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.

_____/

ELECTRONIC VERSIONS OF THIS TRANSCRIPT ARE A CONVENIENCE COPY ONLY AND ARE NOT THE OFFICIAL TRANSCRIPT OF THE HEARING, THE .PDF VERSION INCLUDES PREFILED TESTIMONY.

VOLUME 6

Pages 694 through 862

PROCEEDINGS:	HEARING
BEFORE:	CHAIRMAN LILA A. JABER COMMISSIONER BRAULIO L. BAEZ COMMISSIONER MICHAEL A. PALECKI
DATE:	Thursday, January 10, 2002
TIME:	Commenced at 8:38 a.m.
PLACE:	Clarion Hotel 5316 U. S. Highway 19 North New Port Richey, Florida
REPORTED BY:	LINDA BOLES, RPR Official FPSC Reporter (850) 413-6734
APPEARANCES:	(As heretofore noted.)

DOCUMENT NUMBER-DATE
00922 JAN 25 02
FPSC-COMMISSION CLERK

I N D E X

WITNESSES

EXHIBITS

NUMBER:		ID.	ADMTD.
9	Appendix II, DD-1 and DD-2	700	763
10	TLB-1 through TLB-10	765	861

PROCEEDINGS

(Transcript follows in sequence from Volume 5.)

MR. BURGESS: The next witness we'd call is Donna DeRonne.

COMMISSIONER JABER: Whenever you're ready, Mr. Burgess.

MR. BURGESS: Thank you.

DONNA DERONNE

was called as a witness on behalf of the Citizens of the State of Florida and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. BURGESS:

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

A My name is Donna DeRonne, and my business address is 15728 Farmington Road, Livonia, Michigan 48154.

Q Have you prefiled testimony in this document?

A Yes, I have.

Q Do you have any changes that you would make to that prefiled testimony?

A I have a few minor corrections.

Q Would you please note them?

A Yes. The first one appears on page three, line 15. I refer to Hugh Larkin, Jr., and Steven Biddy. That reference should be to Stephen Stewart, and I do notice I spelled Stephen

with a V as opposed to a P-H.

The next change is at page 11, line 20. I reference Schedule C and that should have been reference to Schedule B.

COMMISSIONER JABER: B as in boy?

THE WITNESS: Boy. And the next change is of the same nature on page 14, line three. I reference Schedule C and that should have also been Schedule B as in boy.

On then on page 31, line nine, I reference Schedule C-3 and that should have been Schedule C-2. And the same thing on line 22 of that page. The reference to Schedule C-3 should have also been to Schedule C-2. Oh, and one, one final reference change. Page 33, line 20, I reference Staff's audit Disclosure Number 5 and it should have been Disclosure Number 4. And that's all the changes I have.

BY MR. BURGESS:

Q With those changes, if the questions posed in your prefiled testimony were asked today, would your answers be the same?

A Yes, they would.

MR. BURGESS: Commissioner, we'd ask that Ms. DeRonne's testimony be, prefiled testimony be entered into the record as though read.

COMMISSIONER JABER: Prefiled Direct Testimony of Donna DeRonne shall be inserted into the record as though read.

MR. BURGESS: Thank you.

BY MR. BURGESS:

Q And did you attach exhibits to your testimony that you prefiled?

A Yes, I did.

Q Would you identify those, please? You can just briefly describe what they are. There's no --

A Yes. The first one is Exhibit 1, which provides my calculations of the revenue requirement calculations. And then Exhibit 2 provides a calculation of the differential associated with exceeding the CUP limits.

Q And those are the exhibits?

A Yes, they are.

MR. BURGESS: Chairman Jaber, may we get an exhibit number to identify Ms. DeRonne's exhibits?

COMMISSIONER JABER: Yeah. And just a minute. On page 33 of the prehearing order, those exhibits listed there, are they all encompassed in DD-1 and DD-2, Mr. Burgess?

MR. BURGESS: I'm sorry. I'm having a little trouble. I've got a different page number.

CHAIRMAN JABER: Okay. Where the exhibits are listed under your witness.

MR. BURGESS: I, I see. May I ask the witness to answer that question?

COMMISSIONER JABER: All right.

THE WITNESS: Yes. Exhibit DD-1 would be that

Exhibit 1 I referenced. I don't see the second exhibit referenced on this.

COMMISSIONER JABER: All right. But in any case the only exhibits you are trying to admit into evidence attached to your prefiled testimony will be your Appendix 2, the qualifications, DD-1 and DD-2.

THE WITNESS: Correct.

COMMISSIONER JABER: All right. Let's make that Composite Exhibit Number 9. And, Mr. Burgess, it'll include her resume.

MR. BURGESS: Thank you, Chairman.

COMMISSIONER JABER: Or whatever Appendix 2 is.

MR. BURGESS: Thank you.

COMMISSIONER JABER: Composite Exhibit 9 is Appendix 2, DD-1 and DD-2.

(Exhibit 9 marked for identification.)

DIRECT TESTIMONY OF DONNA DERONNE

ON BEHALF OF THE CITIZENS OF FLORIDA

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

ALOHA UTILITIES, INC

DOCKET NO. 010503-WU

I. INTRODUCTION

Q. WHAT IS YOUR NAME, OCCUPATION AND BUSINESS ADDRESS?

A. My name is Donna DeRonne. I am a Certified Public Accountant licensed in the State of Michigan and a senior regulatory consultant at the firm of Larkin & Associates, PLLC, Certified Public Accountants, with offices at 15728 Farmington Road, Livonia, Michigan 48154.

Q. PLEASE DESCRIBE THE FIRM LARKIN & ASSOCIATES, PLLC.

A. Larkin & Associates, PLLC, is a Certified Public Accounting and Regulatory Consulting Firm. The firm performs independent regulatory consulting primarily for public service/utility commission staffs and consumer interest groups (public counsels, public advocates, consumer counsels, attorneys general, etc.). Larkin & Associates, PLLC, has extensive experience in the utility regulatory field as expert witnesses in over 300 regulatory proceedings, including numerous water and wastewater, gas, electric and telephone utilities.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION?

A. Yes. I have testified before the Florida Public Service Commission on two prior occasions. I have also testified before several other state regulatory commissions.

Q. HAVE YOU PREPARED AN EXHIBIT DESCRIBING YOUR QUALIFICATIONS AND EXPERIENCE?

A. Yes. I have attached Appendix I, which is a summary of my regulatory experience and qualifications.

Q. ON WHOSE BEHALF ARE YOU APPEARING?

A. Larkin & Associates, PLLC, was retained by the Florida Office of Public Counsel (OPC) to review the rate increase request by Aloha Utilities, Inc. for its Seven Springs Water Division. Accordingly, I am appearing on behalf of the Citizens of Florida (Citizens).

Q. ARE ANY ADDITIONAL WITNESSES APPEARING ON BEHALF OF THE FLORIDA OFFICE OF PUBLIC COUNSEL IN THIS CASE?

A. Yes. Hugh Larkin, Jr., also of Larkin & Associates, PLLC, is presenting testimony in this case. Additionally, OPC Witnesses Ted Biddy and Steven Stewart are also presenting testimony.

Q. HOW WILL YOU TESTIMONY BE ORGANIZED?

A. I address, in order, the following: Overall Financial Summary, Operating Income, Rate Base, Rate of Return and Rate Design.

II. OVERALL FINANCIAL SUMMARY

Q. HAVE YOU PREPARED AN EXHIBIT IN SUPPORT OF YOUR TESTIMONY?

A. Yes. I have prepared Exhibit__(DD-1), consisting of Schedules A, B, C and D, with supporting schedules B-1 through B-8 and C-1 through C-2. The schedules presented in Exhibit__(DD-1) are also consecutively numbered at the bottom of each page.

Q. WHAT DOES SCHEDULE A, ENTITLED "CALCULATION OF REVENUE REQUIREMENT" SHOW?

A. Schedule A presents the calculation of revenue requirement, at this time, giving effect to all the adjustments I am recommending in this testimony, along with the impacts of the recommendations made by OPC witnesses Hugh Larkin, Jr. and Steven Biddy Stephen Stewart. The adjustments presented on Schedule A which impact net operating income can be found on Schedule B. Schedules B-1 through B-8 present the detailed calculations supporting the adjustments to net operating income contained on Schedule B. The OPC adjustments to rate base are listed on Schedule C. Schedule C-1 through C-2 provide supporting calculations for the adjustments to rate base presented on Schedule C. Finally, the OPC's recommended rate of return is presented on Schedule D.

As shown in the revenue increase column, Column (5), on Schedule A, the OPC's recommended adjustments in this case result in a revenue increase for Seven Springs water division of $635,169. This is considerably lower than the $1,077,337 increase requested by the Company.

Q. BASED ON THE CALCULATIONS PRESENTED ON SCHEDULE A, IS THE OPC RECOMMENDING A RATE INCREASE FOR THE SEVEN SPRINGS WATER DIVISION OF $635,169?

A. No, it is not. While the calculations presented in Exhibit__(DD-1) indicate a revenue increase of $635,169, the OPC recommends that Seven Springs water division be allowed no increase in rates at this time. The OPC's overall position that no increase in rates be allowed, along with the justification for that position, is discussed in the testimony of OPC Witness Hugh Larkin, Jr. Schedule A of Exhibit__(DD-1) presents what the OPC's recommended increase in revenues would be, if an increase was warranted in this case. However, as discussed by Mr. Larkin, the OPC strongly feels that no increase in rates is appropriate at this time.

Additionally, there are several late filed exhibits outstanding in areas that the OPC is still investigating. These may impact the revenue calculation I have included on Schedule A.

III. OPERATING INCOME

Correction of Errors in MFRs

Q. ARE THERE ANY ERRORS CONTAINED IN THE COMPANY'S FILING THAT NEED TO BE CORRECTED?

A. Yes. There are numerous errors in the Company's filing that need to be corrected. The Company has acknowledged several of the errors in response to OPC interrogatories filed in this case. Errors need to be corrected for the following items:

- Interest income allocated to Seven Springs Water Division;
- Reflect residential vacation bill revenue;
- Correction to the allocation of bad debt expense;
- Correction to the allocation of pension expense;
- Correction to the allocation of an employee's wages;
- Correction to Contributions in Aid of Construction Additions; and
- Correction of the accumulated amortization of contributed taxes.

Additionally, the Florida Public Service Commission Division of Regulatory Oversight has identified several necessary revisions to the Company's filing as it pertains to the historical test year ended December 31, 2000, in its Audit Report, AFA Control #01-207-2-1, dated October 10, 2001. The audit reports addressed the historic test period; however, several of the problems identified also impact the projected test year calculations in the Company's filing. During the OPC's depositions of Company witnesses, the Company indicated that it did not anticipate, at that time, protesting any of the Division of Regulatory Oversight's findings. As of

the date this testimony was prepared, I have not received a copy of the Company's response to the audit report.

Q. WOULD YOU PLEASE DISCUSS THE FIRST ERROR YOU IDENTIFIED PERTAINING TO INTEREST INCOME?

A. During the historic test year, the Company allocated $10,139 of interest income to the Seven Springs water division. The amount was increased by 1.04688% for customer growth in the filing, resulting in adjusted interest income of $10,614. The interest income for the Company as a whole was $46,114 in 2000. In response to OPC Interrogatory No. 53, the Company indicated that the amount included in the filing was incorrectly allocated. The response indicated that the projected amount for 2001 for the Seven Springs water division should have been $18,104, not the $10,614 contained in the filing. This results in an increase in interest income of $7,490, which I reflected on Schedule B, line 2.

Q. PLEASE DISCUSS THE NEXT ERROR IN THE FILING.

A. On Schedule E-13, page 1 of the Company's MFRs, it failed to extend the vacation bills in calculating the projected test year revenues. The Company acknowledged this error in response to OPC Interrogatory No. 45, stating that: "The 1141 vacation bills should be extended at $3.66 to result in additional test year revenue of $4,176." This additional revenue for residential vacation bills of $4,176 is reflected on Schedule B, line 3.

Q. PLEASE DISCUSS THE CORRECTION TO CONTRIBUTIONS IN AID OF CONSTRUCTION.

A. On MFR Schedule G-12, the Company identified $99,331 of contributed property additions in April 2001. Schedule A-12(A) of the filing, in which the Company calculates the thirteen-month average amount of Contributions in Aid of Construction, only included an increase of $59,990 for contributed property for April 2001. In response to OPC Interrogatory 3, the Company agreed that the monthly balances on Schedule A-12(A) of the filing for April through December 2001 should be increased by $39,341 ($99,331 - $59,990). Since rate base is calculated on a thirteen-month average basis, the correction result in additional Contributions in Aid of Construction (which is a reduction to rate base) of $27,236 ($39,341 x 9/13ths). This correction is reflected on Schedule C, line 6.

Q. DO YOU PLAN TO ADDRESS THE REMAINING ERRORS?

A. Yes. The remaining errors will be discussed in subsequent sections of this testimony, specifically under the headings bad debt expense, pension expense, salaries and wages and accumulated amortization of contributed taxes.

Items that Should Have Been Capitalized

Q. PLEASE DISCUSS YOUR ADJUSTMENT ON SCHEDULE B-2 FOR ITEMS THAT SHOULD HAVE BEEN CAPITALIZED.

A. The Commission's Division of Regulatory Oversight identified four different items in

its audit report that were recorded as expenses on the Company's books during 2000 that should have been capitalized. The items consisted of a well head check valve, pump, pump motor and office filing cabinets. Each of these items, totaling $11,552, were recorded in expense Account 620 during the historic test year. Schedule B-2 calculates the impact on the projected test year that results from transferring the items from expense to plant in service. As shown on the schedule, plant in service should be increased by $11,552, accumulated depreciation should be increased by $613, depreciation expense should be increased by $613 and operation and maintenance expense should be decreased by $12,396. These adjustments are carried forward to summary Schedules B and C.

Q. SINCE THESE ITEMS WERE INCORRECTLY RECORDED AS EXPENSE IN 2000, WHY DO THEY IMPACT THE PROJECTED TEST YEAR EXPENSES?

A. In calculating the projected test year expense in Account 620, the Company essentially utilized the historic test year expense in this account and increased it by its proposed growth and inflation factors. Consequently, any items which overstate the expenses in Account 620 in the historic test year would also overstate the projected test year level. On Schedule B-2, I applied the Company's growth and inflation factors to the $11,552 of expenses that should have been capitalized to determine the appropriate reduction to the projected test year expense level. This results in a reduction to projected test year expense of $12,396.

Bad Debt Expense

Q. WHAT AMOUNT IS INCLUDED IN THE COMPANY'S FILING FOR BAD DEBT EXPENSE?

A. The filing includes bad debt expense of $3,229. The amount is based on the historic test year level. In response to OPC Interrogatory 1, the Company indicated that the amount included in the filing is incorrect. The amounts for Aloha Gardens sewer and Seven Springs water were switched in the allocation process, resulting in Seven Springs water bad debt expense being based on the amount for Aloha Gardens sewer division. According to the Company's response to the interrogatory, the bad debt expense is understated by $2,316 due to the error.

Q. HAVE YOU INCREASED BAD DEBT EXPENSE FOR SEVEN SPRINGS WATER DIVISION BY $2,316 TO CORRECT THE ALLOCATION ERROR?

A. No. I agree that the amount included in the filing should be revised; however, I do not agree with the methodology used by the Company in determining the amount of bad debt expense that should be allocated to Seven Springs water division.

Q. HOW DID THE COMPANY DETERMINE THE AMOUNT OF BAD DEBT EXPENSE THAT SHOULD BE ALLOCATED TO SEVEN SPRINGS WATER DIVISION?

A. In November 2000, the Company prepared a listing off all closed accounts for which no payment had been received from customers in six months. This resulted in

$11,090 of accounts that were written-off to bad debt expense for Seven Springs water and sewer operations in 2000. The Company's response to OPC Interrogatory 1 indicates that this amount should have been allocated 50/50 to Seven Springs water and sewer divisions. This is how the Company determined its corrected bad debt expense for Seven Springs water of $5,545, which is $2,316 higher than the amount included in the filing.

Q. IS THE 50/50 SPLIT OF THE BAD DEBT EXPENSE BETWEEN THE WATER AND SEWER OPERATIONS APPROPRIATE?

A. No, it is not. The most appropriate method for assigning the costs would be to base it on the amount that is specific to each division. However, during depositions, Company's accounting witness, Bob Nixon, indicated that he did not think the Company's accounting system had the capability of determining which of the Seven Springs accounts that were written-off were specific to water versus the sewer operations. Consequently, the 50/50 split was used.

A more appropriate method for allocating the bad debt expense between the water and sewer operations, as the amount specific to each division is apparently not available, would be to allocate the amount based on the percentage of revenue applicable to each division. On an annual basis, Seven Springs sewer division records significantly more revenue than the water division. Since it is previously recorded revenues that are being written-off, it is logical to assume that the percentage of revenues applicable

to each division would be a more appropriate allocation factor to use in assigning bad debt expense.

Q. WHAT PERCENTAGE OF THE TOTAL SEVEN SPRINGS REVENUES ARE APPLICABLE TO THE WATER DIVISION?

A. Based on the amount of revenues for the Seven Springs water and sewer divisions contained in the Company's annual report to the Florida Public Service Commission for the year ended December 31, 2000, 40.27% of Seven Springs total water and sewer revenues were applicable to the Seven Springs water division. The calculation of this percentage is presented on Exhibit__(DD-1), Schedule B-3.

Q. WHAT ADJUSTMENT SHOULD BE MADE TO THE BAD DEBT EXPENSE CONTAINED IN THE COMPANY'S FILING?

A. As shown on Schedule B-3, bad debt expense should be increased by $1,237. This corrects for the error in the Company's filing in which it utilized the amount allocated to Aloha Garden sewer operations, and it includes the more appropriate 40.27% allocation factor for Seven Springs water.

Pension Expense

Q. PLEASE DISCUSS THE ADJUSTMENT ON SCHEDULE ~~C~~ B THAT INCREASES PENSION EXPENSE BY $40,509.

A. During the first six months of 2001, the Company recorded as a cost of Seven Springs

water the amount that should have been allocated to Aloha Gardens sewer, and vice-versa. This resulted in the amount of pension expense contained in the filing being significantly understated. Additionally, the amount included in the filing was based on estimated pension amounts, and the Company has since received the 2001 updated pension expense amounts from its pension plan administrator. According to the Company's response to OPC Interrogatory 12, employee benefits expense should be increased by $40,509 to correct the allocation to Seven Springs water and to reflect the more recent pension expense level provided by the pension plan administrator. This correction and update, which I have reflected on Schedule C, results in a $40,509 increase in employee benefit expense.

