BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of Rocky Mountain Power's Proposed Revisions to Electric Service Schedule No. 37, Avoided Cost Purchases from Qualifying Facilities

Docket No. 14-035-T04

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HEARING PROCEEDINGS

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TAKEN AT: PUBLIC SERVICE COMMISSION
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Salt Lake City, Utah

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REPORTER: Nancy A. Fullmer, RMR

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PROCEEDINGS

THE HEARING OFFICER: Good morning, all. I'm Commissioner Clark and I'll be serving as the hearing officer today. To my left is Chairman Allen, and to his left is Commissioner LeVar. And we appreciate your attendance today.

We're here in the matter of Rocky Mountain Power's Proposed Revisions to Electric Service Schedule No. 37, Avoided Cost Purchases from Qualifying Facilities. This is Public Service Commission Docket No. 14-035-T04. Let's begin this morning with appearances. Counsel, if you would introduce the witness or witnesses that you have present today, that would be appreciated, as well.

MR. SOLANDER: Thank you, Commissioner Clark, Chairman Allen, Commissioner LeVar. My name is Daniel Solander. I'm representing Rocky Mountain Power. I have with me at counsel table Greg Duvall, Director of Net Power Costs for Rocky Mountain Power.

THE HEARING OFFICER: Thank you.

MR. JETTER: I'm Justin Jetter with the Attorney General's Office representing Utah Division of Public Utilities. And with me at the counsel table here is Dr. Abdinasir Abdulle for the Division. Thank you.

MR. OLSEN: My name is Rex Olsen. I'm here on behalf of the Office of Consumer Services. Bela Vastag, the analyst with the Office, is here as my witness.

THE HEARING OFFICER: Thank you. Is that O-L-S-E-N or O-N?

MR. OLSEN: E-N.

THE HEARING OFFICER: Thank you, Mr. Olsen.

MS. HAYES: Good morning. I'm Sophie Hayes representing Utah Clean Energy. And with me as Utah Clean Energy's witness is Ms. Sarah Wright.

THE HEARING OFFICER: Thank you.

MR. DODGE: Good morning. Gary Dodge here on behalf of Sun Edison. My witness Daniel Patry was unable to make it. He has an eight-month-old in the hospital and was unable to make it. So we were going to request--we are requesting that we submit his prefiled testimony as unsworn comments as opposed to testimony.

THE HEARING OFFICER: Thank you, Mr. Dodge.

MR. EVANS: Good morning. I'm William Evans here for Kennecott Utah Copper and Tesoro Refining and Marketing. We, too, have filed comments in this proceeding, but don't have a witness, and, incidentally, don't have cross for witnesses so I will ask that once the preliminaries have been done if I may be excused from the rest of this proceeding.

THE HEARING OFFICER: Thank you, Mr. Evans.

Are there any preliminary matters that counsel desires--or counsel desires before we begin?

Our approach today will be to hear first from the Applicant or the Company and then we'll take the witnesses in the order that the appearances of counsel were made unless there's objection to that process. And if there's nothing further, we'll begin.

Mr. Solander.

MR. SOLANDER: Thank you. Rocky Mountain Power would like to call Mr. Greg Duvall as its witness in support of the proposed changes to Utah Schedule 37. Mr. Duvall will explain the changes that the Company is proposing that were made as a result of the Commission's order in Docket 12-035-100.

THE HEARING OFFICER: Please raise your right hand. Do you solemnly swear that the testimony you're about to give should be the truth, the whole truth, and nothing but the truth?

MR. DUVALL: I do.

GREGORY N. DUVALL,

having been first duly sworn, was examined and testified as follows:

THE HEARING OFFICER: Thank you. Please be seated.

EXAMINATION

BY-MR.SOLANDER:

Q. Morning.

A. Good morning.

Q. Could you please state and spell your name for the record.

A. Yeah. My name is Gregory N. Duvall, D-U-V-A-L-L.

Q. And what is your current position for PacifiCorp/Rocky Mountain Power?

A. I'm the director of net power costs.

Q. And did you oversee the filing to proposed tariff changes as well as filing direct and rebuttal testimony in this proceeding?

A. Yes, I did.

Q. Do you have any changes or corrections to any of your testimony?

A. Yes. I have one change to my direct testimony on page 17, and that's on line 361 where I say that it will not reach its peak until between 4:00 p.m.--I'm sorry--3:00 p.m. and 4:00 p.m. It should be 4:00 p.m. and 6:00 p.m. Mountain Daylight time. I was confused on Pacific time when I wrote this testimony.

Q. With that exception, if I were to ask you all of the questions that are contained in your direct and rebuttal testimony, your answers would be the same?

A. Yes, they would.

Q. And have you prepared a summary of your testimony today?

A. Yes, I have.

Q. Would you please proceed with that?

A. Okay. So my direct testimony provides support for the Company's May 7, 2014 filing to update Schedule 37 prices. The Company made these changes largely as a result of the Commission's order in the renewable QF Docket 12-035-100. If the Company's changes are adopted, there are two primary remaining differences between Schedule 37 and 38.

Schedule 37 uses a proxy method while Schedule 38 uses a partial displacement differential revenue requirement method or the PDDRR. And Schedule 37 is a tariff that applies to all QFs that qualify for Schedule 37 while Schedule 38 is project and location specific.

These two differences allow Schedule 37 to remain simple to understand. The Company proposes five notable changes to Schedule 37 to align with the Commission's order in the renewable QF docket.

First, integration costs were added for wind and solar. Second, the capacity contribution was added for solar. The capacity contribution was already included for wind. And that was updated to conform with the latest Commission findings. Third, capacity costs based on a simple cycle combustion turbine were removed from the sufficiency period and retained in the deficiency period. Fourth, an assumed carbon tax was removed from the forward price curve. And, fifth, the pricing option that provides for a fixed capacity payment plus a flat energy payment was eliminated.

All parties support--supported inclusion of the capacity contribution for specific types of resources. Utah Clean Energy took exception to the remaining four other changes. My rebuttal testimony addresses the issues raised by Utah Clean Energy and later supported by Sun Edison.

The addition of integration cost and capacity contribution, removal of the capacity costs in the deficiency period--in the sufficiency period, and removal of the carbon tax assumption were direct results of the Commission's order in the renewable QF docket.

With regard to integration costs, the Company's required to manage the variations of intermittent resources regardless of size or delivery voltage. With regard to size, the Company currently has approximately 45 megawatts of Schedule 37 contracts with solar projects in Utah, which is--which in aggregate is consistent in size with a Schedule 38 QF. In addition, UCE's proposal is not practical as it would result in a three megawatt QF not paying for integration costs, but a 3.1 megawatt QF would.

With regard to delivery voltage, there is no reason to believe that there's a difference in integration costs, integration requirements between transmission and distribution voltage levels. The Company currently needs to integrate load, which is primarily at a distribution level. Intermittent resources at distribution level would require integration just as intermittent resource levels--resources at a transmission level would.

With regard to the capacity payment in the sufficiency period, the Company cannot avoid a simple cycle combustion turbine in a sufficiency period. The issue was fully litigated in the renewable QF docket. The same reasons supporting the removal of these costs from Schedule 38 apply to Schedule 37.

With regard to the removal of the carbon tax from the forward price curve, it's my understanding the Commission has not approved the inclusion of an estimate of the cost of complying with future carbon legislation in the avoided cost calculation. At this time the carbon tax assumption used in the IRP are just estimates and do not reflect costs the Company can avoid. Until carbon costs can be better defined, an estimate of carbon costs should not be used in the avoided cost calculation.

And then with regard to elimination of the capacity and energy payment options, removal of the capacity and energy payment option is necessary so there's only one avoided cost under Schedule 37 that properly reflects avoided costs for all qualifying facility resource technologies and does not create an opportunity for QFs to gain the methodology to extract higher profits at customer expense.

The Company chose to eliminate the capacity and energy payment option to keep customers from overpaying QFs for capacity that is not avoided. The problem with the capacity and energy payment option is the capacity payment is based on the highest 15-minute period within each month regardless of whether that 15-minute period alines with the Company's capacity needs.

UCE agrees the capacity payment should be reduced by the capacity contribution, but fails to change the measurement period of 15 minutes. They continue to support measuring the capacity contribution based on the 15 minutes. The volumetric pricing structure in the Company's proposal is calculated in the same manner as currently approved volumetric pricing.

In conclusion, overall, UCE and Sun Edison's position is to continue the status quo. This is unacceptable and is inconsistent with the Commission's finding in the renewable QF docket. Their proposal arms customers by artificially inflating the avoided costs over those costs the Company can actually avoid. That concludes my summary.

MR. SOLANDER: Thank you. At this time we would move that Mr. Duvall's direct rebuttal testimony be entered into the record. And Mr. Duvall is available for cross-examination from the parties or questions from the Commission.

THE HEARING OFFICER: Any objection to the evidence being received? The testimony is received. Cross-examination for Mr. Duvall?

MR. JETTER: I just have a brief question for Mr. Duvall.

EXAMINATION

BY-MR.JETTER:

Q. Good morning.

A. Good morning.

Q. A number of times in your opening statement, you referred to renewable QF docket.

Just to clarify for the record, are you referring to the Docket No. 12-035-100?

A. Yes, I am.

MR. JETTER: Thank you. That's the only question I had.

THE HEARING OFFICER: Thank you. Mr. Olsen?

MR. OLSEN: No questions.

THE HEARING OFFICER: Yes, Ms. Hayes?

MS. HAYES: Thank you.

EXAMINATION

BY-MS.HAYES:

Q. Good morning, Mr. Duvall.

A. Good morning, Ms. Hayes.

Q. I just have a few questions. Are you aware that most, if not all, of the Schedule 37 solar QFs interconnect to the Company's distribution system?

A. I'm not aware of the interconnection voltage level, no.

Q. All right. Did you take into consideration distribution system benefits associated with solar QFs connected to the distribution system in your calculation of Schedule 37 avoided costs?

