BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 010503-WU

In the Matter of

APPLICATION FOR INCREASE IN WATER RATES FOR SEVEN SPRINGS SYSTEM IN PASCO COUNTY BY ALOHA UTILITIES, INC.

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VOLUME 8

Pages 949 through 1131

PROCEEDINGS:	HEARING
BEFORE:	CHAIRMAN LILA A. JABER COMMISSIONER BRAULIO L. BAEZ COMMISSIONER MICHAEL A. PALECKI
DATE:	Friday, January 11, 2002
TIME:	Commenced at 9:10 a.m.
PLACE:	Clarion Hotel 5316 U. S. Highway 19 North New Port Richey, Florida
REPORTED BY:	TRICIA DeMARTE Official FPSC Reporter (850)413-6736
APPEARANCES:	(As heretofore noted.)

I N D E X

WITNESSES

EXHIBITS

NUMBER:		ID.	ADMTD.
16	SBF-1 through SBF-3	953	1006
17	JWY-1 through JWY-4	1009	1040
18	(Late-Filed)Source of Pasco County Water to Aloha and Effect on Aquifer. And Is the District Willing to Make an Exception on Pasco Purchases?	1039	
19	JBW-1 and JBW-2	1042	1059
20	Waterate Manual	1058	1059
21	Staff's Revised 2001 Consumption Projection	1061	1130
22	Revised FJL-1 through FJL-11	1063	1130

PROCEEDINGS

(Transcript follows in sequence from Volume 7.)

CHAIRMAN JABER: Good morning. Let's reconvene the hearing. I know we left a couple of things outstanding yesterday, and I know we have a couple of Water Management District witnesses that are supposed to take the stand today. I would like to start with Bart Fletcher this morning, and we'll come back to those outstanding matters after Mr. Fletcher's testimony.

Are the parties prepared for that? Great.

Go ahead, Mr. Jaeger.

MR. JAEGER: Yes.

STEPHEN BART FLETCHER

was called as a witness on behalf of the Staff of the Florida Public Service Commission and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. JAEGER:

Q Mr. Fletcher, you've been sworn in, haven't you?

A Yes.

Q Please state your name and business address for the record.

A My name is Stephen Bart Fletcher, business address is 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850.

Q And by whom are you employed and in what capacity?

A I'm employed by the Florida Public Service Commission as a Regulatory Analyst III.

Q And have you prefiled direct testimony in this docket consisting of 11 pages?

A Yes.

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

A No.

MR. JAEGER: Chairman, may we have Mr. Fletcher's testimony inserted into the record as though read?

CHAIRMAN JABER: Yes. The prefiled direct testimony of Stephen B. Fletcher shall be inserted into the record as though read.

BY MR. JAEGER:

Q And, Mr. Fletcher, did you also file Exhibit Numbers SBF-1 through SBF-3 to your testimony?

A Yes.

Q Do you have any changes or corrections to any of those exhibits?

A No.

MR. JAEGER: Chairman, may we have those exhibits identified as Composite Exhibit 16?

CHAIRMAN JABER: Yes. Composite Exhibit 16 is SBF-1 through SBF-3.

(Exhibit 16 marked for identification.)

DIRECT TESTIMONY OF STEPHEN B. FLETCHER

Q. Please state your name and professional address.

A. My name is Stephen B. Fletcher and my business address is 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850.

Q. By whom are you employed and in what capacity?

A. I am employed by the Florida Public Service Commission as a Regulatory Analyst III in the Division of Economic Regulation.

Q. How long have you been employed by the Commission?

A. I started working at the Commission in November 1997.

Q. Would you state your educational background and experience?

A. I received an Associate in Arts degree with honors from Tallahassee Community College in August 1993. I received a Bachelor of Science degree with a major in accounting and finance from Florida State University in December 1996. From January 1994 to November 1997, I was Assistant Secretary of Florida Horse Park, Inc., formerly known as Aqua Development Group, Inc. My duties under this capacity included conducting the equestrian and resort industry research to develop the business plan and included tax preparation for the corporate returns. In November 1997, I was employed by the Commission as a Professional Accountant in the Division of Water and Wastewater's Accounting Section of the Bureau of Economic Regulation. In April 2000, I became a Regulatory Analyst II in the Accounting Section of the Bureau of Economic Regulation. In June 2000, my section became the File and Suspend Rate Cases Section in the Division of Economic Regulation. In June 2001, I became a Regulatory Analyst III in the File and Suspend Rate Cases Section in the Division of Economic Regulation. I have attended various regulatory

seminars and Commission in-house training and professional development meetings concerning regulatory matters.

Q. Would you explain what your general responsibilities are as a Regulatory Analyst III in the File and Suspend Rate Cases Section?

A. This section is responsible for the financial, accounting and rates review and evaluation of complex formal rate proceedings before the Commission. Specifically, I am assigned to review and analyze the accounting and rate issues for file and suspend rate cases, overearnings investigations and limited proceedings of Class A and B water and wastewater utilities under the jurisdiction of the Florida Public Service Commission. I also am responsible for the review of smaller filings of Class A and B utilities, such as allowance for funds used during construction (AFUDC), allowance for funds prudently invested (AFPI), service availability applications, and tariff filings. For the cases that I am assigned, I coordinate, prepare and present staff recommendations to the Commission on the above type cases. I am also responsible for preparing testimony and writing cross-examination questions for hearings involving complex accounting and financial issues.

Q. Please list dockets for which you have performed analytical work and/or prepared recommendations since joining the Commission.

A. I have attached a list of dockets that I have worked on since joining the Commission, which is identified as Exhibit SBF-1 of my testimony.

Q. Can you summarize the issue for which you are providing testimony?

A. I am providing testimony on Aloha Utilities, Inc.'s purchased raw water transactions.

Q. Please briefly describe your testimony regarding purchased raw water

transactions.

A. Aloha purchases raw water from three different entities: Tahitian Development, Inc. (Tahitian), Interphase, Inc. (Interphase), and Jack Mitchell (Mitchell). Tahitian and Interphase are both related parties to Aloha. Lynnda Speer owns 62.5% of the utility, and she owns 100% of Tahitian Develpoment, Inc. Roy Speer, Lynnda Speer's husband, owns 100% Interphase, Inc. Mitchell is a non-related, third party. Aloha also purchases treated water from Pasco County.

In its minimum filing requirements (MFRs), Aloha projected a December 31, 2001 related party purchased water expense of $128,480 collectively for Tahitian and Interphase. Both Tahitian and Interphase charge Aloha $0.32 per thousand gallons for raw water. Mitchell charges the utility $0.10 per thousand gallons for raw water. These purchased water transactions are basically royalties for raw water. For reasons I will explain later, I do not believe Aloha has proven, through its MFRs or direct testimony, that the royalty fee charged by its related parties for raw water is reasonable.

Q. Please provide a brief history of Aloha's purchased water transactions with Mitchell, Tahitian, and Interphase.

A. According to the utility's response to a staff data request, the Seven Springs water system's Well No. 1 relates to Mitchell. Wells Nos. 3 and 4 relate to Tahitian, and Wells Nos. 6 and 7 relate to Interphase. Mitchell, Tahitian, and Interphase each installed and incurred the costs of the wells themselves. This included the cost of drilling the wells and the cost of the initial equipment and structures. Aloha has paid for repairs and maintenance and some improvements since the initial installation of those wells.

Based on contracts provided by Aloha, the agreements for the purchase of raw water date back to 1972 for Mitchell, 1977 for Tahitian, and 1978 for Interphase. The 1972 agreement with Mitchell called for Aloha to pay $0.05 per thousand gallons of water extracted from Mitchell's land. On October 1, 1975, Mitchell and Aloha executed another agreement which called for Aloha to pay $0.10 per thousand gallons of water extracted. The 1977 agreement with Tahitian called for Aloha to pay $0.10 per thousand gallons of water extracted. On December 28, 1988, this agreement was amended and the charge was increased to $0.25 per thousand gallons of water extracted. On January 1, 1992, Tahitian and Aloha amended their agreement again and the charge was increased to $0.32 per thousand gallons of water extracted. The 1978 agreement with Interphase called for Aloha to pay $0.10 per thousand gallons of water extracted. This agreement was also amended and the charge increased to $0.32 per thousand gallons of water extracted. I do not know when any amendments with Interphase were executed; however, staff has propounded discovery on the utility in order to determine this. Further, I attached a table that reflects the history of the above purchased water agreements, which is identified as Exhibit SBF-2.

Q. Did the Commission approve the $0.10 per thousand gallon charged by Mitchell?

A. Yes. The Commission approved the $0.10 per thousand gallon charge by Mitchell in Order No. 8450, issued August 29, 1978, in Docket No. 770720-WS. This order does not specifically discuss the charge by Mitchell; however, the Commission did approve the Examiner's findings, which included the adjustment to increase purchased water expense to reflect the increase from $0.05 to $0.10

per thousand gallons. Based upon my review of staff's file for Docket No. 770720-WS, the only support documentation for this adjustment was a one page engineering working paper that stated that this rate was increasing based on a new contract. Further, the related party purchased water transactions with Tahitian and Interphase were not addressed either in that order or in the docket file. With the exception of Docket No. 000737-WS which I discuss later, the Commission has not addressed these related party transactions.

Q. Has the Commission ever addressed the payment of a royalty fee for raw water by a utility under its jurisdiction?

A. Yes. In Docket No. 951029-WU, an overearnings investigation for Florida Cities Water Company (FCWC), the Commission approved operating expenses for a royalty fee for raw water extracted. The fee was based on a series of related party transactions that began in 1973. On April 23, 1973, GAC Properties, Inc. (a predecessor company to Avatar Properties Inc. and a related party of FCWC), granted an easement to GAC Utilities, Inc. (a predecessor company to Avatar Utilities Inc. and the parent company of FCWC) for FCWC to operate wellfields and do other work necessary for delivery of water on 149 of 16,000 acres. At that time, these same parties agreed on a royalty fee of $0.03 per thousand gallons to be paid by FCWC for all water pumped from the wells. On June 24, 1973, GAC Properties, Inc. sold the 16,000 acres to a non-related, third party for $800 per acre. This sale included a perpetual easement to FCWC through GAC Utilities, Inc. to extract raw water. To test the reasonableness of the royalty fee, the Commission compared the original cost of the land when first devoted to public service with the cost of the royalty.

FCWC offered three options to compare the value of this royalty easement.

First, FCWC recommended using Lee County's 1978 comparable purchase price of land for the County's own wellfield. Second, FCWC proposed the above purchase price because FCWC's ultimate water usage allowance is twice as much as Lee County's allotted capacity. Third, FCWC suggested an independent appraisal of the easement area.

Order No. PSC-96-0859-FOF-WU, issued July 2, 1996, in Docket No. 951029-WU, states, in pertinent part:

> We find that the third approach of using a land appraisal to measure the worth of the easement provides a direct means of testing the fairness of the assessed royalty charge. . . . Using the respective weighted percentages, the total acreage assigned to FCWC is 613.75 acres. At the most conservative cost of $800 per acre (the cost per acre in the 1973 sale to non-affiliated interests), the investment attributable to this land would be $491,000. Based upon an 8.75% rate of return, the return is calculated to be $42,963. With taxes estimated to be: $8,347 for property taxes, $8,867 for income taxes, and $2,836 for gross receipts taxes, the total expense would be $63,013. This is $5,067 more than the royalty expense of $57,946 used for the 1996 test year, and equates to a cost of $0.0326 per 1,000 gallons.

Based on the above comparative analysis, the Commission found that the $0.03 per thousand gallon royalty fee was a reasonable expenditure in relation to the value acquired.

Q. Has the Commission ever addressed the royalty fees that Aloha pays Tahitian and Interphase for raw water?

A. Yes, the Commission addressed these royalty fees in Docket No. 000737-WS, which was an overearnings investigation of the Aloha Gardens water and wastewater systems and the Seven Springs water system. By Order No. PSC-01-1374-PAA-WS, issued June 27, 2001, the Commission applied the same standards utilized in the 1995 FCWC overearnings investigation to evaluate the appropriateness of Aloha's royalty fees for raw water. Aloha maintained that its related parties do not have documentation of the original cost of the well and land when first devoted to the service of Aloha ratepayers. The Commission found that the utility should have taken the appropriate steps to determine the original cost of the land and wells as of the date the utility began extracting water from these wells. This analysis was necessary to determine if the utility's decision to purchase raw water was the most cost effective choice. Further, the Commission stated that Aloha could have had these lands appraised by an independent appraiser and retained the services of a professional engineer to conduct an original cost study on the wells initially installed. Without this information, the Commission found that it could not evaluate the reasonableness of these royalty fees at that time.

Ultimately, it is the utility's burden to prove that its costs are reasonable. The Commission stated that, by their very nature, related party transactions require closer scrutiny. Although a transaction between related parties is not per se unreasonable, it is the utility's burden to prove that its costs are reasonable. Florida Power Corp. v. Cresse, 413 So. 2d 1187, 1191 (Fla. 1982). This burden is even greater when the transaction is between related parties. In GTE Florida, Inc. v. Deason, 642 So. 2d 545 (Fla. 1994), the Court established that the standard to use in evaluating affiliate

transactions is whether those transactions exceed the going market rate or are otherwise inherently unfair.

Because the agreement with Mitchell was an arms-length transaction, the Commission found that the $0.10 per thousand gallon rate was the market rate for raw water for Aloha's related party transactions. As such, the related party rates of $0.32 per thousand gallons were reduced to $0.10 per thousand gallons.

The Commission ordered that the issue regarding the reasonableness of the rates charged by Mitchell, Tahitian, and Interphase be addressed in this rate case for the Seven Springs water system. The Commission concluded that it was not precluded from finding that the $0.10 per thousand gallons charge for purchased raw water is appropriate for the calculation of final rates in this rate case if Aloha fails to meet its burden of proof.

Q. Do you have any other comments regarding the purchased water agreements with Mitchell, Tahitian, and Interphase?

A. Yes. Based on the utility's response to a staff interrogatory, I conducted an analysis of Aloha's royalty agreements with Mitchell, Tahitian, and Interphase. This analysis is identified as Exhibit SBF-3. The Mitchell property is a 6,700 acre parcel of land on which Aloha has a right to locate its wells and a 10-acre water plant site anywhere on the property. The only restriction is that each well site has a minimum circumference of approximately one acre. Under the agreement with Tahitian, the utility can extract water on a 30-acre parcel of land with the one-acre restriction discussed above. Under the agreement with Interphase, Aloha can extract water on any location of a 638 acre tract, subject to the one-acre restriction.

I believe it is important to note two distinctions between FCWC's royalty easement and Aloha's raw water agreements with Tahitian and Interphase. First, FCWC's royalty easement is in perpetuity; however, Tahitian and Interphase may cancel the agreements upon giving Aloha 30 days written notice. Interestingly, the agreement with Mitchell is perpetual in term. Second, FCWC's royalty fee is fixed at $0.03 per thousand gallons, but the agreements with Tahitian and Interphase have an escalation provision for the royalty fee. According to the 1975 agreement with Mitchell, there is no escalation provision for the $0.10 per thousand gallon charge.

Based on the above, I believe the Mitchell agreement is analogous to the FCWC royalty easement. Also, the Mitchell agreement was an arm's length transaction. As such, without any additional evidence to the contrary, I believe the Mitchell charge of $0.10 per thousand gallons is reasonable. Further, according to the facts discussed above, I believe the Mitchell agreement is of greater value to the utility than the related party purchased water agreements.

Q. When you say the Mitchell agreement is of greater value than the related party purchased water agreements, would you expect that the royalty fee charged by the related parties would be less?

A. Based on my analysis in Exhibit SBF-3, I would have expected the royalty fee charged by the related parties to be less than that charged by Mitchell.

Q. Do you believe that Aloha has met its burden of proof, in this current rate case, that the royalty fee by its related parties for raw water is reasonable?

A. No. As indicated above, Order No. PSC-01-1374-PAA-WS effectively

outlined the steps the utility could have taken in order to meet its burden of proof. In its MFRs and direct testimony, the utility has failed to provide the original cost of the land and wells as of the date Aloha began purchasing water from its related parties. Without this information, a comparative analysis similar to the one that the Commission performed for FCWC in Docket 951029-WU cannot be done. I believe such an analysis is needed to evaluate the reasonableness of the royalty fee charged by the related parties.

Q. Are you able to determine what the related parties should charge per thousand gallons of raw water?

A. No. Without the original cost of the land and wells as of the date Aloha began purchasing water from its related parties, I am not able to determine what the appropriate royalty fee that Tahitian and Interphase should charge.

Q. Should the water royalty fee charged by Tahitian and Interphase be reduced?

A. Yes. As I stated above, I believe the Mitchell agreement is of greater value to the utility than the related party purchased water agreements. As such, I believe that the royalty fee charged by the related parties should at minimum be reduced to $0.10 per thousand gallons.

Q. If the Commission finds that a $0.10 per thousand gallons royalty fee for the utility's related parties is appropriate, what would be the effect on the Seven Springs water system's operation and maintenance (O&M) expenses?

A. The effect would be an $88,330 reduction of Seven Springs water's O&M expenses. The $88,330 amount is calculated as follows:

Projected 2001 Annual Maximum Water Use Permit Pumpage
of the Related Party Wells (Omitting 000's)..... 401,500

Multiplied by Disallowed Portion of the Per 1,000 Gallons Charge..... $0.22

Reduction of Seven Springs Water's O&M Expenses..... $88,330

Q. Does this conclude your testimony?

A. Yes, it does.

BY MR. JAEGER:

Q And, Mr. Fletcher, could you briefly summarize your testimony?

A Yes. I am providing testimony only on the Issue 15 in this case. It's regarding whether an adjustment should be made for related party purchased water transactions. Aloha purchases raw water from three different entities: Tahitian Development, Inc., Interphase, Inc., and Jack Mitchell. Tahitian and Interphase are both related parties. Jack Mitchell is a nonrelated third party.

In its MFRs, Aloha projected a December 31st, 2001 related party purchased water expense of $128,480 collectively for Tahitian and Interphase. Both Tahitian and Interphase charge Aloha 32 cents per thousand gallons for raw water. Mitchell charges the utility 10 cents per thousand gallons.

I believe the Commission should use the same standards that it utilized in the 1995 Florida Cities Water Company overearnings investigation to evaluate these related party royalty fees. To perform such an analysis, the Commission needs to have the original cost of the land and the wells when Aloha first began extracting the raw water from the related party wells. Staff has requested this information; however, the utility has not provided it. As such, I do not believe the utility has met -- has proven that its related party royalty fees are reasonable.

Further, I believe that the Mitchell agreement is of greater value to the utility than the related party purchased water agreement; therefore, I believe the royalty fee charged by the related parties should be at a minimum reduced to 10 cents per thousand gallons.

Q That concludes your summary?

A Yes.

MR. JAEGER: I tender the witness for cross.

COMMISSIONER BAEZ: Thank you. Mr. Wood.

MR. WOOD: I have no questions.

COMMISSIONER BAEZ: Mr. Burgess.

MR. BURGESS: Thank you, Commissioner.

CROSS EXAMINATION

BY MR. BURGESS:

Q Mr. Fletcher, now in your summary you indicated that you have tried to get certain information with regard to original costs; is that right?

A Correct. The original cost of the land and the wells when Aloha first began extracting the water.

Q Okay. And under what mechanism did you try to obtain this information?

A It was an interrogatory in this case.

Q And at this point, I take from your testimony that you have not been able to get that information from the company?

A Correct.

Q And what was your intention had you obtained that information?

A I needed the original cost information in order to perform the same analysis that was done in Florida Cities in order to test the reasonableness of the charges.

MR. BURGESS: Thank you, Mr. Fletcher. That's all we have.

CHAIRMAN JABER: Ms. Lytle.

MS. LYTLE: I have no questions for this witness.

CHAIRMAN JABER: Thank you. Aloha.

CROSS EXAMINATION

BY MR. DETERDING:

Q Good morning, Mr. Fletcher.

A Good morning.

Q You say you tried to get this information through interrogatories. Isn't it true that the utility did respond that it had no such information on numerous occasions?

A Through that interrogatory response, I believe Aloha's response is that they didn't -- couldn't get the information. They didn't have it.

Q Well, you asked whether Aloha had the information first, and they told you they did not; isn't that correct?

A Let me go back. I believe their response is that they didn't have it, the information. Aloha didn't have it.

Q And you also asked about getting the information from the related party as well through Aloha; correct?
A I believe that's the case.
Q Okay. And -- go ahead.
A I believe that was the case. If Aloha didn't have it that they needed to get it from the related party.
Q And Aloha said that the related party had told them they didn't have that information; correct?
A Correct.
Q And we're talking about information concerning the value of land from 1978. Is that not right?
A Well, for the Tahitian Development agreement, I believe they -- that agreement was in '77. It was shortly after that for Interphase.
Q Okay. '77 for one and '78 for the other; correct?
A That's when the agreements were signed, yes.
Q And what they told you in response to that was that the related party had said that they did not keep information any longer than required by those that regulated them, specifically the IRS; correct?
A I believe that was their response, yes.
Q Okay. And what you're talking about is not only the value of the land but of the facilities located on that land that were constructed by that related party; correct?
A Correct, the original infrastructure that was

installed by the related parties.

Q Now, when Aloha began receiving water from these parties, the facilities were already there and in place, the wells were drilled, there were pumps in place, et cetera; correct?

A Yes.

Q These were working wells?

A Yes, they were working wells.

Q You referenced the Florida Cities Water Company case. Where there wells of any type on the property that were included in the arrangement with the Florida Cities case at the time that were included in that payment?

A No.

Q Okay. But in Aloha's case there are and were?

A Yes.

Q Okay. Have you done any analysis of the -- of what a well of these types would have cost at the locations -- at Aloha's locations of its four wells that we're dealing with here?

A I've done no analysis of it.

Q You would agree, however, that the costs of those facilities would be substantial to originally construct, would they not?

A I'm not sure. I'm not an engineer. I don't know what they would cost.

Q Okay. Has anybody on the Staff attempted to do that analysis?

A Not that I'm aware of.

Q But it is true that they could be many times the cost of the land at that time or the value of the value at that time?

A I'm not an engineer. I don't know what the cost would be.

Q Okay. You have no idea --

A I can't answer that question.

Q You have no idea what the cost of a well would be?

A No.

Q Okay. And in the Florida Cities case, the utility was entitled to utilize 149 acres of property; is that right? I believe that's stated on your Page 5.

A Yes, it was 49 acres, but there was -- later, if you look further in the testimony, I think it was with well head protection zones that actual acreage or the weighted acreage was, I think, 613 that the Commission did the analysis on.

Q So that's what was impacted then?

