ENRIQUE BACALAO, STAFF WITNESS, AFFIRMED

DIRECT EXAMINATION

BY MR. JELINSKI:

Q Good afternoon, Mr. Bacalao. Could you please state your name for the record.

A Yes. Enrique, E-N-R-I-Q-U-E; Bacalao, B, as in boy, A-C-A-L-A-O.

Q I'm sorry, I don't quite have the same roll off the tongue as you do. So I apologize for that.

A That's okay. Don't worry. You can mispronounce it any way you want. Just don't ask me to mispronounce it.

Q Did you cause to be filed surrebuttal testimony in this case?

A Yes.

Q And it doesn't appear you had any exhibits.

A Okay.

Q And to the best of your knowledge, are the statements and representations in that testimony true and correct?

A Yes.

Q And if I asked you the same questions today, would you provide the same answers?

A Yes, I would.

Q Is there anything that you would like to modify or

add to the comments that you filed?
A No, there isn't.
Q And after listening to the testimony of some other witnesses, including applicants' witness Mr. Pfeifenberger, is there sur-surrebuttal testimony you would like to offer today?
A Yes, it is.
Q Are you the same Enrique Bacalao that submitted sur-surrebuttal testimony in this proceeding?
A Yes.
Q And what is the purpose of your sur-surrebuttal testimony?
A The purpose of my sur-sur-surrebuttal testimony --
Q Oh, thank you.
A My first, is the response to sur-surrebuttal applicants Pfeifenberger.
Q Mr. Pfeifenberger notes that the 8.41 percent WACC estimate that the Commission staff identifies appears to be the weighted average of the cost of debt and equity of ATC calculated without considering the tax advantage of debt. Do you have any observations regarding Mr. Pfeifenberger's testimony on this matter?
A Yes. Mr. Pfeifenberger is incorrect.
Q Could you please elaborate.

A Commission staff did not estimate the 8.41 percent value, did not overlook the tax advantage of debt, and did not assume that the value applied only to ATC. As set out in the direct Commission Vedvik, the applicants themselves jointly estimated that value and then offered it in response to a data request made by Mr. Vedvik.

I did not interpret the data request response to apply only to ATC. The spreadsheet attached to that data request response calculates the discount rate in tab "ATC-ARR" as shown in cell L, as in London, 16 which is linked to cell C, as in Charlie, 392. Capital structure and tax calculations also appear on that same spreadsheet on a blended and weighted basis. There are also separate tabs dedicated to analyzing the individual investing companies, including one entitled, quote, project allocations, unquote. Therefore, Commission staff did not estimate ATC's WACC, as presumed by Mr. Pfeifenberger, but rather used the data request response to determine the discount rate that the applicants had themselves calculated jointly.

Q Do you believe there was any ambiguity in Mr. Vedvik's direct testimony that might have created some degree of confusion on this point?

A No, not in my opinion. Mr. Vedvik states clearly that the applicants, in the plural, assume a weighted average cost of capital of 8.41 percent, which could better reflect the actual cost of transmission customers are paying for the proposed project, and could be more representative of the risk to Wisconsin transmission service customers associated with the proposed project.

Q Is Mr. Pfeifenberger correct when he stated that the discount rates to evaluate project costs and benefits from investors' perspective, like under the capital budgeting approach, should be based on the overall cost of capital associated with the project, net of the tax benefits of debt financing, which is generally referred to as the aftertax weighted average cost of capital, ATWACC, or simply the W-A-C-C, or WACC?

EXAMINER NEWMARK: Off the record for a minute.

(Discussion off the record.)

A Yes, he is, provided the borrower in question qualifies for interest rate cost reduction under the governing income tax rules and regulations and can make use of that tax deduction. Consistent with this concept, my review of the data response cited above suggested that the applicants had indeed adjusted the estimate cost of debt to reflect the tax benefits of debt financing.

If, however, the applicants in fact failed to make that necessary tax benefit adjustment to the estimated cost of debt, their response to Mr. Vedvik's data request would be incorrect. Consequently, the 8.41 percent discount rate provided to Mr. Vedvik by the applicants would need to be recalculated.

BY MR. JELINSKI:

Q Is Mr. Pfeifenberger correct when he states that the FERC-approved rate of return incentives need to be subtracted from the allowed ROE to isolate the portion of the return that is intended to compensate equity investors for their opportunity cost of capital, i.e., the cost of equity; the netting of the ROE incentives is necessary because the incentives are an adder above the transmission investment's actual cost of equity?

