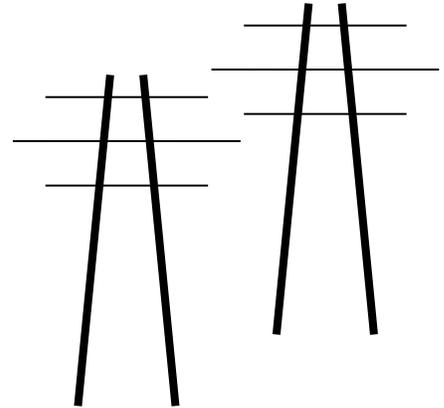


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March 1, 2024

Will Seuffert
Executive Secretary
Public Utilities Commission
121 – 7th Place East, Suite 350
St. Paul, MN 55101

via eDockets only

RE: Reply Comment
Biennial Transmission Projects Report - PUC Docket M-23-91

Dear Mr. Seuffert:

Thank you for the opportunity to file Reply Comment on the Biennial Transmission Projects Report.

It's disturbing that so few bother to Comment on this Report, particularly given the extensive Notice provided. My guess is that if people are aware, they are overwhelmed by permitting dockets, think that their comments would have no impact, and/or don't wake up until transmission is proposed on or near their property and don't find out about a project until the last minute.

Lack of public participation is particularly troubling now that utilities rely on MISO for their "need" claim, and that the Commission accepts MISO "approval" as open and shut demonstration of need, failing to address the distinctions between MISO's utility and market based "approval" and Minnesota's statutory criteria. The Commission has been sleeping at the switch, and is failing in its mandate for public participation.

It's clear that the utilities rely on MISO transmission planning for its need claims, planning which is market and utility-benefit based. All such references to MISO "approval" should be stricken from this Report, as this is not a demonstration of need, but of marketing plans to benefit member utilities.

There are very few Initial Comments serving as a basis for a reply.

Completeness

The Commission has yet to make a “Completeness” determination. Once more with feeling: Without including the MN Energy Connection, except as an afterthought at the end, it is NOT “complete” and should be rejected and utilities given another opportunity to fill in the blanks. There are other necessary pieces missing – see also EDFR’s recommendations, pasted below.

EDF Renewables (EDFR)

EDFR supports “Grid North Partners” projects, in particular the Morris-Grant East Fergus

project increasing the rating of the existing 115 kV line. However, EDFR does not address apportionment of costs. As a benefactor of the project, will costs be attributed to EDFR’s interconnection needs and assigned to EDFR and others receiving the direct benefit of interconnection; or assigned to the owner of the transmission line receiving the direct benefit of high ROI for capital expenditure and of payment for transmission services; and/or will costs be assigned to ratepayers who don’t receive a direct benefit? And will costs be apportioned to each based on benefit received? How will this benefit be calculated?

This one line that EDFR write about is one of many 115 kV lines. Logically all the 115 kV lines should be uprated, and the 69 kV lines uprated to 115kV, as the system underlying the 345kV lines must be robust to be able to withstand an outage of the 345kV system. If CapX lines went down, so would the system.

EDFR complains that the “Biennial Report is Silent on Southwest Minnesota Wind Curtailment and Solutions,” pointing out grid congestion and “stability-limited interfaces.” Both of these are caused by the same problems:

Developers are siting where they can find land and obtain leases, without considering transmission. Developers’ only transmission consideration is getting a MISO queue number and learning of the cost of interconnection. Choosing to site so far from load is a poor business decision. Developers must shift their projects to distributed generation sites, covering every government building, parking lots, warehouses, hospitals, schools, etc., where the load is, and then there’s no need transmission. Developers need to get out of the “if we build it, transmission will come” mindset.

The Public Utilities Commission must also change its mindset and focus on distributed generation. The pattern thus far has been to rubber stamp projects with little regard to impacts on environment or people, and more importantly for this docket, whether or not they can be put online. The Commission needs to direct projects to build near load. How much distributed generation could be built by funneling into the basic development costs the capital cost of transmission, interconnection costs, line loss/series compensation/reactive power, and transmission service into these projects?

