#### 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 transmission line. It's August 19th, 2024. It's Case 4 No. PU-24-91. 5 I don't have any anything else before turning 6 7 over to the portfolio holder. 8 Commissioner Fedorchak, do you? COMMISSIONER FEDORCHAK: No, I don't. 9 COMMISSIONER CHRISTMANN: Okay. It's all yours, 10 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 an area that was identified there would be benefits on 24 25 building this 345 kV line.

So my first question is, if it's been identified in the Tranche 1, can we quantify those benefits for MDU and Otter Tail to look at it? That's my first question. Has that been -- I guess I assumed, and I shouldn't do that, that that was studied so we -- can we get some quantification numbers on that, the benefit of that line? So that's my first question. And I guess if we can get that, then that might lead to some more discussion.

So I don't know. I'm going to look to Adam and

Chris or Julie to maybe give me some history there on that, based on the two years that I've been on the Commission in that area, that that was -- has been identified. And I thought MISO maybe did a good job on identifying that. And this is the one, the only project 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.

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 --COMMISSIONER FEDORCHAK: And just to clarify, 6 7 this is for the whole -- the whole portfolio, not just 8 this line? 9 ADAM RENFANDT: Right. Yeah. 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 17 these benefit metrics and BC cost ratios are for the 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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this -- assumptions that drove that?
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             ADAM RENFANDT: Okay. So the assumptions that
     drive that is that starting off in the future's process
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     when we first start taking a look at where to place
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     these lines, we have to take a look at, okay, we have to
5
     meet certain IRPs, right? We have to meet our IRP
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7
     goals.
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             COMMISSIONER FEDORCHAK: And "we" meaning MISO?
     MISO.
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             ADAM RENFANDT: MISO. MISO.
11
             COMMISSIONER FEDORCHAK: Not we.
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             ADAM RENFANDT: Yeah, yeah, we. Yes.
13
             COMMISSIONER FEDORCHAK: MISO says?
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             ADAM RENFANDT: Yeah.
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             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.
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             COMMISSIONER HAUGEN-HOFFART: So give me an
25
     example of a goal that we might bring forward.
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If it was --
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             ADAM RENFANDT:
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             COMMISSIONER FEDORCHAK: That's the -- not us
3
     really. We don't have these.
             ADAM RENFANDT: Yeah.
4
5
             COMMISSIONER FEDORCHAK: It's other states that
6
     have their goals and they'll do a certain percentage of
7
     them.
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             ADAM RENFANDT: Yep. Right.
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             COMMISSIONER CHRISTMANN: We have a goal but
10
     it's long been exceeded --
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             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.
             COMMISSIONER FEDORCHAK: And then they'll meet
19
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 --
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             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 guide 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 going to meet a hundred percent of our IRP goals and 20 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

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system that enables the meeting of those. They aren't
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2
     meeting them. They're building a system that allows
3
     their members to meet their IRP goals and, like Adam
     said, 85 percent of the state mandates as a planning --
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     that's how they plan. It's their planning protocol.
5
             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?
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             ADAM RENFANDT: For -- yeah, for -- yeah, for
14
     reliability standards as well as engineering kind of
15
     judgment, I guess, if you will.
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             You know, you'll notice that there's -- you
17
     know, on this case, you know, there's actually a
     combined cycle gas being built. You know, that was --
18
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?
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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 next page, so these are the benefits that they've 10 identified. The first benefit is --11 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 20 from the (indiscernible). The last -- I -- he's -- he's 21 pretty squishy on some of these benefit metrics, but even more so on Tranche 2. 2.2 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 higher than the one threshold. Significantly higher. 5 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 ADAM RENFANDT: Correct. Yep. 17 COMMISSIONER CHRISTMANN: Okay. For this 18 project, not Tranche 1 but this project, and for North 19 Dakota, not MISO, what are the avoided capital costs of local resource investment that this -- what costs does 20 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

1 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

1 actually this line or those two lines. So that's 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 that's over in that area; correct? 9 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 2.2 MISO. 23 COMMISSIONER CHRISTMANN: I know. 24 (Laughter) 25 COMMISSIONER FEDORCHAK: Adam is not MISO so...

