

August 21, 2017

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

RE: **Comments of the Minnesota Department of Commerce, Division of Energy Resources**
Docket No. E999/CI-15-556

Dear Mr. Wolf:

Attached are the comments of the Minnesota Department of Commerce, Division of Energy Resources (Department), in the following matter:

In the Matter of the Commission Investigation into Grid Modernization: Focus on Distribution System Planning, Section C.

The Department is available to answer any questions that the Minnesota Public Utilities Commission may have in this matter.

Sincerely,

/s/ SUE PEIRCE
Rates Analyst

SP/lt
Attachment



Before the Minnesota Public Utilities Commission

Comments of the Minnesota Department of Commerce Division of Energy Resources

Docket No. E999/CI-15-556

I. BACKGROUND INFORMATION

In May 2015, the Minnesota Public Utilities Commission (Commission) opened this proceeding to investigate the steps necessary to modernize the electric distribution grid to benefit Minnesota customers, utilities and other stakeholders.

On April 21, 2017, the Commission issued a notice of comment period (*Notice*) on distribution system planning efforts and considerations. The issuance included a questionnaire that was divided into three sections, labeled A-C. Comments to Sections A and B were open to utilities, and Comments to Section C were open to all stakeholders. The Minnesota Department of Commerce, Division of Energy Resources (Department) submits these current comments as initial comments to Section C.

Part C of the Commission's *Notice* requests comment on the following areas:

1. An evaluation of utility plans, including how utility distribution plans should be used in other proceedings;
2. The feasibility of planning enhancements, including whether investor-owned utilities should adopt uniform planning processes;
3. The feasibility of improving demand forecasting and distributed energy resource (DER) modeling;
4. Planning scenarios;
5. Applicable standards and codes;
6. Access to grid and planning data by customers and third parties;
7. Hosting capacity; and
8. Other topics

II. DEPARTMENT ANALYSIS

The Department offers the following comments on the topics contained in Part C of the Commission's *Notice*.

- 1) *How should utility distribution plans be used in other proceedings: Should distribution plans be approved by the Commission?*

At this time, the Department does not recommend the Commission approve distribution plans for any of the utilities. In response to Parts A and B of this *Notice*, the utilities describe a planning process that typically is updated on an annual basis, and generally only forecasts out over a five-year time horizon. The Department does not foresee the ability of the Commission to offer input and approve distribution plans in the shorter timeframes typically used by the utilities. In addition, distribution plans are often tied into a utility's capital budgeting process, and consequently may require flexibility in identifying and developing distribution plans.

All utilities file annual distributed generation (DG) interconnection reports with the Commission.¹ In the event that the Commission desires specific information from some or all of the utilities filing the DG annual report, the Department recommends that the information be requested in the context of this annual filing. Using the DG annual report as a vehicle to obtain additional information about a utility's distribution planning would provide an avenue for obtaining the information without unduly burdening the utilities with another reporting deadline. In addition, the DG reporting process could be a means for the Commission to obtain specific information from utilities about the status of their distribution plans.

- 2) *Feasibility of planning enhancements including adoption of uniform planning processes*

The Department does not support the adoption of uniform planning process standards for all investor-owned utilities. The Department understands each utility will develop their distribution plan in a manner that best meets the needs of their respective customers, and in the context of their own budgeting process. A review of the utility responses to Part A of the Commission's *Notice* suggests that at a very high level, utilities already undertake many of the same steps in the planning process. The Department does not see a need to undertake additional oversight of the distribution planning process at this time. It is not clear what would be the reasonable bases or criteria upon which to establish a threshold or trigger at which point the Commission would require utilities to adopt enhanced planning processes. Should issues

¹ Minnesota Statutes § 216B.1611, subd. 4b.

arise, the Department anticipates that the utility and/or stakeholders will bring the matter to the Commission's attention, at which point the basis for a threshold may be more clear.

