BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

PETITION OF PUGET SOUND)
POWER & LIGHT COMPANY FOR AN)
ORDER REGARDING THE ACCOUNTING) DOCKET NO. UE-920433
TREATMENT OF RESIDENTIAL)
EXCHANGE BENEFITS)
---------------------------------)
WASHINGTON UTILITIES AND)
TRANSPORTATION COMMISSION,)
Complainant,) DOCKET NO. UE-920499
vs.)
PUGET SOUND POWER & LIGHT)
COMPANY,)
Respondent.)
---------------------------------)
WASHINGTON UTILITIES AND)
TRANSPORTATION COMMISSION,)
Complainant,) DOCKET NO. UE-921262

COPY

DEPOSITION UPON ORAL EXAMINATION

OF

DAVID W. HOFF

CONTINENTAL REPORTING SERVICE
Seattle, WA 206-624-DEPS (3377)

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
No. UE-920433; -920499; -921262 Ex. 31 ✓

vs.)
PUGET SOUND POWER & LIGHT)
COMPANY,)
Respondent.)

10:58 a.m.
February 5, 1993
1300 South Evergreen Park Drive Southwest
Olympia, Washington

Lisa K. Nishikawa, CSR, RPR
Court Reporter

A P P E A R A N C E S

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I N D E X

MR. TROTTER: Mr. Hoff has taken the stand. If he could be sworn.

Whereupon,

DAVID W. HOFF,

having been first duly sworn, was called as a witness herein and was examined and testified as follows:

E X A M I N A T I O N

BY MR. TROTTER:

Q. Mr. Hoff, you testified before in the rate design depositions and cross-examination?

A. Yes, I did.

Q. You're aware of the rules that apply to depositions and you recognize that you've been sworn to tell the truth and all of that?

A. Yes.

Q. Just checking.

A. Is there some reason you had to double check with me?

Q. Let's start with your exhibit T --

MR. VAN NOSTRAND: Don, if we could take a minute, I think Mr. Hoff has a few corrections to make to his testimony.

Q. Your counsel has indicated you may have some corrections. Could you list those for us.

A. Yes. It's in Exhibit 569. There's some column headings that are wrong. So on page 1 of Exhibit 569 in column 1 it says in parentheses Exh CEL 3 - Sum 2, Page 1, Line 11. The Page 1 should read Page 2. In column 2 the item in parentheses should be Exh DWH 5 instead of 7, Page 1, Column 4, instead of 1. In column 3 in the parentheses should read Exh CEL 3 - Sum 2, Page 2, rather than Page 4.

Q. Rather than page 4 or page 1?

A. Mine says page 4. 1, I'm sorry. I marked through the 1, it looks like a 4.

The next page, in column 2, again in the parentheses where it says Page 1, that should read Page 2. And in column 5 it should be Exh DWH 5 instead of 7, Page 1, Column 4 instead of Column 1. And finally, on page 3, column 1, it should read Exh CEL 4 rather than 6. And the same correction on column 2. Column 2 should read Exh CEL 4 rather than 6. And that's the extent of the changes.

Q. Okay. Turn to your testimony Exhibit T-567, page 6. And here you summarize or you start by saying you haven't changed any of the principals between your rate design proposal in Docket 920499 and Docket 921262. Although, the numbers have changed because of the updated test year, is that right?

A. That's correct. There were some other minor modifications which this goes on to discuss.

Q. Right. Let's talk about the modifications. And one is the change in the residential rate blocks, is that correct?

A. That is correct.

Q. Another is the elimination of the experimental water heat interruptible schedule?

A. Yes.

Q. And you're also proposing a change in Schedule 100 allocation?

A. Yes. Even though that's not actually part of this case, I propose that for discussion because we will be having that in June.

Q. Okay. Just stopping there for a moment, you submitted your testimony at the time the company filed its rate case, is that right?

A. Yes.

Q. And it filed its rate case initially without decoupling, is that correct?

A. That is correct.

Q. And so your testimony here on Schedule 100 change assumed no decoupling?

A. Although schedule -- that is correct.

Q. And the company in supplemental testimony

has brought back the decoupling, is that right?
A. Yes.
Q. Does that require you to make any change in your testimony on page 6 beginning on line 18?
A. No, it does not.
Q. Are there any other changes that we have not discussed?
A. No. They should be in this testimony.
Q. I mean, that we've -- we've outlined the residential rate blocks, the experimental water heat schedule and the Schedule 100 testimony. Are there any other principal changes that we should itemize at this point?
A. On page 6 there's a -- the change in DWH-3 which is the change in the format, plus there is a little bit of a change in the calculation and so that's one of the changes. Then I believe you've outlined the rest. Oh, the terms of Schedule 36 was a change on page 7, line 6.
Q. Okay. And just briefly summarize the changes to that schedule.
A. The change to that schedule, basically we reduced the basic charge and eliminated the voluntary interruptible and short-term energy credits.
Q. What was the reason for that?

A. Primarily because of when we updated to the new cost of service and the new rates with the lost revenue calculation that is part of this and the new rates, it meant that the voluntary interruptible and short-term credit would be eliminated. The basic charge was changed because we have concluded that we can -- could do the program with a much lower cost process than the one we originally anticipated, therefore, the cost would be lower.

Q. You were asked in response to Staff Data Request 24 in the rate design docket to identify in what respects the company's rate design proposal would be different absent decoupling. Do you recall that?