A. So in terms of distribution system benefits, I'm not sure what is being referred to.

Q. Benefits at reducing peak demand on different distribution substations or deferring needed investments in the distribution infrastructure?

A. No, I did not. At this point I'm not aware of any savings that could come from those facilities.

Q. So you're not aware that the Company has studied distribution benefits such as the ones I just described associated with two megawatt PD projects interconnected at the distribution level?

A. No, I'm not.

Q. All right. Let's see, I want to move to your rebuttal testimony at lines 110 through 112 regarding carbon costs as used in the IRP.

A. Correct. Yep, I'm there.

Q. Okay. You say because the IRP risk assessment is only an estimate of potential future costs imposed as a direct cost on emissions, it should not be included in avoided cost calculations, correct?

A. That's correct.

Q. QFs contract with the utility for periods

up to 20 years; is that correct?
A. Yeah, that's correct.
Q. And you used projections of fuel prices and market prices and other assumptions in calculating avoided costs, correct?
A. That's correct.
Q. And the IRP utilizes price projections and assumptions about the future such as gas prices, market prices, capital costs, heat rates, O&M costs, et cetera; is that correct?
A. That is correct.
Q. And does the Company rely on projected environmental regulation compliance costs and carbon price assumptions in justifying its investments in pollution control technologies?
A. I believe it does because it uses the IRP models, which include those assumptions.
MS. HAYES: Thank you. I have no further questions.
THE HEARING OFFICER: Mr. Dodge?
MR. DODGE: Thank you. I do just have a couple questions.
EXAMINATION
BY-MR.DODGE:
Q. One, Mr. Duvall, you referenced the 3.1

megawatt Schedule 38 facility and the three megawatt 37 facility. How many 3.1 megawatt 38 facilities are you familiar with in your Rocky Mountain territory or in the Pacific territory?
A. I'm not familiar with any 3.1 megawatt facilities on Schedule 38.
Q. The reality is 38 facilities are 50 to 80 megawatts almost always and 37 facilities are very small, three and under, right?
A. They're very small, but, as I mentioned earlier, we have in aggregate 45 megawatts worth of Schedule 37 customers.
Q. I understand, but I'm responding to your suggestion it's unfair that a 3.1 megawatt facility on 38 has to be treated one way and a three megawatt facility treated another. In reality, that's not a fair comparison because that doesn't happen?
A. It's not happened to date.
Q. Secondly, you suggest equal treatment on the two other than the two issues that you identified as remaining, but isn't it true that they then treat it differently in all these seven or eight ways for all the years we've had a Schedule 37?

A. I don't know if it's for all the years, but I believe in my direct testimony I refer back to the original Commission order. It was a '94 order. I don't know if that was beginning of Schedule 37.

Q. And, in fact, the Commission has repeatedly chosen to treat Schedule 37 differently in many ways in those orders that you reference. Is that not a fair statement?

A. Well, I think prior to the 12-035-100 order, there were capacity costs included for Schedule 38 in the sufficiency period. The Commission got rid of those. So I think there were integration costs for wind, which was not something that was in Schedule 37 so that is new. So I'm not aware of any other differences that Mr. Dodge may be referring to.

Q. You can check, but I think you'll find that, in fact, 38 has never had--well, never--as many years as I've been watching 38, they've never had payments during the sufficiency period. I believe that's specific to Schedule 37. If that's true, that was a deliberate decision to treat capacity payments during the sufficiency period different for 37 than for 38 for many years if what I represented is true?

A. Yeah. I'm sorry, my previous answer was incorrect. Mr. Dodge is right, that there was no capacity in the sufficiency period in Schedule 38. However, as I recall, UCE argued to--and others--argued to add capacity payments in the sufficiency period in that docket and the Commission rejected it.

Q. I think that's a true statement. Presumably, the Commission had reasons that they treated the two schedules quite differently over the years. Would you agree with that?

A. I'm not going to speculate on the Commission's reasoning.

Q. Let me turn quickly to CO2 costs. If you were forced--and I can't force you--but if you were forced to be the spokesman for the Company and give this Commission your best guess as to the cost of your entire portfolio of resources ten years or 20 years into the future, do you agree with me it's highly likely that the Company's spokesperson forced to answer that would include some kind of one--some kind of carbon related costs in the future, whether they be an assumed carbon tax, whether they be regulations under the new EPA regulations for carbon, but they would probably assume some kind of cost is going to be in it. Would you agree with that?

A. I would suspect that--I mean, the landscape has changed. When the EPA issued their 111(d) rule in June of this year, it does not have a carbon tax, but it does have other ways of reducing carbon. And I think in the future, future IRPs, we will be looking at the impact of 111(d), you know, as it becomes more clear.

Q. You suggested one--well, do you suggest that even 111(d) projected costs not be included in QF pricing because they're speculative and their carbon related? Is that your position?

A. With regard to 111(d) my position is we don't know what 111(d) is going to bring yet, but it is a regulation as opposed to just an assumption. There is a regulation out there that people are working on, states are working on, companies are working on, and it's sort of the expectation of the future with regard to carbon at this time.

Q. So once the Company makes its best guess in--let's say in the 2015 IRP context of what the 111(d) compliance cost would be, is it the

Company's position that that best guess as to 111(d) compliance costs should be included in Schedule 38 and Schedule 37 avoided cost pricing?

A. Well, I'm not sure. I think--I mean, the difference between 111(d) and the current IRP assumptions is that 111(d) is actually a real, proposed rule. What's in the IRP now, the carbon cost adders--the carbon tax adders that are in the IRP right now are, I think, based on previous legislative proposals that have not come to fruition. I think 111(d) kind of marks a different future because it's actually a real regulation that's been adopted.

Q. But my question was is it the Company's position that once the Company projects those 111(d) costs--well, let me step back.

We probably won't know for five years or more for sure what 111(d) is going to cost. Is that a fair assumption, because of litigation--expected litigation, regulation process, et cetera?

A. I can't make that assumption.

Q. Assume with me it's going to be many years before the court process is done on 111(d) and we can project with certainty what those costs are--well, with more certainty what those costs are going to be. Would it be the Company's position that until that certainty is there or more certainty, five or whatever years down the road, that you not include 111(d) costs in avoided cost pricing?

A. It's a pretty hard question to answer. I think as we get to a point where we are more comfortable what 111(d) will be bringing--that may be a year from now. That may be three years from now. I don't know. There's a lot of work going on. And I think it will be a conversation that we have in the future in terms of what gets reflected in the Company's plans and the Company's avoided costs and all of that with regard to 111(d). I don't have the answers today.

Q. Couple of follow up. The current IRP does not assume that there will be a carbon tax, does it? It includes a carbon cost based on whether it be cap and trade, a direct carbon tax, or a 111(d) type regulation. It's an estimate of the cost of the Company of complying with expected carbon regulation. Is that not a fair statement?

A. I always thought it was a tax. It starts at $16 a ton beginning in 2022 and escalates from there.

Q. Have you read the IRP chapter that deals with that, with the why they include a carbon cost as opposed to a carbon tax? Or they do that as a surrogate for expected carbon costs of some sort? Do you disagree with that?

A. Yeah, I don't disagree with that. I mean, I think it's represented in the models as a tax, but I think it is to capture the impacts part of the future from a planning perspective.

Q. So I started by saying if I could force you to be the spokesperson for the Company and give me your best guess as to whether there will be some kind of carbon cost in the Company's portfolio ten, 15, 20 years from now, if the answer to that would have been yes, were I the Company spokesperson I would guess there will be, and yet if you set avoided cost pricing today ignoring any such cost, you're underpaying those customers based on true avoided costs, are you not?

A. No. I don't believe that estimates are true of what it costs. They're not costs the Company can avoid at this point.

Q. Are gas costs in the year 2025 an

estimate or a known fact?

A. Well, they're a forecast provided by third-party expert group.

Q. And how reliable have they been in the past? You've done some backcasting of that. Have they been really reliable in projecting fuel costs, essentially gas costs?

A. I think that information's in the IRP. I'm not sure how I would characterize it.

Q. Isn't the reality it's been woefully inadequate in predicting and forecasting actual gas prices?

A. I would not say that. I would say that the forecasts from the actuals don't match, but I would not characterize them as woefully different.

Q. Why is it you choose to pick on carbon projections as opposed to fuel projections to leave out of this pricing for QFs?

A. Well, we know we will have fuel expenses and we don't know that we'll have any carbon tax.

Q. And yet the Company, for at least a decade or so, has included and assumed carbon costs in its IRP for purposes of justifying wind plants that the Company bought, for the purpose of justifying environmental investments in its plant.

So the Company relies upon an assumed carbon cost in the future to justify its own investments and yet you're not willing to project that for the purpose of paying people that want to build small QFs. Is that a fair statement?

A. No, it's not a fair statement.

Q. What part is not fair about that?

A. The IRP looks at both owned resources and purchased resources. It doesn't really differentiate as to whether the Company's going to own it or buy it under a PPA like a QF.

Q. Well, that wasn't the point of my question. It was you did, in fact, build how many hundred megawatts of wind--

MR. SOLANDER: I'm going to object. Mr. Dodge can ask the question without saying what the point of his question is.

THE HEARING OFFICER: Could you just restate the question, Mr. Dodge?

MR. DODGE: I guess I don't understand the objection. I have to object--

MR. SOLANDER: My objection is it's not a question you're asking. You're making a speech and then following up with a question.

MR. DODGE: This is cross-examination,

counsel. I'm allowed to do leading questions and to set forth my assumptions.

THE HEARING OFFICER: Mr. Dodge, rephrase your question or restate the question.

MR. DODGE: Thank you, Mr. Chairman.

BY MR. DODGE:

Q. The question was has the Company not included an assumed carbon cost in its future cost scenarios or projections for purposes of justifying wind projects that the Company--maybe some did it, bought by contract, too. That's why I was saying it was not the point of the question. But you did build hundreds of megawatts, thousand-plus megawatts of wind. You, in part, relied upon an assumed carbon cost to justify that and to justify fairly massive environmental improvements at your coal plants. Is that not accurate?