The issue of “stability-limited interfaces” is to be expected. Transmission is inherently unstable, and requires much planning and compensation for the line losses inherent in the beast. This is yet

another reason to build near load. Continuing to build so far away worsens the problem. Rather than expect utilities to build transmission to fulfill their needs, proactive planning is overdue. They should also consider the line loss percentage. The “MN Energy Connection” line, a radial line from SW MN to Sherco, projects an 11 to almost 13% line loss. When connecting a 30-40% resource to a transmission line that will lose 11-13% to get to the endpoint, does that make economic sense?¹ The developer’s project won’t care, but the buyer and ratepayers will, because they’ll have to pay for construction, generation, and transmission service for all that energy that doesn’t reach the destination.

EDFR’s comment regarding FENOCH, and also stability-limited interfaces BRIGEN, and CHBGGEN (which could be identified easily enough) is reminiscent of the “Fort Calhoon” interface, in Nebraska, and that costs of repair and upgrade of the Fort Calhoon interface, IN NEBRASKA, was woven into a Minnesota transmission line project (SW MN 345kV – Docket 01-1958) to be paid for by those paying for that transmission project. The secrecy of existing transmission, transmission needs, and transmission projects based on CEII claims is overdone, as is claims of “TRADE SECRET.” To understand what is truly needed, we have to have the big picture. It’s also curious why wind projects’ generation isn’t directed into the MISP MVP 3 and 4 across northern Iowa...

EDFR states that its understanding is that a new 345kV outlet needs to be built. There are two transmission lines proposed, one from Big Stone to Alexandria and “Big Oak and the other a radial line from Lyon County to Sherco. And as EDFR notes, because those claimed FENOCH, BRIGEN and CHBGGEN stability-limited interfaces have not been the subject of transmission studies, and information is hidden in the cone of silence, the Commission and developers should evaluate the veracity of those claims. Who benefits from this situation and who pays now and should “solutions” be proposed based on yet to be performed studies.

EDFR Recommendations focus on the stability and interconnection issues in SW Minnesota. In the second paragraph of Recommendations, EDFR correctly notes that “the PUC has been aware of the congestion and curtailment issues” and also that “the Report does not provide an extensive description and analysis,” and asks that the “PUC request additional, specific information related to the curtailment problems and solutions...” Yes, the Commission should do this – it’s late, but must be done. As the Commission works with the transmission owners to fill in the blanks in this report, the Commission should also take a larger view and address its role in creating this mess. Billions of dollars of transmission have been built because a certain utility wants it, and now more billions are in the approval process, and to what end? The Commission must carefully identify who benefits from these projects, and those that benefit should pay!

EDFR’s specific recommendations should be addressed, through a lens of Distributed Generation and considering line loss:

¹ (as all lines do – this is why utilities no longer disclose the line loss for a specific project, and instead say that it’s a _____ (nominal) percent of the EASTERN INTERCONNECT. Knowing the Eastern Interconnect, a small percentage of humongous GWs of energy is quite a bit!

- The extent that projects described or proposed in the Report will improve historic or future congestion and curtailment in southwest Minnesota.
- The root causes of the stability, thermal or other issues present in southwestern Minnesota with emphasis on those impacting currently installed wind capacity.
- MISO regional studies, local TO studies characterizing this issue and describe any potential solutions to these stability issues.
- Require the TO's to include in the supplemental filing a plan to resolve the stability issues present in southwest Minnesota. The plan should include timeline for study work needed, local or MISO approval processes, description of new transmission facilities required to resolve these issues, estimated capital costs and potential Commercial Operations Date (COD).