A What was impacted, I think, through well head protection zones, and there was other things, some kind of, I guess, transmission lines or something that the property suffered degradation. And I think that it expanded the 149 to the 613.

Q So the Commission considered more than just the location of the wells but actually the area impacted by those wells?

A Yes.

Q Okay. Isn't it true that in Aloha's 1977 rate proceeding before this Commission that the Commission recognized the 10 cents per thousand gallons paid to an unrelated party for extraction of water?

A Yes.

Q Did the Commission in that case say anything about, we're approving this because it is an unrelated party? Did they limit that to unrelated parties?

A I don't think there was -- the only thing that was in the order -- could you repeat your question?

Q Did the Commission in any way suggest that the reason they were approving this or one of the factors in approving this was that it was an unrelated party?

A No.

Q Did the work papers of the Staff suggest that this was because it was an unrelated party?

A No.

Q Immediately after that case is when the utility started purchasing water from related parties, correct, within a year?

A For -- that was a '77 docket, and I think Tahitian

was signed -- yes.

Q In both cases it was approximately a year, give or take six months?

A Began purchasing the water?

Q Uh-huh -- well, entered into the agreement.

A Entered into the agreement, yes.

Q Okay. And in the Florida Cities case, there had been no prior approval of an arrangement with an unrelated third party, had there?

A Prior to the Florida Cities case?

Q Uh-huh. There had been no approval of a similar arrangement for an unrelated third party.

A I'm not aware of any docket prior to that where the Commission addressed it in an order --

Q And isn't it true --

A -- other than, you know, approving the '77 docket for Aloha for that third party.

Q Okay. But not for Florida Cities. Florida Cities did not have as guidance, for lack of a better word, the fact that the Commission had approved a similar arrangement at an earlier time?

A Not to my knowledge, not for the Florida Cities case.

Q Isn't it true that Aloha has reflected the payments to its related party for many years in its annual reports to the Commission?

A Yes. And I know in my depo you asked me that, and since then I saw -- when we were down in depos in Mr. Nixon's office, I reviewed some of the annual reports that reflected that.

Q And the Commission had never taken issue with this arrangement since its inception until a docket in -- well, an order issued just this last year, 2001; is that correct?

A It was never addressed by the Commission as an issue until the recent overearnings investigation.

Q And in fact, as late as 1998 this Commission undertook an investigative audit of this company, issued interrogatories, issued an audit report that dealt with this issue, and yet when the final order dealing with those audits or utilizing those audits came out, there was no adjustment for this?

A Right. Staff did not make that an issue in that -- I believe it was a limited proceedings dockets. There was -- two of them were combined. And during that same time period, we had an undocketed overearnings investigation. And we did send out that discovery, but we did not make it an issue in those limited proceedings.

Q Okay. But it was discussed in the audit, and it was discussed in discovery?

A It was discussed in an audit disclosure and it was -- yes.

Q Okay. Isn't it true that this utility at the time it entered into those agreements had less than $100,000 in water -- net water rate base?

A When they originally entered into the agreements?

Q Uh-huh, with the related parties.

A I don't know what the company's financial status was at that time.

Q And isn't it true that the utility had over $1 million worth of debt at that time?

A Again, I'm not sure of that. I don't know their financial status at that time.

MR. DETERDING: Let me catch up to where I am. Give me just a minute.

Q Would you agree that according to the case law that transactions between related utilities and related parties should be judged by this Commission based upon the market value of the service provided?

A I would agree that case law as indicated in my testimony said that the court standard -- it says that the standard to use in evaluating affiliate transactions is whether those transactions exceed the going market rate or are otherwise inherently unfair.

Q Would you agree that the market value in this case is -- would be what the utility could obtain those services for from an unrelated third party?

A In Aloha's situation, I think that -- you know, Aloha has a water use permit. Anything below the capacity of that well I would say that the market rate for raw water would be Mitchell. Anything above that I would say from testimony since I've been here at the hearing that their alternative for treated water would be Pasco County. However, I don't think that Pasco County, even though you asked me that in my deposition, that the market rate -- I think I said it was the market rate would be Pasco County. Given further thought on that, I don't think that that is market rate. However, I will agree that it appears in short term that above the WUP, I think the county is the utility's only option at this point.

Q Okay. Well let's try and break this down a little bit. 1978, '77, '78, this utility is looking for a supply of water. It has a situation where the Commission approved an unrelated transaction at 10 cents per thousand gallons; correct?

A It did.

Q Okay. The utility needs more water. It enters into an agreement with a related party at the same cost per thousand. Do you agree that at that time that was the market rate for raw water available to this utility?

A I think the Mitchell rate is the -- that is the market rate for raw water. However, there's -- I would point out that in the Mitchell agreement, if that is the market rate

and the court standard is that you're supposed to evaluate related party transaction, that they don't exceed market value or they're inherently unfair -- I'm sorry, I lost my train of thought. Could you repeat that?

Q I think you answered my question.

CHAIRMAN JABER: Mr. Deterding, he asked you to repeat the question. Do you remember what the question --

MR. DETERDING: To be honest with you, Commissioner, after that, I don't remember. If you want, you can have the court reporter read it back.

CHAIRMAN JABER: Mr. Fletcher, do you want the question repeated back?

THE WITNESS: Yes.

(Requested question read back court reporter.)

THE WITNESS: Yes, I believe the Mitchell rate was market value at that time. However, I would point out that, you know, the Mitchell agreement didn't have an escalation clause -- provision in the royalty fee, and the related parties did. I would note that that -- it was distinct differences between those agreements. There -- being that there was -- the related parties had an escalation clause for the royalty fee, and then also I believe the owners, Tahitian and Interphase, there's also a provision in those contracts where they could cancel or void the contract within 30 days written notice. There was a distinct difference.

And another difference between the Mitchell and the related party agreement is under Mitchell they could install a 10-acre plant site.

BY MR. DETERDING:

Q Okay. Does the agreement say that they will get that plant site for free?

A I think the agreement says that they have the right to place a 10-acre well site.

Q But it doesn't say, you will not have to pay for that plant site?

A There's no charge that I -- in reviewing the contract where they -- other than payment of the royalty fee, there's no other charge -- other charge for that -- placing a 10-acre plant site that I saw in the contract.

Q Well, so you're saying you don't -- you believe that contract allows them to place a 10-acre plant site without any additional cost, without having to acquire that land?

A Not on my reading. I don't --

Q They would not have to, or they would have to?

A I don't see there being an additional charge that they have to pay a utility based on my reading. Looking at the provisions of the contract, I don't see where they have to pay them more to place the 10-acre well site.

Q Well, isn't it true it doesn't speak to that issue? It doesn't say whether you will have to pay for that additional

plant site?

A What the agreement says is they have the right to place a 10-acre well site on the allotted acreage under the agreement.

Q Okay. But it doesn't say whether or not they would have to pay for that 10-acre plant site?

A No.

Q Now, you mentioned the perpetual nature. We have been -- or Aloha has been extracting water from the Mitchell property and from the related parties' property for approximately 23, 24 years; correct?

A Yeah, it sounds about right.

Q And what is the -- what has been the difference thus far between the provision in the utility's agreement with its related parties and its agreement with Mitchell as far as the term of the agreement? How has that affected this utility thus far? Let me rephrase the question. Maybe make it a little easier on you.

Isn't it true that there has been no difference as far as the effect of that -- the difference in terms between the related party and the unrelated party agreements on this utility thus far in that 24-year period?

MR. JAEGER: Chairman Jaber, I'm going to object because he confused me. One time you were talking about the length of time, and then the next time you just said "terms."

Are you talking about time?

MR. DETERDING: I apologize. I'll clarify, Ralph.

BY MR. DETERDING:

Q You said there was distinction because one was a perpetual agreement and one had a cancellation agreement.

A Correct.

Q How have those provisions affected this utility's access to water in the last 24 years? Have they had any effect?

A Well, the related party agreements, even though they have that cancellation provision in there -- well, for the owners, they haven't done so. So I don't see -- but there was a potential for that, but I guess no effect that I see. I mean, they haven't canceled the agreements; however, there's always that potential that they can.

Q Okay. The utility has an interconnect with Pasco County, does it not?

A Yes, it does.

Q And it is buying or preparing to buy large quantities of its water from Pasco County; correct?

A Right.

Q And does its arrangement with Pasco County have a 30-day cancellation provision?

A No.

Q It has no cancellation provision?

A My understanding is that, you know, Aloha is a bulk water customer, and there is no -- the county, if they were to cease service of that bulk water, they would have to probably go through a public -- they would have to go through a public hearing to do so. And based on discussions with the counties I've had, there would have to be extraordinary circumstances. If a bulk water customer is not past due on their bill, they're current, for them to go to public hearing to the county in order to cease that service.

Q Well, is there a written agreement between Aloha and Pasco County for that service?

A No. They were originally under Pasco County Water Authority and that agreement -- or county took them over. And I believe the agreement with Aloha canceled or expired in 1999. And it's just -- there's no written agreement anymore. They are just a bulk water customer of the county.

Q So the county could cancel and refuse service to this utility at any time?

A Based on my -- they could refuse service, I guess, given a certain set of circumstances. If they are late on their payment, they could do it. But based on my discussions with Pasco County Doug Bramblett (phonetic), he was saying -- my discussions with him is there would have to be extraordinary circumstances for them to cease bulk water purchase -- the sale of bulk water, treated water to Aloha, if they are current on

their bill without any extraordinary circumstances. They wouldn't not cease the service.

Q All right. Extraordinary circumstances, would that include Pasco County needing the water for some other purpose?

A That I don't know. He didn't define that.

Q So you don't know what that means?

A I don't know what he meant by "extraordinary circumstances," but I do remember him saying that they would not cease -- it wouldn't be at a whim. They would have to have specific reasons to cease the service.

Q Had the principals of Tahitian or Interphase suggested that they would discontinue service on a whim?

A I'm not sure what -- a whim was -- no. Your use of the word "whim," no. I don't remember seeing anything like that. I just remember seeing it in, what, Steve Watford's direct testimony? If the royalty fees were not recognized, I guess that they would cancel. Something like that he would -- the related parties would cease the agreement, I guess, if they didn't -- were not paid.

Q So in other words, if the utility broke the contract?

A Right. But nothing at a whim, no. But they could do under the agreement, though. I would state that since they have that clause, they don't have to have a reason, but they could do it at a whim.

Q As could the county; correct?

A No. This is as to the related parties.
Q Well, I'm asking you also as to the county; correct? That is true also as to the county?
A I don't think that they could do it at a whim. Like I say, Douglas Bramblett told me they would not cease to service at a whim. That's my discussion with him, my understanding from him, that they would not do it at a whim. And I actually asked him that, the words "at a whim," you would not do that. You would have to be late on your payment or other extraordinary circumstances.
Q Who makes that decision for the county?
A I don't know.
Q So you don't know if it's Mr. Bramblett who would make such a decision?
A Not him specifically. I don't know if he would.
Q Okay. And there is no written document, no written contract that expresses the terms under which they would discontinue that service, is there?
A There is no written agreement with Aloha and Pasco County. Well, now, whether there's anything else, I'm not aware of.
Q And there is no provision, any rule, tariff, or ordinance of the county that suggests under what conditions they would or would not discontinue service to Aloha?
A I'm not aware of any written document. Like I said,

just based on discussion with Douglas Bramblett, they would have to have a public hearing to cease the bulk water customer service.

Q Okay.

A I'm sure that's written in their county provisions or something somewhere.

Q Why are you sure that's written their county provisions?

A I take that back. I don't know if it is.

Q Is Mr. Bramblett an attorney?

A I don't know whether he is or not.

Q Okay. Have you done any research about the legal ability of the county to discontinue service to Aloha for any reason?

A Just with my discussion with Douglas Bramblett that I testified earlier here, nothing else.

Q Would you consider that legal research into their ability to do so?

A Legal research?

Q Uh-huh.

A I'm not a lawyer. I don't --

Q So would you consider that legal research, your discussions with Doug Bramblett on the phone?

A I wouldn't consider it legal research.

Q Would you agree that the utility has provided in

response to discovery information showing that if the 10 cents per thousand gallon charges is adjusted for the Commission's own leverage formula indicator of inflation, that the charge currently would be at or below what the 10 cents was at that time -- at the time --

A You said leverage formula, you mean price index?

Q I'm sorry, price index. I think I did that at deposition too.

A I remember seeing some discovery there. Again, what docket it was in, I'm not sure when it was -- what docket it is. I remember seeing utility's responses. I believe it was in part of our discovery that you-all sent to us in part of your responses.

Q What is Aloha's alternative for obtaining water if the related parties did discontinue service because Aloha's failure to pay the agreed upon price for that water?

A Again, under the -- it's my understanding that Aloha has a water use permit, and it encompasses those related party wells. So they definitely -- based on discovery that we sent out to SWFWMD, they could explore the opportunity of installing, transferring the withdrawal allocation limits of those wells if the related parties cease the agreements to other areas within the Seven Springs water system. And that's again up to the maximum of the WUP or I guess just -- excuse me, just related -- specifically just transferring whatever the

WUP limits. They got this WUP, and they have several wells, so whatever the specific capacity of each of those wells, transferring them to some other site within their service area. They definitely could do that as far as -- it's an option to them.

Q Okay. You say, "they definitely could do that." Do you know whether or not such moving of wells or moving of permits would be approved by the Water Management District?

A Well, let me rephrase that. They definitely can explore that option. I don't know about the -- let me restate that prior answer.

They definitely could explore that option.

Q But you don't know whether they could get approval for such a proposal?

A Well, I don't know. Based on the response we got from SWFWMD as far as approval from them, I can't say for certain, but it appears that that's definitely an option that it can explore. I don't know. I'm not employed with them, and I don't know all the permitting requirements as far as modifying the WUP, whether they absolutely would approve it or not, or, you know, there may be other considerations, you know, installing new wells from DEP. I can't speak for those agencies.

Q But they would have to go to DEP and the Water Management District for permitting related to moving those

wells, would they not?

A I believe so, yes.

Q Okay. And isn't it true that what the Water Management District witness said yesterday was that they would consider any such a proposal?

A He said that they would consider that proposal as long as the newly installed wells did not cause new additional groundwater withdrawal impacts.

Q Okay. And he agreed that they would consider any proposal put before them related to water withdrawals; correct?

A I believe that's correct, yeah.

Q Okay. But he didn't say they would approve or likely to approve or any such thing, did he?

A I don't think. I don't think so. I can't recall. I don't know whether he did or not on that.

Q Okay. Isn't is true that the utility would incur costs related to permitting at both the DEP and the Water Management District if it pursued that option?

A Of course.

Q And it would incur costs related to engineering fees for that work as well, would it not?

A I believe so.

Q And it would incur costs related to drilling and equipping new plants, would it not?

A Drilling the wells? Yes.

Q Drilling wells, putting in pumps --
A Whatever the facility -- yes.
Q -- putting in buildings.
A Whatever is required, yeah, to transfer that well.
Q And that wouldn't include moving anything from the existing locations because both the Mitchell and the related party agreement suggests that the equipment that is there is the property owner's when the utility ceases utilizing it, does it not?
A Yes.
Q Do you have any idea what the cost of such a proposal to move one of those wells, much less four of them, would be?
A I don't know what it would cost.
Q Now, if I assume -- well, you tell me. Do you know whether the Water Management District would consider as a good reason for relocating a well the fact that the utility could save 20 cents per thousand gallons on the purchase of that water?
A Could you repeat that?
Q Do you believe that the Water Management District would consider as a sound basis for moving well locations the fact that the utility could save 20 cents per thousand gallons on the purchase of that water?
A I would have to defer that to SWFWMD. I don't know.
Q Okay. Now, if the utility cannot -- you offer a

couple of options. One being this relocation of wells. Let's assume for the moment that that would either be not permittable or would be more expensive than staying where they are and complying with the contract. What is the other alternative available to this utility, or what other alternatives are available to this utility if that occurs, if they can no longer acquire that water from the related party?

A As far as getting raw water?

Q Getting raw water, getting treated water, getting water that it can utilize.

A Well, assuming that they explore that option and they can't -- a utility explores the option of -- I got your question. You're saying if they can't relocate the wells, what is their option?

Q Correct.

A Well, I guess it appears that the only option right now as far as getting water is to purchase from Pasco County.

Q And the price from Pasco County is substantially higher, would you agree, than the current costs that the utility incurs in obtaining and treating the raw water through the related party agreement?

A Yes.

Q Do you know of any other available sources besides Pasco County under that scenario that they could not move the wells and could no longer obtain it from the related party?

A I know of no other source. Not for the short term, no.

Q And you've heard that the utility is exploring other alternatives for the long term; correct?

A Right. That's why I stated it that way.

Q Isn't it true that the utility has responded in discovery that it is willing to do the treatment itself and sell water to Aloha -- treated water to Aloha at less than -- slightly less than what the county is selling the utility treated water for?

A Yes, I think they proposed that.

Q I'm sorry. That that the related party is -- I want to make sure I got the question. The related party is willing to sell treated water to Aloha at slightly less than --

A Yeah, that's what I understood. Yes, that's what I understand.

Q Would you agree that the price paid to Pasco County for treated water is the market value for treated water that Aloha can obtain?

A No. As I said earlier in one of my answers is, you asked me that at deposition, I believe, that I said it was market. And upon further review, right now, I see that that's being the only option. And since it's a monopoly, I don't think you can really say that that's market value. I mean, it's just one source, and market value, I guess, that's defined

as, you know, a price set in a competitive environment. So that's what it is currently, my understanding, that that's the only source currently available that can readily provide treated water to Aloha.

Q Okay. And since you agree that it is the only source, why is that not market value? Aren't you saying that the raw water issue is market from the unrelated -- the cost paid to the unrelated party indicates market for raw water?

A Like I said, the county, they're a monopoly. They're the only option there. I stated that the raw water at the Mitchell rate is market. You have Mitchell; you have Tahitian; you have Interphase. There's not just one there. I mean, I guess there's options that are available. There's no monopoly, I guess, in the raw water.

Q So you're going to --

COMMISSIONER PALECKI: Mr. Fletcher --

MR. DETERDING: I apologize.

COMMISSIONER PALECKI: -- let me just see if I have this straight. Are you saying that because you don't -- under the circumstances here in Aloha's territory and the fact that the Water Management District is requiring that they get -- make outside purchases, and there's only one provider, Pasco, are you saying that there's not truly a free market and therefore you cannot calculate a market price?

THE WITNESS: Correct.

COMMISSIONER PALECKI: Thank you.

BY MR. DETERDING:

Q And yet you're saying that when you judge the market for raw water, there are more than one alternatives because there are the related parties. So you're saying, you could -- the option of the related party and what that related party charge indicates market as well as the one price from an unrelated party; correct? Didn't you just tell me there were more than one option for raw water?

A I did tell you there was more than one option for the raw water.

Q And those options are Mitchell and the related party; correct?

A And the related parties, yeah, those three.

Q So the distinction is that in this case, in the case of raw water, that there is more than one option, and the other options are the related parties. So their price that they would charge is part of what determines market value?

A I'm not sure I'm understanding your question.

Q Well, you've drawn a distinction between the purchase of raw water and treated by saying in the treated water situation there's only one option and that's Pasco County. In the raw water situation, there is an unrelated party and there are two related parties, so that that is indicative of market, but what is indicative of market, the charges of both the

related and the unrelated parties; correct?

A Did you ask me that all three of their rates are indicative of what the market is?

Q Isn't that what you just said in response to my question about the distinction between the market for raw and the market for treated water?

A I would say, yes, the Mitchell, Interphase, and Tahitian, that's the market for raw water for -- or that's the market available to Aloha for raw water.

CHAIRMAN JABER: Mr. Fletcher, may I ask a question this way? Because I think you're -- I don't know if you're using the word "market" loosely to put in for a terminology that's used now in competitive pricing mechanisms. So for purposes of your answers, how is it you define the market? What determines the word "market" for you?

THE WITNESS: Market -- market value, I'm sorry, Chairman.

CHAIRMAN JABER: Well, you've used "market" in two different contexts. You've used market in saying there is the availability of this resource, and you've called that the market. And then you've used market in conjunction with price, market price. So my question to you is, what is it you think the word "market" means when you're using it in conjunction with what's happening in treated water and with what's happening in conjunction with raw water? I think that's what

Mr. Deterding is trying to understand. What is your distinction?

THE WITNESS: I guess it would be the alternatives of what service or products you're looking at.

CHAIRMAN JABER: All right. So do I understand your testimony to be because in treated water there are several sources --

THE WITNESS: Excuse me, raw water.

CHAIRMAN JABER: Raw water there are several sources available to Pasco County, you believe there's an adequate market, and there is a market price.

THE WITNESS: I believe there's a market price for the raw water for Aloha because they have the option of Mitchell, they have the option of Tahitian and Interphase for the raw water under their WUP capacity.

Above that, I don't think that there is a market for treated water because there is only one vendor -- I guess you could say there is only one option available to them is Pasco County.

CHAIRMAN JABER: Mr. Deterding, is that what you are trying to obtain?

MR. DETERDING: I think so. Thank you, Madam Chairman.

BY MR. DETERDING:

Q You say there is no market because there's only one

supplier for treated water; is that right? There is no market price? There is no way to determine what the market price --

A There is no market value --

Q Okay.

A -- for the treated water.

Q And the market value is $2.35 per thousand gallons?

A That's the price -- I'm saying $2.35 is the price that Pasco County charges, and I'm saying that that's not market value because Aloha -- I mean, Pasco County is a monopoly. And that's why I'm saying it's not market value, but that is the charge that Pasco County --

Q Okay. What other options for purchasing treated water are available to Aloha besides Pasco County?

A There's no currently available that they can readily accept it other than your proposal that in the future that related parties may sell treated water, but that doesn't currently exist. I mean, they can't readily provide that to -- well, I guess -- well, they have the wells. Currently, I don't see that there's any other source for treated water.

Q And you mentioned the related party offer to sell at slightly less than Pasco County. That's the other alternative; correct?

A That's what I've heard proposed.

Q Okay. What about New Port Richey or Port Richey or any of the other cities around -- nearby? Do you know whether

or not they sell bulk water, treated water?

A I don't know whether they --

(Pause.)

Q Would you agree that it is appropriate for this utility to go with the most cost-effective alternative it has for obtaining water that it can use in providing service to its customer?

A I think it would be prudent for a utility to -- in incurring expenses, any expense that they try to go with the most cost-effective choice.

Q And that includes, in your opinion, even if that is an interruptible source? In other words, if the source that is the cheapest is one that has a cancellation provision?

A I'm sorry, can you repeat that?