A. Yes, I do.

Q. As Deposition Exhibit 2, I would like to hand you a two-page response.

MR. ADAMS: Could we go off the record for just a second.

(Discussion off the record.)

MR. TROTTER: Let's mark this Hoff Deposition Exhibit 1.

(Marked Deposition Exhibit No. 1.)

MR. CAMERON: So we're referring to the other one as Lynch Depo Exhibit 1?

MR. TROTTER: Yes. And it will be included in her deposition.

Q. Now, Mr. Hoff, do you recognize your Deposition Exhibit 1 as your Response to Staff Data Request 24?

A. Yes.

Q. I asked you a few minutes ago and you confirmed that when you filed your testimony the company was not proposing decoupling. And could you indicate why you did not raise the issues that you raise in this response in your direct testimony since it assumed no decoupling?

A. Because in the testimony, as you'll see that even though the company didn't file for decoupling we did not -- we still supported decoupling, and we had anticipation that before the end of the case that there would be a decoupling proposal before the Commission. That has proven to be the case. So even though technically we did, in fact, file it without decoupling, it was our intent that we had hoped that something could be worked out on the decoupling issues. And so I did not change -- there was -- I should say there was some discussion of whether I should change the rate design testimony with regards to the fact that we were not filing the decoupling and we decided not to, with one of the main reasons being that I think we thought that eventually there would be a decoupling proposal in this case.

Q. So what you're telling us, then, is that if the Commission bought the rate case that you filed 100 percent, they should not buy -- this is before the supplemental testimony -- they should not buy your rate design, is that correct?

A. What I'm saying is that my rate -- my filing was strongly influenced by decoupling and by the process surrounded decoupling, by the Rate Design Collaborative, by the Rate Design Task Force, by the requirement from the Commission to have this separate rate design case in the first place. So what I'm answering here is that because of all of that, this is what came out, this proposal came out of that process. Had we not had that process, had we not had the decoupling as part of the process, I would not have filed these same rates. It's not exactly the same as saying that then if you pull up back decoupling that you completely wind back the clock and take away everything that you've done in the past.

Q. And many of the things that were done in the past, the Rate Design Task Force and the Rate Design Collaborative, many of those issues that were addressed there could be addressed in the context of a traditional rate case?

A. Yes, they could have. But we were there basically because of decoupling and because of the whole NOI process.

Q. Let's take a look at your response to Data Request 24. And you indicate in the first paragraph of your response that changes in your rate design are the result of the decoupling order, collaboration with the Rate Design Collaborative and input from the Rate Design Task Force, is that correct?

A. Yes.

Q. And in the bulleted items there you talk about, first, the residential two-block marginal cost rate. Do you see that?

A. Yes.

Q. And you do in your testimony in this case address elasticity issues associated with that, don't you?

A. Yes, I do.

Q. And the purpose, as I understand it, of that elasticity analysis is to compensate the company for lower revenues that result from customers obeying the price signal that you're giving them, is that correct?

A. I think that would be a good approximation of the reason, yes.

Q. The next item is the agreement to file a basic charge using the basic customer definition and you refer back to Exhibit T-8 in the rate design docket. Am I correct that the Commission has never accepted the minimum distribution approach for Puget?

A. That's correct.

Q. And with respect to this item vis-a-vis decoupling, is your concern that without decoupling you want to recover as much of your revenues through basic charges than through energy charges?

A. Well, I think we've always felt that it's most appropriate to recover costs from customers according to the way the costs are incurred. I think that we feel that a lot of the costs that are in fact charged over kilowatt hours don't vary by the kilowatt hours and so it's more appropriate to align the costs and the revenue collections to have a larger basic charge. When you get that misalignment there's a potential that you will have lost revenues. And under decoupling, the risk of that is lessened.

Q. To the extent the company has such a risk, it's had it for a great length of time, has it not?

A. That is correct.

Q. The next item, increased seasonal

differential in energy charges. Didn't you testify earlier that the basis for the seasonal differential was due to BPA differentials?

A. That's the basis for assigning the cost for picking the 10 percent differential.

Q. And with respect to decoupling, is it your position that increased seasonality in rates creates unstable revenue recovery?

A. We have made a calculation in this case that would indicate that there is a loss of revenue that's associated with increasing the seasonal differential in our elasticity adjustment. I think that any time you change from what would be the status quo to something else, you're going to have an impact.

Q. And you've quantified that impact, at least attempted to, in your elasticity analysis?

A. That's correct.

Q. Is the concern here about going to increase seasonality in rates just simply that there is a change or is it the concern that you will now be recovering more revenues in summer months than in winter months than before?

A. Actually, the change of increase in the differential would be recovering more revenues or receipts in winter than in summer.

Q. I'm sorry.

A. It's primarily because there is a change, and that when you have a change, it's going to change things.

Q. So there's nothing inherently at risk to your revenues by having more revenues collected in the winter than the summer, it's just the change itself?

A. Well, I think that, again, having a change that changes with more revenues being collected in the winter than the summer would be of concern to some people in the company to have that revenue stream look different.

Q. Are you worried about having insufficient cash in the summer?

A. I'm not sure if it's insufficient cash or it's -- I think primarily what I would be concerned about is that when you have more of your revenue collection in the winter and it's more a function of the weather, it becomes then much more variable and so it's more -- has more variation, therefore, more risk associated with it.

