Service	No	SPL_SL_14-65_Interested Parties
Daniel	Williams	DanWilliams.mg@gmail.com	Powerfully Green	11451 Oregon Avenue N Champlin, MN 55316	Electronic Service	No	SPL_SL_14-65_Interested Parties
Steven	Wishart	steven.w.wishart@xcelenergy.com	Xcel Energy	7th Floor 414 Nicollet Mall Minneapolis, MN 554011993	Electronic Service	No	SPL_SL_14-65_Interested Parties
Robyn	Woeste	robynwoeste@alliantenergy.com	Interstate Power and Light Company	200 First St SE Cedar Rapids, IA 52401	Electronic Service	No	SPL_SL_14-65_Interested Parties
Thomas J.	Zaremba		WHEELER, VAN SICKLE & ANDERSON	Suite 801 25 West Main Street Madison, WI 537033398	Paper Service	No	SPL_SL_14-65_Interested Parties