A. Well, I believe there were--we used the IRP framework to justify resources, whether they're company owned or PPAs. But when we get to actually entering the contract with a QF or our own facilities or PPA that's not a QF, we pay actual costs. We don't pay costs that are not actual, that are not--you know, that don't occur.

Q. So what's the actual cost when you buy wind energy from a wind developer? Do you sign a PPA? You do pay an actual cost?

A. We are paying the cost that we agreed to in the PPA.

Q. You pay a negotiated cost. And isn't the QF context trying to duplicate that? Because we don't have arms-length negotiations. We're trying to determine what you would pay if you went out and deliberately negotiated for that power purchase agreement at the full cost you would have paid had you chosen to do it yourself.

A. No. I'm not sure I understand the question. But in a PPA with a third party that we acquire through our fee, whatever they bid in is what they bid in. I don't know what they put in there in terms of their own assumptions about carbon costs in the future.

Q. So what I'm trying to get at is why you're picking on carbon costs alone when all the projections that are just that in a 20-year context. Until this year, you had never proposed that carbon costs were too ambiguous or too uncertain to remove. Your testimony says it's only because you read the Commission order suggesting it. Is that a fair statement?

A. Yes, it is.

Q. So if the Commission in that order, in the Schedule 38 docket, did not intend to say that you must remove your assumed carbon costs that you've used in the IRP for a decade or so, then your proposal to take it out would be not well founded unless they choose a different basis for it. Is that a fair statement, too?

A. No. And just--you know, we did look at--I did look at the order, and I believe that that was what the Commission said. But, as a practical matter, we don't have carbon costs or carbon tax or whatever that we know of that we're going to avoid and, therefore, it shouldn't be included in an avoided cost at this time.

Q. Nor do you know what the gas prices are going to be in ten years and yet you pay for that?

A. We know that we're going to burn gas and it's going to have a cost.

Q. And you can sit here as the Company rep and say you don't know you're going to have some kind of carbon cost?

A. Well, I'm not the Company rep, but I believe I've answered this question already. I think there will be some--I mean, 111(d) that directs as carbon emissions and there's costs associated with complying with 111(d).

Q. So failure to include any assumed carbon cost will, by definition, underpay true avoided costs to QFs if that cost projection is completely ignored? Is that not a fair statement?

A. No, it's not.

Q. You don't agree with that even though you've admitted there will be some costs and you're proposing not to pay them, you don't see that as not reaching full avoided costs, this failing to reflect true avoided costs?

A. Well, I think there's probably more issues with 111(d). There may be--we may need to relook at avoided costs when we know more about 111(d). Due to the fact that there may be some costs that we will need to incur under 111(d) that may not be appropriate for paying avoided costs under PURPA.

MR. DODGE: I have no further questions.

THE HEARING OFFICER: Mr. Evans?

MR. EVANS: No questions. Thank you.

THE HEARING OFFICER: Redirect?

MR. SOLANDER: No questions. Thank you.

THE HEARING OFFICER: Questions from the Commission?
COMMISSIONER LeVAR: No.
CHAIRMAN ALLEN: I don't have any.
THE HEARING OFFICER: I have just a couple of questions for you--or a few questions for you, Mr. Duvall.
EXAMINATION
BY-THE HEARING OFFICER:
Q. First, in your direct testimony where you describe the current Schedule 37 methodology--I think it's about lines 96 and forward on page 5.
A. I'm there.
Q. Okay. Relative to the prices that are provided in the schedules that were presented with your request for tariff modification, looking first at prices for base load, how is the methodology, if at all, different as reflected in those schedules in relation to the current methodology as you describe it here on page 5? In other words, what adjustments have you made that would, if any, affect those base load price calculations?
A. So for base load the integration cost would not apply. The capacity contribution would

not apply. Removal of the capacity costs in the sufficiency period would affect that. The removal of the carbon from the official forward price curve would affect it beginning in 2021. And the elimination of the one pricing option would affect it.

Q. And so it's those latter adjustments--

A. Latter three, correct.

Q. --that you apply to this--what I'll call the ten megawatt differential revenue requirements method? Are there any other changes in that method that you've applied in the base load schedule calculations?

A. Not that come to mind.

Q. And then for the schedules that relate to wind or the two types of solar, the other adjustments would be applied, but, again, to the same ten megawatt differential revenue requirement approach that's been used historically?

A. Yes. The integration costs and the capacity contribution costs.

Q. Thank you. Do you happen to have Ms. Wright's--Sarah Wright's rebuttal testimony in front of you?

A. Yes, I do.

Q. Would you turn, please, to page 4? I want to ask you about her testimony at lines 60 through 66. Here she talks about relationship between an eight cent per kilowatt hour price under Schedule 38. And then--I'm sorry--Schedule 37. Prices under Schedule 38 that she characterizes as having generally been in the five to six cent per kilowatt hour range. And then under--prices under the proposed--the Company's proposed method of three to four cents, are those correct relationships as you understand them? In other words, is this factually correct?

A. So the schedules under Schedule 38--or the prices under Schedule 38, which were the five to six cents, were from Mr. Vastag's testimony. And I think what he's aware of are the prices that have been brought before--the contracts that have been brought before the Commission for approval. We have given a lot of prices out since then. And while those are project specific and I don't know if they're confidential or not, but I think I can say that they're in the range of three to four cents.

Q. And you're referring to Schedule 38?

A. Schedule 38, the more recent prices that we've been putting out.

Q. Couple of other subjects, Mr. Duvall.

A. Okay.

Q. Can you help us by sort of giving us an update on where the company stands with regard to the solar integration study? Do you have an idea of when the Commission might see that?

A. Well, the sequencing that the folks are working on this is that they put the capacity factor study. There were two studies.

Q. Right. I wanted to ask you about the other one, as well, so if you want to update us on all of them, that's great.

A. Okay. So on the capacity factor study, the study--technical study has been complete. It was complete in August. It's being reviewed. Testimony is being prepared. And I would hope that maybe by the end of this month or early next month, that will be filed with the Commission.

Q. And that would apply to both wind and solar?

A. Yes, it would. Yeah, I believe that's right. And then the solar integration study is further down the pike. At this point, we don't have actual solar data to help us put that study together. So at this point I've asked the folks who are working on it and I have not gotten a firm schedule at this point.

THE HEARING OFFICER: Those are all my questions. Any follow-up, Mr. Solander?

MR. SOLANDER: No, thank you.

THE HEARING OFFICER: Thank you, Mr. Duvall--oh.

COMMISSIONER LeVAR: Can I have a follow-up?

THE HEARING OFFICER: Absolutely.

EXAMINATION

BY-COMMISSIONER LeVAR:

Q. Just as a follow-up to your answer to Commissioner Clark's question --

THE HEARING OFFICER: Hang on. You don't have to ask me--you asked me if you could follow up. I said you don't have to ask me.

COMMISSIONER LeVAR: Okay, sure. Just so you would know what I was doing, though.

THE HEARING OFFICER: Absolutely.

BY COMMISSIONER LeVAR:

Q. Your answer with Mr. Clark on this Schedule 38 pricing on the four completed dockets versus the ones that are in process--and, again, if I'm asking a question that focuses on the ongoing dockets, please say so. But is the biggest--all of those, the ones that Mr. Vastag calculated and the ones that process are all under the new order, the 12-035-100 docket?

A. Correct.

Q. Is the difference in pricing between those the difference in what's being displaced or is there something else that's driving the difference between five/six and generally three to four?

A. No. It's in the amount of QF requests we've got in a queue. And as you get more and more QF requests, you go lower down on the stack in terms of what's displaceable next.

COMMISSIONER LeVAR: Thank you.

THE HEARING OFFICER: Thank you. You're excused, Mr. Duvall.

MR. DUVALL: Thank you.

THE HEARING OFFICER: Anything further, Mr. Solander, with your direct case?

MR. SOLANDER: That's my direct case. Thank you.

THE HEARING OFFICER: Thank you Mr. Jetter?

MR. JETTER: Thank you. The Division would like to swear in and call our first witness, Dr. Abdulle.

THE HEARING OFFICER: Do you solemnly swear that the testimony you're about to give should be the truth, the whole truth, and nothing but the truth?

MR. ABDULLE: I do.

ABDINASIR ABDULLE, Ph.D.,
having been first duly sworn, was
examined and testified as follows:

THE HEARING OFFICER: Thank you, Dr. Abdulle. Please be seated.

Mr. Jetter, whenever you're ready.

MR. JETTER: Thank you.

EXAMINATION

BY MR. JETTER:

Q. Dr. Abdulle, would you please state your name and occupation for the record. And would you please spell your name also for the court reporter?

A. My name is Abdinasir Abdulle. First name Abdinasir, A-B-D-I-N-A-S-I-R. Abdulle, A-B-D-U-L-L-E. And I'm a technical consultant for the Division of Public Utilities.

Q. Thank you. And did you prepare and file direct and rebuttal testimony in this docket?
A. Yes, I did.
Q. Do you have any changes or updates that you would like to make to either of those filings, prefiled testimony?
A. No changes.
Q. And if you were asked the same questions that were included in both of those filings today, would your answers remain the same?
A. Yes.
Q. Thank you. Have you prepared a brief statement summarizing the position of the Division of Public Utilities?
A. Yes, I did.
Q. Please go ahead.
A. I have filed direct and rebuttal testimony in this proceeding. In those I addressed the proposed change that the Company filed. Those changes were the ones that were just recently released down by Mr. Duvall. But to refresh, it's including the integration and capacity costs is for wind and solar qualifying facilities in avoided cost calculations for Schedule 37. Removing capacity costs simple cycle

combustion turbine from the calculation of avoided costs for a Schedule 37 using the sufficiency period. Removing those from the official forward price curve the specific adder that represents a future carbon dioxide tax. Eliminating the capacity and energy payment options related to the monthly payments. And also keeping the seasonally differentiated on-peak and off-peak energy prices, but providing this pricing scheme for a base load facility, wind facility, and a solar facility separately.