Q Well, would you agree that the utility should go with the most cost-effective choice even if it is an interruptible, even if it's one that can be canceled or a source that can be canceled on relatively short notice? In other words, the cheaper regardless of whether it's an interruptible source?

A I would think it would be more prudent to have one that was not interruptible. I mean, you just have to weigh a cost-benefit analysis. You just have to look at your options, and for interruptible -- if you could pay a little bit more, I guess -- I'm sorry, I'm just not -- I guess I'm not understanding the question.

Q Well, I'm asking you whether or not what's more important, interruptible or lack of an interruptible source, or the cost of the source of the water? Isn't it more important, in your mind, to go with the cheapest source of water?

A Well, I think you'd have to look at cheaper. You couldn't just look at the short term, you'd have to look at long term. And, you know, you could get -- given the right set of circumstances, over the long range you may choose something that in the short term maybe cost higher but in the long run -- say, if you had an uninterruptible source and then you had an interruptible source where, you know, they could throw you off, and then you would not provide that particular service, and then you have to go pay money in order to get it from another, and it could be higher, so you would have to look at long run, so you have to look at the set of circumstances. I can't really answer that.

You have to give me a set of circumstances or -- you know, because it could be in the short term it could be higher, but in the long run it could work out that you would want the uninterruptible source. I don't know.

Q Do you recall my taking your deposition on November 20th of last year -- November 30th? I'm sorry.

A November 30th, yes.

Q If you'll look on Page 83 of that deposition transcript -- do you have that with you?

A Yes. Eighty-three?

Q Yes. And I ask you at Line 8, "Question: You believe they have to have an uninterruptible source of water?

Answer: I would say, yes, as a reliable source of water. If it can be interrupted at a whim, I guess that's -- the utility would need to look for alternative sources. I mean, that would put them in a bind. I would agree if Pasco County can say, hey, we're no longer going to sell water to you. So I think it would be good maybe to explore alternative sources of water.

Question: Even if they cost more?

Answer: Well, I think you would have to look at the most cost-effective method. I mean, you can explore them. I guess the most cost-effective choice would -- I assume that the utility would decide to go with.

Question: The cheaper regardless of whether it is interruptible?

Answer: Would decide to go with. I would say you would decide to go with the most cost-effective choice.

Question: Which means the cheaper choice even if it's interruptible?

Answer: The most cost-effective, I guess that would be cheaper."

Is that an accurate representation of the questions and answers posed to you?

A Yes, that's what I said.
Q And you stand by that answer?
A I stand by that answer. And what I meant by "cheaper" is you have to look at short term and long term, too, is what I meant, I guess. That's the only thing I need to clarify by what I said by "cheaper." You need to take into consideration long term and short term.
Q Did you say anything about weighing those options in your answers to my question in your deposition?
A Weighing the options of looking at short term or long term?
Q Uh-huh.
A No, I just said "cheaper." And how I'm defining "cheaper" -- and I guess I could have elaborated, but I didn't but I'm elaborating now. What I mean by "cheaper" is that you have to look at short term and long term.
MR. DETERDING: Give me just a minute.
Q I want you to assume that in 1977 Aloha had a deficit in retained earnings of $150,000, had revenues of $225,000, an operating loss of $30,000, and rate base of $200,000. You got a picture here of what I'm talking about?
A Okay.
Q And that they had long-term debt of $1.5 million. Now, under those financial conditions, do you believe the utility was likely able to obtain money from a third party in

order to finance the construction of wells or purchase of land?

A I don't know what was available to them --

Q Okay.

A -- at that time. I mean, the owner of the utility -- I know Lynnda Speers has -- she has two long-term debt issues. I don't know what -- yeah, two-long term debt issues to finance through a reuse project. I can't remember if -- I'm assuming she was the owner at that time. She could have -- that was the source that they could have gone to if that's what you're saying. Even with that financial condition, I guess -- I'm assuming that Lynnda Speers could have considered something like that if she was the owner at that time. I'm not --

Q And you don't know if she was the owner at that time?

A I don't know whether she was or not. Maybe the owner of the company could have personally done it. I don't know.

Q So in other words, somebody could have subsidized this utility by the granting of debt that would not otherwise be available to this utility from a third party source. Is that what you're saying?

A I wouldn't say "subsidize." I mean, I'd say they can make an investment in their utility.

Q Well, let's assume for the moment that this utility has to go to the financial markets in order to obtain financing for construction or purchase of land and for construction of facilities. Do you believe with a $150,000 deficit, a $30,000

current loss, and over $1.5 million in current debt that they would be able to do so?

A Given that hypothetical, I don't think it's favorable that they would get a loan, but I'm not a banker. So it doesn't look favorable to me given that financial rendition.

Q Okay. Do you know what the status of the water resource availability in this area was at the time? Are you generally familiar with that from PSC orders or review of PSC orders?

A What the status of what?

Q Of the water resource in this area in 1977, '78.

A I'm not sure I understand what you mean by "status."

Q Well, let me be a little more specific. Isn't it true that the Commission at that time issued several orders that referred to the emergency water situation in the Pasco County U.S. 19 corridor around that time?

A I think we got some discovery from the utility where they listed some orders that contain that information or something that -- I don't know what the orders speak of, but according to the utility.

Q Did you look at those orders?

A I may have, but I don't recall what -- I don't know what they -- I can't recall what the orders contained in them.

Q Did you consider in your determination of what the appropriate thing for this company to have done in 1978 -- did

you consider that situation that was posed to you in that response to discovery? Did you consider that -- what was termed an emergency situation by this Commission at that time in making your determination of what this utility should have done in 1978?

A Did I consider it as part of my testimony here?

Q Right.

A I did not look at those orders in preparation of my testimony.

Q So you didn't give any consideration to the circumstances that were outlined in those orders concerning the saltwater infiltration that was existing in many areas around Aloha's territory at that time?

A Are you asking did I take that into consideration in my testimony, what the conditions were?

Q Correct.

A And what was contained in those orders?

Q Correct.

A Again, I didn't look at those orders in preparing my testimony.

Q Okay. But don't you agree that if those emergency situations existed that many wells were going bad in that area, that it would have been prudent for Aloha to consider that in deciding whether to purchase a piece of land and sink large sums of money into the construction of permanent wells at that

time?

A Again, I don't know the exact status of -- if that was the case. If you're asking it as a hypothetical should --

Q Yes, if that were the case. Wouldn't it have been prudent for Aloha to consider those issues in determining whether or not it should sink large sums of money into the construction of wells at that time?

A Well, I think they can do a cost-benefit analysis of -- if that was the case, they needed to explore the conditions at the time and do what they think, you know, after they run the cost-benefit analysis and make their choice. I mean, they have got to look at the conditions at the time or whatever and any expense that they are going to incur. I imagine they're going to analyze that. They would take that into effect if that was the case back then.

Q And they did that, didn't they?

A Did they do that when they entered into the arrangements?

Q Yes.

A I don't know if they did it at the time of the arrangements. I don't know when they entered into the related party agreements. I don't know. I don't know what the management did at the time they executed the arrangements, what analysis that they performed.

Q Okay. So if this utility is no longer able to pay

its related party for obtaining raw water and treating that water, then the only immediately available alternative to this utility is to buy water from Pasco County at $2.35 a thousand; correct?

A Assuming they cannot relocate the wells somewhere else in their service area, assuming that can't be done, currently the only option for treated water is Pasco County.

Q And do you have any idea how long it would take even if they could relocate those wells, how long it would take to permit, design, and construct those facilities?

A I'm not an engineer. I don't know.

Q So the immediately available alternative is to buy water from Pasco County at $2.35 a thousand?

A Again, assuming that they can't transfer the withdrawal allocation limits of those related party wells, I would say --

Q Well, again --

CHAIRMAN JABER: Let him finish, Mr. Deterding.

MR. DETERDING: I apologize.

A -- I would say, yes, that currently Pasco County would be their only option for treated water.

Q And you would agree that they could not immediately transfer those well permits, construct facilities, and begin pumping those as an immediately -- say, by the end of the time this case is concluded?

A We're here in January now, and I guess the case is going to be --

Q It's scheduled to be completed in April.

A April. So -- I'm not an engineer. I don't know how -- the permitting, how long it takes with the permitting with DEP. I don't know. I do know that they have to do the permit. They have to do the construction. How long that takes, I don't know.

CHAIRMAN JABER: Mr. Fletcher, and it's okay if you can't answer this, you just need to tell me. I don't want you to speculate or guess. If Aloha went to DEP and said, we're trying to sink new wells, or we're relocating wells, and DEP knew there was another option of Aloha buying water from Pasco County, would they give Aloha a permit for the wells?

THE WITNESS: I don't know that answer.

CHAIRMAN JABER: Okay. Thank you.

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

CHAIRMAN JABER: Thank you, Mr. Deterding.

Commissioners, do you have questions?

COMMISSIONER PALECKI: No questions.

CHAIRMAN JABER: Staff, redirect?

MR. JAEGER: Yes.

REDIRECT EXAMINATION

BY MR. JAEGER:

Q Mr. Fletcher, I think what you've shown as Staff's

concern with this interruptibility, the 30-day provision; is that correct?

A Yes. I think it's better to have uninterruptible.

Q Didn't we ask if Aloha could get the contracts modified to delete the 30-day provision?

A Did Staff -- could you repeat that?

Q Didn't we ask Aloha if it could get the contracts modified to delete the 30-day provision?

A I believe we did. Whether it was sent verbal or written, I don't know, but I believe we did.

Q And what was the utility's response?

A No.

Q Now, you've talked about Mr. Bramblett quite a bit. Who is he?

A He's Pasco County Utility's assistant administrator, I believe is his title, or assistant director. I'm not quite sure. He's like the second in charge according to his title, I guess.

Q And that's why you went to him when you had the question on bulk rates?

A Yes.

Q Going to the Mitchell agreement, how many acres in the Mitchell property are available?

A On their contract there's -- the allotted acreage is 6,700 acres.

Q Are there a limit on how many wells that can be placed in the Mitchell property?

A They can install as many wells as they want given a one-acre restriction, I believe, between the wells. I guess that probably would have something to do with the well head protection zones. I'm assuming that's why they have that in there.

Q There was a whole series on cost-effectiveness, and you were talking about the short run, long run. Also, wouldn't you have to take into account the escalation clause in the contracts as to whether -- in a cost-benefit analysis?

A Yes.

Q Finally, if rates are not sufficient to cover the cost of the utility, isn't it the utility's responsibility to file for a rate case?

A Yes.

MR. JAEGER: That concludes my redirect.

CHAIRMAN JABER: Thank you, Mr. Fletcher.

THE WITNESS: Thank you.

(Witness excused.)

CHAIRMAN JABER: All right. Staff, you have Exhibit 16. Without objection, that will be admitted into the record.

(Exhibit 16 admitted into the record.)

CHAIRMAN JABER: All right. Let me ask the parties,

have you checked out of the hotel? This might be a good time to take a break, 15 minutes, let everyone check out of the hotel. Just so you know, our plan is to work right through lunch. We are very optimistic that we can finish the hearing today because we have to finish the hearing today.

(Brief recess.)

CHAIRMAN JABER: Let's reconvene the hearing. Ms. Espinoza, is it appropriate now to go back to Mr. Yingling? It's my understanding he's available now.

MS. ESPINOZA: Yes. Thank you.

CHAIRMAN JABER: All right. The Water Management District, Ms. Lytle, do you want to call Mr. Yingling, please.

MS. LYTLE: Yes, ma'am.

CHAIRMAN JABER: And he has not been sworn; right?

MS. LYTLE: No, he has not.

CHAIRMAN JABER: Mr. Yingling, I understand you have not been sworn. I'll spare you from standing up, but will you raise your right hand.

(Witness sworn.)

CHAIRMAN JABER: Thank you.

JAY W. YINGLING

was called as a witness on behalf of the Southwest Florida Water Management District and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MS. LYTLE:

Q Could you please state your name, place of employment, and employment address for the record.

A My name is Jay Yingling. I'm a senior economist at the Southwest Florida Water Management District, and the address is 2379 Broad Street, Brooksville, Florida 34604.

Q And did you prefile testimony of 19 pages with Exhibits JWY-1 through 4 in this matter?

A Yes, I did.

Q Do you wish to update or change that testimony?

A No.

Q Could you briefly summarize your testimony for us?

A Yes. I'm here today to support -- for the District's support of the adoption of the more water-conserving rate structure for Aloha Utilities that would enhance the ability of the utility to come in compliance with its water use permit and generate any funds necessary for conservation programs needed to bring the utility into compliance.

I'm also here to support the use of the water price elasticities in the Waterate model developed by Dr. Whitcomb to estimate changes in use in revenues that may occur due to changes in Aloha's rates.

MS. LYTLE: At this time, I would ask that the testimony of this witness be entered into the record as though read.

CHAIRMAN JABER: Yes. The prefiled direct testimony of Jay W. Yingling shall be entered into the record as though read.

MS. LYTLE: And I would ask that Exhibits JWY-1 through 4 be entered.

CHAIRMAN JABER: We'll identify right now as Exhibit 17 JWY-1 through JWY-4.

(Exhibit 17 marked for identification.)

DIRECT TESTIMONY OF JAY W. YINGLING

Q. Please state your name and professional address.

A. Jay W. Yingling, 2379 Broad Street, Brooksville, Florida, 34604-6899.

Q. Where are you employed?

A. The Southwest Florida Water Management District.

Q. What is your position with the District?

A. Senior Economist.

Q. Please describe your duties in this position.

A. My duties include economic analytic work in support of key District research, planning, programmatic and regulatory functions. More specifically, I participate in rulemaking activities, evaluate proposed rules, prepare or supervise the preparation of Statements of Estimated Regulatory Costs (SERCs), prepare or supervise the preparation economic analyses of water and land issues concerning the District and existing, proposed, and potential District programs. Since the development of the Memorandum of Understanding (MOU) between the Florida Public Service Commission (Commission) and the five water management districts (1991), I have acted as a liaison to Commission staff on issues of mutual interest addressed in the MOU. This duty has included working with Commission and utility staff on water use permittee related rate structure and conservation issues, attending and presenting at utility customer meetings, and providing testimony in rate hearings.

Q. Please describe your training and experience.

A. I received both B.S. (1982) and M.S. (1984) degrees in Food and Resource Economics from the University of Florida. My academic training included courses on both economic theory (supply and demand) and applied quantitative analysis (econometrics and statistics). Since March of 1987, I have been employed by the SWFWMD, first as an economist and then as Sr. Economist since June 1991. Prior to working for the SWFWMD, I worked as a Staff Rules Analyst for the St. Johns River Water Management District. I have prepared or supervised the preparation of dozens of SERCs, numerous articles, presentations and reports on water resource economic issues. Perhaps most relevant, I was the District's project manager for the development of the Water Price Elasticity Study completed in 1993 and for the development of the Waterate Model. As stated before, I have also coordinated with Commission staff on rate structure and conservation issues since before 1991. I have testified both on the behalf of the Commission and utilities in rate hearings. My current resume is attached as Exhibit 1.

Q. Why does the District promote the use of water conservation oriented rate structures?

A. For the benefit of all water customers within its jurisdiction, the District promotes the efficient use of water. The longer that we can maintain demand within the limits of available high quality water

sources, the longer we can avoid the higher costs of having to develop lower quality sources. For water to be used efficiently, it must be priced in a manner that provides incentives for efficient use.

Over the years, water price elasticity studies have shown that water utility customers are responsive to changes in water price. Extensive statistical studies of utility water demand show that when the price of water increases, demand for water decreases, when all other factors are equal (such as weather). Economic theory indicates that persons respond to marginal price, the price of the next unit of a good purchased. The marginal price is, therefore, the appropriate incentive for efficient use. In much of the SWFWMD, potable quality water is at least a seasonally scarce resource. Water conservation oriented rate structures reinforce the concept of scarcity and the need to conserve through the marginal price of water. If there is no marginal cost for additional water use or the marginal cost of water declines as more water is used, the scarcity of high quality potable water sources is not adequately reflected and behavioral changes and the adoption of water conserving technologies will be less likely to occur.

Q. What is the purpose of a water conservation oriented rate structure?

A. From the District's perspective, the purpose of a water conservation oriented rate structure is to provide economic incentives to reduce per capita water use to, or maintain it at, a given level. The primary goal

is not to change or generate additional revenues for a utility. The intent is to provide incentives for conservation within the rate structure itself through manipulation of fixed and variable charges and the level or location of marginal prices. It is one of a number of tools that can be used to reduce or maintain per capita use, and it is required in Water Use Caution Areas (WUCAs).

Q. How is a water conservation oriented rate structure determined?

A. From a permitting perspective, the District has used the same guidelines on water conservation oriented rate structure since 1993. These guidelines are called "Interim Guidelines for Water Conserving Rate Structures", and are attached as Exhibit 2. In essence, the guidelines prohibit the use of two rate structure forms based on the marginal price signal. Flat rates, in which there is a single fixed charge for water use and no gallonage charge, has a marginal price of zero. There is no additional charge for additional gallons used. This structure does not reflect scarcity and provides no disincentive to profligate use. Declining block rate structures are also not acceptable because the marginal price declines as more water is used. Such a structure does not reflect the scarce nature of the resource because the marginal cost of water to the consumer declines as more water is used.

In the literature, many types of rate structures are considered water conserving The most common among these are inclining block, seasonal,

uniform with a seasonal surcharge, ratchet, and excess use charge. All involve some form of higher marginal price for water use based on usage or season. Uniform rates, with a constant marginal price, are sometimes also considered a water conserving rate structure. To minimize costs to regulated utilities, the District will accept a uniform rate structure when the utility is in compliance with per capita requirements. If it is not in compliance, then a more aggressive rate structure, such as those mentioned where the marginal prices increases based on usage or season must be implemented.

Q. What water use permittees are required by rule to implement a water conserving rate structure?

A. Public water supply utilities with permitted quantities of 100,000 gallons or more that are located in the Highlands Ridge, Eastern Tampa Bay, and Northern Tampa Bay WUCAs. The requirement for utilities in the Northern Tampa Bay WUCA is found in Section 7.3.1.2 of the Basis of Reveiw, in the Water Use Permit Information Manual, Part B, which is incorporated by reference as a rule of SWFWMD in Rule 40D-2.091, Florida Administrative Code. The authority to require the use water conserving rate structures and the District's flexible approach to the implementation of the requirement as outlined in the "Interim Minimum Guidelines for Water Conserving Rate Structures" were evaluated and approved in the Division of Administrative Hearings Case No. 94-5742RP

commonly referred to as the "SWUCA rule challenge." The hearing officer recognized that "the general concepts as to what constitutes a water conserving rate structure are well recognized in the industry" (Final Order, p. 799). The District's Guidelines were found to be consistent with those general concepts.

In addition to the conditions contained in the Guidelines, there may be other occasions when the District may encourage or require the implementation of a water conserving rate structure or the implementation of a more aggressive water conserving rate structure. One of these occasions would be when the utility is violating the water quantity limits of its permit and may cause or contribute to harm to water resources. Water conserving rate structures are recognized as one of a number of reasonable tools that may be necessary to bring a permittee into compliance when water resources are potentially being harmed.

Q. What other guidance is there on the development of water conserving rate structures?

A. There are other features of a water conserving rate structure for which the District does not have specific guidelines. However, the District has made available additional recommendations to permittees and the Commission, including "Recommendations for Defining Water Conserving Rate Structures", by John B. Whitcomb, prepared for the Southwest

Florida Water Management District, August 1999, which is attached as Exhibit 3. Additionally, the literature is rich with recommendations for developing water conserving rate structures. (American Water Works Association, 1992; California Department of Water Resources, 1988; Californian Urban Water Council, 1997). A bibliography of these references is attached as Exhibit 4.

For example, the fixed charge portion of the bill should be kept to the minimum commensurate with the need for revenue stability. However revenue stability can be enhanced with the establishment of a revenue stabilization fund while keeping the fixed charges reasonably low. A low fixed charge increases the revenue required from gallonage charges and therefore higher gallonage charges. This provides more of a disincentive to wasteful use and more of a reward to the customer for reducing use. A utility that purchases all of its water does not need to be as concerned about revenue stability as does a utility with its own withdrawals financed by revenue bonds which must be paid regardless of the demand for water.

The marginal price change(s) for an inclining block rate structure should be large enough to give the customer an incentive to reduce usage to the previous block. The higher or last block(s) thresholds(s) should be low enough to cover a significant portion of the customer base or the structure will only have a significant impact on a small portion of the

customer base and not have the water conserving effect desired. Similar types of considerations should also be made in the development of other types of water conserving rate structures.

Q. How effective are water conserving rate structures?

A. This is a difficult question to answer - but difficult to answer for a number of good reasons. However, theoretical considerations, their relatively common use, and common sense would indicate that well designed water conserving rate structures are effective. The authors of the Guidebook on Conservation-Oriented Water Rates (California Department of Water Resources, 1988), describe the dilemma quite well.

> "First, DWR knows of no city that has adopted conservation-oriented water rates without at the same time enacting a general water rate increase. Therefore, it is not possible to tell how much of the subsequent drop in per capita water consumption was due to a revised rate structure and how much was due to higher water costs.
>
> However, the experiences of Washington, D.C., and Tucson, Arizona, which switched to conservation-oriented water rates in the late 1970's, show significant water savings can result from conservation-oriented water rates. Refer to the excerpts from DWR Bulletin 198-84 (in the back pocket of this guidebook) for more information.

When a city adopts conservation-oriented water rates, some customers will get lower water bills, others will face higher water costs, and some residential customers might see no difference in their annual water costs.

The incentive to conserve will come from several factors. First, most users will experience increased summer water bills and lower winter water costs. This is desirable, for conservation is more valuable during the peak summer months.

Second, large water users will tend to get higher bills under the revised rate schedule, which would provide them with incentives to reduce use.

Third, large residential users, with above-average outdoor use, will tend to get higher water bills under conservation-oriented water rates. Because outdoor use has been found to be more responsive to price than outdoor use, the drop in exterior water use by large users should outweigh any increase in water use by apartment dwellers, most of whom will face lower water bills.

A fourth factor in conservation-oriented water rates that leads to reduced water consumption over time is the fact that everyone now knows if a household gets careless and increases its water use, its water bill will increase more under the revised rate schedule than it would have under the old rate schedule.

The final factor explaining the use of pricing incentives to encourage conservation is the concept of marginal cost. Marginal cost is the cost of purchasing one more unit of a good or service. Although switching to conservation-oriented water rates will mean that some users will face lower average costs, virtually everyone should face significantly higher marginal water costs (if the new rates are truly conservation-oriented).

Economic studies often indicate that consumers make purchase decisions based more on marginal costs than average costs.