A I respectfully disagree with Mr. Pfeifenberger. Mr. Pfeifenberger is stating that the project can attract the equity funds required at the FERC authorized base ROE, currently 10.32 percent, without requiring FERC's ROE incentive adders. That argument implies that the incentives offered by FERC are unnecessary to help offset the particular risk profile of the project in obtaining investment equity funding. A brief review of FERC's transmission investment incentives program would be helpful in evaluating this implication.

Transmission incentives were enacted by Congress in the Energy Policy Act of 2005, also known as 2005 EPA, on August 8, 2005, which added a new Section 219 to the Federal Power Act. Section 219 required the Federal Energy Regulatory Commission, FERC, F-E-R-C, to establish by rule incentive based, including performance based, rate treatments for the transmission of electric energy in interstate commerce by public utilities by enhancing reliability and reducing congested related costs.

2005 EPA mandated, among other things, that FERC should -- FERC's rule shall, A, provide a return on capital that attracts new investment in transmission facilities; and, B, maintain rates, charges, terms and conditions that are just and reasonable and not unduly discriminatory or preferential. FERC Order No. 679 established, among other matters, the following transmission incentives and guidance in fulfilling its obligation under

Section 209. ROE adders. Enhancing the authorized ROE was deemed to be the most effective adder to attract capital investment into transmission in the amounts required while absorbing the inherent risks, project delays, and siting difficulties on the best terms possible.

Other incentives. A number of financial incentives were initially adopted to mitigate a proposed transmission project's business risk profile.

Guidance on granting of incentives. There must be a nexus between the incentive requested and the risk or need of the project, which must exceed normal risks. And that's known as the nexus test. All incentives granted to any single project must be evaluated as a whole to avoid overcompensation.

FERC No. 679-A and 679-B address some subsequent objections raised by customer interests, arguing that Order No. 679 was too permissive in offering rate incentives, and clarified procedures.

Following a notice of inquiry, and that was in 2011, FERC issued a policy statement that provided additional guidance and clarity on certain aspects of FERC's transmission incentive policy and procedures, among them, A, each element of the incentive package must be tailored to meet the demonstrable risks and challenges of the project; B, the interrelationship of all elements of the project must be evaluated; C, reductions of risk must be offset against any ROE adder requested; D, to avoid -- encourage avoidance of double-counting risks with the DCF analysis in determining the base ROE; E, examine the use of risk reducing incentives before considering ROE adders; and F, provide general guidance regarding the application for an incentive ROE based on a project's risk and challenges.

To reconfirm, Mr. Pfeifenberger's argument presumes that the rate of return on equity, ROE, that would be required to incent investors to invest in this transmission project, that is, the ROE required to fairly compensate for them their opportunity cost incurred in not investing in an alternative opportunity of equal risk, is the base authorized rate of return on equity set by FERC, without need of FERC granted ROE adders.

If Mr. Pfeifenberger reasons that the FERC ROE adders should be netted out because those ROE adders are not needed, i.e., that the applicants can obtain the required equity funds without the need for FERC's ROE adders to offset exceptional risks or challenges, that would imply that either, A, the applicants have not accurately described the exceptional risks and challenges associated with the transmission project for which they requested investment incentives from FERC; or, B, FERC has deviated from the applicable statutes and rules cited above in considering and improving investment incentives for this project.

Q Does this conclude your testimony?

A Yes, it does.

MR. JELINSKI: Mr. Bacalao is available for cross-examination.

EXAMINER NEWMARK: Okay. Questions?

MR. LOEHR: Yes, Your Honor.

CROSS-EXAMINATION

BY MS. LOEHR:

Q Mr. Bacalao, were you reading from something just now?

A Yes, I was.

MS. LOEHR: May I approach?

EXAMINER NEWMARK: Yes, sure. Let's go off the record.

(Discussion off the record.)

BY MR. LOEHR:

Q I want to go back to the start of your

sur-sur-surrebuttal. You talked about the 8.41 percent discount rate that Commission staff identified.
A Correct.
Q And you stated that that was not a Commission staff calculated number.
A Correct.
Q And that it was something that was provided by the applicants in response to a data request?
A Correct.
Q And was it provided by the applicants in response to a data request asking for an appropriate discount rate for this proceeding?
A I believe so. I would have to check the exact wording in the data request, which is in the record.
Q And I believe you referenced Mr. Vedvik's testimony with respect to the reference to the data request?
A That is correct. I believe the data request is an exhibit in that direct testimony.
Q I don't know about that, but I do see a surrebuttal PSC Vedvik 3, line 10.
A I may have been wrong. I'm not quite sure which of Mr. Vedvik's testimony it was attached to. But wait one second. Let me just see something.
In my notes it shows up as direct

Commission Vedvik page 10, PSC reference number 365153. In my first testimony, which is a sur-surrebuttal, I have the same reference to direct PSC Vedvik pages 6 to 10 and Exhibit PSC Vedvik 2, page 2. I don't have the testimony in front of me, I'm afraid, so perhaps we can call it up.

