1 BEFORE THE PUBLIC UTILITIES COMMISSION
of the state of colorado

REPORTER'S TRANSCRIPT

Volume II

Docket No. 08A-532E
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IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF ITS 2009 RENEWABLE ENERGY STANDARD COMPLIANCE PLAN


Pursuant to notice to all parties of interest, the above-entitled matter came on for hearing before Commissioner Matt D. Baker, commencing at 9:01 a.m., on April 7, 2009, at 1560 Broadway, Denver, Colorado 80203, said proceedings having been reported in shorthand by Vanessa Campbell, James Midyett and Harriet Weisenthal.

Whereupon, the following proceedings were had:

7 today off with staff. Is that okay?

MS. BOTTERUD: Thank You, Commissioner Baker. After discussing the status with my client later yesterday afternoon, staff would like to request the opportunity of calling Mr. Gene Camp to address the lockdown and time fence issues, if that is acceptable to the parties and yourself.

COMMISSIONER BARER: I believe I was -Yes, it's fine for me. I believe I was implying that

1 staff could bring whatever witness they felt could best answer their specific questions on this issue.

Is there any problems from anybody else on that?

MS. CONNELLY: Depending upon what Mr. Camp says, since we do not yet know what staff's position is on this issue, we may or may not be able to cross-examine him immediately on his position, so, again, depending on what he says, we would potentially like the opportunity to have the day to consider our cross-examination and our rebuttal and then ask that he be recalled tomorrow afternoon for cross-examination purposes.

If he agrees with our position or if it's just minor variation we may be able to handle it directly.

COMMISSIONER BAKER: Okay. Does that work for staff?

MS. BOTTERUD: It does, Your Honor.
Thank you.
COMMISSIONER BAKER: So Mr. Camp would be available today or tomorrow should it prove necessary. Good morning, Mr. Camp. called as a witness on behalf of the Staff of the PUC, having been first duly sworn, testified as follows: COMMISSIONER BAKER: Okay. Have a seat.

DIRECT EXAMINATION
BY MS. BOTTERUD:
Q Mr. Camp, would you state your name and spell it for the record?

A Sure. My name is Gene Camp, C-a-m-p.
Q And by whom are you employed and in what capacity?

A I am employed by the Public Utilities Commission and I am the chief of the energy section here at the Commission, so chief of the staff there.

Q And how long have you been employed by the PUC?

A Roughly four years.
Q And have you always been employed as the chief of the energy section?

A No. When I was first hired I was actually one of the staff engineers and was promoted a couple years ago to the position of chief.

Q Are you familiar with the issues in this docket?

A I tell you, I'm familiar with some of the
major issues. I can't say that I'm familiar with every issue in this docket. The reason I'm here today is just to address specifically the time fence issues.

Q And could you generally give an overview of the purpose of your testimony?

A Yes. Purpose of my testimony really is to provide staff's position on the time fence issue for the Commission's consideration.
$Q \quad$ Could you explain why trial staff didn't provide testimony on the issues as part of its prefiled answer testimony in this docket?

A Sure. When we first looked at the orders coming out of -- from you, Commissioner Baker, we had thought that actually the issue of the time fence had been removed from consideration in this docket. We actually had had some people preparing some testimony along that line until that order came out and then we decided to, you know, actually not provide that testimony in the docket itself.

Q And, now, could you describe what your understanding is of what Public Service is proposing with regard to the time fence?

A Sure. My understanding is what Public Service wants to do is perform their initial estimate of the cost and the benefits that are associated with
particular resources that they're wanting to acquire and then take those estimates and basically lock them in once they've contracted for them and then consider that in their -- really the calculation of the available funds for the RESA moving forward out in future years.

Q And what's your understanding of what the term locked in or lockdown means?

A Well, basically my understanding is they want to basically lock in benefits or cost, or actually really the combination of the two based on their projections, not based on, you know, actual numbers in the future. I think that's probably simple enough at this point.
$Q$ What is your understanding of the company's concern with determining the impact on the RESA using actual cost for transactions that occurred in the past?

A Well, one thing I noted is I guess in the company's witness Ahrens, he had expressed that the company was concerned that if forced to continually recalculate incremental costs that are driven by uncertain gas price projections they could be in a situation where RESA funds become inadequate to pay for those incremental costs.

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So that was the main concern that I saw in their testimony. I think they were just concerned that going into the future if they made a decision based on gas projections they may be limited on what they could do in the future under the ReSA.
$Q$ On Page 21 of Mr . Ahrens' direct testimony, he states that the issue is similar to the regulatory issue of prudent investment. Do you agree?

A No. To me this is quite a different issue than prudency here.

This is not unlike resource planning in general. We make decisions for resource planning based on projections. We look out into the future, we do our best guess or best estimate of what gas prices are, coal prices, what the -- in the case of carbon, what we believe carbon costs may be looking into the future, and then we make a decision. And at that point is -based on the knowledge we have we make a decision on what's a good choice, and I think that's the case here on renewables.

We -- we're not suggesting that without a time fence that some resource that the company would pick would be judged imprudent in the future. That decision's been made in this proceeding. What is being asked here is that they never go back and look at the
way those are treated in the future.
This does get moved into future ReS
plans, depending on what's decided here with this time fence. For example, if the price of gas increases in the future over what is projected, there probably is actually more -- not probably, there will be more headroom out there for additional resources. This is likely to cause, you know, more headroom as less.

So it's -- the issue of prudence has to do with whether they're going to get recovery. The company's going to get recovery of their investments and what they choose here regardless.

This has to do with looking at that 2 percent RESA and making decisions in 2010, 2011, out into the future into how do you look at the choices you make today on how it could affect what you can do in the future.

So it's -- to me that's -- the question is not on prudency of the resource, that's why I don't quite agree with the analogy they used that it's similar to the prudency on a resource selection.

Q In your opinion, does Section 40-2-124 allow the company to recover projected costs?

A Now, I can give you a layman's opinion here because I'm not an attorney, but I've never seen
anything in the statute that talks about recovery on -on projected costs out there.

In my opinion, it's kind of a stretch to believe that it was intended that the maximum impact to the customers' bill is -- should be based on what the company has even described has uncertain gas price projections. I mean, that seems like it's -- it would be surprising to -- it would surprise me if the legislature intended that that's the basis of doing an impact test.

Many of the resources that the company's putting into place have a number of years of life out there and the projected savings are likely to be wrong. I mean, $I$ think one thing we know is projections are going to be high or low, it's unlikely they're going to hit right on, and I believe that actually we should be adjusting in the future based on what we know in the future, not based on what we know today.

Q Are you aware of some examples of Colorado regulation that might inform the Commission when making its decision about the time fence and lockdown?

A Well, kind of back up to the same discussion $I$ was having just a minute ago on resource

1 planning in general.

Again, we pick resources for resource planning purposes based on projections. We will pick what we believe is a good gas projection to use, we will pick what is a reasonable carbon cost in the future, we look at what we think is a reasonable coal cost in the future.

Once we've made those decisions, and the Commission affirms that, those are usually considered prudent going into the future.

Now, the actual cost of gas, though, that's charged back to customers is based on actual costs. The company doesn't expect to get reimbursed gas based on their projection that they made when they picked these resources.

In fact, at one time they did -- were structured that way and slowly they've moved away from that because, again, projections usually don't match actuals, and there's too much risk there.

So, again, I think it seems like there's kind of a disconnect here on what the company's proposing on looking at this narrow issue of the RESA account and wanting to just do that based on projections that they make today versus using the best available information they have each year as they look

1 forward.

Q Will staff's position likely result in less renewable resources being acquired?

A Actually, I don't think we have any idea of the impact. I think it's as likely that more renewables could be dispatched based on not using a time fence as less renewables.

I think the environmental community, especially in the resource planning docket had -- I think with one voice indicated that they thought that the gas projections were low looking into the future.

If those gas projections are indeed low then the amount of renewables that could be acquired in the future is actually higher.

Now, the converse is true, too, though. I mean, if the projections of the company are actually high relative to actual, it may be that they may need to back off on future acquisitions for a period of time during that period when gas prices are lower than they expect.

So, again, that -- I don't think that what we're suggesting here is intended to reduce the amount of renewables or to increase it, either one, it's just that it should be proportional to the actual numbers out there that are reflective of the gas
prices, carbon prices, those kind of things looking into the future.

Q And Mr. Camp, could you provide a visual example of what a lockdown would look like over the long-term?

A Sure. I can try. If you don't mind, I'll kind of draw something on the board that's real simple.

COMMISSIONER BAKER: Is that on?
Q (By Ms. Botterud) Is it plugged in?
A It is. I'm going to just take a guess -I mean, I'm not sure how many years Alamosa's been in place, but I think Alamosa is a resource that the company has suggested in here that they do treat with a lockdown. I think we're roughly two years into Alamosa. It may be one year, three years, something in that time frame, but it's about a 20 -year resource.