3) *The feasibility of improving demand forecasting and distributed energy resource modeling*

The Department supports modeling, forecasts, and maps that are cost effective, secure, tailored to each utility's individual abilities and needs, and that add meaningful information.

4) *Planning Scenarios*

The type of modeling and use of various planning scenarios will depend on the amount of DER activity taking place on a utility's system. Similar to the process that occurs in integrated resource planning, the Department foresees that utilities could benefit from high/medium/low growth estimates for DER, as well as efforts to identify the location on the distribution system for expected growth.

Stakeholder input could be useful in identifying potential locations for expected growth in distributed generation facilities. In obtaining stakeholder input, the utility may need to develop a process for obtaining the commercially sensitive information from some stakeholders (i.e. solar developers) as they may be reluctant to share their plans with the utility or other stakeholders.

5) *Applicable Standards and Codes*

The Department supports adherence to applicable national and state electrical codes and standards.

6) *Access to grid and planning data by customers and third parties*

Communities and third parties may be interested in access to grid and planning data for the purposes of coordinating geographically targeted energy efficiency and demand response projects, planning for electric vehicle charging infrastructure such as electric bus corridors, and coordinating with other local community development initiatives. The Department supports developing a process that would allow utilities and communities to undertake such targeted projects.

7) *Hosting Capacity*

A proceeding is currently underway to update Interconnection Standards in Docket No. E999/CI-16-521. As part of this update, the Department is aware of discussions on how to make capacity and other information available to customers and other parties seeking to install distributed generation on the grid. A similar discussion has taken place as part of Xcel's Community Solar Garden docket (Docket No. E002/M-13-867)(CSG Docket). The CSG Docket provides developers an opportunity to obtain distribution infrastructure and load analysis on a per-feeder basis. The Department expects the Interconnection Workgroup to develop a similar process for all interconnections.

III. CONCLUSION

The Department appreciates the opportunity to comment on Section C of the Commission's *Notice*.

