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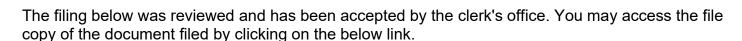
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STATE OF NORTH DAKOTA

PUBLIC SERVICE COMMISSION

Otter Tail Power Company/Montana-Dakota Case No. Utilities Co. 345kV Transmission Line - PU-24-91 Jamestown to Ellendale Public Convenience & Necessity

TRANSCRIPT OF WORK SESSION August 19, 2024

APPEARANCES

Commissioners Sheri Haugen-Hoffart, Randy Christmann, and Julie Fedorchak

PUBLIC SERVICE COMMISSION:
Brian Johnson, Christopher Hanson, Adam Renfandt,
Victor Schock, John Schuh

COMMISSIONER CHRISTMANN: Okay. This is a work 1 2 session of the North Dakota Public Service Commission on 3 the Otter Tail and MDU Jamestown to Ellendale 345 kV 4 transmission line. It's August 19th, 2024. It's Case No. PU-24-91. 5 6 I don't have any anything else before turning 7 over to the portfolio holder. 8 Commissioner Fedorchak, do you? COMMISSIONER FEDORCHAK: No, I don't. 9 10 COMMISSIONER CHRISTMANN: Okay. It's all yours, 11 Commissioner Haugen-Hoffart. 12 COMMISSIONER HAUGEN-HOFFART: Well, thank you. 13 I guess going back to our commission meeting 14 last week, I proposed an order and we got into some 15 discussion. And so I think there's those discussion 16 items that we need to go through. And I'm just going to 17 say I'm -- I'm going to give -- just may -- my question, 18 or lay it out and Randy and Julie and staff can answer 19 this. 20 You know, looking at that Jamestown to Ellendale 21 line, we've identified there's some congestions that we 22 can -- need to get -- being an exporter, get things out. 23 So when I look at MISO and studying Tranche 1, this is 24 an area that was identified there would be benefits on 25 building this 345 kV line.

So my first question is, if it's been identified 1 2 in the Tranche 1, can we quantify those benefits for MDU 3 and Otter Tail to look at it? That's my first question. 4 Has that been -- I quess I assumed, and I shouldn't do 5 that, that that was studied so we -- can we get some 6 quantification numbers on that, the benefit of that 7 line? So that's my first question. And I quess if we 8 can get that, then that might lead to some more 9 discussion. 10 So I don't know. I'm going to look to Adam and 11 Chris or Julie to maybe give me some history there on 12 that, based on the two years that I've been on the 13 Commission in that area, that that was -- has been 14 identified. And I thought MISO maybe did a good job on 15 identifying that. And this is the one, the only project 16 in Tranche 1 that North Dakota has what I would say is maybe benefit. So I'll give that to --

ADAM RENFANDT: So I've got a couple handouts here that might help guide the conversation here.

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COMMISSIONER HAUGEN-HOFFART: Thanks, Adam.

ADAM RENFANDT: I think I put this in the wrong order. I got a couple -- I only have two more. I've got this one here. Okay, yeah. There. I think it's in that order then.

So we're here to kind of discuss the Jamestown

to Ellendale 345 kV line that was part of MISO's Tranche

1. I believe it was passed by the MISO board of
directors in June of 2022.

So the first page you see, it is an overview.

When we think of LRTP projects, we kind of have to think of them more in a portfolio approach. And in this particular line, it happens to have been studied and paired well with not just the single line, which is the Jamestown to Ellendale line, but also the Big Stone South to Alexandria to Cass- -- Cassie's Crossing.

When it comes down to the benefits, there are benefits in terms of figuring out what kind of reliability benefits there are. And in this case you'll see that this is from a MISO presentation that indicates that the Jamestown to Ellendale line as well as in combination with the Big Stone South to Cassie's Crossing relieves 40 elements with excess loadings for the first transmission element loss or the N-1 and some of the elements with excess of loading for the second transmission element.

When MISO first started going through their analysis, they looked at several alternatives. They focused a lot on six of them. They look at largely -- largely what kind of effect in terms of loadings it will have, and it will compare to see if, okay, if it can

identify a mini portfolio project, if you will, that relieves the most. And they also tend to look somewhat at the cost of those lines, but really it's a reliability analysis. And they also then perform an economic analysis on it as well.

So kind of getting back to the question on the benefits that this provides, this first page shows, for Zone 1 through 7, as we are in -- we are located in Zone 1, so that would be to the yellow, to the right of that chart.

Now this is the most conservative, what you call cost-benefit analysis. So the entire portfolio was -- cost \$10.3 billion. And then they figure out, okay, well, what kind of benefits can we attach to it such that the benefit-cost ratio is 1.0 or greater. So per the tariff, that's the hurdle that we're looking at.

And what do I mean by "the most conservative one" is that they also show this for a 40-year present value for benefits as well as they increase the value of loss load that they give their other metrics to something that is probably a bit unrealistic.

So I think when people talk about and when you hear numbers reported, they're mainly talking -- they're talking about these numbers, which is the most conservative of them.

So you can see that we're in Zone 1. So the 1 2 minimum is 2.8. And then that's where the max comes in. 3 So we've always tended -- tend to focus on the minimum benefits that we can achieve. 4 5 And if we then go and look at the second page --6 COMMISSIONER FEDORCHAK: And just to clarify, 7 this is for the whole -- the whole portfolio, not just 8 this line? 9 Right. Yeah. ADAM RENFANDT: 10 COMMISSIONER FEDORCHAK: Not just the two lines, 11 it's the whole --12 ADAM RENFANDT: Yeah. 13 COMMISSIONER FEDORCHAK: -- all of Tranche 1? 14 ADAM RENFANDT: And we have asked before to --15 for them to break it down further and more granularly. 16 Yeah, that's maybe something that we're working on, but these benefit metrics and BC cost ratios are for the 17 18 entire \$10.3 billion. Because they're all supposed to 19 work together in one portfolio to deliver value. 20 So if we take a look at the --21 COMMISSIONER FEDORCHAK: One more quick question 22 on that one, Adam. The inset over there on the right, 23 is that North Dakota resource additions by 2039? 24 ADAM RENFANDT: Yes, they are. 25 COMMISSIONER FEDORCHAK: So can you talk about

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1
     this -- assumptions that drove that?
2
             ADAM RENFANDT: Okay. So the assumptions that
3
     drive that is that starting off in the future's process
4
     when we first start taking a look at where to place
5
     these lines, we have to take a look at, okay, we have to
6
     meet certain IRPs, right? We have to meet our IRP
7
     goals.
8
             COMMISSIONER FEDORCHAK: And "we" meaning MISO?
9
     MISO.
10
             ADAM RENFANDT: MISO. MISO.
11
             COMMISSIONER FEDORCHAK: Not we.
12
             ADAM RENFANDT: Yeah, yeah, we. Yes.
13
             COMMISSIONER FEDORCHAK: MISO says?
14
             ADAM RENFANDT: Yeah.
15
             COMMISSIONER FEDORCHAK: Yeah.
16
             ADAM RENFANDT: So MISO will collect every
17
     utilities' IRPs and they'll take that and say, okay, we
18
     need to -- you know, we need to achieve that.
19
             And then they also will meet a certain amount of
20
     goals that are not -- that aren't just goals. They're
21
     just -- you know, kind of wishes, if you will, that
22
     aren't -- that aren't mandated by the legislature, for
23
     instance.
             COMMISSIONER HAUGEN-HOFFART: So give me an
24
25
     example of a goal that we might bring forward.
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ADAM RENFANDT: If it was --
1
2
             COMMISSIONER FEDORCHAK: That's the -- not us
3
     really. We don't have these.
             ADAM RENFANDT: Yeah.
4
             COMMISSIONER FEDORCHAK: It's other states that
5
6
     have their goals and they'll do a certain percentage of
7
     them.
8
             ADAM RENFANDT: Yep. Right.
             COMMISSIONER CHRISTMANN: We have a goal but
9
10
     it's long been exceeded --
11
             COMMISSIONER FEDORCHAK: Well, these are more
12
     like state -- the IRPs are what the companies are
13
     planning, right? So they assume that's going to happen,
14
     because the companies are planning for those at least.
15
     They work to build a system that is going to meet the
16
     needs of their members, which are the investor -- the
17
     people with the IRPs.
18
             ADAM RENFANDT: Uh-huh.
19
             COMMISSIONER FEDORCHAK: And then they'll meet
20
     the -- then they'll build a system to reach a certain
21
     percentage of, say, Minnesota's renewable mandates or
22
     Wisconsin's or whatever. That -- that's the other --
23
             ADAM RENFANDT: Yep, right.
24
             COMMISSIONER FEDORCHAK: -- piece component.
25
             ADAM RENFANDT: Yeah. And in this component --
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COMMISSIONER FEDORCHAK: Of the futures. 1 2 ADAM RENFANDT: Of the futures. 3 COMMISSIONER FEDORCHAK: These are the futures --4 5 ADAM RENFANDT: Yeah, yeah. And that's 6 another --7 COMMISSIONER FEDORCHAK: -- that help to 8 (indiscernible) how -- and they're not like, you know, 9 meeting like a hundred percent of any future. They're 10 just used as the guidelines to begin to imagine what 11 kind of system we're going to need. Because nobody 12 really knows, but these are the things that direct and 13 quide what this future system they think is going to 14 need based on what people are putting in their plans. 15 ADAM RENFANDT: And that's an important point 16 because we're looking at the year 2039. And by 2039, in 17 this particular case of what -- what all of this benefit 18 metrics is based upon is that you meet 100 percent of 19 your IRP goals -- or not we, but MISO will say we're 20 going to meet a hundred percent of our IRP goals and 21 we're going to meet 85 percent of our aspirational goals 22 that -- that they -- that Commissioner Fedorchak was 23 just describing. 24 COMMISSIONER FEDORCHAK: And I do think it's 25 important to re-emphasize that MISO is trying to build a

```
system that enables the meeting of those. They aren't
1
2
     meeting them. They're building a system that allows
3
     their members to meet their IRP goals and, like Adam
4
     said, 85 percent of the state mandates as a planning --
5
     that's how they plan. It's their planning protocol.
             So back to this resource additions, this is
6
7
     based on what they're seeing in North Dakota IRPs
8
     mostly?
9
             ADAM RENFANDT: IRPs. They will put in some
10
     units that are model built --
11
             COMMISSIONER FEDORCHAK: For reliability?
                                                         ΤО
12
     meet reliability standards?
13
             ADAM RENFANDT: For -- yeah, for -- yeah, for
14
     reliability standards as well as engineering kind of
15
     judgment, I guess, if you will.
16
             You know, you'll notice that there's -- you
17
     know, on this case, you know, there's actually a
18
     combined cycle gas being built. You know, that was --
19
     you know, that's likely the -- the conversion of maybe
20
     the goal --
21
             COMMISSIONER FEDORCHAK: Oh.
                                            Oh. They're
22
     looking at converting that to --
23
             ADAM RENFANDT: Yeah.
24
             COMMISSIONER FEDORCHAK: -- in their
25
     assumptions?
```