Q. SHOULD ANY ADDITIONAL ADJUSTMENTS TO PENSION EXPENSE BE MADE?

A. According to the Company's response to OPC Interrogatory 12, Seven Springs water division should have been allocated 44.83% of the pension expense. The revised pension expense includes the impact of the 44.83% allocation. This is considerably higher than the 37.5% general allocation factor used in the filing. During the Deposition of Company accounting witness Bob Nixon, the OPC requested a late filed exhibit to explain and show how the 44.83% allocation factor was determined. The OPC also requested a copy of the information provided by the pension plan administrators resulting in the higher pension expense amount. As of the time this testimony was prepared, I have not received the late filed exhibits. Consequently,

additional adjustments to pension expense may be appropriate.

Salaries & Wages - Open Positions

Q. PLEASE DISCUSS THE COMPANY'S ADJUSTMENT FOR ADDITIONAL EMPLOYEE POSITIONS.

A. In addition to its actual employee compliment as of June 30, 2001, the Company's filing includes ten additional employees. The adjustment for the ten additional employees results in an increase in salary and wage expense, on a Seven Springs water division basis, of $107,850. This is a 30% increase above the projected annualized level of salary and wage expense for employees existing as of June 30, 2001. Of the ten additional employees, five are to fill new positions and five are to fill open positions. The new positions are for a clerk, fleet maintenance employee, electronic technician, utility director and an additional utility worker. The open positions are for a utility I worker, utility II worker, labor supervisor, and two plant trainees.

Q. HAS THE COMPANY FILLED ANY OF THE OPEN OR NEW POSITIONS YET?

A. No. According to the response to OPC Interrogatory 25, all ten positions remain open. In fact, according to the response to OPC Interrogatory 27, three additional positions have become vacant. Consequently, the Company's filing includes payroll costs associated with thirteen more employees than it actually has on-hand.

Q. ARE YOU RECOMMENDING ANY ADJUSTMENTS RELATING TO THE ADDITIONAL EMPLOYEES ADDED BY THE COMPANY?

A. Yes. As shown on Schedule ~~C~~ B, I recommend that the entire $107,850 added by the Company for the ten additional employees be removed. These positions have not been filed to date, and the employee compliment has declined even further. Considering the Company's high historic employee turnover rates and problems retaining employees, along with the further reduction of employees, it is not realistic to assume that the Company will retain thirteen additional employees in the near future, or that 100% of the Company's proposed employee positions will both be filled and remain filled. The Company would need to increase its compliment of employees who are directly charged or allocated to Seven Springs water by 37% above the current level. Ratepayers should not be asked to pay costs associated with employees that do not exist. By allowing the Company's annualized salary and wage adjustment, after a correction discussed later in this testimony, I am still reflecting the costs for three more employees than the Company currently has.

Q. DOES THE REMOVAL OF THE COMPANY'S ADJUSTMENT FOR ADDITIONAL EMPLOYEES IMPACT ANY OTHER ADJUSTMENTS CONTAINED IN THE FILING?

A. Yes. On MFR Schedule B-3(A), the Company increased employee benefit expense by $13,255 for benefits associated with the proposed new employees. This amount is also being removed on Schedule B in Exhibit__(DD-1).

Correction to Salary and Wage Annualization

Q. PLEASE DISCUSS THE CORRECTION THAT NEEDS TO BE MADE TO THE COMPANY'S SALARY AND WAGE ANNUALIZATION ADJUSTMENT.

A. The Company calculated its salary and wage annualization adjustment on MFR Schedule G-8. The purpose of the adjustment on MFR Schedule G-8 is to reflect the annualized salary and wages of the actual employees based on the salaries effective as of July 9, 2001. On line 42 of the Schedule, the Company calculated the annualized salary of Charles Painter, who is the Utility Operations Supervisor. According to the schedule, Mr. Painter's salary should have been allocated to Seven Springs water division at a rate of 37.5%. However, the calculation presented on line 42 of the schedule results in 100% of Mr. Painter's annualized salary being allocated to Seven Springs water.

Q. WHAT ADJUSTMENT IS NECESSARY TO CORRECT THIS APPARENT ERROR?

A. The Company's annualized salary and wage expense for Seven Springs water division should be reduced by $21,268. The calculation of the adjustment is presented on Schedule B-4.

Officers Salary and Wages

Q. DID YOU REVIEW THE COMPANY'S PROPOSED OFFICER SALARY AND WAGE EXPENSE TO ENSURE THAT IT IS CONSISTENT WITH PAST

COMMISSION DECISIONS?

A. Yes. Based on my review, an adjustment to the Company's proposed projected test year officers salary and wage expense needs to be made.

Q. PLEASE EXPLAIN.

A. In Order No. PSC-01-0326-FOF-SU, the Commission limited the vice-president's salary to 20% of the president's salary. On MFR Schedule G-7, page 1, the Company indicated that it was basing the projected expense in Account 603 - Salaries and Wages - Officers on the amount allowed in the last Order. The filing reflects an expense level of $66,707. OPC Interrogatory 23 asked the Company to provide a listing of the officers whose payroll expense is included in Account 603, along with the officer's actual salaries for 2000 and 2001. Based on the response, the expense level in Account 603 in the filing consists of the 2000 salary costs associated with the president, the vice-president at 20% of the president's salary level, and either Connie Kurish or the controller's salary, depending on which portion of the response is relied upon. Connie Kurish and the controller's (Marion Vinyard) salaries are already included in the Company's salary and wage annualization adjustment. Consequently, the amount of salary and wage expense for officers includes a double count for certain employees who are already reflected in the payroll annualization adjustment.

Q. WHAT ADJUSTMENT SHOULD BE MADE TO REMOVE THE DOUBLE COUNTING OF PAYROLL COSTS FOR CERTAIN EMPLOYEES?

A. As previously indicated, the salaries and wages for the officers other than the president and vice-president are already reflected in the salary and wage annualization adjustment. On Schedule B-5, I calculated a revised officers salary and wage expense based on the current salary of the president and 20% of the president's salary for the vice-president. This resulted in a total officers salary and wage expense of $154,502. I then applied the Seven Springs water division allocation factor of 37.5%, resulting in adjusted officers salary and wages expense of $57,938, which is $8,769 ($66,707 - $57,938) less than the amount contained in the Company's filing.

Purchase Water Expense

Q. THE PROJECTED PURCHASE WATER EXPENSE IS THE MAIN DRIVER OF THE RATE INCREASE REFLECTED IN THIS CASE. IS THE OPC RECOMMENDING ANY REVISIONS TO THE PROJECTED LEVEL OF PURCHASE WATER EXPENSE?

A. Yes. OPC Witnesses Steven Stewart and Ted Biddy both discuss the Company's projections of customer water consumption in this case. Both are recommending significant reductions to the Company's projected water to be sold in 2001. While each of these OPC witnesses use different methodologies in projecting the amount of gallons to be sold to customers in 2001, they come to a similar conclusion and similar levels of projected gallons to be sold. Any reductions to the projected level of water sold likewise impacts the amount of water that is necessary to be purchased from Pasco County.

Q. HAVE YOU CALCULATED THE IMPACT OF THE OPC'S RECOMMENDED REDUCTION IN PROJECTED WATER TO BE SOLD IN THE TEST YEAR ON PURCHASE WATER EXPENSE?

A. Yes. As previously mentioned, both OPC witness Ted Biddy and OPC witness Steven Stewart recommend significant reductions to the projected number of gallons to be sold in the projected test year. As the number of gallons projected to be sold is slightly higher in Mr. Stewart's analysis, I flowed through the impact of his recommendation in order to be conservative in determining the necessary reduction to purchase water expense. The calculation is presented in Exhibit__(DD-1), Schedule B-6. The calculation follows the same methodology used by the Company on its Schedule G-9 of the MFRs in determining the projected purchase water expense for purchases from Pasco County. For illustrative purposes, the schedule also includes a column (column 3) showing the impact of OPC witness Ted Biddy's recommended reduction to purchase water expense.

Q. PLEASE DESCRIBE YOUR CALCULATION.

A. OPC Witness Steven Stewart determined that the projected 2001 test year level of water to be sold to customers should be 998,492,175 gallons. In translating the projected water to be sold to total water required with treatment and system losses, the Company used a factor of 10% for unaccounted for water. On Schedule B-6, I used a factor of 9.20% for unaccounted for water. This resulted in the OPC's recommended water required with treatment and system losses of 1,099,660,986. I then subtracted

the water available under the Consumptive Use Permits in determining the amount of water required to be purchased from Pasco County, prior to the Company's recommended repression adjustment. After applying the Company's proposed repression adjustment of 5% to the total estimated 2001 water required, consistent with the methodology employed by the Company, the resulting amount of water to be purchased from Pasco County is 300,077,936 gallons. On Schedule B-6, I then applied the current rate charged from Pasco County of $2.35 per thousand gallons, resulting in projected cost of water to be purchased from Pasco County of $705,183. The Company used the previous rate of $2.20 per thousand gallons in its calculations. Schedule B-6 updates this amount for the actual current rate of $2.35 per thousand gallons. As shown on Schedule B-6, purchase water expense should be reduced by $222,910.

Q. WHY DID YOU USE A 9.20% UNACCOUNTED FOR WATER FACTOR IN YOUR CALCULATION?

A. The Company's calculations assumed a 10% unaccounted for water rate. However, the actual percentage of unaccounted for water, per Company MFR Schedule F-1 was 9.20%. According to the response to OPC Interrogatory 50, the actual accounted for water percentage for the first seven months of 2001 was 8%. The Company would have to realize a considerably higher unaccounted for rate for the last five months of 2001 to bring the average 2001 rate up to 10%. Consequently, I see no reason to, at a minimum, reflect the actual historic test year unaccounted for level of 9.20% in

calculating the amount of water needed to be purchased from Pasco County.

Q. DOES THE OPC'S RECOMMENDED REDUCTIONS TO THE LEVEL OF PROJECTED WATER TO BE SOLD IN THE TEST YEAR IMPACT OTHER AMOUNTS CONTAINED IN THE COMPANY'S FILING?

A. Yes. Any reductions to the projected level of customer consumption will likewise impact the projected level of revenues to be collected from customers during the test year.

Q. HAVE YOU CALCULATED THE IMPACT ON PROJECTED TEST YEAR REVENUES?

A. Yes. On MFR Schedule E-13, the Company estimated its projection factor for application to test year consumption sales by dividing its estimated 2001 gallons to be sold by the gallons actually sold in 2000. This resulted in the Company's estimated projection factor of 1.08473. On Schedule B-1, I recalculated the projection factor by dividing the OPC's recommended 2001 gallons to be sold by the actual 2000 historic test year gallons sold. This results in a revised projection factor of 0.98012. Using the same methodology employed by the Company, I then determined the projected test year consumption that the gallons sold rate of $1.32 is applied to. As shown on Schedule B-1, projected test year revenues should be reduced by $99,787 to reflect the impacts of the reduced consumption level recommended by the OPC.

Q. DO YOU HAVE ADDITIONAL CONCERNS REGARDING THE LEVEL OF PURCHASE WATER EXPENSE REFLECTED IN THE CALCULATION OF BASE RATES?

A. Yes. In response to Staff Interrogatory 25, as updated November 1, 2001, the Company provided the number of gallons pumped and the number of gallons purchased from Pasco County for the first nine months of 2001. Based on the response, the Company only purchased 103,056,000 gallons from Pasco County for the first nine months of 2001. In fact, the response shows that no purchases have been made from Pasco County since March 2001. In other words, no purchases were made from Pasco County for the months of April through September of 2001. The Company's filing includes the expense associated with purchasing 421,860,000 gallons from Pasco County on an annual basis. Applying a 75% factor to this amount would result in a three-fourths year (9 months) purchase level of 316,395,000, which is considerably larger than the amount actually purchased in the first nine months of 2001 of 103,056,000 gallons. The amount to be purchased from Pasco County in the Company's filing was assumed to be the total gallon requirements less the amounts allowed to be withdrawn by the Company under its Consumptive Use Permit.

Q. HAS THE COMPANY CONTINUED TO EXCEED ITS CONSUMPTIVE USE PERMIT LIMITS FOR THE FIRST NINE MONTHS OF 2001?

A. Yes, considerably so. The Consumptive Use Permit specifies that the average daily authorized gallons per day are 2,040,000. The peak monthly gallons per day

allowance is 2,470,000. Based on the response to Staff Interrogatory 25, as updated, for the first nine months of 2001, the Company pumped 747,964,341 gallons from its wells. The Consumptive Use Permit allowance, based on the average allowed gallons per day, would be 556,920,000 gallons (2,040,000 gpd x 273 days) for that same nine month period.

Q. WHY IS THIS A CONCERN, FROM A REVENUE REQUIREMENT PERSPECTIVE?

A. If base rates are set under the assumption that the Company stays within its Consumptive Use Permit (CUP) requirements, and the Company then continues to withdraw more water from its wells than allowed under the Permit, the Company will essentially receive a windfall at the cost of ratepayers. The Company pays nothing for amounts withdrawn from two of its wells. On one of its wells, it pays a royalty fee of $0.10 per thousand gallons withdrawn, and on the five remaining wells, it pays a royalty fee of $0.32 per thousand gallons. The Company pays $2.35 per thousand gallons for water it purchases from Pasco County. If the Company exceeds its Consumptive Use Permit allowance while base rates are set assuming this will not happen, the Company will receive a windfall ranging from $2.03 to $2.35 per thousand gallons on the amount it exceeds its CUP allowances by.

Q. DO YOU RECOMMEND THAT REVENUE REQUIREMENT BE CALCULATED TO REFLECT THE FACT THAT THE COMPANY HAS HISTORICALLY

EXCEEDED ITS CONSUMPTIVE USE PERMIT WITHDRAWAL ALLOWANCES?

A. No. However, I do recommend that as part of the final order in this case, some safety measures be put into place to ensure that ratepayers are not required to pay excessive amounts for water purchases that are not ultimately made by the Company. I recommend that the Commission put in place a reporting requirement for the Company in which it reports the amounts withdrawn from each of its wells and the amounts purchased from Pasco County on a regular basis, such as quarterly. In periods in which the Company exceeds its Consumptive Use Permit allowances, thereby purchasing less water from Pasco County and withdrawing more water from its own wells at a lower cost, the Company should be required to record the price differential in a deferral account to be flowed back to ratepayers in a future proceeding. This would protect both the Company (allowing it to collect rates based on the higher Pasco County purchases) and protect ratepayers.

Q. COULD YOU GIVE A BRIEF EXAMPLE OF HOW THE DIFFERENTIAL WOULD BE CALCULATED?

A. Yes. The Company's Consumptive Use Permit allows for the average gallons per day withdrawn from Well 1, which is the Mitchell well, of 449,000 gallons. On a monthly basis (assuming a 30-day month), this would be 13,470,000 gallons. Assume that the Company withdraws 18,584,000 gallons in a given month from that well. (This was the case in June 2001, per Staff Interrogatory 25.) The actual withdrawal

would exceed the average daily allowance for that month by 5,114,000 gallons. The royalty fee on the water withdrawn from the Mitchell well is $0.10 per thousand gallons, which is $2.25 less per thousand gallons than the water purchased from Pasco County. Under this scenario, the Company would defer $11,506.50 (5,114 thousand gallons x $2.25 per thousand gallons).

Since the Company is permitted under its CUP to withdraw up to 1.2 times the permitted quantities for an individual well on given days so long as it does not exceed its average daily withdrawal allowances on an annual basis, the calculation of the deferral could be done on an annual basis, as opposed to the monthly basis given in the above example.

Q. WHEN DO YOU RECOMMEND THIS DEFERRAL METHOD BEGIN?

A. I recommend that it begin on a prospective basis at the date the final order in this case is issued. While the Company has exceeded its CUP allowances for at least the first six months of 2001, the higher costs associated with a higher level of purchases from Pasco County have not yet been considered in setting base rates for Seven Springs water operations.

Q. DO YOU HAVE ANY ESTIMATES OF BY HOW MUCH THE COMPANY COULD OVER-EARN IF BASE RATES ARE SET TO ASSUME THE COMPANY STAYS WITHIN ITS CUP LIMITS AND IT THEN EXCEEDS THOSE LIMITS?

A. Since actual data was available for the first nine months of 2001, I prepared Exhibit__(DD-2), attached, demonstrating the impact of the Company exceeding its CUP permits for the first nine months of this year had base rates been in effect which assumed that the Company stayed within its CUP limits. If base rates are set on the premise that the Company will not exceed its CUP limits, thereby resulting in higher purchase water expense for purchases from Pasco County, and the Company then exceeds its CUP limits at a similar level as was experienced in the first nine months of this year, the Company would effectively receive $427,087 more from ratepayers for purchase water expense during that period that it would actually pay out to Pasco County. This $427,087 differential is based on the Company's actual gallons pumped and gallons purchased from Pasco County for a period of only nine months. On an annual basis, if the Company continued these water source patterns, the amount would be higher than the $427,087 calculated on Exhibit__(DD-2). I am not recommending that an adjustment be made based on the information provided in Exhibit__(DD-2). The purpose of the exhibit is to demonstrate how important it is for a safety mechanism to be put in place as a result of this case to ensure that the Company does not receive windfall profits from its customers in the event that it continues to exceed its CUP limits.

Chemical and Purchase Power Expense

Q. DO THE RECOMMENDED REDUCTIONS TO THE PROJECTED TEST YEAR AMOUNT OF GALLONS TO BE SOLD TO CUSTOMERS ALSO IMPACT THE

COMPANY'S PROJECTED LEVEL OF CHEMICAL EXPENSE AND PURCHASE POWER EXPENSE?

A. Yes, it should. In calculating the projected 2001 chemical expense, the Company applied its projected ERC growth rate of 4.688% and its projected inflation rate of 2.5% to the historic test year chemical expense of $89,344. This resulted in a projected test year chemical expense of $95,871, or an increase of $6,527. In calculating the projected 2001 purchase power expense, the Company applied its projected ERC growth rate of 4.688% to the historic test year purchase power expense of $80,713, resulting in an increase of $3,784.

Q. SHOULD THE ERC GROWTH RATE BE USED IN ESTIMATING THE CHANGE IN CHEMICAL AND PURCHASE POWER EXPENSE?

A. No. As indicated by OPC Witness Steven Stewart, the historic test year level of water consumption was higher than normal due to weather conditions in the historic test year. The amount of chemicals and purchase power necessary would be more directly related to the total amount of water that is treated and pumped, rather than the number of customers or ERCs. Consequently, I recommend that the projected test year chemical and purchase power expenses be recalculated based on the consumption projection factor instead of the ERC growth factor.

Q. YOU PREVIOUSLY STATED THAT THE COMPANY ALSO APPLIED AN INFLATION FACTOR TO ITS HISTORIC TEST YEAR CHEMICAL EXPENSE.

DO YOU RECOMMEND THAT THE INFLATION FACTOR BE APPLIED?