/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
Comments**

Docket No. E999/CI-15-556

Dated this 21st day of August 2017

/s/Sharon Ferguson

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Thomas	Melone	Thomas.Melone@AllcoUS.com	Minnesota Go Solar LLC	222 South 9th Street Suite 1600 Minneapolis, Minnesota 55120	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Herbert	Minke	hminke@allete.com	Minnesota Power	30 W Superior St Duluth, MN 55802	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Dalene	Monsebroten	dalene@mncable.net	Northern Municipal Power Agency	123 2nd St W Thief River Falls, MN 56701	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Martin	Morud	mmorud@trunorthsolar.com	Tru North Solar	5115 45th Ave S Minneapolis, MN 55417	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Michael	Murray	mmurray@missiondata.org	Mission:Data Coalition	1020 16th St Ste 20 Sacramento, CA 95814	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Ben	Nelson	benn@cmpasgroup.org	CMMPA	459 South Grove Street Blue Earth, MN 56013	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Ron	Nelson	ron.nelson@ag.state.mn.us	Office of the Attorney General-RUD	Bremer Tower, Suite 1400 445 Minnesota Street Saint Paul, Minnesota 55101	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Carl	Nelson	cnelson@mncee.org	Center for Energy and Environment	212 3rd Ave N Ste 560 Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
David	Niles	david.niles@avantenergy.com	Minnesota Municipal Power Agency	220 South Sixth Street Suite 1300 Minneapolis, Minnesota 55402	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Rolf	Nordstrom	rnordstrom@gpisd.net	Great Plains Institute	2801 21ST AVE S STE 220 Minneapolis, MN 55407-1229	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
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_15- 556_OFF_SL_15- 556_Official Service List
David	O'Brien	david.obrien@navigant.com	Navigant Consulting	77 South Bedford St Ste 400 Burlington, MA 01803	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Jeff	O'Neill	jeff.oneill@ci.monticello.mn.us	City of Monticello	505 Walnut Street Suite 1 Monticello, Minnesota 55362	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Russell	Olson	rolson@hcpd.com	Heartland Consumers Power District	PO Box 248 Madison, SD 570420248	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Dan	Patry	dpatry@sunedison.com	SunEdison	600 Clipper Drive Belmont, CA 94002	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Jeffrey C	Paulson	jeff.jcplaw@comcast.net	Paulson Law Office, Ltd.	4445 W 77th Street Suite 224 Edina, MN 55435	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
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_15- 556_OFF_SL_15- 556_Official Service List
Jennifer	Peterson	jjpeterson@mnpower.com	Minnesota Power	30 West Superior Street Duluth, MN 55802	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Hannah	Polikov	hpolikov@aee.net	Advanced Energy Economy Institute	1000 Vermont Ave, Third Floor Washington, DC 20005	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
David G.	Prazak	dprazak@otpc.com	Otter Tail Power Company	P.O. Box 496 215 South Cascade Street Fergus Falls, MN 565380496	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Gayle	Prest	gayle.prest@minneapolismn.gov	City of Mpls Sustainability	350 South 5th St, #315 Minneapolis, MN 55415	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Gregory	Randa	granda@lakecountrypower.com	Lake Country Power	2810 Elida Drive Grand Rapids, MN 55744	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Mark	Rathbun	mrathbun@greenergy.com	Great River Energy	12300 Elm Creek Blvd Maple Grove, MN 55369	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Michael	Reinertson	michael.reinertson@avanteenergy.com	Avant Energy	220 S. Sixth St. Ste 1300 Minneapolis, Minnesota 55402	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
John C.	Reinhardt		Laura A. Reinhardt	3552 26Th Avenue South Minneapolis, MN 55406	Paper Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
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_15-556_OFF_SL_15-556_Official Service List
Craig	Rustad	crustad@minnkota.com	Minnkota Power	1822 Mill Road PO Box 13200 Grand Forks, ND 582083200	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Robert K.	Sahr	bsahr@eastriver.coop	East River Electric Power Cooperative	P.O. Box 227 Madison, SD 57042	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Richard	Savelkoul	rsavelkoul@martinsquires.com	Martin & Squires, P.A.	332 Minnesota Street Ste W2750 St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Thomas	Scharff	thomas.scharff@versoco.com	Verso Corp	600 High Street Wisconsin Rapids, WI 54495	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Larry L.	Schedin	Larry@LLSResources.com	LLS Resources, LLC	332 Minnesota St, Ste W1390 St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Christopher	Schoenherr	cp.schoenherr@smmpa.org	SMMPA	500 First Ave SW Rochester, MN 55902-3303	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Dean	Sedgwick	N/A	Itasca Power Company	PO Box 457 Bigfork, MN 56628-0457	Paper Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Maria	Seidler	maria.seidler@dom.com	Dominion Energy Technology	120 Tredegar Street Richmond, Virginia 23219	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