So the company has looked at that resource let's say over a 20-year period, and we'll put their gas price projection that the company is using out there.

Let's say -- it's probably steeper than
that curve, but just to indicate this is what the company has projected. They want to actually use this curve to determine what is being put into the RESA as

1 far as savings or costs, those kind of things. If the actual price of gas in reality is here -- let's say this is actual. This is projected.

What you've told consumers is that they're getting the maximum amount of resources under 2 percent. Actually what they're getting is what was projected. It's possible for the price of gas, if it was higher, there was actually more headroom available during that period.

They could have as each year passed ratcheted up a little bit, even if their projection was the same. But, likewise, if the gas prices in actuality are lower, it's going to reduce the headroom. So they may have to reduce for a period --

Q I'm sorry, Mr. Camp, it's hard to hear you.

A I'm sorry. If the price of gas in actuality was lower than the projection, then the company would need to actually back off on their acquisitions for a period of time and then continue to ramp up based on the curve out there.

But I think that's what was intended in the legislation out there, that there be a 2 percent impact.

Q Thank you, Mr. Camp.

MS. BOTTERUD: And when we have a chance, I'd like the opportunity to enter Mr. Camp's drawing into evidence as an exhibit.

COMMISSIONER BAKER: Okay.
Q (By Ms. Botterud) Mr. Camp, is the company's claim that they must continually recalculate incremental costs a reasonable argument for not doing so each year?

A I don't think so, because that's kind of puzzling, that argument, to me anyway because it seems like the company's going to be remodeling every year regardless.

They're going to have to take the resources that they contracted that year, fix them in the models, which would take some special modeling. They'll be looking into the future in 2010 for their RES plan, they'll be modeling the new gas projections that they have at that time, and to say that they're continually remodeling and this is a burden just seems like kind of an empty argument to me because I think they're doing the same amount of activity here regardless.
$Q$ What's your understanding of what's being decided on the time fence and the lockdown as it pertains to this docket?

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A To be horiest with you, I'm somewhat confused about this still.

And I know, Commissioner Baker, I think you indicated at the beginning of this hearing that this -- what was decided in this docket for a time fence would only affect resources in this docket, or that was my understanding. But it seems like the whole nature of a time fence is how it affects future RES plans.

By locking in, for example, SunE Alamosa in this docket, which is the 20 -year resource, it affects what the company will do in the future and the amount of funds that they have available under the RESA for the next 18 years, so -- RES plans and that's similar to, for example, the -- I may have the title wrong, but $I$ know it's the Northern Winds contract or the recent wind contract we just put into place.

I'm not sure how many of the particular resources the company is seeking this kind of treatment or if they're seeking that on all of their resources that have already been in effect to date.

I know I reread Mr. Ahrens' testimony.
He does mention Alamosa in his testimony. I'm not sure if that's the only one that's being addressed.

So it's actually somewhat unclear to me

1 what the outcome of this docket is, what you will decide, and it's not clear to me what even Public Service is seeking in this. So it's -- I'm not sure that I have any clarity on that.

2 Could you summarize staff's position on the time fence and lockdown?

A Yes. Staff believes that the rate impact or the -- like other costs charged to customers should be based on actual costs where at all possible.

For example, in 2009, if the company, just as an example, projected that they could put 100 turbines into place under the existing RESA and gas costs were actually lower as a result, I mean, in actuality, and basically the numbers show that really 95 are all that were justified under the 2 percent plan, then the future resource plan should be adjusted downward accordingly.

But likewise, if gas prices are higher than the company projected, let's say that the numbers show that, say, 105 turbines could have been put in under the RESA, then the company would have the option to actually put more resources in plan -- in their plan or into the -- to actually acquire them.

So it seems like there's -- instead of -you know, it's -- it seems unreasonable to base future

1 decisions, which that's what we're actually deciding in this case, we're going to decide whether it makes sense to how many -- how many dollars we're going to spend in, say, 2015 based on the projection that the company has made today for Sune Alamosa.

In fact, I'm not even clear, for example on the Sune Alamosa if they're seeking that they lock it in at the gas price they projected two years ago when they contracted for it, which is what they've indicated they won't lock in that contract, are they going to lock it in today based on 2009 projections? And then, again, we live with that projection all the way into the future until that resource is no longer viable out there to be used.

The one thing that I think Commissioner Tarpey has brought up many times, and I think it's a good saying, is the only thing that you can be sure of with regard to projections is that they're going to be wrong, and we know that's going to be the case. They're either going to be high or low.

And it seems that we should be adjusting our plans as we move into the future based on our best estimate and projections of what we believe the future's going to look like, not based on what we knew several years ago. a moment, please.
(Pause.)
MS. BOTTERUD: Could we go off the record for a minute?

COMMISSIONER BAKER: Sure.
(Discussion off the record.)
(Whereupon, Exhibit No. 37 marked for

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identification.)
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COMMISSIONER BAKER: Back on the record. Okay. Proceed.

Q (By Ms. Botterud) Mr. Camp, you should have in front of you an exhibit that's been marked for identification as Exhibit No. 37. Would you give a brief description of what that represents?

A Yes. This was what I drew on the board here to kind of describe the difference between how the RESA would be affected for using projected or these locked in costs and benefits versus the actual that would be reflected by actual gas prices, those kind of things.

Q And does the exhibit accurately reflect what you drew on the white board?

A It does.
Q And did you enhance by making darker the

1 exhibit so that it would copy more clearly?

A I did.
Q Thank you.
MS. BOTTERUD: I'd move for admission of what's been marked for identification as Exhibit No. 37.

COMMISSIONER BAKER: Any objections?
MS. CONNELLY: No objection.
MS. HICKEY: No objection.
COMMISSIONER BAKER: It is admitted. 37
is admitted.
(Whereupon, Exhibit No. 37 admitted into evidence.)

MS. BOTTERUD: We have no further questions for Mr. Camp.

COMMISSIONER BAKER: Okay. Would Public Service or anyone else like to delay cross or --

MS. CONNELLY: Public Service Company would like to ask a few clarifying questions so that we fully understand Mr. Camp's proposal, and then we would like to defer our cross and/or rebuttal until tomorrow. COMMISSIONER BAKER: Okay.

MS. CONNELLY: Because I need to check with my client as to exactly what we want to say. But I do have some questions to fully understand his
proposal.

COMMISSIONER BAKER: Is that fine with

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everybody?
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MR. MICHEL: We have some cross or
explanation -- you know, as Ms. Connelly said, clarification. Where you draw the line, I'm not sure, but we'd like to ask those now.

COMMISSIONER BAKER: Okay. So we'll take clarifying questions now. I think Mr. Michel wants to stray into stray cross. I don't have a problem with that if everyone's okay with that.

MS. CONNELLY: I'd be happy to go first with my clarifying questions. If I may ask them from here.

CROSS-EXAMINATION
BY MS. CONNELLY:
$Q$ As I understand your proposal, Mr. Camp, you would like to have the incremental cost of the renewable portfolio continually updated.

A Well, you say continually. It should be updated annually.

Q Updated annually. Okay. Now, when you update the incremental cost of the renewable portfolio annually, which renewable resources are you including in the update? And by that I mean which renewable

1 resources are you -- that are in the RES plan are you displacing when you put together your No-RES plan?

A One, I'm not sure what the company was planning on doing here. That's unclear to me. But I think it's -- it's actually closer to the status quo of what we've been doing in the past.

I know there are certain resources that were already, I guess, not considered in the RESA altogether. I mean, that were put in place under the old LCP process. So it would actually be the resources that have been put in place since then that, again, you would look into the future each year and apply what the company believes is the best projection of gas prices, carbon costs, even coal costs. I'm guessing there may be at times where wind might displace something other than gas, like -- that's something that the company would have to look at into the future. I think generally what you're looking at is gas right now.

Q Just so I, again, have clarification on the mechanics, we have had four resources that resulted from the 2005 Allsource IRP which have never been included in our retail rate impact calculations. So as I understand, you're in agreement that those remain out.

> A That's a decided issue to me.

1 existed at the time that Amendment 37 was passed, those are all out?

A I agree.
Q But then I would take it your position is, from what you've said, is everything that we have acquired since then gets reevaluated -- everything else that we've acquired since then gets reevaluated annually in the RES/No-RES calculation.

A Correct.
MS. CONNELLY: I think we understand Mr. Camp's proposal now and we'll be prepared to address it through cross and/or through a rebuttal witness tomorrow.

COMMISSIONER BAKER: Okay.
CROSS-EXAMINATION

## BY MR. MICHEL:

Q Good morning, Mr. Camp.
A Good morning.
Q So if I understand your testimony, staff's position is that there should be, I guess, a moving time fence with respect to resources that the company would procure in this -- in this compliance period; is that --

A Yes. I mean, basically that you would

1 use your best projections looking into the future to decide what future resources you would acquire.