Q. I take it the company has never advised you that they would have trouble financing or would have an increased need of financing in the summer if this was implemented?

A. They haven't advised me of that. I haven't asked.

Q. What is the elasticity of electric demand in winter and summer for Puget?

A. There is -- I have done some -- I have documented the elasticity results as a result of some staff data requests. I believe that was supposed to be asked next time. That's in the pages 11 through 15. But basically they are in the response to staff data requests --

Q. I'm familiar with those. That's fine. Why are seasonal rates less certain under traditional ratemaking than under decoupling?

A. The rates themselves aren't. The revenues associated are more -- I wouldn't say certain, I would say more stable under decoupling, because under decoupling the revenues are determined by the customer counts which don't vary by summer and winter, whereas if you're not decoupled, your revenues are determined by kilowatt hours which are different in summer and winter and because seasonal rates makes the revenues associated with those kilowatt hours more different in the summer and winter.

Q. But again, when you filed your testimony you did not -- your company did not include a recovery

of base cost revenues in the PRAM, is that right?
A. When we filed the testimony?
Q. Yes.
A. That's correct. That's one of the reasons I put the elasticity adjustment associated with seasonality in the case.
Q. Also on the last page of your Deposition Exhibit 1 you talk about the cost-of-service study and you indicate that your methodology may have been different in the use of the top 200 peak hours for the coincident peak allocation factors. Do you see that?
A. Yes, I do.
Q. Now, in earlier proceedings in the rate designing docket you were asked questions or perhaps Ms. Lynch was asked questions about the basis for selecting the 200 hours, and I believe her testimony was that it was based on the amount of time Puget's peaking units are used. Are you saying that you would base your cost-of-service study on a peak allocation method that was based on the number of hours that your peaking units were not used if decoupling was not in effect?
A. No. I would only pick 12 of those hours instead of all 200.
Q. Why is decoupling the determinant of that

decision?

A. I think instead of decoupling per se, it's more the process that we entered into associated with the decoupling that was a determinant of that. That was a result of the collaboration discussions with all the parties. We were in that process of discussion because of decoupling, because of the NOI, because of the Commission's order.

Q. That's what I'm trying to differentiate here, because certainly the process of the Collaborative probably resolved a lot of issues just because people were able to get good information and were able to deal with it, regardless of whether that collaboration was started because of decoupling or not. Is this an item that is directly decoupling related? In other words, if you don't have decoupling, you would propose a different allocation method because of revenue certainty, et cetera?

A. The reason I hesitate is it's sort of all in a package, and if we had not had decoupling, we probably would not have proposed this. Now that we do have it and may lose it, would we change back to the old way, I really can't say.

Q. Let me ask it this way. Would your revenue recovery be less certain under a 200-peak hour allocation factor as opposed to a 12-hour allocation factor?

A. I can't say right now.

Q. This may be a little beyond page 1 through 10, but it deals with the elasticity that we were talking about which I think is related, but just let me ask you, if the Commission accepts decoupling, what does that do to the elasticity proposal? Is that in or out?

A. I would propose that it stays in, for the simple reason that it should mean the deferral would be minimized. It won't -- it doesn't have to stay in for a revenue reason for the company, but it should more closely match the revenues with the receipts, and so I would recommend it stay in.

Q. Well, we'll talk about that more in the rate case then. Thank you.

A. Okay.

Q. Now I would like to turn to the rate schedules that you're sponsoring and I would like to draw some comparisons with your previous proposal, and I want to compare Exhibit 12 which is your initial tariff and let's focus on Schedule 7 and I want to compare that with Schedule 7 in Exhibit 570.

A. Okay.

Q. Your initial proposal was an initial block of 500 kWh at 4.096 cents, is that correct?

A. Yes. Mm-hmm.

Q. And your new proposal is an initial block of 800 kWh at a rate of 6.0277 cents, is that correct?

A. Yes.

Q. And what is the purpose of the significantly higher rate in your new proposal?

A. It's a function of two things, one, the increase in revenue requirement because the initial proposal, as you remember, was in the -- related to the U 89-2688 revenue requirement. This is a much higher revenue requirement, so all rates would be different. The second is the difference in the blocking, and when you have fewer kilowatts in that first block, which the original proposal did, that rate could generally be lower than if you have more kilowatt hours. It has to do with balancing a total revenue requirement amongst two different sets of kilowatt hours and the weighing that happens as a result of that balancing. So two factors, one, the increase in revenue requirement and then, two, the change in the blocking.

Q. This increase reflect in any way the marginal cost of serving water heat?

A. For the first block in essence it reflects it a bit because the last rate is set at that marginal cost and so since this is a residual of that, what's left over, it would be affected by that, but it's not directly set by that.

Q. What is the marginal cost of serving residential water heat loads?

A. Well, under the original proposal there are several data requests that discuss that. Essentially it is that 6.069, and then you also have to take into account our Schedule 94 and Schedule 100 rates because you want to have it net, so it's those added up to that. The rate -- let's see if it's in a -- there's a data request. I don't think it's in -- I think it was a Navy data request that has this outlined what those costs are. I could provide that.

Q. That's fine. Let me put it this way. Should the initial block in this rate schedule be based on the marginal cost of serving residential water heat?