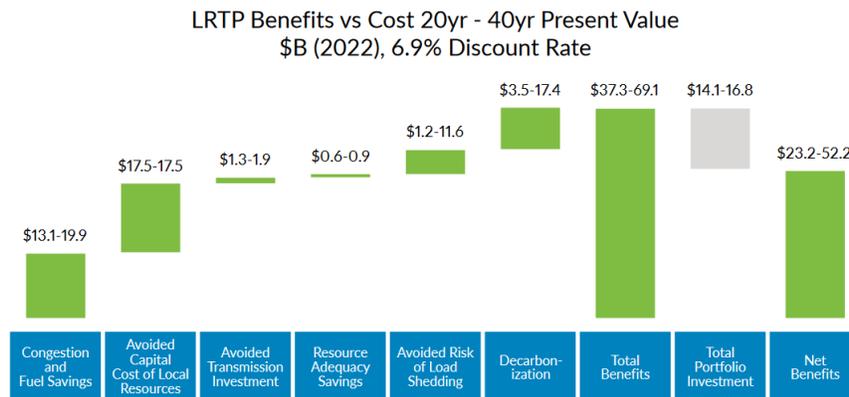
The transmission owners should update their filing with the missing information, prodded along by the Commission if they're reluctant. The Commission should also require that Xcel insert its "MN Energy Connection" into the transmission plan with sufficient information to see how it fits into the SW region and Minnesota's transmission system. It was stated at one of the MN Energy Connection scoping meetings that no studies have been done on this project, and it's bizarre to propose a transmission project of this \$1.14 BILLION magnitude without studies. The line loss and need for series compensation has been revealed, so that's a start, but Xcel should explain in detail why it should build a \$1.14 BILLION transmission line that loses so much energy in its travels.

Commerce - DER

The Completeness Comment period closed on November 21, 2023. DER first assesses MTO's variance requests, the first of which is public participation. The Commission should charge the utilities to develop, with the Commission's assistance, better outreach and participation, maybe inserts in bills announcing zoom meetings? Maybe announce the Biennial Transmission Report and comment periods at public meetings and utility open houses with links to access the Report. I attended meetings for the Northern Reliability Project and the "MN Energy Connection," and there was not any mention. Commerce-DER lets utilities off the hook too easily.

MTOs also requested that "it be allowed to continue to reference the latest MISO Transmission Expansion Plan (MTEP Report) to provide information about the identified inadequacies in Minnesota." This is problematic, as the MTOs rely on MISO and MTEP for their need claim, and worse, that's generally accepted by the Commission.

Prior MISO MTEP Reports had a "Cost Benefit Analysis" which is not part of the MTEP23.



Note the benefits are not benefits to ratepayers or the public, they're "Congestion and Fuel Savings, Avoided Capital Cost of Local Resources, Avoided Transmission Investment, Resource Adequacy Savings, Avoided Risk of Load Shedding, Decarbonization" -- benefits to the member utilities. The slant of MISO Reports is not in the public interest, and does not address criteria as framed by the Certificate of Need statute. See Minn. Stat. §216B.243, subd. 3. For this reason, it isn't a concern if the MTEP is referenced in the Biennial Transmission Report, but the Minnesota need criteria should be addressed. Granting the variance does not recognize the requirement that utilities address CoN criteria.

As Dr. Rakow notes, the variances are consistent with Commission decisions in prior Biennial Reports, but that consistency does not mean that they should be granted!

In the Commerce comment, under "Transmission Studies," the verdict is "that the Report includes the required transmission studies." HEADS UP: An interesting point raised in the Plan, a cut and paste, about a study that was NOT included:

3.3 Regional Studies

While every study undertaken adds to the knowledge of the transmission engineers and helps to determine the transmission facilities required to address long-term reliability and to transport renewable energy from various parts of the state to the customers, some studies are intentionally designed to take a broader look at overall transmission needs. Regional studies analyze the limitation of the regional transmission system and develop transmission alternatives to support multiple generation interconnection requests, regional load growth, and the elimination of transmission constraints that adversely affect utilities' ability to deliver energy to the market in a cost-effective manner.

MISO started a Regional Transmission Overlay Study (RTOS) in 2016, but due to limited benefits identified in the study MISO has put the study effort on hold.

This disclosed that there was a negative finding, that there were "limited benefits identified in the study." Really! This is important, a study we should pay careful attention to when these "regional" projects are repeatedly proposed, applied for, and permitted. We should take a close look at the questions posited, what was studied, if individual projects were studied, and what those limited benefits were.

As far as transmission studies listed, yes, it does list some, but there are no links. It's pretty hard to determine the value of the studies if they're not available.

In the Commerce comment, p. 6, section D, Transmission for Renewables and Solar, it says:

The RES Report starts with a gap analysis which provides "an estimate of how many more megawatts of renewable generating capacity a utility expects it will require beyond that which is presently available to obtain the required amount of renewable energy." According to the chart on page 223 of the RES Report, the RES Utilities, as a whole, have sufficient capacity acquired to meet the Minnesota RES needs through 2035. Additionally, the RES utilities, as a whole, have enough capacity to meet the RES needs of other jurisdictions as well as Minnesota's RES needs through 2035. According to Table 2 of the RES Report only two RES Utilities need additional renewable capacity for Minnesota RES needs by 2030, totaling only 58 MW.⁵ Finally, according to Table 3 of the RES Report no RES Utility needs additional solar capacity through 2035.