It was never put into question the resources you've already selected in the past.

Q Okay. But it would affect the amount of RESA dollars that are available to pay for those resources?

A Absolutely.
Q Okay. And you indicate that that would affect the company's future actions. Would it not also put the company at additional risk that it could actually recover enough dollars for long-term, major resources that it might procure today?

A I don't believe so, because I believe the statute's pretty clear, especially on contracts or the resources they put into place that the company should be able to recover the cost.
$Q$ And what if there are simply not enough dollars in the -- within the retail rate impact that gets calculated based on future projections to ever pay off resources that the company has already procured?

A I think that's very unlikely for one. I think you may have periods of time. I think the worst-case I could imagine is you may have a year where you couldn't do any acquisitions or you may have to,.

1 you know, forestall it for a period of time.

If gas prices got to the point where they were so low such that that happened, it may require something to be taken up with the legislature across the street on how do you address that considering that you can't put renewables in with a 2 percent limit because gas prices are so low.

I don't think -- I think there's very few of us that believe that gas prices are going to stay as low as they are over the next few years, though. I think we're in a very temporary period where gas is low.

Q But you'd agree there is more risk with the company procuring a large resource and a costly resource, that there may not be enough dollars to recover that resource --

A Well, you --
Q -- in the future?
A -- say risk, but I still believe the statute requires that they be compensated for that. I think it's possible that you couldn't acquire future or additional resources looking into the future if the gas prices were to get so low.

Q If the company's recovery guarantee that you've expressed conflicts with the rate -- the retail

1 rate impact that gets calculated based on your future projections, which would control?

A Well, I think the rate impact is -again, it's -- that's not as defined language as the company's right to recovery. I think there's specific pieces of the statute that talks about the company's right to recovery of renewable resources, so I think the company will get those -- that recovery no matter what.

It may be that we may be in a period of time where we're exceeding the rate impact, and I think the Commission would have to acknowledge that, but not I'm sure, again, that there's anything that we can do about it other than, you know, charge those costs to rate payers for a period of time until we're not upside-down again.
$Q$ So it's your opinion that the retail rate impact cap can be violated if it conflicts with the company's recovery of approved resources?

A I think there is the potential that could happen, and I'm not sure if there's any way around that, I mean, in the situation where gas prices were to go through the floor. But, again, I think that's very unlikely. You're talking about a scenario, I think, that is unlikely to happen.

Q What -- you'd agree that if the company goes into a deferred balance for a resource, there are carrying charges associated with that, those dollars that are deferred for later recovery.

A You know, I'm going to probably defer that question to our witness Dalton, because I have not looked in detail -- I listened a little bit during the hearing yesterday but $I$ have not really studied what the company is proposing as far as treatment of the deferred balance.

Q Okay. But carrying charges on unrecovered balances could affect the company's ability to recover within the retail rate impact cap?

A I suppose it could.
Q Okay. And I'd like you to assume with me that the company perceives that your recommendation may put it at risk for actually recovering the dollars that it expends on a large resource, okay?

A Okay. I would disagree that that's within the law, but $I$ guess we can make that assumption.

8 Okay. Would you agree, then, that that would cause the company to be biased toward underprocuring renewables if they perceive that there was a risk of actually recovering the dollars

1 associated with those facilities?

A Yes, I guess if that's their interpretation of the law that they may be at risk of not recovering it, but $I$ don't believe that's the case.
$Q$ And would that, then, also be inconsistent with statutory language saying that we should be developing and using renewable resources to a maximum practical extent, creating a situation that would cause the company to underprocure?

A Well, to me they don't underprocure. The legislature has put in a 2 percent cap or limit, and to say that they're underprocuring because you're running into the cap, they have met the statute. You can't procure more than is allowed by statute. I mean, there's --

Q You can procure less.
A You can, yes. That's not the case here. We have a utility that is exceeding as far as the amount of renewables they're putting go into place, because, you know, they're trying to move towards the governor's executive order asking for carbon reduction.

So I think, again, this is a -- we're kind of chasing down a rabbit trail here that's kind of meaningless to me.

0 Let me understand what it is you are

1 proposing when you suggest that we relook retrospectively at the rate impact cap associated with the resource procurement.

As I understood from your answer to Ms. Connelly, you would annually rerun the RES/No-RES scenario to see what the rate impact cap is for a particular year based on the most current information about several variables; is that right?

A That's right.
Q And those variables that you would suggest updating are, as I understand, gas prices --

A I would say --
Q Go ahead.
A Fuel costs, carbon costs, I think even sales projections, if you have new sales projections. I think it depends on what the company has available at the time. We know that they project gas costs on -- I mean, right now in their LDC business on a monthly basis.
$Q \quad$ Uh-huh.
A They project ECA costs on a quarterly basis. So there's -- it's not that we're asking them to come up with a projection they're not already doing out there either.

Q I understand. So fuel costs and carbon

1 costs, those are the things that you would update within the RES/No-RES scenario?

A Yes.
Q Okay. Now, would you agree that as those fuel prices change, that affects a whole spectrum of company decisions in terms of purchasing power, buying RECs, building gas plants, not building gas plants?

A Yes. And, in fact, I think that's consistent with our argument here. It affects even the way they dispatch units on a daily basis.

Q Right. Okay. Now, let's say in 2010 we do your updated RES/No-RES scenario. Gas prices have dropped significantly and that RES/No-RES scenario would show that what the company would do is go out and build a gas plant, okay?

Now, in 2011, gas prices have escalated, and when you do the RES/No-RES plan that would show that there should not have been a gas plant built. Which of those two scenarios is going to control in 2011?

A One, like all resource planning, you make a decision based on the best knowledge you have at the time. If you are deciding in 2010 on resources that you're going to put in place, you're going to make a decision. You're not going to rethink in 2011 did it

1 make sense that I started building a plant in 2010.

That's the way we have done business here for a lot of years at the Commission. I mean, it's -once we've decided to approve a particular resource that we're going to put into place and, one, if it goes through a competitive acquisition it has a presumption of prudence or if it's a contract for a renewable resource, again, that the company brings to the Commission, they can get that presumption of prudence by bringing it to -- for approval.

You don't go back and look later to say, My forecast was wrong, therefore, I'm going to back off of what $I$ decided a year or two ago.

Q Okay. So the gas plant that was indicated in 2010 would be locked into the RES/No-RES scenarios that you run and every year beyond that.

A If you actually had decided to build a gas plant, yes.

Q Okay. And what if midstream, between -in July of 2009 the company would have decided to build a gas plant but by the time your scenario comes along, by the time of the projection, gas prices have changed dramatically and that decision would have changed, how will you -- how do you know -- aren't you hardwiring decision making dates for the company that may, in

1 reality, not exist?

A Well, I think you -- what you would suggest we can't do a resource planning. We do resource planning right now. For example, we're looking at a period of time several years out into the future. It's not in the next two or three years, but we -- because many resources take years to several years to actually develop and put into place, you have to make decisions today based on the best knowledge you have on what you're going to put in place several years down the road.

If you have the opportunity to change your mind going down the road, I'm not sure -- it seems like the company would bring that back to the Commission. It probably depends on how much investment they have in a particular resource.

Q So in 2011 the RES/No-RES scenario could show that maybe the company should have halted construction and abandoned the plant that it had started?

A I think that's -- that's an extreme example. I mean, even right now we're not looking at resources in that period of time; we're even farther out than that. Gas plants even take typically a year or two to develop, at the low end. I mean, you saw

1 that with the Fort St. Vrain turbines up there, which is a very simple addition.

Go ahead.
Q But is that -- if that were the case, is that what you would do? Is that what you would create in this hypothetical system that presumably is going to extend for 20, 30, 40 years or however long the compliance acquired resource exists?

A I think you're going to revisit what you're going to do into the future every year.

Q Okay.
A That's what the statute actually says.
It says we're going to plan annually. Why -- I'm not sure what purpose the legislature would have had if -to think that they're going to require you to plan annually and say, Well, five years from now I'm going to take the assumptions I used from five years ago and project what I'm going to do over the next 15 years. I think you use the best information you have looking into the future.

Q And --
A We don't second-guess what we've decided in the past, and I think that's where -- to me it seems like we're raising an issue here that doesn't exist.

We're not suggesting that the prudency of

1 the investments that they make today, in 2009, should change.
$Q$ Okay. Now, if the RES/NO-RES projection in 2010 or 2011 shows a gas plant should be built, what would that gas plant cost and how would you determine that? Because there won't be an actual RFP that gets issued to build a plant.

A I guess you need to give me a little more detail here. What is the process we're going through to -- is this in a resource planning docket?