In addition to those that I just listed, changes, there were other routine changes that the Company usually do it on a yearly basis that were made. The Division reviewed proposed changes and concluded that with the exception of removing the carbon dioxide tax adder from your official forward price curve, that these changes are just, reasonable, and in the public interest. I recommend the Commission approve it.

Regarding the carbon dioxide tax adder, the Division found that the Commission direction in Docket 13-035-100 was ambiguous and would not make a decision, therefore, did not take a position on that issue.

Thank you. That concludes my summary.

MR. JETTER: Thank you. The Division would like to move at this time for entry of the direct and rebuttal testimony of Dr. Abdulle into the record.

THE HEARING OFFICER: Any objections? They're received.

MR. JETTER: Thank you. I have just one quick follow-up question.

BY MR. JETTER:

Q. I believe you said 13-035-100 and I think the docket number may be--is it possible it's 12-035-100?

A. That's correct.

MR. JETTER: Thank you. I have no further direct questions and our witness is available for cross. Thank you.

THE HEARING OFFICER: Thank you, Mr. Jetter.

Mr. Olsen?

MR. OLSEN: We have no cross. Thank you.

MR. SOLANDER: No questions, thank you.

THE HEARING OFFICER: Mr. Solander, sorry to jump over you.

MS. HAYES: Thank you, Commissioner

Clark.

EXAMINATION

BY MS. HAYES:

Q. Good morning, Dr. Abdulle. In your direct testimony at line 58--

A. Page?

Q. I don't know.

A. I got it.

Q. Oh, thank you. You say, "The Division believes that with the exception of some simplifications that are already in place, all QFs should be treated equally and their avoided costs should be calculated the same way regardless of their sizes." Could you tell me what are those simplifications already in place?

A. Indifferent here in the Schedule 37 from Schedule 38 given the fact that Schedule 37 customers are small. Those simplifications are outward silent to remove the burden and say from Schedule 37 customers.

Q. So would you agree that the size of the resource modeled in the grid run is one of those simplifications?

A. That's the differentiation between two schedules is the time.

Q. And also that the supply curve of the resource model and grid?

A. I'm not sure what you mean.

Q. I'll make it clearer. I'm sorry. I'll get to that. Can I lead you to your rebuttal testimony at line 42? You say capacity payments during the sufficiency period when an FOT is displaced, which includes a capacity payment, would overcompensate the QF contrary to the ratepayer indifferent standard; is that correct?

A. Correct.

Q. I would like to ask you some questions about how energy payments in the resource sufficiency period are calculated under Schedule 37 and 38 and how they're different.

A. Yeah.

Q. So under Schedule 38, avoided energy costs in the sufficiency period are calculated on differential grid runs and the QF resource is modeled with the supply curve based on its actual supply characteristics; is that correct?

A. I'm not sure what that's asking, but the way I understand it and the intent I had about this statement is the fact that when running the grid, when the QF is grazing the front of transaction, that--the grid model captures the whole avoided cost because it included the capacity costs that were there. So adding it again would overcompensate the--

Q. Sure. But I just want to ask you some questions about how Schedule 37 and Schedule 38 differ. So in Schedule 38, the proxy resource, if you will--although I may be conflating my methods--but was it the resource modeled for it to calculate energy payments in the sufficiency period is based on the QFs that has approached the company? So, for example, if I'm a solar QF developer and I'm approaching Rocky Mountain Power for a Schedule 38 contract, in order to figure out avoided cost energy prices in the sufficiency period, the Company will model a grid run with the supply curve of--that corresponds with the type of resource I'm proposing, size and supply curve; is that correct?

A. Correct.

Q. And, as you were saying, the Commission found that to the extent the QF supply curve displaces front office transactions in that grid run, the avoided costs compensate for avoided capacity costs as a component of the avoided front office transactions; is that correct?

A. Correct.

Q. So under Schedule 37, energy costs in the sufficiency period are based on the addition of a zero cost ten average megawatt resource; is that correct?

A. Correct.

Q. And that resource is added as a flat decrement to load, correct?

A. Correct.

Q. So the energy price based on this flat decrement to load is an average energy price that does not take into consideration the supply characteristics of unique QF resources or the resources that an actual QF would displace; is that correct?

A. It does not include the unique characteristics of the QF.

Q. So it's possible, isn't it, that the Schedule 37 energy price does not offset summertime front office transaction capacity to the same extent that a solar QF's actual supply curve would offset summertime front office transaction capacity; is that correct?

A. I don't agree with that. When you spread your front office transactions because of the size of the qualifying facility that's offsetting, the grid model will calculate what avoided cost would be or should be. And that's the number that would be--the number we would use in avoided cost. And that includes capacity costs of the facility.

Q. But do you agree that an actual solar supply curve may displace more front office transactions than a flat decrement to load?

A. A comparison between flat decrement load and a solar?

Q. Supply curve would--produces most of its energy in the summertime?

A. Yes.

Q. So a QF that produces most of its energy in, for example, third quarter heavy load hours would not get compensated or would displace more front office transactions than a ten megawatt flat load decrement? I think that's what I just asked, sorry.

And so to the extent that an actual solar QF produces most of its energy in those high--those heavy load hours, it does not get compensated to the same extent under Schedule 37 as an actual solar supply curve would get compensated under Schedule 38; is that correct?

A. There are so many different small QFs that are out there, solar, wind, whatever you call it, and each one if they go on we use the specific characteristics of those things and they negotiate prices Schedule 38 would be, that would put a lot of burden to these small QFs.

So these changes, these differences we're talking about now, are the reasoning--are the difference between the two. And those--that specific QF, small QF, would be different than the other one. And different than the other one. They are all different. So that's why we're choosing the price to avoid all those problems.

Q. Right. So would you agree that by simplifying the method, Schedule 37 QFs are not compensated in the same way or to the same extent, for example, under Schedule 38, which models the actual supply curve?

A. Yes.

Q. So if simplifications to Schedule 37 prices have the affect of artificially reducing 37 prices compared to Schedule 38 prices, do Schedule 37 prices discriminate against small QFs relative to large QFs?

A. I don't think so. The simplifications are cost saving for these small QFs, not cost burden on them. So they're not going to be undercompensated based on these calculations that are put there in the grid model and the calculations for avoided costs. I don't think that they are under.

Q. Even though they're compensated less for, for example, their energy and capacity based on the way energy prices are calculated?

A. The fact that we are posing a price that would be applicable to all small QFs, it's not--that price as we're quoting may not be the same if we have to calculate each one of them individually.

Q. Hasn't--oh--

A. Go ahead.

Q. Go ahead. Sorry, I didn't mean to cut you off.

A. I'm finished.

MS. HAYES: Okay. I have no further questions. Thank you.

THE HEARING OFFICER: Mr. Dodge?

MR. DODGE: Thank you.

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EXAMINATION
BY MR. DODGE:
Q. Dr. Abdulle, good morning. In your testimony you reference, you know, the importance of the ratepayer indifference standard, right?
A. Yes.
Q. The Division recognizes, does it not, that another goal of PURPA and Utah's mini purpose statutes are to encourage the development of small clean renewable projects?
A. Correct.
Q. If--you stated several times that some of the proposals being made by Utah Clean Energy you oppose on the grounds that it would violate the ratepayer indifference standard. Does the Division give equal consideration to whether the approach the Company uses in setting avoided cost rates may undervalue the pricing--the avoided cost pricing?
A. I understand the question, are you saying reconsider the fact that the price proposed may be under?
Q. Yes. Is that an issue that you would be concerned about?
A. Yes.

Q. And I guess has the Division had any discussions about their level of confidence in a 20-year levelized three to four cent energy plus capacity future? If that's the prices of the current avoided costs are spitting out for a Schedule 37 and we heard today for Schedule 38 projects, does the Division have confidence that the 20-year levelized cost of resources energy plus capacity is going to be in the 30 to $40 per megawatt range--megawatt hour range?

A. The Division did not have a specific discussion on that specific question in this proceeding.

Q. As a Doctor of Economics and a utility specialist, what level of confidence do you have that that will be the pricing we'll see over the next 20 years?

A. Over 20 years, I cannot say--my confidence level is hundred percent, but I cannot--I don't know which to calculate what that specific number would be present number, but we are confident that to a certain extent that these would be true.

Q. And you do accept that ratepayers are not indifferent and are, in fact, damaged if avoided cost rates are set too low and it makes projects that would otherwise be built not be built, QF projects?

A. Yes.

MR. DODGE: Okay. Thank you. No further questions.

THE HEARING OFFICER: Redirect?

MR. JETTER: No redirect, thank you.

THE HEARING OFFICER: Questions from the Commission? Dr. Abdulle, you're excused. Thank you very much.

DR. ABDULLE: Thank you.

THE HEARING OFFICER: Anything further, Mr. Jetter?

MR. JETTER: No, thank you. That concludes the Division's presentation.

THE HEARING OFFICER: Mr. Olsen?

MR. OLSEN: At this time we would like to call Bela Vastag.

THE HEARING OFFICER: Do you solemnly swear that the testimony you're about to give will be the truth, the whole truth, and nothing but the truth?

MR. VASTAG: Yes, I do.

BELA VASTAG,

having been first duly sworn, was
examined and testified as follows:
THE HEARING OFFICER: Thank you very much. Please be seated.
EXAMINATION
BY-MR.OLSEN:
Q. Could you please state your name for the record, please, and your position.
A. My name is Bela Vastag, B-E-L-A. Last name, Vastag, V-A-S-T-A-G. I'm a utility analyst employed by the Office of Consumer Services and my business address is here in this building, 160 East 300 South, Salt Lake City.
Q. On August 12, 2014, did you provide initial testimony in this proceeding?
A. Yes.
Q. And on August 29, 2014, did you provide rebuttal testimony?
A. Yes.
Q. At this time do you have any changes to make to your testimony?
A. No, no changes.
Q. So if you were asked those questions again, your answers would remain the same?
A. Yes.