So although it is not possible to quantify the above five factors for each city to determine exactly how much water would be saved by switching to conservation-oriented water rates, DWR believes that a city with typical water rates (a conservation index number of approximately 0.7) switching to these conservation rates (an index number of 1.0) would be equivalent to the effect of raising the average price of water by 10 to 20 percent, while keeping the old rate structure.

This would mean that if the above typical city (with a winter PED[1] of -0.25 and a summer PED of -0.35) were to adopt these conservation rates, it could expect a decline in per capita

[1] PED is the price elasticity of demand.

> residential winter water use of 2.5 to 5 percent and a decline in summer per capita residential water use of 3.5 to 7 percent. Commercial, industrial, and public-authority water use could also be expected to decline if conservation-oriented water rates are applied to those user classes."

As noted in this authority, it is quite difficult to find a utility that has adopted a water conserving rate structure that has not also included an increase in revenues. Further, to isolate the effects of the structure change from other water demand variables, it may be necessary to perform complex and expensive statistical analyses. Utilities are not inclined to perform such analyses. There is, however, some anecdotal evidence of the effectiveness of the water conserving rate structures.

In 1995, the Homosassa Special Water District implemented a revenue neutral water conserving rate structure. The rate structure was designed using the District's Waterate model. Although no formal statistical analysis of the effect of the rate structure has been performed, in a recent telephone conversation between myself and utility superintendent Dave Purnell, Mr. Purnell was quite firm in his conviction that the water conserving rate structure (inclining block) played a significant role in reducing per capita water use in the service area (October 23, 2001).

In 1993, Sarasota County changed their inclining block rate structure to a more aggressive inclining block rate structure. Again, the change was designed to be revenue neutral. Per capita use declined significantly in the years following the structure change. No other significant conservation programs were implemented in the during the same period. Although no formal statistical analysis of the effect of the rate structure has been performed, David Cook, Manager of Finance and Administrative Services for Environmental Services, is confident that the rate structure change played a significant role in the decline in per capita water use in Sarasota County's service area (telephone conversation on October 25, 2001).

In 1991, the Spalding County Water Authority (Georgia) changed from a declining block rate structure to an increasing block rate structure. As a result, the average customer's bill increase by $1.99 per month. The estimated price elasticity for the rate change was -.33. In 1993, the average bill was increased by $2.13 per month without a change in rate structure. The estimated price elasticity for the 1993 rate change was only -.07. A simple test was conducted to determine if weather was significantly different between the two periods. It was not. In addition, no other conservation programs were implemented during either period of time. The author concludes that the change in rate structure was a significant contributing factor to the larger response to the rate

change in 1991 (Jordan, 1994).

Another study in Georgia in 1992 indicated that the daily water use for systems using declining block rate structures was 503 gallons per connection, 428 gallons for systems using uniform rate structures, and 352 for systems using inclining block rate structures (Jordan and Elnagheeb, 1993).

Q. Do Aloha Seven Springs' existing and proposed rate structures comply with the District's water conserving rate structure requirement?

A. While both the existing and proposed rate structures comply with the rate structure requirements as defined in the Guidelines with respect to per capita usage, the utility is not in compliance with its permit quantity limitations and the utility's withdrawals are located in an area where water resources are stressed. Furthermore, recent and potential additions to the utility's service area are characterized by high per capita use. Given these factors, a more aggressive water conserving rate structure than exists, such as an inclining block structure, is appropriate.

Assuming a residential average use of about 8,000 gallons per month[2] for single family residential use, a simple analysis indicates that the maximum mix of fixed and gallonage-related rate revenues under the

[2]Actual is 8,584 gallons per month (Schedule E-14).

proposed rate structure (approximately 34% fixed)[3] is a significant improvement from the existing rate structure (approximately 53%). Concerning the first price block threshold (10,000 gallons per month) under the proposed residential structure, approximately 27% of all bills and 32% of water use would be affected by the second block price. This is not insignificant. A lower threshold would send a stronger conservation message to a larger number of customers. However, it could also lower the price differential between blocks unless the fixed charge could be lowered without significantly affecting revenue stability. The placement of the threshold is not inconsistent with the objectives of an inclining block rate structure.

The price differential between the proposed blocks is approximately 25%. Such a differential is not insignificant and is consistent with the objectives of an inclining block rate structure.

The proposed general service rate structure appears to continue to be a minimum gallonage charge uniform rate structure. An inclining block rate structure could be developed for general service customers that would be provide an additional conservation incentive for this customer class. However, given the increase in the uniform rate, there will

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[3]Aloha reported in its response to Citizen's First Set of Interrogatories No. 42 that the portion of proposed rate revenues coming from fixed charges would be 38%.

likely be a significant incentive to conserve for this customer class. In summary, the proposed rate structures provide a stronger conservation incentive than the previous rate structure. Any shortcomings of the rate structures will likely be made up for by the general increase in rate levels.

Q. What is the history of the Waterate model?

A. In 1991 the District was developing the WUCA rules which included the requirement for water conserving rate structures to be used as a demand management tool. At the time there were no large sample estimates of water price elasticities for that included a wide range of prices in the sample and there is a wide range of water prices in the District due to source water of varying quality. It was deemed desirable to conduct such a price elasticity study to assist utilities in the District in estimating reductions in demand due to rate structure and price level changes. The consulting firm of Brown and Caldwell, in association with Dr. John Whitcomb, were engaged to conduct the study. The price elasticity study, the most comprehensive ever known to be conducted in the State of Florida, was completed in 1993. The study demonstrated that single family residential water price elasticity changes over a large range of prices. While the study provided more accurate estimates over a range of prices, the application of the varying levels of price elasticity required a more complex set of calculations than a single

price elasticity. To facilitate the use of the more discrete price elasticity estimates, the same consultants were engaged to develop a rate model that would automate the numerous calculations of changes in water use and revenues for levels of consumption at various price ranges. The model is simply a tool to perform a larger number of more discrete calculations - but the same types of calculations that would be performed by a rate consultant. The model was also completed in 1993. Since that time, the District has provided the model at no cost to utilities in the District, conducted no-cost workshops on its use, and has provided a toll-free user help line.

Over the years Dr. Whitcomb has made several revisions to: a) make the model single family residential elasticity estimates more accurate, b) make the model run time faster, and c) to add desirable features. In spite of changes to the single family estimation equation, the price elasticities have remained quite stable in relevant price ranges and within the ranges of other single family residential price elasticities. The latest version of the model was released in 2001 and runs in Microsoft Excel, a very commonly used spreadsheet model which allows the direct input of utility financial spreadsheets.

Q. Are the proposed rates affordable?

A. A measure of water bill affordability that the District has used in the past is whether the total annual water bill exceeds 2% of median

household income and is derived from the EPA's "rule of thumb" measure of affordability.[4] Interim and proposed rate annual water bills were estimated at thousand gallon increments from 5,000 to 10,000 gallons per month and were compared to estimated Pasco County median household income ($28,202) and the low end of the 90% confidence interval for the estimate ($25,313)[5]. The annual estimated water bill at each monthly increment of use was below 2% of both the median household income estimate and the lower value of the 90% confidence interval for the estimate. The highest estimated percent was 1.5% at the low interval for the estimate. According to this measure of affordability, the proposed rates should generally be affordable.

[4]Federal Register /Vol. 56, No. 20/ January 30, 1991/Rules and Regulations. P. 3570.
[5]County Estimates for Median Household Income for Florida: 1997. Http://www.census.gov/hhes/www/saipe/stcty/c97_12.htm October 16, 2001.

MS. LYTLE: And at this time I would tender this witness for cross-examination.

CHAIRMAN JABER: Thank you. Mr. Deterding.

MR. DETERDING: I have no questions.

CHAIRMAN JABER: Thank you, Mr. Deterding.

Mr. Wood, do you have any questions for this witness?

MR. WOOD: Yes, I have a couple of questions.

CROSS EXAMINATION

BY MR. WOOD:

Q In the testimony, you made several statements regarding cost and cost conservation. Would you say -- what would you approximate the average customer will cost to incorporate these items?

A Which items would those be?

Q Your conservation items.

A I was not involved in the development of the conservation plan, and so I don't have those numbers available. I'm not aware of them.

Q From the Water Management District, if we're overpumping and we're advocating conservation, why doesn't the Water Management District act with the State as a state and the county to restrict building permits if there's no water?

A As far as I am aware, the District does not have the authority to restrict building permits.

Q But doesn't the District make recommendations to

somebody to do that?

A Generally in review of comp plans and so on, they do comment on the availability of water, but not -- to my knowledge, not, you know, specifically in terms of restricting building permits.

Q When this conservation program starts and Tampa Bay Water also gets involved with whatever they're supposed to be doing and we continue to build, where is the water going to come from?

A Tampa Bay Water has identified projects to meet future demand as part of the partnership agreement.

Q Why couldn't Aloha be part of that partnership?

A To the best of my recollection, only the member governments of Tampa Bay Water and the District are parties to the partnership agreement. I don't know whether there are legal opportunities for Aloha to join into that, but it would be the same sources of water.

Q Wouldn't it be a wise that with the expenses that you are attempting to place on the individual customers in a small district that there no longer be the small district and that it be incorporated into the larger district?

A I don't understand your question.

Q Isn't it about time since this is allegedly no longer a rural area that there is no longer a need for Aloha, and it should be Pasco County?

A I don't think I'm qualified to answer that question. To my knowledge, there's no legal reason why Aloha cannot exist.

Q Well, in one of the testimonies it was said that the so-called aeration system that you're trying to work with them on, that it will cost 25 million bucks. Is that something that could be spread very easily over 1,200 customers -- or 12,000 customers?

A I didn't follow which system you're talking about.

Q You talked about an aeration system that was going to -- in your proposed I'll call it an agreement that they would put in an alternate source, and they would begin study on the alternate source, and this alternate source was estimated at $25 million.

A To my knowledge, there's just a discussion of a feasibility study, and so those numbers could change. And it's one source that they can consider. They could also consider continuing purchasing water from Pasco County.

Q If they were going to purchase the water from Pasco County, why do we need Aloha?

A I don't believe that that's a question that I should answer. As far as I know, the laws of the state of Florida allow the existence of private utilities.

Q Yes, I understand that. But hasn't the need for small private utilities in this area been eliminated?

MS. LYTLE: Objection. This is outside of the scope of this witness's direct testimony.

CHAIRMAN JABER: Mr. Wood, I do agree with that. I think we're getting beyond what he has testified to. Would you like to reword your question and maybe show him something from his testimony that he could reference?

MR. WOOD: Well, I'm presuming -- this is an assumption, and you always can get in trouble -- that he was part of the development of the tentative consent order.

CHAIRMAN JABER: Okay. Let's establish that. Let's ask him this way.

Mr. Yingling, are you aware or were part of the drafting of the consent order?

THE WITNESS: I was aware of the drafting of the consent order, but I was not a party to the drafting of the consent order.

BY MR. WOOD:

Q Okay. I have one last question. The water -- from an economic standpoint, I am getting lousy water today, yet we want to put a conservation equation in there that will increase the cost, so now tomorrow I'm going to get the same crappy water at a much higher rate. Isn't that inflation?

A That would not be an economic definition of inflation, I don't think. The cost of water would go up, yes.

Q Where is the value added?

CHAIRMAN JABER: Mr. Yingling, let me try to -- because I realize you weren't here when the customers testified the first day. There was a concern raised by the consumers. If the Water Management District wants the PSC to implement a conservation rate structure for this utility and the quality of the water continues to be poor that comes out of the faucets in the home, it's sort of anticonservation.

They testified that they have to run the water until that black color comes out, and they recognize that that's use of -- that's an excessive use of water. And they're saying, how can the Water Management District with one hand want to implement a conservation rate structure, recognizing that they may have to use excess water just to get the black color out of their water? And that's what Mr. Wood is referencing. And could you perhaps explain the rationale behind a conservation rate structure?

THE WITNESS: The rationale for the District's requirement for a water-conserving rate structure is that it's beneficial to all the residents of the District and in particular those in water-stressed areas, water use caution areas to conserve water as much as possible. By doing that, you avoid having to develop newer, more expensive sources of water. So that is the rationale for a water-conserving rate structure.

CHAIRMAN JABER: Have you done any sort of analysis

in the Seven Springs water system area of how much water is used just to flush out the faucets or the lines because of the black color in the water?

THE WITNESS: No, I have not.

CHAIRMAN JABER: Mr. Wood.

BY MR. WOOD:

Q Are you aware of the recommendation in the consent order to add a water auditor and an additional staff member?

A I believe I recall reading that, yes.

Q But you're not familiar with what the duties of these people would be?

A I did not read a -- I don't recall reading a description of exactly what they would do.

Q So there is -- at this point in time, there is no cost justification for those people; is that correct?

A My presumption would be that a water auditor would either audit the internal use of water at the utility or assist in facilitating conservation among its customers. That's typically what somebody like that does.

Q And are you aware of Web sites that other utilities are using?

A Yes.

Q How many hits a day do they get on their that Web site?

A I'm not aware of that.

MR. WOOD: That's all I have.

CHAIRMAN JABER: Thank you, Mr. Wood.

Mr. Burgess.

MR. BURGESS: We have no questions.

CHAIRMAN JABER: Thank you. Staff.

MS. ESPINOZA: Just a few questions.

CROSS EXAMINATION

BY MS. ESPINOZA:

Q Good morning, Mr. Yingling.

A Good morning.

Q In general, regarding inclining-block rates for residential customers, would you agree that in order to reduce overall average monthly consumption per customer that it is preferable to cap the first usage block at a consumption level at the overall monthly average, rather than cap the first usage block at some level greater than the overall monthly average?

A It would affect more -- the higher block would affect more customers, and I believe that you would probably see more conservation. Of course, there are other factors involved as well.

Q Okay. And would you agree that in affecting more customers, as you just said, that part of the reason would be because those customers that are using between the overall monthly average and the cap for block one do not receive the appropriate pricing signals to reduce their consumption?

A They would not be receiving the higher pricing signal, yes.

Q Thank you. And would you agree all things equal that it is preferable to target a greater percentage of consumption for inclusion in usage blocks two and above?

A Yes.

Q Thank you. Mr. Yingling, as part of your duties with the District, you've worked with the Commission Staff in the design of water conservation programs for utilities; correct?

A Yes.

Q And you have either appeared before the Commission or in other instances written letters of support of Staff-recommended conservation programs for the utilities in the District; correct?

A Yes.

Q So you would agree that you have more than a general knowledge about District-endorsed conservation programs; correct?

A Yes.

Q Okay. Mr. Yingling, have you ever heard of a document called, "The Development of Water Conservation Options for Nonagricultural Water Users"?

A Is that a stand-alone document or a --

Q My follow-up would be, would you agree that this document is included in the 2000 Regional Water Supply Plan?

A There is a section in the Regional Water Supply Plan on nonagricultural water conservation options, yes.

Q And can you speak to us in general about this document?

A In general, I did not participate in the development of that section.

Q Would you agree that that document was prepared by and at the direction of the Water Management District?

A Yes.

Q And would you also agree that in counties within the District including Pasco County are part of the plan?

A Yes, I believe Pasco County is part of the plan.

Q And being that Pasco County would be part of the plan, information regarding Aloha Utilities would also be included in that plan?

A As it specifically regards Aloha Utilities?

Q Yes, sir.

A I don't recall if Aloha Utilities was specifically addressed in the plan.

MS. ESPINOZA: Okay. We have no further questions. Thank you.

CHAIRMAN JABER: Thank you. Commissioners.

COMMISSIONER PALECKI: Yes. Mr. Yingling, I'd like to thank you and the Water Management District for participating in this docket. Your testimony has been very

helpful to me.

Yesterday, I had a chance to speak with one of the other Water Management District witnesses about purchasing water -- about Aloha purchasing water from Pasco County. And I learned that Tampa Bay Water in the relatively near future, in the next year or so, will have several different alternative water sources, one of which will be the desal plant, Tampa Bay. But until those sources come on-line, that by purchasing water from Pasco County, Aloha will be pulling water basically from the same aquifer from a relatively close location to where they are taking their water today and so that there won't truly be a net benefit to this area until such time as the alternate water sources come on-line.

And my concern is that the ratepayers for Aloha will have to pay a relatively high price for this water from Pasco County and that we won't really see a benefit to the area. And my question to you is, if this Commission were to put in place some very strong conservation rates and some strong conservation programs, would the Water Management District consider delaying the requirement that Aloha purchase from Pasco County until such time as the alternate water sources come on- line, specifically the desal? I just have a hard time forcing the ratepayers of this utility to spend more money when there's not really going to be a benefit to the area.

THE WITNESS: I cannot say that there wouldn't be a

benefit to the area because I'm not sure what mix of sources Pasco County uses, whether it relies upon its own wells specifically in that region or there are -- most of that system is interconnected. So they potentially, and I'm not saying they are, but they potentially could be getting water from other areas of the Tampa Bay region. So I'm not sure that it wouldn't result in a net benefit.

The immediate problem is that Aloha is not in compliance with its permit, not the water stresses in general in the area. I could not say not being in the regulation department that they would delay, you know, having to buy water from Pasco County. That would be something that would be made in the regulatory realm. It would be a case that would have to be presented.

COMMISSIONER PALECKI: Well, from my viewpoint, I have no problem that the Water Management District requires Aloha to make these purchases, but if they do so with knowledge that it's just pulling the water from wells that are a few miles away and it's really causing just as much strain on the same aquifer, it would be very nice if some sort of exception could be made until the new water sources come on-line, because I really have a problem forcing these ratepayers to pay additional dollars if there's not truly going to be a benefit to the aquifer.

THE WITNESS: I couldn't really respond to that not

knowing what specific environmental features are affected by the two different sets of wells.

COMMISSIONER PALECKI: Is that something that you could look into for us?

THE WITNESS: That's something that probably the regulatory department could do.

COMMISSIONER PALECKI: If you could ask them to, I would appreciate it.

MS. LYTLE: Commissioner, would you like the District to prepare some kind of a late-filed exhibit or statement concerning --

COMMISSIONER PALECKI: Yes, that would be very helpful to me if you could provide a late-filed exhibit to address those concerns. And like I've said, I have absolutely no problem with the utility and its ratepayers being forced to pay the additional dollars after the desal plant comes on-line when there are these additional sources. I just have very grave concerns about requiring them to pay additional dollars if the damage is still being done to the aquifer.

CHAIRMAN JABER: Commissioner Palecki, let's call that Exhibit 18. It will be a late-filed. And do you want to give us a short title so when they refer back to it in the record they know?

COMMISSIONER PALECKI: I guess as a short title -- I guess my concern is source of Pasco County water to Aloha.

That's what I really want to know, is where the water is coming from and its effect on the aquifer.

CHAIRMAN JABER: Source of Pasco County --

COMMISSIONER PALECKI: Water to Aloha and its effect on the aquifer.

CHAIRMAN JABER: But I think you also wanted to know if the District regulatory department would be willing to make an exception for purchases of Pasco County if a conservation rate program was implemented; correct?

COMMISSIONER PALECKI: Yes, yes.

CHAIRMAN JABER: So it's twofold, Ms. Lytle. If you could address the Commissioner's concern with regard to the source of the county's water and also address whether the District regulatory department can make an exception on the requirement that they purchase -- that Aloha purchase from Pasco County if a conservation program is implemented by the PSC. That's Late-Filed Exhibit 18, and it will be due in two weeks.

(Late-Filed Exhibit 18 identified.)

COMMISSIONER PALECKI: Thank you.

CHAIRMAN JABER: Any other questions, Commissioners?

COMMISSIONER PALECKI: No.

CHAIRMAN JABER: Ms. Lytle, redirect?

MS. LYTLE: Just one question.

REDIRECT EXAMINATION

BY MS. LYTLE:

Q Mr. Yingling, does a conservation-oriented inclined-block rate structure necessarily mean that there will be an incline in rates for very small users?

A No.

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

CHAIRMAN JABER: Thank you. Thank you, Mr. Yingling.

(Witness excused.)

CHAIRMAN JABER: And we have Exhibit 17, Ms. Lytle, admitted into the record without objection.

(Exhibit 17 admitted into the record.)

CHAIRMAN JABER: And your next witness is Dr. Whitcomb.

MS. LYTLE: Yes, ma'am. Dr. Whitcomb has not been sworn, ma'am.

CHAIRMAN JABER: Okay. Could you please raise your right hand, Dr. Whitcomb.

(Witness sworn.)

CHAIRMAN JABER: Thank you.

JOHN B. WHITCOMB

was called as a witness on behalf of the Southwest Water Management District and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MS. LYTLE:

Q Would you please state your name and address for the record.

A I am John Whitcomb, and my professional address is 1906 19th Street in Golden, Colorado 80401.

Q And, Dr. Whitcomb, what is your relationship with the Southwest Florida Water Management District?

A The District has asked me to come here to discuss issues on price elasticity.

Q Did you prefile testimony of 10 pages and 2 exhibits in this matter?

A Yes.

Q Do you wish to update or change that testimony?

A No.

Q Could you briefly summarize your testimony for us?

A The District asked me to comment on the application of price elasticities in this case for Aloha, and I came up with three comments. The two major comments in the application that I had was that the sewer rates were not incorporated into the analysis, and the second issue had to do with the short-run versus long-run response to price elasticity.

MS. LYTLE: At this time, I would ask that the testimony of this witness be entered into the record as though read.

CHAIRMAN JABER: Yes. The prefiled direct testimony

of John B. Whitcomb shall be inserted into the record as though read.

MS. LYTLE: And I would also ask that Exhibits JBW-1 and 2 be entered.

CHAIRMAN JABER: Composite Exhibit 19 shall be identified for JBW-1 and JBW-2.

(Exhibit 19 marked for identification.)

DIRECT TESTIMONY of John B. Whitcomb, PhD.

Q. Please state your name and professional address.

A. John B. Whitcomb, PhD, 1906 19th Street, Golden CO 80401

Q. Have you been retained by the Southwest Florida Water Management District to provide testimony in this proceedings?

A. Yes.

Q. Please provide a brief summary of your qualifications as they relate to this proceeding.

A. I am an economist/statistician who has worked with over 100 water agencies on projects related to water pricing, market research, water conservation intervention analysis, and benefit-cost evaluation as a consultant over the last 12 years. I was the principal investigator of major studies measuring customer understanding and sensitivity to water pricing and bill presentation in Florida, Texas, the Southwestern U.S. (Arizona, California, and Nevada), and Brazil. I have conducted four out of the last five major water price elasticity studies conducted in the U.S. and have worked on over a dozen water cost-of-service studies. I hold a BA in economics and geography from the University of California, Santa Barbara and a PhD in geography and environmental engineering from the Johns Hopkins University.