Q No, this is in your annual retrospective --

A We don't --
Q -- RES --
A We don't procure nonrenewable assets in a ReS plan. We do that through the resource planning docket several years into the future. That's where I'm having trouble with your --

Q Well --
A -- your, I guess, hypothetical here, because it seems like so far from reality that it's --

Q Well, I agree.
A I'm not --
Q That's the concern I'm having.
So in 2010 PSCo goes out and procures a

1 resource today, a renewable resource.

## A Okay.

2 And what you are saying is that in future periods the company should rerun the RES/No-RES scenarios to determine how much of the RESA dollars are available to pay for that resource, right?

A I am suggesting that you brought -- rerun the RES/No-RES scenario to determine how many RESA dollars are available to invest in the future.

Q Invest in the future, but not available to fund a long-term resource that the company has procured today? In other words --

A That -- I guess where I'm having difficulty with your scenario is once a decision is made for a particular resource, for example, a SunE Alamosa, to me it's -- it's analogous to a sunk asset that the company has on any other resource that they may have company owned. We don't question in the future should we have built that.

Q I understand. What I'm -- what I'm trying to get at is the impact of what you're suggesting, and what $I$ 'm -- what $I$ 'm saying is -- or what I'm asking you is when you rerun that RES/No-RES scenario, that's going to determine how many of those RESA dollars that got collected are within the retail

1 rate impact -- let me back up a minute.

Let's say gas prices go up. That is going to -- from what was projected today when PSCo went out and procured their resource. That is going to suggest that there is less headroom.

A I think the opposite is true. If gas prices went up from what PSCo projected, your actual savings associated with that on a renewable resource would actually increase, which would produce additional headroom, which would allow the company to potentially -- I mean, it's, again, their choice to procure more RES or more renewable resources, which I think is what we want them to do.
$Q$ And the opposite, if gas prices go down, the incremental cost of that resource is higher and that would require --

A It may be a reduction in what you're planning on doing in the future, yes.

Q I'm going to stop there.
MS. CONNELLY: Commissioner Baker, I have two more clarifying questions, again to understand staff's proposal based on their cross, if I might ask them.

## COMMISSIONER BAKER: Sure.

MS. CONNELLY: Let's see if I can

1 remember what they are. BY MS. CONNELLY:

Q Okay. The first deals with your statement that because cost recovery is allowed to utilities when they buy eligible energy resources we shouldn't worry if there are insufficient RESA dollars created by the recalculation.

What is your -- what is staff's position on how the company would recover that remaining cost?

A I would suggest they probably should pass back through the ECA if that were the case. Because, again, $I$ think once a decision is made on a resource it shouldn't be any different than a nonrenewable resource. The company should have the right to recover the cost of that and the cost of any energy associated with that into the future.

Because, again, that decision was made in this particular -- or in a particular RES proceeding that it was the right decision to make. We're not going to rethink that decision in the future.

Q Okay. And then the final question I have is you were talking about the recalculation of the incremental cost affecting future decisions but not affecting past decisions, and I want to make sure I

1 understand how what you're testifying to now relates to issues that we've had in past cases.

In past cases we were talking about doing a look back in a compliance report and rerunning the RES plan to look at what happened in the past year and we got a ruling from the Commission saying, Well, we don't have to do that unless we fail to meet the renewable energy standard and then we rerun it to see if there's more headroom and we can ... Okay. That's not what you're talking about here, I take it.

A No.
Q What you're talking about here is doing the recalculation only for future plans. Am I correct in my understanding?

A You are correct. I mean, to me what you would do is actually put in actual gas costs for what happened in the past, see if that created some additional headroom or reduced your headroom, one of the two, looking into the future but then put in actual projections. But it shouldn't change what you decided to do in this plan.

COMMISSIONER BAKER: All right. I think, Commissioner Baker, we understand staff's proposal and, again, we'll be prepared to address either through cross or through our own rebuttal witness tomorrow.

COMMISSIONER BAKER: You raised something that was slightly confusing to me, so I want to clarify one thing.

## EXAMINATION

BY COMMISSIONER BAKER:
Q I was looking at this as a -- in your vision, which is a -- in staff's vision this is a -these are snapshots in time, you make decisions on the best available information that you have, that if in the future there becomes a conflict between the prudency and the cost cap, it's your understanding that the protections granted to the company in statute hold them harmless from recovery -- for recovery purposes.

But for planning purposes moving forward, you would -- these -- the resources starting after what's -- after the ones that came online in 2005 resource planning, you would go back and you would use new gas projections to figure out what the headroom was for those.

I don't -- what I didn't understand is you also said you would use, look back and see what the actual gas production cost would be. Can you just help me with that?

A Well, you actually -- you need to determine did you have additional headroom in the past.

1 In other words, did you --

Q How useful would that be for the look forward part? I mean, you're looking at it just from an acquisition point of view, because you don't do that with resource planning, I don't think.

A No, but you also need to somehow fix what did you produce in the past and what did it cost.

COMMISSIONER BAKER: Okay. I'll save the rest of my questions for --

A Okay.
Q -- tomorrow, but ...
MR. MICHEL: Commissioner Baker, I actually -- as a result of this I wanted to ask a couple of clarifying questions.

I'm sorry, I understand this is not the usual routine, but we're sort of in a situation where we haven't had the benefit of seeing this testimony until just this morning.

COMMISSIONER BAKER: That's totally fine. I'll just say it's -- if we're short at the end of the day you're the one that has problems.

MR. MICHEL: I understand.

## CROSS-EXAMINATION

BY MR. MICHEL:
Q So Mr. Camp, let me just before we get to

1 this question, 1 -- is it fair to assume that when you eval -- when you suggested that if there was a conflict between the company's ability to recover costs and the rate impact test that the company cost recovery would supersede that, were you venturing that as a legal opinion or as a regulatory expert?
A. One, I'm not an attorney.

Q Okay.
A So ... But my -- I guess the layman's reading of the statute basically indicates that the company has the right to recover the cost associated with renewables under 40-2-124, so --

Q Okay.
A -- I believe they have that right, but again, I'm not representing myself as an attorney.

Q I understand. Okay. When you run your future projection, your future RES/No-RES scenarios, that will impact the amount of -- let me back up.

The company today goes out and procures a renewable resource, SunE Alamosa, for example. Your future projections will determine how much of that resource gets paid from ECA dollars versus how much gets paid from RESA dollars; is that right?

A I'm not sure. I think it -- I believe you're correct in saying that. RESA dollars will pay for the incremental costs of that unit.

A Are you talking about the scenario where there's insufficient funds to cover it within the RESA? Maybe I'm not quite clear.

Q No, I'm not. I'm just -- the company collects a certain amount of RESA funds. Those funds are used to pay the incremental costs of renewable resources. Am I right so far?

A That's right.
Q Okay. And what you were doing in your ongoing RES/No-RES scenarios is you're determining on an ongoing basis how much of that resource cost is actually incremental?

A I believe that is true.
Q Okay.
A Yes.
0 So that what your future scenarios will determine is how much of the RESA funds go to pay for that resource versus how much of them get paid through the normal rate making process?

A Correct. For example, the example I gave where, let's say, gas prices are higher than what the company projected, you would have used less than your

2 percent RESA funds and which actually would free up additional dollars into the future for additional procurements.

Q Okay. And so when you run those RES/NO-RES scenarios, the No-RES scenario does need -is my understanding what you're suggesting is that needs to reflect the most current information available to the company at that time with respect to fuel and CO2?

A Yes. And, you know, the one that occurs to me, too, as we speak here that I would even add to that list is the cost of the replacement facility, too.

I mean, if it's a gas unit, that gas unit may be more expensive in the future. So you wouldn't use the value -- or the cost of a gas turbine from five years ago, you would use your best estimate of what that gas turbine cost at the time you're doing your --
$Q$ So you would update the No-RES scenario to reflect the current price of new resources as well?

A Yeah. The replacement resources, because the others seem like they would wash through the analysis.

Q Okay. And you agree that the estimate for those resource costs is not going to be verified by any kind of RFP process? again, we can debate that, $I$ guess, in a RES plan if necessary, but, again, the company's going to use a gas projection.

That's not necessarily -- I mean, all of these are projections and I think parties have the right in a proceeding to object to certain values that are put in front of them for consideration in that docket.

Q And once a -- let's say in 2011 a gas plant was determined should be built in the No-RES scenario, that gas plant would then continue to exist in all future RES/No-RES scenarios that you would perform to determine that incremental headroom?

A I guess that's what still confuses me a little. I would say no.

Q You would say no?
A Because, again, you would look -- when we do this analysis, say, in 2010, you're going to look into the future, decide what you can -- replace everything that's renewable with some, I guess in this case, gas units out there and then compare that with how much renewables you can put in under the 2 percent limit. It's not locking in that you're going to build a gas unit.

Q But --
A If you decide in 2012 that the gas unit isn't what's appropriate at that point, you would put what would be appropriate.