A. No.

Q. Why not?

A. Because it's not where generally water heat usage is. Water heat usage generally is later than that. Another point is that the marginal cost -- use of marginal cost of water heat is sort of a surrogate to general marginal cost and so we set the tail block to be reflective of the marginal cost, then the first block was whatever it took to make the -- to add up to the total revenue requirement. So I would believe the tail block is the appropriate block to have set at a marginal cost, not the first block.

Q. I don't have the Navy request in front of me. Did they also ask you for the marginal cost of serving residential space heat loads?

A. Did they? Is that a question?

Q. Yes.

A. I think they asked me for all my marginal cost rates. Actually --

Q. Do you have an estimate of that?

A. I would have an estimate, yes. I would be able to provide an estimate.

Q. And you're going to provide it in response to that data request?

A. Let me --

Q. You recently filed your updated net avoided cost to the Commission, is that correct?

A. Yes.

Q. Would this data be contained in that filing?

A. The basic data would be contained in that filing. We would probably have to do some calculations in order to get it to apply directly to water and space heat, depending on -- but the raw data is in that filing. However, that data was not used for these rates.

Back to your other question, it's actually our update to Bench Request Number 5. That provides the marginal costs that were used in all of the -- calculations of marginal cost used in our marginal rates.

Q. Let me just make a Deposition Request 13 (sic). If you could provide your estimate of marginal cost for serving residential water heat and residential space heat and provide your support for those calculations.

(Deposition Request No. 12.)

A. Okay. Now, do you want this based on our newest avoided cost or based on the costs that were used for this filing?

Q. Both.

A. Okay.

Q. I noticed in your Exhibit 570, your tariffs, you're no longer proposing Schedule 6, the residential interruptible water heater credit, and you testify on page 6 to 7 of your testimony, T-567, that you discovered that your original estimates on the value of the interruption to the company were overstated and that the credit would be less than a dollar per month based on your revised estimates, is that correct?

A. That is correct.

Q. Under what circumstances would Puget be inclined to reintroduce this credit? What would happen to your peak capacity prices or other factors that would cause that credit to increase?

A. Well, if the original estimates had proven to be sustained, we would have continued. Where we could have a credit that was similar to the basic charge that we're asking the customers to pay. No, I can't really say where the exact crossover point would be, but certainly the dropping from approximately $5 to approximately 70 cents I thought was of a significant magnitude that we probably should not run the experiment.

Q. I guess my question is what would drive -- what types of costs would increase to drive that credit up?

A. Okay. Basically the reason that it went down were assumptions on how much benefit we're getting from the interruption, in other words, out of the water heaters that are interrupted, considering the fact that not all water heaters are on at the same time and those sorts of considerations, that the value of that water heater interruption according to their newer estimates went down, not because of the cost or the calculation of the worth of a kilowatt of savings, but because the calculation of how many kilowatt savings we're going to get per each interruption. It would have to -- those essentially are assumptions made by the engineering group based on their work and analysis and considerations. If they would for some reason have a basis to change those assumptions, I think we could go back and use it.

Q. So your assumptions were based on the fact that on any given interruption a water heater may or may not -- the probability of that a water heater may or may not be on caused your value of interruption to decrease?

A. Primarily, yes.

Q. You focused on the second half of the equation. Do I take it that if Puget's peak capacity prices increased that the other half of the equation would be higher?

A. That's correct.

Q. And what is the likelihood of that occurring?
A. Probably not too high right now.
Q. Why is that?
A. Because it's my understanding, at least on the short term, that there's still relatively good market for purchasing that kind of capacity, however, those assumptions could change.
Q. So if natural gas prices increased, that would be a change --
A. That would, yes.
Q. -- that would impact this?
A. Yes. And so if they increased substantially, that would make the value of the interruption worth more.
MR. TROTTER: Nothing further. Thank you.

E X A M I N A T I O N

BY MR. TRINCHERO:
Q. Good morning, Mr. Hoff.
A. Good morning.
Q. Mark Trinchero with WICFUR. I have just a very few questions for you. You state in your testimony that the rate spread and rate design recommendations are basically the same in this case as

in the rate design proceeding, and I believe counsel for staff went through with you and inventoried the various changes that you have made, one is in the residential class rate design and the interruptible water heater credit in terms of Schedule 36, and I guess what I need to get some clarification on is whether or not the change to the designing of Schedule 100 rates is an appropriate topic for today's deposition or if that should be held as a PRAM and other general rate case matters issue for later depositions.

A. Probably the latter.

Q. Okay. Well, then I will, so long as I'm not waiving any rights to ask you questions on that at a later date, I will forego questioning on that today.

Referring to Hoff Deposition Exhibit 1, would it be accurate to say that some of these rate design proposals while not necessarily tied directly to decoupling in the sense that revenues may be lost were the product of give and take? Would that be accurate?

A. That would be definitely accurate.

Q. And it's the company's position, from what I heard you saying earlier, that the basic charge using basic customer definition was one of those give-and-take type of compromises in this proceeding and that, indeed, conceptually you believe that the costs and revenues are better matched using the minimum system approach, is that correct?

A. Yes.

Q. Would it be accurate to say that the use of 200 peak hours as opposed to 12 peak hours in your peak credit methodology is also one of those give and take compromises?

A. I think it's accurate to say that it is -- was part of the process. Probably should have asked Ms. Lynch this because she is the one that basically makes those kinds of decisions. I think we were considering that even prior to the collaboration, but it was certainly part of the package, if you will.