EXAMINER NEWMARK: Off the record.

(Discussion off the record.)

EXAMINER NEWMARK: All right. Let's get back on the record.

BY MR. LOEHR:

Q Okay. Off the record, I think we determined that the data request that you were referring to when you were referring to Mr. Vedvik's testimony was data request 1.169?

A Yes.

Q Okay. And that's the source of staff's use of the 8.41 percent?

A Correct.

Q And we've just brought up on the screen PSC reference number 347526, PDF page 8, and it has the request and response to data request 1.169?

EXAMINER NEWMARK: That's what's on the screen.

A Okay.

BY MR. LOEHR:

Q And did you read that for a moment?

A Yes.

Q Is there anything in that request that refers to a discount rate?

A No. That is -- the present value -- present value revenue requirements. To get that calculation, you have to use a discount rate, so it's in the spreadsheet that's attached. So the answer to your question is there is no reference to discount rate in the text, but there is by -- necessarily a discount rate that has to be used to calculate a present value.

Q And the request is referring just to ATC; is that correct?

A That is correct. Yes.

Q So it's not taking into account the other two applicants?

A Not that reference. But if you go to the text that I cited from Mr. Vedvik's testimony, it refers to all three applicants. And when you go to the spreadsheet, it shows all three applicants. So it may have been a mischaracterization perhaps, beyond my knowledge as to exactly how that was misstated -- how that was stated that way. But it says what it says.

Q What I'm trying to understand is Commission staff indicated -- you indicated that a weighted average cost of capital is one methodology of determining a discount rate?

A If you are using -- yes, if you're using -- it's one way to do it. It's the correct way to do it for this particular calculation.

Q And you did not ask the applicants to determine their weighted average cost of capital that they would use for a discount rate in this proceeding?

A Please remember I'm relying on Mr. Vedvik's data request and the response to his data request. So I'm relying on his testimony as to what was asked and what was offered. And I looked at both provided.

Q So the answer is no?

A The answer is no to the question did I ask it? Sorry, what was the question?

(Question read by the reporter.)

A I did not, no.

Q And your only knowledge of the source of the 8.41 percent is Mr. Vedvik's testimony on this topic?

A That is correct, which would in turn rely on these data requests -- on the data request and response.

Q And it's this data request and response that we're

talking about, 1.169?
A I believe so, yes.
Q And that's the only one?
A As far as I know, yes. I did find the reference in his direct testimony as to what the numbers were and how he obtained them, if you want me to give you that reference, which I relied on.
Q And that is direct PSC Vedvik 10?
A This would be direct PSC Vedvik 9 and 10. And I would say on page 8, lines 19 and 20, and on page 10, lines 10 through 18.
Q So you did not conduct any independent calculation using your classical method?
A No. In -- as you gather from my first testimony, it describes the scope of what I was asked to do. And it was basically to look at the direct and the rebuttal testimonies provided on this topic and look at the calculation methodology. I was not asked to independently verify all the calculations from scratch.
Q So do you have any reason to dispute Mr. Pfeifenberger's calculation?
A It seems to be based -- one second, let me just pull his up. It seems to me that his calculations, which appear on his sur-surrebuttal; and it's pages 2 and

3, the table is on page 3. It appears to me that he was using the same information except reaching a different number by -- and then there -- I would disagree with some of the methodologies there; but I alluded to those in my first testimony which is sur-surrebuttal. There are several things that I have difficulty with in accepting the methodology there. But leaving that aside, it looks like he is using the same information that was provided to Mr. Vedvik.

Q And you indicated in your oral sur-surrebuttal testimony that it is appropriate to consider the aftertax weighted average cost of capital?

A That is correct. Assuming always that the borrower qualifies and the borrower has a capacity to use it.

Q And you have reason to dispute Mr. Pfeifenberger's calculation of the aftertax portion of the weighted average cost of capital?

A Assuming that the other numbers are correct, it appears that he's right. I have no way of verifying that the blended tax rate for ATC, for ITC and for Dairyland are what he says they are. I would have to go and verify that. But assuming for a second that those numbers are correct, the methodology, which are the last three lines of his Table 1, would be correct, yes.

Q And assuming for a second that the 8.41 percent calculation did not include the aftertax calculation, that would make the 8.41 percent incorrect; is that true?

A That is correct. I assumed based on my review of the spreadsheet that it had been factored in. In other words, the 8.41 was an aftertax WACC. But if it wasn't, then it would be incorrect.