1 ADAM RENFANDT: Yeah. We -- yeah, in their 2 assumptions so... 3 COMMISSIONER FEDORCHAK: Do they take into consideration the EPA regulations? 4 5 ADAM RENFANDT: They haven't. COMMISSIONER FEDORCHAK: I don't think so. 6 7 ADAM RENFANDT: No, no. No, they haven't. 8 COMMISSIONER FEDORCHAK: All right. ADAM RENFANDT: So then kind of moving onto the 9 10 next page, so these are the benefits that they've 11 identified. The first benefit is --12 COMMISSIONER FEDORCHAK: Let's talk for a minute 13 about how these get developed. ADAM RENFANDT: Okay. 14 15 COMMISSIONER FEDORCHAK: Because each one of 16 these processes is like a big, long, you know, 17 stakeholder input on identifying what benefits are going 18 to be used to measure the overall -- the overall benefit 19 calculation. And these are where you get some questions from the (indiscernible). The last -- I -- he's -- he's 20 21 pretty squishy on some of these benefit metrics, but 22 even more so on Tranche 2. 23 So, anyway, was there anything in particular 24 about these benefit metrics that raised concern in the 25 stakeholder process, Adam?

1 I mean, I know we -- we said that -- we objected 2 to the decarbonization benefit being used. And so then, 3 in response to that, they took that out and told us what our cost-benefit would be without it. And it was still 4 5 higher than the one threshold. Significantly higher. ADAM RENFANDT: Yeah. And it -- there's very 6 7 little benefit that's derived from this decarbonization 8 benefit. The BC, the benefit-cost ratio, goes -- when 9 you remove it, goes from 2.8 to 2.6. So that's kind of 10 saying if you spend, like, a dollar, you get \$2.06 back. 11 COMMISSIONER CHRISTMANN: So the two 12 overwhelmingly large factors in the -- in the benefit 13 column for Zone 1 are, one, congestion and fuel savings, 14 two, avoided capital cost of local resource investment; 15 correct? 16 Correct. Yep. ADAM RENFANDT: 17 COMMISSIONER CHRISTMANN: Okay. For this 18 project, not Tranche 1 but this project, and for North Dakota, not MISO, what are the avoided capital costs of 19 20 local resource investment that this -- what costs does 21 this avoid? 22 ADAM RENFANDT: So this avoids the building of 23 local generation that would cost more. 24 COMMISSIONER CHRISTMANN: Like the gas plant 25 that we ordered Xcel to build, for example? That's the

only one I can think of.

COMMISSIONER FEDORCHAK: Again, it's modeled.

It's not necessary --

ADAM RENFANDT: Yeah. It's kind -- yeah, it's kind of like, you know, when we had the original MVP portfolio, we had to -- we could share resources and then reduce local overbuild.

So if we're able to spread that out with transmission, then there's a point in which you're supposed to hit the sweet spot, and it's called the "bathtub curve," right, in which you want to put your transmission overlay on your resources such that you're all in a sharing pool and you're able to then not build something -- not have a grid that's Balkanized such that -- or have no wires and we've got to overbuild a ton of maybe thermal generation because we couldn't then use a renewable source maybe.

COMMISSIONER CHRISTMANN: So the biggest share of our benefits are avoiding costs that we can't identify.

COMMISSIONER FEDORCHAK: Well, that's not -their model costs out to 2039. I mean, you have to look
at the time frame. So -- and that -- these might be
good questions for -- because MISO should be able to
identify those things for this project, for that -- for

actually this line or those two lines. So that's 1 2 probably a question we could ask them for -- to address. 3 And I think it's an important one to understand, you know, how all this stuff is pulled together. 4 COMMISSIONER CHRISTMANN: The other one that is 5 6 very significant in that is the congestion and fuel 7 savings. And so I think any of us that have, in recent 8 years, watched LMP prices have seen the congestion 9 that's over in that area; correct? 10 ADAM RENFANDT: Yep. 11 COMMISSIONER CHRISTMANN: And this study was 12 approved in 2022 so it was done well before Applied 13 Digital was even discussed. Because the -- my own just 14 occasional but pretty frequent viewing of LMP prices, 15 I've seen the heat map. I'm seeing a lot less 16 congestion problems over there. And we've only got the 17 first phase of Applied Digital going. So I don't know 18 that these congestion benefits are really there for us 19 anymore. 20 COMMISSIONER FEDORCHAK: They might not be. 21 It's a fair question. And, also, Adam's not defending 22 MISO. 23 COMMISSIONER CHRISTMANN: I know. 24 (Laughter) 25 COMMISSIONER FEDORCHAK: Adam is not MISO so...

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1
             COMMISSIONER CHRISTMANN: Well, he's kind of
2
     bringing their case.
3
             COMMISSIONER FEDORCHAK: He's been trying so
     that we can, yeah, understand.
4
5
             COMMISSIONER HAUGEN-HOFFART: And I quess that
6
     was my question in looking at some of this, is how much
7
     of this, I mean, gets updated as things go on? Like
     Randy brought up Applied Digital. I mean, how is that
8
9
     fed into MISO and updated so we have current -- more
10
     current information? I mean --
11
             COMMISSIONER FEDORCHAK: Once these projects are
12
     approved, they don't go back and update all this. Like
13
     this was agreed on and approved by the board a year --
14
     more than a year ago. So they don't go back --
15
             COMMISSIONER HAUGEN-HOFFART: Okay.
16
             COMMISSIONER FEDORCHAK: -- and keep changing
17
     these.
18
             COMMISSIONER HAUGEN-HOFFART:
19
             COMMISSIONER FEDORCHAK: -- and re-justifying
20
     the case or changing the case.
21
             COMMISSIONER HAUGEN-HOFFART: Well, I wouldn't
22
     have to say "re-justify" but just more accurate data
23
     that we as PUCs could have. Like when we -- when the --
24
     when the Tranche 1, when this case comes before us, we
25
     have more information, but lesson learned.
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COMMISSIONER FEDORCHAK: And we don't ever see
1
2
     all of Tranche 1.
3
             COMMISSIONER HAUGEN-HOFFART: Right.
             COMMISSIONER FEDORCHAK: This is the only line
4
     we'll see.
5
             COMMISSIONER HAUGEN-HOFFART: Right. But things
6
7
     have changed since then. I mean -- point taken.
8
             COMMISSIONER FEDORCHAK: Yeah. We should -- we
9
     could ask MISO for them to provide us that for this -- I
10
     don't know if they've got it at that granular level or
11
     not.
12
             ADAM RENFANDT: To provide?
13
             COMMISSIONER FEDORCHAK: The congestion fuel
14
     savings, avoided capital costs of local investment --
15
     well, even all the benefit metrics, if they can, for --
16
     for Zone 1 for just --
17
             ADAM RENFANDT: Just --
             COMMISSIONER FEDORCHAK: -- Jamestown to
18
19
     Ellendale.
20
             ADAM RENFANDT: Yeah, okay.
21
             COMMISSIONER HAUGEN-HOFFART: Or could MDU? I'm
22
     sorry, but could MDU provide us any of that?
23
             COMMISSIONER FEDORCHAK: I doubt it. They don't
24
     run the models.
25
            ADAM RENFANDT: Yeah, they wouldn't have access
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to that level of information and detail that MISO --1 2 COMMISSIONER HAUGEN-HOFFART: I got my answer. 3 COMMISSIONER FEDORCHAK: And the thing is, the 4 other thing to remember, and this is just a part of the 5 reality of MISO, is if you look at the size of our zone, 6 I mean there's a lot of what's happening in Minnesota 7 and part of Wisconsin driving Zone 1. And that's --8 that's the reality for us in North Dakota and MISO. 9 Zone 1 includes all of Minnesota and a chunk of 10 Wisconsin. 11 VICTOR SCHOCK: So -- especially on the fuel 12 cost savings, it's one -- because both RTOs do that kind 13 of comparison when they run modeling. And it's one 14 thing I've really struggled with in our zone. Usually 15 we have trapped generation that can't get out. And when 16 they do their model, well, this zone or this area is 17 going to benefit by that trap generation getting out. 18 Well, I suppose the zone as a whole is going to benefit, 19 but our prices go up as a result of it. 20 COMMISSIONER FEDORCHAK: Riaht. 21 VICTOR SCHOCK: So that negative -- that 22 negative congestion that's happening down there changes

to even keel with the rest of the system. And primarily in this instance, I think Minnesota's prices probably go down a slight bit --

23

24

25

COMMISSIONER FEDORCHAK: Yep

VICTOR SCHOCK: -- while ours go up to what the rest of the zone is seeing.