A. No, I do not. The two largest components of the Company's chemical expense are chlorine gas and Aquadene Liquid. In response to OPC Interrogatory 5, the Company provided a breakdown of the chemicals it purchased through June 2001 in both quantity and unit cost. The quantities and unit costs for chemicals purchased in the historic test year were provided in workpapers to the Company's filing. Based on a review of the information provided, the unit cost per pound for chlorine gas was $0.47 for all of 2000 and through at least June 2001. The unit cost per gallon of Aquadene Liquid was $10.10 for all purchases in 2000 and 2001 to date. The two largest components of chemical expense have not changed and have not increased by the 2.5% inflation factor. I recommend that the inflation factor not be applied to the historic test year level of chemical expense. In fact, the total chemical expense for the first seven months of 2001 was $8,141 lower than the chemical expense for the same seven month period in 2000.

Q. HAVE YOU PREPARED SCHEDULES SHOWING THE IMPACT OF YOUR RECOMMENDATIONS ON PROJECTED CHEMICAL EXPENSE AND PURCHASED POWER EXPENSE?

A. Yes. The projected test year chemical expense is calculated on Schedule B-7 and results in a $8,303 reduction to the Company's requested level. The projected test year purchase power expense is calculated on Schedule B-8 and results in a $5,389 reduction to purchase power expense.

Rate Case Expense

Q. IS THE OPC RECOMMENDING ANY ADJUSTMENTS TO RATE CASE EXPENSE?

A. Yes. OPC Witness Hugh Larkin, Jr. recommends in his direct testimony that the Company's proposed rate case expense associated with the current case be denied. Consistent with his recommendation, I removed the Company's proposed amortization for the current case of $111,625 on Schedule B. Additionally, I removed the proposed average unamortized balance of $223,250 from working capital on Schedule C, page 2.

IV. RATE BASE

Accumulated Depreciation Related to Computers

Q. WHAT IS THE PURPOSE OF YOUR ADJUSTMENT ON SCHEDULE C, PAGE 2, FOR ACCUMULATED DEPRECIATION RELATED TO COMPUTERS?

A. In the audit report for the historic test year by the Commission's Division of Regulatory Oversight, Audit Disclosure No. 1 indicated that the Company incorrectly adjusted its accumulated depreciation account when it reflected the separation of its computer equipment from its other office furniture and equipment. The separation was required in Commission Order 01-1374-PAA-WS. According to the audit report, accumulated depreciation related to computers should be increased by $2,262 to correct the error. I reflected this revision on Schedule C, page 2.

Working Capital - Pilot Plant Project

Q. PLEASE DISCUSS THE COMPANY'S ADJUSTMENT TO INCREASE WORKING CAPITAL BY $190,000 FOR THE PILOT PLANT PROJECT.

A. On MFR Schedule A-3(A), the Company increased working capital by $190,000 for the average estimated cost of the pilot plant project, based on the amount approved in Commission Order No. PSC-01-1374-PAA-WS. On July 14, 2000, the Commission issued Order No. PSC-00-1285-FOF-WS, in which it ordered the Company to implement a pilot project to enhance water quality. The Company estimated the cost of the pilot project would be $380,000. In Order No. PSC-01-1374-PAA-WS, dated June 27, 2001, the Commission increased working capital for the Seven Springs water system by $190,000 for the average projected cost of the pilot project. The Company increased working capital by the $190,000 projected average balance approved in the Order.

Q. WHAT IS THE CURRENT STATUS OF THE PILOT PROJECT?

A. The current status and further details regarding the pilot project is discussed in the direct testimony of OPC witness Ted Biddy. As indicated in his testimony, the pilot program has essentially been suspended and a final report has not yet been prepared by the Company's engineer. The Company is apparently waiting until water supply issues are resolved prior to completing the pilot project.

Q. WHAT AMOUNTS HAVE BEEN SPENT BY THE COMPANY TO DATE ON

THE PILOT PROJECT?

A. The Company records the costs associated with the Pilot Project in Account 105-02-00 - W/W Pilot Plant on its general ledger. In response to OPC Production of Document request no. 9, the Company provided its general ledger for 2001 through August. Based on the general ledger, the actual balance in the account as of August 2001 was $74,746. This is considerably lower than the total projected cost of $380,000. Exhibit__(DD-1), Schedule C-1 provides the month-end balances in the pilot project account, along with the monthly increases in the balance.

Q. CONSIDERING THE ACTUAL AMOUNT SPENT TO DATE IS CONSIDERABLY LOWER THAN THE PROJECTED COST OF $380,000, SHOULD THE BALANCE INCLUDED IN WORKING CAPITAL BE REVISED?

A. Yes. The amount included as an addition to rate base for working capital should be based on the actual projected 13-month average balance for the 2001 test year, not 50% of the total projected amount to be spent. As indicated previously, the Company only spent $74,746 on the project through August 2001. It is highly unlikely that the 13-month average test year balance will be $190,000, particularly as the project has essentially been put on hold and delayed by the Company.

Q. WHAT ADJUSTMENT ARE YOU RECOMMENDING?

A. As shown on Schedule C-1, I recommend that working capital be reduced by $135,730 to reflect a projected test year thirteen-month average balance of $54,270.

In calculating the projected test year average balance, I used the actual balances for each month, December 2000 through August 2001. I then estimated the monthly level of additions for the months of September through December based on the average monthly expenditures for the first eight months of the year. This may actually result in a larger amount than is appropriate as the delay in the program may result in lower amounts being spent during the last few months of the year.

Accumulated Amortization of Contributed Taxes

Q. WHAT IS THE PURPOSE OF YOUR ADJUSTMENT ON SCHEDULE ~~C-3~~ C-2 TO REDUCE ACCUMULATED AMORTIZATION OF CONTRIBUTED TAXES BY $10,877?

A. In its filing, the Company made an adjustment to the average historic test year level of accumulated amortization of contributed taxes to correct its 2000 amortization, per Commission Order No. PSC-01-1374-PAA-WS. In that order, the Commission required the Company to continue using the amortization rate previously adopted. This impacted both the level of amortization and the level of accumulated amortization. On Schedule A-3(B), it appears the Company correctly adjusted the balance of accumulated amortization in the historic test year. However, the correction did not carry-over into the projected test year balance in the filing.

Q. PLEASE EXPLAIN.

A. As shown on Exhibit__(DD-1), Schedule C-3, the Company's adjusted average

historic test year balance of accumulated amortization of contributed taxes was $180,633. In Order No. PSC-01-1374-PAA-WS, the Commission determined that the correct annual level of amortization of contributed taxes was $30,691. The projected test year thirteen-month average level should be the corrected historic test year thirteen-month average level plus one year of amortization. This would result in a projected test year thirteen-month average level of $211,324, not the $222,201 balance contained in the Company's filing. The Company adjusted its starting point in determining the historic test year average balance, but not in determining its projected test year average balance. As shown on Schedule C-3, accumulated amortization of contributed taxes should be reduced by $10,877, which decreases rate base by the same amount. I would like to note that the Company does appear to have correctly reflected the Commission's approved amortization level in calculating the annual amortization in its net operating income on MFR Schedule B-1(A) of the filing.

V. RATE OF RETURN

Q. ARE YOU RECOMMENDING ANY REVISIONS TO THE COMPANY'S PROPOSED RATE OF RETURN?

A. Yes. I am recommending three separate revisions to the Company's calculation of its proposed rate of return. All three revisions pertain to the long-term debt component of the capital structure. Specifically, I recommend the following:

- The amount of debt be increased to include all debt components in calculating

the capital structure.

- The annual amortization of the discount on the Bank of America construction loan be corrected to reflect twelve months of amortization instead of seventeen months.
- The interest expense for the two loans from the owner, L. L. Speers be revised to reflect the current prime rate plus 2%.

Q. PLEASE DISCUSS YOUR FIRST REVISION.

A. In calculating the capital structure weighting, the Company only included the two loans from its owner, Lynnda Speer, in the debt balance and excluded its other debt issues. The Company also has debt associated with two loans from Bank of America and various vehicle loans. The Commission's Division of Regulatory Oversight indicated in Disclosure No. 5 of its audit report that the Company should include all of its long term debt issues in its capital structure. I agree. On Exhibit__(DD-1), Schedule D, page 2, I calculate the adjusted capital structure weighting giving effect to all debt issues. The revised capital structure calculated on page 2 is carried forward to the calculation of the overall rate of return on page 1 of Schedule D.

Q. PLEASE DISCUSS YOUR NEXT REVISION.

A. In its audit report, the Division of Regulatory Oversight, in Disclosure No. ~~5~~ 4, indicated that the amortization of the issuing expense for the Bank of America construction loan used in the calculation of the effective debt cost rate included

seventeen months of amortization instead of twelve months. This error was carried forward by the Company in calculating the 2001 effective debt cost rate. On page 3 of Schedule D, I reflect the corrected amount of annual amortization of the issuing expense, resulting in a $1,760 reduction in the amount used by the Company in its calculations.

Q. WHY DO YOU RECOMMEND THAT THE INTEREST RATE APPLIED TO THE LOANS FROM L. L. SPEER BE REVISED?

A. Interest on the Company's loans from the owner, Lynnda Speer, are based on prime plus 3%. In prior Commission Orders, the Commission has determined that the debt rate applied to the loans from the related party (owner) for purposes of calculating the overall rate of return should be limited to prime plus 2%. In its filing, the Company used a rate of 8.75% for these two loans. As of November 2, 2001, prime was 5.50%. Consequently, I recommend that the debt rate for the two loans from the owner be included in the calculation of the average debt cost rate at 7.50% (prime of 5.50% plus 2%). Page 3 of Schedule D calculates the revised effective cost rate for debt of 8.53%.

Q. WHAT IS THE IMPACT OF THE COMBINATION OF YOUR THREE RECOMMENDED REVISIONS ON THE OVERALL RECOMMENDED RATE OF RETURN?

A. As shown on Schedule D, page 1, my recommended revisions result in an overall rate

of return of 8.67%. The Company's calculated rate of return of 9.07% should be replaced by the 8.67%.

VII. RATE DESIGN

Q. DOES THE OPC HAVE ANY ADDITIONAL CONCERNS BEYOND THOSE ALREADY IDENTIFIED?

A. Yes. In this case, the OPC is not recommending a specific rate design. However, the rate design proposal offered by the Company should not be approved without revision.

Q. COULD YOU BRIEFLY DISCUSS THE IMPACT OF THE COMPANY'S RATE DESIGN PROPOSAL?

A. The rate structure, as proposed by the Company, is designed to collect all of the revenue requirement proposed by the Company in the base charge and the first consumption block. The Company then proposes that amounts collected under the second tier, which would be amounts which exceed the revenue requirement calculated in this case, be used to pay higher water bills from Pasco County, for conservation measures and for the search for alternate sources of water. As shown on MFR Schedule E-13, page 2, the Company's proposed rate design, prior to resulting conservation, would result in the Company collecting $690,295 more in rates than the amount calculate as the Company's revenue requirement. The Company then used the conservation rate model provided by SWFWMD to estimate a reduction to this

amount of $401,377 due to conservation resulting from the rate increase and rate structure. After the conservation adjustment is made, the Company's proposed rate design still results in the Company collecting $288,918 more from ratepayers than its revenue requirement calculations support. It is this amount that the Company proposes to be used for higher purchase water costs, conservation measures and research into new water sources.

Q. WHY SHOULD THE PROPOSED RATE DESIGN NOT BE APPROVED?

A. Rates should not be designed to result in the ultimate collection of revenues which exceeds the amount of revenue requirement approved by the Commission in this case. In other words, the Company's rates should not be designed to recover the additional $288,918, as proposed by the Company. To do so would effectively result in a guarantee that the Company will recovery its authorized rate of return. Rates are set to allow the Company the opportunity to earn a reasonable rate of return, not to guarantee that the Company will earn a return. The rate structure proposed by the Company would effectively eliminate risk the Company may have at the cost to ratepayers. This is not appropriate and not consistent with ratemaking principles and standards.

Q. WHAT ABOUT THE COMPANY'S POSITION THAT IT IS REQUIRED TO SPEND ADDITIONAL AMOUNTS ON CONSERVATION MEASURES?

A. If the Company wishes to collect additional amounts from ratepayers for conservation

measures, it should submit its proposed conservation programs and the associated costs for review by the OPC, the Commission Staff and any other parties in the proceeding, along with the estimated cost of such programs. If such information had been provided, it could have been considered for inclusion in calculating revenue requirement. The Company should not effectively be given a blank check at ratepayers expense to fund future programs and costs at its discretion. It is not appropriate to automatically include amounts in rate design to be collected from ratepayers that exceed the revenue requirement that was supported and justified in the rate case.

Q. DOES THIS COMPLETE YOUR TESTIMONY?

A. Yes, it does.

BY MR. BURGESS:

Q Ms. DeRonne, would you give a brief summary of the testimony that you've prefiled?

A Yes, I would. What I did in this case is I reviewed the company's MFRs mainly from an accounting perspective for calculating the company's revenue requirement. In the review of the MFRs I came across several errors that had been made and I referenced those within my testimony, and to the best of my knowledge those have all been agreed to and stipulated to in this case.

I then addressed pension expense, and that was to update the company's numbers for more recent actuarial evaluation and to correct for an error in the company's number, which I believe that has also been agreed to.

I then made an adjustment for salaries and wages. The company had included ten more positions in its salary and wage expense than it actually had filled. Five of them were for new positions and five were for open positions. And I removed those as they were vacant as of the time I had written my testimony.

I also made an adjustment for purchased water expense where I flowed through the gallonage recommendations of OPC witness Stephen Stewart. And I followed the similar methodology as the company except I replaced the company's ten percent unaccounted for factor with a 9.2 percent, which is the

actual test year factor of unaccounted for water, and I calculated the impact of the OPC's recommendation to come up with an adjusted purchased water expense. And I also flowed the impact of that change in the purchased water or on the amount of gallons to be purchased from customers on the revenues. And I also recommended that a mechanism be put into place as the company has consistently exceeded its water use permits, and the revenue requirement it has calculated in this case is under the assumption that it will now come within those requirements. And since they have exceeded it historically for numerous years, I recommend that some sort of protection be put in place that rates being charged to customers are not now set under the assumption that that won't happen, that the deferential caused by their overpumping or if they continue to overpump somehow be accounted for as a protection to customers.

I also recommended -- the OPC didn't take a direct, make a direct recommendation on rate design other than we strongly disagree with the company's proposal that the rate design be set up to collect more than what the projected revenue requirement in this case is. If the company had specific programs or conservation programs, those should be, if they are reasonable or allowable, they should be included in the revenue requirement calculation. There should not be a factor of rate design that automatically results in the company recovering more than what its calculated revenue requirement

is.

And as I state in my testimony, the OPC's primary recommendation is that no rate increase be allowed. But absent the significant quality of service concerns the OPC has the calculated revenue increase in this case would be $635,000 as opposed to the amount requested by the company.

Q Ms. DeRonne, you say you flowed through the projected usage recommended in the testimony of Mr. Stewart. Did you also review the testimony of Mr. Biddy in this regard?

A Yes, I did. And the reason I flowed through Mr. Stewart's as opposed to Biddy was to take a more conservative approach as it had projected slightly more gallons than Mr. Biddy's had.

Q Thank you, Ms. DeRonne. And that completes your summary?

A Yes, it does.

MR. BURGESS: Then we tender the witness for cross-examination.

COMMISSIONER JABER: Thank you.

Mr. Wood, do you have any questions?

MR. WOOD: I have no questions.

COMMISSIONER JABER: Okay. Ms. Lytle?

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

COMMISSIONER JABER: Okay. Staff?

MR. JAEGER: Just a very few.

COMMISSIONER JABER: Okay.

MR. JAEGER: Okay. No questions for DeRonne. We'll save them for Mr. Biddy.

COMMISSIONER JABER: Okay. That's fine. Commissioners? Mr. Deterding?

MR. DETERDING: Thank you.

CROSS EXAMINATION

BY MR. DETERDING:

Q Good evening, Ms. DeRonne.

A Almost. Good late afternoon.

Q Yeah. I'd call it evening.

Isn't it true that the only reason you suggested no increase is appropriate is based upon the testimony of Mr. Larkin?

A Based on his testimony and recommendation, which I have a lot of confidence in as he has been doing this a lot longer than I have.

Q He is your boss, is he not?

A He's the senior partner in the firm I work for.

Q Okay. Give that the appropriate weight.

But for your testimony you would have recommended -- but for his testimony you would have recommended an increase of $635,000 though, would you not?

A But for the OPC's recommendation based on customer satisfaction, if you just address the revenue requirement

calculation based on flowing through the recommendations and adjustments absent the quality of service testimony, yes, I would have recommended it.

Q Which I guess the shortcut of that is but for Mr. Larkin's testimony you would have recommended the $635,000 increase?

A But for the concerns of the Office of Public Counsel, had Mr. Larkin not testified to that issue, I'm not saying that that would not have still been addressed.

Q Okay. All right. Fair enough. Have you ever prepared the MFRs --

COMMISSIONER JABER: Ms. DeRonne -- I'm sorry, Mr. Deterding. Hang on one second. I need you to speak right into the microphone when you answer.

THE WITNESS: Okay. Is this, is that -- okay.

BY MR. DETERDING:

Q Have you ever prepared the MFRs in a Florida rate case?

A I'm sorry. I didn't hear you.

Q Have you ever prepared the MFRs in a Florida rate case?

A No, I haven't prepared them myself.

Q Would you agree that bad debt expense is likely to increase within increased revenue?

A It could, yes.

Q Would you agree that it is likely to increase with increased revenue?

A There is a good chance it will. I'm not sure that the correlation would be an exact percentage to what was experienced in the test year. But if you do increase revenue, there may be an increase in bad debt expense.

Q All right. Well, we've been through this in your deposition as well.

A Yes.

Q And do you have your deposition with you?

A Yes, I do.

Q Page 14, line 20.

"Do you believe bad debt expense will increase as revenue increases?"

Answer, "It may."

"You don't believe it will?"

Answer, "There's a good chance it will."

Now is good chance the same as likely in your mind?

A Yes.

Q Okay. Thank you. And you stand by that answer that you gave in your deposition?

A Yes. My, my complete answer, if I may answer the whole --

Q Sure.

A -- is I state, "There's a good chance it will. I

can't tell you for sure it will. I know if you look at the company's historic bad debt expense levels, it varies from year to year. Some years it goes up, but it has also declined substantially between '99 and 2000."

Q Okay. Did you attempt to make an adjustment for bad debt expense to reflect the increased revenue that you propose?

A No, I didn't. As I said in my deposition, because of the company changing the methodology by which it accounts for bad debt expense and because of the fact that it cannot tell from its accounting records what bad debt expense is specific to each, the water versus the wastewater, I did not feel that I could come up with a proper ratio to estimate or there wasn't a historic analysis that could be done to determine what the ratio of bad expense to revenue would be on a regular basis with this company.

Q Isn't it true that Aloha's, in Aloha's recent rate case that bad debt expense was allocated 50/50 between water and sewer?