If so, why are we hearing such a hue and cry that "WE NEED TRANSMISSION!"

There's also a disturbing section in this DER comment, "REFORM PROPOSAL." The proposal to "focus on broader policy issues rather than transmission planning details" is contrary to the fact that "policy" is not need as defined in statute. It goes on further to recommend that the Commission "define inadequacy as any issue where the solution would require a CN." First, this would reduce the cost of the process, bringing it into better alignment with benefits." What costs, and what benefits and to whom? Clear as mud. The "REFORM PROPOSAL" has not had any public notice, participation or comments.

The notion of focus on CN projects suggestion may lead to use of the Biennial Transmission Report as substitute for the Certificate of Need review, similar to the IRP. Yes, that is possible that in the Plan a utility can request certification, but there's a problem with that, as evidenced by the MN Energy Connection line, where from Xcel's perspective, the line was "approved" and there's no need for a Certificate of Need. This "MN Energy Connection" is a long and large line, and by the comments and scoping meeting attendance in the hundreds, many people are very concerned.

If only projects with a requirement of a Certificate of Need were in the Biennial Transmission Report, the Commission, and the public who bother to look, would have no concept of the big picture of transmission. That's as unacceptable as the Commission "approving" a transmission project with no regional transmission map entered into the docket.

Policy wise, those affected by the proposal would have essentially no opportunity to participate, and there'd likely be minimal review by the Commission, as the Biennial Transmission Report is not set up for Certificate of Need level review.

Commerce-DER Replies on Overland comments minimizes many of the points made.

The majority of proposals in the MTEP/MVP are market based projects, with a cost/benefit analysis showing benefits in various categories, and these benefits are benefits to the member transmission owners. The Commission should pay attention to this analysis and note the benefactors when making a decision that is to be in the public interest.

The fact of Xcel's 1,500 MW excess capacity was reported in its 2022 SEC 10-K filing. As with the NERC Report reference, the 2022 documents were the most recent. Xcel last week filed its 2023 10-K, and the Commission should pay particular attention. The term "MISO planning resource auction" and "excess capacity" are not found in the 2023 10-K.

The Commission should take note of the peak demand reported in the 2023 10-K², together with peak demand from 2000 to this 2023 report, as Xcel stated in its "MN Energy Connection" application a projected annual peak demand of both 0.2% and -0.2%, and in its most recent IRP filing, that number has inexplicably jumped to 1.8%. That's not credible considering that Xcel's demand has been essentially flat for 24 years!

² Online at <https://d18rn0p25nwr6d.cloudfront.net/CIK-0000072903/44e72ff2-0fdf-4b99-aab9-827549c741f7.pdf>

First, the peak demand, as Xcel is making bizarre claims now of projected 1.8% increase in peak demand, changed from 0.2%, or is it -0.2%, in their “[Revised Application](#)” for the MN Energy CON transmission line. Here’s “peak demand” for 2023, compared with “peak demand” for 2022. Note 2023 is LOWER than 2022, and peak demand remains essentially FLAT. DOH!

Capacity and Demand

Uninterrupted system peak demand and occurrence date:

	System Peak Demand (MW)			
	2023		2022	
NSP System	9,231	Aug. 23	9,245	June 20
PSCo	6,909	July 24	6,821	Sept. 6
SPS	4,372	Aug. 17	4,280	July 19

From Xcel’s IRP, filed just the other day, Chapter 1, p. 7 of 15:

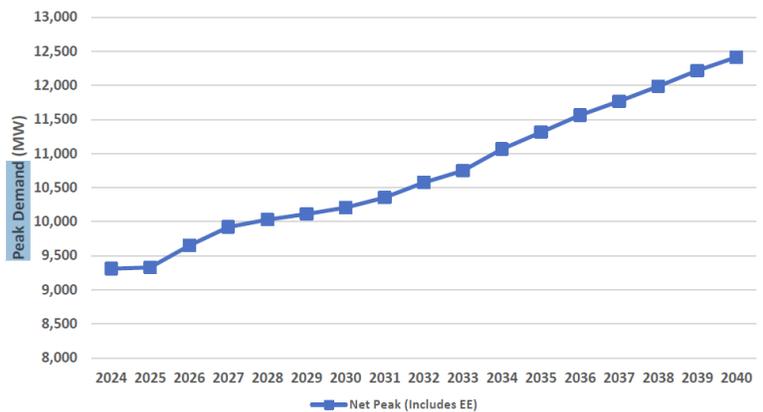
We now, however, anticipate that this period of ultra-slow consumption growth is ending, and we expect to see the demand for our service increase at a greater pace. While further improvements in energy efficiency and demand response capabilities will continue to provide substantial value to our customers, we anticipate that emerging uses of electricity will result in greater consumption growth than we have needed to plan for in the recent past. Specifically, our base case forecasts now anticipate average annual growth rates of 1.8 percent in our peak demand, and 2 percent for our energy forecast over the 2024-2040 planning period. This is a marked divergence from what we have anticipated in the past, as demonstrated in the Figure 1-3 below:

And this, IRP, Chapter 3, 2 of 29:

During the 2024 – 2040 planning period, the base case peak forecast increases at an average annual growth rate of 1.8 percent. As demonstrated in Figure 3-2 below, annual peak demand increases at an average of 194 MW each year, starting with 9,309 MWs in 2024 to 12,414 MWs in 2040.

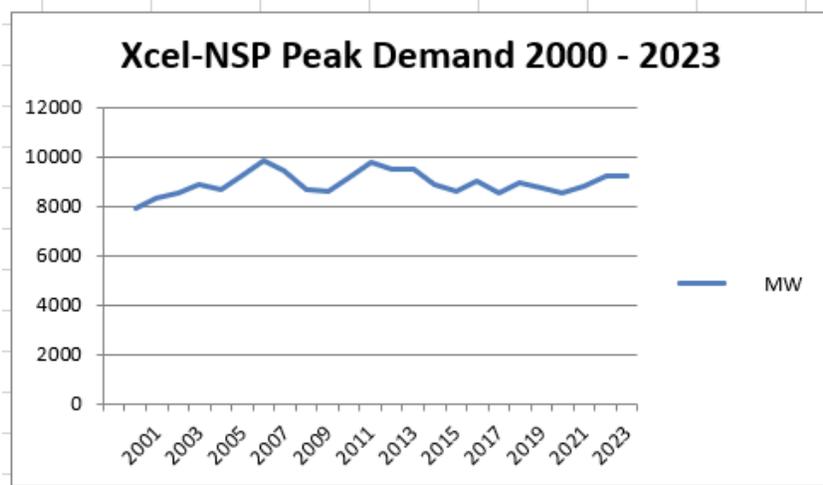
And this, IRP Chapter 3, p. 3 of 29:

Figure 3-2: NSP System Median Base Summer Peak Demand (MW)
(Includes modeled EE Adjustment)



Here's reality – the peak demand over the last 24 years:

Xcel Peak	MW
2000	7,936
2001	8,344
2002	8,529
2003	8,868
2004	8,665
2005	9,212
2006	9,859
2007	9,427
2008	8,697
2009	8,615
2010	9,131
2011	9,792
2012	9,475
2013	9,524
2014	8,848
2015	8,621
2016	9,002
2017	8,546
2018	8,927
2019	8,774
2020	8,571
2021	8,837
2022	9,245
2023	9,231