MR. LOEHR: That's all I have.

EXAMINER NEWMARK: All right. Other cross?

MR. CHASCO: I do have a couple questions.

CROSS-EXAMINATION

BY MR. CHASCO:

Q So with respect to your testimony that -- and correct me if I mischaracterize it, that the ROE adders, incentive adders that the applicants receive should be not removed from your version of the discount rate. With me so far?

EXAMINER NEWMARK: Off the record.

(Discussion off the record.)

Q Let me rephrase. So as I understand your testimony, you would not remove the ROE incentive adders from the discount rate because they're required in your view to attract capital. Is that a fair characterization of your testimony?

A It would be correct if you assume that the ROE adder that was requested and granted is needed to attract the capital. If, on the other hand, the applicants assume that it's not needed to attract the capital, then it shouldn't be added. In other words, the discount rate, the ROE that should be used in the discount rate is the real marginal cost of equity, what it would cost to raise that equity when you need it. And if that ROE adder is reflective of what the real cost of equity is, then it should be included. If it is not accurately reflecting it, then it should not be included.

Q If an incentive -- I think you already said this. But if I understood you correctly, if an incentive is not for the purpose of attracting capital, you would agree then that it should be removed from your calculation of the discount rate?

A No. I don't think that would be a correct summary of what I said. If you would allow me to repeat briefly what I said. The rules as they were stated or -- stated by FERC were that you begin by bringing an application in where you have reduced the risk as much as you can. If there are still risks that cannot be reduced and it's possible for FERC to offer you risk mitigating incentives, then you do that. If you still have risks that you cannot mitigate, then you look at ROE adders as a way of compensating it.

So if you remember that the cost of equity reflects the risk of the project and the investor is aware of all of these various risks, then if the job has been well done, that is to say the calculations are done, then, yes, you would actually include the ROE adders as well as the other benefits.

Q All right. Let me come at it from a different angle. Are you aware that one of the adders that at least Dairyland receives is for the purpose of encouraging RTO membership?

A Yes, I'm aware of that.

Q And that has no impact on your analysis of whether that should be included in the discount rate?

A To answer that question, I would have to be looking at this from the perspective of the person raising funds for Dairyland. And the short answer would be if you were -- if Dairyland's investors, which I realize are cooperatives, required membership and absent that would require a penalty of 50 basis points, then yes, you would have to add it in.

Q Even if that has nothing to do with this particular

project?
A Well, no. That's part of the project risk.
Q MISO membership or not belonging to MISO is related to this particular project?
A That is correct.
Q For the purpose of calculating the discount rate?
A It would be part of the risk profile. If you were not a member of MISO, that would be a different risk profile than if you were.
Q Would it change your opinion at all if an entity such as Dairyland decided to participate in Badger Coulee, for example, without receiving the MISO membership equity adder, ROE adder? If my question makes sense.
A Remind me, what's the timing difference between Badger Coulee and this one? A year, two years?
Q A couple years.
A Couple years. The reason I ask that question is because the markets are ever revolving, obviously. With Dairyland, the problem is that you don't have publicly traded securities; so it's a lot more difficult to actually measure that accurately.
Q Maybe I'll ask a different question. Do you think the discount rate should be different for the different applicants? Is a dollar value to Dairyland's members today different than a dollar to

ITC's customers?

A The short answer is that the required rate of return -- the required rate of return for the same project should be about the same for all three participants. Well, what becomes different is the cost of actual funding this. And that might make it a little more attractive for one of the investors than it would be for another of the investors. But the actual required return should be about the same for all three if all three are taking the same type of risk in undertaking the project.

MR. CHASCO: Okay. I think that's all I have. Thank you.

EXAMINER NEWMARK: Okay. Cross? Ms. Overland.

CROSS-EXAMINATION

BY MS. OVERLAND:

Q Good afternoon. Carol Overland on behalf of Jewell Jinkins intervenors.

A Good afternoon.

Q In your sur-surr, the verbal testimony before you started the cross, you referred to the incentive adders in the FERC policy statement. And would you agree that the policy statement you were referring to, that would be MISO Exhibit 6?