Q. So is it fair to say that absent the collaboration on decoupling in rate design, that the company probably would have stuck with the 12 peak hours?

A. I think that's probably fair to say. I think we probably would not have changed anything very dramatically from what our previous cases were and that certainly we would use 12 for as long as I can remember.

Q. And indeed there was a sound conceptual

basis for using the 12 hours?
A. Yes.
MR. TRINCHERO: Thank you. I have no further questions.

E X A M I N A T I O N

BY MS. ARNOLD:
Q. Just a couple questions, Mr. Hoff. On page 14 of your testimony, Exhibit 567, you are describing the additional adjustment for price elasticity to account for the differences resulting in power factor charges. The power factor adjustment that's proposed in Schedule 80 is not impacted by the changes in the revenue requirement, is it? That is, the methodology is not changed?
A. The methodology is not. That's correct.
Q. Would there be other changes as a result of the general rate case filing in the power factor adjustment other than that it will increase the revenues?
A. The magnitude of the adjustment would be, but there weren't any other changes to the calculation method.
Q. At page 15 of your testimony you say, "In addition, planned conservation is included in the

attrition adjustment as a decrease to forecasted kilowatt hour sales." Does the proposed change to Schedule 83 which the company filed at the end of January affect the decrease in forecasted kilowatt hour sales?

A. Actually, I think I was supposed to answer these questions in two weeks, but I'll go ahead and -- I don't think it's affected the forecast yet. That forecast was prepared prior to that change. I don't know how much they anticipated that change when they prepared the forecast so I can't answer directly other than I know the forecast that this was based on was prepared prior to that change to refiling of '83.

Q. Does the company plan to make any revisions to its testimony and exhibits in the general rate case as a result of the proposed change to Schedule 83?

A. I'm not sure.

Q. Turning to Deposition Exhibit 1, I believe you testified in answer to Mr. Trotter's question that the company's elasticity studies showed an impact due to seasonal rates and you referred to some staff data requests and Mr. Trotter said, yes, I know which ones those were. Can you tell me which staff data requests you were talking to?

A. They are requests 11 73 through 11 81.

Q. Thank you.

MR. ADAMS: Could you repeat the last number again.

THE WITNESS: 11 81.

Q. Mr. Trotter asked you several questions about the bullet on Deposition Exhibit 1 involving the increased seasonal differential in energy charges. And you said the primary concern that the company felt was not that there might be an insufficient cash flow in the summer, but more variation in the winter weather? Is that correct?

A. That would be the reason, primary reason for me. I think that there are -- there are concerns about cash flow that may be affecting -- that may be affected by this as well, but for me, most of the concern is the variability.

Q. And the next bullet says that the introduction of seasonal demand charges would likely have been different absent decoupling. How would it have been different absent decoupling?

A. We would probably have maintained the status quo which is no seasonal differentiated demand charges.

Q. Why?

A. Because there is a risk involved of

changing the status quo that we would not recover our allowed revenues, and that would essentially be an uncompensated risk until we did some adjustments for that and so we would probably not have stuck our neck out, if you will, and taken that risk.

Q. Can you explain that risk to revenues, if there was, that results in your view from seasonal demand charges.

A. Well, we've calculated our elasticity adjustment, what the magnitude of that would be. Conceptually, anytime you increase demand for a portion of the time, which this does, over what it would have been otherwise, you're going to get a reaction, which in this case would mean reduction in revenues.

Q. And your response to Staff Data Request 11 73 through 11 81 will show this elasticity --

A. Yes.

Q. -- adjustment calculation?

I think you testified in your prior testimony that the Collaborative that you keep referring to did not include Bellingham Cold Storage or any of the other cold storage or frozen food processors that are intervening in this rate case, is that correct?

A. Yes.

Q. Have you since the rate design case began had any communications with any of those customers to resolve their concern over the seasonality of their rates?

A. We have had some meetings with some of those customers, yes.

Q. And what was the outcome of those meetings?

A. We basically discussed our existing rates. The general outcome was that I think we probably had a better understanding of the customers' concern and appreciation for it.

Q. Did you in connection with these discussions perform any analysis of the cost of serving these cold storage frozen food processor customers?

A. Of the cost of serving those customers themselves?

Q. Yes.

A. Not that I recall.

Q. Do you know whether you or anyone else has performed any analysis of the cost of serving those customers?

A. Not as a specific class of customers, no. Obviously they are part of a larger class of customers that we do study, but not as a specific class.

MS. ARNOLD: Okay. That's all my questions. Thank you.

E X A M I N A T I O N

BY MR. CAMERON:

Q. I just have a couple questions, Mr. Hoff, and they relate to the water heater credit you mention on page 7 of your testimony.

A. Okay.

Q. I understand the answers you gave staff counsel before. Just a couple of clarifying questions, if I may. First, can you tell me what particular reserve obligation the company was trying to satisfy through use of the interruption on water heater loads? Was it -- not seem to be spinning reserve but was it operating reserve or planning reserve?

A. Basically the costs that were included in that evaluation include some costs of substations, peak capacity costs that are basically the same calculations that we do with peak credit methodology, so it's those sorts of costs. As far as whether they are spinning or planning, I think that basically, you know, I'm not a system planner, I'm not sure I can actually make the distinction between those.