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             COMMISSIONER CHRISTMANN: Well, he's kind of
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     bringing their case.
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             COMMISSIONER FEDORCHAK: He's been trying so
     that we can, yeah, understand.
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             COMMISSIONER HAUGEN-HOFFART: And I guess that
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     was my question in looking at some of this, is how much
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     of this, I mean, gets updated as things go on? Like
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     Randy brought up Applied Digital. I mean, how is that
     fed into MISO and updated so we have current -- more
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10
     current information? I mean --
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             COMMISSIONER FEDORCHAK: Once these projects are
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     approved, they don't go back and update all this. Like
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     this was agreed on and approved by the board a year --
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     more than a year ago. So they don't go back --
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             COMMISSIONER HAUGEN-HOFFART: Okay.
             COMMISSIONER FEDORCHAK: -- and keep changing
16
17
     these.
             COMMISSIONER HAUGEN-HOFFART:
18
                                           Okay.
             COMMISSIONER FEDORCHAK: -- and re-justifying
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20
     the case or changing the case.
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             COMMISSIONER HAUGEN-HOFFART: Well, I wouldn't
22
     have to say "re-justify" but just more accurate data
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     that we as PUCs could have. Like when we -- when the --
     when the Tranche 1, when this case comes before us, we
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     have more information, but lesson learned.
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COMMISSIONER FEDORCHAK: And we don't ever see
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     all of Tranche 1.
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             COMMISSIONER HAUGEN-HOFFART: Right.
             COMMISSIONER FEDORCHAK: This is the only line
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     we'll see.
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6
             COMMISSIONER HAUGEN-HOFFART: Right. But things
     have changed since then. I mean -- point taken.
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8
             COMMISSIONER FEDORCHAK: Yeah. We should -- we
     could ask MISO for them to provide us that for this -- I
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10
     don't know if they've got it at that granular level or
11
     not.
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             ADAM RENFANDT: To provide?
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             COMMISSIONER FEDORCHAK: The congestion fuel
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     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
     sorry, but could MDU provide us any of that?
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23
             COMMISSIONER FEDORCHAK: I doubt it. They don't
     run the models.
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25
             ADAM RENFANDT: Yeah, they wouldn't have access
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to that level of information and detail that MISO -COMMISSIONER HAUGEN-HOFFART: I got my answer.

COMMISSIONER FEDORCHAK: And the thing is, the other thing to remember, and this is just a part of the reality of MISO, is if you look at the size of our zone, I mean there's a lot of what's happening in Minnesota and part of Wisconsin driving Zone 1. And that's -- that's the reality for us in North Dakota and MISO. Zone 1 includes all of Minnesota and a chunk of Wisconsin.

VICTOR SCHOCK: So -- especially on the fuel cost savings, it's one -- because both RTOs do that kind of comparison when they run modeling. And it's one thing I've really struggled with in our zone. Usually we have trapped generation that can't get out. And when they do their model, well, this zone or this area is going to benefit by that trap generation getting out. Well, I suppose the zone as a whole is going to benefit, but our prices go up as a result of it.

COMMISSIONER FEDORCHAK: Right.

VICTOR SCHOCK: So that negative -- that 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 --

1 COMMISSIONER FEDORCHAK: Yep

2.2

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,
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     but, okay, if the issue is somebody else out of state's
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     need for energy and some developer that wants to come in
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     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
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10
     -- maybe not one of them, but we're going to be paying
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     for all the rest of them too. And when better than now
12
     to fight it?
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             COMMISSIONER FEDORCHAK: I don't disagree.
                                                          And
14
     we did fight it. But we --
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             COMMISSIONER CHRISTMANN: MISO.
             COMMISSIONER FEDORCHAK: At MISO, yeah.
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17
             COMMISSIONER CHRISTMANN: I'm talking about at
18
     FERC.
             COMMISSIONER HAUGEN-HOFFART: So is that how it
19
     would play out, I mean, going off of that? Tell me --
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21
             COMMISSIONER FEDORCHAK: Yeah, I don't know.
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             COMMISSIONER HAUGEN-HOFFART: Can you walk me --
23
     well, first of all, does anybody have anything else,
     Chris or Adam, to add to these?
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             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

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had our --
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             COMMISSIONER HAUGEN-HOFFART: Informal?
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             COMMISSIONER CHRISTMANN: -- informal on
     July 8th, I didn't write down $2.54 a month. I wrote
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     $3.15 a month for --
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             CHRIS HANSON: Yep.
6
7
             COMMISSIONER CHRISTMANN: -- MDU and 5.85 for --
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             CHRIS HANSON: Correct.
             COMMISSIONER CHRISTMANN: -- Otter Tail.
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             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:
                                       Oh.
16
             CHRIS HANSON: It's a different methodology but
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     it's -- it's, I guess you could say, cleaner. But the
     average that MISO was allocating, their number was $2.54
18
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,
     MDU's number was $3.15. The memo that I had was 5.75.
23
24
     And I think Matt Olsen came back and amended that to
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     5.85 per megawatt-hour. So that's because they used
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different methodology for allocating those transmission
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2
     costs. So you are correct.
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             COMMISSIONER FEDORCHAK: Okay. So I -- and
     Randy raised a good question about how, if we deny this,
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5
     say, what is the result? Where does it go? Or do the
6
     companies -- where can the companies protest? Or MISO,
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     I guess.
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             UNIDENTIFIED SPEAKER: Well, I'm still getting
     acquainted with this case. And I know you guys asked me
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     to come in here and have some discussion, but if we have
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     -- we issue an order with the denial, obviously it
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     depends on the basis of the denial and it depends on the
     basis of the challenge. It could either be in Federal
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     District Court or it could be in State Court. And so it
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     would be up to the issue that really is being appealed.
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             COMMISSIONER FEDORCHAK: So the -- Otter Tail or
     MDU would likely then decide to take it -- it could.
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             UNIDENTIFIED SPEAKER: It would likely be Otter
19
     Tail or MDU.
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             COMMISSIONER CHRISTMANN: Or MISO.
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             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 --
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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