COMMISSIONER CHRISTMANN: And this is kind of one of my concerns here, is so our ratepayers pay to build this and the benefits are looked at, well, is this investment here some big benefit, but it's mostly to whoever the new developer is that comes in and builds another wind farm. A few landowners but not to most of these Otter Tail and MDU customers. And I'm just -- I'm not seeing nearly the benefits or congestion improvements as what this seems to want to indicate.

that I think is -- two other issues that are relevant are the reliability savings or reliability impacts and are the access for our broader generation to get out. I mean, if there's congestion, there's generators in North Dakota that are being curtailed. And depending on price, you know, that hurts them. And, you know, the higher-price ones are the ones probably being curtailed first. So that's -- that's another North Dakota issue.

COMMISSIONER CHRISTMANN: You know, I guess it's a separate argument of whether this is the right time to have the battle, but therein lies a lot of the reason for me wanting to take on the battle, and I don't even

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know how the -- where or how the battle would occur,
1
2
     but, okay, if the issue is somebody else out of state's
3
     need for energy and some developer that wants to come in
4
     and set up some more wind farms here, fine, pay for it.
5
     Not our ratepayers all the time.
6
             And so, yes, the RTO forces this cost allocation
7
     on us, but if we don't fight for it -- or fight against
8
     it successfully, guess what? We're going to be paying
     for -- was it three that's all south so maybe not that
9
10
     -- maybe not one of them, but we're going to be paying
11
     for all the rest of them too. And when better than now
12
     to fight it?
13
             COMMISSIONER FEDORCHAK: I don't disagree.
                                                          And
14
     we did fight it. But we --
15
             COMMISSIONER CHRISTMANN: MISO.
             COMMISSIONER FEDORCHAK: At MISO, yeah.
16
17
             COMMISSIONER CHRISTMANN: I'm talking about at
18
     FERC.
19
             COMMISSIONER HAUGEN-HOFFART: So is that how it
20
     would play out, I mean, going off of that? Tell me --
21
             COMMISSIONER FEDORCHAK: Yeah, I don't know.
22
             COMMISSIONER HAUGEN-HOFFART: Can you walk me --
23
     well, first of all, does anybody have anything else,
24
     Chris or Adam, to add to these?
25
             CHRIS HANSON: Just a scale -- sorry. I was
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just going to add that the scale of Tranche 1, the numbers that we got from MDU and from Otter Tail were like 10 and a half billion or somewhere between 10 and 10 and a half billion, and the cost per megawatt-hour that they were estimating in 2031, which was the max rate, was about \$2.54 per megawatt. So -- so -- or megawatt-hour. So just as kind of a -- as a scale.

Now that -- how that impacts, say, residential customers is going to depend upon the company. Because each of the companies has their own allocation methodology for transmission costs. But just to kind of give you an average on things, the Tranche 1, on average, would be about, you know, \$2.54 per megawatt-hour.

So I'll throw -- NSP, as an example, does a direct allocation per megawatt-hour so that would affect their customers by \$2.54 per month for a thousand kilowatts or 1 megawatt of use -- or megawatt-hour of usage per month.

But then we talked about Tranche 2, 3, 4. You know, as you're getting up into that 50 billion range, then, you know, you're talking 10, \$15 per megawatt-hour as a relative scale.

COMMISSIONER CHRISTMANN: Okay. Then I need to be corrected here and find out where I'm wrong. When we

```
had our --
1
2
             COMMISSIONER HAUGEN-HOFFART: Informal?
3
             COMMISSIONER CHRISTMANN: -- informal on
4
     July 8th, I didn't write down $2.54 a month. I wrote
     $3.15 a month for --
5
 6
             CHRIS HANSON: Yep.
7
             COMMISSIONER CHRISTMANN: -- MDU and 5.85 for --
8
             CHRIS HANSON: Correct.
9
             COMMISSIONER CHRISTMANN: -- Otter Tail.
10
             CHRIS HANSON: Correct. So as I said, MDU and
11
     Otter Tail have an allocation methodology that's
12
     different for residential and for commercial,
13
     industrial. I'll use NSP as an example because they do
14
     a per-megawatt-hour allocation so it's a straight --
15
             COMMISSIONER CHRISTMANN:
16
             CHRIS HANSON: It's a different methodology but
17
     it's -- it's, I guess you could say, cleaner. But the
18
     average that MISO was allocating, their number was $2.54
19
     based upon their estimates at the peak in 2031 when all
20
     the projects are up and running before they start to
21
     amortize off.
22
             So, yes, you are correct. Like MDU's number,
23
     MDU's number was $3.15. The memo that I had was 5.75.
24
     And I think Matt Olsen came back and amended that to
25
     5.85 per megawatt-hour. So that's because they used
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different methodology for allocating those transmission
1
2
     costs. So you are correct.
3
             COMMISSIONER FEDORCHAK: Okay. So I -- and
4
     Randy raised a good question about how, if we deny this,
5
     say, what is the result? Where does it go? Or do the
6
     companies -- where can the companies protest? Or MISO,
7
     I quess.
8
             UNIDENTIFIED SPEAKER: Well, I'm still getting
9
     acquainted with this case. And I know you guys asked me
10
     to come in here and have some discussion, but if we have
11
     -- we issue an order with the denial, obviously it
12
     depends on the basis of the denial and it depends on the
     basis of the challenge. It could either be in Federal
13
     District Court or it could be in State Court. And so it
14
15
     would be up to the issue that really is being appealed.
16
             COMMISSIONER FEDORCHAK: So the -- Otter Tail or
17
     MDU would likely then decide to take it -- it could.
18
             UNIDENTIFIED SPEAKER: It would likely be Otter
19
     Tail or MDU.
20
             COMMISSIONER CHRISTMANN: Or MISO.
21
             COMMISSIONER FEDORCHAK: Could MISO? Do they
22
     have any --
23
             UNIDENTIFIED SPEAKER: Again, depending on the
24
     issue and where it's at.
25
             COMMISSIONER CHRISTMANN: Well, let's say --
```

COMMISSIONER FEDORCHAK: Sure.

COMMISSIONER CHRISTMANN: I mean if -- if it went to court and the courts backed the Commission on a denial -- or, no, overturned the Commission on a denial, well, then it would move forward unless we appealed.

But let's say they backed our decision on a denial, wouldn't at some point this get to be a FERC thing over whether the states can stop -- and this could be SPP too -- stop RTO-approved projects through their PC&N process? Isn't that something that is going to have to get determined at some point? Or are they just all going to go to load pays?

UNIDENTIFIED SPEAKER: So I'm guessing the issue that you're presenting is an interstate commerce issue from the discussion that you're providing. And I'd be happy to have some additional discussion with that, but I probably would not want to be having that in -- in open meeting without having an opportunity to review the tariffs that we're discussing.

COMMISSIONER CHRISTMANN: So we've kind of touched on these, but I want to re-emphasize two points. One is, yes, we can talk about avoiding congestion or avoiding additional investment costs. I haven't found any basis for those other than someone who likes doing projects, putting numbers together, I -- I can't see

anything.

I will point out, though, that among the project benefits are to accommodate new electric generation projects. That, to me, that's who ought to be paying at least a good part of this, if not all of it. Because that, to me, is the key benefit in this, is to add the new generators. And to the extent that's for decarbonization or to meet other states' policy goals, regardless. The point is to add that generation. And I think that is the key benefit that this is looking to solve.

The other, though, has to do with reliability and our discussion. This isn't in, like, the presentation, I don't think, but I'm using my recollection. Correct me if it's wrong. The real reliability issue in North Dakota that was highlighted as an example that this could take care of was the very near miss at Jamestown.

And I think it's been said before, but kudos again to Otter Tail for still hanging on to that old generator in town there that almost never gets used and being able to keep Jamestown going as they did.