Q. So it was predicated on an avoided cost of capacity without differentiation as to the use of that capacity?

A. Well, I think that in that calculation there is some use involved. You know, there are fuel costs in that calculation and some estimates of how much that fuel cost would be to get it to a kilowatt cost. So it's not just capacity for the generation, obviously it is capacity for the substation.

Q. Yes. How quickly was the response to have been had under this interruption had it gone forward?

A. How quickly to -- the response as far as customers are concerned or the response once we have it in place to the signal to interrupt?

Q. The time elapsed between the perception of need by your system's operation people and the actual interruption.

A. Immediate. It was going to be controlled by the company.

Q. So within a matter of cycles?

A. Yes, as far as I know. You're stretching my understanding of this, but my understanding is we push a button and they go off.

Q. All right. Okay. I understand that. And the button is connected to something?

In your answers before, you referred to the value of this credit being tied to natural gas, suggesting that your avoided cost was that of a combined cycle -- or a combustion turbine. Is that a correct inference?

A. Yes. I see here that there are 200 hours of gas that is included in this valuation.

Q. Is not a better source of this type of capacity the hydro system than combustion turbine?

A. That's a question for the system planners to decide and the people who do these calculations. I think what we consider is that the marginal resource is indeed a CT, not the hydro system.

Q. Well, are you saying, then, that you did not consider the availability of hydro capacity in calculating the value of this credit to the company?

A. It was not the direct part of the calculation. I think it probably was considered when we -- when they decided that the marginal unit was a CT, that takes into consideration that we already have existing hydro, but the hydro system was not part of the calculation.

Q. So then you did not consider the growing constraints on the hydro system caused by Endangered

Species Act mitigation measures in calculating the value of this credit to the company?

A. Not directly, although probably even with that marginal unit would still be the CT, combustion turbine.

Q. So you're saying that indirectly you took hydro into account by focusing on combustion turbines instead?

A. Why I'm hesitating is whether I actually did this. Actually, the group that did the analysis did this. I just took their word for it, if you will. But I think that's correct.

Q. Should we wish to make this the subject of a data request, which group should we mention?

A. You could send it to me and I'll make sure that it gets to the right place. It may be Mr. Lauckhart ends up actually answering at least that portion of the question.

Q. Okay. Part of your answer before about the credit referred to the fact that many residential water heaters might be cycled off at the time of interruption. Did you consider applying this credit to larger customers such as those in the commercial class?

A. For this experiment, this was just the residential experiment. I think that we've considered that and we may do that eventually, but that was not part of this experiment.

Q. Is there a reason why you didn't apply it to the commercial class?

A. None other than we wanted to get started with something that -- you know, start small, if you will.

Q. Small referring to the size of the water heater within the affected customer's residence?

A. I think that and just something that, you know, we would be familiar with, and also because obviously the impact on residential water heaters could be fairly large because we have a lot of residential water heaters. I think it's more a question of where do you start in looking at this issue.

Q. Could it make sense to look at a smaller population of customers with larger water heaters than the typical residential heater?

A. Yes, that would be another way of doing the experiment.

Q. And would you support that sort of experiment?

A. Yes.

MR. CAMERON: That's all I have. Thank you.

EXAMINATION

BY MR. ADAMS:

Q. Mr. Hoff, I'm going to ask you some questions that are a bit piecemeal because of the various questions that preceded me. Let me start off on the water heat interruption credit, and without getting into the specifics of the program, I just want to ask you a general assumption question. Were both analyses that you've done of the water heat interruption credit -- interruption program prepared assuming a mature control point cost of the $300, meaning that the cost of installing a radio control switch at a customer's water heater was $300? Was that a constant in both analyses?

A. Yes, it was.

Q. Was that estimate prepared based on the cost of a retrofit installation or an installation at the time of a new construction?

A. I really don't know. That was prepared by the T and D people who did this analysis.

Q. Could you provide that information in any of the work papers that underlay that calculation as

Deposition Request -- frankly, I think I lost the number --

MR. TROTTER: 14 (sic).

Q. -- 14 (sic). Thank you.

A. Yes, I can.

(Deposition Request No. 13.)

Q. Just to follow up on a couple of the preceding questions relating to the interruption program, isn't at least one of the reasons why it was initially proposed for the residential customers was that at least during the Collaborative it was residential customers who were pushing for the program?

A. Yes, that is one of the reasons.

Q. Is proposed Schedule 36 available for commercial water heat interruption?

A. Yes, it could be. It's not -- I mean, with 36 we don't have direct control of interruptions, but certainly if somebody wanted to interruption their water heaters along with anything else they wanted to interruption in 36, it would be part of it.

Q. So that option is available?

A. Yes.

Q. At page 7, line 6, you just generally indicate that you are modifying the terms of Schedule

36. Could you in a little more detail describe what those changes are.

A. Actually, maybe -- well, okay. What I'm doing is I'm referring to Exhibit 570 and comparing that with Exhibit 12, and looking at Schedule 36, and essentially a side-by-side comparison of this would show you exactly the changes.

The main change is if you look on the rates, monthly rate was $66. And I see we still have the plus in there which we were supposed to take out. Oh, it is plus. I'm sorry. And then the interruptible monthly rate of an interrupt month went from 23.50 to $22.

And then if you look at the next rates, one-year firm interruptible demand went from a 75-cent credit to a 70-cent credit and five year is the same.