Q. Have you prepared a summary of your testimony?

A. Yes, I have.

Q. Would you please read that for the record?

A. In my testimony I provided the Office of Consumer Services' position on the Company's proposed Schedule 37 changes to Schedule 37, which I will summarize. The Office recommends that the Commission approve the Company's proposed changes. The Office supports the changes because they will reestablish ratepayer indifference for pricing under Schedule 37 and it will implement Commission approved guidelines for QF avoided cost pricing in Docket 12-035-100.

The current Schedule 37 pricing format that includes a capacity payment can provide QF compensation that greatly exceeds the Company's avoided costs. This violates the PURPA standard of ratepayer indifference. In addition, the current two pricing formats under Schedule 37 provides substantially different payments to a QF. Again, this violates the PURPA standard of ratepayer indifference. Therefore, the Office supports the Company's proposal to eliminate the pricing format that includes the capacity payment and only provide QF payments in an energy based format for a per kilowatt hour basis.

This payment format is also consistent with how large QFs are paid under Schedule 38. The Company's proposed changes also implement certain provisions for QF avoided cost methods, which were ordered by the Commission in Docket 12-035-100 for large QFs under Schedule 38. These provisions include, one, integration charges for wind and solar QFs. Two, capacity contribution values for wind and solar QFs. Three, no additional capacity payments are to be given to QFs during the sufficiency period. Four, no specific adjustments to QF pricing are to be made for the value of fuel price hedging, fuel price volatility, or environmental risk.

The Company has complied with these four provisions in their proposed Schedule 37 pricing by implementing integration charges and capacity values for wind and solar QFs, by removing capacity payments based on a simple cycle combustion turbine during the sufficiency period, and by removing the effect of a hypothetical CO2 tax from the forecast of wholesale electricity prices.

The Office asserts that these changes proposed by the Company are appropriate because the method for calculating QF avoided cost pricing should be consistently applied whether for large QFs under Schedule 38 or for small QFs under Schedule 37. The Office understands that an order to provide small QFs streamlined contracting process under Schedule 37 be avoided cost modeling and needs to be simplified and cannot be exactly the same as in Schedule 38. However, the provisions ordered by the Commission in Docket No. 12-035-100 should be applied to all QFs. The Office also understands that even when the methods for calculating avoided cost pricing were applied consistently, prices will be different for different QFs because pricing is also dependent on such factors as when the modeling is done, which IRP preferred portfolio is used, where the QF is in the queue, et cetera.

Some parties in this proceeding claim that the modeling of Schedule 37 pricing needs to be consistent with certain assumptions from the Company's IRP. Some claim that assumptions should be the same as the IRP base case. It is unclear what the IRP base case is. The Office believes--the Office does not believe that PURPA requires QF avoided costs be consistent with the utilities IRP, but that they should be reflective of actual costs the Company will avoid. Even if some type of consistency with the IRP was mandated, this would be difficult to achieve since each IRP models multiple cases with widely varying assumptions. The cases and assumptions model chain--the cases and assumptions model change each IRP cycle.

On the other hand, the IRP and QF avoided cost pricing are prominently linked because the IRP's preferred portfolio is used in the modeling of QF prices.

In addition to supporting the Company's proposed changes, my testimony also provides two additional recommendations by the Office. These recommendations are, one, the Company should work with stakeholders and regulators concerning any QF related transmission constraints and make a filing with the Commission before implementing any change to avoid cost pricing for transmission constraints. And, number two, in future annual Schedule 37 filings, the Company should include a list of projects that have contracted with the Company under Schedule 37 during the previous year. And this list should include specific information about each project. That concludes my summary.

THE HEARING OFFICER: Anything further?

MR. OLSEN: No, Your Honor. Mr. Vastag is now available for cross-examination.

THE HEARING OFFICER: And you would like us to receive in evidence his direct and rebuttal testimony?

MR. OLSEN: Yeah. I didn't know exactly when you wanted me to ask that, but I would, Your Honor.

THE HEARING OFFICER: That's fine.

MR. OLSEN: Thank you.

THE HEARING OFFICER: Is there any objection? It's received. Thank you. Cross-examination?

MR. SOLANDER: No questions. Thank you.

MR. JETTER: No questions from the Division.

THE HEARING OFFICER: Thank you.

MS. HAYES: Thank you, Commissioner Clark.

EXAMINATION
BY-MS.HAYES:
Q. Good morning, Mr. Vastag.
A. Good morning, Ms. Hayes.
Q. Can I direct you to your rebuttal testimony, page 8, starting at line 151?
A. Okay.
Q. You say even if the capacity payment format could be modified to produce the same total payments as the energy only format for the proposed rates in this proceeding, the likelihood is that they will deviate again in the future. It would be administratively burdensome to continually review these rates to ensure they remain in sync. Is that correct?
A. Yes.
Q. Are you aware that the Commission requires that the Company review its Schedule 37 prices once a year or whenever the 25 megawatt cap is reached?
A. Yes.
Q. Are you aware that the Commission requires the Company to file updates to its Schedule 38 pricing and input assumptions four times a year?

A. I believe it's four times.
Q. Are you aware that Schedule 38 pricing, which is unique to specific QFs, changes with every QF based on the QF resource type and size and the resources it displaces?
A. Right. Every QF, the pricing is different.
Q. So you are aware, then, that Schedule 38 prices are not fixed at a specific rate; is that correct?
A. That's correct.
Q. There's no platonic ideal avoided cost?
A. Unfortunately.
Q. Yeah, right. And Schedule 38 prices and terms are negotiated based on a Commission approved method; is that correct?
A. Yes.
Q. Whereas Schedule 37 prices are not based on a specific QF resource, but are rather based on a flat ten megawatt load decrement; is that correct?
A. I'm not exactly sure what you mean by flat ten megawatt load decrement, but I'll--
Q. It's a--
A. --accept that--

Q. Okay.
A. --that if you say that that's what it is.
Q. Okay. So it would not make sense to reset Schedule 37 rates every time a new Schedule 38 PPA is signed or removed from the queue, would it?
A. No.
Q. Based on administrative efficiency, for example?
A. Right. The purpose of--one of the purposes of Schedule 37 is to provide a simple process for QFs to contract with the Company.
Q. Do you recognize that there will always be some inconsistency between Schedule 37 and Schedule 38 pricing, correct?
A. Yes.
Q. If you could continue looking at your testimony starting where I left off at 155, therefore, the Office asserts that there should be just one payment format for Schedule 37 incorporating the Company's avoided cost and for simplicity of consistency with Schedule 38, that payment format should be an energy only format?
A. Yes.
Q. Why is it important that the single

payment option for Schedule 37 be an energy only payment?

A. Well, in order to--the first part of the reasoning is that there shouldn't be two different payment formats for Schedule 37 because they, as we've seen in the current schedule, they produce different prices. So if we need to choose one of them, then one reason to choose the energy only is that that's the way Schedule 38s are paid. So it would be using the similar pricing format between the two schedules.

Q. But you mentioned and you recognized previously that it would be possible to set both payment options so they were consistent, correct?

A. Anything's possible, yeah, when you model things at the beginning.

Q. Anything is possible, what a positive statement. And we've already established that Schedule 38 pricing is a moving target, correct?

A. Yes. It changes with each PPA.

Q. And that Schedule 37 and 38 prices may coincide, but will never likely be exactly the same, correct?

A. No. Just by definition the way modeling works, they won't be exactly the same.

MS. HAYES: Thank you. I have no further questions.

THE HEARING OFFICER: Mr. Dodge?

EXAMINATION

BY-MR.DODGE:

Q. Good morning, Mr. Vastag.

A. Good morning.

Q. I'm looking at your rebuttal testimony beginning on line 53. This is dealing with CO2 taxes. And you indicate the position of the Office is based on the plain language from the Commission's order in the Schedule 38 QF docket that, quote, we approve no specific adjustments to value fuel price hedging, fuel price volatility, or environmental risk. Is it the Office--or is it your view that a plain language of that order said that the Company was, in fact, instructed to make four specific adjustments to its normal grid modeling to remove the impacts of the projected CO2 costs?

A. Excuse me, did you say four adjustments?

Q. Will you accept, subject to check, that, in fact, the Company made adjustments to four of the grid files? There are four grid files normally used for grid purposes, including QFs that included some impact from CO_2 cost assumptions.

A. Can you explain what those--I mean, what are those grid files--what data do they contain?

Q. You and I are both at a handicap here. I suspect you don't run grid and neither do I.

A. No.

Q. But I'll tell you what I understand and I'll just ask you subject to check, then I'll ask my question. I'm not asking you to verify this. But it's my understanding that carbon costs were adjusted out of the grid file called energy charge, adjusted out of the grid file called fuel price, and adjusted out of the grid file called other cost, and adjusted out of grid file called price forecast. In other words, there are four specific input files to the grid to which specific adjustments were made to remove the impact of the CO_2 costs, as I understand.

Now, without asking you to verify that, if you accept that subject to check, is it your view that the plain language of the 12-035-100 order was that the Company should make specific adjustments to those four files to remove the impacts of projected carbon costs?

A. Well, the order didn't direct the Company to make any specific adjustments to any specific files. It said that avoided costs would not have any specific adjustment for environmental costs. So how that's implemented is within the grid modeling is beyond my expertise and I would have to rely on the Company's expertise.

Q. When you say you rely on the plain language of the order, that suggests to me that you think that order plainly says, not with anything make no specific adjustment, but, in fact, what it means is go make specific adjustments to four files to remove your projected impacts of carbon costs. Is that how you read the plain language?

A. Well, the Company in its current modeling at the time of Schedule 37 had included a CO2 cost, which apparently is opposite of what the Commission ordered in Docket 12-035-100 so that they had to make adjustments to their modeling to adjust for that requirement.

Q. You say it was contrary to it. Did the Company adjust its Schedule 38 pricing immediately following the entry of the 12-035-100 order, to your understanding?