But as this plays out in my mind, this project, what I have heard was, if I were to add all the new generation, it generally flows from that -- like the

Ellendale point down through South Dakota and Minnesota 1 2 and out, but if there's problems there, they need this 3 alternative route to get it up to Jamestown and then 4 from there on it can flow through Fargo and away. 5 Okay. If -- as far as to add the new 6 generation, I guess that makes sense. It also tells me 7 there's plenty of capacity in the transmission lines 8 between Jamestown and Fargo for all this to flow that 9 way, which tells me when Xcel builds their gas plant 10 there, it can flow the other way and that can just as 11 easily be used to help solve any potential energy shortfalls in Jamestown. 12 13 And so I think the one investment that I can see 14 that this is going to eliminate the need for is that 15 generation plant. And I guess it's fine as long as 16 we're willing to have service when it's windy but not 17 when it's not. I don't think most of the people are. 18 COMMISSIONER FEDORCHAK: Randy, did you review 19 the project benefits identified in the companies' 20 application? 21 COMMISSIONER CHRISTMANN: I have, but it's been 22 a while and I don't know if I have --23 COMMISSIONER FEDORCHAK: How did we -- we had an 24 informal, right --25 COMMISSIONER HAUGEN-HOFFART:

```
COMMISSIONER FEDORCHAK: -- on this? That's how
1
2
     we --
3
             COMMISSIONER CHRISTMANN: Was that presented
     then or was that in the case earlier?
4
5
             COMMISSIONER HAUGEN-HOFFART: Well, it's --
     both.
7
             COMMISSIONER FEDORCHAK: Both.
8
             COMMISSIONER HAUGEN-HOFFART: It's in their
9
     application and the --
10
             COMMISSIONER CHRISTMANN: What you're looking
11
     at, though --
12
             COMMISSIONER FEDORCHAK: This is their
13
     application.
             COMMISSIONER CHRISTMANN: -- this.
14
15
             COMMISSIONER FEDORCHAK: Right.
16
             COMMISSIONER CHRISTMANN: Okay.
17
             COMMISSIONER FEDORCHAK: This is the
18
     application.
19
             COMMISSIONER CHRISTMANN: What page?
             COMMISSIONER FEDORCHAK: 11. And to some extent
20
21
     page 9 is the project need.
22
            COMMISSIONER CHRISTMANN: Okay.
23
             COMMISSIONER FEDORCHAK: I just don't know when
24
     they -- when all these problems, these reliability
     problems, like at 40 transmission elements with
25
```

excessive thermal loadings for N-1 contingencies and 70 1 2 elements with excessive loading, and then down below the 3 project improves voltages in the Red River Valley by relieving 97 voltage violations and 91 voltage 4 violations for N-1-1 contingencies, like how many of 5 those are North Dakota customers? How much of that is 6 7 -- how much of that is a North Dakota issue? I mean, I am -- I want to know -- I would have 8 9 to be reminded of that. I'd have to have a more 10 technical discussion, I think, with the company to 11 understand the implications for our customers of not 12 having this line. 13 VICTOR SCHOCK: Isn't N-1 what drives congestion 14 pricing? 15 COMMISSIONER FEDORCHAK: I don't --16 Adam? 17 ADAM RENFANDT: If it's overloaded, so if it's 18 overloaded, it could be overloaded for a number of 19 reasons. You know, an outage definitely is it. I mean, 20 that creates congestion such that, if you can't -- if 21 you can't have -- if you can't fire up or move electrons 22 from point A to point B and then you might have to go 23 and fire up a more expensive peaker, for instance, if 24 you've got a line outage, for instance.

VICTOR SCHOCK: Right.

25

ADAM RENFANDT: Or something like that, yeah. 1 2 VICTOR SCHOCK: But congestion pricing -- and 3 this is, I think, the case in both RTOs. It isn't 4 because the lines that are in operation at that moment 5 can't handle the load that's going across them. It's in the event of a loss of your biggest element --6 7 ADAM RENFANDT: Uh-huh. 8 VICTOR SCHOCK: -- the remaining system isn't able to pick that load up without tripping. 9 10 ADAM RENFANDT: It doesn't have to be -- like 11 you can get congestion if it just -- if it -- in the 12 event that it would -- if in the event that you had an 13 outage. 14 VICTOR SCHOCK: Right. 15 ADAM RENFANDT: In that case, yeah, then --16 yeah, then you -- but you're not actually in an outage. 17 VICTOR SCHOCK: Right. No, I absolutely agree 18 that you're not in an outage, but the pricing for 19 congestion, I think, is based on that N-1 scenario. ADAM RENFANDT: Yeah, that's how the grid 20 21 operates. Yeah. Yep. 22 VICTOR SCHOCK: So all that is to say I think 23 that's a good portion of what they're speaking to in the 24 40 elements with excessive loading for the first 25 transmission element loss.

```
ADAM RENFANDT: Yeah, yeah, that's --
1
2
             VICTOR SCHOCK: I think that's largely
3
     congestion.
             I don't know if that -- does that make some
4
5
     sense?
             COMMISSIONER FEDORCHAK: And so?
 6
7
             VICTOR SCHOCK: I'm not drawing any conclusions
8
     from that. It was just that you started to kind of talk
9
     about it a little bit and I -- I don't know that that's
10
     the entire answer --
11
             COMMISSIONER FEDORCHAK: So the benefits of
12
     relieving that are -- it's not a reliability concern.
13
             VICTOR SCHOCK: Not -- I'm not even saying that
14
     definitively. I think your question was what those 40
15
     elements are. And I think probably a good chunk of them
16
     are probably that N-1 scenario where overloading --
17
             COMMISSIONER FEDORCHAK: Well, no. I'll put it
18
     a lot more simply.
19
             VICTOR SCHOCK: Okay.
20
             COMMISSIONER FEDORCHAK: That's a lot of
21
     technical mumbo jumbo. What I want to know is how does
22
     this matter to North Dakota customers?
23
             VICTOR SCHOCK: Sure.
24
             COMMISSIONER FEDORCHAK: Does it? Or is it just
25
     a bunch of sentences to make it seem like, "Jeez, that
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```
sounds bad, we better approve this"? Right?
1
2
             VICTOR SCHOCK: Yeah.
3
             COMMISSIONER FEDORCHAK: So I don't know.
     Maybe --
4
             VICTOR SCHOCK:
                             Sure.
5
             COMMISSIONER FEDORCHAK: -- it is a bunch --
6
7
     maybe it is a big problem for North Dakota customers,
8
     maybe it isn't. I don't -- I can't tell by this, and I
9
     don't recall exploring that deeply in our informal with
10
     them. So I would want to know that so we don't -- you
11
     know, so I can have that information --
12
             VICTOR SCHOCK:
                             Yep.
13
             COMMISSIONER FEDORCHAK: -- in making my
14
     decision anyway.
15
             VICTOR SCHOCK: Do you want to know that from
16
     the company or from MISO?
17
             COMMISSIONER HAUGEN-HOFFART: The company.
18
             COMMISSIONER FEDORCHAK: The company.
19
             COMMISSIONER HAUGEN-HOFFART: It's in their
20
     application.
21
             UNIDENTIFIED SPEAKER: So just for clarification
22
     on that, they're basically saying when they analyze this
23
     solution, they're kind of looking at it in conjunction
24
     with the Big Stone, Alexandria, the other projects on
25
     Zone 1. So you're saying, "Okay, well, I get that this
```

applied to all of Zone 1, but of that -- of these issues, how many -- how much of the issue applied to North Dakota specifically?" So we're kind of getting lumped in with the whole zone.

COMMISSIONER FEDORCHAK: Right.

UNIDENTIFIED SPEAKER: And this is the issue to the whole zone, but how much of it applies specifically to us?

COMMISSIONER FEDORCHAK: Yeah. And what is the impact of this? Is it a price issue? Is it -- is it a lot -- you know, we can't get power at certain times? It's hurting the lines? Like what is the actual -- what are the issues that it's causing?

Yeah, and same -- I mean, the company might have a -- probably MISO needs to get us more specifics of the impacts of this project on the benefit metrics that they've used here. And if they can get those for North Dakota versus all of Zone 1, that would be helpful too.

COMMISSIONER CHRISTMANN: You know, when -- when it's simplified down, when -- and I don't know who was speaking at the time, I presume Otter Tail because it was about Jamestown, but between the two when we had the informal, when they talked about that situation in Jamestown that I referenced earlier, okay, yeah, that is something that happened, aware of it, it made a good

case in point to me, I was thinking, okay, now I'm seeing some benefit here until, like I say, then I thought more about it, except for, supposedly, within a little over a year or -- things usually run late, but in the relatively near term we had a new gas plant go in Fargo. That should be able to do it. I guess when they just say, "Oh, well, there's all these benefits," it's not very persuasive to me.

COMMISSIONER FEDORCHAK: Uh-huh.

COMMISSIONER CHRISTMANN: Tell me what they are, where the shortages are, what can't we do. And we'll see once -- whether it seems it to me that -- or it seems to us as a group, as a body, whether those benefits then are primarily going to the ratepayers that are being asked to pay for this or to somebody else.

COMMISSIONER FEDORCHAK: Yep. Good questions. As you said, like, we tried in the cost allocation discussion to make these points. They weren't -- they didn't win the day. This is our next -- this is our next tool to try to address them.

COMMISSIONER CHRISTMANN: And while we're on this, I -- a legal question -- oh, did you have something else?

COMMISSIONER FEDORCHAK: Well, I just -- but I'm not -- I'm also -- you know, I definitely -- I'm not

sure that this doesn't have just merits for North Dakota 1 2 on -- on a technical side so I'm not, like -- I'm very 3 open to hearing what the benefits are to our customers because I -- I think that there are -- and to our 4 generators, I guess. I'd like to evaluate -- be 5 6 evaluating that along with it. So... 7 COMMISSIONER CHRISTMANN: I think you got it

covered.