A I believe, as I said in my deposition, I was not, as I say right here on page 15, I'm not sure, I'm not sure if it was a contested issue in that case.

Q Okay. Well, assuming for the moment it was allocated 50/50 between water and sewer and now you're proposing a different allocation methodology, isn't there a possibility that there will not be full recovery of those, of those

expenses?

A As I said again in my deposition -- first, maybe for the Commission's benefit what I had recommended for bad debt expense, what the company does, they determine the total bad debt expense for Seven Springs water and wastewater combined and then they allocated that in this case 50, well, in their revisions to this case that it be allocated 50/50 between water and wastewater.

My position was that it should be based more on the revenue allocation between the water and wastewater, so I recommended a different percentage than the 50/50 split.

And as I said in my deposition, had both the water and wastewater cases used the same test year and the same total expense level with the same test year, then, then you wouldn't fully recover it if the allocation is changed. But to the best of my knowledge they used different test years and there was a different total bad debt expense levels in those years.

Q But you don't think --

MR. JAEGER: Marty, excuse me. Could, could we go off the record for a minute? I'm confused. I hate to interrupt your deal, but is there a bad debt expense issue or what issue are you on?

MR. DETERDING: I was just quizzing her on her testimony.

MR. JAEGER: I thought we just stipulated bad debt

expense, Number 10, to be increased by $1,237.

MR. DETERDING: You're right. I apologize. Which stipulation is that, Ralph?

MR. JAEGER: Number 10 is what I show. I was just wondering if there was another issue that this could be relating to.

MR. DETERDING: No. No. I think you're right.

COMMISSIONER JABER: Thank you, Staff.

MR. DETERDING: Yeah, thank you. Though that was my last question on the subject.

MR. JAEGER: I'm sorry it took so long.

MR. DETERDING: That's all right. I appreciate it.

COMMISSIONER JABER: Ms. DeRonne, if that happens again and you know the issue has been stipulated, you can tell us, too.

THE WITNESS: Yeah. I wasn't sure as a witness that was my place or --

MR. DETERDING: Well, I apologize.

THE WITNESS: Next time I will.

MR. DETERDING: Wasting everyone's time.

BY MR. DETERDING:

Q You made an adjustment to remove from expenses the cost of ten of the utility's positions that were vacant as of the date of filing the application, have you not?

A Correct.

Q You would agree that to the extent those positions have been filled now and no others have become vacant that all of those costs should be considered in rate setting, would you not?

A To the extent they've been filled I would like to see what salary they were filled at as compared to what was included in the original filing. And I know we have requested that as a late-filed deposition exhibit but I have not seen that yet. So I would want to compare that to what was actually included in the filing. I wouldn't just blanket say, yes, include what was in the filing. And I would want to make sure and have assurances that while those ten positions may have been filled, there aren't significant other positions that have come, become vacant in the meantime. I would want to see the whole employee compliment.

Q Okay. So if -- let me summarize what I think you just told me is that if these positions had been filled at the salary levels that were proposed and if there have been no other positions that have become vacant, you would agree they should be recognized in rate setting?

A I wouldn't disagree with it in this particular case, no.

Q Okay. Thank you. And your adjustment to employee benefits at the bottom of page 14 of your testimony --

A Yes.

Q -- that is entirely dependent upon your adjustment to salaries, is it not?

A To my adjustment to salaries pertaining to the new employee positions, yes.

Q Right. Okay.

A Or actually let me state that -- I said the new employee positions. By that I meant the five new positions and the five vacant positions.

Q Okay.

(Pause.)

Let me talk to you about pension benefits. Isn't it true that Aloha's employees, while not eligible to have pension benefits until after a year, the utility starts paying costs toward those pension benefits from day one for those employees?

A I do not believe the actuaries include in their expense calculation the employees until those employees become eligible for the plan.

Q But isn't it true that the utility starts incurring expense for them from day one of their employment?

A They're not required to provide those benefits to, the employees are not eligible for that plan until they have been there a full 12 months. And with the high employee turnover rate with this company that becomes a little bit more of a concern than what may be the norm.

Q Yeah. I understand. But I think we're, we're

talking past each other. Doesn't the utility start incurring expenses related to those employees' pension benefits from the first day of their employment?

A The company accrues the expense based on the actuarial evaluation. I'm not sure that the actuarial evaluation includes those employees, impacts until those employees have been there a full year.

Q Well, if those employees -- if the utility is paying expenses related to those pension benefits from day one, those expenses should be included for those employees, should they not?

A Well, they're not paying them from day one. They are factored as an accrual.

Q Okay.

A And if they're included in the calculation of the pension accrual from day one, then it would be appropriate. But I'm not sure that's the case.

Q Okay. I believe you said in your summary that your, that your adjustment to purchase water is based solely on the proposed adjustments from Mr. Stewart; is that correct?

A Well, as I said, I flow through Mr. Stewart's recommendations of the total gallons to be sold and I flow it through the methodology by which the company calculated with the exception that I changed the unaccounted for water percentage from the company's ten percent to 9.2 percent.

Q Okay. Now you proposed that the PSC implement a mechanism to retain jurisdiction over revenues of this company to ensure that it purchases all of its water above its permit, water use permit limits, do you not?

A I recommend that some mechanism be put in place to protect ratepayers to ensure that if they do continue to excessively exceed their water use permits, that ratepayers aren't still paying that $2.35 per gallon that is assumed in setting rates in this case. So I recommend that some sort of mechanism be put in place so that the Commission can monitor that and keep track of that and so that if the company does exceed those excessively, that something could be done by the Commission to identify the amounts associated with that.

Q So but you propose no similar mechanism to allow the Commission to adjust rates if there are shortfalls in revenues because of consumption above or below the projected level; correct?

A No, I do not. The purpose of this mechanism would be to protect ratepayers because there is the unique situation where the company has exceeded its water use permits for numerous, numerous years. So I think because of that added concern there needs to be some sort of safety mechanism in place. I'm not recommending an automatic rate clause mechanism. I'm recommending that a protection be put in place in this specific issue and incidence because of the historic

excessive withdrawals from these wells.

Q Aren't there substantial repression adjustments in this case or assumptions of substantially reduced consumption in this case?

A I know the company has flow through in projecting their amount of gallons that need to be purchased from Pasco County assumed five percent repression factor. And I do know there is built into the rate design model factors that take into account repression.

Q Substantially more than that five percent you were referring to, do they not?

A That's my understanding. I'm not intimately familiar with the rate design model.

Q Okay. Are you familiar with how often the Commission has implemented rates that include an assumption that reduction in consumption will be anywhere close to that level?

A Not that I'm specifically aware of, no.

Q Okay. If this is one of the first times they've ever done such a thing, don't you think that that variability also demands some sort of mechanism for ensuring that shortfalls don't occur?

A No, I don't. The purpose of regulation is not to guarantee that the company recovers all its costs. You set up rates to allow the company an opportunity to earn a rate of return. If something happens and the company does not meet

that rate of return or it sells a lot, has to buy a lot more than what it projected in this case, it has the ability to the best of my knowledge to then come before the Commission and request a change in rates.

Q And you're talking about filing another rate case?

A I don't know if it would be a rate case or a limited proceeding.

Q Okay. Isn't it true that the PSC has in place existing mechanisms to review utilities' earnings?

A I know the company files reports with the Commission and I believe their Commission Staff reviews those reports, but I'm not sure if there's an automatic mechanism by which the Commission would make the company come in.

Q Doesn't the Commission have an existing annual report review for, for reviewing utilities' overearnings on an annual basis?

A I assume they do, but I don't know the specifics on that. I do know that if it is found the company is overearning, there would be some leg associated with that.

Q And if the utility is found to be underearning because of differences between this repression and actual events, then there would also be a lag in attempting to receive that rate recognition there, too; correct?

A There would be some lag. I know the company has the ability to request an interim increase in proceedings, but

there would be some lag.

Q Wouldn't the utility have to demonstrate that they are already experiencing that inequity between the rates as projected and the numbers as actually experienced before they could even file to get that interim rate increase?

A I'm not sure of the specifics of the requirements of the filing. As I said before, the reason I recommended this is the company's history of exceeding those use permits and the fact that we are calculating rates based on including all that, those additional purchases at the $2.35 rate. And that's a significant change in this case from what has been done historically with this company.

Q Are you familiar with the level of fines being proposed by the Water Management District for those exceedences?

A To the best of my knowledge no fines have been proposed yet. And it's my understanding that based on a draft of the consent order there's a waiving of fines. That's my understanding at this point, that there have been no fines and there's something in the consent order along the lines of waiving fines.

Q And under what circumstances would those fines be waived under that draft you're --

A I don't know all the specifics of the draft. I do know it is a draft and I do know that the company to the best

of my knowledge hasn't been fined to this point.

Q Okay. Since you've brought up what the draft consent order says, do you know whether or not it, in fact, requires the utility to spend hundreds of thousand, if not millions, of dollars in order to avoid those fines?

A I don't, I don't know the specifics of the draft consent order. No.

Q Okay. Okay. What do you suppose the Water Management District would do if Aloha continued its excess pumping after receiving rates enabling it to purchase water from the county?

A You would have to ask the Water Management District that. I know they've been exceeding it for numerous years and nothing, no fines have been levied at this point. I don't know if for some reason that would all the sudden change going forward. You would have to ask the Water Management District that.

Q And your proposal is that this set-aside would exist only to the extent and if this utility exceeds its permit level?

A Yes. I recommend that, that there be a monitoring and potentially a set-aside where it's monitored how much the company actually withdraw, withdraws from its own wells and its affiliate-owned wells and the Mitchell well as compared to what is included in the water use permit allowance, and that the

amounts in excess of the annual average allowance that is provided for in the permits, some mechanism be put in place to defer that and to monitor that closely.

Q Aren't there portions of the permit that relate to monthly as well as annual allowances?

A Yes. There's an average daily allowance level and there are allowances where on particular days you can exceed it by 1.2 times, something along that level, and there are also monthly peak amounts. But the permits state that the total annual average level cannot exceed, I believe it's 2,040,000 daily.

Q So how would you propose that this mechanism would even deal with those differences between the annual average and the daily permit level, et cetera?

A Well, that's why in my testimony I said that some sort of deferral calculation could be done on an annual basis because the average daily is based on the annual average daily amounts. I do acknowledge that the amounts withdrawn could vary from day to day, but the permits do provide for an average, an annual average daily amount.

Q Are you aware of any case in which the Florida Public Service Commission has undertaken something similar to what you're proposing?

A No. But I'm also not aware specifically of a case where you have a situation of this nature where the company has

been for years exceeding a level and now you're basing rates as though that will not happen again in the future.

Q Nor are you aware of any case where the Commission has assumed a reduction in consumption at the level that this case has, have you?

A I believe as I said earlier, not that I'm aware of.

Q Okay. Have you proposed any recognition of the costs for the reporting procedures that you have suggested?

A No, I have not. I do know that the company has to report its usage to SWFWMD already and the company does already file annual reports, maybe more than annual, I presume, to the Commission, so I'm not sure that there would be a significant incremental cost in this.

Q So you're suggesting that this would be an annual reporting requirement?

A I think it would be in the Commission's interest to keep an eye on that more than just at an annual level. I don't believe I recommend any specific reporting increment levels.

Q But you believe it should be more often than annual. So there would be an additional report to the PSC at a minimum.

A It would be nice if it were more than annually so that 12 months later everyone isn't shocked when they see these numbers.

Q You propose not to recognize an inflation adjustment proposed on chemicals; is that correct?

A Correct.

Q And this is because you say you've seen no increase in the price paid for chemicals for the last 18 months; correct?

A Yeah. I had an amount on a cost per unit of chemicals for an 18-month period provided by the company, and during that time the rate per unit paid by the company for the chemicals had not changed. And also I'd like to point out that for the first six months of 2001, which is the projected, projected test year, the company's chemical expense had actually decreased significantly. I didn't pick that up. All I did was left it at the test year level with the exception of changing it for the changes in the amount of, amount of water that would need to be treated.

Q Have you looked to see if those chemical expenses have, in fact, increased in the last six months?

A No. I only had data through July of 2001, so I did not.

Q And I take it by your proposing an adjustment on that basis that you don't think chemical expenses are subject to any inflation because it hasn't occurred in 18 months?

A I don't believe that going from the historic test year to the projected test year in this case there was a demonstration that they had increased by a level of inflation.

Q Okay. Have you made an attempt to test other

expenses of this utility to determine whether or not they're impacted by inflation more than inflation?

A I looked through various expense accounts but I didn't do a specific analysis on an item-by-item basis. I do know the company did not apply inflation factors to at least three accounts: That would be its legal expense, its accounting expense and its engineering expense. Those three expense accounts also did not have an inflation factor applied by the company.

Q Did you -- but did you go and attempt to find accounts where maybe inflation was not sufficient to recognize the actual increase in costs that you anticipated would occur?

A I reviewed the expense accounts and the amounts expensed by account by this company by month, but I didn't specifically go in and see how, to determine how inflation impacted each of those accounts. No.

Q You just, you just picked one where you found there had been no change and said inflation should not be included?

A What caused me to focus in particular on that account was the fact that for the first six months of 2001 as compared to the historic test year for the same six-month period there was a significant decline in the chemical expense that had been booked in that same six-month period for the next year.

Q Uh-huh.

A Due to that significant decline it caused me to take

a closer look at the chemical expense in particular.

Q Have you done any analysis of chemical expense to find out whether it is subject to those kind of fluctuations from year to year or whether it is still subject to, generally to inflationary pressures?

A Beyond what I've already stated I did, comparing the expense from year to year for this particular company and the actual cost by unit for that 18-month period, no.

Q Okay.

A Am I speaking loud enough for the reporter? Okay.

MR. DETERDING: Give us just a second.

(Pause.)

You made an adjustment, did you not, to working capital allowance based upon the actual costs that had been incurred with regard to the pilot project?

A Yes, I did.

Q And was that an adjustment that was based upon someone else's testimony or is that, is that something that you're, you're proposing on your own?

A As I say in my testimony, I am proposing this. And the purpose of it is to include the working capital allowance in this case on the level that was actually spent during the time period.

Q Okay. Isn't the utility required to continue with that pilot project to its completion?

A It's my understanding that they're required to.

Q Okay. And have you done an analysis to determine whether or not they will incur substantial additional costs in doing that, in completing it?

A The company has the contention that they will and I don't have any problems with the total projected costs. The issue I brought forward here is that in calculating the projected year working capital requirement of the company, the company based it on the total cost of that project divided in two. And what I recommend is that the amount in the working capital calculation be based on the amounts that were actually incurred in that 12-month period. And in my adjustment I had eight months' worth of actual and then I estimated the next four months to determine the actual impact on working capital in the rate year.

Q Isn't it true that the utility accounted for this in accordance with the way the Commission's order requiring this pilot project required them to do?

A I have no problem with the account the company recorded it in or how it's recorded on its books. So from an accounting perspective I don't believe they're not -- I believe they're in compliance with how they are required to account for it.

Q Well, isn't it true that they were required to account for it in an amount equal to the way they did account

for and that you have reduced that based upon actual expenditure versus the projected cost to complete that?

A I know in a previous case earlier this year for this company, I believe it was the overearnings investigation, the Commission included it in that overearnings investigation based on 50 percent of the projected costs. But now that we are complete with the rate year I recommend that it be based on the actual amounts that were actually spent by the company during that period.

I'm not saying they should never recover the costs of this pilot project. What I'm saying is that for calculating working capital in this case that it be based on the company's actual, the way the amounts were actually expended.

Q But that is contrary to the way the Commission told them to account for it in the most recent review of that issue?

A I'm not sure if they were specifically told that's how you have to account for it. That's how it was treated in calculating the rate base impact in that particular case.

Q Okay.

A Does that -- I hope that answers your question.

Q And that same treatment was recognized in interim rate setting, was it not, in this case?

A I'm not sure I wouldn't disagree with that. But I do know that in that interim case you were projecting amounts. Now we have the actual amounts for this 12-month period.

Q Do you have any knowledge of what will be expended in completing that pilot project and when?

A I know Mr. Biddy has testified that there has been a delay in that pilot project and I believe I read some information from the company, too. But, no, I don't know when the rest of the amounts will be spent or what the remaining projected amounts for that particular pilot project are. All I know is what has actually been spent at this point.

Q So you know what has actually been expended to date, is that what you said?

A Oh, I'm sorry. I misspoke. I know what had been expended through August of this year.

Q Okay.

A And based on Mr. Biddy's testimony there had been a delay of that project. But as of today's date I don't know what the total expense has been.

Q Or as of the close of the test year you don't know what has been expended?

A As of December 31st? No. I know the amount as of August 31st.

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

THE WITNESS: You're welcome.

COMMISSIONER JABER: Mr. Burgess?

MR. BURGESS: No redirect.

COMMISSIONER JABER: Thank you, Ms. DeRonne. And we

will admit Exhibit 9 without objection.

MR. BURGESS: Thank you, Commissioner.

(Witness excused.)

(Exhibit 9 admitted into the record.)

CHAIRMAN JABER: Mr. Burgess, you can call your next witness.

MR. BURGESS: My next witness is Mr. Ted Biddy.

COMMISSIONER JABER: Let Mr. Biddy get settled on the stand. But we will take a five-minute break. Come back as soon as you can. Okay?

(Brief recess.)

COMMISSIONER JABER: Let's get back on the record. Mr. Burgess, you called Mr. Biddy to the stand.

MR. BURGESS: I did.

COMMISSIONER JABER: Okay.

TED L. BIDDY

was called as a witness on behalf of the Citizens of the State of Florida and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. BURGESS:

Q Mr. Biddy, would you state your name and business address for the record, please.

A Yes. My name is Ted Biddy. The address is 2308 Clara Kee Boulevard, Tallahassee, 32303.

MR. BURGESS: Okay. Is that being picked up by the

court reporter or do you need him closer to the microphone?

THE COURT REPORTER: If you can get a little closer.

BY MR. BURGESS:

Q All right. Mr. Biddy, did you prefile testimony in this case?

A Yes, I did.

Q Do you have any changes that you would make to the testimony that was prefiled?

A Not at all, no.

Q If you were asked the questions that are posed in your prefiled testimony tonight, would your answers be the same?

A Yes, they would.

MR. BURGESS: Chairman Jaber, I would ask that Mr. Biddy's prefiled testimony be entered into the record as though read.

COMMISSIONER JABER: Yes. The prefiled testimony of Ted L. Biddy shall be inserted into the record as though read.

MR. BURGESS: Thank you.

BY MR. BURGESS:

Q Mr. Biddy, did you also prepare a number of exhibits that are sequentially numbered TLB-1 through TLB-10 and inclusive?

A Yes, I did.

MR. BURGESS: Chairman Jaber, may we get a -- well,

would you like any description of them or, I mean, there's ten of them here.