A. Some point they adjusted their Schedule 38 pricing. I'm not sure when that was implemented.

Q. The Office has seen a number of QF projects come before the Commission for approval in the last year, correct?

A. Correct.

Q. And those were done--some of them before and some of them after the 12-035-100 order came out in--I believe it was August, was it, or September of 2013?

A. It was August.

Q. Some of those contracts were done after that; is that not right?

A. Yes.

Q. And is it your understanding or do you agree that the Company did not remove the CO2 taxes immediately after the 12-035-100 order, that, in fact, those QF projects that have come forward for approval included the CO2 assumptions and it was only this year, a year later almost, when they were redoing 37 prices and then they began in 38 to remove them? Is that your understanding?

A. Well, I understand from informal

discussions with the Company that there was some lag between this 03-100 order--035-100 order and when it implemented the order provisions. And I'm not sure the timing as to which of the QF PPAs incorporated the new requirements, but I understand there was some lag. It did not occur immediately.

Q. So if it was the plain language of the Commission's order that gave the Company just violated that order until it finally implemented that this year. Is that kind of your view?

A. Well, violate is--I'm not sure if I agree with that word. But you have to give the Company some leeway in implementing. I don't--

Q. Even if it's the plain language? I guess that's what I'm chafing at. You say plain language and I have a really hard time with your view. The plain language of that order said remove these CO2s, make these CO2 adjustments when the Company itself didn't make them for months and you didn't propose that they make them--the Office, right, until they came forward?

A. Right. Right. We were not aware of those specific adders, the way they work in the QF model.

Q. Mr. Vastag, you're here representing an entity that represents consumers, electric consumers. It's a role I'm fairly comfortable with myself. I would like to ask you a few questions from the perspective--your perspective of protecting customers. If QF pricing is set so low, artificially low, below what the actual cost of the Company is going to be in the next 20 years to acquire resources, is the ratepayer indifferent standard met or violated?

A. QF avoided cost isn't based on actual market costs. They're based on a cost that the Company will avoid. And when, as we discussed earlier, you know, that will, for a particular QF, their avoided costs will depend on where they are in the queue. As these projects stack up, the Company's avoided costs decline. So when you talked earlier about is three or four cents actual fair market value, it's not really about fair market value. It's what the Company avoids in the future.

Q. Exactly. And if, in fact, pricing today is being set at three to four cents and therefore projects that would otherwise be renewable projects that mitigate price risk for 20 years because it's a set price, mitigate carbon risk because there's no carbon implication, et cetera, if those projects are not built because three to four cents is lower than a reasonable projection of what they will actually spend, are ratepayers harmed?

A. No. Because there's already many projects in the Company's queue in the IRP resource plan that accounts for all those risks and all those costs. And these additional projects are not required to serve the customers.

Q. Let's talk about that. Have you looked at the QF queue? Have you seen that in the Schedule 38 filing? Have you watched that over the years?

A. I've seen the transmission queue, which is on the Company's transmission page.

Q. I'm not talking the transmission queue. I'm talking the QF queue that the Company filed with its quarterly Schedule 38 update.

A. Yeah, I've glanced at that. I recall seeing that, yes.

Q. Can you name one QF project that's been built in the state that is on that queue in the last three years?

A. I'm not sure. I don't know exactly--
Q. So you're saying that customers are not harmed because let's say there's a queue of 15 resources. Well, first of all, do you understand that to get on the queue, all you need to do is ask for indicative pricing?
A. I believe that's correct.
Q. So if 15 QFs come and say, give us indicative pricing, and if the pricing goes from four cents to five cents down to three cents by the end of the queue, and if none of those projects get built because they're priced too low, and then if the actual costs end up higher than what those projections were, are ratepayers not worse off?
A. Well, we don't know how the future will play out.
Q. I understand. Accept my assumption.
A. There is a version of the future where that could happen, yes, and another version where some of those QFs will be built and--but we have to--the Company does have to follow a process and this is an issue that we've discussed in some of the PPA dockets where, you know, the number of projects in the queue and potentially QFs that

aren't far enough along in development even in the queue, they are harming other QFs or more serious.

Q. I'm just asking does the Office care if QF projects are not built? Is it the Office's preference just to kind of go with whatever the Company decides to build and acquire and take those risks as opposed to setting prices today that are known and that avoid carbon-type risks and environmental risks if the pricing is set the same so that the rate is indifferent? Would you not choose the renewable projects that add those other benefits?

A. Yeah. We care about those issues, yes.

Q. And has the Office looked to confirm to itself that the avoided cost pricing coming out of these models is a realistic projection of what the Company would actually avoid or will actually incur if we go through the 20 years without these projects?

A. We're not in the position to dig that deeply in the model.

MR. DODGE: Thank you. No further questions.

THE HEARING OFFICER: Redirect, Mr. Olsen?

MR. OLSEN: I have no redirect. Thank you.

THE HEARING OFFICER: Questions from the Commissioners? Okay. Mr. Vastag, you're excused. Thank you very much.

We're contemplating a recess and wondering how much is in front of us because we don't want to unnecessarily detain you.

MS. HAYES: Utah Clean Energy will call Sarah Wright, but I think my witness and I would love a five-minute break.

THE HEARING OFFICER: We'll be in recess till 25 minutes till the hour, so it will be ten minutes.

(Recess taken.)

THE HEARING OFFICER: Ms. Hayes.

MS. HAYES: Thank you. Utah Clean Energy would like to call Ms. Sarah Wright as our witness.

THE HEARING OFFICER: Please raise your right hand. Do you solemnly swear the testimony you're about to give should be the truth, the whole truth, and nothing but the truth?

THE WITNESS: I do.

SARAH WRIGHT,

having been first duly sworn, was
examined and testified as follows:
THE HEARING OFFICER: Thank you.
EXAMINATION
BY-MS.HAYES:
Q. Good morning, Ms. Wright. Would you please state your name, position, and business address for the record?
A. Yes. My name is Sarah Wright, S-A-R-A-H, W-R-I-G-H-T. I'm the executive director of Utah Clean Energy. And my business address is 1014 Second Avenue, Salt Lake City, Utah 84103.
Q. Thank you. In this docket did you file direct testimony on August 12th and rebuttal testimony on August 29th?
A. I did.
Q. If I asked you the same questions today as set forth in your direct and rebuttal testimony, would your answers be the same?
A. They would.
MS. HAYES: I would like to move the admission of Ms. Wright's direct and rebuttal testimony in this docket.
THE HEARING OFFICER: Any objections? They're received.

MS. HAYES: Thank you.
BY MS. HAYES:
Q. Ms. Wright, do you have a summary of your testimony you've prepared?
A. I do.
Q. Go ahead and present that. Thank you.
A. Thank you. Good morning, Commissioners. Morning, everyone. Utah Clean Energy--is that a good loudness? Sorry, you never know. Excuse me.

Utah Clean Energy strives to create a safer, more efficient, cleaner, and smarter energy future. We strive for a smooth and cost efficient transition to an energy portfolio that imposes fewer risks to Utah families and businesses. The Public Utilities Regulatory Act, PURPA, is an important mechanism for facilitating renewable energy development and creating growth in a monopoly controlled market, while reducing risks associated without a heavy reliance on finite fossil fuels, finally including fossil fuels.

Fair pricing for QFs, both small and large, is critical to protecting the long-term interests of Utah and Utah ratepayers. Utah Clean Energy's interest in this docket is safeguarding Utah's proper implementation of PURPA laws and regulations.

Mr. Duvall claims that Utah Clean Energy's oppositions to the Company's proposed modifications to the avoided cost method is intended solely to maintain artificially high rates for small QF customers at the expense of the Company's customers. Contrary to Mr. Duvall's claims, it is Utah Clean Energy's goal to ensure that avoided cost pricing fairly values renewable energy electricity generation at least in principle.

It is the position of Utah Clean Energy that avoided costs should be a reflection of the actual avoidable cost, including costs the Company would otherwise incur in the absence of QF generations based on its resource procurement decisions. As discussed in my testimony in multiple dockets, ratepayers will be on the hook for costs associated with carbon regulations and stranded assets. The Company does include carbon costs in its IRP analysis and its fuel and energy cost projections. Future carbon regulation is even more certain now that the proposed EPA rules for nonexisting power plants or with the proposed EPA rules.

Any adjustments removing the value of estimated carbon regularity costs from Schedule 37 pricing will discount this important and growing benefit renewable energy resources bring to the system and reduce the probability of these risk mitigating resources being built. It is my opinion that this is not in the public and ratepayers' interest.

Currently, the IRP presents the Company's best public analysis of the cost and risk associated with the environmental implications of its resource decisions, including the costs and risks associated with carbon regulation. However, the Company has made specific adjustments to extract carbon costs from its official forward price curve and other grid files to remove this value from the avoided cost pricing.

It is important to remember that ratepayers, not the Company, will pay for the costs that the Company specifically extracted from avoided cost pricing to use one set of assumptions to determine the Company's resource investment strategies and a strip down set of assumptions to calculate avoided cost pricing for PURPA does not result in costs that are fair to ratepayers.

If the Company will agree to cover all the costs associated with future carbon rules and hold ratepayers harmless, then it might be appropriate to remove such costs from QF pricing. But as it stands now, ratepayers will be on the hook for these costs. And it is important to value risk mitigation of QF renewables bring to the system at least to the same extent that it is valued in the Company's IRP.

The IRP standards and guidelines call for avoided cost pricing to be consistent with the IRP. Therefore, to the extent that costs associated with environmental regulation--environmental regulation are considered in the IRP. These costs should be carried through to avoid cost pricing.

Schedule 37 and Schedule 38 are different. And while the Company's proposed changes--the Company's proposed changes do not make them consistent. Schedule 37 was designed to be a simpler method for small QFs that do not have the negotiating power and resources of large QFs. A good example of the differences in the calculation of the energy payment. The value of solar energy is undervalued in Schedule 37 compared to Schedule 38.