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VICTOR SCHOCK: So to clarify -- clarify what I think I heard, so we're going to get a response from MISO on the benefit metrics for Zone 1 on this line specifically. So I think if Adam can reach out, that's probably the most efficient.

And then whatever response you get, if you want to pass that through Chris.

And then, Chris, if you can work with Otter Tail and MDU on a response for what these elements savings and benefits are. And then, you know, if it's reliability benefit, how and what circumstance?

And we'll get all of that submitted into a couple of docket entries, hopefully, rather than just some emails flying around. And --

COMMISSIONER CHRISTMANN: And, you know, yes, I know these things take time, but there's a reason why they take time, so people don't make bad decisions. But

```
1
     it seems like as far as the -- anything having to do
2
     with congestion in that area of the state, this should
3
     be recalculated based on Applied Digital's second phase
4
     being in effect. Because I understand they're pretty
5
     far along with it already and the first phase is already
6
     going. And, like I say, from my just viewing of heat
7
     maps, it's having quite an impact. So maybe I'm wrong
8
     about that, but it doesn't appear that way to me.
9
             COMMISSIONER HAUGEN-HOFFART: But it's a good
10
     point to evaluate.
11
             COMMISSIONER FEDORCHAK: Yeah.
                                             And then maybe
12
     they can provide information about what other additional
13
     generation they've cited there in their long-range
14
     transmission planning that drove the need for these
15
     lines. Because it isn't just what exists today.
16
     much more what they modeled to becoming. So, you know,
17
     that -- that is part of this equation so they should
18
     explain that.
19
             UNIDENTIFIED SPEAKER: The generation that --
20
     that showed up?
21
             COMMISSIONER FEDORCHAK: Where they -- yeah.
22
     That's going to -- you know, it isn't just --
23
             COMMISSIONER HAUGEN-HOFFART: Planning.
24
             COMMISSIONER FEDORCHAK: -- well, we took care
25
     of the congestion now because we've got Applied Digital
```