For this proceeding, it is particularly relevant that I was the lead

statistician of a study conducted for the Southwest Water Management District titled *Water Price Elasticity Study*. The study was originally published in August 1993. Subsequently, I concluded that the type of water use model used with the single family customers in that 1993 study could be improved. This came about from peer review of the original model and my further investigation of this model in other price elasticity studies in other parts of the United States. The limitation of the 1993 single family model is that interactions between water prices and property values were not adequately separated. Using the original database, I re-specified and re-estimated the single family water use model using a more conventional model form. The results of this work, six years after the original report were published, are described in an update of the report of the same name dated August 1999. The big picture findings of the 1993 report did not change. Long-run water price elasticities for the single family Florida homes studied still tend to be about -0.5.

I should also state I am the designer of the Waterate 2001 software program that Aloha Utility, Inc. (Aloha) used as part of this rate case. Waterate 2001 is an Excel workbook that agencies can use as a planning tool to simulate how changes in water and sewer rate structures impact water revenues and water demand. It automates complex calculations and provides a comprehensive, flexible framework from which to evaluate

alternative rate structures. Features include single or multi-block rate structures that can vary by season, short- and long-run price elasticity adjustments specified by customer class, and detailed reporting of expected water use changes over a 5-year planning horizon. Waterate is not a cost-of-service rate model as some often assume. It is purely a tool for assessing the water use impacts from alternative water and sewer rate structures given certain assumptions.

Q. At the request of the South West Florida Water Management District, did you review Aloha's use of Waterate 2001 as applied to this rate case?

A. Yes. I contacted and received on October 31, 2001 an electronic copy of the Excel workbook used by Steve Watford in this case. Steve is the President of Aloha and he called me previously around August 1, 2001 with questions about Waterate 2001. A copy of the Waterate tables provided is attached as Exhibit 1.

Q. In your review, what is your opinion of the appropriateness of the application of Waterate 2001 in this case?

A. While the application was generally appropriate, I found three areas where the accuracy or interpretation of the application can be improved. First, sewer rates need to be factored into the evaluation. In Aloha's Seven Springs Water Division, a customer's sewer bill is based, in part, on monthly water use. Moreover, the sewer rates are both significant and have been significantly increased. It is my understanding that the

residential sewer rate increased from $2.26 per thousand gallons (TG) before December 8, 2000 to $3.41/TG starting May 23, 2001 (there was also an interim rate of $3.65) with a 10 TG cap per month. This is a significant change and is part of the overall price signal customers face. Sewer price should be factored into the price elasticity calculation. The following is a quote from the Waterate 2001 manual:

> Enter water and sewer prices ($/water unit) associated with each rate block. You will need to do so for the year prior to the base year, the base year, and for the planning years (1 to 5).

Second, I am not knowledgeable about FPSC rules on how to factor in long-run price changes into a rate case. It is my opinion that only half of a water price impact on water use will occur in the first year after the change. I provide the following quote from the Waterate 2001 manual:

> In the short-run, customers can affect behavioral changes but are limited in their ability to alter capital investments in outdoor landscaping and water using appliances and fixtures. Once a customer makes a water-related investment it becomes a sunk cost. It may take a long time before that investment needs replacing. It may take an extreme climate fluctuation (e.g., freeze) before landscaping gets replanted with drought-tolerant alternatives (xeriscape). Bathroom fixtures (e.g., toilets) may last for over 30 years. Hence, while increases in water prices may induce

customers to act sooner, it may take some customers years to complete desired changes. In addition, it may take a customer a number of billing cycles just to understand the ramifications of a rate structure change. Because of these factors, price elasticity can be expected to be greater in the long run than in the short run.

Based on review of previous research studies, we recommend that users assume a short-run half life of one year. In other words, 50, 75, and 87.5 % (needs to be rounded in Table 2 of Exhibit 1) of the long-run price impact occurs in the first, second, and third years after a price change respectively. The user can change this progression if desired.

Aloha assumes in its application of Waterate 2001 that all of the long-run price impact will occur in the first year. I think it will be half that in the first year. Again, I do not know how multiple year price impacts are accounted for in the context of this type of rate case so I only present this as an observation so that people can interpret results correctly.

Third, in Waterate Table 8 of Exhibit 1, I noticed that the water prices shown for residential customers in the 0 to 3 TG per month rate tier in 1999 and 2000 are set to $1.32. In reality, for the base years 1999 and 2000 Aloha had a $0 price for the first 3 TG as this water use was part

of the minimum base facility charge. Aloha properly reduced income associated with the base facility charge in Table 7 of Exhibit 1. The net impact of all of this is negligible and does not impact the bottom line results. In future runs, however, it would be cleaner to make this change. In fact, I recently changed the Waterate code to specifically account for minimum water use associated with the base facility charge.

Q. Could your three changes be made in Aloha's run of Waterate 2001?

A. Yes. It would be fairly easy to insert the sewer prices, adjust the short-run price elasticity to fit FPSC rules if necessary, and change the minimum use quantity charge to $0 for the first 0 to 3 TG/month tier.

Q. Is the price elasticity algorithm contained in Waterate and used by Aloha appropriate for this rate case?

A. Yes. The SWFWMD study was based on a relatively large empirical dataset collected for 1,200 individual homes served by 10 SWFWMD retail water agencies. Given the water prices associated with this case, the approximate constant unit price elasticity is about -0.5. The approximate constant unit price elasticity in this case is about -0.5. That means that for every 1% increase in combined water/sewer price over inflation, water use will drop by 0.5% over the long-run. This finding is consistent with other researcher's findings in Florida. For example, such studies are described in Chapter 14 pages 295 to 301 of the Water

Resources Atlas of Florida, 1998. In addition, results are consistent with the other two Southeastern studies conducted by Danielson of 261 homes in Raleigh, North Carolina (indoor elasticity of -0.305 and outdoor elasticity of -1.38) and Ware and North for 14 Georgia Communities (-0.61 and -0.67 depending on model). Given the consistency of findings in general and the local scope of the SWFWMD study in specific, I believe the price elasticities used are appropriate and the best estimates available. In Exhibit 2, I provide references of relevant price elasticity studies.

Further, the price changes I have reviewed in Aloha's case are significant and material. The proposed water rates almost double existing rates. This is on top of the very significant sewer charge increase.

Q. Has Waterate been used at other water agencies?

A. Waterate is not a cost-of-service model, but a rate planning tool. Waterate is most applicable to agencies facing significant changes in revenue requirements or contemplating significant changes in rate structure. This does not happen often as most water agencies make small year-to-year incremental changes. Aloha is an exception as it is looking at doing both. Outside of Florida I have setup and beneficially applied Waterate in Austin TX, San Antonio TX, Corpus Christi TX, Las Vegas NV, Santa Monica CA, Redwood City CA, Petaluma CA, and several agencies in

Brazil. In Florida I have fielded a number of phone calls of people interested in getting a copy of the model or in data input questions. Several consulting firms operating in Florida have also obtained copies of Waterate. I do not know of any agencies using Waterate on an on-going basis, but that is not the purpose of Waterate.

MS. LYTLE: And I would tender this witness for cross-examination.

CHAIRMAN JABER: Thank you. Mr. Wharton.

CROSS EXAMINATION

BY MR. WHARTON:

Q Good morning, Dr. Whitcomb.

A Good morning.

Q Would you agree that the Water Management District retained you to perform this study and create this model because it is perceived that there is a water shortage in this area?

A Yes.

Q Now, to your knowledge, Aloha has obtained a copy of the model?

A Yes.

Q And Aloha has been in communication with you about the use and application of the model, haven't they?

A Yes.

Q To your knowledge, is your model the most comprehensive model of its type which is specifically created for use in the state of Florida?

A Yes.

Q In your opinion, is your model any less applicable to Aloha Utilities just because Aloha is a private utility as opposed to a government utility?

A No.

Q Would you say that your model was created by you -- I'm sure it has a variety of purposes, but one of those would be such that it could be applied in a case such as this?

A Yes.

MR. WHARTON: That's all we have.

CHAIRMAN JABER: Thank you. Mr. Wood.

CROSS EXAMINATION

BY MR. WOOD:

Q When you stated in your testimony that Waterate was not a cost of service model but a rate planning tool, what did you mean by that?

A Cost of service model is -- in the field of ratemaking and water ratemaking deals with developing revenue requirements, and that's looking at all the associated costs that are going to be collected via the rate model. Waterate has no elements addressing revenue requirements at all. It's strictly and purely a simulation tool to see how prices change as water price -- water and sewer prices change, what is the change in water use. So it's a much more limited scope than a full ratemaking application.

Q Does it take into consideration customers that are ordinarily required to do a lot of extra flushing of their lines in order to get a product that is usable?

A It's not a water use forecasting tool, and so it does

not have a component that would be an add-on to come up with a gross amount of water used by customers.

Q So in effect, what I understand you're saying that there are cases where it is not effective?

A I'd have -- I don't understand by what you mean by "not effective."

Q Well, if it doesn't take into consideration the excess water that has to be used in order to make the water usable such as flushing, then how is it -- how are you going to get conservation under control?

A Well, again, it's not a water use forecasting tool. It's not -- there's no component of Waterate that has that element in it. And I would respond is that after -- given that there is flushing, which I don't have any way of quantifying or knowing in this local case, is after that occurs, well, water used above and beyond that would then be part of the types of things that customers could do to cut back on their water as a response to price.

CHAIRMAN JABER: Right. But I think Mr. Wood's point is, there's nothing in the model or anything in the proposed conservation rate structure by the Water Management District that accounts for the fact that some of that excess water might go to -- according to customer testimony might go to the excess associated with flushing the lines just that the color comes out.

THE WITNESS: Right. But I guess my response to that is that would be irrelevant to this application.

CHAIRMAN JABER: Because?

THE WITNESS: Well, if they have this flushing amount of water that occurs, let's say it's 10 percent, that will occur and now all that other 90 percent of the water is used for consumptive use, for irrigating lawns, for washing dishes, for flushing toilets, taking showers, et cetera, and that that -- those water end uses would then be price responsive.

CHAIRMAN JABER: And are you aware of any model that has been developed to date that might factor in poor quality of service?

THE WITNESS: Not in ratemaking, no.

CHAIRMAN JABER: Okay.

MR. WOOD: I have no more questions.

CHAIRMAN JABER: Thank you, sir.

Mr. Burgess.

MR. BURGESS: We have no questions.

CHAIRMAN JABER: Staff.

MS. ESPINOZA: A few questions.

CROSS EXAMINATION

BY MS. ESPINOZA:

Q Good morning, Dr. Whitcomb.

A Good morning.

Q We're going to hand out a document, but we'll get to

that in a few minutes.

Dr. Whitcomb, have you read the testimony of the other District witnesses in this case?

A I have read through some testimony. Please don't assume that I've read it all.

Q Okay. And you agreed earlier, I believe, in a response to a question by Mr. Wharton that you have been in contact during the pendency of this case with Aloha's president, Mr. Watford, with respect to your Waterate model and the application and the use of that model; correct?

A Yes.

Q Then you're aware that primary issues in this case include Aloha's increase in purchased water costs coupled with change in rate structure; correct?

A Yes.

Q Okay. Are you aware that Mr. Paul Stallcup has provided testimony in this case on behalf of Commission Staff?

A Yes.

Q Okay. And the utility has taken the rates contained in Mr. Stallcup's Late-Filed Exhibit Number 7 to a deposition that we had and inserted them into your Waterate model, and a summary of these results is attached to Mr. Watford's rebuttal testimony as Exhibit SGW-7. Do you have a copy of that, by any chance? If not, I do.

A A copy of the model output?

Q Actually, of Exhibit SGW-7 which is an exhibit to Mr. Watford's rebuttal testimony. I've got a copy.

MS. ESPINOZA: Madam Chairman, at this time I'd like to use this exhibit which is attached to Mr. Watford's rebuttal testimony.

CHAIRMAN JABER: That's fine.

MS. ESPINOZA: Okay. May I approach the witness?

CHAIRMAN JABER: Yes.

THE WITNESS: Thank you.

BY MS. ESPINOZA:

Q Dr. Whitcomb, first, do you recognize these pages as outputs from the Waterate model?

A Yes.

Q And turning to Table 9 of the Waterate model -- and it's on Page 16 for anybody else who's looking for it -- and specifically looking at the specific line called "Change from Changes in Base Water Use."

A Yes.

Q Isn't it true that the cost savings indicated in Table 9 on this line is calculated based on average water cost?

A Yes, with perhaps some qualifications.

Q Go ahead.

A This -- those changes in revenue requirement are a reflection of the water use changes that occur from the price elastic water reductions which are sometimes referred to as

repression. It's taking those decreases and going back to an earlier table, on Table 3, and looking at the short-run variable revenue requirements that are usually associated with purchased water costs, chemicals, and energy pumping costs. And that is then how that particular line is derived.

Q Okay. But you did answer yes to the question that it's calculated based on average water cost with your following clarification?

A Yes.

Q Okay. Now, would you agree that in this particular case in which every thousand gallons saved by Aloha represents water that Aloha does not have to purchase from Pasco County, that cost saving is more appropriately calculated based on marginal water cost?

A Yes.

Q Okay. Now, turning to the document that you were handed earlier and taking a moment to look it over.

A That's the same document?

Q No, I'm sorry. You should have been handed a document by -- it should have a cover page on it.

A Yes, I have it.

Q Okay. And looking at the document itself --

A Yes.

Q -- do you recognize this document as a Waterate manual?

A Yes.
Q And this document was written by you?
A Yes.
Q And it is part of the Waterate model that Aloha has relied on in this case with respect to calculating revenue surpluses and shortfalls based on changes in revenue requirements; correct?
A Yes.
Q And you have assisted the utility in this regard; correct?
A Yes.
MS. ESPINOZA: Madam Chairman, may we please have this document marked as Exhibit --
CHAIRMAN JABER: Sure. Exhibit 20.
MS. ESPINOZA: -- 20.
CHAIRMAN JABER: Uh-huh, will be the Waterate manual.
(Exhibit 20 marked for identification.)
MS. ESPINOZA: And we have no further questions. Thank you very much.
CHAIRMAN JABER: Thank you. Redirect, Ms. Lytle?
MS. LYTLE: No redirect, ma'am.
CHAIRMAN JABER: All right. Let's do exhibits.
Dr. Whitcomb, I have a question that I wanted to wait until we were all done. This is completely different. Do you ever testify in telephone and electric cases?

THE WITNESS: No.

CHAIRMAN JABER: Okay. All right. Thank you. Thanks for testifying today.

THE WITNESS: Pleasure.

(Witness excused.)

CHAIRMAN JABER: Exhibits. Water Management District, Exhibit 19 is admitted without objection.

Staff, Exhibit 20 is admitted without objection.

MS. ESPINOZA: Thank you.

(Exhibits 19 and 20 admitted into the record.)

CHAIRMAN JABER: Now, parties, I think -- parties and Staff, I think we should take up Mr. Deterding now. What do you think? Because I notice that the last Staff witness we have is Mr. Stallcup, and maybe you all disagree. You just need to tell me. Ms. Sorensen is coming back this afternoon. Doesn't it make sense to finish Ms. Sorensen before we do Mr. Stallcup, or it doesn't matter?

MS. ESPINOZA: I don't know if it would make a huge difference. Although right now I don't believe we have a problem with taking Mr. Deterding up if he's amenable.

MR. DETERDING: That's fine with me.

MS. ESPINOZA: Or we can take up Mr. Stallcup.

CHAIRMAN JABER: Okay. Let's take up Mr. Stallcup. I thought Ms. Sorensen needed to testify first, so let's go ahead and take up Mr. Stallcup.

Paul, you've been sworn; correct?

THE WITNESS: Yes, I have.

CHAIRMAN JABER: Okay. Go ahead, Staff.

PAUL W. STALLCUP

was called as a witness on behalf of the Staff of the Florida Public Service Commission and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MS. ESPINOZA:

Q Please state your name and business address for the record when you're ready.

A My name is Paul Stallcup. My business address is 2540 Shumard Oak Boulevard, Tallahassee, Florida.

Q And in what capacity are you employed?

A I'm the supervisor of the economics and forecasting section in the Division of Economic Regulation.

Q And have you prefiled direct testimony in this docket consisting of 28 pages?

A Yes, I have.

Q Do you have any changes or corrections to your testimony at this time?

A Yes, I do as presented in an exhibit I would like to attach to my testimony.

MS. ESPINOZA: Okay. Madam Chairman, this is an exhibit that the parties were provided a copy of on Wednesday.

What it is, it's a copy of Mr. Stallcup's revised consumption forecast. At the time I passed it out to them on Wednesday, I indicated that we would be seeking to enter this as an exhibit with Mr. Stallcup's testimony, and at that time the parties indicated that they would not have an objection.

So what we would like to do is mark this separate exhibit for the record, and then include his exhibits that are attached to his testimony separately as another composite exhibit.

CHAIRMAN JABER: All right. We need to insert his testimony in before we talk about exhibits.

MS. ESPINOZA: Okay. And the reason I brought this up before that is because this exhibit will have a correction on his actual testimony.

CHAIRMAN JABER: I see. All right. Is there any objection to Staff's revised 2001 Consumption Projection Exhibit?

Mr. Wharton, it's been represented that you all have no objection to this exhibit that Staff just passed out.

MR. WHARTON: That's correct.

CHAIRMAN JABER: That will be Exhibit 21, Staff.

(Exhibit 21 marked for identification.)

BY MS. ESPINOZA:

Q Okay. And, Mr. Stallcup, with respect to this exhibit that we've just marked as Exhibit 21, do you now have

any changes or corrections to your testimony?

A Yes. Two numbers in my testimony should be changed. Line 15 -- I'm sorry, Page 15, Line 4, and the sentence that reads, predicted total consumption for the RS class to be 890 million gallons and some. The new number should be 905,635,244.

And on Page 16, Line 1, the sentence which reads, consumption forecast for 2001 is 1 billion and some other digits. The new number shall be 1,016,121,784. These corrections are consistent with the exhibit just handed out.

MS. ESPINOZA: Madam Chairman, may we please have Mr. Stallcup's testimony inserted into the record as though read?

CHAIRMAN JABER: Yes. The prefiled direct testimony of Paul W. Stallcup shall be admitted into the record as though read.

MS. ESPINOZA: Thank you.

BY MS. ESPINOZA:

Q Mr. Stallcup, did you also file Exhibit Numbers FJL-1 through FJL-11 to your testimony?

A Yes, I did.

Q And do you have any changes or corrections to any of those exhibits?

A None other than those corrections that were provided to the parties at my deposition.

MS. ESPINOZA: And to clarify on that, those revised exhibits were provided to the parties and also filed in the docket. And I believe that all the parties have copies of those revised exhibits as well as all three Commissioners.

CHAIRMAN JABER: Great.

MS. ESPINOZA: May we have those Exhibits FJL-1 through FJL-11 marked as Composite Exhibit 22?

CHAIRMAN JABER: Yes. Composite Exhibit 22 will be the revised FJL-1 through FJL-11.

(Exhibit 22 marked for identification.)

DIRECT TESTIMONY OF PAUL W. STALLCUP

Q: Would you please state your name and business address?

A: My name is Paul W. Stallcup. My business address is 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399.

Q: By whom and in what capacity are you employed?

A: I am employed by the Florida Public Service Commission as the Supervisor of the Economics and Forecasting Section in the Division of Economic Regulation.

Q: Would you please summarize your educational and professional experience?

A: I graduated from the Florida State University in 1977 with a Bachelor of Science degree in Economics with minors in Mathematics and Statistics. I received my Masters of Science Degree in Economics from the Florida State University in 1979 and, as a PH.D. candidate, completed the course work and doctoral examinations required for that degree in 1980.

In 1981, I was employed by Florida Power and Light Company as a Load Forecast Analyst. In this capacity, I prepared short and long term forecasts of company sales, peak demand, and customer growth. In 1983, I was employed by the Florida Public Service Commission (the Commission) as an Economic Analyst and in 1991 was promoted to my current position as Supervisor of the Economics and Forecasting Section. In this capacity, I have analyzed and made recommendations on a variety of issues in all of the industries regulated by the Florida Public Service Commission. In addition, since the Commission's last reorganization in May of 2000, I have acted as supervisor to staff members who have analyzed and made recommendations on water and wastewater forecasting, repression, and rate design issues in various dockets.

Q: Have you previously testified before the Florida Public Service Commission?

A: Yes. In 1983 I testified on behalf of the Commission staff in the Florida Power and Light rate case (Docket No. 830465-EI). IN 1997 I testified on behalf of the staff in the Florida Power Corporation's proposed buy-out of Orlando Cogen Limited's energy contract (Docket No. 961184-EQ), and in 2000 I provided testimony in the Aloha Utilities rate case (Docket No. 991643-SU). Finally, in 2000, I provided testimony in BellSouth's Permanent Performance Measures Case (Docket No. 00012-TP).

~~In addition, I have been a faculty member of the NARUC Annual Regulatory Studies Program at Michigan State University since 1998, and a faculty member of the Eastern Utility Rate School since 1997, lecturing on water pricing concepts.~~

~~Q. Have you previously testified before this Commission on behalf of Commission Staff?~~

~~A. Yes. In January 1993, I testified in the show cause portion of Docket No. 900025-WS regarding the application for a staff assisted rate case by Shady Oaks Mobile Modular Estates, Inc. (Shady Oaks). In August 1994, I testified in Docket No. 930944-WS regarding the revocation of the water and wastewater certificates of Shady Oaks. In October 1996, I testified in Docket No. 950615-SU regarding the application for approval of a reuse project plan and an increase in wastewater rates by Aloha Utilities, Inc. And in May 2001, I filed testimony in Docket No. 991437-WU regarding the application for an increase in water rates by Wedgefield Utilities, Inc.~~

Q. What is the purpose of your testimony in this case?

A. The purpose of my testimony is to:

(a) evaluate the projected customer growth contained in the utility's Minimum Filing Requirements (MFRs) and addressed in the prefiled testimony of utility witness Robert Nixon;

(b) evaluate the projected growth in consumption contained in the utility's MFRs as addressed in the prefiled testimony of utility witness David Porter, and to address the consumption growth projection filed by OPC witnesses Ted Biddy and Stephen Stewart;

(c) respond to the calculation of inclining-block rates as contained

in the utility's MFRs and addressed in the prefiled testimony of utility witnesses Robert Nixon and Stephen Watford, and addressed in the testimony of Southwest Florida Water Management District (SWFWMD) witnesses John Whitcomb and Jay Yingling;

(d) explain the Memorandum of Understanding (MOU) that exists between the Commission and the five Water Management Districts (WMDs), and how the Commission and the WMDs work together in cases;

(e) discuss conservation programs as addressed in the prefiled testimony of SWFWMD witness Lois Sorensen; and

(f) develop a series of illustrative rate designs.