In Schedule 37 method, the energy value is calculated using a ten megawatt flat load decrement missing the value a solar QF brings during summertime heavy load hours. In contrast, the Schedule 38 method uses actual supply curves for the specific QF resource in the grid--in the grid modeling in order to calculate a more accurate energy value that better reflects the value that solar generation brings in heavy load hours. This difference alone, for example, result in a lower less accurate energy value for solar resources under Schedule 37 relative to the more resource specific Schedule 38 method.

The Company proposes changes in interest of so-called consistency have reduced avoided cost prices without consideration of the overall method. Without consideration for the overall method consideration such as accuracy and fairness.

So--and also regarding the Company's proposal to begin charging integration charges for small QFs, there's not enough evidence on the record to support small--charging small QFs integration charges at this time. For example, there is no evidence on the record that small QFs, which interconnect to the distribution system level, will pay any integration costs.

Further, virtually all small QFs currently contracted for are solar QFs. An IRP has not conducted an integration study for solar. Large QFs have the opportunity to negotiate a credit for their benefits that they bring to the transmission and distribution system an opportunity to offset some of the integration costs with additional system benefits. Whereas small QFs have no such options. Until there is more evidence and parties have the opportunity to examine the trade off in costs and benefits of small QFs, it is premature to charge small QFs with an integration charge.

And regarding the capacity payment and capacity value, there continues to be confusion around renewable energy resources capacity factors and their capacity value. The capacity factor is used to estimate in light of energy produced by a resource while the capacity value or credit is a reliability based calculation that assigns a value to a resource based on its ability to reduce the probability of a loss of load event and to maintain system reliability. For example, a solar resources effective capacity value is significant because it provides most of its generation during heavy load hours. Solar capacity value is higher than its capacity factor.

In contrast, wind generally has a higher capacity factor than solar, yet a lower capacity value. Utah Clean Energy recognizes that there may need to be an adjustment to the capacity payment calculation, but rather than eliminate the capacity and energy payment as the Company proposes and rather than calculating the payment based on QF and maximum output during the peak out period as is the current method, which may overestimate a QF's capacity value.

The Commission should continue to authorize the capacity payment option, but modify the capacity payment to reflect the QF's value in reliably meeting load. In other words, the capacity payment offered to renewable QFs should be adjusted consistent with a capacity value of a renewable resource, but should not be eliminated as payment options. It is especially important not to eliminate the capacity payment when solar projects are being undercompensated for their energy value.

Regarding consistency, if consistency between Schedule 37 and Schedule 38 is the primary objective in setting Schedule 37 avoided cost rates, then we must do a much more thorough review and comparison of Schedule 37 and 38 methods that have been presented in this docket to ensure that we are not further sacrificing accuracy in Schedule 37 prices. Being selectively consistent defeats the objective of consistency. Moreover, consistency between the methods has never been the priority in setting the Schedule 37 avoided cost rates.

Schedule 37 and 38 has never been set in the same manner. In fact, Schedule 37 and 38 were always intended to recognize that there are differences between small and large QFs and small and large QF developers.

In this docket, parties have supported changes that lower the prices to the point that Schedule 37 prices appear to be lower than Schedule 38 prices. This is not fair and this does not meet the intent of PURPA. That concludes my summary. Thank you.

THE HEARING OFFICER: Ms. Hayes.

MS. HAYES: Thank you. Ms. Wright is available for cross-examination.
THE HEARING OFFICER: Thank you.
MR. SOLANDER: No questions. Thank you.
EXAMINATION
BY-MR.JETTER:
Q. Good morning, Ms. Wright.
A. Good morning.
Q. I just have a few questions. I would like to start with a few questions about the integration cost of Schedule 37 customers. Is it a fair statement that the integration costs are intended as a measure of the cost to a power system better incurs as it responds to the variability any uncertainty of intermittent generation resources like solar, wind, the types of resources we generally see in Schedule 37 customers?
A. I'm not an expert on how these studies are completed and everything that goes into them. I'm sure that is part of it. It probably has to do with where it is on the transmission system. We have to reliably meet load at all times and load is variable, as well.
Q. Okay. Is there a difference between 2.9

megawatt windmill and a 3.1 megawatt windmill in the variability if the two are at the same site?

A. Well, I would say--if they're at the same site?

Q. Yes.

A. No.

Q. And so would a customer be indifferent if there were two different pricing calculations for one being at 2.9 and one being at 3.1?

A. Well, I guess I should revise the last question. There may be a difference based on where it is on the distribution system. And most of the small QFs are solar connecting to the distribution system.

Q. Okay. Let's use an example. Let's say in my hypothetical we have an industrial park that has--let's say we have 80 owners in this industrial park and each owner has its individual one megawatt solar project on their roof. Is the collective 80 megawatt solar there going to be different in its variability or its cost to the power system as opposed to a neighbor that's across the street, let's say, with an 80 megawatt Schedule 38 solar array?

A. Well, it probably wouldn't be across the street, but, yes, the Company has done studies on adding megawatts of solar on the distribution system in Toquerville and Delta area. And they found out that by adding it to the distribution system, it actually reduced the peak demand on that distribution system. So it did bring benefits to that system. So, yes, when it goes onto the distribution system, there may be benefits that are not being calculated and added into the--or considered when adjusting the--when looking at the integration costs.

Q. Okay. And with respect to the other integration costs like responding to the variability and the output, would those be the same for both?

A. You know what? Unfortunately, I'm not an expert on integration studies. And my point in this case is that there hasn't been a study that looked at that, the impacts of integrating on the distribution system. I'm not an expert so I can't answer those questions.

Q. Okay. Let me move on just to a couple brief questions. You testified both in your prefiled testimony and your comments that you believe that the Commission should retain both the energy only and the capacity and energy separate options for the QFs under Schedule 37; is that correct?

A. Yes.

Q. And those would result in different prices to the QF; is that correct?

A. Unless they are changed to make them more consistent, yes.

Q. Okay. And is it accurate that a customer's only indifferent to one price?

A. I'm sure there's a range of variability on that, but if you want just one exact price, then--I don't know. It depends on if the price is accurate.

Q. Okay. But there would only be one actual price--whether we hit it precisely with a Schedule 37 method, there would, in reality, only be one actual, perfect avoided cost price?

A. I've never seen a perfect avoided cost price, but in theory, that's correct.

Q. And so if there's two different methods that result in different pricing, one of those would not be an accurate reflection of the avoided cost?

A. I'll accept that.

Q. Okay. And just, finally, with respect to the capacity payments during the sufficiency period, are you aware of any simple cycle combined--or, excuse me--simple cycle combustion turbine that will, in fact, be avoided? Is there anything in the IRP plan to built a facility that would be avoided?

A. My point around the having a capacity payment is that the capacity payment isn't that they--the way that the solar is modeled, it is not receiving fair value for the energy it provides during those peak market purchases. So I don't know of a simple cycle, but until we look at the whole model collectively, the whole--looking at how we calculate 37, to take away the capacity payment without looking at how the energy is calculated will be undercompensating the solar resources.

Q. Okay. But if we can compensate, then, for a project that's not a proposed project that doesn't exist that likely will never exist, that would be a pretty inaccurate way to calculate that; isn't that correct?

A. I'm basing my position on the Commission's previous rulings and how we've always calculated the value for Schedule 37.

Q. Okay. So just because we've done it in the past, that we should keep doing it?

A. Or figure out a model that is more accurate.

MR. JETTER: Okay. Those are all the questions I have. Thank you.

MS. WRIGHT: Thank you.

THE HEARING OFFICER: Mr. Olsen?

MR. OLSEN: Yeah, I have a few, if I may, Your Honor. And I'm not quite sure how the Commission does this. I've got a couple of exhibits that I would like to take from various IRPs. Perhaps Ms. Wright could confirm that they're accurate representations of the IRPs and I could submit them at that time and that would be a fair process?

THE HEARING OFFICER: That's typical of what we would do. Do you have copies for counsel and the reporter?

MR. OLSEN: I do, Your Honor. And I also have copies of the IRPs, so if I may approach.

THE HEARING OFFICER: Absolutely.

So we'll mark this as OCS Cross Exhibit No. 1 for identification.

MR. OLSEN: Thank you, Your Honor.

Just so that we may make sure that this is an accurate representation, I would like to give the IRP to the witness so she can look at it.

MS. WRIGHT: I would--

MR. OLSEN: If you're willing to accept that, then I'm happy with that. Thank you.

Your Honor, just as a matter, I've got three of them. Should I do them all simultaneously?

THE HEARING OFFICER: Might be efficient if you did them all.

MR. OLSEN: Then I will do that.

THE HEARING OFFICER: If that's convenient for you.

So Cross Exhibit 1 for identification is a page from--ostensibly from PacifiCorp's 2011 IRP.

MS. WRIGHT: If you want me to verify that, I will.

MS. HAYES: Can I get a copy of the ones you're--

MR. OLSEN: Oh, I apologize.

Would you like to see that to confirm that.

MS. WRIGHT: I mean, if it's better for the record to have me confirm it, I'm happy to.

THE HEARING OFFICER: If you're able to accept these at least subject to check, that's, I think, an efficient way to proceed.

MR. OLSEN: I appreciate that.

THE HEARING OFFICER: The second exhibit for identification is page 174 from the 2013 IRP.

MR. OLSEN: And with the Commission's permission, I'll do No. 3, which is the equivalent of the draft from the 2015 IRP.

THE HEARING OFFICER: And so this will be Cross Exhibit No. 3 for identification.

MR. OLSEN: I have one final exhibit, Your Honor. Your Honor, this is--excuse me--Commissioner, this is a page--for the record, it's page 224 and 225 of the PacifiCorp IRP of 2013.

THE HEARING OFFICER: This will be marked OCS Cross Exhibit 4 for identification.