A Let me just ask you. You're talking about my sur-sur-surrebuttal that I read today?
Q It would be your verbal testimony.
A And then the question again is -- ?
Q When you're referring to a FERC policy statement, and I believe that's MISO Exhibit 6 and I'd like that verified.
EXAMINER NEWMARK: Let's go off the record.
(Discussion off the record.)
EXAMINER NEWMARK: On the record.
BY MS. OVERLAND:
Q Okay. What I'm looking for is verification if this is -- if that on the screen, which is the Wellinghoff Exhibit 6, if that would be the same FERC policy statement you were referring to earlier, regarding Order 679?
A Yes, it is. It's FERC docket number RN1126000 May 11, 2011, is what my notes indicate. I think that's right. That's the same one.
Q Okay. Thank you. And then there were -- the FERC orders introduced by Jewell Jinkins intervenors, Exhibits 6 and 7, which were orders granting abandoned plant incentive, and I want to clarify, would those be then the type of incentive adders

you're referring to?
A Those would fall into the category of the first one that I said about risk mitigation. And there are several types that are available; and depending on the application and the specific project, you would have, for example, full recovery or partial recovery of an abandonment or if you have CWIP, 100 percent CWIP as opposed to AFUDC.
Q And CWIP means -- ?
A That's construction -- sorry, let me think a second. Cost --
Q Would it be construction work in progress?
A Thank you. Construction work in progress. It's been several years since I've had to use that term. And the other one is allowance for funds under construction.
So there are different forms of incentives for risk reduction that are intended to protect projects that have exceptional risk or perhaps a sponsor that has a bigger challenge because they've just been created and don't have a credit record, things like that. So on a case-by-case basis, by design, by the rules, FERC would look at these things and so would the applicants and they would work their way through what risk mitigations might be

appropriate. And then according to the rules, you then look at ROE adders, if that helps you understand it.

Q Okay. So then what that means, does that mean then that according to FERC, this project is sufficiently risky then to acquire this adder?

A You would have to ask that question of the applicants. I am not aware of the answer to that question.

Q Okay. Looking at your surrebuttal, which would have been your first filing, on page 2, you state that the purpose of your testimony is to assist the Commission in evaluating the accuracy and relevance of the respective present value calculations. So regarding accuracy, could you look at direct applicants Degenhardt 6.

A I...

Q Degenhardt 6, that would be ERF 358849. It'll be up shortly.

EXAMINER NEWMARK: Off the record.

(Discussion off the record.)

BY MS. OVERLAND:

Q If you could focus on, for example, line 13 where the 13.42 percent which represents the share of Schedule 26A charges, when you were talking about accuracy and the purpose of your testimony, did you verify, for example, the input of 13.42 percent from Schedule 26A?

A No. That was outside the scope of what I was asked to do.

Q Okay. So, and that would then apply to the 10.6 percent following on line 20, none of these, you did not verify any of these?

A No. I had to concentrate on whether one discount rate or a different discount rate was the right one to use and why.

Q Okay. Clear. Now, in your testimony, the written testimony, page 4, you discuss the distinction between an approach from the customers' perspective and an approach from the perspective of its owners. Is there an approach in the record from the ratepayer perspective?

A As I understood the applicants' argument, they were trying to calculate the present value of the revenue requirement, which is what's the impact on the customer expressed in present value terms. So if you look at the debt benefits and you calculate it over the years and you bring it back, what is that number? And the argument here is which is a correct discount rate to use. So the answer to your question is I believe the applicants did look at it from the customers' perspective from that respect.

Q But are you clear that -- thus -- as I understand it, thus far in this proceeding the customer is distinct from the ratepayer, that the customers are like the transmission service customers? And what I'm wondering is did the ratepayers come into this calculation anywhere?

A I don't know how to answer that question because I did not examine the testimony from the perspective of differentiating between the first line of buyers of the transmission service and the ultimate buyers of the transmission service. So, I'm sorry, I can't answer your question from that point of view. If I understood your question. Did I?

Q I think so.

A Okay. Then the answer is, no, I didn't look into it.

Q I believe so. Now, in this written surrebuttal, you list several points about material shortcomings. How material is material when we're looking at a record going to the Commission?

A Could you point me to which of the references you're talking to in that testimony, what page and which line.

Q Sure. Starting on page 5 and beginning on 18. This would be your written testimony. And you're saying there are two material shortcomings in the calculations. And I'm wondering, how material is that in your view?

A Well, it would require -- material from a conceptual perspective, I haven't calculated the number so I can't tell you how material it is in dollars and cents. But they are fundamentally serious. And that's one of the reasons why in responding to an earlier question where I was asked to look at Mr. Pfeifenberger's calculations I said I have difficulties with those calculations. So, for instance --

EXAMINER NEWMARK: Just off the record.

(Discussion off the record.)

A In answer to your question, I would say that since I was at a very specific scope of what I was going to do, if you look at the recommendations if any that I would make at the tail end, which starts on page 8, you will see that one of the options available should the Commission decide is to go back and recalculate; and if you're going to recalculate, these are two of the big issues that I'd say would have to be revisited.