Q. Have you prepared exhibits in this case?

A. Yes, I have prepared 11 exhibits. The exhibit numbers and titles are listed below.

Exhibit No.	Exhibit Title
FJL-1	Test of Forecast Methodologies
FJL-2	Customer Growth Projections
FJL-3	Analysis of Aloha's Consumption Projection
FJL-4	Aloha's Projection Periods: Customer Growth v. Consumption Growth
FJL-5	Aloha Service Area Drought Severity Classifications: 2000-2001
FJL-6	Moisture Deficit Variables
FJL-7	Weather Variables: Correlation to Average Monthly Residential Consumption per ERC
FJL-8	Consumption Projections

	FJL-9	Comparison of Consumption Projections
	FJL-10	Analysis of Aloha's Requested Rate Design
	FJL-11	Illustrative Rate Designs

Q. Thank you. Please begin with a discussion of the utility's customer projections. Have you read the testimony of utility witness Robert Nixon, as well as analyzed MFR Schedule F-9 which was sponsored by Mr. Nixon?

A. Yes, I have.

Q. Would you briefly explain the utility's customer growth forecast methodology?

A. Yes. To forecast customer growth, the utility based its Equivalent Residential Connection (ERC) forecast on a time trend of historical residential ERCs as required by the MFRs. This forecast is presented on pages 1 and 2 of Schedule F-9.

Q. Do you believe the utility's customer growth forecast produces a reliable result?

A. Yes, I do.

Q. Would you please explain how you concluded that Aloha's customer growth forecast is reliable?

A. Yes. Because the utility has relied on a time trend to forecast ERC growth, I constructed a separate econometric model of ERC growth. This model explains ERC growth using the rate of growth in the number of households in Pasco County as measured by the University of Florida's Bureau of Economic and Business Research. The purpose of this model is to provide a benchmark projection that can be used to test the reasonableness of the utility's ERC

forecasts.

Q. Why do you believe this comparison is necessary?

A. Forecasts derived from time trends incorporate within them the intrinsic assumption that the level of change in the future will be equal to the level of change observed in the historical data. This assumption ignores any other causal factors that may influence growth, such as changes in economic and/or demographic conditions, and forces the forecasts to grow at the same level as that observed in the historical data.

An econometric model differs from a time trend model in that it incorporates changes in economic and/or demographic conditions to explain growth. In periods when future conditions are very much like those observed in the past, an econometric model would yield forecasts that are very similar to those produced by a time trend. However, when future conditions are expected to differ from those observed in the past, an econometric model is capable of reflecting these expected changes in its forecast. For example, if population growth were expected to slow in the future, an econometric model of future ERCs would show future ERC growth slowing as well. This sensitivity to changing conditions cannot be incorporated into a time trend forecast. Therefore, econometric models tend to produce more reliable forecasts over a wider range of conditions.

I believe it is important for the Commission to verify that the projections produced by a time trend approach are appropriate for setting rates. In particular, I believe that it is important to verify that the ERC growth forecasts submitted by the utility are a proper reflection of the expected economic and demographic conditions in which the utility will be

operating. This can be achieved by comparing the ERC forecasts produced by the time trend method to those produced by an econometric model. If the two approaches produce similar forecasts, the Commission can have additional assurance that the utility's projections are reasonable. If, however, the two differ significantly, this may serve as a signal that the trended forecasts may need to be adjusted.

Q. How well did Aloha's forecast compare to the forecast produced by your econometric model?

A. As shown in Exhibit FJL-1, the econometric model produced an ERC forecast for the test year ending December 31, 2001 of 10,448, compared to Aloha's forecast of 10,560. This difference of 112 ERCs represents a statistically significant difference.

Q. Did you perform additional analysis on the utility's ERC forecast?

A. Yes. As shown in Exhibit FJL-2, I performed a time trend analysis similar to that of Aloha, but performed the analysis by customer class by quarter from the period January 1996 through December 2000.

Q. Why did you perform a quarterly time trend analysis on the utility's ERC forecast?

A. In a time trend series, the more data points that are available, the better the regression line. The additional data points may bring out subtle trends in the data that are eliminated when data is combined, as is the case when combining 12 months of data into one single data point. Therefore, in this case, rather than use a trend analysis with only five data points, I performed the same analysis by quarter, which yielded 22 data points over the period ended June 2001.

Q. What were the results of your additional analysis?

A. As shown on Exhibit FJL-2, performing a quarterly time trend analysis projected 17 fewer ERCs than did Aloha's model. Because my result deviates from Aloha's projected ERC growth by only -0.2%, I do not recommend that Aloha's yearly time trend analysis be adjusted.

Q. Thank you. Regarding the utility's consumption projections, have you read the testimony of utility witness Porter, as well as analyzed MFR Schedule G-9 which was sponsored by Mr. Porter?

A. Yes, I have.

Q. Would you please explain the utility's consumption projection analysis?

A. Certainly. As shown on MFR Schedule G-9, page 1, Mr. Porter analyzed consumption over the period of July 2000 through June 2001. His analysis involved three sets of calculations of both annual average monthly demand and annual average daily demand per ERC for: 1) total water sold to customers in all subdivisions; 2) total water sold to customers in subdivisions created more than 10 years ago; and 3) total water sold to customers in subdivisions created less than 10 years ago. I have summarized this portion of Mr. Porter's analysis on Exhibit FJL-3.

Q. What was his stated purpose for performing water demand calculations in this manner?

A. According to Mr. Porter, due mainly to a demographic shift from retirement households to younger households and larger homes, the average water demand per ERC of 258 gallons per day (GPD) is not representative of the demands being placed on the system by its newer customers. He concluded that the water demands in subdivisions created in the past 10 years of 500 GPD/ERC

are more reflective of water demand on a going-forward basis. Mr. Porter then multiplied 500 GPD/ERC times Aloha's projected 473 additional ERCs in 2001 to arrive at additional water demanded during 2001 of 86,322,500 gallons.

Q. Do you agree with Mr. Porter's consumption projection methodology?

A. No, I disagree with Mr. Porter's methodology for several reasons. As shown on Exhibit FJL-4, the utility's customer growth projection was based on the period of 1995-2000. However, the consumption projection did not rely on the same five-year period. Instead, a 12-month period that overlapped the end of the historical test period was used.

Q. Please continue.

A. Linear regression is the Commission's preferred method for projecting customer and consumption growth, because it considers data trends, both up and down, in the projection calculation. In this case, linear regression was used to project customer growth, but Mr. Porter's consumption projection is based on an averaging calculation, which does not recognize data trends. The result is that data trends evident in the five years of data used to project customer growth were ignored when projecting consumption for those same customers.

Q. Have you read the testimony of the Office of Public Counsel (OPC) witnesses Ted Biddy and Stephen Stewart in response to Mr. Porter's consumption projection?

A. Yes, I have. These witnesses also disagree with Mr. Porter's consumption projection methodology.

Q. What is their main area of disagreement with Mr. Porter's projection?

A. Both Mr. Biddy and Mr. Stewart testify that Mr. Porter's calculation is flawed because it ignores the abnormally dry weather in 2000. They testify

that the abnormally dry weather during that period would reflect increased water usage due to irrigation needs and that consumption under normal weather circumstances would be less than projected by the utility. They recommend basing the projected consumption on average consumption per ERC during the years 1995-2000. This results in OPC's recommended projected consumption per ERC of 265 GPD.

Q. Do you agree with Messrs. Biddy and Stewart regarding the weather during 2000?

A. No, I do not. Based on information obtained from the National Drought Mitigation Center, I have prepared Exhibit FJL-5 which compares the monthly drought classifications for Aloha's service area for the years 2000 and 2001. I have prepared a ranking system based on the drought classifications, with a drought classification of D 0 (abnormally dry) being assigned a value of 1, while a drought classification of D 4 (exceptional drought) receives a score of 5. As shown on my exhibit, the total annual drought score for the year 2000 is 33, resulting in an average monthly drought score of 2.8. Similarly, the total annual drought score for the year 2001 through the month of November is also 33, resulting in an average monthly score of 3.0. Even in the event that December 2001 does not receive a drought classification, both the total annual and average monthly scores for 2001 will be identical to those of 2000. Therefore, I believe the weather during the years 2000 and 2001 are comparable, and that no adjustment should be made to rectify a perceived abnormal weather period.

Q. Do you recommend an alternative consumption projection methodology to those recommended by Aloha and OPC?

A. Yes, I do. Consistent with Commission practice, I recommend that multiple linear regression produces a more reliable result and should therefore be used to project consumption. Also consistent with Commission practice, I recommend that these projections be done separately for the residential and general service classes.

Q. Would you please explain why you believe multiple regression is the appropriate consumption projection methodology to use in this case?

A. Certainly. Many factors, such as the number of persons in the household and weather - have an impact on consumption. Therefore, it is appropriate to select a consumption projection methodology which enables analysis of these factors on water demand.

Q. Were you able to obtain data such as the average number of persons per household for inclusion in your analysis?

A. Unfortunately, no. In an interrogatory propounded by the Commission staff, the utility was asked to provide this data. However, Aloha responded by stating that they did not have any such data. I also attempted to obtain the data from the Pasco Chamber of Commerce, but was unsuccessful there as well.

However, I was able to obtain information regarding other variables which I believe affect consumption. For example, I was able to obtain information on several types of weather variables which may reasonably be expected to influence consumption. I believe total monthly rainfall, average daily precipitation and average daily temperature are examples of such variables that should be analyzed with respect to each variable's effect on consumption. In addition, I also examined the possibility that other weather

variables might also impact consumption.

Q. Would you please explain?

A. Yes. For example, rainfall tends to have a negative effect on consumption, while temperature typically has a positive effect on consumption. As temperature rises, it increases the evaporation rate of rainfall, thereby influencing the extent that rainfall decreases consumption. Therefore, a single variable that incorporates the effects of both temperature and rainfall might also be relevant. The moisture deficit variable (MDV) incorporates average daily temperature for the month and total rainfall for the month. The MDV is somewhat similar to the net irrigation requirement (NIR) variable, which the Commission recognized in Order No. PSC-96-1320-FOF-WS, issued October 30, 1996, in Docket No. 950495-WS as having a positive correlation to consumption in the majority of months analyzed. I have calculated MDVs for each month during the period 1996 through 2000, and the results are presented on Exhibit FJL-6.

Q. Has the MDV been recognized by the Commission in prior cases as a relevant weather variable to consider when projecting consumption?

A. Yes. The MDV has been approved in several prior Commission cases as an appropriate weather variable to use in a multiple regression equation.

Q. What was your next step in your consumption projection calculation?

A. As shown on Exhibit FJL-7, I regressed each of the following weather variables against residential consumption per ERC to find the variable with the highest r^2 score: 1) average daily temperature; 2) average monthly temperature since 1948; 3) average daily precipitation; 4) total precipitation for each month; 5) average monthly precipitation since 1948; 6) effective

precipitation; and 7) MDV.

Q. What is the significance of r^2?

A. r^2 is a measure of how much variation in the dependent variable can be explained by the independent variable. Assuming all other things being equal, the higher the r^2 value, the better the variable will perform in a projection model. As indicated on page 7 of Exhibit FJL-7, the variable with the highest explanatory power is the MDV. I have graphed the MDV and residential consumption per ERC on page 8 of FJL-7 to demonstrate how well residential consumption moves in relation to changes in the MDV.

Q. Would you please provide an overview of the model you used to forecast test year consumption for the residential class (RS)?

A. Yes. The model used to forecast test year consumption for the RS class is based upon billing analysis data for the period from January, 1996 through June, 2001. This data is aggregated into quarterly data for the purposes of estimating the model. The model specifies consumption per residential ERC in each quarter as a function of two primary drivers: weather (as measured by MDV) in the current quarter and a four quarter lagged value of consumption per residential ERC. This specification implies that consumption per ERC in each quarter is dependent upon current weather conditions but will look at consumption per ERC observed during the same quarter of the prior year. As established earlier, weather affects consumption. Therefore, the model also includes a variable to adjust for the difference in weather between the current and lagged period. Also, three binary variables used to account for atypical rainfall observed in the historical weather data. This model and the resulting consumption per ERC forecast is shown in my Exhibit FJL-8.

Q. What did this model predict for total consumption for the RS class for 2001?

A. The model results, when combined with the ERC forecast described above, predicted total consumption for the RS class to be ~~890,535,306~~ 905,635,244 gallons. This forecast is based on 6 months of actual data for the period January through June, 2001 and six months of forecasted consumption for the period July through December, 2001.

Q. Would you please provide an overview of the model you used to forecast test year consumption for the general service class (GS)?

A. The model used to forecast consumption for the GS class is similar to that used for the RS class. The model is based on historical billing analysis data from January, 1996 through June, 2001. It aggregates this data into quarterly observations and estimates consumption using weather and prior usage from the same quarter in the previous year. The model also contains four binary variables used to adjust for atypical weather conditions. The results of this model are also presented in my Exhibit FJL-8.

Q. What did this model predict for total consumption for the GS class for 2001?

A. The model results, when combined with the ERC forecast described above, predicted total consumption for the GS class to be 110,486,540 gallons. This forecast is based on six months of actual data for the period January through June, 2001 and six months of forecasted consumption for the period July through December, 2001.

Q. What do your models predict total water consumption to be for 2001?

A. Based upon the forecasts for the RS and GS classes, the total water

1,016,121,784

consumption forecast for 2001 is ~~1,001,021,846~~ gallons.

Q. Have you prepared a comparison of the results of Aloha's consumption projections, versus yours and those of OPC?

A. Yes. A comparison of my projection, versus those of the utility and OPC may be found on Exhibit FJL-9.

Q. Let us move on to the utility's rate structure and proposed revenue recovery portion of your testimony. Have you also read the testimonies of utility witness Stephen Watford and SWFWMD witness Jay Yingling?

A. Yes, I have.

Q. Would you please describe Aloha's current rate structure?

A. Yes. The utility's current rate structure consists of a base facility charge (BFC) and uniform consumption charge rate structure. For residential customers, a gallonage allotment of 3,000 gallons (3 kgal) is included in the BFC, while the gallonage allotment for general service customers varies by meter size. This type of rate structure is generally considered a nonconservation-oriented rate structure because the customer does not receive pricing signals to conserve at or below the gallonage allotment level. However, according to SWFWMD witness Jay Yingling, the current structure does meet the requirements of the SWFWMD's guidelines with respect to per capita usage.

Q. Please describe Aloha's proposed rate design and cost recovery methodology.

A. Certainly. The utility has proposed a two-tier inclining block rate structure to be applicable to the residential class, with usage blocks set for monthly consumption: 1) at 0-10 kgal; and 2) for consumption in excess of 10

kgal. The utility has also proposed maintaining its BFC and uniform consumption charge rate structure for the general service class, and eliminating the gallonage allotments for all customers. Finally, the utility proposes to generate their full revenue requirement through a combination of the first tier of consumption charges, all base facility charges and general service gallonage charges. Aloha has proposed that monies received through the second tier of consumption charges be set aside and used for: 1) paying the cost of water as purchased from Pasco County, and 2) for utilization for various conservation measures.

Q. Have you analyzed Aloha's proposed rate structure?

A. Yes. Aloha's proposed rate structure is consistent with inclining-block rate structures previously approved by the Commission in that the first tier (block) is not greater than 10 kgal and the usage block rate differential for the second block is at least 25% greater than in the first block. However, as shown on Exhibit FJL-10, an analysis of price increases to customers at various consumption levels reveals that customers using 3 kgal will receive the largest percentage increase. This is understandable, because the 3 kgal allotment is being removed from the BFC. However, customers using between 4 kgal and 6 kgal receive approximately the same percentage price increases as those customers using between 20 kgal and 100 kgal. In fact, customers using a mere 4 kgal per month will receive virtually the same percentage increase as those customers using 100 kgal. Therefore, I believe it is appropriate to modify the utility's proposed rate design.

Q. Would you please explain why you believe this is appropriate?

A. Yes, I will. The reason why inclining-block rates reduce average usage

is because demand in the higher usage block(s) should be more responsive to price than demand in the first block. Therefore, water users with low monthly usage benefit through lower rates, while water users with high monthly usage will pay increasingly higher rates and be subjected to increasingly greater percentage increases. Thus, high water users will have a greater incentive to conserve. However, the utility's proposed inclining-block rate structure does not distinguish between low and high use. Under Aloha's proposal, there is a relatively flat 27 percentage point spread in price increase for consumption ranging from 3 kgal to 300 kgal.

Q. Do you have any recommendations as to how to modify Aloha's proposed rate structure?

A. Yes. I will discuss a series of illustrative rate designs, as well as my recommendations for Aloha's rate structure, later in my testimony.

Q. Please address Aloha's proposed cost recovery methodology.

A. Considering the manner in which the utility has proposed to recover their full revenue requirement of $3,044,811 as shown on MFR Schedule B-1, their requested rates generate an amount in excess of their requested revenue figure. Removing miscellaneous service revenues of $32,284 results in revenues from monthly service rates of $3,702,822.

Q. Has the utility further explained their proposal?

A. Yes. In response to Staff's First Set of Interrogatories, No. 15, utility witness Nixon states that the $3,735,106 revenue calculation "... is linear, and does not factor in any reduction in revenue due to conservation related to the proposed price of water. [The] $401,377 represents the net reduction in revenue predicted by the SWFWMD Water Rate Model. The $288,918

is ... the predicted revenue that will be collected after implementation of the proposed conservation rates. To the extent this predicted excess revenue is realized, it will be used for conservation programs as required in cooperation with SWFWMD."

Q. Do you have concerns about this proposed method of cost recovery?

A. Yes, I do. It is my understanding that the Commission does not approve revenue requirements (rate of return times rate base) in excess of what was requested by the utility. In addition to utility witness Nixon stating that the excess revenues generated from rates would be used for conservation programs, utility witness Watford states in response to Staff's First Set of Interrogatories, No. 18(a), "the utility has conferred with SWFWMD several times concerning the types of conservation programs the district is going to require Aloha to implement as part of it's [sic] conservation program that is going to be a part of it's [sic] final consent order with the district."

Q. What is the status of the Consent Order between the SWFWMD and Aloha?

A. SWFWMD witness John Parker, the District's Water Use Regulation Manager, has testified in regard to the Consent Order that "after several meetings and a formal mediation, the parties have been unable to reach a settlement." Therefore, at this time, it does not appear that the District has approved a utility-specific conservation program for Aloha.

Q. What is your opinion regarding Aloha's requested conservation expenses?

A. Because there is no Consent Order, and, therefore, no approved conservation programs, I do not believe the utility's rates should be set at a level that generates excess revenues for those programs' expenses. However, given the Memorandum of Understanding (MOU) that exists between the Commission

and all five of the state's Water Management Districts (WMDs), I believe it is important to work with the SWFWMD on this issue.

Q. Would you please explain the MOU that exists between the Commission and the five Water Management Districts, and how the Commission and the WMDs work together in cases?

A. Yes. The Commission has a MOU with the SWFWMD, as well as with the four other WMDs. In June 1991, the Commission and the five WMDs recognized that it is in the public interest that they engage in the joint goal to ensure efficient and conservative utilization of water resources in Florida, and that a joint, cooperative effort is necessary to implement an effective state-wide water conservation policy. The MOU memorializes the common objectives, principles and responsibilities of each agency in order to implement an effective state-wide water conservation policy.

Q. What are the common objectives of the two agencies as they relate to public water systems?

A. The common objectives as stated in the MOU include, but are not limited to:

(a) fostering conservation and the reduction of withdrawal demand of ground and surface water through, among other measures, employment of conservation promoting rate structures, maximization of reuse of reclaimed water, and through customer education programs;

(b) to effectively employ the technical expertise of the WMDs regarding water resource development and water resource management, and to employ Commission expertise in the economic regulation of utilities for the promotion of efficient water

consumption in the public interest; and

(c) that the agencies shall exchange pertinent available information regarding water systems experiencing water availability problems.

Q. With regard to water conservation programs, have you read the testimony of SWFWMD witness Lois Sorensen?

A. Yes, I have.

Q. Would you briefly summarize her testimony?

A. Yes. Witness Sorensen, the SWFWMD's Water Shortage Coordinator, testified regarding conservation that water utilities in the District must develop and implement a utility-specific water conservation plan or program. She provided testimony regarding the four main types of measures that could be elements of a utility's water conservation program - education, operation, regulation and incentive - and also provided cost effectiveness ratios for several of the programs discussed. She suggested that Aloha could pay the conservation program expenses by "... revenues generated ... to create a dedicated water conservation fund, or allocate(d) funds from other disallowed expenses ..." She further testified that many of the conservation program measures discussed in her testimony could be done fairly quickly, if necessary, to help Aloha come back into compliance with its Water Use Permit (WUP).

Q. Do you believe water conservation programs for utilities are important?

A. Yes, I do, especially when a utility is not in compliance with its WUP.

Q. Is Aloha in compliance with its WUP?

A. SWFWMD witness Parker has testified that Aloha is not in compliance with its WUP because it is exceeding the permitted annual average day withdrawal.

Witness Parker goes on to testify that, "Aloha needs to implement a water conserving rate structure, and water conservation programs to comply with SWFWMD rules and its WUP....to date Aloha has not taken adequate measures to conserve water."

~~Q. Do you agree with witness Sorensen's suggestion regarding how to pay for conservation program expenses for Aloha?~~

~~A. Since it is my understanding that the Commission does not approve revenue requirements in excess of what was requested on MFR Schedule B-1, I believe the only method of funding Aloha's conservation programs in this case is through reductions in operating expenses, thereby freeing up monies to apply toward the conservation programs. Finally, to the extent conservation programs are funded, I believe the Commission staff should work with the SWFWMD to insure that the conservation program monies are being spent appropriately.~~

Q. Thank you. Earlier in your testimony, you stated that, through a series of illustrative rate designs, you would explain how Aloha's proposed rate design should be modified. Would you please begin?

A. Certainly. There are several steps involved in evaluating and calculating an inclining-block rate structure including (but not limited to) determining: 1) the appropriate "conservation adjustment," if any; 2) the appropriate usage block rate factors; and 3) the appropriate usage blocks. So that my comparisons to Aloha's proposed rate design are as comparable as possible, I have based Exhibit FJL-11 on Aloha's requested revenues from monthly service rates of $3,702,822, as well as used Aloha's projected bills, ERCs and gallons. In Exhibit FJL-11, the analysis is first categorized by the

selection of different usage blocks. Aloha has proposed usage blocks of 0-10 kgal and 10+ kgal. I believe an alternative set of usage blocks that merits consideration is for usage at 0-8 kgal, 8-15 kgal and 15+ kgal. The utility's proposed usage blocks are shown on pages 1 through 3 of Exhibit FJL-11, while the alternative set of usage blocks is shown on page 4 through 6 of my exhibit.