Again, $I$ think a strategist selects resources based on load projections of the system out there, not -- we don't lock in future resources.

Q Well, let me ask you, because now we're both confused.

A I'd agree.
2 So what you -- what you -- we're in 2011, gas prices have dropped to such an extent that the No-RES scenario when it's run through the strategists shows companies should go out and build a new gas plant, okay?

A In what year?
Q Well, in 2011 they should immediately start construction to be completed within two years let's say. All right?

A Okay.
Q Is there something -- I'm judging from your facial expression that you -- that's an unrealistic scenario?

A Well, one, we don't -- we don't acquire nonrenewable resources through the RES plan.

Q Okay.
A I mean, that's why I -- I guess --
Q I understand what you're saying.
A -- that's why I'm struggling here.
Q You would agree, though, that the idea behind the RES/No-RES scenario is to look at what the company would have done if it didn't have renewables available to it versus what it is doing with

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renewables?
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A Yes.
$Q$ Okay. And that if there are low gas prices, one of the things the company might do in those scenarios is build a gas plant?

A If their analysis indicated that at the time they were doing resource planning, yes, I would agree.

Q Or they might, you know, bump up their gas -- their purchase power?

A They might. They may actually forestall doing some renewables for a period of time until they knew --

Q Okay.
A -- whether it was justifiable under the 2 percent rate cap.

Q And so what I'm suggesting is that when

1 you update your fuel, CO2, you're also -- that's going to affect a lot of decisions the company makes besides just what the cost is of fuel for their power plants or what their energy costs are. It can have a lot of repercussions beyond just fuel costs. Plant decisions, for example.

A Well, yes. I mean, that's the whole idea. To me these are both resource planning proceedings.

I mean, this is a resource planning proceeding for renewables and when you decide something, yes, it affects what you do into the future. Because you're going to make a decision and start implementing a plan. Once the Commission approves it, I would expect the company's actually going to go acquire those resources.
$Q$ And I guess the bottom line I'm getting to is that there are a whole lot of variables that we're not going to know, and that going into the future and locking down these few components is not going to give us a high degree of certainty as to what that No-RES scenario would really look like if the company -- if we'd actually had the company go out and not procure renewables and take alternate actions over time.

A I would agree, but I'd also suggest that in 2015 we're going to have a better idea what the price of gas, the price of carbon, the price of gas units are for 2018 than we are today.

MR. MICHEL: Okay. That's all I have. Thanks.

MS. CONNELLY: I hate to do this to you, but I have one more clarifying question, and if $I$ might.

CROSS-EXAMINATION
BY MS. CONNELLY:
Q The -- if you would assume for a minute that the company may not be as confident as you are about the cost recovery if we go over the retail rate impact, would the staff support a change to the commission RES rules that clearly specified that in the situation where through this recalculation the company is now in jeopardy of having sufficient money under the retail rate impact rule to pay for resources that it has already acquired, that the difference will be made up through some other rate mechanism?

A I would support that.
MS. CONNELLY: Thank You.
COMMISSIONER BAKER: Okay. Mhank You,
25 Mar. Canm. We'll see you I was hoping latex today, but

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I remind you you are still under oath. EUGENE CAMP,
having been called as a witness, being previously duly sworn, testified as follows:

DIRECT EXAMINATION
BY MS. BOTTERUD:
Q Mr. Camp, when you were previously on the stand in response to some questions Ms. Connelly posed to you, a portion of your response was that staff would agree to support a rule in, I guess, the resource planning section of the Commission's rules that would in essence make the company whole. Would you clarify your response, please.

A Sure. I'll try.
I believe the scenario that we're talking about and -- in the case, for example, I'll use the Sunf Alamosa, since it seems like that was one that's applicable to this particular docket. In the case that gas prices in actuality reduced -- to the extent that the RESA would be insufficient to cover the cost, I would suggest that the company could seek -- and I guess what we were talking about is a possible rulemaking that would allow recovery through, for example, some other mechanism, possibly the ECA or something like that.

I think, at the same time, that would also have an impact again, into the future, if you look into the future, in that, again, you have over-spent the RESA; I think the company has to be made whole, regardless. But again, you are in a situation where you have over-spent the RESA; and I think it would cause curtailing of future acquisitions for a period of time until that point when the RESA was positive again. Does that clarify the question that was

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BY MS. CONNELLY:
Q When you are talking about curtailing future acquisitions, are you talking about curtailing -- it's the phrase "curtailing" that I'm concerned about -- delaying acquiring additional resources or are you talking about curtailing the energy that we buy from the resources that we've already contracted?

A I think I chose the wrong word there.

1 Curtailing isn't the right word. I think it would cause you to be limited on what you could acquire in the future as far as new resources, either contract resources -- but again, you wouldn't limit at all energy on a project that you have already signed or on projects that you have already got approved by this Commission.

Q Okay. And the question I asked you earlier -- and I just want to make sure that what you have said now is not a change in your answer. And I asked if staff would support clarifying by Commission rule this proposal, that for resources that have been acquired, the company is still entitled to full cost recovery even if there are insufficient funds in the RESA to pay the incremental costs as they are now recalculated. Did you intend to change your answer on that?

A No. And I think the company is still entitled, by statute, but to recover the total cost out there for any resources that have been approved by this Commission.

MS. CONNELLY: Thank you.
MS. KING: Can I just nail that down so
I'm clear to what staff is -- so that I'm clear on what staff is agreeing to?

BY MS. KING:
$Q$ Staff is agreeing, were the company to seek a rule change that would -- that would clarify that it would be entitled to full cost recovery in the event that later recalculations to the forecasts that were -- to assumptions that were used would mean that the RESA funds would be exhausted by that resource and they would get full cost recovery through a different mechanism. Is it staff's position then that future decisions -- that there would need to be some forestalling of acquiring more renewable energy resources until that -- until the RESA were -- had a positive balance in it; is that accurate?

A That's correct. Because, again, you have dollars flowing into the RESA every year; so it wouldn't be the situation -- or I can't envision a situation where you would never recover enough at some point where you wouldn't be in a position where you couldn't acquire resources in the future; but it may be a period of time -- again, I think we're talking about a situation that's unlikely.

I think it would -- the only condition that would cause this would be a very severe change in the price of gas for a number of years; because --

1 again, I think SunE Alamosa, we're using that example,
2 it doesn't eat up the entire RESA; there are a lot of
3 projects that are a part of that. A lot of your

11 that condition.

20 down. We'll see you tomorrow.
21 MS. CONNELIY: But don't go far.
(Discussion off the record.)
COMMISSIONER BAKER: MY apologies

1 having been called as a witness, being previously duly 2 sworn, testified as follows:

3 COMAISSIONER BAKER: We were at either
4 WRA -- let's let WRA go and then staff; is that okay?
MS. MANDELI. Thank you.

BY MS. MANDELL:
Q Mr. Warren, I'm Victoria Mandell, attorney for Western Resource Advocates.

A Welcome.
Q Mr. Warren, I think you have been here in the room this morning and this afternoon -- well, this morning when Mr. Camp testified twice concerning the trial staff's position on the lockdown of incremental costs and resources going forward; is that right, you were here?

A Physically, yes.
Q I'm not sure what that means. COMMISSIONER BAKER: He's running models in his head.

MS. MANDELL: I think we're all trying to work through what that meant.

BY MS. MANDELL:
$Q \quad$ So I wanted to ask you a couple of questions about your understanding of how Mr. Camp's
proposal would actually be implemented in the modeling and the impact of that, if that's okay.

A Well, we'll see where it takes us.
$Q$ Okay. So if -- let me know if you have the same understanding that $I$ do of his proposal. And as $I$ understand it, he is suggesting that annually there would be a remodeling or recalculation of both the RES and No-RES scenarios with regard to -- for purposes -- okay, I'm trying -- I'm not sure exactly what he was saying. So what is your understanding of what he was saying as far as going back and recalculating the variables for past decisions? Do you understand how that would be done with the modeling?

A I don't believe past decisions are what he was trying to get at. I think what his position is is that in the -- in the current RES and No-RES modeling, existing RES units, SunE Alamosa, the '07 and '08 on-site solar remain in the No-RES, as well as in the RES. And so they wash because they are already existing and that decision to put those on the system has been made.

I believe Gene's position is that those RES units would be removed from the No-RES -- maybe not. That's one way to do it. They would be removed from the No-RES in a remodeling of the RES/No-RES

1 incremental cost, that would occur such that all the RES units would be in the RES plan, but not in the No-RES plan. So you would get a different incremental cost than you would the way it's currently done. That -- that could be one way to look at Gene's method. The other -- I'm not really sure. The other method that came to light is he just wants this ongoing incremental cost, which was the way I've done it in this scenario, the current RES plan, to be reran just SunE and the E-'07, '08 on-site units to remodel just that incremental cost, based on new information. So it's a little bit -- I'm a little unsure as to exactly how we would implement that.