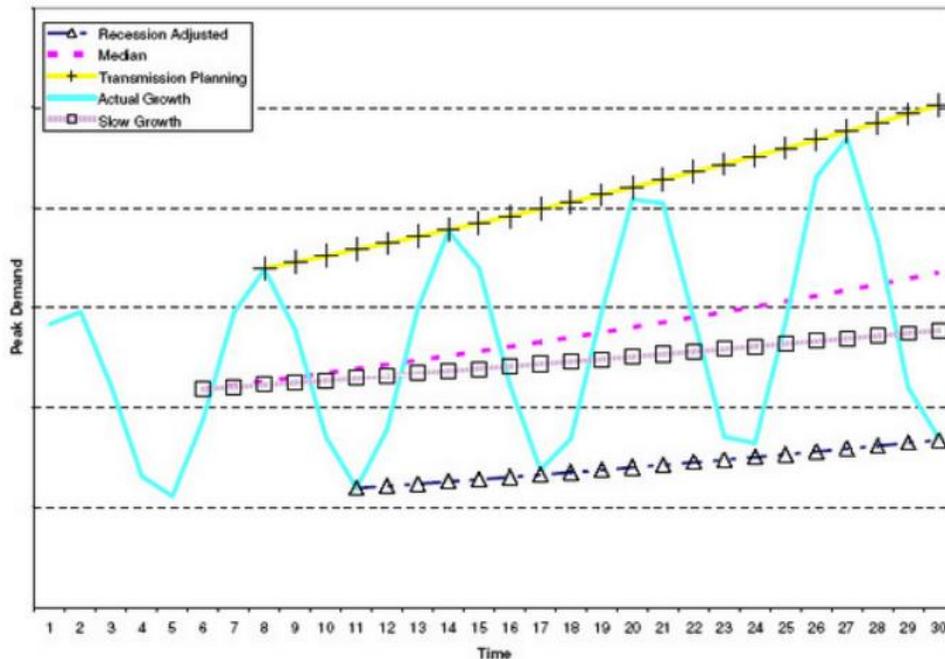


Dr. Rakow notes that issues regarding Tranche 1 build-out and MN Energy Connection are issues to be addressed in those separate dockets, and that's correct. However, where Xcel has

misled the Commission and the public with its extreme CapX 2020 demand projection of 2.49%, upon which the Certificate of Need was granted, the Commission must be reminded often of the extreme overstatement, and be mindful of the big picture, not only in transmission proposals, but in demand projections.

We also must recall Dr. Rakow’s unforgettable demand projections, which were given the last minute entry in the CapX 2020 Certificate of Need, to sway the record and explain away the obvious drop in demand as a “blip” despite the absurdity of the applicants’ projection of a 2.49% annual demand increase:

Graph 1: Forecast Comparison



Xcel’s gross overstatement of demand is the obvious trend and demands extra scrutiny. It’s this writer’s hope that all peak demand projections are taken with a pound or two of salt. Review of Integrated Resource Plans and transmission applications and granting of Certificates of Need, or denial or limitations, have significant impacts on Minnesotans, whether impacts to landowners, ratepayers, or applicants’ and participants’ credibility.

Murray County

Although it’s good to see local governments weigh in, Murray County’s comments filed today, March 1, 2024, are a cut and paste taken from the last page of the EDFR Comments, and have no probative value.

As one who worked hard to make the Biennial Transmission Report law in Minnesota, and worked hard to recruit members of the public to pay attention and comment, it’s problematic to

see such limited participation. Though the Commission has done a reasonable job of providing notice, it's not enough, and we need to find additional ways to get the word out.

Further, I ask that the Commission retain the disclosure and public participation requirements and work on increasing awareness of the Biennial Transmission Report, soliciting interest and comments.

Thank you for the opportunity to provide this Reply Comment.

Very truly yours,

A handwritten signature in cursive script that reads "Carol A. Overland".

Carol A. Overland
Attorney at Law

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron	60 S 6th St Ste 1500 Minneapolis, MN 55402-4400	Electronic Service	No	OFF_SL_23-91_Official
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_23-91_Official
Ian M.	Dobson	ian.m.dobson@xcelenergy.com	Xcel Energy	414 Nicollet Mall, 401-8 Minneapolis, MN 55401	Electronic Service	No	OFF_SL_23-91_Official
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_23-91_Official
Carol A.	Overland	overland@legalectric.org	Legalelectric - Overland Law Office	1110 West Avenue Red Wing, MN 55066	Electronic Service	No	OFF_SL_23-91_Official
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_23-91_Official
Christine	Schwartz	Regulatory.records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_23-91_Official
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th PI E Ste 350 Saint Paul, MN 55101	Electronic Service	Yes	OFF_SL_23-91_Official
Adam	Sokolski	adam.sokolski@edf-re.com	EDF Renewable Energy	10 Second Street NE Ste 400 Minneapolis, MN 55410	Electronic Service	No	OFF_SL_23-91_Official