COMMISSIONER JABER: Right. No. We can, we can certainly introduce them as a composite exhibit. But let me ask the parties their preference. That's ten exhibits in a composite and in terms of reference in a brief and, Staff, in your recommendation, is there a benefit to breaking this up a little bit?

MR. BURGESS: Whatever the parties may need and desire. It doesn't matter to us.

MR. WHARTON: It may be the most difficult for the Staff because when I brief we're just going to say as he says on Exhibit 10. So, I mean, we could break it up, if it's your pleasure.

MR. JAEGER: I think we could do it all in one composite exhibit, but if you would just reference which TLB-10 in exhibit --

MR. WHARTON: We will.

COMMISSIONER JABER: Sounds great. Composite Exhibit 10 will be TLB-1 through TLB-10.

MR. BURGESS: Thank you.

(Exhibit 10 marked for identification.)

Q. WHAT IS YOUR NAME AND BUSINESS ADDRESS?

A. My name is Ted L. Biddy. My business address is 2308 Clara Kee Boulevard, Tallahassee, Florida 32303.

Q. BY WHOM ARE YOU EMPLOYED AND WHAT IS YOUR POSITION?

A. I am self-employed as a professional engineer and land surveyor.

Q. WHAT IS YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE?

A. I graduated from the Georgia Institute of Technology with a B.S. degree in Civil Engineering in 1963. I am a registered professional engineer and land surveyor in Florida, Georgia, Mississippi and several other states. I was the vice-president of Baskerville-Donovan, Inc. (BDI) and the regional manager of their Tallahassee Office from April 1991 until February 1998. I left the employment of BDI on September 30, 1998. Before joining BDI in 1991, I had operated my own civil engineering firm for 21 years. My areas of expertise include civil engineering, structural engineering, sanitary engineering, soils and foundation engineering and precise surveying. During my career, I have designed and supervised the master planning, design and construction of thousands of residential, commercial and industrial properties. My work has included: water and wastewater facility design; roadway design; parking lot design; stormwater facilities design; structural design; land surveys; and environmental permitting. I have served as the principal and chief designer for numerous utility projects.

Among my major water and wastewater facilities designs have been a 2,000 acre development in Lake County, FL; a 1,200 acre development in Ocean Springs, MS; a 4-mile water distribution system for Talquin Electric Cooperative, Inc. and a 320-lot subdivision in Leon County, FL. As senior project manager while employed by Baskerville-Donovan, my projects included the complete refurbishment of the water supply and distribution system for the City of Apalachicola; the complete refurbishment of wastewater collection system and treatment plant for the City of Apalachicola; water and wastewater system improvements at Carrabelle; water supply and several distribution systems for developments on St. George Island; water and wastewater systems at correctional facilities for the Florida Department of Corrections; and numerous smaller water and wastewater projects.

Q. WHAT ARE YOUR PROFESSIONAL AFFILIATIONS?

A. I am a member of the Florida Engineering Society, National Society of Professional Engineers, Florida Institute of Consulting Engineers, American Consulting Engineers Council, American College of Forensic Examiners and the Florida Society of Professional Land Surveyors.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE A STATE OR FEDERAL COURT AS AN ENGINEERING EXPERT WITNESS?

A. Yes, I have had numerous court appearances as an expert witness for cases involving roadways, utilities, drainage, stormwater, water and wastewater facilities designs.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION (PSC OR COMMISSION) ON ENGINEERING ISSUES IN CONNECTION WITH WATER AND WASTEWATER RATE CASES AND QUALITY OF SERVICE ISSUES?

A. Yes, I have testified before the PSC for Docket Nos. 940109-WU, 950495-WS, 950387-SU, 951056-WS, 950387-SU, 960329-WS, 960545-WS, 971065-SU, and 991643-SU on various engineering issues and quality of service issues.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide engineering testimony on the projected future water use within the service area of Aloha Utilities, Inc. (Aloha); testimony on the status of the black water problem in the Aloha service area; and to provide testimony of my engineering analysis of unaccounted for water within

Aloha's service area.

Q. DURING YOUR STUDY OF THIS CASE WHAT DOCUMENTS DID YOU REVIEW AND WHAT INVESTIGATIONS DID YOU MAKE?

A. I studied all the MFR filings and exhibits as filed by the Utility, all PSC Staff and Utility correspondence and all discovery furnished by Aloha to the PSC Staff and to the Office of the Public Counsel (OPC). I also read the depositions of Aloha's president Stephen Watford, accountant Robert Nixon and engineer David Porter as taken by the PSC Staff. I also attended the depositions of these three Aloha witnesses taken by OPC.

I interviewed Mr. Gerald Foster of the Florida Department of Environmental Protection (FDEP) permitting and enforcement staff regarding Aloha's water supply systems in the FDEP Tampa office. I further interviewed Mr. John Parker and Mr. Steven DeSmith of the Southwest Florida Water Management District (SWFWMD) in the SWFWMD Brooksville office concerning Aloha's Water Use Permit (WUP); enforcement action presently being taken by SWFWMD against Aloha and a variety of other water use issues pertinent to Aloha. I obtained copies of the SWFWMD files on Aloha's WUP and copies of their file on enforcement action against Aloha.

Mr. Parker and Mr. DeSmith gave me the names of other SWFWMD personnel who had pertinent information concerning Aloha's water supply system. I interviewed these individuals by telephone and obtained some copies of file information from them. These individuals included Mr. Bart Weiss, the reverse osmosis (R/O) expert on the SWFWMD staff; Mr. Robert Peterson, overall district water use expert on the SWFWMD staff; and Ms. Rachael Link, keeper of the records of all irrigation wells within the district.

I also interviewed Aloha water customers Mr. Harry Hawcroft and Mr. Sabino Metta to determine the current status of the black water problem in the homes of Aloha's water customers.

I studied in detail the historic water use data of Aloha's customers and performed several analyses which I will discuss below. I also discovered from OPC witness Steve Stewart's investigation that the year 2000 was the driest

weather year since SWFWMD has kept records back to 1916.

Q. DO YOU AGREE WITH ALOHA'S SCHEDULE G-9, PAGE 1 OF 4, PREPARED BY ENGINEER DAVID PORTER, IN WHICH HE DEVELOPS A WATER USE OF 500 GALLONS/DAY PER ERC AND PROPOSES THIS WATER USE FOR ALL FUTURE ALOHA CONNECTIONS ON A GOING FORWARD BASIS?

A. No, I do not agree with Mr. Porter's methodology of computation or the results of his proposed water use projection.

Q. PLEASE EXPLAIN WHY YOU DO NOT AGREE WITH MR. PORTER'S METHODOLOGY OR THE WATER USE PROJECTION HE PROPOSES FOR FUTURE CONNECTIONS?

A. Mr. Porter furnished a single handwritten sheet for the calculation of the 500 Gallons/Day/ERC that he proposes for projected water use of future connections in response to OPC's request No. 11 for production of documents. At his deposition on October 29, 2001, Mr. Porter admitted that all the data he uses in his calculation was furnished to him by Aloha's president Steve Watford and that he did not make any independent investigation concerning this water use issue. Mr. Porter simply averaged the annual average monthly demand (AAMD) per ERC for the period 7/1/00 to 6/30/01 for twelve of the newer subdivisions in the Aloha service area. The AAMDs for each of these subdivisions were furnished to him by Mr. Watford. Mr. Porter adds the AAMDs for these twelve subdivisions for this one 12-month period and divides

the sum by 12 to obtain an average of 15,200 Gallons/Month/ERC. He then divides this average by 30 days to obtain a value of 500 Gallons/Day/ERC which he proposes in Schedule G-9, Page 1 of 4, as a proper water use for predicting water demands of Aloha customers on a going forward basis.

Mr. Porter's methodology suffers from a number of flaws, to the point that I do not believe it to be a valid engineering analysis. First, as he acknowledges, he did not compile the data for the AAMD for the subdivisions himself, but accepted data from Mr. Watford for 12 subdivisions selected by Mr. Watford out of the 30 subdivisions in the Aloha service area. Mr. Watford chose the 12 most recent subdivisions which also happen to have higher monthly uses to furnish to Mr. Porter. Mr. Porter states in Schedule G-9 that it is within these newer subdivisions that the future water use will be 500 Gallons/Day/ERC due to an alleged demographic shift from retirement households to younger households with children and larger homes with larger lots. Mr. Porter admitted at his deposition that he had made no surveys or studies of these newer subdivisions to confirm his theory of a demographic shift in population.

Mr. Porter's use of only one 12 month period to determine the projected future water use is a serious mistake. He stated at his deposition that he felt that these latest 12 month period water use records were the best evidence of the current water use of Aloha's customers. Using a very limited time period as a data base in determining engineering projections is always suspect because one must always guard against unusual events skewing the results of projections obtained

from short period data bases. In this case, Mr. Porter totally ignored the fact that his data base of flows included the driest weather period on record and that heavy irrigation would have obviously skewed his resulting projection to the high side. He also ignored the fact that the flows furnished to him by Mr. Watford were from recently established subdivisions whose lawns would have been in the early stages of growing in and would have therefore required more extensive irrigation, especially during a dry weather period.

Mr. Porter's projection of 500 Gallons/Day/ERC is much higher than engineering design standards for water systems and the history of water use in this country. Mr. Porter, is a professional engineer, with years of experience in utility engineering. A flow value of 350 Gallons/Day/ERC is the standard design value taught in all engineering schools and is the standard in the engineering profession. Furthermore, this 350 Gallons/Day/ERC is a conservative value and historic water uses are almost always considerably below the design flow. Moreover, water use per ERC is not increasing in Florida but is decreasing due to water conservation measures being promoted by water management districts, utilities and others. Nevertheless, Mr. Porter accepted his calculated average of 500 Gallons/Day/ERC and proposed its use in calculating water to be purchased from Pasco County in 2001.

There is yet another unusual factor that would have tended to skew his projection to the high side for these 12 newer subdivisions. These 12 newer subdivisions are mostly located in the south portion of Aloha's service area

which is the portion of the service area where the "black water problem" is at its worst. One of the common practices in these areas with the black water problem is to perform extensive flushing of home systems on a frequent basis to try to improve the quality of water in the homes. This common practice has been previously testified to before the Commission by many of Aloha's customers and obviously would cause the water usage in these areas to be higher than normal. This practice of frequent wholesale flushing of home systems is a phenomenon caused by the low quality of Aloha's water which contains hydrogen sulfides and/or sulfates that enter home systems and reacts with copper piping in the homes resulting in a discolored and often offensive smelling water. It is certainly hoped that the root problem of Aloha's low quality water is a temporary problem since Aloha is under PSC order to find and install a solution to the problem. Therefore, any excessive usage caused by the frequent flushing of home systems in the Aloha "black water problem areas" should not be a permanent condition and should not be counted when projecting future water usage needs.

For all of the above reasons cited, I do not agree with Mr. Porter's methodology of projecting future demands for new customers of Aloha and I believe that the 500 Gallons/Day/ERC result of his projection should be rejected as unreasonable and in error.

Q. DO YOU AGREE WITH ALOHA'S SCHEDULE G-9, PAGE 2 OF 4 IN WHICH MR. PORTER CALCULATES THE ADDITIONAL WATER

DEMAND IN 2001 AND THE COST OF PURCHASED WATER FROM PASCO COUNTY IN 2001?

A. No, I do not agree with Mr. Porter's calculation methodologies or the results he obtains for additional water demand in 2001 or the cost of purchased water from Pasco County in 2001.

Q. PLEASE EXPLAIN WHY YOU DO NOT AGREE WITH THESE METHODOLOGIES AND THE RESULTS MR. PORTER OBTAINED FOR ADDITIONAL WATER DEMAND IN 2001 AND THE COST OF PURCHASED WATER FROM PASCO COUNTY IN 2001?

A. Based on my discussion above concerning my belief that Mr. Porter calculated a wrong value for future connection demand of 500 Gallons/Day/ERC, I therefore believe that he starts with a false premise by using this projected demand. He simply multiplies this projected demand of 500 Gallons/Day/ERC by the projected growth of 473 ERCs in 2001 to arrive at an additional water demand for 2001 of 86,322,500 gallons. He then adds his calculated additional demand of 86,322,500 gallons to the total water sold in 2000 of 1,018,745,467 gallons to arrive at his projection of 1,105,067,967 gallons of water to be sold in 2001. He then adjusts this projected water to be sold in 2001 to allow for 10% for treatment and system losses and arrives at a total of 1,227,853,297 gallons of water required for 2001.

To calculate the amount of water to be purchased from Pasco County, Mr. Porter subtracts Aloha's WUP limit of 2.04 MGD (744,600,000 gallons/year) from the

total water required of 1,277,853,297 gallons to obtain 483,253,297 gallons to be purchased from Pasco County in 2001. Finally, to arrive at the cost of the purchased water, Mr. Porter simply multiplies the 483,253,297 gallons by Pasco County's charge of $2.20 per 1,000 gallons to obtain the cost of purchase water for 2001 of $1,063,157.

In this calculation in Schedule 9, page 2 of 4, Mr. Porter compounds his error of using a future demand of 500 Gallons/Day/ERC by adding the erroneously calculated additional demand to the amount of water sold in the year 2000. Since Mr. Porter prepared his direct testimony and his portion of the MFRs in August, he should have known the amount of water actually sold through at least June, 2001 and should have noted that water consumption was going down and not up in 2001. Aloha furnished water consumption records to the PSC Staff and to OPC through their response to Staff's interrogatory No. 25. It was a matter of common knowledge throughout Florida that the year 2000 was a very dry weather year with resulting high water demand for irrigation while the year 2001 has been to date a much more normal rainfall year with resulting lower water demand for irrigation. The truth is that water consumption through June, 2001 decreased by 52,412,000 gallons from water sold for the same period in the year 2000 even with one half years growth of ERCs.

Notwithstanding the dramatic difference in weather for the years 2000 and 2001, Aloha added its projected additional demand for ERC growth to the water sold in 2000 and called the value so obtained the projected water to be sold in 2001.

Since we now know the actual flows in 2001 to have decreased from year 2000, the methodologies and calculations in Schedule G-9, page 2 of 4 must be summarily rejected as erroneous.

Q. DO THE RECORDS FOR THE FIRST 6 MONTHS OF 2001 FURNISHED BY ALOHA IN RESPONSE TO STAFF'S INTERROGATORY NO. 25 SHOW THAT ALOHA PURCHASED HALF OF THE 483,253,297 GALLONS THAT ENGINEER PORTER PROJECTS TO BE PURCHASED FROM PASCO COUNTY IN 2001?

A. No. The records furnished by Aloha in response to Staff 's interrogatory No. 25 show that Aloha had purchased only 103,056,000 gallons from Pasco County through June of 2001. This amounts to only 42.6 percent of half of the amount that Mr. Porter projects for 2001. At this same rate of purchased water from Pasco County, a total of 206,112,000 gallons will be purchased from Pasco County in 2001 as compared to the Porter projection of 483,253,297 gallons.

R. DID ALOHA'S ACCOUNTANT USE MR. PORTER'S ERRONEOUS CALCULATIONS IN SCHEDULE G-9, PAGES 1 OF 4 AND 2 OF 4 TO CALCULATE ALOHA'S ADDITIONAL COSTS OF PURCHASED WATER AND REVENUE REQUIREMENT?

A. Yes, see Schedule G, pages 3 of 4 and 4 of 4 prepared by Aloha accountant Robert Nixon.

Q. HAVE YOU PREPARED ANY EXHIBITS IN SUPPORT OF YOUR ASSERTIONS THAT ALOHA'S ENGINEER PORTER ERRONEOUSLY

PREPARED PAGES 1 OF 2 AND 2 OF 4 OF SCHEDULE G-9 OF THE MFRS AND IF SO, PLEASE EXPLAIN THESE EXHIBITS?

A. Yes, I have prepared a number of exhibits that I attach hereto and will explain in order as follows:

Exhibit TLB-1: This exhibit shows a calculation of historic water use per ERC for the Aloha system. Data was taken from Schedule F-9 of the MFRs and from Aloha's response to Staff's interrogatory No. 25. The calculations also included the total ERC data furnished by Aloha in Schedule F-9. The calculations extend from 1995 through 2000 and also include the first 6 months of 2001. The calculations reveal that the water sold per ERC was 247 gallons/day in 1995, increased to 277 gallons/day by the year 2000 and then decreased to 264 gallons/ERC in 2001. The calculations also show that the water use per ERC would decrease further to 258 gallon/day when the six month water sold records are annualized for 2001. The small water use increase per ERC from 1995 through 2000 is understandable since the SWFWMD considers the period 1990 to 2000 to be a period of drought. In like manner, the decrease in water use per ERC in 2001 is also understandable since rainfall weather patterns returned to near normal in 2001 in the Aloha service area.

Exhibit TLB-2: This exhibit shows a comparison of Aloha Engineer Porter's calculated cost of purchased water in 2001 from Pasco County in Schedule G-9, page 2 of 4, to the cost of purchased water from Pasco

County that I computed using an annualized total for 2001 based on the records for water sold in the first 6 months of 2001. I applied the recent increased cost of Pasco County water from $2.20 per 1,000 gallons to $2.35 per 1,000 gallons.

The comparison shows that the projected cost of purchased water from Pasco County by my calculation would be $845,749 compared to Mr. Porter's calculated cost of $1,135,645, a difference of $289,896.

Both calculations assume that Aloha will indeed purchase all of their water above their WUP with SWFWMD from Pasco County. This quantity over Aloha's WUP was calculated by my methodology as 359,893,333 gallons and by Mr. Porter's methodology as 483,253,297 gallons. Interestingly, the Aloha water records furnished in response to Staff's interrogatory No. 25 show that Aloha had purchased only 103,056,000 gallons from Pasco County during the first 6 months of 2001. This amounts to only 28.6% of the amount that I computed to be needed to be purchased from Pasco County and only 21.3% of the amount calculated by Mr. Porter. Obviously, Aloha continues to violate the limits of their WUP from SWFWMD by pumping much more from their wells than allowed by their permit. Therefore, any calculation of cost of purchased water from Pasco County for the year 2001 must be tempered with the actual records of purchased water from Pasco County rather than the total water needs above Aloha's WUP limits. From the

six months records furnished by Aloha to date, it appears that Aloha will only purchase about 206,112,00 gallons for year 2001 compared to the total I calculated that needed to be purchased from the County of 359,893,333 gallons.

Exhibit TLB-3: This exhibit calculates a historic annualizing factor for the first six months sale of water as a percentage of the actual annual sale of water by Aloha. The calculation of the annualizing factors considers the six year actual data from 1995 through 2000. The average of these six years shows that 50.92% of the total annual water sales had occurred by the end of the first six months of the year. Therefore, my methodology in Exhibit TLB-2 of doubling the water sold during the first six months of 2001 to arrive at a projected total water sold for the year appears to be reasonable.