Q Okay. And for clarification for now, what the company has proposed is that the incremental costs that were calculated annually are set and not recalculated going forward.

A The ongoing incremental cost.
Q The ongoing incremental cost with regard to investments that have already been made; is that right?

A That is correct.
Q Okay. And it's also clear -- it's also clear that the investment decisions, both large and small renewable resources, are based on that -- you

1 know, the current calculation of incremental costs. But the company has to rely on the calculation that's made that year of incremental costs for its investment decisions going forward; isn't that right?

A That is correct. You have to make decisions on information you know today.

Q Okay. So with the trial staff's proposal -- let's look at some of the variables that he's proposing be recalculated in both the RES and No-RES scenarios. As I understand that, the variables that he's proposing be recalculated for purposes of looking at incremental cost every year would be fuel costs and carbon costs and the avoided costs of the -of the resource that would have been purchased; is that what you understood as well?

A Not of the resources that would have been purchased. I think it's just the company's gas cost forecast, the company's sales forecasts or fuel costs; it's not unit-specific costs. It would be the system fuel costs that he was referring to, if I remember correctly.

Q That's -- we might have heard different things or $I$ might have miss heard because, with regard to those variables, the specific ones that would be backcast and recalculated, I understood he was talking

1 about gas turbines and also the assets that would have been purchased in the -- in the calculation of the No-RES scenario; but you heard something different, is that right?

A I don't believe -- I don't believe that there is actually a recalculation of a gas cost for a specific unit. We do have a gas cost forecast that applies to the entire system. And there are transport fees to various areas on the system and various units on the system; but I don't believe you would recalculate based on just updating a specific gas cost for a unit. It would be a system-wide gas forecast update, a system-wide coal cost update, a system-wide sales forecast update.

Q I'm talking about the resources not the fuel for the resource.

A Okay.
Q I understand that's what he was saying, but I'm not sure.

A Maybe ask the question one more time and I'll try -- maybe I'll hear it differently.

Q I'm just trying to understand basically, in terms of remodeling the RES and No-RES scenarios, all the variables that would be remodeled; and I understood it to be a pretty wide net of variables that

1 would be recalculated. And I thought one of those factors was in fact the resource that would be used for calculation of the hypothetical No-RES scenario world.

A I would agree with that. If we did see significant cost changes in projected CT installations or CC installations, for those No-RES units, those nonrenewable units which offset the RES units in the No-RES plan; if those costs have changed, I think it would be prudent for the company to update those costs.

Q So one question $I$ had was with regard to the variability of some of those estimated factors. So in your experience, would you agree that gas prices can be volatile and that that could really impact the No-RES/RES scenario, if you looked back three or four years later to recalculate incremental cost?

A I do agree that gas costs are -- is a volatile commodity. Looking back two or three years, I don't think is practical. I don't know what you would do if you looked back three years from now and said, Oh, well, three years ago we had more headroom. I don't know what you would do with that.

It is -- it's an unknown thing for me to -- if you considered a twenty-year project and you were ten years into the project, I don't believe it's practical from a modeling standpoint to put in ten
years of actual data and then ten years of forecasted data. It's just not the way these models are set up. They are not designed to do this and it would be very painstaking.

Now, if you look one year -- one year is not so bad, but the inputs just multiply tremendously if you try to backcast the actual values. You can reset your forecast going forward, annually; but that's not a backcast.

Q So in terms of the volatility of some of these variables, would it be fair to say that, in terms of carbon emissions costs, we really don't have a sense of how variable that could be?

A We do not until -- until we have some guidance on that, it's really our single best guess at this point.

Q And with regard to the avoided costs, the resource that's placed in the No-RES plan to determine nonincremental costs, could there be variability -- and volatility with regard to those costs, as well, over, say, a two or three or four-year period?

A I believe there is some volatility in the turbine market. As the economy changes, steel prices can go up and down and turbines can -- there can be a shortage, there can be -- you know, it's all a supply

1 and demand kind of thing. So there is some volatility in nonrenewable generation.

Q Let's take a hypothetical for just a moment. If there is -- with these resources -- these estimations that, as you have acknowledged, can be relatively volatile, let's say, hypothetical -hypothetically that a lot of these -- this volatility in price or cost happens simultaneously in such a way that it impacted the amount available for the RESA fund, let's say, by 20,30 percent. Do you believe that that could happen, that enough of those could go in the same direction to impact the RESA amount relatively significantly? Can you see that from your perspective in the modeling?

A I am unsure what the level of impact would be, but there definitely would be an impact. And I would say it would be deemed significant.

Q But at this time, you are not -- you can't really give a percentage of any kind that would be --

A No, I don't know if you would -- if things turned sour, if you would run short in ten years instead of twenty. I don't have a feel for that.

Q Okay.
A It's really a tough science and that's

1 why we have these huge models to kind of figure this out for us.

Q But you are saying it could be significant, but the model is complex.

A Yes.
Q So my question, just looking at this a little more granularly, today, as I understood your earlier testimony, the SunE Alamosa facility, which I would -- I think we would agree would be categorized in the large investment area, occupies approximately 64 percent of the RESA pot of money available going forward; is that what you said?

A That's incorrect.
Q Okay, please explain.
A It is about 64 percent of, I believe, Column $J$, the ongoing incremental cost only.
$Q \quad$ Okay. So then it's 64 percent -- 64 percent of the amount that would be -- of the funds that would be most impacted by this recalculation that staff is proposing; is that right?

A Well, recalculation would change that -could possibly change that percentage. It's --

Q I'm not talking about the percentage for Sune Alamosa. My last question just had to do with the recalculation of the ReS/No-RES scenarios that trial

1 staff is proposing; that would have the most impact on the incremental cost part of -- like Table 6-3 or Table 6-4?

A The recalculation would change the -- I believe would change the ongoing incremental cost, Column J, if I understand Mr. Camp's position.
$Q$ So in terms of the impact of that recalculation of Column $J$ every year, and the -- you know, the impact based on the variable factors, I'm trying to understand how it would impact Public Service's investment in renewable energy on a going-forward basis every year. So, right now, as I understand it, SunE Alamosa is approximately 64 percent of that Column $J$ pot; is that right?

A That's correct.
Q And smaller generation -- renewable generation resources compose approximately 36 percent of that pot.

A That would be the '07, '08 on-site solar program, right.

Q So I'm just exploring this with you for a moment. If there was a significant change in that Column $J$, based on the recalculation of these variables, these estimated variables, Public Service wouldn't really be able to get out of the investment in

1 the large SunE Alamosa facilities; they can't stop

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that; is that right?
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A That is correct. I believe that's Mr. Camp's position that those investments that we have made, those contracts that we have signed would virtually be unaffected. It would be just be how those costs would be recovered.

Q And with regard to the smaller program, if there was a significant impact on Column $J$ incremental costs, where Public Service might have room to change its investment decisions that would be in the smaller program -- does that make sense to you?

A Not necessarily. The ongoing cost column, Column J, is the '07 -- when you talk about the smaller program, the ' 07 on-site solar program, those investments have already been made and these ongoing costs are the non-rebate costs, the non-one-year costs. And we have contracts with those homeowners and those companies to pay them $X$ amount for those RECs. And $I$ don't believe the company would be in a position to go back and say, We want to cancel those contracts now.
$Q \quad$ Okay. So the impact of the trial staff's proposal would -- if there were changes that lowered the amount of -- the recalculation lowered the amount that was available to pay for these resources that

1 Public Service Company has already invested in, the company -- the only way for the company to reduce its exposure is just through future purchases; is that right?

A That is correct. I believe that's Mr. Camp's position, that current resources, contracted for and in place, would remain in place; and we would only scale back our future decisions on what was made available -- what would be available through the supposedly reduced RESA balance.
$Q$ So under the trial staff's proposal, the company -- unless they are really sure of recovery of costs for investments that they have already made, it's going to be more exposed to the ability to not be able to recover funds if this Column $J$ is subject to reanalysis every year.

A I don't believe that was Mr. Camp's position. I believe his position was that the company would be held whole for purchases and RES units, so to speak, that we've already contracted for. And whether that -- and if there were no funds available in the RESA, that they would support recovery of those costs through another mechanism such as potentially the ECA or a different mechanism. So it would not effect that. It would only effect what we would look at in the

1 future if the balance of a recalculation changed from a positive to a negative, so to speak.
$Q$ Hold on.
MS. MANDELL: Could I just have one second, please.
(Pause.)
MS. MANDELL: I have just one more question. Thank you for the time there.
$Q$ Do you have that Column $J$-- that chart 6-3 -- 6-3 in front of you? It's in Volume 2 of the plan.

A Yes, I do.
Q Thank you, sir.
Just another clarification question, under the company's proposal, Column $J$ in 6-3 are the locked down ongoing incremental costs; is that right?