BY MS. OVERLAND:

Q Okay. And your comments were made -- just a minute. You note on page 6 that the accuracy may suffer if the calculations are not updated with the passage of time. And you were using information that had been developed a while ago.

Do you feel that it needs updating since the filing of that information on which you were relying?

A Yes, but the order of magnitude may not be material. What I mean by that basically is markets are continuously changing, sometimes more radically than others. Sometimes they move and you can come back and by sheer coincidence or serendipity you're at the right rate for the wrong reason. You're using a stale number that just happens to be the right one. You would have to basically go through and recalculate it and say let's -- if you decide to do it, which the Commission may or may not choose to do, obviously; but if you're going to do it again, you would basically have to say let's do all the calculations as of a particular date, and then you go and you check the markets and you ask the right questions and do your best to get the right answers as to what the marginal cost of equity, the marginal cost of debt and any preferred stock, et cetera, to calculate the marginal cost of equity or the marginal weighted average cost of capital applicable to this project at this point in time. That's really what it's getting to.

Q So to take a snapshot in time perhaps?

A You have to take a snapshot in, but you have to be pointing the camera in the right direction. You don't look backwards, you look forwards, for instance.

Q And then you also on page 8, as you're winding up with your suggestions, that the Commission consider clarifying the rules governing this type of application with respect to the economic evaluation of future projects.

A I'm sorry, which line are you on?

Q Okay. Page 8, lines -- the end of line 16 through 18.

A Okay.

Q And first, when you discuss, you know, economic evaluation of future projects, is this in essence looking at the MVP projects specifically or do you mean generally all projects evaluated by the Commission?

A No, I meant in general construction projects. I mean, it struck me that the questions -- the calculations being used were being approached from different angles and that it would be useful to clarify which the Commission would prefer we used.

MS. OVERLAND: And I have no further questions. Thank you.

EXAMINER NEWMARK: All right. So who else? Let's go off the record.

(Discussion off the record.)

EXAMINER NEWMARK: Let's get on the record.

CROSS-EXAMINATION

BY MR. KURTH:

Q Hi, Mr. Bacalao. My name is Joel Kurth. I'm a landowner intervenor.

A Good afternoon.

Q Good afternoon. Do you believe generally that load-serving entities pass on their costs plus an allowed return on investment to ratepayers?

A I'm sorry. I had difficulty hearing you. I apologize. Could you just repeat it again.

Q Do you believe that generally load-serving entities pass on their costs plus an allowed return on investment to ratepayers?

A That is -- what you are describing is the classical rate recovery mechanism. Yes.

Q In your testimony, when you discuss the project from the owner's perspective, are you referring to the corporate equity shareholders?

A I'm -- yes, I'm actually including the debt holders as well because you have to consider creditors. And in the specific case of Dairyland Power, of course we have to be cognizant of the fact that they are a cooperative. Doesn't change the fact that they have owners by a different name.

Q So from the perspective of these owners of a hypothetical transmission project, if the return on equity for the project is greater than the weighted average cost of capital for the project and the company and the project is of the same risk as the average corporate project for these companies, the economic value added for the project is positive for the corporate equity shareholders, correct -- for the owners if the ROE is greater than the weighted cost of capital?

A You said something at the outset which I think is incorrect, but accidentally. Could you start your question again and I will stop you and make sure that you said what you meant.

Q Sure. From the perspective of the owners of a hypothetical --

A Right.
Q -- transmission company, if the return on equity for the project is greater than the weighted average cost of capital for the project --
A Okay. Stop right there. When you talk about the weighted average cost of capital, you're including all the sources of capital including preferred and debt, long-term debt, short-term debt, and even off balance sheet financing. That's debt that's off the balance sheet.
The cost of equity is the highest cost -- typically the highest cost component of that blend. So the first part of your question, you know, you'll always have a cost of equity that's going to be higher than the weighted cost of capital. At best it will be the same if you fund it completely with equity. So I just wanted to make sure that we were on the same page, Mr. Kurth.
Q Let me try to clarify. When I say return on equity, I mean the actual net income returns.
A Oh, the earned return on equity as --
Q Correct.
A -- opposed to the cost of equity.
Q Correct.
A I'm with you now.

Q Should I repeat the question?
A Start again, yeah.
Q Okay. I'll add in the earned portion. So from the perspective of the owners of a hypothetical transmission company, if the earned return on equity for the project is greater than the weighted average cost of capital for the project and the company and the project is of the same risk as the average corporate project, economic value added for the project is positive for the owners, correct?
A Yes. The only thing I'm concerned about here is, again, just to make sure that we're talking apples and apples, weighted average cost of capital being the marginal cost to fund the project, earned return on equity being what the owners end up earning. And the short answer would be yes, you would have economic value created.
Q Thank you. Would it then follow if the weighted average cost of capital was greater than the earned return on equity for the project, the economic value added for the owners would be negative, correct?
A You would expect so, yes.
Q Is it fair then to call the weighted average cost of capital the hurdle rate for owners, to use a term of art?