Exhibit TLB-1.1: In this exhibit I present a tabulation and chart of the change in water sold per ERC by Aloha over a seven year period with the data for 2001 based on the six months actual data.

Exhibit TLB-1.2: In this exhibit I present a tabulation and chart of the change in water sold per ERC by Aloha over a seven year period with year 2001 annualized by doubling the amount sold during the first six months.

Q. DID YOU CALCULATE ALOHA'S UNACCOUNTED FOR WATER FOR THE PROJECTED TEST YEAR OF 2001?

A. Yes, I calculated Aloha's unaccounted for water for 2001 based on the records which Aloha furnished in response to PSC Staff's interrogatory No. 25. In this response, Aloha showed a total pumped and purchased water of 603,404,141 gallons through June of 2001 and total water sold of 497,022,000 gallons for the same time period. Calculating the water sold versus the total water pumped and purchased (497,022,000/603,404,141) yields a percentage of 82.4% and therefore unaccounted for water of 17.6%. This percentage would be the same if one annualized the amounts of water sold and the amounts of water pumped and purchased by doubling the six month totals. The 17.6% unaccounted for water is of course 7.6% over the normal allowance by the PSC. If the unaccounted for water is truly 17.6% then all costs related to volume such as cost of power, chemicals, etc. should be reduced by 7.6%.

At the OPC deposition of Aloha's president, Stephen Watford on October 29, 2001, Mr. Watford was confronted with these records that Aloha furnished in response to interrogatory and the resulting percentage of unaccounted for water. Mr. Watford's response was that there must be something wrong with the records furnished. If this is true, then let Aloha furnish the corrected records but if the records furnished are accurate, then appropriate deductions in expenses related to volume are in order.

As I was completing this testimony on November 6, 2001, OPC received two late filed exhibits to Mr. Watford's deposition of October 29,2001. The first late filed exhibit by Mr. Watford was an update through September, 2001 of Aloha's

response to Staff's interrogatory No. 25 giving a tabulation of total water pumped and purchased through September, 2001. This late filed exhibit which I attach hereto as Exhibit TLB-9 shows a total pumped and purchased water through September, 2001 of 851,020,341 gallons. The second late filed exhibit to Mr. Watford's deposition is an update through September, 2001 of several flow factors including total water sold to customers of 731,751,000 gallons. I attach this late filed exhibit hereto as Exhibit TLB-10. Calculating the water sold versus total water pumped through September (731,751,000/851,020,341) yields a percentage of 86% and therefore unaccounted for water of 14%. Obviously the unaccounted for water varies from month to month and the full 2001 records should be used for a true picture of the full projected test year of 2001 for unaccounted for water.

Strangely, there are unexplained differences in the data shown on these two late filed exhibits to Mr. Watford's deposition. For instance, for total water pumped and purchased, one document shows 851,020,341 gallons while the other document shows 818,650,000 gallons for an unexplained difference of 32,370,341 gallons.

Interestingly, the 731,751,000 total gallons sold to customers through September, 2001 as reported by Mr. Watford in his late filed exhibit may be approximately annualized by considering this total amount sold to customers to be about 75% (9 months/12 months) of the total projected to be sold in 2001. By this calculation, the total 2001 sales to customers would be 975,668,000

gallons which is slightly lower than my previous projection of 994,044,000 gallons that I obtained by doubling the six month values. The annual projection using the nine month records is further proof that my six month projection was slightly conservative since the remaining records for October, November and December are not normally high usage months. Again, the actual records are showing a much lower water usage than the usage shown by Mr. Porter in Schedule G-9 of the MFRs.

Q. WHAT TESTIMONY DO YOU HAVE TO OFFER CONCERNING ALOHA'S ALLEGED DEMOGRAPHIC SHIFT WITHIN THEIR SERVICE AREA TO YOUNGER CUSTOMERS WITH CHILDREN WITH LARGER HOMES ON LARGER LOTS?

A. My testimony is based on having been in the Aloha service area on many occasions during two cases before the PSC over the last 3 years. I have not only been throughout the service area but have been in a number of the Aloha customer's homes and have discussed this very issue with Aloha customers. My observation has been that there is only a scattering of young families with children and that the vast majority of Aloha's customers are older retired people with average age of about 70 years. My observation has been that these customers have no more than an average of 2.5 occupants per household which is the same as established by the SWFWMD for this area. The customers that I have interviewed completely agree with me and my observation. I have also noted that the newer subdivisions in the southern part of Aloha's service area all

tend to have large houses with extensive landscaping on their lots that they irrigate regularly. Some, but not all, of these newer subdivisions have irrigation water from private wells and distribution systems owned by their homeowner's associations. A listing of permitted irrigation wells that I obtained from the SWFWMD confirmed the presence of these private irrigation wells. Not surprisingly, the subdivisions with the private irrigation wells and distribution systems have smaller Average Annual Monthly and Daily Demands from Aloha. Two out of the twelve subdivisions that Mr. Porter averaged to obtain his 500 Gallons/Day/ERC have these private irrigation wells and these two subdivisions (Millpond and Wyndtree) showed Average Annual Daily Demands of only 209 and 322 Gallons/Day/ERC respectively. The fact that the remainder of these subdivisions had high usage per ERC which made the average equal to 500 Gallons/Day/ERC only goes to prove that it was the extensive irrigation in the driest year on record in 2000 that caused the extraordinary water use.

In summary, I have seen nothing in the Aloha service area to support Aloha's claim of a demographic shift in population.

Q. WILL YOU NOW DISCUSS YOUR INVESTIGATION INTO THE STATUS OF THE "BLACK WATER PROBLEM" WITHIN THE ALOHA SERVICE AREA AND THE PROGRESS ALOHA HAS MADE IN GOING FORWARD TO FIND A SOLUTION TO THIS PROBLEM?

A. Yes, I will. I first obtained a copy of the PSC clarification order to Aloha from the past water quality issue case. The clarification order from the PSC reads as

follows:

> ORDERED that Aloha Utilities, Inc. shall immediately implement a pilot project using the best available treatment alternative to enhance the water quality and to diminish the tendency of the water to produce copper sulfide in the customers' homes as set forth in the body of this Order. It is further
>
> ORDERED that Aloha Utilities, Inc. shall file monthly reports with the Commission indicating the status of permitting and construction for the pilot project and the results of the pilot project on the quality of water.

I then went to the PSC web site and pulled up all the monthly reports from Aloha to the PSC to determine what Aloha had done in response to the PSC order. I obtained and studied copies of Aloha's monthly reports to the PSC for the months of January, 2001 through October, 2001. Through these reports, Aloha's responses to interrogatories and depositions of Aloha witnesses by PSC Staff and the OPC, I was able to piece together the history of Aloha's actions in response to the PSC order.

It will be remembered that Aloha proposed a packed tower aeration system as their solution to the hydrogen sulfide content in their water during the prior water quality case before the PSC. However, Mr. David Porter reports that FDEP contacted him and suggested that Aloha pilot test an ion exchange followed by clarification process known as the "MIEX DOC" process. FDEP informed Mr. Porter that the MIEX DOC process had been piloted successfully

by Pasco County for their water supply. Mr. Porter and Aloha apparently determined that this MIEX DOC process was the "best available treatment alternative" because Mr. Porter immediately began to meet with representatives of ORICA Watercare, owners of the MIEX DOC process and their Florida representative WesTech, Inc. to arrange for the pilot testing.

By the March report to the PSC, Mr. Porter reports that the small scale "bench-top" tests had been completed on the Aloha water from Well No. 9 using the MIEX system and that the testing went quite well. He and the MIEX representatives will now plan the full scale pilot testing.

In his April report to the PSC, Mr. Porter informs that the full scale pilot testing had been performed at well No. 9 and that the results were very encouraging with the finished water from the tests having very low hydrogen sulfide, total organic carbon, UV absorbance and color values. Mr. Porter then discusses certain modifications to be made to the testing equipment and that further testing will be performed.

In his May report to the PSC, Mr. Porter reports that the modified testing equipment was "mixing limited" and that further modifications would be made to the equipment for additional testing.

By his July report to the PSC, Mr. Porter informs that subsequent testing had been performed using pH control equipment and up-flow reactor-clarifier and that the testing went well with the MIEX process obtaining good ionic sulfide removal efficiencies. The pilot program was ended and the equipment sent back

to WesTech. Mr. Porter states that he will now prepare the MIEX pilot trials report that will take 30 to 45 days to complete. He also says that he will work with Orica and WesTech to develop plant process designs and cost estimates which will be included in the report.

From Aloha engineer Porter's reports through July, 2001, the pilot testing and the results using the MIEX process sound very good, and the reader of these reports is expecting to see Mr. Porter's final report on the MIEX process within a short time, including a design for the Aloha system and cost estimates for installation. However, in Aloha's August report, Mr. Porter tells us that "water supply issues have come up" and that "he has been looking into alternative water sources for the long term supply for Aloha." Mr. Porter reports that the development of a reverse osmosis (R/O) treatment system using brackish water may be the solution. He further states that this possible new water source may, to some extent, be combined with either the MIEX or packed tower alternative for overall solutions to the various issues which Aloha faces. Mr. Porter says that he will complete a draft of the MIEX pilot trials report and review it with FDEP prior to preparing the final report.

In Aloha's September, 2001 report to the PSC, Aloha engineer Porter repeats his August report verbatim and then adds, "Therefore, not only must Aloha now evaluate the different alternatives for reduction of hydrogen sulfide, but it must also evaluate these alternatives in light of their expected compatibility with the more pressing water supply needs and those alternatives that the Utility must

address immediately."

Aloha's October report to the PSC is simply a verbatim repeat of their September report.

I attach hereto as Exhibit TLB-4 copies of Aloha's reports to the PSC from January, 2001 through October, 2001.

After reading Aloha's reports on the pilot testing of the MIEX process at Aloha's Well No. 9, I went to the web site of the MIEX product and found a paper entitled " USE OF A CONTINUOUS ION EXCHANGE PROCESS (MIEX) TO REMOVE TOC AND SULFIDES FROM FLORIDA WATER SUPPLIES." I printed the MIEX paper and attach it hereto as Exhibit TLB-5.

In this technical paper, the MIEX process is described in detail and then case studies concerning sulfide removal are discussed. The sulfide removal in bench scale tests at Aloha's Well No. 9 are presented along with charts showing essentially complete removal of the hydrogen sulfide. The paper concludes with the statement that "Ion exchange resins can be used to remove a number of soluble contaminants of concern and trials with the MIEX resin technology have demonstrated simultaneous removal of TOC (Total Organic Carbon) and sulfides, providing a simple and economical solution to problems encountered by many utilities in Florida." The author of the paper then acknowledges and thanks contributions to his paper including, "David Porter of David Porter Engineering Consultants for making available the results of the Aloha Utilities tests."

In reading Aloha's reports to the PSC concerning the pilot testing, one is encouraged that an economical solution for hydrogen sulfide removal may have been found. But the July report suddenly reports that "water supply issues have come up." This statement leaves the impression that the water supply issue is a new issue only recently raised and the ensuing reports make it clear that Aloha intends to solve the water supply issue before proceeding further with the solution to the hydrogen sulfide ("black water") problem in their wells.

This posture by Aloha is indefensible. Aloha has known of their water supply problem since at least April 2, 1999 when the SWFWMD first issued Aloha an overpumping compliance notice with a demand that Aloha bring their pumping withdrawal within their permitted quantities. A second more strongly worded "Notice of Non-Compliance, overpumping" letter was sent to Aloha by the District on June 6, 2000. Then on November 11, 2000, the District's legal department sent Aloha a Notice of Violation with demands for Aloha to bring its withdrawal into compliance within 30 days or face fines and legal action. Finally, on January 5, 2001 the District sent Aloha a proposed consent order including heavy fines and provisions for Aloha to bring their withdrawal within permit limits. Negotiations have proceeded between Aloha's attorney and the District's counsel since January with the current status being that Aloha has now proposed to perform an R/O feasibility study for additional water supply.

During my visit and interviews with SWFWMD personnel, I obtained a copy of their entire file on the enforcement action and proposed consent order with

Aloha. I attach these copies hereto as Exhibit TLB-6.

I also placed calls to some Aloha customers and inquired as to the current status of the "black water problem." I was informed that the problem is as bad as ever and that home systems must be frequently flushed in order to use the water.

In summary, my investigation into the status of the black water problem and Aloha's progress in solving the problem revealed that Aloha's pilot testing seems to have found an answer but that Aloha is delaying completion of engineering studies, reports, preliminary designs, etc. until they solve their water supply problem. Aloha has obviously painted themselves into a corner by their inaction since 1999 in developing additional water supply. It is also true that different water chemistry from water purchased from Pasco County and chemistry of new water from an R/O process will all have to be taken into consideration in any MIEX system designs if these waters are mixed with the Aloha Well waters. In the meantime Aloha customers suffer with a very low quality water that is very offensive in their homes. I am informed by R/O experts in the SWFWMD that it will require 3 to 4 years from the start of an R/O feasibility study to completion of an installation. Meanwhile the customers suffer.

Q. BASED ON YOUR INVESTIGATIONS, DO YOU BELIEVE THAT ALOHA HAS COMPLIED WITH THE COMMISSION'S ORDERS IN CONNECTION WITH PILOT TESTING AND REPORTS REQUIRED IN CONNECTION WITH ENHANCING THEIR WATER QUALITY TO

DIMINISH THE TENDENCY OF THE WATER TO PRODUCE COPPER SULFIDE IN THE CUSTOMERS HOMES?

A. Aloha may have complied with the letter but not the spirit of the Commission's order. Starting a pilot program which they knew or should have known would have to be suspended because of their water supply problems was only a half-hearted attempt to comply with the Commission's orders. Preparing reports for August, September and October that are essentially identical and provide no further evidence of progress is disingenuous in my opinion. It appears to me that Aloha is simply stalling on this issue, as well as the issue of overpumping beyond their permit limit.

Q. DO YOU HAVE ANY COMMENTS CONCERNING YOUR INTERVIEWS WITH SWFWMD PERSONNEL IN CONNECTION WITH ALOHA'S WATER SUPPLY PROBLEMS?

A. The SWFWMD personnel that I interviewed seem to be exasperated with their dealings with Aloha to get them to comply with the withdrawal limits of their WUP. Talking to them and reading their interoffice memorandums in the consent order file (Exhibit TLB-6) make this fact obvious. The District's technical personnel have serious doubts as to the technically feasibility of an R/O facility in the Aloha Service area. One Professional Geologist in the District's Water Use Section states in a memorandum that the R/O system proposal by Aloha "contain this Utility's typical delaying tactic and wait and see approach." This same Geologist stated in his memorandum that, "The proposed

R/O facility is a "red-herring" in my opinion, as I do not think FDEP would approve such a facility within the Aloha service area, due to the difficulty of disposing of the brine-water-concentrate produced during the RO process."

Notwithstanding their misgivings, the SWFWMD seems to be willing to let Aloha study an R/O facility as this provision is included in the latest draft of the proposed consent order.

Concerning the cost of an R/O feasibility study and installation, Mr. Bart Weiss, the District's R/O expert, estimated to me that the study would cost $600,000 to $700,000 and the R/O installation of a 2.5 MGD plant would cost $15 to $17 million. Aloha's president, Steve Watford, has testified at deposition that his engineer had given him a cost of about $1 million for the study and $20 to $30 million for the plant installation.

Q. DOES THAT COMPLETE YOUR DIRECT TESTIMONY?

A. Yes, it does.

BY MR. BURGESS:

Q Mr. Biddy, could you provide a summary of your testimony for the Commission, please?

A Yes, sir, I will. The purpose of my testimony is to provide engineering testimony concerning the Aloha request for rate increase, and in that connection I did study all the file data including the MFRs, all the testimony, all the exhibits.

I did then conduct interviews of the Department of Environmental Regulation, Mr. Foster who testified here, concerning any enforcement action they might have against Aloha, permit compliance issues, and the DEP's involvement in the MIEX pilot program.

I then went to the Suwannee River Water Management, I mean the Southwest Florida Water Management District and interviewed Mr. John Parker, who testified here this morning, and his associate Mr. Steven DeSmith.

From them I received the names of a number of other people in the district that I should talk to about the proposed RO project that Aloha was looking at, a Mr. Bart Weiss, who I interviewed by phone, and Mr. Robert Peterson, who is the district's overall water use expert, and a Ms. Rachael Link, who is the keeper of the records of the irrigation wells in the district.

I did study all the historic water use records for the Seven Springs area and I did determine the weather for the

last ten, 15 years. And also for Mr. Stephen Stewart's investigation I discovered that the Year 2000 had been the driest year on record since the Water Management District has been keeping records, and that would be in 1916.

I then did an analysis of Mr. David Porter's projections of the water use for the Aloha test here. I was very shocked to see that he had proposed the use of 500 gallons per day per ERC. I found that Mr. Porter's analysis was not a correct engineering analysis and I recommended in my testimony that it be disregarded, and I'll be happy to explain why as we go through my testimony.

In summary on that I did find that the water use had actually decreased during the 2001 year rather than any increase.

I did calculate the unaccounted for water for the Year 2001 and found it to be in excess of ten percent. I investigated the status of the black water problems in the area and also the status of the Aloha pilot program for their MIEX project and I investigated their proposed RO facility study and plant. And that's the general outline of my testimony.

MR. BURGESS: Thank you, Mr. Biddy.

Chairman Jaber, we would tender the witness for cross-examination.

COMMISSIONER JABER: Thank you. Mr. Wood, do you have any questions?

MR. WOOD: Yes.

CROSS EXAMINATION

BY MR. WOOD:

Q Mr. Biddy, on the pilot program --

A Yes, sir.

Q -- is the pilot program progressing today?

A Not to my knowledge, no, sir. It was started early in the Year 2001, went through July of 2001, and was then suspended essentially with the statement that supply problems had come up and they would have to solve them before they could go forward.

Q Did the pilot program, did it lead you to believe that it had been well underway?

A Yes, sir. It was, it essentially was finished for the bench testing and then a pilot test on Well Number 9 and showed very good results.

Q Were these results ever published anywhere?

A Yes, they were. I went to the web site, and that's one of my exhibits is the web site of, of the parent company of MIEX, who published their paper on this. And I have that paper included in one of my exhibits, and they did quote Mr. Porter and the information he furnished in the mixed tests of the MIEX project.

MR. WOOD: Uh-huh. That's all the questions I have.

COMMISSIONER JABER: Thank you, sir.

Ms. Lytle?

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

COMMISSIONER JABER: Staff?

MR. JAEGER: Just a few.

CROSS EXAMINATION

BY MR. JAEGER:

Q Mr. Biddy, all other things being equal with respect to the average monthly temperature, as temperature increases would you expect average water consumption to also increase?

A Yes.

Q All things being equal with respect to total monthly rainfall, as precipitation increases you would expect average water consumption to decrease?

A To decrease, yes.

Q Wouldn't you also expect that as the temperature rises, the evaporation increases?