A That's correct.
$9 \quad$ Okay. So under the trial staff's proposal that $J$-- that column would actually not exist, it would all be exposed to recalculation; is that right?

A It is a question of mechanics. As I sort of described earlier, I think there's two possible methods to consider Mr. Camp's position, a remodeling of all the RES units under RES/No-RES. As such, then

1 everything becomes kind of a big portfolio of costs and

22 BY MS. BOTTERUD:
A Okay.
COMMISSIONER BAKER: Staff?

CROSS-EYAMINAMION

Q Good morning, My. Warien.
A Good morning.
Q Were you in the heaxing room yesterday

1 BY MR. MICHEL:

1 regulation, or greenhouse gas regulation, you would make an exception to the lockdown that PSCo has proposed that -- that Public Service has proposed, and impute a carbon cost of zero in the RES/No-RES calculation of rate impact; is that a fair statement of your recommendation?

A I would say, yes, but the known and measurable would also be tied to the idea that it's being passed through in customer bills.

Q That what is being passed through?
A Carbon costs, besides being known and measurable, are being included in customer bills.

Q And the logic that you're using to conclude that, is that carbon costs are being considered as nonincremental costs in the procurement of the renewable resources?

A No. That $I$ was taking the perspective that because the retail rate impact calculation is supposed to mirror customer rates, by including a cost that is, of yet, not part of the customer's bill, it's inappropriate to include it in the calculation of a retail rate impact determination.

Q Okay. Well, Public Service has anticipated, as part of its forecast, or as part of the Commission's adopted forecast, that carbon costs are

1 going to be a certain amount in the year 2010; is that

A Yes.
Q And you are suggesting -- and what is that amount, roughly?

A I believe it starts at $\$ 20$ a ton, and escalates at $7 \%$ per year.

Q And do you know the accumulated amount? Is it $\$ 100$ million? Less? Let me ask it this way: That $\$ 20$ per ton, is that being -- is it your testimony that there is a component of the company's revenue requirements that is collecting $\$ 20$ a ton for each ton of carbon?

A Currently?
Q Above $80 \%$ of their carbon emissions.
A Excuse me, currently, no.
0 Okay. And it's your testimony that there would be, if the Commission accepted Public Service's position in this case?

A What I'm saying is, that if the carbon costs are included in the retail rate impact, there will be imputed costs that do not exist on the customer bill.

Q So, over and above recovery for the renewable resources that are part of this plan, there

1 is going to be an additional recovery for carbon costs;
2 is that what you are testifying to?

3

A Well, the carbon costs get factored into the analysis through the comparison of RES to the No-RES. And you can see, in my exhibits to my testimony, the colored chart, what I believe to be an illustrative example of what that carbon cost inclusion does to the retail rate impact and the lockdown.

Q All right. Well, let's move ahead one second. All right.

Now, in your testimony, you discuss the reality of greenhouse gas regulation from a commodity price fluctuation, such as gas prices. And that is why you would make an exception to a lockdown proposal for carbon regulation -- for carbon costs and not for gas price fluctuations; is that ---

A That's a fair characterization.
Q Okay. All right. And the basis for that, is that there is a -- because there is no carbon regulation, that is to distinguish it from price fluctuation?

A For a commodity such as natural gas?
Q All right.
A Because of -- the natural gas is eventually collected, the cost of that natural gas is

1 eventually collected from customers through the ECA on the electric side.

Q Is there a financial difference between there being no carbon regulation and there being carbon regulation in which Public Service's carbon costs are zero?

A Could you rephrase that question?
Q Is there any financial difference, in your mind, between a situation where there is no carbon regulation and a situation where there is carbon regulation but the price to Public Service is zero?

A I think the financial difference comes in the calculation of the lockdown, as it relates to this case.

0 Well, I am asking you, is there a financial difference between, from Public Service's perspective, between those two scenarios that $I$ just described?

A Currently, since carbon is not a cost to the company, there would be no cost difference between what's happening today and a price of zero.

Q All right. But in the situation where there is no carbon regulation, you would create an exception to the lockdown, but in the case where there was a carbon regulation, if the cost to Public Service

1 was zero, you would not create an exception to the lockdown?

A Is the premise in your question that the zero cost is a known cost?

Q Yes.
A Then $I$ would not make an exception. I would say they should include the carbon cost, if it is zero, due to, let's say, Federal legislation has declared that actual cost to customers -- excuse me -the Federal legislation has declared that, under a cap and trade, currently, Public Service would have no costs for the carbon.

Q Okay. So, that, in the event there was carbon regulation in 2010, but the impact of that regulation on Public Service was zero, then you would maintain -- you would not breach the lockdown, and you would maintain the $\$ 20$ per ton forecast?

A Your question is confusing me, because you say they use zero, but you have a forecast that would show 20 .
$Q \quad$ That's right.
A But if the actual dollar value is zero, I don't think the forecast should include 20.

Q So then, basically, what you are saying is each year, regardless of whether there's a

1 regulation or not, you're going to look at the carbon cost and the updated rate impact test for that, then, current carbon cost?

A Yes.
Q Okay. But you will not do that for other commodities?

A Well, there would be a natural gas price forecast that would be updated in each client's plan.

Q Would you then breach the lockdown for the changes between the forecast of gas and the actual gas in any compliance year, in each compliance plan?

A Let me answer by phrasing a little more facts around this. In the question -- let's say we're looking at the SunE Alamosa today, as it relates to this docket. What the OCC is advocating is the lockdown of, for lockdown purposes, go ahead and lock down all of the costs that are associated with that contract, except for the carbon. And then once the carbon costs become known and measurable, through legislation, rerun those numbers and that will create more headroom.

If we assume a zero value, that's a very conservative approach. If we assume -- to rerun the numbers, once we receive the utility's known costs, that will create the additional headroom, that is true,

1 so to speak, that is actually created by the resource. That recalculation might likely occur beyond today's -or the value that we would lockdown today.
$Q$ All right. Well, that really wasn't -my question was, as I understood your testimony, you are going to rework the compliance plan every year, based on actual experience with carbon regulation; is that correct? That's what I understood you were saying.

A Let me make it clear. There's two components that you need to keep in context, it's the retail rate impact, and it's the lockdown.

As it relates to lockdown, we would say that the lockdown should happen similar to what Public Service proposes, either at the time of the signing the contract, or in the aggregated annual values for the on-site solar. And in determining that lockdown, there would be no carbon in today's 2009 plan. But in 2010, if carbon came into the equation, we would have the company rerun the numbers to calculate what -- the additional headroom that has been created by carbon savings for that.

Q But you are talking about locking down the RES scenario as it relates to the rate impact test. Isn't part of Public Service's proposal to also lock

1 down the variables in the No-RES scenario and lock in 2 the rate impact?

A Yes, it is.
$Q$ Okay. And as I understand what you are saying, is you reopen that No-RES lockdown assumption related to carbon, based on actual experience with carbon?

A Sometime in the future.
Q Right. But you will not do that for any other commodity?

A That's correct.
$Q$ And so, if in 2010, there is carbon regulation, at zero cost, you will then not unlock, if you will, the carbon costs in the No-RES part of the scenario?

A For the 2010, no, we would not, because, under your example, you say the carbon costs were zero.

Q Okay. And in 2012, if the carbon costs go up to $\$ 20$, will you then -- or let's say they go up to $\$ 40$, will you then recalculate the rate impact test, based on the changes in that price?

A For the lockdown, we would recommend the Commission, yes, recompute the, what $I$ will call again, "the headroom," created by the resources that were acquired prior to that, again, SunE Alamosa, for

1 example.

Q Okay. So, just to be clear, you're saying that you will recalculate the rate impact every year, for the life of that SunE Alamosa plant, based upon actual experience with carbon fluctuations, but you will not do that for gas price fluctuations?

A Sorry. Mr. Michel, in your example, you said, for instance, in 2012, we would have carbon costs of $\$ 40$ a ton. I would also assume, at that point, we would have a forecast for what we think carbon will be continuing on in 12,13 and so forth.
$Q \quad$ Okay.
A I would think that, at that one point in time, in that compliance year, 2011, we would reexamine the, for instance, SunE Alamosa, and we would relock it down on a permanent basis, going forward, just to pick up what I call equivalent layer or additional slice to the carbon that's attributed to the Sune Alamosa. I do not envision, each year, the lockdown will be continually recomputed for the SunE Alamosa.

I would say its like a two-step process.
We'll lock down everything today, based on all forecasted costs, except for carbon. Then once carbon becomes a known and measurable quality, we will have some forecast for the future. We'll have a better

1 starting point, that will be -- for the second lockdown, which gives us an additional wedge or slice of that benefit, that can be used in the retail rate impact.

Q Okay. I understand, now, what you are saying; is that once there's carbon regulation, you will make another forecast and that that will be permanently locked in?