A The approval rate?
Q The hurdle rate.
A The hurdle rate. Oh, I'm sorry. Yes. If properly calculated. If you'll give me a second. The whole concept of a hurdle is what's the minimum return that you should be able to earn on a project. If you can earn more on that, you will have a positive net present value, i.e., you're making money, it's worth it to go ahead. If you hit that hurdle, in other words, you get to zero net present value, you may as well walk away. Find something that gives you a better -- equivalent risk but a better return. And if you have a negative net present value, and that is where you're earning or below the weighted of the hurdle rate, then don't go ahead unless you have non-economic reasons to do it. You have a regulatory gun put to your head saying you've got to do it or there's some other reason that makes it compelling that balances out the negative financial character of the investment.
Q Thank you. Would you agree that the ratepayers also have a hurdle rate since they will through transmission charges passed through load-serving entities to -- plus an allowed return on equity to their bills, since they do in the end through this

mechanism pay for the project over its estimated life?

MS. LOEHR: Your Honor, I'm going to object to this line of questioning. Mr. Bacalao already testified that his surrebuttal testimony is very narrow in scope in analyzing the two discount rates in this proceeding and I think we've exceeded that here.

MR. JELINSKI: I join in that objection.

EXAMINER NEWMARK: Off the record.

(Discussion off the record.)

EXAMINER NEWMARK: Let's get back on the record. I'll allow the question.

A The least confusing way to answer the question, we tend to think of customers, as I think has been pointed out in earlier testimony, in terms of cost of service or customer charges. But there is an implied hurdle rate. And you could probably make it clearest by saying suppose you have a choice between accepting service from your local load-serving entity or doing something, making an investment that would provide you the same service on the same conditions with the same risks, but which you own. And what you would then have to figure out is as long as my investment in my alternative source of energy gives me a better return, is better, if you wish, than continuing the serving, then you have that implied hurdle rate. But it's confusing unless you think of it that way. Does that help you?

Q I think so. I'm just going to ask this last question in this line. From the perspective of the ratepayers, much like the transmission company owners, economic value added for the project, in the transmission company project like Cardinal-Hickory Creek, the economic value added for the project would be positive if the return on investment exceeds the hurdle rate of the ratepayers, that implied hurdle rate that you just mentioned in the answer to the last question?

A Yes. In plain English, if you could do better by accepting what this proposed transmission line is going to do and cost and benefits it's going to give you, if you can do better with that than any other alternative, you're better off, in plain English.

Q Thank you. So my next series of questions intend to get a little bit more understanding of the hurdle rate from the ratepayers' standpoint.

MS. LOEHR: Your Honor, this is what we just talked about. I thought that was all included in that line of questioning. That is beyond the scope of Mr. Bacalao's testimony.

EXAMINER NEWMARK: Off the record.

(Discussion off the record.)

(Recess taken from 3:40 to 3:54 p.m.)

EXAMINER NEWMARK: Let's get started. Back on the record. All right. So currently we have Mr. Kurth asking some cross-examination questions of the witness, and there's an objection that it's outside the scope of the witness's testimony. So I'm just going to have staff respond to that.

MR. JELINSKI: Yes. I think that it's been clarified in this case that the economic analysis and the -- therefore, the effect of the discount rate that's being discussed in Mr. Bacalao's testimony is related to transmission customers, not ratepayers. And so I think that any questions related as we've kind of -- I think it's been clear throughout the hearing that we have not inquired into any analysis related to the impact on ratepayers specifically. So I think any questions that would get at those impacts would be outside the scope of Mr. Bacalao's testimony.

EXAMINER NEWMARK: All right. So, Mr. Kurth, do you have any other questions?

MR. KURTH: I do.

EXAMINER NEWMARK: Okay. Go ahead.

MR. KURTH: I think I do. I'm sorry. Let's go off the record.

(Discussion off the record.)

EXAMINER NEWMARK: Let's get back on the record. Mr. Kurth, do you have any additional questions?

MR. KURTH: Let's stay off the record.

(Discussion off the record.)

EXAMINER NEWMARK: On the record. Go ahead.

BY MR. KURTH:

Q Ratepayers do participate in the risk of this project, correct?

A Indirectly eventually they do, yes.

Q I only have a few more questions, and these are regarding the FERC ROE incentive adder. This adder like other costs is in the end passed through to ratepayers in their electric bills, correct?

A That is correct.