A Yes.

Q And so as the temperature rises, wouldn't you agree as evaporation increases it reduces the effect that rainfall would have on consumption?

A Probably so depending on the antecedent conditions that existed prior to that event you're talking about.

Q But you do agree that increasing temperatures affect the magnitude that rainfall reduces consumption?

A Yes.

Q Do you believe that the black water that some of the customers of Aloha are experiencing is caused by hydrogen sulfide reacting with copper pipes?

A Yes, I do.

Q And what does chlorinating do to hydrogen sulfide?

A Chlorinating drives the hydrogen sulfide all the way to sulfates. If you, if you, I guess if you added enough chlorine, it would drive it all the way to elemental sulphur.

The problem here is, as I see it, is that we have a varying raw water concentration of hydrogen sulfide. The chlorinator is set to meter out whatever it takes to oxidize, say, five parts per million of hydrogen sulfide. But periodically you get much higher concentrations coming through and essentially you use up all the chlorine and you pump hydrogen sulfide directly into the system and into the homes. I see that as far more likely than the sulfates being oxidized or being changed back to hydrogen sulfide in the hot water heaters, although that may have an effect, also. But to the extent it exists in this area, I think it's the pure hydrogen sulfide coming into the homes from time to time but not all the time.

Q So the solution is either to keep the hydrogen sulfide and SO4 (PHONETIC), I'm sorry, the sulfate form or get rid of the sulfide completely; is that correct?

A Yes. The best way is to get rid of the hydrogen

sulfide completely.

Q And what are some of the processes that get rid of either 98 to 99 percent of that?

A Well, during the water quality case, of course, the company recommended a packed tower aeration system, very excellent system, also a very costly system. As you remember, I recommended that we go to an oxidizing pressure filter.

At the conclusion of that the order was that Aloha go forward with either that packed tower aeration system or another system that would dramatically decrease this hydrogen sulfide and keep it from entering the homes or any hydrogen sulfide from being a problem in the homes.

At the, not the insistence but I guess the recommendation of the DEP and Tampa office Aloha chose to go to a chemical process that's called a MIEX process, which is an ion exchange followed by a filtration system. It's kind of similar to what I had proposed, except it's not a pressurized system, it's an open system. And it will essentially take all the hydrogen sulfide out and from what I can read in the literature at a very economical cost.

Q This is the MIEX?

A The MIEX system, yes, sir.

Q Now --

A That's what they have tested as a pilot program. And the results are very encouraging, except for the fact that they

stopped in July and didn't go forward.

Q Now we've talked about both packed tower aeration and just, I've heard regular aeration or cascade or tray. Can you tell me the differences in those?

A Yes. The packed tower is a forced draft aeration that gives you much better water interface with air, which immediately takes out -- any time water that's contaminated with hydrogen sulfide comes in contact with air, it interfaces it with the air. Any hydrogen sulfide that's there, it will, it's soluble up to 3,000 parts per million, so chances are if there's a hydrogen sulfide source as there is particularly in Wells 8 and 9, that you'll have a concentration of the hydrogen sulfide. But when it enters and contacts with air, it immediately comes out a solution, it goes into the atmosphere.

And so a gravity type or like a ladder type aeration will get you, you know, some contact and you can, you can get a good percentage of the hydrogen sulfide out. I have used that system successfully in some areas, places.

A forced draft aeration system is under pressure and, therefore, gives you more exposure to air, more interface with air with the water and more removal of the hydrogen sulfide.

Q I may have testified. I'll let you answer the question. How much will just regular aeration -- what percentage of the hydrogen sulfide can you expect to get rid of with regular aeration?

A In excess of 50 percent, maybe 65 or so for just a gravity type aeration.

Q And packed tower aeration, what can you expect?

A Essentially all, 98 to 100 percent. And the same thing is true with chemical systems, 98 to 100 percent.

Q And how much more expensive is packed tower than regular tray?

A It's, there's no comparison. A tray aeration is simply where you bring water in, just trickle it over essentially a ladder and let it interface with the atmosphere and bubble down to drop down to a containment vessel; whereas, the packed tower aeration is a pressure system and forced draft air going through the water and it's perhaps a million dollars per site that we talked about at the quality case.

Q Have you done any analysis to determine how much of the hydrogen sulfide will be needed to be removed to show any improvement in the customers with the black water problem?

A No, I have not specifically done that analysis.

I know from, from my experience with this ladder type aeration that a gravity type aeration, cascading aeration down a ladder type will remove it to the point where I've never seen the black water problem in those areas with copper plumbing. But you can only, only be sure if you get it all out, and so I think I, I would certainly be back to my same recommendation I had at the prior hearing. And this MIEX system is kind of a

derivative of that or a similar process and it sounds like a good system.

MR. JAEGER: I have no further questions.

COMMISSIONER JABER: Thank you.

COMMISSIONER PALECKI: Could I just follow-up on that? I think you said that your previous recommendation was the oxidizing pressure filter?

THE WITNESS: Yes, sir, I did.

COMMISSIONER PALECKI: If you were to have to choose between the oxidizing pressure filter or the MIEX system, which do you prefer?

THE WITNESS: I would like to see a little more cost on the MIEX system. I think it's -- from what I can read of the literature, it sounds like it has a, it's better from an operational standpoint. I hope it would be similar in cost, which was about $300,000 per well that I had estimated for the pressure, oxidizing pressure filter.

I would lean right now towards the MIEX system based on what I've read of its record and its literature and the pilot program that was run at Well Number 9 at Aloha.

COMMISSIONER PALECKI: So you'd lean in favor of the MIEX but you just would like to know a little bit more about the cost?

THE WITNESS: Yes, sir. And it's there at that point now and has been since July to start some, you know, to

complete a report and a preliminary design and a cost estimate. And we've been waiting on that, frankly, since July and here we are.

COMMISSIONER PALECKI: Thank you.

CHAIRMAN JABER: Aloha?

MR. WHARTON: Commissioner Palecki, I hope that in furtherance of a full record that you'll make yourself a note and perhaps ask Mr. Porter about that.

COMMISSIONER PALECKI: Yes, I will.

MR. WHARTON: That oxidizing pressure filter came up in the last case and I'll bet we had done a deposition on it that was, now I don't remember all that stuff now, but it was a lot of evidence on whether or not that was appropriate.

MR. BURGESS: Commissioner, I think this is inappropriate for, you know, Mr. Wharton to be testifying here. Obviously Commissioner Palecki can ask whatever he wants.

MR. WHARTON: Okay.

CROSS EXAMINATION

BY MR. WHARTON:

Q Good evening, Mr. Biddy.

A Good evening.

Q Did I hear you say that you understood the Commission had issued an order directing Aloha to go forward with packed tower?

A No.

Q Okay.

A They had issued an order to go forward with a pilot program using either packed tower or an alternative that they deemed best. I included that order verbatim in my testimony, if you'd like me to read it.

Q No. That's okay. I just had misunderstood what you had said about the packed tower, the order to go to packed tower itself.

A Or the best alternative, I think is the way they worded it.

Q But you're talking about the pilot project; right?

A That's correct, and to issue monthly reports.

Q Mr. Jaeger asked you a series of questions about the relationship between temperature and rain and water usage, and every time he included the phrase "all other things being equal." Do you remember that?

A Yes.

Q Would you agree that if all other things aren't equal, that some of your answers might be different?

A Well, you have to consider the whole water balance equation, as I testified at deposition. And rainfall is one, of course, temperature, antecedent moisture condition, soil conditions, there's any number of factors that you need to look at in terms of drought indexes and just what you need to have as far as irrigation. That's what we're talking about here

primarily.

Q But would you agree that the type of ratios that you expressed might exist for those particular factors could be affected by such things as Water Management District restrictions? Let's say that it's both hot and it's dry but there are severe restrictions in place. That might change the relationship between the heat and the --

A All of those are factors that need to be considered.

Q Okay. Mr. Biddy, have you ever seen hydrogen sulfide in Aloha's water after it is treated but before it goes into a home?

A Well, we visited this issue during the quality case. I took a lab and tried to take samples of all the wells and in all the homes. I say all the homes; a series of ten or 12 homes, I guess it was. As you well remember, all we could find was a superchlorinated water and no, no chemicals of any sort, not one, not even in the raw water. The Savannah Lab is a very competent and highly respected laboratory, took those samples and tested them and found nothing but highly chlorinated water.

Q All right. Well, since you issued the, since you mentioned the issued of superchlorination, do you recall that your testimony in that case was that Aloha must have superchlorinated the raw water wells in order for Savannah Labs to get the results that they got?

A Yes, I do, and I still believe that. There's no way

that we could have taken raw water out of Wells 8 and 9 -- in fact, every well. We found no sulfides in any raw water and simply because, I believe, and the lab told me it had a strong chlorine content, that the raw water had been spiked with chlorine. Now to what extent it was spiked, I don't know. Like I say, superchlorinated, a lot of chlorine added to the raw water.

Q Now let me make sure that we all understand what we're talking about. You agree that at that time, and I'm going by memory, the wells you were talking about, some of them were 500 gallons per minute and at least one was 1,000 gallons per minute?

A Yes, that's correct.

Q Okay.

A Well Number 1 is 1,000 gallons a minute.

Q And do you remember the witness from Savannah Labs indicating that she did not believe that such superchlorination could have occurred?

A Well, you know, I use that term "superchlorination" rather loosely. I'm saying it was spiked with chlorine. The lab said that the strong odor, and it had an odor index of 16 to 20, which is way over the allowable, was a strong chlorine odor and they could find no sulfides in the water anywhere. So I concluded that the wells had been, the raw water had been doctored, and I still believe that to this day.

Q Well, Mr. Biddy, you provided some background. Let me ask you again. Have you ever seen hydrogen sulfide in Aloha's water after treatment but before it goes into a home?

A No.

Q Okay. Do you have any specific evidence that Aloha's treated water has hydrogen sulfide in it?

A That's my theory that it does from time to time because of the varying concentration from the raw water, particularly in Wells 8 and 9, which are the new wells that were built on the power line in a very low, swampy area.

Q But do you have any specific evidence that Aloha's treated water has hydrogen sulfide in it?

A Just, just the circumstantial evidence of, of the homes in that area that are fed by Wells 8 and 9 having a high incidence of the black water problem, the copper corrosion problem. And I don't for one minute believe that sulphur-reducing bacteria could change the sulfates to that extent and blacken and eat up all the copper piping in a home and cause the extent of the black water that I saw when I went to these homes where a lady could take me to her bathtub and turn on a nozzle and draw a tub full of ink. And that --

Q Do I --

A There's a tremendous amount of hydrogen sulfide getting to that copper to cause such a thing.

Q Do I fairly characterize your testimony that you do

not have any specific evidence that Aloha's treated water has hydrogen sulfide in it?

A Just circumstantial evidence.

Q Other than -- no specific; correct?

A I do not.

Q Okay. Would Aloha's water be in compliance with DEP rules if it had zero milligrams per liter chlorine residual?

A No.

Q Didn't DEP testify the utility was in compliance with all the rules?

A At the times of testing, yes, they sure did. They're supposed to have two-tenths of a part per million, the furthest part in the system, at all times.

Q Can you have a free chlorine residual in water that has hydrogen sulfide in it?

A No, you cannot.

Q Okay. Mr. Biddy, given your theory about the hydrogen sulfide in the water, how would you explain two homes side by side, one which experiences the black water problem and one which does not?

A I think it's a matter of use. One that's in, either sitting there vacant or on vacation or with only very little use and it sits there and reacts with the copper piping, that home would tend to have the black water problem with the presence of hydrogen sulfide versus a home that might be in

heavy use with water during that day.

And I want to emphasize that that hydrogen sulfide, my theory about the hydrogen sulfide being pumped directly into the homes is a sporadic thing. It is not, not the usual norm. The usual norm is that there is free chlorine in the system. But occasionally the, the concentration from these wells, Well 8 and 9, of the raw water is higher than the meter is set for the chlorinator. And until Aloha gets a complaint and can go out there and turn up the meter or go out and flush the system, you'll have black water or hydrogen sulfide going into these homes.

Q And in the example I gave you, what if the use were approximately equal, how would you explain the phenomenon?

A I'd have to look at it on a case-by-case basis. But I don't -- I believe if they were equal, they'd probably both have black water if they had enough contact time with the copper.

Q Sir, you have testified in your prefiled testimony about the issue of flushing and how much water that uses in terms of your testimony about the water usage of Aloha's customers; correct?

A Yes. I did not quantify how much. I said it's a factor that Mr. Porter did not consider the fact that, especially in that southwest and south area of the service area where you've got a lot of black water problem, that my

experience and talking with all these customers is that they flush regularly and extensively and, therefore, are forced to waste a lot of water.

Now I heard Mr. Porter's testimony about eight gallons per day per ERC. I have no idea if that's correct or not. I have not quantified that.

Q Okay. In fact, you haven't done any kind of an analysis or a report or an attempt to specifically quantify any kind of an average for people who have this problem in terms of how long they flush, how much they flush or how often they flush, have you?

A Well, it would be an extensive project to go and survey all these homes and, no, I have not had time nor budget to do that.

Q Okay. And so your evidence in that regard is anecdotal?

A Well, it's more than that. It's from direct interviews with these people while I was doing tests at their homes and seeing 300 customers at two different, three different meetings.

Q Mr. Biddy, do you have a copy of your deposition?

A Yes, I do.

Q I'd like you to look at page 20.

A 20?

Q And I guess I should ask you do you recall that I

took your deposition on November 28th, 2001?

A Yes.

Q And at page 20, line six.

Question, "Have you done any kind of an analysis or report or attempt to specifically quantify any kind of an average for people who have this problem in terms of how long they flush, how much they flush or how often they flush?

Answer, "No, I haven't."

Question, "So your evidence in that regard is anecdotal?"

Answer, "That's correct."

Do you stand by that question and answer?

A Well, yes. But when you say anecdotal, it's based -- anecdotal in this case is, is my direct investigation with these people. It's not just hearsay.

Q And you haven't tried to keep any specific records about who flushes so often or for this duration or this time; correct?

A No. I've simply talked to a lot of the problem area owners and determined that they, they do flush a lot when they have a problem to clear the water up to a point where they can use it.

Q Any notes that you kept from past customer contacts in that regard you didn't even review in preparation for your participation in this case, did you?

A I did go back in the prior notes of the case and looked at the different people that I had talked to and I reviewed some of the notes, and that certainly is true what I just said about the flushing.

Q Well --

A And I've heard before this Commission and I'm sure Ms. Jaber, who was on the last Commission, remembers as well that people talk about flushing all the time when they say they have the black water problem. It's the only way to get rid of it.

Q Sir, when I took your deposition on November 28th, you had already prefiled your testimony; right?

A Yes.

Q Take a look at page 21 for me commencing at line three. Well, commencing at line one.

"Have you kept other records of the conversations?"

Answer, "I have notes from time to time on those prior cases. I don't have those prior case notes with me. We went into a number of homes and did actual sampling and testing in the homes and outside of the homes."

Question, "Have you gone back and reviewed those notes in preparation for your participation in this case?"

Answer, "No, I have not."

A And I had not at that time.

Q Okay.

A But, you know, you, as you might expect, I did then go back and look at them.

Q Okay. But before when you filed your testimony you had not reviewed your notes?

A No. That's true.

Q Okay. And, in fact, you had just relied on your prior perceptions and memories in that regard?

A Yes. Yes. And it hadn't been that long.

Q Now on this issue of flushing and how it affects water usage, you're not able to quantify in terms of gallons per day what flushing occurs?

A I have made no attempt to quantify it. I could, with enough time and research, make a pretty good estimate of it. I heard Mr. Porter testify to eight gallons per day per ERC. I have no way to verify that.

Q As we sit here today do you have any basis to disagree with Mr. Porter's conclusion?

A No, I don't.

Q You didn't have the budget or the time to do any kind of study or analysis in terms to quantify that into gallons per day; correct?

A As far as flushing, the amount of flushing, no, I did not.

Q Yes, sir. Now you agree that the Chelsea neighborhood is one that's experiencing one of the worst black

water problems in the Aloha service area, don't you?

A Yes, I do.

Q And you would suspect that they have irrigation water somewhere in that neighborhood because usage in the Chelsea neighborhood is very low, isn't it?

A That's true.

Q But you had a list with you, a computer printout at the deposition of irrigation wells in the Aloha service area, and you looked there and you couldn't establish there was an irrigation well in Chelsea, could you?

A No. But I -- there was perhaps 1,000 names or more on the list of people who had those irrigation well permits. I have no idea whether they took it out in somebody's name or whatever. I know that Wyndtree and Wyndgate both have the irrigation lines installed by the homeowners association. Chelsea, I suspect they do. I don't know that for a fact.

Q But you acknowledge that you told me in your deposition that if, in fact, Chelsea Place does not have an irrigation well, it's very surprising to you that they have relatively low usage and yet they've experienced a black water problem?

A Yes. And, of course, if Mr. Porter is correct that it's eight gallons per day per ERC, that's a small effect. And that was the very last effect that I mentioned as affecting the water usage.

Q And you told me regarding that particular dilemma on Chelsea Place that you didn't know what conclusions to draw from that apparent anomaly.

A Well, I said if that were all true as you postulated, that that would be an anomaly that I could not explain.

Q Let's talk about the issue of demographics. Sir, you indicate in your testimony that you haven't observed anything that would lead you to believe there's been a demographic shift in the Aloha service area; correct?

A That is correct.

Q Now you seem to indicate that you had a concern about the fact that Mr. Porter in reaching his opinions had relied on information from Mr. Watford. But, in fact, you have no reason to doubt the accuracy of the information Mr. Watford supplied to Mr. Porter, do you?

A No. As I explained at deposition, I, my problem with the data Mr. Watford furnished to Mr. Porter was the selectivity of the data rather than the accuracy of the data. I have no reason to doubt that it was accurate data that he pulled for each one of these subdivisions from his records. But he selected the 12 subdivisions.

Q Now you agree the 12 subdivisions used by Aloha when projecting water use are not the 12 highest use neighborhoods in Aloha; correct?

A That's correct.

Q But you agree that they are Aloha's 12 newest neighborhoods.

A They are. And they contain many of the higher usage areas.

Q And you agree they are all less than ten years old?

A Yes, they are.

Q And it's not your contention that Aloha handpicked these 12 neighborhoods to prove some point.

A Well, I, I have lots of problems with, with Mr. Porter's average of those. He did a simple average of the gallons per day per ERC, which is a mathematically meaningless number in this case.

For instance, he, one subdivision had 79 bills that were analyzed that had a 560 or 70 gallons per day per ERC. He, he averaged that on an equal basis with those with eight and 9,000 bills with a 220 gallon per day per ERC. That's just mathematical nonsense, and he knows, he fully knows that. You cannot do a simple average and get anything. You need to do a weighted average.

Q But it's not your contention that Aloha picked those 12 neighborhoods to prove some point, is it?