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1
     there. There's a bunch more -- how many more wind farms
2
     did they model being developed in the eastern part of
3
     North Dakota that will drive congestion up again? And
     those were driven by -- probably by Minnesota
4
     environmental goals and others but -- yeah.
5
             UNIDENTIFIED SPEAKER: Yeah.
 6
7
             COMMISSIONER FEDORCHAK: That would be helpful
8
     to know, what kind of generation they modeled in that
9
     area --
10
             UNIDENTIFIED SPEAKER: And where.
11
             COMMISSIONER FEDORCHAK: -- for this.
12
             UNIDENTIFIED SPEAKER: Yeah, we can -- we can
13
     get that.
14
             COMMISSIONER HAUGEN-HOFFART: And I think
15
     separately, I mean we're going to work with Jack as far
16
     as maybe some next steps --
17
             UNIDENTIFIED SPEAKER:
                                    Sure.
18
             COMMISSIONER HAUGEN-HOFFART: -- if denied just
19
     for an understanding as far as litigation.
20
             UNIDENTIFIED SPEAKER: Be happy to have that
21
     discussion. I would note as well, though, after we
22
     receive all the documents, all the information that's
23
     necessary, it may be worth considering appointing
24
     advocacy staff if we need to flush out certain issues a
25
     little better and maybe have a formal hearing on it as
```

1	well.
2	COMMISSIONER FEDORCHAK: Yeah. That's a good
3	point. I'd be open to that, because I really do want to
4	understand the companies' side of it and the benefits
5	that they are seeing.
6	COMMISSIONER CHRISTMANN: Anything else?
7	COMMISSIONER HAUGEN-HOFFART: No. I think this
8	was first of all, I want to say thanks to everyone
9	for getting this lined up so quickly on the work
10	session. And, no, I have nothing further. I look
11	forward to the additional information to receive to
12	evaluate.
13	COMMISSIONER CHRISTMANN: Okay. With that,
14	thanks, everybody, and this work session is concluded.
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

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Dated this date of September 8, 2025.

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August 19, 2024, Work session ND PUBLIC SERVICE COMMISSION

So my first question is, if it's been identified 2 in the Tranche 1, can we quantify those benefits for MDU 3 and Otter Tail to look at it? That's my first question. STATE OF NORTH DAKOTA Has that been -- I guess I assumed, and I shouldn't do PUBLIC SERVICE COMMISSION 5 that, that that was studied so we -- can we get some Otter Tail Power Company/Montana-Dakota Utilities Co. 345kV Transmission Line -6 quantification numbers on that, the benefit of that line? So that's my first question. And I quess if we 8 can get that, then that might lead to some more 9 discussion. 10 So I don't know. I'm going to look to Adam and TRANSCRIPT OF WORK SESSION 11 Chris or Julie to maybe give me some history there on August 19, 2024 12 that, based on the two years that I've been on the 13 Commission in that area, that that was -- has been 14 identified. And I thought MISO maybe did a good job on 15 identifying that. And this is the one, the only project 16 in Tranche 1 that North Dakota has what I would say is 17 APPEARANCES maybe benefit. So I'll give that to --Commissioners Sheri Haugen-Hoffart, Randy Christmann, and 18 ADAM RENFANDT: So I've got a couple handouts 19 here that might help quide the conversation here. PUBLIC SERVICE COMMISSION:
Brian Johnson, Christopher Hanson, Adam Renfandt,
Victor Schock, John Schuh 20 COMMISSIONER HAUGEN-HOFFART: Thanks, Adam. 21 ADAM RENFANDT: I think I put this in the wrong 22 order. I got a couple -- I only have two more. I've 23 got this one here. Okay, yeah. There. I think it's in 24 that order then. 25 So we're here to kind of discuss the Jamestown 1 COMMISSIONER CHRISTMANN: Okav. This is a work 1 to Ellendale 345 kV line that was part of MISO's Tranche 2 session of the North Dakota Public Service Commission on 2 1. I believe it was passed by the MISO board of 3 the Otter Tail and MDII lamestown to Ellendale 345 kV 3 directors in June of 2022. 4 transmission line. It's August 19th, 2024. It's Case 4 So the first page you see, it is an overview. 5 No. PU-24-91. 5 When we think of LRTP projects, we kind of have to think 6 6 I don't have any anything else before turning of them more in a portfolio approach. And in this 7 7 over to the portfolio holder. particular line, it happens to have been studied and 8 Commissioner Fedorchak, do you? 8 paired well with not just the single line, which is the 9 COMMISSIONER FEDORCHAK: No. I don't. 9 Jamestown to Ellendale line, but also the Big Stone 10 COMMISSIONER CHRISTMANN: Okay. It's all yours, 10 South to Alexandria to Cass- -- Cassie's Crossing. 11 Commissioner Haugen-Hoffart. 11 When it comes down to the benefits, there are 12 COMMISSIONER HAUGEN-HOFFART: Well, thank you. 12 benefits in terms of figuring out what kind of 13 13 I guess going back to our commission meeting reliability benefits there are. And in this case you'll 14 last week. I proposed an order and we got into some 14 see that this is from a MISO presentation that indicates 15 discussion. And so I think there's those discussion 15 that the Jamestown to Ellendale line as well as in 16 16 items that we need to go through. And I'm just going to combination with the Big Stone South to Cassie's 17 say I'm -- I'm going to give -- just may -- my question, 17 Crossing relieves 40 elements with excess loadings for 18 or lay it out and Randy and Julie and staff can answer 18 the first transmission element loss or the N-1 and some 19 19 of the elements with excess of loading for the second 20 20 You know, looking at that Jamestown to Ellendale 21 line, we've identified there's some congestions that we 21 When MISO first started going through their 22 can -- need to get -- being an exporter, get things out. 22 analysis, they looked at several alternatives. They 23 So when I look at MISO and studying Tranche 1, this is 23 focused a lot on six of them. They look at largely --24 an area that was identified there would be benefits on 24 largely what kind of effect in terms of loadings it will 25 25 building this 345 kV line. have, and it will compare to see if, okay, if it can PAGE 4

	ND I ODLIO OLIV		
1	identify a mini portfolio project, if you will, that	1	this assumptions that drove that?
2	relieves the most. And they also tend to look somewhat	2	ADAM RENFANDT: Okay. So the assumptions that
3	at the cost of those lines, but really it's a	3	drive that is that starting off in the future's process
4	reliability analysis. And they also then perform an	4	when we first start taking a look at where to place
5	economic analysis on it as well.	5	these lines, we have to take a look at, okay, we have to
6	So kind of getting back to the question on the	6	meet certain IRPs, right? We have to meet our IRP
7	benefits that this provides, this first page shows, for	7	goals.
8	Zone 1 through 7, as we are in we are located in Zone	8	COMMISSIONER FEDORCHAK: And "we" meaning MISO?
9	1, so that would be to the yellow, to the right of that	9	MISO.
10	chart.	10	ADAM RENFANDT: MISO. MISO.
11	Now this is the most conservative, what you call	11	COMMISSIONER FEDORCHAK: Not we.
12	cost-benefit analysis. So the entire portfolio was	12	ADAM RENFANDT: Yeah, yeah, we. Yes.
13	cost \$10.3 billion. And then they figure out, okay,	13	COMMISSIONER FEDORCHAK: MISO says?
14	well, what kind of benefits can we attach to it such	14	ADAM RENFANDT: Yeah.
15	that the benefit-cost ratio is 1.0 or greater. So per	15	COMMISSIONER FEDORCHAK: Yeah.
16	the tariff, that's the hurdle that we're looking at.	16	ADAM RENFANDT: So MISO will collect every
17	And what do I mean by "the most conservative	17	utilities' IRPs and they'll take that and say, okay, we
18	one" is that they also show this for a 40-year present	18	need to you know, we need to achieve that.
19	value for benefits as well as they increase the value of	19	And then they also will meet a certain amount of
20	loss load that they give their other metrics to	20	goals that are not that aren't just goals. They're
21	something that is probably a bit unrealistic.	21	just you know, kind of wishes, if you will, that
22	So I think when people talk about and when you	22	aren't that aren't mandated by the legislature, for
23	hear numbers reported, they're mainly talking they're	23	instance.
24	talking about these numbers, which is the most	24	COMMISSIONER HAUGEN-HOFFART: So give me an
25	conservative of them.	25	example of a goal that we might bring forward.
	PAGE 5		PAGE 7
1	So you can see that we're in Zone 1. So the	1	ADAM RENFANDT: If it was
1 2	So you can see that we're in Zone 1. So the minimum is 2.8. And then that's where the max comes in.	1 2	ADAM RENFANDT: If it was COMMISSIONER FEDORCHAK: That's the not us
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2	minimum is 2.8. And then that's where the max comes in.	2	COMMISSIONER FEDORCHAK: That's the not us
2	minimum is 2.8. And then that's where the max comes in. So we've always tended tend to focus on the minimum	2	COMMISSIONER FEDORCHAK: That's the not us really. We don't have these.
2 3 4	minimum is 2.8. And then that's where the max comes in. So we've always tended tend to focus on the minimum benefits that we can achieve.	2 3 4	COMMISSIONER FEDORCHAK: That's the not us really. We don't have these. ADAM RENFANDT: Yeah.
2 3 4 5	minimum is 2.8. And then that's where the max comes in. So we've always tended tend to focus on the minimum benefits that we can achieve. And if we then go and look at the second page	2 3 4 5	COMMISSIONER FEDORCHAK: That's the not us really. We don't have these. ADAM RENFANDT: Yeah. COMMISSIONER FEDORCHAK: It's other states that
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1	COMMISSIONER FEDORCHAK: Of the futures.	1	ADAM RENFANDT: Yeah. We yeah, in their
2	ADAM RENFANDT: Of the futures.	2	assumptions so
3	COMMISSIONER FEDORCHAK: These are the	3	COMMISSIONER FEDORCHAK: Do they take into
4	futures	4	consideration the EPA regulations?
5	ADAM RENFANDT: Yeah, yeah. And that's	5	ADAM RENFANDT: They haven't.
6	another	6	COMMISSIONER FEDORCHAK: I don't think so.
7	COMMISSIONER FEDORCHAK: that help to	7	ADAM RENFANDT: No, no. No, they haven't.
8	(indiscernible) how and they're not like, you know,	8	COMMISSIONER FEDORCHAK: All right.
9	meeting like a hundred percent of any future. They're	9	ADAM RENFANDT: So then kind of moving onto the
10	just used as the guidelines to begin to imagine what	10	next page, so these are the benefits that they've
11	kind of system we're going to need. Because nobody	11	identified. The first benefit is
12	really knows, but these are the things that direct and	12	COMMISSIONER FEDORCHAK: Let's talk for a minute
13	guide what this future system they think is going to	13	about how these get developed.
14	need based on what people are putting in their plans.	14	ADAM RENFANDT: Okay.
15	ADAM RENFANDT: And that's an important point	15	COMMISSIONER FEDORCHAK: Because each one of
16	because we're looking at the year 2039. And by 2039, in	16	these processes is like a big, long, you know,
17	this particular case of what what all of this benefit	17	stakeholder input on identifying what benefits are going
18	metrics is based upon is that you meet 100 percent of	18	to be used to measure the overall the overall benefit
19	your IRP goals or not we, but MISO will say we're	19	calculation. And these are where you get some questions
20	going to meet a hundred percent of our IRP goals and	20	from the (indiscernible). The last I he's he's
21	we're going to meet 85 percent of our aspirational goals	21	pretty squishy on some of these benefit metrics, but
22	that that they that Commissioner Fedorchak was	22	even more so on Tranche 2.
23	just describing.	23	So, anyway, was there anything in particular
24	COMMISSIONER FEDORCHAK: And I do think it's	24	about these benefit metrics that raised concern in the
25	important to re-emphasize that MISO is trying to build a	25	stakeholder process, Adam?