Q Since ratepayers will in the end pay for this adder through charges on their electric bills, should -- I'm not saying that you did or have done -- but should the adder be considered from the ratepayers' perspective in the analysis of economic value for this project?

MR. LOEHR: Objection, it's beyond the scope of his testimony. He did not consider the impact to ratepayers or customers.

EXAMINER NEWMARK: I'm just going to let him answer. I think that was -- that's what he intended to imply by should, I suppose.

A I will try and honor your point in my answer. My response to that question would be that if you look at this project and you calculate, you know, what's the present -- net present value, if you want to look at it from an investors' perspective, or the net benefit eventually to customers, you do have to factor in what the various costs are.

So ultimately you are indirectly doing what you're talking about. But we're honoring the objection. Let's not go all the way to the ultimate ratepayers. Let's simply look at it from the perspective of saying how do we know how to judge the benefits of this thing? How do we -- what is the correct way to evaluate this in broad terms? So that was what I attempted to do.

BY MR. KURTH:

Q Thank you.

A It's up to you to judge whether I did it well or not.
Q To clarify, the applicants -- this is regarding the adder again. The applicants still receive the adder -- let's just say that they're approved for the adder, the project is approved, they go to FERC, they get approved for the adder. They receive this adder regardless of the discount rate used in the economic analysis of the project, correct? One has nothing to do with the other really, right?

MR. JELINSKI: I'll just object. I think that's outside the scope of what he's testifying to. Again, he's not testifying to what is eventually going to be recovered at FERC. He's testifying as to what the appropriate discount rate is and how he's using that methodology to calculate it.

MR. KURTH: May I respond to that?

EXAMINER NEWMARK: Yeah. Go ahead.

MR. KURTH: There is a probability that the adder does get added. Okay? And so you can do a probability weighted analysis and correct the discount for that probability that the adder is added.

EXAMINER NEWMARK: Okay.

MR. JELINSKI: Well, if you wanted to offer that testimony, you could have, sir. My only point in objecting is that that's not the testimony that Mr. Bacalao has offered here.

EXAMINER NEWMARK: Okay. Well, we did have -- we had a discussion of the FERC process and the risks and adder -- the necessity or the ability to put in adders. So I think I'll have him answer the best he can with -- as far as Mr. Kurth's question. So you can answer that. So do you want to read back the question or do you want to restate it?

BY MR. KURTH:

Q Applicants still receive the adder regardless of discount rate used in the economic analysis?

MR. JELINSKI: See, again, that's my objection. He can't -- he's asking for him to predict whether they'll receive the adder.

A Could I be helpful by basically recycling what I said earlier in a different way?

EXAMINER NEWMARK: Okay.

A That might be helpful.

MR. JELINSKI: No, there's question before you.

EXAMINER NEWMARK: Let's just leave it at that point.

MR. KURTH: I'll move on.

MS. OVERLAND: There's some real confusion here because Jewell Exhibits 6 and 7 are the FERC order for the adder.

EXAMINER NEWMARK: Right, but --

MR. CHASCO: That's not accurate. Those are different incentives.

EXAMINER NEWMARK: Right. It's something -- I think we're talking about something different. So if you have a different question, we can move on from this one.

MR. KURTH: No further questions. Thank you, Mr. Bacalao.

THE WITNESS: You're welcome.

EXAMINER NEWMARK: All right. Okay.

MR. JELINSKI: Just one question for redirect.

EXAMINER NEWMARK: Okay. Go ahead.

REDIRECT EXAMINATION

BY MR. JELINSKI:

Q Mr. Bacalao, I think we had some discussion about your reliance on data request response 1.169; and I think you expressed before that you relied on the spreadsheet that was produced as part of that data request response. Could you explain again what your understanding is of what was contained in that spreadsheet?

A Certainly. And I apologize if there was any typographical area or misleading. But what I did was go to the source of the number, 8.41, 8.41 percent, and evaluate where it came from, how it was calculated, not to verify that the calculations were correct, but to understand how it was derived. This information came as a result of the data request that was made by Alexander Vedvik and it was incorporated into his testimony. And that is the spreadsheet that you're referring to. If you look at that spreadsheet, it has a number of paths. The critical one where the 8.41 percent appears indicates that tax was calculated, tax benefits were calculated, that it was for all three of the investors; and that is the basis of saying, well, in that case I'm evaluating this.

MR. JELINSKI: Nothing further. Thank you, Mr. Bacalao.

EXAMINER NEWMARK: All right. Thanks. You're excused. Thank you.

(Witness excused.)

MS. OVERLAND: Your Honor, I'm not intending to be rude. But I have to go to Minnesota. For the record?