Q. Why did you select this alternative usage block group to consider?

A. As I discussed earlier in my testimony, Aloha's proposed rate design does not send increasingly higher price signals to those customers at high consumption levels. In fact, a review of Exhibit FJL-10 will indicate that, for usage between 8 kgal and 15 kgal, the percentage increases are less than those for customers using less than 8 kgal. One way to mitigate this disparity is to create a usage block so that usage in the 8 kgal to 15 kgal range can be assigned a higher gallonage rate than for usage in the 0 to 8 kgal range.

Q. Do you have any concerns about dropping the first usage block threshold to 8 kgal?

A. No, I do not. An analysis of utility witness Nixon's Late Filed Deposition Exhibit No. 2 (revised MFR Schedule E-14) indicates that the 10 kgal threshold captures 73% of the utility's bills and 68% of its consumption. Lowering the first block threshold (cap) to 8 kgal captures 66% of the utility's bills and 61% of its consumption - not a large change from those percentages at the 10 kgal cap. Furthermore, lowering the cap from 10 kgal to 8 kgal will send a stronger conservation price signal to a larger group of customers. When lowering the first usage block threshold, however, it is

important to consider that the Commission in past cases has recognized that, as a revenue stability consideration, at least 50% of the bills and gallons be captured in the threshold of the first usage block.

Q. Please continue with the explanation of your illustrative rate designs.

A. Thank you. For the two sets of usage blocks being evaluated, there are three alternatives for base facility charge (BFC) v. gallonage charge cost recovery for each usage block set: BFC = 31%, BFC = 28%, and BFC = 25%. For example, Page 1 of Exhibit FJL-11 is based on usage blocks of 0-10 kgal and 10+ kgal, with a BFC allocation of 31%. Page 2 of Exhibit FJL-11 also examines the 0-10 and 10+ kgal set of usage blocks, but at a BFC allocation of 28%. Page 3 of Exhibit FJL-11 lowers the BFC allocation to 25%. The lower the BFC allocation percentage - and, therefore, the greater the gallonage charge allocation percentage - the more conservation oriented the rate is considered.

The same pattern is repeated for pages 4 through 6 of Exhibit FJL-11, but for the 0 to 8 kgal, 8 kgal to 15 kgal and 15+ set of usage blocks. Finally, pages 1 through 3 of Exhibit FJL-11 contains the same 5 sets of usage block rate factors: 1) 1.0/1.25, 2) 1.0/1.5, 3) 1.0/1.75 and 4) 1.0/2.0. Pages 4 through 6 of Exhibit FJL-11 contain the following usage block rate factors: 1) 1.0/1.25/1.5, 2) 1.0/1.25/1.75, 3) 1.0/1.25/2.0 and 4) 1.0/1.5/2.0.

Q. How should an appropriate BFC allocation percentage be designed?

A. The appropriate BFC allocation percentage is one that permits the utility to recover a significant share of its fixed costs while at the same time sending customers the proper pricing signals to encourage them to control

their water usage.

Q. Would you please explain?

A. There are several things to keep in mind when selecting an appropriate BFC v. gallonage charge allocation. One is that, in this case, due to the elimination of the 3 kgal allotment in the BFC, the customers at 3 kgal of usage will receive the greatest percentage price increase. This problem is mitigated somewhat by decreasing the BFC allocation percentage. However, due to revenue stability concerns, the BFC allocation percentage should not be decreased to the point that the new BFC is less than the current BFC. In addition, a competing point to consider is that the gallonage charge allocation percentage should be at a level such that the resulting gallonage charge in the first block is not less than the utility's current gallonage charge.

Q. Do you agree in theory that placing more of the cost recovery burden in the gallonage charge places the utility at risk for greater revenue instability?

A. In theory, a move away from revenues generated through fixed charges to revenues generated through gallonage charges will increase the uncertainty about the revenue stream. In practice, however, the variability of revenue received exists within a continuum. For example, if the Commission were to set the BFC at zero, making the utility's revenue requirement totally dependent on the number of gallons sold, in months of extremely low usage there could be the risk that revenues generated might not cover fixed costs. This situation could place the utility at greater risk. At the other extreme, the Commission could set the BFC at 100% of the utility's revenue requirement

and thereby eliminate any variability in revenue associated with usage.

Q. Will placing 31% of the utility's cost recovery burden on the BFC place the utility at a greater risk for revenue instability?

A. Yes. However, as may be calculated from MFR Schedule E-13, this is the same BFC v. gallonage charge allocation split proposed by the utility. On Schedule E-13, the utility's proposed rate design generated BFCs of $1,152,330, plus corresponding gallonage charge revenues of $2,550,492. This represents 31% of the revenues recovered through the BFC, with the remaining 69% of revenues recovered through the gallonage charges in Aloha's proposed rate design.

Furthermore, I believe the magnitude of the cost recovery shifts resulting in a BFC allocation percentage of 25% are insignificant compared to the resulting improved conservation pricing signals sent to customers, while at the same time minimizing the price increases for largely nondiscretionary use.

Q. You mentioned earlier that the appropriate BFC allocation percentage is one that permits the utility to recover a significant share of its fixed costs while also sending customers the proper conservation pricing signals. How would this analysis be performed?

A. This analysis is based on the fact that there will be a certain baseline level of water sold to customers during the year. I believe it is reasonable to assume this baseline level is represented by the sum of residential usage in the first usage block plus water sold to the utility's general service customers. It is not necessary for 100% of the utility's fixed costs to be recovered solely through the BFC if a combination of the BFC and the revenues

generated by this baseline level of usage combine to cover fixed costs. After fixed costs are recovered, it is entirely appropriate for the incremental variable costs to be recovered through the revenues generated by the number of gallons sold.

Q. What does the analysis of Exhibit FJL-11 reveal?

A. Based on the results of my analysis, as shown on page 6 of this exhibit, a preferable rate structure to that proposed by Aloha is one that is based on the alternative set of usage blocks, and a BFC allocation percentage of 25%. The price signals sent to the medium and high consumption users based on this rate design are greater than on any other page of the exhibit. My recommendation is based upon a balancing of the utility's financial stability and generally accepted conservation principles.

Q. Thank you. Moving on the next portion of your testimony, have you read the testimony of SWFWMD witness John Whitcomb, Ph.D.?

A. Yes, I have. Dr. Whitcomb testified regarding the SWFWMD's 1999 price elasticity study, as well as the development and application of the Waterate 2001 software used by Aloha in this filing. Waterate 2001 is an Excel workbook that may be used as a planning tool to simulate how changes in water and sewer rate structures impact water revenues and water demand.

Q. Do you believe a reduction in water demand (repression) will occur in this case, and, if so, how should the demand reduction be estimated?

Q. Yes. I believe it is reasonable to expect a reduction in demand (repression) caused by an increase in the water rates. I also believe it is reasonable to estimate demand reductions based on the long-run price elasticities found in the District's study. Specifically, when gallonage

prices are below $1.50 per kgal, price elasticity is estimated to be -0.398, for prices between $1.50 per kgal and $3.00, the price elasticity is estimated to be -0.682, and for prices above $3.00 per kgal, price elasticity is estimated to be -0.247. Furthermore, as testified by Dr. Whitcomb, it can be expected that 50% of the long-run price impact will occur in the first year.

Q. Do you have any concluding remarks?

A. Yes, I do. I would like to emphasize first that staff's final recommended customer growth and consumption projections should be carried through to any other related projection factors used. Finally, the conclusions I draw from Exhibit FJL-11 are based wholly on the utility's proposed filing. To the extent this exhibit is used in staff's final recommendation in this case, the rate calculations should be based on staff's final recommended revenue requirement, as well as on staff's final recommended bills, ERCs and consumption.

Q. Does this conclude your testimony?

A. Yes.

BY MS. ESPINOZA:

Q Mr. Stallcup, could you please briefly summarize your testimony.

A Yes. The purpose of my testimony is to supplement the record on two important areas in this case. These areas are: The appropriate water consumption forecast, particularly for the residential class, to be used for rate-setting purposes, and how an effective conservation rate structure should be developed to encourage price-induced conservation.

With respect to the water consumption forecast, I recommend that the Commission adopt the forecast contained in my direct testimony and as updated in the exhibit just handed out. This forecast is based upon a comprehensive econometric model that includes the effects of weather as well as the impact of recent demographic trends occurring within the Aloha service territory. Thus, it's my opinion that this model successfully incorporates the issues raised by Public Counsel Witness Stewart considering weather normalization, and it addresses the concerns raised by the utility about the recent demographic shift away from retirement-oriented homes and towards larger family-oriented homes.

Contained within the forecast issue is the important subissue of repression. As you know, repression deals with the fact that as water prices rise, water consumers will respond by using less water. This repression of water usage is based upon

the economic concept of price elasticity of demand. As stated in my testimony, I accept the price elasticity demand estimates and the resulting repression of water consumption proposed by Water Management District Witness Dr. Whitcomb.

The second major area I address in my testimony is how an effective conservation-oriented rate structure can be developed. What makes a conservation-oriented rate structure effective is that it pushes the majority of the price increases -- the majority of the percentage increase in price upwards towards larger users of water while simultaneously holding down price increases for users who use water sparingly. To this end, I present a set of illustrative rate designs that show how changes in allocations between base facility charges and gallonage charges as well as variations in usage block rate factors can help produce more effective conservation-oriented rate structures.

Finally, in addition to the two major areas I just addressed, I offer an opinion concerning the appropriate way this Commission should consider cost recovery for conservation programs. It's my opinion that any conservation program approved by the Water Management District for this utility and deemed by this Commission to be a prudently incurred expense, then those expenses should be recoverable through the normal cost recovery calculations traditionally used by this Commission.

I've seen no extraordinary circumstances in this case that would warrant the use of nontraditional cost recovery methods. That concludes my testimony -- or my summary.

MS. ESPINOZA: Thank you.

CHAIRMAN JABER: Thank you, sir.

Mr. Wood, do you have any questions?

MR. WOOD: Yes.

CROSS EXAMINATION

BY MR. WOOD:

Q When you mentioned demographics, what are you basing your demographics on?

A The notion of the demographic shift is a notion that was originally raised by the company. To paraphrase the company's position, it's their contention that within the Aloha service territory the fundamental demographics of the area are changing away from retirement homes, if you will, towards larger family-oriented homes. That is a contention by the company. It's not my job to either except or reject that contention on its own, rather what my job is, is to analyze the data, the actual consumption data itself, both for the most recent year as well as recent history to determine what the actual consumption data reveals.

The company contends that the demographic shift will influence consumption. Well, that's fine. That's their contention. My job is to evaluate the data to see if that

change in consumption actually exists.

Q So you didn't get any of your information from the governmental source or anything like that, from, like, the Census Bureau?

A We did obtain some economic data that actually came the state of Florida concerning household evaluations, things like that, that were originally attempted to be incorporated into the model, but we found the statistical fit of such data to not meet the muster, so we did not use it.

MR. WOOD: That's all I have.

CHAIRMAN JABER: Thank you, sir.

Mr. Burgess.

CROSS EXAMINATION

BY MR. BURGESS:

Q Mr. Stallcup, have you been here through the entire hearings?

A Yes, I have.

Q So you heard Mr. Porter's testimony?

A Yes, I did.

Q Do you hear Public Service Commission Staff ask some questions with regard to implied assumptions within his method?

A Within Mr. Porter's method, yes.

Q Did you hear them ask questions about implied assumptions about how growth would take place over the course of the test year?

A Yes.

Q Do you recall hearing him ask whether his model assumed that growth would take place all at the beginning of the test year?

A I recall that.

Q What is your understanding about Mr. Porter's method in this regard?

A I believe that method is flawed.

Q And what is your understanding with regard to whether it in fact implicitly assumes that growth will take place at the beginning of the year?

A That is implicitly what that presumption would require. And it's my opinion it should be an average rather than occurring right at the beginning of the year.

Q Is that because it doesn't make any sense to assume that the growth that you're going to have in any given year is all going to take place on January 1st of that year?

A Yes, that's my opinion.

Q Does that assumption make any sense at all to you?

A Mr. Porter's assumption?

Q Yes.

A No, it doesn't.

Q You spoke of the recovery of conservation measures?

A Yes.

Q Do you believe if there is going to be cost recovery

of conservation measures in rates, that the conservation that can be anticipated from those measures should also be considered?

A Yes.

MR. BURGESS: Thank you. That's all we have.

CHAIRMAN JABER: Ms. Lytle.

CROSS EXAMINATION

BY MS. LYTLE:

Q Good morning.

A Good morning.

Q I think I just have one question for you. Given the public water supply concerns and the stress that the water resource is under in this area, you do agree that water conservation programs are both necessary and appropriate for Aloha Utilities?

A Yes, I do.

MS. LYTLE: Thank you.

CHAIRMAN JABER: Mr. Wharton.

CROSS EXAMINATION

BY MR. WHARTON:

Q Good afternoon, Mr. Stallcup.

A Good afternoon.

Q You talked a little bit about Aloha's witness. Let's talk about Mr. Biddy and Mr. Stewart. You have read their testimony?

A Yes, I have.

Q And you disagree with their conclusion that it is appropriate to make an adjustment for 2000 being abnormal weather, don't you?

A Actually, I agree with what they're attempting to do, it's more of a difference in methodology.

Q But you would agree that your testimony says at Page 11, Line 21, "I believe the weather during the years 2000 and 2001 are comparable, and that no adjustment should be made to rectify a perceived abnormal weather period"?

A Yes. And that statement is predicated on the fact that the model that I base my observations on uses a weather variable called the moisture deficit variable which uses rainfall and temperature to measure the need to use water. I believe the information that the Public Counsel witnesses used was just the rainfall data. And when you look at those different ways of measuring the need to use water, you can reach somewhat different conclusions based on weather variations.

Q But utilizing the moisture deficit variable, you agree that you have concluded that the weather during the years 2000 and 2001 are comparable?

A For the purpose of my model, it didn't make any difference.

Q Okay. Well, whether it made any difference or not,

do you agree that your conclusion was that they are comparable?

A Yes, that's what's in my direct testimony, that for the purposes of my model, they're comparable.

Q Let me try to use the blue sheet on you. This Special Report that the Commission handed out to the customers says, "The PSC Staff adjusts test year data to properly reflect conditions in the future period for which the rates are being fixed." Was that part of your task in this case?

A Yes.

Q Okay. And so that was something that you wanted to keep in mind as you were coming up with your conclusions, is that to the extent something needed to be adjusted, and you felt that was appropriate, you wanted to incorporate that information?

A Yes. In fact, it's that very thought that caused me to file the exhibit that we just considered this morning that takes my test year forecast for water consumption, which I feel is very accurate, obviously, and then make certain adjustments to those forecasted numbers to make the consumption data more representative on a going-forward basis.

Q And that's a good point, Mr. Stallcup. This exhibit that you have proffered today is something that you have just completed work on recently; right?

A Yes, that's correct.

Q And this exhibit reflects your belief that it's

appropriate to take into account that there have been Water Management District restrictions in place while some of this data that everyone's looked at was being generated and that that might affect usage levels on a going-forward basis?

A Yes. It was my attempt in creating this exhibit to reflect all available information into the analysis such that the numbers could be as accurate as possible. However, I would like to point out that it was my original intent in coming up with this exhibit to have had available to me all of the historical consumption data for the test year. At this point, it's now historical consumption data for 2001.

If I had had that available to me, then we would have been able to remove any forecast issue itself from the consumption data we'll be basing rates upon and only have to deal with what it takes to normalize that data for things like water restrictions or abnormal weather.

Q And I guess I want to focus just for the purposes of your response on the word "normalize." You do believe it's appropriate that if there is a factor out there such as the imposition of Water Management District watering restrictions, that that's something that should be taken into account when the Staff adjusts the test year to properly reflect conditions in the future period for which the rates are being fixed?

A Let me answer that a bit generically, if I may. I think as we've talked about in deposition for quite some time

is that in preparing a forecast for rate-setting purposes, what you do is step -- it's a two-step process. The first step is you attempt to get the forecast as accurate as you possibly can. That's step number one. Step number two is then to look at that forecast and determine if there are any inputs to that forecast that somehow need to be modified such that the resultant number is more representative of the period for which rates will actually be in effect. In Aloha's case that would be the year 2002 and forward. It's analogous to making pro forma adjustments, if you will, to your basic forecast.

So in that sense, if it's believed that watering restrictions existed in the historical period but that they will be lifted in the future when rates will be in effect, then it's my opinion that that adjustment should be made, yes.

Q And you will agree that to the extent the Water Management District determines that it is appropriate, the water restrictions may well be lifted at some point in the future?

A They may well be. I do not know for sure.

Q Mr. Stallcup, you would agree that if someone is attempting to project water usage in the future and they are aware of demographic variables in the service area that might affect that usage, that that should be taken into account to the extent that those demographic variables or changes may affect consumption?

A Basically I agree with you, yes, I do. But I think what's giving me pause to think is something implied in the way you asked the question that you necessarily have to take account of the demographic variables themselves. There are ways in constructing a forecast model such that you can capture the essence of the demographic shift without necessarily having to get down to the specific variables themselves.

Q And what you're speaking of is the concept that I had such a difficulty with in your long deposition that essentially there is no explicit input for that information in your model, but it's in there?

A Yes, it is.

Q Okay. Now, you don't have any reason to doubt the information you've seen regarding usage in Aloha's 12 newest neighborhoods is accurate, do you?

A No. I've seen no information to indicate otherwise.

Q And you agree that the projected connections to Aloha's system are going to come in the newest neighborhoods?

A I've seen no information to indicate otherwise.

Q And you believe that Aloha is in a position to have the best firsthand knowledge to the extent the demographics are shifting or changing in their service area of all the parties in this case; isn't that correct?

A Yes, I would agree with that, but based upon the forecast I've seen of future consumption, I doubt if they have

the best opinion of what future water consumption will look like.

Q I think you told me that between your model and OPC's model and Aloha's model, you wouldn't bet your money on Aloha's or OPC's.

A If I were to bet on the three, my money would be on mine.

Q Okay. Now, you do agree with the proposition that there's a positive correlation between income and size of house and family size and size of lawn and water use; correct?

A Yes, just as there would be with any other economic good.

Q And as we sit here today, you have no reason to disbelieve the company's projection that new customers are going to use 500 gallons per day?

A I haven't done an independent verification of that, but I will accept that as a concern that the company has. And also, since you brought that up, since we had an opportunity to talk last, which I think was last Friday, I've had an opportunity to evaluate the financial ramifications of the company's belief that all new customers will tend to consume around 500 dollars (sic) a day, and I can talk about that now if you'd like, or we can talk about that later.

Q Do you think I want to hear it?

A I'm sorry?

Q I said, do you think I want to hear that?
A I think your client might.
Q We'll let your counsel get into that with you.
A Okay.
Q Well, no. Actually --
CHAIRMAN JABER: Well, Mr. Wharton, because I don't want you to come back and tell me you want recross.
MR. WHARTON: You're exactly right. Steve beat you to the punch, Madam Chairman.
BY MR. WHARTON:
Q Okay. Why don't you go ahead and tell me about your conclusions in that regard.
A Okay. Just as a little bit of background, I think one of the large concerns that the company has is based upon a late-filed exhibit that I provided in my first deposition in which the company asked me to generate some rates that would result from the illustrative rate designs in my direct testimony. They wanted me to generate those rates, including repression effects and that sort of thing, so that they could get a sense of what the rates would look like if we were to adopt the illustrative rate designs in my testimony. So I satisfied that late-filed requirement. We generated some rates, and we had a little bit of going back and forth on how to tweak the spreadsheet to make it work well.
Given all that, I took those rates that came out of

that late-filed exhibit exercise, and I assumed that, okay, let's suppose that we calculate in our normal revenue requirement way a set of rates that will at least satisfy current revenue requirements for the company. But on a going-forward basis, all new customers that the company has will consume 500 gallons a day. That equates to customers consuming 15,000 gallons a month. Okay. That's just 500 times 30 days a month.

I took that 15,000 gallons a month and applied it against the rate structures that came out of the illustrative rate designs. And when I went through that exercise, the revenues generated by those rates, if I remember correctly, were $35.02. The marginal cost of providing those customers with water based on Pasco's cost of $2.35 per thousand was thirty-five dollars and I think 20 cents or maybe 25. So on a going-forward basis, if we get the revenue requirement stuff set right now for the test year and we got your current fixed cost and your current variable costs covered properly, on a going-forward basis if you have new customers coming on at 500 gallons a day, the rates that are coming out of these spreadsheets we've been playing with will cover essentially all of the variable costs associated with purchased water from Pasco County. And that gives me great comfort in the sense that the company had been concerned that on a going-forward basis that they weren't going to be able to cover the cost of

their purchased water if we went through the kind of stuff the Commission normally does to calculate rates. But what I saw when I went through this exercise is that the company's marginal revenues and marginal costs are really pretty close on a going-forward basis such that the revenue stability is perhaps not nearly as jeopardized as what we were thinking about earlier.

MR. WHARTON: Can we think about that for a minute?

CHAIRMAN JABER: Yes.

BY MR. WHARTON:

Q Mr. Stallcup, before you performed those particular calculations, did you make the assumption as the Waterate model demonstrates that the imposition of these rates will cause certain users to move down in consumption into a lower block?

A Yes, I did. And this is a topic we had talked about while we were modifying the spreadsheet based on Late-Filed 7, but yes, I did.

Q And I guess just so the record is clear and the Commissioners understand in case they're no faster that I am, that issue is that these blocks are divided into zero to 8,000, 8 to 15 and above 15?

A Correct.

Q And if conservation rates are put into effect, some people will go under 15, and some people who were in the 8 to 15 will go into the zero to 8?

A Yes.

Q And you do agree that in utilizing the model it is appropriate to take that into account?

A Yes. And I incorporated that into the spreadsheet upon which these calculations are based. I'd also like to note that's also the same phenomena that occurs in Dr. Whitcomb's Waterate model.

CHAIRMAN JABER: Mr. Stallcup, so that I understand, how is that different from repression?

THE WITNESS: Actually, it's the effect that repression has on the distribution of water use. Large users of water don't use quite as much as they did before, so it tends to show a more compact distribution, if you will, of water consumption.

CHAIRMAN JABER: Okay.

BY MR. WHARTON:

Q Mr. Stallcup, do you agree that to the extent the Waterate model predicts usage block changes due to conservation efforts, as we've talked about, that it's appropriate for the Staff to use the Waterate model to make those kind of determinations and to take those kind of factors into account?