The demand penalty is a bit different. And then the rates -- let's see. The credit for interruption, there is -- before, we had long term firm interruptible, short term firm interruptible, and non-firm interruptible, and now we just have a long term firm interruptible, so we dropped the short term and the non-firm. Those are primarily the differences.

Q. First of all, looking just at the monthly charge, as I understand it, you've dropped it from $66 to $2.21? What is the rationale for that change?

A. Because before, we thought we were going to have to have a rather expensive system of notification, and I think that they have concluded that they can use a telephone.

Q. So you can't press a button, in other words?

A. No, you can't press a button on this, but basically it's a revision of basically the type of system we need to notify. We thought we would have to have a printer before, an on-line printer connected.

Q. I notice also under availability you've restricted it apparently to only 10 customers.

A. Yes.

Q. Is that all the customers that would be interested in this kind of a service or is that all of the interruptibility you need or where does this 10 customer count come from?

A. It was because this is basically an experiment. It's not because of that is all the interruptibility we need. We're doing this to try it out as an experiment and felt that restricting the number of customers made it a more manageable experiment.

Q. Am I correct that under this interruption, though, after this telephone call you have to rely on the customer to do the interruption, you cannot physically interrupt the customer?

A. That's correct.

Q. Okay. Let's move to a couple questions concerning changes that you've made in the residential rate design, recognizing that you have covered some of this ground before. You propose changing the size of the initial block from 400 or 500 kWh to 800 kWh, correct?

A. That's correct.

Q. And you state that this was done primarily to move more gradually?

A. Yes. When we did the analysis of the impacts of this change with the rate case where we had an actual revenue increase, we found that leaving the change at 400 and 500 resulted in what I, in my judgment, thought might be an unacceptable differential in impact, and so to try to minimize that, I compromised in the change and went to 800 instead of all the way from 1,000 to 400 and 500.

Q. Were there any other reasons than those you just stated for that change?

A. No. It was entirely because of the impact.

Q. Now, you've also proposed a considerable increase in the rate for that initial block up to from approximately 4.2 cents to 6 cents, have you not, or increase of approximately 42 percent?

A. Yes.

Q. And your tail block increases have gone from, as I understand it, about 6.1 cents to 7.4 cents or an increase of about 22 percent, is that correct?

A. Yes.

Q. How does this comport with the concept of baseline rates which the Commission adopted in cause U 7805 in the response to the requirement they consider lifeline rates? Do you recall that generic proceeding?

A. I wasn't around then. I wasn't in this business in 7805. I know I've read the results of that. I think that it still is a lower rate than the tail block rate. It's still an inverted rate. The change itself, you know, as I mentioned before, is a result of an increase in the cost of service and then the change of the blocking. Personally I feel that as long as we have inverted rates, that that is -- that that addresses the concerns about lifeline rates raised in 7805 -- or baseline rates.

Q. To your knowledge, has the company

requested any formal reconsideration of that docket?

A. Of 7805?

Q. Yes.

A. Well, I would sort of consider having a general rate design case, which the Commission has done, is a reconsidering of all of those concepts.

Q. The company has not requested any reopening of that specific docket, is that correct?

A. No.

Q. Now, each of the residential blocks that you've proposed would be subject to Schedule 94 decreases associated with the residential small farm credit with BPA, would it not?

A. Yes.

Q. What level of Schedule 94 credit has the company filed in its general rate case?

A. I don't believe we filed a change in 94 so it would be at the existing credit which is 0.75 cents.

Q. What level of credit does the company believe would be justified based on the general rate case filing?

A. 0.75 cents. That's why we didn't change it. I think that we're continuing to monitor what's happening with BPA and with their case and how our case goes, and it may be that we'll want to change that rate at some future time.

Q. BPA rates are scheduled to increase in October 1, are they not, the same date as they would in this case, presumably?

A. That's correct.

Q. The impact would be that both would move up at the same time then, correct?

A. That both our rates, our costs, and BP's rates would be moving up at the same time?

Q. That's correct.

A. Yes.

Q. And so has the company done a calculation that basically shows that the current Schedule 94 would remain the same based on Bonneville's request and based on your request in this case?

A. We've thought about it. I think that -- you know, I'm hesitating about it, whether we have a specific calculation, and maybe what -- actually, what the best approach would be to -- I love this -- ask Mr. Lauckhart that when he gets on the stand in two weeks about those calculations. We thought about it, obviously, when we filed this and I think the general conclusion was that let's not change the rate immediately, let's wait to see a little bit more how the BPA situation works out. But I think perhaps it would be best to defer those questions to Mr. Lauckhart.

Q. Okay. Well, just again, not looking at the specific amount, but is the company anticipating making such a filing during the pendency of this general rate case then?

A. I don't think we know yet. I think we could, but as of right now we don't have plans to make a filing yet. I guess that's what I can say.

Q. Dealing again with the proposed residential rate blocking that you've discussed in your testimony, you would agree, would you not, that several members at least of the Rate Collaborative recommended a larger step up between the blocks, that is, between the first block with a smaller initial block and a more substantial second block?

A. Yes, I think that our original proposal was more closely aligned with the general consensus of the Collaborative, although it wasn't -- I sort of hate to use the word "consensus." I think the way you put it, some of the members recommended, that would be a better way to put that.

Q. So your proposal here is moving in the opposite direction and is not based on that collaborative process, though, correct?