A The Commission would make the forecast and we would lock it in.
$Q$ And you would lock it in, and that would establish the rate impact associated with that resource for the life of that resource?

A There would actually be what I consider two components to that resource, one initially with no carbon, then there would be the incremental proposals piece for the carbon only.

Q Okay.
A So, yes, then, they're locked down permanently in line with the contract.

Q And the distinction you are going to get is the fact there's no carbon regulation right now as opposed to there being carbon regulation with a very low or zero price?

A Correct. OCC has advocated to the

1 conservative approach, of putting it in at zero today, and when it becomes known and measurable, you can get the additional headroom, because you'll have a better starting point on which to measure from.

Q And your assumption is that you are going to know better what the carbon prices will be at the time carbon regulation is implemented than you would know today?

A That's correct.
2 Okay. Now, is it true that you will have the ability to be able to better forecast other commodity prices in a future year, in that future year, than you can today?

A Are you thinking of natural gas?
Q As an example.
A I don't know. I don't know if the forecasting method would become better over time.

Q If you knew gas prices in -- I would say, at the beginning of 2013, were $\$ 8$, would you think you could better forecast those gas prices in that year than you could without that information? It gives you a starting point, right?

A The difference between natural gas prices is if the forecast is wrong, it doesn't matter so much, but the ECA is going to true it up, because the

1 forecast could go in, customers would only pay what's 2 actually incurred.

Q Get back to my question, if you would, which is, if you have information about what the price will be at the beginning of 2013, is that going to give you a better opportunity to forecast gas prices in 2013 than you could today?

A So, you are asking me to answer the question from today's standpoint as opposed to compliance plan in 2013?

Q Yes.
A I don't know how I could have better information about a price that's four years out from today than I would today.

9 Well, then, if you know what the price of carbon is four years out from today, is that giving you any better information as to what the carbon price will be in the future than it would today? What's different?

A It's to take a conservative approach to carbon.

## Q Okay.

A Because we don't know the starting point.
Q All right. So, I think I understand what you are suggesting now. Would you agree that an

1 underrealization of carbon costs in 2010, for example, we have a forecast that says it will be $\$ 20$ per ton in 2010, that that could be offset by an underestimation of carbon costs in later years?

A Correct. And it would impact the headroom either positively or negatively, depending on how it varies from, let's say, the $\$ 20$ benchmark.

9 So, even though it's your testimony, I believe, that because there is no carbon regulation, there's no carbon cost, the fact that there's no carbon cost in those earlier, or first years, could be offset by underestimations in our forecast in later years?

A It could be, but I think taking our approach of setting it at zero, provides only upside for the Commission, when carbon actually takes effect, in the sense of creating more headroom in the future.

Q When you say, "creates only upside for the Commission," what do you mean by that?

A Because if we use a value of zero, and in your example, if it comes in at $\$ 40$ a ton in 2012, we'll know that the headroom created by the SunE Alamosa case is $\$ 40$ a ton, times whatever the equivalent value of the offset of carbon tonnage was.

If we chose $\$ 20$ a ton, let's say, and it turns out to be 40 , there would be a $\$ 20$ shortfall, so

1 to speak, in the headroom that's been accumulated 2 during that time. Conversely, if carbon comes in lower than 20 , then there would be a overcollection, because you would have had more headroom than really did exist.

Q Well --
A So, any zero starting point is just to say there is only upside to move from zero to a positive value, gives you more headroom than having to worry about whether you're plus or minus, over or above a forecasted starting point of 20.

Q If you got a carbon price of zero, that diminishes the headroom; isn't that right?

A Currently, but I would say that the headroom created by the carbon doesn't really exist, because customers aren't paying for carbon currently. The OCC premise was that the RESA retail rate impact should mirror reality, in terms of the costs that are factored into retail rate determination.

Q Okay. Now, you would agree that what you are proposing affects the rate impact, correct?

A Well, for this year we're only dealing with the lockdown.

0 But the financial implication of your proposal to not impute a carbon cost, until there is actual carbon regulation, the financial impact of that

1 is to change the rate impact amount and the amount of
2 the RES that gets allocated between the ECA and the

MR. MICHEL: I don't have a whole lot more.

COMMISSIONER BAKER: I am not rushing you. I just thought I would -the witness: Mr. Michel, I am looking at Table 6-3, Column $J$, in the row labeled, "2009." And you'll see a figure of $5,259,570$. I suspect that if the carbon adder was not used in the calculation for that figure, that the incremental ongoing cost would be higher, and that would have the effect of reducing the amount of money that could be used to acquire other

1 eligible energy resources.

BY MR. MICHEL:
Q Okay.
A My caveat would be that the carbon adder benefit would come in the latter years for SunE Alamosa, and these other facilities, in 2007, 2008 on-site, once the carbon is known and that headroom that we anticipated today, would be captured in the future.

Q Okay. But you don't know whether the forecast that we make on the date the carbon regulation is implemented is going to be better than the forecast that's in place now on a life-cycle basis?

A No, I don't.
Q Okay. Could you turn to page 7 of your testimony?

A Of my Answer Testimony?
Q Yes. All of this will be your Answer Testimony.

A I'm there.
Q I don't have a copy of your Rebuttal Testimony in front of me, so. . .

All right. I think we heard all of that. Let me -- okay. Let me follow-up with one final line of questions. We talked about the distinction -- we

1 talk about distinction between there being no carbon 2 regulation and there being carbon regulation that was

3 very inexpensive or zero. Do you recall -- excuse me
4 one second. Are you aware that in a number of climate 5 change regulation proposals at the Federal level, there 6 is a thing -- there is a feature that I call, "early

7 action credit?"

11 that is a -- or ask you to assume that that is an
A No, I am not.
$Q$ If I were to represent to you that that is an issue in front -- or let me represent to you that issue, before Federal policy makers right now.

A Okay.
Q Do you understand what I mean when I say, "early action credit?"

A No. Could you explain that a little better?

Q I would like you to assume that early action credit refers to Congress creating a law that rewards companies that have taken early action to reduce $\mathrm{CO}_{2}$ emissions.

A Something like prior to the enactment of the legislation?

Q Exactly.
A Okay.

1 proposed $\mathrm{CO}_{2}$ regulation, let's say, a bill is enacted in 2012, and because of actions that Public Service took in this Compliance Plan, in 2009, the company was able to reduce its compliance costs in the years 2012 and out, because of early actions that it took, okay? I would like you to assume that that's the case.

A Can I ask a clarifying question?
$Q$ Certainly.
A Those, the values of that early action, can be monetized?

Q I will represent to you that it will, one form of early action credit, would be to allow the company to have allowances for emissions represented by reductions that it has taken in the early years, or offsets to carbon emissions in later years.

A Okay.
$\dot{Q}$ In that case, isn't it true that you would want to recognize the carbon benefits today that the company and its customers had paid for, as nonincremental costs associated with that resource? In other words, let's say that, because of early action credit, the company's cost of compliance in 2012 went from $\$ 50$ a ton to $\$ 30$ a ton. You would agree that that's a benefit that would not be there, but for the

1 early action the company took?

A And early actions are because of the deployment of renewable resources or eligible resources?

Q As an example.
A Okay.
Q Or other carbon reduction mechanisms the company may have taken. And would you agree that those are costs incurred today that are avoiding costs that would be incurred later, and that there is actually a benefit from a carbon standpoint, to doing that today, even though the regulation may not occur until 2012?

A I would think that you could come before the Commission, in a compliance plan, in that 2012 time frame, and they have that estimation, that because of the early actions taken in primary years, instead of paying $\$ 50$ a ton for the carbon, they now only have to pay 30 ; therefore, there was some savings. There would be presumably some sort of allocation of what was for eligible energy resources and what would be maybe acquired due to advancements in their fossil fuel fleet, such that that savings of the difference between $\$ 50$ and $\$ 20$ can be allocated between the RESA and the ECA, and ratepayers would receive that benefit monetized.

1

Q But they would have lost the benefit between now and 2012, under what you're suggesting, because no adjustment would be made until that law is actually in effect, or you -- no lockdown would occur until that law is actually in effect?

A Well, as you portrayed it, the one aspect to carbon legislation, we don't know if that will make the final bill.

Q Right. I agree. But if it does, does it indicate that the company today is actually, by its actions today, in advance of carbon regulation, are actually avoiding nonincremental costs in the future?

A I might characterize it as the utility acting in a prudent manner for the future.

MR. MICHEL: Okay. I think that's all of the questions I have. Thank you, Mr. Shafer.

THE WITNESS: Thank you Mr. Michael.
COMMISSIONER BARER: I think we're going
to end today, and we will come back-public Service, I think, is up.

Mis. Conneliy: Yes, we have cross for
Mr. Shafer.
COMMISSIONER BAKER: Yes. And staff has
no-eross. Okay.
MR. MICHEI: Mr. Baker, if I could just