A Precisely which factors were those again? I'm sorry.

Q The fact that the model does show that people will tend to move into lower blocks as they conserve.

A Based on the work that I've done, both the typical

Staff spreadsheets that we would typically use to calculate rates and the calculations performed inside the Waterate model appear to do almost exactly the same thing, implement the idea of elasticity almost at exactly the same way. So I would say that I think Staff should continue to calculate rates as they always have done, but I would also agree, because there's virtually no difference, that the Waterate model could be used to sanity check what Staff does. And I think that would be perfectly satisfactory.

Q And you do think it's appropriate to use the model in that way based on the conversations that we have had about also using marginal costs as opposed to average costs?

A The Waterate model you mean?

Q Right.

A Yes. I think if you were to adjust the Waterate model to recognize the peculiarity in this case, if you will, that the avoided water cost is actually marginal cost rather than average, the Waterate model would be more applicable. Let me provide a caveat on this, however, though. As you know, I haven't had a lot of time to play around with the Waterate model, and so I can't say with 100 percent certainty that every aspect of its calculations would necessarily conform to normal Commission practice. Simply because I haven't gone through that exercise, I can't agree with you 100 percent.

Q But as we sit here today, you have not yet discovered

anything that makes you feel like you would not want to use the Waterate model to at least verify the rates that will ultimately be proposed by the Staff?

A I think it is an appropriate tool to be used for verification purposes, but I would point out that I still have some question on the way that the Waterate model implements the definition of usage blocks.

MR. WHARTON: One moment, Madam Chairman.

Q Mr. Stallcup, are you in agreement with Dr. Whitcomb's recommendations regarding the appropriate price elasticity to be used?

A Yes. I would defer to Dr. Whitcomb on the decision of what constitutes an appropriate price elasticity. He's done more work in that area than I have.

Q Okay. Let's talk for a moment about the base facility charge.

A Okay.

Q You said you'd been here in the proceeding listening; right?

A Yes.

Q Did you hear Mr. Willis give an explanation to the customers where he essentially said, the base facility charge is where we put the fixed cost, and the gallonage charge is where we put the variable cost?

A Yes.

Q And do you agree that the PSC has an MFR rule, Rule 25-30.437(6), that says: "The base facility charge incorporates fixed expenses of the utility and is a flat monthly charge; the usage charge incorporates variable utility expenses and is billed on a per 1,000 gallon basis?" And I'm not reading the entire rule, but you're generally familiar with that rule?

A Generally, yes.

Q Now, you would agree that the Commission's traditional approach for allocating revenue between the base facility charge and the gallonage charge would be as Mr. Willis described it that the fixed charges go into the base facility charge?

A I guess you could characterize it as traditionally, yes.

Q Do you agree that what the Staff has recommended is that the gallonage charge be intended to recover to some extent -- well, strike that.

Do you agree to the extent the gallonage rate is fixed at a level that will require Aloha to cover some of its fixed cost from gallons sold? Let me lay that foundation for that.

Isn't the Staff recommending that in this case some of Aloha's fixed costs be recovered in the gallonage charge?

A Yes.

Q And you would agree, would you not, that to the extent the gallonage rate is fixed at a level that will require Aloha to recover some of its fixed costs from gallons sold, then the number of gallons sold is a critical component as to whether Aloha will have the revenues to cover its fixed cost?

A I would agree that it is a component of its ability to cover its fixed cost. And where we're starting to go here now is the notion of revenue stability, I think.

What I've proposed in my testimony is that we perform what we normally call a conservation adjustment. And this adjustment shifts some of the costs associated with gallons away from fixed charges to gallons. It's cost shifting such that the base facility charge would be less than it otherwise would be. This causes gallonage charges to be larger than they otherwise would be. This, having more dollars being recovered in the gallons, gives us the wherewithal to construct a more effective conservation-oriented rate structure. It gives us larger percentage changes in price and the gallonage charges to make the result in rate structure more cost-effective.

The concern here is, I believe, that if too much of the fixed charges are recovered in the gallonage charges, the company may run at a risk of not being able to cover its fixed cost. And that's a valid concern. I would agree with that. A question of how much do you shift or not, you know, from fixed to gallonage charges is a question that, in my opinion, you

can't really answer until you know what the final revenue requirement numbers are.

The entire question of what constitutes an appropriate rate design is a question that really requires all the pieces to be provided to you before you can really come up with that final determination. I think what we're talking about right here is, we're already talking about how much is too much in allocating dollars to the gallonage charge as opposed to the base facility charge. And I don't think I can answer that at this point because I don't know what the final revenue requirements are at this point.

Q Are you aware of the fact that Aloha's actual fixed charges are at around 46 percent?

A I believe we've talked about that in deposition, yes.

Q And the Staff has recommended that of that amount only 25 percent be recovered in the base facility charge; is that correct?

A I believe that in the final analysis 25 percent of total costs would be in the base facility charge, 75 percent in the gallonage charge. I think that's a proper way to represent that number.

Q Well, and I'm sorry, Mr. Stallcup, I'm not sure I understand your answer. Aloha has a certain amount of fixed cost; correct?

A And currently, let's say it's 41 percent of total

costs.

Q Okay. Although I think 46 percent is the appropriate --

A Okay.

Q -- but whichever for the answer.

Staff is recommending that Aloha be allowed to recover about a quarter of those fixed costs, about 25 percent, in the base facility charge?

A In the rate design, fixed cost would be 25 percent of total cost. In the illustrative rate designs we've talked about in the late-filed exhibits, yes.

Q Well --

CHAIRMAN JABER: Mr. Wharton, we can take ten minutes, allow you all to think about that response. We'll take ten minutes.

MR. WHARTON: We probably need ten minutes after all of Mr. Stallcup's responses. I realize we don't have time to do that. Thank you.

(Brief recess.)

CHAIRMAN JABER: Let's reconvene the hearing. Mr. Wharton, you were cross-examining.

MR. WHARTON: Yes, I was. Thank you.

BY MR. WHARTON:

Q All right, Mr. Stallcup. Now, you have indicated that 25 percent of the fixed and variable costs -- let me try

that again.

You've indicated that 25 percent of the fixed and variable expenses are in the base facility charge in what Staff has recommended?

A No, I don't think that would be an accurate way to describe it. What I'm saying is that 25 percent of total revenues recovered by the company should be collected through the base facility charge.

Q Okay. Then is it fair to say that the base facility charge that the Staff proposes actually includes less than 25 percent of Aloha's fixed costs?

A No, I wouldn't say that either. I believe what you said earlier that if Aloha's total costs, 41 percent, would be allocated by a traditional accounting methodology to be roughly, let's say 40 percent, just to make the numbers easy --

Q Uh-huh.

A -- what I'm recommending is that for rate-setting purposes that percentage be 25 percent.

Q Okay. I'm going to get there eventually. I'm not blaming you at all. If 25 percent of Aloha's costs are built into the base facility charge and Aloha's fixed costs are 46 percent, then you would agree that not all of Aloha's fixed costs are in the base facility charge; correct?

A I would agree.

Q Okay. Do you agree that any shift of the fixed costs

from the base charge to the gallonage charge increases the risk -- the utility's risk of meeting its revenue requirement over the way that the concept is stated in the rule because by definition the gallonage charge is something that may not be achieved? The projected gallonage charges may fall short of projections.

A No, I don't know if I can necessarily agree with that. I think it's more a question of degree rather than anything else. And the reason I say that is that there are certain levels of water usage that are, for all practical purposes, nondiscretionary. And if rates are established such that revenues recovered through the base facility charge and that, if you will, nondiscretionary usage is sufficient to cover the company's fixed costs, then I really don't think that the financial risk issue really comes into play.

Q Well, for instance, if the gallonage sold in this case was a 20 percent differential between reality and the projection, then you would agree that would put Aloha at risk for being able to recoup those revenues necessary to cover their fixed expenses?

A I hadn't gone through that arithmetic. I don't know if I could agree with that or not.

Q Well -- but you would agree with my example that that quite possibly could be the result?

A I think if sales are less than what is projected,

yeah, there would be financial risk associated with that, but exactly what it is, I'm not sure.

Q Would you agree that the more that a utility's fixed charges are in the gallonage charge that the more that relative risk increases? Whatever percentage that risk is, the more that relative risk increases?

A Conceptually I can agree with that, yes.

Q How is it that you believe that what is proposed with regard to the base facility charge complies with the rule?

A It's my understanding that what the rule states is that the Commission is required to consider or -- I don't think that's exactly what I think it says -- should incorporate a consideration of what the company's actual fixed costs are. To the extent that the base facility charge allocation that I've discussed does incorporate the consideration of the company's fixed costs, I believe we are consistent.

Q You would agree that when I took your deposition that you couldn't think of any other cases where the Commission has approved a structure with regard to the gallonage charge and the base facility charge that is substantially similar to what's being recommended in this case?

A Not to my recollection having the base facility charge set at 25 percent. Not in my recollection, but then again, I've been only dealing in water cases for a little over a year, so my recollection doesn't go very deep.

Q You would also agree that this is a case where several of the parties seem to be disagreeing on what water usage will be in the future?

A Actually, I think two of the parties are very, very close as to what it's going to be in the future. Both Public Counsel and myself, we're only off by a couple of tenths of a percent in terms of growth. And I also think that the projections that I have created accommodate the concern of the company about the additional customers consuming 500 gallons a month. So I'm not really sure we're all disagreeing.

Q You would agree that the company is disagreeing with OPC and the Staff in that regard?

A It seems like every time we talk you-all disagree with me less and less.

Q Well, let me ask a question. You mentioned Mr. Stewart. You have no firm opinion on whether the average customer who connects to the system in the year 2002 will use an amount of water which is closer to the utility's projection of 500 gallons or closer to Mr. Stewart's projection of 265 gallons, do you?

A I'm sorry, say that again.

Q Yeah. You have no firm opinion on whether the average customer who connects to Aloha in the year 2002 will use an amount of water which is closer to the utility's projection of 500 gallons or closer to Mr. Stewart's projection

of 265 gallons?

A The average new customer, considering only the new customers? I haven't performed an analysis of that per se, no.

Q You would agree, Mr. Stallcup, that if water consumption is underprojected in this case, Aloha is going to have a problem paying its bills, and it's going to have to come back before the Commission and file a rate case?

A No, I no longer agree with that statement.

Q But you agreed with it at the time of the deposition?

A Yes. Since that time, I've gone through this analysis of the incremental 500-gallon-a-day customer.

Q You would defer to the advice of the Water Management District in terms of what kind of conservation programs are reasonable for Aloha and what kind of costs they should be allowed to recover in that regard?

A Yes. My understanding on that particular issue is that the Commission has a memorandum of understanding with the Water Management Districts. And the Water Management Districts are recognized as having the expertise to identify appropriate conservation programs for the utilities. So in that respect, yes.

Q It's your belief that to the extent the Water Management District requires or recommends the implementation of a certain conservation program, then Aloha should be allow to recover those costs?

A In general I can agree with that statement. However, for me to say that that would necessarily be true would be to preclude the judgment of my Commissioners, which is something I generally try not to do.

Q And it would be your recommendation in terms of such a conservation program as it would be implemented by Aloha that to the extent there was a reasonable cost involved, it should be recognized by the Commission?

A Yes. And let me tell you why because I think there is a particular aspect to the Aloha situation and conservation expenses that kind of gives us a unique opportunity to quote I think it was Dr. Kurien who testified on the first day. He indicated he was after a win-win situation. I think in this respect we have the opportunity for a win-win-win situation.

If the Water Management District were to identify programs that it thought were appropriate for this utility and if we suppose that these conservation programs cost less to implement for a typical customer than the cost of the purchased water that that customer would otherwise consume, what we're going to have is in my vernacular coming from an electric background is a cost-effective conservation program. The cost of implementing that program is less than the cost of the purchased water that will be conserved.

In that instance, what happens is that the ratepayers are served because their total revenue requirements will go

down because purchased water costs will go down by more than conservation expenses will go up. The company is served in that regard because they won't be facing the uncertainty associated with higher purchased water costs because it will be less purchased water cost necessary. And the Water Management Districts will be served because they will be able to encourage conservation and conserve the natural resource which is their charge. So I think the conservation programs in this particular regard gives us an opportunity to satisfy everybody involved.

Q So what you're recommending in that regard is that Aloha pay for the conservation programs up front and then hope the savings is realized to cover them?

A I don't know if I'd put it that way. I think the Water Management District can identify programs that will be effective, and I would trust them doing that.

Q Would you agree that for every gallon saved by a conservation program there is a resulting drop in revenue received?

A Yes, I would agree with that.

Q And do you disagree with the testimony of the Water Management District witness who indicated that she thought it would be appropriate for the Commission to allow Aloha the opportunity to recover its cost of conservation programs in its rates?

A I also agree with that. It's my view, and I think I indicated this in my summary, that I see no reason to adopt nontraditional rate recovery schemes as was contained, I think, in the company's original filing. I think conservation expenses should be recovered within revenue requirement calculations.

Q Do you believe, Mr. Stallcup, that you encourage utilities to engage in conservation programs if you set the rates up such that, well, you can go pay for the program and put it into place and then hope it pays for itself at some future date?

A I still wouldn't put it that way. The way that I see it is that if there are conservation programs that the Water Management District identifies as being appropriate and this Commission determines those conservation programs to be reasonable expenses for the company to incur, then those expenses can be included in the revenue requirement calculation, along with any resulting decrease in water sold such that the final rates coming out of those calculations will be adequate to cover the company's expenses and earn an appropriate rate of return after all conservation effects have been included.

Q But you would agree, Mr. Stallcup, the risk is on the utility? If the utility spends, for instance, $50,000 on conservation programs and those do not result in a reduction in

usage, the utility is going to eat that $50,000?

A No. Actually, I agree quite the contrary because the rates that would be set would be based on reduced sales. But if you're getting to turn around and sell the water, too, you're already covering rates to cover your $50,000. But if you get to sell additional water on top of it, to my way of thinking you're coming out ahead of the game.

Q Well, in that case there's going to be a commensurate rise in expenses and purchased water costs too; right?

A Yes. But if those conserved gallons are at the margin at the -- over and above what would otherwise be the case, those would tend to be in the higher usage blocks, and those are associated with higher prices.

Q And conversely, if that savings doesn't happen, all the purchased water is going to be at the marginal cost which is 2.35 right now; right?

A That's a constant cost of 2.35. And in those upper blocks at least in the rates that I proposed and the second and third blocks, the revenues associated with those blocks are greater than 2.35.

Q Yeah, but would you expect all the conservation to occur in the upper block?

A Because of what we talked about before where the bulk -- the shifting of usage from higher blocks to lower blocks occurs, that's where the revenue effect would be, but --

Q But you would agree --

A -- yes, conservation does occur in those higher blocks.

Q I apologize. You would agree that some of the savings is going to be by users in the lower two blocks?

A In the lower first block is the only one of concern, I think, but yes, there will be conservation in those blocks as well.

MR. WHARTON: One moment, Chairman Jaber.

Q Are you aware that in the latest draft of the consent order between Aloha and the Water Management District there is a recognition that the utility will not be implementing those conservation programs unless the Commission provides the utility rates to allow it to do so?

A I'll take your word for it. And if I may elaborate a little bit. I can appreciate the utility's concern in that regard too. It's my understanding based on the deposition questions that we've had prior to this hearing that the company is dealing with two governmental agencies. The Water Management District on one hand which wants them to incur costs to implement conservation programs and then us, the Commission, on the other hand who has the ability to allow them recovery of those costs. So I think one of the company's concerns is the coordination of the imposition with the costs with a right to recover them through higher rates that might incorporate those

costs. So in that sense, yeah, I will accept your --

CHAIRMAN JABER: Well, Mr. Stallcup, let me make sure, though, that I understand. The Water Management District does not say, make those improvements or go and buy water from Pasco County only if the PSC allows you cost recovery. In reality, if this Commission, for whatever reason, denies the request for a rate increase, that's independent of what the Water Management District may require the utility to do. Is that your understanding?

THE WITNESS: That is correct, and certainly that can transpire. I was simply paraphrasing what I understood the company's concern to be in this regard.

CHAIRMAN JABER: Okay. And correct me if I'm wrong, but the PSC -- neither the PSC Staff nor the PSC as an agency overall is party to that consent order.

THE WITNESS: That's my understanding, yes.

BY MR. WHARTON:

Q Let me ask you something, Mr. Stallcup. You had said that you had thought these conservation programs should be handled in -- with traditional Commission rate-setting methods, I believe?

A Yes, that's my opinion.

Q Well, isn't it true that normally if something costs $50,000 and you convince the Commission that it costs $50,000 and that it is necessary, that then the revenue requirement is

increased by $50,000? But that's not what you are proposing to do with the conservation programs, is it?

A No, I wouldn't agree with your arithmetic. And this is where you and I would differ in this. Let's suppose there's a conservation program out there that costs $50,000. One portion of operating expenses would go up by 50,000. That would be conservation expense. However, purchased water expense would also go down in this particular instance, so there would be some offsetting effect there as well.

Q If the conservation program costs $50,000, are you proposing to put any of that money into the revenue requirement, or do you believe that the costs for that will just be covered by the savings you've talked about?

A It's my opinion, not as an accountant now, I'm just talking, you know, from having worked at the Commission for some time, it's my opinion that any prudently incurred expense is eligible for cost recovery.

Q So does that indicate that to the extent that a conservation program costs $50,000, you believe that some part of that money should be put into the revenue requirement?

A Yes.

Q And to the extent that the Commission deemed that the costs were reasonable or were recommended or required by the Water Management District, do you believe that all that amount should be put into the revenue requirement?

A All of it should be an input to the calculation of final revenue requirements. Remember, the final calculation of revenue requirements also depends upon any reduction in purchased water costs and all the other things that may flow from the adoption of a conservation program. But with that small caveat, yes.

Q Would you agree, Mr. Stallcup, that the beneficial effects that the utility will realize from conservation programs that you've testified about will actually occur over time?

A Yes, I'd agree with that.

Q And you've done no analysis or calculation about what that horizon is before the costs would be fully recovered?

A That's correct.

Q But you agree the costs would have to be incurred before the conservation programs were put into place?

A Certainly some of them probably would be, yes. I'm not an expert in conservation programs, so I really can't say for sure.

MR. WHARTON: We have no more questions. Thank you.

CHAIRMAN JABER: Thank you.

MR. WHARTON: Thank you, Mr. Stallcup.

CHAIRMAN JABER: Commissioners.

COMMISSIONER PALECKI: Yes, I just have one question, Mr. Stallcup. If this Commission were to dramatically increase

the impact fees that are charged on new construction in the company's tariffs, would that increase in revenues allow the Commission to lower the rate to the lowest block of users, those users that truly conserve so that those customers that conserve the most are rewarded?

THE WITNESS: Yes. I believe the rate design could be designed such that with an increase in revenues coming from the impact fee source, that the rates in the lower block could be held down to be less than what they otherwise would be, and so that shift could be reflected in the rates. Yes, that is possible.

COMMISSIONER PALECKI: Thank you.

CHAIRMAN JABER: All right. Staff.

MS. ESPINOZA: Just a few questions on redirect.

REDIRECT EXAMINATION

BY MS. ESPINOZA:

Q Mr. Stallcup, referring to Exhibit FJL-5 of your testimony.

A Yes.

Q You would agree, would you not, that this is an exhibit that indicates drought classifications?

A Yes.

Q Okay. And the results of this exhibit are what you were referring to on Page 11 of your testimony when you were previously directed --

A Yes.

Q -- when you conclude that the weather periods are comparable; correct?

A Oh, yes, indeed.

Q Okay. And you would agree that drought classifications are different from moisture deficit variables?

A Yes.

Q To the extent that specific price elasticities have been identified by Dr. Whitcomb, would you agree that specific price elasticities be used in the repression calculation?

A Yes. And the reason I say that is that in the spreadsheet approach that Staff typically uses in calculating the rate designs and the repression effects, there's an allowance for an explicit entry of price elasticity. So in that respect, I would encourage that a specific price elasticity be used for Staff's purposes in establishing the final rates.

Q And shifting now to the base facility charge issue. Wouldn't you agree that it is now common Commission practice to shift cost recovery allocation from the base facility charge to the gallonage charge?

A Yes, I would.

Q And this is in large part due to this agency's memorandum of understanding with the Water Management Districts in which we seek to design a more conservation-oriented rate

structure whenever possible?

A Yes, that's my understanding.

Q And the Commission has recognized that this shift, although it increases revenue and stability to a certain degree, is an appropriate trade-off when compared to the conservation benefit received; correct?

A Yes. There is those competing desirable aspects they're searching for in a rate design. One being rate stability -- revenue stability, and the other one being an effective conservation rate design.

Q Now, leaving revenue stability concerns aside for a moment. You would agree that shifting the base facility percent downward and thereby increasing the gallonage charge, that in doing this it should result in greater water conservation through rates?

A Yes.

Q And this result is beneficial in terms of promoting the preservation of water with the Management District?

A Yes.

Q And you testified that you believe it is appropriate to incorporate watering restrictions into your model; correct?

A I'm sorry, say that again.

Q You testified as a result of this exhibit that we entered prior to your testimony that that exhibit came about because you believe it is appropriate to incorporate watering

restrictions into your model; correct?

A Yes.

Q And that is, in fact, what you've done in your revised forecast; correct?

A Correct.

Q And this was done in response to concerns that were raised by the utility at your depositions; correct?

A Yes, that is correct.

Q And these depositions were taken after your testimony was filed?

A Correct.

Q Okay. Would you agree that with the decrease in revenues received resulting from conservation that the utility also has a decrease in purchased water expense?

A Yes.

Q And to be clear, when you were asked questions regarding this draft consent order between the Water Management District and the utility, you have not seen a copy of this draft consent order?

A Not to my recollection, I haven't.

MS. ESPINOZA: That's all we have. Thank you.

CHAIRMAN JABER: Thank you.

Thank you, Mr. Stallcup.

(Witness excused.)

CHAIRMAN JABER: Exhibits, Staff. Exhibit 21 shall

be admitted into the record without objection, and 22 is admitted into the record without objection.

MS. ESPINOZA: Thank you.

(Exhibits 21 and 22 admitted into the record.)

(Transcript continues in sequence with Volume 9.)

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STATE OF FLORIDA)
: CERTIFICATE OF REPORTER
COUNTY OF LEON)

I, TRICIA DeMARTE, Official Commission Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorneys or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 25th DAY OF JANUARY, 2002.

Tricia DeMarte

TRICIA DeMARTE
FPSC Official Commission Reporter
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