1 Ellendale point down through South Dakota and Minnesota 2 and out, but if there's problems there, they need this 3 alternative route to get it up to Jamestown and then from there on it can flow through Fargo and away. 4 Okay. If -- as far as to add the new 5 generation, I guess that makes sense. It also tells me 6 7 there's plenty of capacity in the transmission lines 8 between Jamestown and Fargo for all this to flow that way, which tells me when Xcel builds their gas plant 9 10 there, it can flow the other way and that can just as 11 easily be used to help solve any potential energy 12 shortfalls in Jamestown. And so I think the one investment that I can see 13 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 informal, right --24 25 COMMISSIONER HAUGEN-HOFFART:

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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.
6
7
             COMMISSIONER FEDORCHAK: Both.
8
             COMMISSIONER HAUGEN-HOFFART: It's in their
     application and the --
9
10
             COMMISSIONER CHRISTMANN: What you're looking
11
     at, though --
12
             COMMISSIONER FEDORCHAK: This is their
13
     application.
14
             COMMISSIONER CHRISTMANN: -- this.
15
             COMMISSIONER FEDORCHAK: Right.
16
             COMMISSIONER CHRISTMANN: Okay.
17
             COMMISSIONER FEDORCHAK: This is the
18
     application.
             COMMISSIONER CHRISTMANN: What page?
19
20
             COMMISSIONER FEDORCHAK: 11. And to some extent
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
25
     problems, like at 40 transmission elements with
```

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? 8 I mean, I am -- I want to know -- I would have to be reminded of that. I'd have to have a more 9 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. 25 VICTOR SCHOCK: Right.

ADAM RENFANDT: Or something like that, yeah. 1 2 VICTOR SCHOCK: But congestion pricing -- and this is, I think, the case in both RTOs. It isn't 3 because the lines that are in operation at that moment 4 can't handle the load that's going across them. It's in 5 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 congestion, I think, is based on that N-1 scenario. 19 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 40 elements with excessive loading for the first 24 transmission element loss. 25

```
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
     about it a little bit and I -- I don't know that that's
9
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
2.2
     this matter to North Dakota customers?
23
             VICTOR SCHOCK: Sure.
             COMMISSIONER FEDORCHAK: Does it? Or is it just
24
25
     a bunch of sentences to make it seem like, "Jeez, that
```

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1
     sounds bad, we better approve this"? Right?
2
             VICTOR SCHOCK:
                             Yeah.
3
             COMMISSIONER FEDORCHAK: So I don't know.
     Maybe --
4
             VICTOR SCHOCK:
5
                             Sure.
             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
     don't recall exploring that deeply in our informal with
9
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.
             COMMISSIONER HAUGEN-HOFFART: It's in their
19
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 open to hearing what the benefits are to our customers 3 because I -- I think that there are -- and to our 4 5 generators, I guess. I'd like to evaluate -- be evaluating that along with it. So ... 6 7 COMMISSIONER CHRISTMANN: I think you got it 8 covered. VICTOR SCHOCK: So to clarify -- clarify what I 9 10 think I heard, so we're going to get a response from 11 MISO on the benefit metrics for Zone 1 on this line specifically. So I think if Adam can reach out, that's 12 13 probably the most efficient. 14 And then whatever response you get, if you want 15 to pass that through Chris. 16 And then, Chris, if you can work with Otter Tail 17 and MDU on a response for what these elements savings 18 and benefits are. And then, you know, if it's 19 reliability benefit, how and what circumstance? 20 And we'll get all of that submitted into a 21 couple of docket entries, hopefully, rather than just 22 some emails flying around. And --23 COMMISSIONER CHRISTMANN: And, you know, yes, I 24 know these things take time, but there's a reason why

they take time, so people don't make bad decisions. But

25

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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
     being in effect. Because I understand they're pretty
4
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,
     that -- that is part of this equation so they should
17
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.
             COMMISSIONER FEDORCHAK: -- well, we took care
24
25
     of the congestion now because we've got Applied Digital
```

1 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. COMMISSIONER HAUGEN-HOFFART: -- if denied just 18 for an understanding as far as litigation. 19 UNIDENTIFIED SPEAKER: Be happy to have that 20 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 advocacy staff if we need to flush out certain issues a 24 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					
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23					
24					
25					

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