William	Seuffert	Will.Seuffert@state.mn.us		75 Rev Martin Luther King Jr Blvd 130 State Capitol St. Paul, MN 55155	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
David	Shaffer	DShaffer@MnSEIA.org	Minnesota Solar Energy Industries Project	1005 Fairmount Ave Saint Paul, MN 55105	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Patricia	Sharkey	psharkey@environmentalla wcounsel.com	Midwest Cogeneration Association.	180 N. LaSalle Street Suite 3700 Chicago, Illinois 60601	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Bria	Shea	bria.e.shea@xcelenergy.co m	Xcel Energy	414 Nicollet Mall Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Doug	Shoemaker	dougs@mnRenewables.or g	MRES	2928 5th Ave S Minneapolis, MN 55408	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
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_15- 556_OFF_SL_15- 556_Official Service List
Anne	Smart	anne.smart@chargepoint.c om	ChargePoint, Inc.	254 E Hacienda Ave Campbell, CA 95008	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Trevor	Smith	trevor.smith@avantenergy. com	Avant Energy, Inc.	220 South Sixth Street Suite 1300 Minneapolis, Minnesota 55402	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Joshua	Smith	joshua.smith@sierraclub.org		85 Second St FL 2 San Francisco, California 94105	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Ken	Smith	ken.smith@evergreenenergy.com	Ever Green Energy	1350 Landmark Towers 345 St. Peter St St. Paul, MN 55102	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Ken	Smith	ken.smith@districtenergy.com	District Energy St. Paul Inc.	76 W Kellogg Blvd St. Paul, MN 55102	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Beth H.	Soholt	bsoholt@windonthewires.org	Wind on the Wires	570 Asbury Street Suite 201 St. Paul, MN 55104	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Benjamin	Stafford	bstafford@aee.net	Advanced Energy Economy	1000 Vermont NW Floor 3 Washington, DC 20005	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Sky	Stanfield	stanfield@smwlaw.com	Shute, Mihaly & Weinberger	396 Hayes Street San Francisco, CA 94102	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Tom	Stanton	tstanton@nrri.org	NRRI	1080 Carmack Road Columbus, OH 43210	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Byron E.	Starns	byron.starns@stinson.com	Stinson Leonard Street LLP	150 South 5th Street Suite 2300 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
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	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List
Eric	Swanson	eswanson@winthrop.com	Winthrop & Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	OFF_SL_15- 556_OFF_SL_15- 556_Official Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Thomas P.	Sweeney III	tom.sweeney@easycleanenergy.com	Clean Energy Collective	P O Box 1828 Boulder, CO 80306-1828	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Steve	Thompson	stevet@cmpasgroup.org	Central Minnesota Municipal Power Agency	459 S Grove St Blue Earth, MN 56013-2629	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Stuart	Tommerdahl	stommerdahl@otpc.com	Otter Tail Power Company	215 S Cascade St PO Box 496 Fergus Falls, MN 56537	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Pat	Treseler	pat.jclaw@comcast.net	Paulson Law Office LTD	4445 W 77th Street Suite 224 Edina, MN 55435	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Lise	Trudeau	lise.trudeau@state.mn.us	Department of Commerce	85 7th Place East Suite 500 Saint Paul, MN 55101	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Karen	Turnboom	karen.turnboom@versocom.com	Verso Corporation	100 Central Avenue Duluth, MN 55807	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
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	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Roger	Warehime	warehimer@owatonnautilities.com	Owatonna Public Utilities	208 South WalnutPO Box 800 Owatonna, MN 55060	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Jenna	Warmuth	jwarmuth@mnpower.com	Minnesota Power	30 W Superior St Duluth, MN 55802-2093	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Karlee	Weinmann	kweinmann@ilsr.org	Institute for Local Self-Reliance	1313 5th St SE #303 Minneapolis, MN 55414	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Jason	Willett	jason.willett@metc.state.mn.us	Metropolitan Council	390 Robert St N Saint Paul, MN 55101-1805	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Cam	Winton	cwinton@mnychamber.com	Minnesota Chamber of Commerce	400 Robert Street North Suite 1500 St. Paul, Minnesota 55101	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Robyn	Woeste	robynwoeste@alliantenergy.com	Interstate Power and Light Company	200 First St SE Cedar Rapids, IA 52401	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
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_15-556_OFF_SL_15-556_Official Service List
Thomas J.	Zaremba	TZaremba@wheelerlaw.com	WHEELER, VAN SICKLE & ANDERSON	44 E. Mifflin Street, 10th Floor Madison, WI 53703	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List
Christopher	Zibart	czibart@atcllc.com	American Transmission Company LLC	W234 N2000 Ridgeview Pkwy Court Waukesha, WI 53188-1022	Electronic Service	No	OFF_SL_15-556_OFF_SL_15-556_Official Service List