	PAGE 9		PAGE 11
1	system that enables the meeting of those. They aren't	1	I mean, I know we we said that we objected
2	meeting them. They're building a system that allows	2	to the decarbonization benefit being used. And so then,
3	their members to meet their IRP goals and, like Adam	3	in response to that, they took that out and told us what
4	said, 85 percent of the state mandates as a planning	4	our cost-benefit would be without it. And it was still
5	that's how they plan. It's their planning protocol.	5	higher than the one threshold. Significantly higher.
6	So back to this resource additions, this is	6	ADAM RENFANDT: Yeah. And it there's very
7	based on what they're seeing in North Dakota IRPs	7	little benefit that's derived from this decarbonization
8	mostly?	8	benefit. The BC, the benefit-cost ratio, goes when
9	ADAM RENFANDT: IRPs. They will put in some	9	you remove it, goes from 2.8 to 2.6. So that's kind of
10	units that are model built	10	saying if you spend, like, a dollar, you get \$2.06 back.
11	COMMISSIONER FEDORCHAK: For reliability? To	11	COMMISSIONER CHRISTMANN: So the two
12	meet reliability standards?	12	overwhelmingly large factors in the in the benefit
13	ADAM RENFANDT: For yeah, for yeah, for	13	column for Zone 1 are, one, congestion and fuel savings,
14	reliability standards as well as engineering kind of	14	two, avoided capital cost of local resource investment;
15	judgment, I guess, if you will.	15	correct?
16	You know, you'll notice that there's you	16	ADAM RENFANDT: Correct. Yep.
17	know, on this case, you know, there's actually a	17	COMMISSIONER CHRISTMANN: Okay. For this
18	combined cycle gas being built. You know, that was	18	project, not Tranche 1 but this project, and for North
19	you know, that's likely the the conversion of maybe	19	Dakota, not MISO, what are the avoided capital costs of
20	the goal	20	local resource investment that this what costs does
21	COMMISSIONER FEDORCHAK: Oh. Oh. They're	21	this avoid?
22	looking at converting that to	22	ADAM RENFANDT: So this avoids the building of
23	ADAM RENFANDT: Yeah.	23	local generation that would cost more.
		24	COMMICCIONED CHRICTMANN, Like the gas plant
24	COMMISSIONER FEDORCHAK: in their	24	COMMISSIONER CHRISTMANN: Like the gas plant
	COMMISSIONER FEDORCHAK: in their assumptions?	25	that we ordered Xcel to build, for example? That's the

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1	only one I can think of.	1	COMMISSIONER CHRISTMANN: Well, he's kind of
2	COMMISSIONER FEDORCHAK: Again, it's modeled.	2	bringing their case.
3	It's not necessary	3	COMMISSIONER FEDORCHAK: He's been trying so
4	ADAM RENFANDT: Yeah. It's kind yeah, it's	4	that we can, yeah, understand.
5	kind of like, you know, when we had the original MVP	5	COMMISSIONER HAUGEN-HOFFART: And I guess that
6	portfolio, we had to we could share resources and	6	was my question in looking at some of this, is how much
7	then reduce local overbuild.	7	of this, I mean, gets updated as things go on? Like
8	So if we're able to spread that out with	8	Randy brought up Applied Digital. I mean, how is that
9	transmission, then there's a point in which you're	9	fed into MISO and updated so we have current more
10	supposed to hit the sweet spot, and it's called the	10	current information? I mean
11	"bathtub curve," right, in which you want to put your	11	COMMISSIONER FEDORCHAK: Once these projects are
12	transmission overlay on your resources such that you're	12	approved, they don't go back and update all this. Like
13	all in a sharing pool and you're able to then not build	13	this was agreed on and approved by the board a year
14	something not have a grid that's Balkanized such that	14	more than a year ago. So they don't go back
15	or have no wires and we've got to overbuild a ton of	15	COMMISSIONER HAUGEN-HOFFART: Okay.
16	maybe thermal generation because we couldn't then use a	16	COMMISSIONER FEDORCHAK: and keep changing
17	renewable source maybe.	17	these.
18	COMMISSIONER CHRISTMANN: So the biggest share	18	COMMISSIONER HAUGEN-HOFFART: Okay.
19	of our benefits are avoiding costs that we can't	19	COMMISSIONER FEDORCHAK: and re-justifying
20	identify.	20	the case or changing the case.
21	COMMISSIONER FEDORCHAK: Well, that's not	21	COMMISSIONER HAUGEN-HOFFART: Well, I wouldn't
22	their model costs out to 2039. I mean, you have to look	22	have to say "re-justify" but just more accurate data
23	at the time frame. So and that these might be	23	that we as PUCs could have. Like when we when the
24	good questions for because MISO should be able to	24	when the Tranche 1, when this case comes before us, we
25	identify those things for this project, for that for	25	have more information, but lesson learned.
-	PAGE 13		PAGE 15
1	actually this line or those two lines. So that's	1	COMMISSIONER FEDORCHAK: And we don't ever see
	decadily this line of those two lines. So that's	_	
2	probably a question we could ask them for to address.	2	all of Tranche 1.
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1	to that level of information and detail that MISO	1	know how the where or how the battle would occur,
2	COMMISSIONER HAUGEN-HOFFART: I got my answer.	2	but, okay, if the issue is somebody else out of state's
3	COMMISSIONER FEDORCHAK: And the thing is, the	3	need for energy and some developer that wants to come in
4	other thing to remember, and this is just a part of the	4	and set up some more wind farms here, fine, pay for it.
5	reality of MISO, is if you look at the size of our zone,	5	Not our ratepayers all the time.
6	I mean there's a lot of what's happening in Minnesota	6	And so, yes, the RTO forces this cost allocation
7	and part of Wisconsin driving Zone 1. And that's	7	on us, but if we don't fight for it or fight against
8	that's the reality for us in North Dakota and MISO.	8	it successfully, guess what? We're going to be paying
9	Zone 1 includes all of Minnesota and a chunk of	9	for was it three that's all south so maybe not that
10	Wisconsin.	10	maybe not one of them, but we're going to be paying
11	VICTOR SCHOCK: So especially on the fuel	11	for all the rest of them too. And when better than now
12	cost savings, it's one because both RTOs do that kind	12	to fight it?
13	of comparison when they run modeling. And it's one	13	COMMISSIONER FEDORCHAK: I don't disagree. And
14	thing I've really struggled with in our zone. Usually	14	we did fight it. But we
15	we have trapped generation that can't get out. And when	15	COMMISSIONER CHRISTMANN: MISO.
16	they do their model, well, this zone or this area is	16	COMMISSIONER FEDORCHAK: At MISO, yeah.
17	going to benefit by that trap generation getting out.	17	COMMISSIONER CHRISTMANN: I'm talking about at
18	Well, I suppose the zone as a whole is going to benefit,	18	FERC.
19	but our prices go up as a result of it.	19	COMMISSIONER HAUGEN-HOFFART: So is that how it
20	COMMISSIONER FEDORCHAK: Right.	20	would play out, I mean, going off of that? Tell me
21	VICTOR SCHOCK: So that negative that	21	COMMISSIONER FEDORCHAK: Yeah, I don't know.
22	negative congestion that's happening down there changes	22	COMMISSIONER HAUGEN-HOFFART: Can you walk me
23	to even keel with the rest of the system. And primarily	23	well, first of all, does anybody have anything else,
24	in this instance, I think Minnesota's prices probably go	24	Chris or Adam, to add to these?
25	down a slight bit	25	CHRIS HANSON: Just a scale sorry. I was
	PAGE 17		PAGE 19
1	COMMISSIONER FEDORCHAK: Yep.	1	just going to add that the scale of Tranche 1, the
2	VICTOR SCHOCK: while ours go up to what the	2	numbers that we got from MDU and from Otter Tail were
_	rest of the zone is seeing.	3	like 10 and a half billion or somewhere between 10 and
3		_	
3 4	COMMISSIONER CHRISTMANN: And this is kind of	4	10 and a half billion, and the cost per megawatt-hour
	_		
4	COMMISSIONER CHRISTMANN: And this is kind of	4	10 and a half billion, and the cost per megawatt-hour
4 5	COMMISSIONER CHRISTMANN: And this is kind of one of my concerns here, is so our ratepayers pay to	4 5	10 and a half billion, and the cost per megawatt-hour that they were estimating in 2031, which was the max
4 5 6	COMMISSIONER CHRISTMANN: And this is kind of one of my concerns here, is so our ratepayers pay to build this and the benefits are looked at, well, is this	4 5 6	10 and a half billion, and the cost per megawatt-hour that they were estimating in 2031, which was the max rate, was about \$2.54 per megawatt. So so or
4 5 6 7	COMMISSIONER CHRISTMANN: And this is kind of one of my concerns here, is so our ratepayers pay to build this and the benefits are looked at, well, is this investment here some big benefit, but it's mostly to	4 5 6 7	10 and a half billion, and the cost per megawatt-hour that they were estimating in 2031, which was the max rate, was about \$2.54 per megawatt. So so or megawatt-hour. So just as kind of a as a scale.
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4 5 6 7 8 9	COMMISSIONER CHRISTMANN: And this is kind of one of my concerns here, is so our ratepayers pay to build this and the benefits are looked at, well, is this investment here some big benefit, but it's mostly to whoever the new developer is that comes in and builds another wind farm. A few landowners but not to most of these Otter Tail and MDU customers. And I'm just I'm	4 5 6 7 8 9	10 and a half billion, and the cost per megawatt-hour that they were estimating in 2031, which was the max rate, was about \$2.54 per megawatt. So so or megawatt-hour. So just as kind of a as a scale. Now that how that impacts, say, residential customers is going to depend upon the company. Because each of the companies has their own allocation
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1	_ : = = : = = = : = = = : = : = : = : =		
1	had our	1	COMMISSIONER FEDORCHAK: Sure.
2	COMMISSIONER HAUGEN-HOFFART: Informal?	2	COMMISSIONER CHRISTMANN: I mean if if it
3	COMMISSIONER CHRISTMANN: informal on	3	went to court and the courts backed the Commission on a
4	July 8th, I didn't write down \$2.54 a month. I wrote	4	denial or, no, overturned the Commission on a denial,
5	\$3.15 a month for	5	well, then it would move forward unless we appealed.
6	CHRIS HANSON: Yep.	6	But let's say they backed our decision on a denial,
7	COMMISSIONER CHRISTMANN: MDU and 5.85 for	7	wouldn't at some point this get to be a FERC thing over
8	CHRIS HANSON: Correct.	8	whether the states can stop and this could be SPP
9	COMMISSIONER CHRISTMANN: Otter Tail.	9	too stop RTO-approved projects through their PC&N
10	CHRIS HANSON: Correct. So as I said, MDU and	10	process? Isn't that something that is going to have to
11	Otter Tail have an allocation methodology that's	11	get determined at some point? Or are they just all
12	different for residential and for commercial,	12	going to go to load pays?
13	industrial. I'll use NSP as an example because they do	13	UNIDENTIFIED SPEAKER: So I'm guessing the issue
14	a per-megawatt-hour allocation so it's a straight	14	that you're presenting is an interstate commerce issue
15	COMMISSIONER CHRISTMANN: Oh.	15	from the discussion that you're providing. And I'd be
16	CHRIS HANSON: It's a different methodology but	16	happy to have some additional discussion with that, but
17	it's it's, I guess you could say, cleaner. But the	17	I probably would not want to be having that in in
18	average that MISO was allocating, their number was \$2.54	18	open meeting without having an opportunity to review the
19	based upon their estimates at the peak in 2031 when all	19	tariffs that we're discussing.
20	the projects are up and running before they start to	20	COMMISSIONER CHRISTMANN: So we've kind of
21	amortize off.	21	touched on these, but I want to re-emphasize two points.
22	So, yes, you are correct. Like MDU's number,	22	One is, yes, we can talk about avoiding congestion or
23	MDU's number was \$3.15. The memo that I had was 5.75.	23	avoiding additional investment costs. I haven't found
24	And I think Matt Olsen came back and amended that to	24	any basis for those other than someone who likes doing