EXAMINATION

BY-MR.OLSEN:

Q. Ms. Wright, your rebuttal testimony at lines 152 and 153--

A. Could you excuse me, I'll get them?

Q. Yeah, thank you.
A. I'm there.
Q. Thank you. You said avoided cost pricing should include carbon costs consistent with the Company's base case IRP assumption. Is that correct?
A. Yes.
Q. If I could ask you to look at the 2011 handout, which I guess was No. 1, it references Table 7.5. Do you have that in front of you?
A. Seven point--sorry, I have 7.6.
MS. HAYES: 7.5 is on the back.
BY MR. OLSEN:
Q. Sorry, it's a two-sided copy. Thank you. I apologize.
A. You need really good eyes.
Q. Indeed. In looking at this IRP modeling, can you tell me for the record how many cases the IRP modeled?
A. Well, I believe they did more than 16 here. So if you look at--according to this table, I don't remember if they did any more than this. Are you saying that they--well, they did more than 33 because they did some subsets like 38. So I'm not going to count them, but it looks like 34 or

35 maybe.
Q. And if you look at the page 165 portion of that exhibit and those are labelled core cases, how many core cases could they--
A. It looks like 19--or 20, maybe.
Q. 20, correct. That's exactly. Of all of those cases that we've referred to, which of those are labelled base case?
A. I would have to go back to the IRP and they refer to scenarios as their base case scenarios in the IRP and the meetings. And so I would have to go back and find out which one corresponds because often in the IRP, the language they use at some of their tables doesn't match the language everywhere, but that's a good point. That would need to be clarified.
Q. If I could ask you to look at, I guess, No. 2, which is from the 2013 IRP--
A. Yes.
Q. --Table 7.6.
A. I'm there.
Q. How many cases did the Company model for 2013?
A. They did quite a few because they modeled multiple transmission scenarios on top of their

core cases. Each core case four or five transmission scenarios, as well.

Q. And in those, are any of those labelled base case?

A. In this scenario--again, this is a matter of semantics. They call their cases the run base cases, but it's usually--in this case I think the base case was medium. They went from zero to the medium scenario. So I accept that the language would need to be clarified. And I also accept that it will change as IRPs go forward.

Q. And that, in fact, one portion of that has a zero expectation CO_2 pricing?

A. No. It doesn't have a zero expectation of pricing. A number of years ago the Utah regulators asked for them to run a zero case to see what that would look like. I don't believe people really believed there will be zero carbon costs in the future and if we do, we move in peril.

Q. That's just your position, I expect. Looking at the cross-examination Exhibit 4--

A. Is that the large one?

Q. No, that--oh, excuse me, 3, which is the--no, it is 4. Excuse me, 4, which is the two-page exhibit. It says--and on page--what is labelled page 224 with a chart on the bottom of it, do you see that?

A. Yes.

Q. Will you look at the first paragraph, could you please read the--read that full sentence?

A. "Portfolio C07 under Energy Gateway Scenario 2 ranks highest among the remaining portfolios on a risk-adjusted PVRR basis, and was selected as the preliminary preferred portfolio for the 2013 IRP."

Q. So the preferred portfolio in 2013 was the C07; is that correct?

A. Yes.

Q. And if you'll look--just to affirm that, if you'll look on the next page, please, on page 225, and there's also a slight adjustment that I've marked with yellow. Could you read that for the record, please?

A. The Company has selected portfolio EG2-C07 as the 2013 IRP preferred portfolio.

Q. Thank you. And then referring back to Exhibit No. 2, looking at C07, the C02 price is listed as zero, is it not?

A. It is. I don't know whether they had a high gas price in that scenario and they had a low coal price in that scenario. So one factor does not determine the portfolio outcome and I don't know what was in C07 regarding RPSs. So it's very dangerous. If we wanted the Company to plan for single risk issues and to modeling for single risk issues, we would ask them to do that. But what they're running is scenarios and a mixture of different assumptions.

Q. And all of those are represented in the IRPs, are they not?

A. Yes. A variety of different scenarios are run for, first, the system optimizer model. And that's a model that just selects a variety of portfolios that then undergo risk analysis after that.

Q. And it yields a variety of cases, so if your statement is that the Commission should rely on the IRP and cases presented in the IRP, the fact is, isn't it true, then, that the recommendation--the IRP base case assumption is going to give little meaningful guidance because there are almost innumerable cases in the IRP that you provide?

A. And that same thing holds true for natural gas prices. They have a variety of different scenarios for natural gas prices. And they generally--they choose the base case scenario as their official forward price curve to do the prices. There are variabilities--I'm sorry, my glasses are off to read. I have to put them back on to see you. But there are a variety of assumptions that are used in the IRP, different solar price curve, different energy price curve, I mean, fuel price curve, and they're all--if you want to say unknown, we don't know exactly what it will be. And they chose a high gas price curve so then to follow your logic to its full extent, we should be running a high gas price curve in the avoided cost pricing.

Q. I think my point was simpler than that simply to say that you use the IRP is not going to give--that there are effectively 30 or so scenarios that are run in the IRP, the various IRPs. And the IRP itself will provide little guidance.

A. But if we go back to the IRP standard and guidelines, it says that avoided cost pricing should be consistent with the IRP.

Q. And you said the base case?

A. That's the lowest, really, price other than zero that they gave. I'm giving the price that the Company--you know, I'm not saying it should be the high price. Personally, I may believe that's a more likely outcome when you look at the science of climate change and when finally it will take action. But I set the lower price. I suggested that price because that's the price that the Company tends to weigh more heavily on.

MR. OLSEN: I have no further questions, Your Honor--or Commissioner, excuse me. Course of habit, I apologize.

THE HEARING OFFICER: Thank you. Mr. Dodge?

MR. DODGE: Thank you. Ms. Wright, I do have a few questions.

EXAMINATION

BY-MR. DODGE:

Q. I think the record is very confused right now and I would like to see if we could maybe get back to what you actually said. I would like to refer you back to lines 152 and 153 of your rebuttal and ask you whether your summary said that avoided cost pricing should include carbon costs consistent with the Company's base case IRP assumptions or did you say the base case portfolio or did you say the base case runs?

A. Base case assumptions.

Q. So let's talk about that. All these exhibits are talking about portfolios and both core cases and other cases run, sensitivity cases run. You just talked about base case assumptions, right?

A. That is correct.

Q. Do you have an understanding when the IRP runs gas prices, for example, now that's an assumption that goes into the IRP like you reference an assumption. An assumption is gas prices. What levels of gas prices--what do they label their three gas price assumptions; do you know?

A. I believe it's low, base, and high.

Q. So when you say a base case assumption, if we were talking about gas, would you mean the middle one, the base case gas assumption versus the high or low assumption?

A. That's correct.

Q. Now, let's now go to CO2. When they made assumptions that they used in their various core and sensitivity runs and in selecting portfolios, do you know what three assumptions they used for CO2 prices and what they labelled them?

A. I think they labelled them under--they called it base case scenarios so there's probably a little confusion and I would have to go back and read, but they have a zero, a medium--I don't know if it's high. They also have a hard cap case. They have two hard cap cases. The medium is actually the lowest case that they have.

Q. And when we go back, for example, to Cross Exhibit No. 2, that has CO2 prices, they have medium, high, and zero, right? And is it a fair statement that zero is the low, medium is the base, and high is the high? Is that what you meant when you said the base case assumption?

A. Yes, it is.

Q. So the medium in the 2011--was that the 2011? 2013. The medium in the 2013 is what you meant when you said base case assumption as the CO2 prices?

A. Yes.

Q. And is it also your understanding that when the Company ran avoided cost pricing at least prior to the spring of 2014, that it used its forward price curve that included the base case CO_2 assumption?

A. Yes.

Q. And when you asked for consistency, is that the consistency you're asking for that they continue to use their own best projection of future prices including CO_2 costs?

A. Yes, it is.

MR. DODGE: Thank you. No further questions.

THE HEARING OFFICER: Ms. Hayes.

MS. HAYES: I'll just ask one follow-up question.

EXAMINATION

BY-MS.HAYES:

Q. So Mr. Olsen was asking you about these exhibits. Is the--and these are core case assumptions. Is case modeling the only portion of the IRP that looks at carbon costs?

A. No, it's not.

Q. So carbon costs factor into other assumptions used in the IRP?

A. Yes, it does.

Q. Does the carbon cost assumption factor into the Company's official forward price curve?

A. Yes, it does.

MS. HAYES: No further questions.

THE HEARING OFFICER: Questions from the Commission? Commissioner LeVar.

COMMISSIONER LeVAR: Thank you.

EXAMINATION

BY-COMMISSIONER LeVAR:

Q. Can I pose a hypothetical? And if it gets too strained, please tell me. So consider a two megawatt QF solar that leads directly into the distribution system. And if that QF reduced the distribution system heat load to create an event that you spoke about earlier in your testimony, if that QF were allowed to negotiate a contract under Schedule 38 rather than take a price on 37, could that peak load reduction be negotiated under the current structure 38?

A. Yes, it could. But that doesn't get around the fact that small QFs don't have the negotiating power that large QFs do.

COMMISSIONER LeVAR: Okay, thank you. That's all I have.

THE HEARING OFFICER: Anything further? Thank you, Ms. Wright, you're excused.

THE WITNESS: Thank you. Mr. Dodge,

you've asked us to receive your witness's testimony as an unsworn public witness comment?

MR. DODGE: Yes. And I don't know that it requires a motion. It would be as though we sent a letter. It's in the record. We understand the implications of your inability to rely upon it for a factual finding, but it's in that context we would request that the Commission consider that testimony.

THE HEARING OFFICER: I just wanted to be clear that that request would be honored and granted.

MR. DODGE: Thank you.

THE HEARING OFFICER: Is there anything else to come before the Commission today? We're adjourned. Thank you all very much. We're off the record.

(Hearing concluded at 11:17 a.m.)

CERTIFICATE

This is to certify that the foregoing proceedings were taken before me, NANCY A. FULLMER, a Registered Merit Reporter and Notary Public in and for the State of Utah;

That the proceeding was reported by me in stenotype and thereafter caused by me to be transcribed into typewriting, and that a full, true, and correct transcription of said testimony so taken and transcribed is set forth in the foregoing pages;

I further certify that I am not of kin or otherwise associated with any of the parties to said cause of action, and that I am not interested in the event thereof.

Nancy A Fullmer
____
Nancy Fullmer, RMR