A. It's moving in the opposite direction. I think that there were also members of the Collaborative that wanted a flat rate or a less differentiated rate.

Q. Right. But this is not a result -- your change here is not a result of that collaborative process, correct?

A. That's correct. My change is solely a result of looking at the impacts and the department's judgment that they were unacceptable.

Q. The department meaning Puget's rate department?

A. Puget's rate department, yes.

Q. Turning now to rate spread, and looking at your DWH number 5, I don't remember what the number is.

A. 571?

Q. Yes. Looking at page 1, you have proposed a larger than average increase for the residential class, correct?

A. Yes.

Q. And am I correct that that recommendation is based on the cost-of-service study prepared by Ms. Lynch?

A. Yes.

Q. Your proposed rates move each class exact one-third of the way from their current cost revenue ratio to the results of Ms. Lynch's cost of service study results, do they not?

A. Yes.

Q. Would you agree that this is a mechanical application of the results of the cost-of-service study taking the ratemaking principle of gradualism into account?

A. Yes.

Q. In translating the results of Ms. Lynch's study into your proposed rates, did you apply a differential risk premium to each customer class or was it your goal to move towards a common rate of return for each class?

A. I did not apply a differential so, yes, it would be a common rate of return.

Q. In translating the results of that study into your proposed rates, did you apply a differential risk premium to each class of property, for example, treating generating property as more risky than distribution property?

A. No.

Q. You may have heard these questions from Ms.

Lynch. I'm going through some of the same ones.

A. I was going to say.

Q. Again referring you to the testimony of Mr. Weaver, Miller, and Abrams with respect to the risks associated with purchase power and their position that the company must beef up its equity capitalization ratio if it is to rely heavily on purchase power, do you recall that general testimony of those witnesses?

A. Yes.

Q. Just for your purposes did you attempt in any way to incorporate those additional costs in your rate spread proposal by assigning those additional costs between classes based upon the allocated purchase power cost to each class?

A. No.

MR. ADAMS: That's all I have. Thank you very much.

MR. TROTTER: Anything further from anyone? The witness is excused. Thank you. Off the record.

(Discussion off the record.)

MR. TROTTER: We're back on the record just for a second. Mr. Adams's Deposition Request 13 should be Deposition Request 12. There was no -- I had marked down a Deposition Request 12 prior to that and it was not proper.

MR. VAN NOSTRAND: Yes. 13 becomes 12.

MR. TROTTER: Deposition Request 13 will become 12.

MR. ADAMS: My 13 becomes 12 and yours becomes 11. Is that what you're --

MR. TROTTER: Is that right, Jamie?

MR. VAN NOSTRAND: Public counsel's Deposition Request 14 becomes 13 and staff counsel's Deposition Request 13 becomes Number 12.

MR. TROTTER: Thank you. Off the record.

(Deposition concluded at 12:20 p.m.)

DAVID W. HOFF

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

SUBSCRIBED AND SWORN to before me this 23rd day of February, 1993.

Janita K. Maustas
Notary Public in and for the State of Washington, residing at Kirkland

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Puget Sound Power & Light Company
Docket No. UE-920499
Response To Staff Data Request No. 24

EXH. NO. 81
FEB 5 1993
WITNESS Hoff
LISA K. NISHIKAWA

Request

In what respects would the rate design proposal be different absent decoupling? Include in your answer whether the cost-of-service model or parts of the model would have been different and how.

Response by Mr. Hoff

The following rate design proposals would likely have been different absent decoupling. These changes are the result of the decoupling order, subsequent collaboration with the Rate Design Collaborative, and input from the Rate Design Task Force.

- o The residential two-block marginal cost rate.
- o Agreement to file a basic charge using the basic customer definition. (Described in Docket No. UE-920499, Ex. T-8 p. 28).
- o The increased seasonal differential in energy charges.
- o Introduction of seasonal demand charges.
- o Experimental interruptible rates.
- o Experimental marginal cost rates.

These rate design changes represent the culmination of many months of cooperative work under the paradigm of decoupling. Most of these changes have potential negative revenue impacts absent decoupling and could create potential seasonal instability in revenue recovery. In the last general case, Docket No. U-89-2688-T, the company proposed opposite positions on two major issues -- seasonality and the basic charge. Specifically, the company proposed the elimination of seasonality and a significant increase in the basic charge based on the minimum system method. The fact that the company is proposing a different approach is an indication of the impact of decoupling on the rate design proposals.

With regards to rate spread, in the absence of decoupling the Company would not have moved towards parity as quickly as proposed in the rate design filing because of concern over revenue recovery. In contrast, the Company did not propose any rate differentials to move toward parity in the last general rate case.

With regards to cost-of-service, the company's proposal on the treatment of distribution plant most likely would have been different. In the past the company has proposed use of the minimum system method. In the absence of decoupling, the company would most likely have used this method or some hybrid classification/allocation method which more closely aligns revenue with costs, and thus put less revenue at risk when sales decline. Another area in the company's proposed cost-of-service methodology that may have been different is the use of the top 200 peak hours for the coincident peak allocation factors. In past filings the company has utilized, and the commission generally accepted, the top 12 peak hours in this calculation. The presence of decoupling and the recommendations of the collaborative group played a major role in our decision to change. Finally, the proposal for all parties to use a common PC-based cost-of-service model and the associated company training was attributed in part to decoupling and the company's enhanced effort to work with other parties.