25	5.85 per megawatt-hour. So that's because they used	25	projects, putting numbers together, I I can't see
	PAGE 21		PAGE 23
1	Proc. 1. 11 1.1 C. III at a second se	1	anything
1	different methodology for allocating those transmission		anything.
1 2	different methodology for allocating those transmission costs. So you are correct.	2	I will point out, though, that among the project
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2 3 4	costs. So you are correct. COMMISSIONER FEDORCHAK: Okay. So I and Randy raised a good question about how, if we deny this,	2 3 4	I will point out, though, that among the project benefits are to accommodate new electric generation projects. That, to me, that's who ought to be paying at
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11 and soll with continues and potential energy an	9	way, which tells me when Xcel builds their gas plant	9	to be reminded of that. I'd have to have a more	
12	10	there, it can flow the other way and that can just as	10	technical discussion, I think, with the company to	
13	11	easily be used to help solve any potential energy	11	understand the implications for our customers of not	
14	12	shortfalls in Jamestown.	12	having this line.	
15 Generation plant. And I guess it's fine as long as we're willing to have service when it's windry but not we're willing to have service when it's windry but not we're willing to have service when it's windry but not we're willing to have service when it's windry but not we're willing to have service when it's windry but not we're willing to have service when it's windry but not we're willing to have service when it's windry but not we're willing to have service when it's windry but not we're willing to have service when it's windry and the project benefits identified in the companies'	13	And so I think the one investment that I can see	13	VICTOR SCHOCK: Isn't N-1 what drives cong	estion
16 we're willing to have service when it's windy but not 16 Adam? 17 when it's not. I don't think most of the people are. 17 ADAM RENFANDT: If it's overloaded, so if it's overloaded, so if it's overloaded, it could be overloaded for a number of reasons. You know, an outage definitely is it. I mean, reasons. You know, an outage definitely is it. I mean, the treates congestion such that, if you can't in verify our ant't nev er you can't fine verify our can't nev er you can't fine very our ant't nev er you can't fine very you can't fine very you can't nev er you can't fine very our can't nev er you can't fine ver one electrons 23 cOMMISSIONER FEDORCHAK: How did we we had an information in the properties of the properties of the properties of the your spot and fine up a more expensive peaker, for instance, if you've got a line outage, for instance, if you've got a line outage, for instance, if you've got a line outage, for instance, if you've got all never got got got got she for the you've got all never got got got got she for instance, if you've got all never got	14	that this is going to eliminate the need for is that	14	pricing?	
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PAGE 26 PAGE 28	24	they when all these problems, these reliability	24	40 elements with excessive loading for the first	
	25		25	transmission element loss.	
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	14D 1 ODLIO OLIV		
1	ADAM RENFANDT: Yeah, yeah, that's	1	applied to all of Zone 1, but of that of these
2	VICTOR SCHOCK: I think that's largely	2	issues, how many how much of the issue applied to
3	congestion.	3	North Dakota specifically?" So we're kind of getting
4	I don't know if that does that make some	4	lumped in with the whole zone.
5	sense?	5	COMMISSIONER FEDORCHAK: Right.
6	COMMISSIONER FEDORCHAK: And so?	6	UNIDENTIFIED SPEAKER: And this is the issue to
7	VICTOR SCHOCK: I'm not drawing any conclusions	7	the whole zone, but how much of it applies specifically
8	from that. It was just that you started to kind of talk	8	to us?
9	about it a little bit and I I I don't know that that's	9	COMMISSIONER FEDORCHAK: Yeah. And what is the
10	the entire answer	10	impact of this? Is it a price issue? Is it is it a
11	COMMISSIONER FEDORCHAK: So the benefits of	11	lot you know, we can't get power at certain times?
12	relieving that are it's not a reliability concern.	12	It's hurting the lines? Like what is the actual what
13	VICTOR SCHOCK: Not I'm not even saying that	13	are the issues that it's causing?
14	definitively. I think your question was what those 40	14	Yeah, and same I mean, the company might have
15	elements are. And I think probably a good chunk of them	15	a probably MISO needs to get us more specifics of the
16	are probably that N-1 scenario where overloading	16	impacts of this project on the benefit metrics that
17	COMMISSIONER FEDORCHAK: Well, no. I'll put it	17	they've used here. And if they can get those for North
18	a lot more simply.	18	Dakota versus all of Zone 1, that would be helpful too.
19	VICTOR SCHOCK: Okay.	19	COMMISSIONER CHRISTMANN: You know, when when
20	COMMISSIONER FEDORCHAK: That's a lot of	20	it's simplified down, when and I don't know who was
21	technical mumbo jumbo. What I want to know is how does	21	speaking at the time, I presume Otter Tail because it
22	this matter to North Dakota customers?	22	was about Jamestown, but between the two when we had the
23	VICTOR SCHOCK: Sure.	23	informal, when they talked about that situation in
24	COMMISSIONER FEDORCHAK: Does it? Or is it just	24	Jamestown that I referenced earlier, okay, yeah, that is
25	a bunch of sentences to make it seem like, "Jeez, that	25	something that happened, aware of it, it made a good
	PAGE 29		PAGE 31
		4	case in point to me, I was thinking, okay, now I'm
1	sounds bad, we better approve this"? Right?	1	case in point to me, I was trinking, okay, now I m
1 2	victor schock: Yeah.	2	seeing some benefit here until, like I say, then I
	· · · · · · · · · · · · · · · · · · ·		
2	VICTOR SCHOCK: Yeah.	2	seeing some benefit here until, like I say, then I
3	VICTOR SCHOCK: Yeah. COMMISSIONER FEDORCHAK: So I don't know.	2	seeing some benefit here until, like I say, then I thought more about it, except for, supposedly, within a
2 3 4	VICTOR SCHOCK: Yeah. COMMISSIONER FEDORCHAK: So I don't know. Maybe	2 3 4	seeing some benefit here until, like I say, then I thought more about it, except for, supposedly, within a little over a year or things usually run late, but in
2 3 4 5	VICTOR SCHOCK: Yeah. COMMISSIONER FEDORCHAK: So I don't know. Maybe VICTOR SCHOCK: Sure.	2 3 4 5	seeing some benefit here until, like I say, then I thought more about it, except for, supposedly, within a little over a year or things usually run late, but in the relatively near term we had a new gas plant go in
2 3 4 5 6	VICTOR SCHOCK: Yeah. COMMISSIONER FEDORCHAK: So I don't know. Maybe VICTOR SCHOCK: Sure. COMMISSIONER FEDORCHAK: it is a bunch	2 3 4 5 6	seeing some benefit here until, like I say, then I thought more about it, except for, supposedly, within a little over a year or things usually run late, but in the relatively near term we had a new gas plant go in Fargo. That should be able to do it. I guess when they
2 3 4 5 6 7	VICTOR SCHOCK: Yeah. COMMISSIONER FEDORCHAK: So I don't know. Maybe VICTOR SCHOCK: Sure. COMMISSIONER FEDORCHAK: it is a bunch maybe it is a big problem for North Dakota customers,	2 3 4 5 6 7	seeing some benefit here until, like I say, then I thought more about it, except for, supposedly, within a little over a year or things usually run late, but in the relatively near term we had a new gas plant go in Fargo. That should be able to do it. I guess when they just say, "Oh, well, there's all these benefits," it's
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		1 -	
1	sure that this doesn't have just merits for North Dakota	1	there. There's a bunch more how many more wind farms
2	on on a technical side so I'm not, like I'm very	2	did they model being developed in the eastern part of
3	open to hearing what the benefits are to our customers	3	North Dakota that will drive congestion up again? And
4	because I I think that there are and to our	4	those were driven by probably by Minnesota
5	generators, I guess. I'd like to evaluate be	5	environmental goals and others but yeah.
6	evaluating that along with it. So	6	UNIDENTIFIED SPEAKER: Yeah.
7	COMMISSIONER CHRISTMANN: I think you got it	7	COMMISSIONER FEDORCHAK: That would be helpful
8	covered.	8	to know, what kind of generation they modeled in that
9	VICTOR SCHOCK: So to clarify clarify what I	9	area
10	think I heard, so we're going to get a response from	10	UNIDENTIFIED SPEAKER: And where.
11	MISO on the benefit metrics for Zone 1 on this line	11	COMMISSIONER FEDORCHAK: for this.
12	specifically. So I think if Adam can reach out, that's	12	UNIDENTIFIED SPEAKER: Yeah, we can we can
13	probably the most efficient.	13	get that.
14	And then whatever response you get, if you want	14	COMMISSIONER HAUGEN-HOFFART: And I think
15	to pass that through Chris.	15	separately, I mean we're going to work with Jack as far
16	And then, Chris, if you can work with Otter Tail	16	as maybe some next steps
17	and MDU on a response for what these elements savings	17	UNIDENTIFIED SPEAKER: Sure.
18	and benefits are. And then, you know, if it's	18	COMMISSIONER HAUGEN-HOFFART: if denied just
19	reliability benefit, how and what circumstance?	19	for an understanding as far as litigation.
20	And we'll get all of that submitted into a	20	UNIDENTIFIED SPEAKER: Be happy to have that
21	couple of docket entries, hopefully, rather than just	21	discussion. I would note as well, though, after we
22	some emails flying around. And	22	receive all the documents, all the information that's
23	COMMISSIONER CHRISTMANN: And, you know, yes, I	23	necessary, it may be worth considering appointing
24	know these things take time, but there's a reason why	24	advocacy staff if we need to flush out certain issues a
25	they take time, so people don't make bad decisions. But	25	little better and maybe have a formal hearing on it as
	PAGE 33		PAGE 35
1	it seems like as far as the anything having to do	1	well.
2	with congestion in that area of the state, this should	2	COMMISSIONER FEDORCHAK: Yeah. That's a good
3	be recalculated based on Applied Digital's second phase	3	point. I'd be open to that, because I really do want to
4	being in effect. Because I understand they're pretty	4	understand the companies' side of it and the benefits
5	far along with it already and the first phase is already	5	that they are seeing.
6	going. And, like I say, from my just viewing of heat	6	COMMISSIONER CHRISTMANN: Anything else?
7	maps, it's having quite an impact. So maybe I'm wrong	7	COMMISSIONER HAUGEN-HOFFART: No. I think this
8	about that, but it doesn't appear that way to me.	8	was first of all, I want to say thanks to everyone
9	COMMISSIONER HAUGEN-HOFFART: But it's a good	9	for getting this lined up so guickly on the work
10	point to evaluate.	10	session. And, no, I have nothing further. I look
11	•	11	forward to the additional information to receive to
	COMMISSIONER FEDORCHAK: Yeah. And then maybe		
12	COMMISSIONER FEDORCHAK: Yeah. And then maybe they can provide information about what other additional		
12 13	they can provide information about what other additional	12	evaluate.
13	they can provide information about what other additional generation they've cited there in their long-range	12 13	evaluate. COMMISSIONER CHRISTMANN: Okay. With that,
13 14	they can provide information about what other additional generation they've cited there in their long-range transmission planning that drove the need for these	12 13 14	evaluate.
13	they can provide information about what other additional generation they've cited there in their long-range transmission planning that drove the need for these lines. Because it isn't just what exists today. It's	12 13	evaluate. COMMISSIONER CHRISTMANN: Okay. With that, thanks, everybody, and this work session is concluded.
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August 19, 2024, Work session ND PUBLIC SERVICE COMMISSION

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