A I don't know whether they did or not.

Q Okay.

A I know that they --

Q Thank you. Now you do agree that it's logical for

Aloha to assume that its growth will come in neighborhoods that aren't yet built out; right?

A Yes. I do agree that, that --

Q And conversely you agree that it wouldn't be logical for Aloha to assume that its growth will occur in neighborhoods that are built out?

A Yes, that's true for the future. For analyzing the past six years, as Mr. Porter did in his rebuttal testimony and exhibit thereto, obviously those subdivisions are ones that are built out now, were in the process, some stage of being built out. The 30 total subdivisions within the Aloha service area, not many of those are fully built out. Veterans Village may be nearly built out. I have seen some vacant lots, few, I grant you, just a few in Veterans Village. But of the 18 that were not selected to be in this average there are areas available.

MR. WHARTON: Commissioner, Chairman Jaber, I think Mr. Biddy is envious of the cross-examination done by Mr. Porter of Mr. Wood. I am getting -- I mean, that question was, it wouldn't be logical for Aloha to assume its growth will occur in neighborhoods that are built out. I think he's mentioned Mr. Porter in response to every question I've asked. We should do that on redirect.

MR. BURGESS: Commissioner, may I respond?

COMMISSIONER JABER: Mr. Burgess, your response.

MR. BURGESS: Yes. I, you know, whether he chooses

to reference Mr. Porter or not, I'm not sure that there's much of an issue on that. The fact of the matter is he's responding directly to the question. The question was does it make any sense to assume that there will be growth in these other neighborhoods? That was his question and Mr. Biddy is answering that.

MR. WHARTON: No.

MR. BURGESS: And he's in the process of answering that.

CHAIRMAN JABER: I'm going to overrule your objection.

Mr. Biddy, try to limit your responses to the question. You may start with a yes or no answer, you may elaborate, but remember that your attorney will redirect you as well.

THE WITNESS: All right. Thank you.

BY MR. WHARTON:

Q Now you haven't attempted to do any analysis or reports or quantifications of the kind of demographics from neighborhood to neighborhood in Aloha that would allow you to determine the age of the families living in there, have you?

A It's -- you would call it anecdotal. My evidence -- no, I have not done that. My evidence is simply observation, having been involved in three cases, been in many of the homes, been in the neighborhood on numerous occasions.

Q But you would agree you haven't done any analyses or reports or quantifications of those kind of demographics?

A I just said that. That's correct.

Q Okay. And you agree that in terms of taking into account future growth in the service area that you should take into account the demographics of the families?

A Yes, I do.

Q And that would include, say, their age and whether they have children?

A There's a lot of factors; that, size of the lot, the lawns, so on.

Q Income level?

A Income level would play some role, yes.

Q Prices of the homes?

A Some, some, I would say some influence, yes.

Q The irrigation habits of the particular demographic groups?

A Yes. And whether or not they have reuse irrigation there or their own homeowner-piped irrigation as some do.

Q But you haven't attempted to quantify the number of new homes by any factor such as age, size, lawn, affluence, children or income, have you?

A Yeah. You asked me those questions. That's correct. And you asked me those questions at deposition and I told you that I just had not had time nor budget to do that. I'd love

to do it and it's something that probably needs to be done, but I have not.

Q Have you reviewed Mr. Watford's rebuttal testimony?

A Yes, I did.

Q And do you recall seeing Exhibit 8 to that testimony, which represented some ads for the homes and neighborhoods in Trinity?

A Yes, I saw that.

Q Are those ads for homes which are in neighborhoods where Aloha's future growth will occur?

A Some of them appear to be.

Q Are these homes like the homes that are built in, say, Veterans Village or some of the older neighborhoods in Aloha?

A No. They're larger homes, more expensive homes.

Q You wouldn't expect any of the building that's still going on in Aloha's service area to be very small homes, would you?

A Well, not in, not in the new subdivisions in the south portion of the service area. The remaining vacant lots in other subdivisions, I would expect them to be comparable if somebody wanted to build in those areas, including the mobile home park, the big one.

Q Sir, would you take a look at your deposition, page 62, line 23?

Question, "Would you expect that any of the building that is still going on at Aloha in terms of the construction of houses would be very small houses?"

Answer, "No, I would not."

A And that's true.

Q Do you stand by that question and answer?

A That's true.

MR. BURGESS: Excuse me. Did you have something to add to that?

THE WITNESS: I said most of the growth will occur in the large home area in the south part of the area.

BY MR. WHARTON:

Q Do you agree, Mr. Biddy, that the fact that there are older, smaller homes in Aloha's service area skews the average system-wide ERCs down?

A Yes.

Q And do you agree that the homes that will be built in the Aloha service area on vacant lots will be more similar in characteristics to those in the 12 newer neighborhoods than to the older, smaller homes; right?

A Yes.

Q And Aloha provided information in discovery, didn't it, about the number of lots that were undeveloped in the 12 newer neighborhoods?

A I don't remember seeing the number of undeveloped

A Yes, I do. And I just said that the majority will be. I wanted to point out that there will be some in other areas obviously.

Q You didn't qualify your answer thusly in your deposition, did you?

A Well, I am now.

Q Okay. Now you aren't able to quantify at all in any of Aloha's newer neighborhoods things such as the number of pools or the average square footage of the homes, are you?

A I have not done that.

Q And you haven't attempted to quantify when you would expect construction will take place on the vacant lots in Aloha's newer neighborhoods, have you?

A Well, the only thing I have seen is Aloha's projection, which I did not disagree with, of 473 new ERCs a year. To that extent I'm assuming we'll have that kind of growth.

Q You would agree that the construction of new schools in or adjacent to a neighborhood is indicative of a belief on the part of local government that there's a need for those schools because there are going to be children in those neighborhoods?

A In some part of that area, yes. There's no schools built directly in these new subdivision areas but there are new schools around the area. I've seen that. I don't know that

that means that they're to serve the south area.

Q Well, you don't know anything about the construction of any schools in the Seven Springs area, do you?

A No, I don't.

Q Okay. And you would agree that if there is a new school, that at least means that in the perception of the school board it's needed?

A That it's needed, yes.

Q And if there's more than one school, you would agree that would indicate an even greater need?

A Yes, I would.

Q Do you know whether or not, Mr. Biddy, there is, in fact, a new elementary school right in the Trinity neighborhood?

A I don't know that.

Q Okay. Now you agree that construction is proceeding at a fairly vigorous pace in Aloha's newest neighborhoods?

A Yeah. The 473 ERCs a year is a pretty good clip, yes.

Q And you would agree that Aloha's newer neighborhoods appear to be successful developments which have been successfully marketed?

A It appears so, yes.

Q Okay. Now you agree with the proposition that affluent customers in larger homes tend to use more water,

don't you?

A To some extent.

Q Okay.

A Not nearly to the extent that Mr. Porter reported.

Q Now I think you told me your belief is that the average age even in the newer neighborhoods is 70 years old; correct?

A From what I have observed by three cases and being in the neighborhoods, going in the homes, attending three hearings, that has been my observation, yes.

Q So, Mr. Biddy, your testimony in that regard is based on what you have just indicated and the fact that you have been in about a dozen of customer, of the customers' homes, some of which were not in the newer neighborhoods; correct?

A That's correct.

Q Okay. And you agree the percentage of customers you have had personal contact with or talked to is really a very small fraction of the total customers of Aloha?

A Well, as far as my personal conversations with them, yeah, it would be a small percentage.

Q Significantly less than one percent; right?

A Well, you know, it would take a long time to get around to a majority of 25,000.

Q Would you agree significantly less than one percent?

A One percent would be what, 250? Yeah, it's probably

somewhere around 250.

Q Well, let's take a look at your deposition. Page 93, line 24, right after I asked you the question about the customers you'd had personal contact with.

Question, "It is significantly less than one percent, isn't it?"

Answer, "Certainly."

Do you stand by that testimony?

A Well, you know, it would be a guess as to how many I've personally interviewed. I said a minute ago 250 might be a reasonable estimate. On reflection, thinking about all the customers I've talked to at three hearings plus the ones I've seen in the neighborhoods, that might be a good rough guess on my part as to the number I've talked to and interviewed about this system.

Q So are you changing the answer you gave me in your deposition?

A Well, I'm just, just reflecting on it and saying that one percent of the 25,000 in the area would be 250 people. So have I interviewed and talked personally to 250 people? Probably so. And so I was mistaken by agreeing with your, your --

Q But you've only been in about a dozen of their homes; correct?

A That's correct, about.

Q Okay. Now if you'd have had the time or budget to more closely interview a larger sample of people, you would have done that?

A Yeah. If, you know, to make a total study of the area, you, you would, it would be well to interview a good cross-section sample.

Q Let's talk about the black water program for a moment.

A All right.

Q You haven't quantified how many people you believe are affected by the black water problem, have you?

A No, I haven't.

Q And you would agree the number of people who spoke at the water quality hearing was, in fact, less than 60?

A It was. However, there had to be at least three, 400 people there at both the morning and evening sessions, many who would have spoke, I suppose, if there had been time. We spent hours and hours and they all obviously were agreeing, as the Commission can verify, with the other testimonies. And many were, were homeowners association presidents and vice-presidents who represented 90 to 100 individuals. So --

Q So they claimed; right?

A So they claimed, yes.

Q Now you agree that the sulfate concentration allowed by DEP's rules is much larger than that found in Aloha's water?

A Yes.
Q In fact, that's 250; right?
A That is correct.
Q And when you measured the sulfate concentration typically found in Aloha's finished water, you found it was four or five parts per million; right?
A Yeah. It was very low.
Q Let's talk about the potential solutions to this problem in your testimony about Aloha's efforts in that regard.
Now the only familiarity you have with Aloha's pilot project is that you have read all the reports from Aloha to the PSC and you've investigated the web site of the MIEX process and you've studied the case histories and the methodology of the treatment; correct?
A Yes. And I have pulled the technical papers on MIEX from the web site and studied those as well.
Q But you do agree that as Aloha is engaged in this project, it is prudent for Aloha to take into account the fact that there may be three or four water chemistries involved in a going forward basis?
A Yes, and I agree with that. And my point was that Aloha should have taken that into account a long time ago. They knew -- see, in July of this year Mr. Porter suddenly says in his report water supply issues have come up and I believe he even says suddenly in one of his reports or new. The

impression is left with the reader that all of the sudden there's a water supply issue that's come up. Well, it's just not true. They've been under citation since April of 1999. They've known of their water supply issue all this time. To say that and to stop the pilot program in its tracks and use that as an excuse in July, I thought, was rather disingenuous on their part. And then to just not do anything else until now or later was just not really going wholehearted at obeying the Commission's order.

Q And yet, Mr. Biddy, having said that, you agree that this latest issue of the incompatibility came up in the middle of the pilot project, don't you?

A Well, I know that the incompatibility problem has existed for some time with the corrosion control program of Pasco County being different from that of, practiced by the Aloha system. So they've known of -- this is not new.

Now the chloramine treatment that Pasco County has recently announced is a new incompatibility problem. So you've got a double incompatibility problem now to solve.

Q So you do agree that the latest issue of incompatibility came up in the middle of the pilot project; correct?

A Yes. Somewhere in the early summer, I think, of 2001.

Q And now another issue has just come up from Pasco

County, hasn't it?

A From Pasco County?

Q That's correct. Of the Pasco County water that you just testified about.

A Yes.

Q Okay. And you would agree that in order to design a coherent system that would be in compliance with the rules and regs, you need to take all the water chemistries into account?

A Yes. And we discussed this at length at my deposition. And what I said then and I say now is that Aloha should have gone forward with investigations of partial systems that perhaps handle the area served by Wells 8 and 9 only since obviously those are the problem area wells and they were at Well 9 doing their first pilot program. I would have expected to see some kind of recommendation since the project showed high efficiency in removing hydrogen sulfide, something that might have been installed separate from the rest of the system.

Q And you agree that -- well, I tell you, Mr. Biddy, I'm not sure you answered the question.

You agree that in order to design a coherent system that would be in compliance with the rules and regs, you have to take water chemistry in account; right?

A And I said yes, of course.

Q And you agree that it would be imprudent not to do so?

A Of course.

Q And you agree that you should carefully consider water chemical interaction both when you're planning your storage facilities and your treatment facility?

A Yes. And the point is, my point is go do it, go on and do it. Don't, don't drag your feet forever on it.

Q And if you don't know what the water chemistries are going to be, you can't come up with a solution for what you perceive Aloha's problems are with regard to water quality, can you?

A I believe that I could have come up with some solutions for the southwest area without that by designing --

Q Do you agree with my statement?

MR. BURGESS: Excuse me. Excuse me. He's answering the question.

MR. WHARTON: Well, he's not really.

MR. BURGESS: Would you allow him to finish?

COMMISSIONER JABER: Mr. Wharton, he needs to complete his answer and, if you don't think he's answered it, follow-up. But let him complete his sentences.

THE WITNESS: Yes, I believe so. By designing a separate independent system and isolating the area served by Wells 8 and 9, I think I could have come up with a design.

BY MR. WHARTON:

Q But you agree that if you don't know what the water

chemistries are going to be, you're not going to be able to come up with a solution for what you perceive Aloha's problems to be with regard to water quality; isn't that true?

A I'm going to have to give you a yes and no answer. Yes, for the whole system. No, if you were talking about a partial system with Wells 8 and 9 since we know full well the water chemistry at Wells 8 and 9.

Q Mr. Biddy, do you agree that Aloha can't proceed to final design on storage or treatment until they solve this water supply problem?

A For the overall system that's true.

Q And you would agree that Aloha only learned the county was going to go to chloramine treatment just recently?

A Well, by recent you mean early summer of last year, I'll agree.

Q Okay. They learned just this, this year. Well, 2001. We're now in 2002. Correct?

A Early summer of 2001.

Q Now you would not support the immediate construction of the MIEX process treatment plant right now because you think it needs to be fully investigated; correct?

A Well, certainly. I think that's what we've been waiting on for Mr. Porter. He said his report would be coming in 30 to 45 days. That's what he said in July. We've yet to see anything else on it except verbatim repeats of that letter.

Q And you're aware that Pasco County is about to substantially change its water chemistry?

A I am, yes.

Q And you would agree that the pilot project is something that was ordered by the Commission without any accounting for this whole water chemistry dilemma that Aloha finds itself in?

A Yes.

Q And if the MIEX system was put into place and then the water chemistry required a modification of that system, that modification would then need to be accomplished for the system to work properly, wouldn't it?

A If you're talking about the overall system, yes. If you're talking about an isolated system that used only well water from 8 and 9, no.

Q You would agree that -- well, sir, do you have your deposition?

A Yes.

Q Look at page 109, page (sic.) ten.

Question, "And just to make sure the record is clear, if the MIEX system was put into place and then the water chemistry required a modification of that system, that modification would need to be done; right."

Answer, "Yes, it would.

A What -- where are you at?

Q Page 109, line nine. When we talked about this in your deposition, you didn't give me this qualification about Wells 8 and 9, did you?

MR. BURGESS: Excuse me. I'd ask counsel to allow Mr. Biddy to look at not only the lines that he cited but the context and take his time and then respond to it.

MR. WHARTON: Take your time.

THE WITNESS: Well, certainly I did on the previous page, 108, discuss the fact about isolating around Wells 8 and 9. You know, I answered the deposition the same way I'm answering here.

If you're talking about the overall system, yes, you've got, you can't go forward until such time as you know the full water chemistry.

BY MR. WHARTON:

Q But I just asked you the exact same question and now you're talking about Well 8 and 9. You didn't do that in the deposition, did you?

A Well, certainly I did. Look back at page 108. And I'm certain we discussed this at length for several minutes, so it must be on other pages as well.

Q Now you don't know whether the MIEX process treatment plant could be isolated just for Wells 8 or 9, do you?

A Don't know without studying it. But you didn't go back and look. If you look at 107, 108, you'll see the

discussion that I just mentioned. So don't leave the impression that we didn't talk just exactly like we're talking now about the isolated system.

Q Although you would agree that on page 109, line nine, when I asked you that question you didn't make that qualification?

A Well, you're talking about the overall system I'm assuming at that point. Yes.

Q You wouldn't support putting the MIEX system into place until these water chemistry questions are answered, would you?

A You'd have to know the water chemistry questions either for an isolated system at 8 and 9, or for the overall system you'd have to know what the water chemistry was from Pasco County and probably have, before you could do that you'd have to know what the proposed chemistry would be and be pretty confident of it with the RO system.

Q It wouldn't be prudent for Aloha to go ahead with those questions outstanding, would it?

A Not on the overall system, no. But I said I would have thought that that would have been the first thing they would have thought about was trying an isolated system in the problem area.

Q But you would agree that it wouldn't be prudent to go forward with that system either until those water chemistry

questions were answered and it was studied?

A I did not say that. I said it would be if you, if you studied it and showed it to be financially feasible and you could actually technically isolate it.

Q Okay.

A I believe you could.

Q Setting aside these questions of the compatibility of the water supplied by the Pasco County Utility Department, if Pasco County has higher quality water than Aloha, wouldn't you agree that the more water Aloha purchases from Pasco County, the more that's going to raise the quality of the water delivered by Aloha to its customers?

A You're saying all things being equal, all the compatibility problems solved and so on? Yes, that's true.

Q Do you know whether anyone other than you has suggested that treatment of only Wells 8 and 9 is the appropriate solution to these black water concerns?

A I don't know any other engineer who's been investigating this for all these years as Mr. Porter and I have.

Q Have you ever heard Mr. Porter make that suggestion?

A No. But I see Mr. Porter went directly to the problem area with his pilot program, to Well 9, and did his pilot program there. I've never heard him say he would isolate the systems.

Q Have you ever heard DEP or any of its staff suggest that treatment only of Wells 8 and 9 is the solution?

A DEP doesn't get into that kind of detail.

Q Have you ever heard anyone, say, at the PSC suggest that?

A No, I have not.

Q Do you know whether the pilot project requirement in the PSC order suggests isolation for Wells 8 and 9?

A No, it doesn't mention it. I would have thought that's the first thing that Mr. Porter would have thought about. I'm sure he did. But perhaps, you know, he wasn't given the go-ahead to look into that kind of detail. I don't know. I'm not privy to what he was contracted to do.

Q You would agree after hearing all the evidence in the water quality case that the Public Service Commission did not see fit to isolate the pilot project to Wells 8 and 9; correct?

A Well, they were interested in solving the problem, and the problem is the service area served by Wells 8 and 9 primarily. So, you know, I would think it would be a good solution if it were technically feasible and economically feasible, but that's something we won't know until there's some preliminary design done on a real successful pilot program.

Q Aloha's wells are all looped, aren't they?

A Yes. They're interconnected.

Q Okay. Now, again, do you believe that buying larger

quantities of water from the Pasco County Utilities Department will improve the quality of the water Aloha delivers to its customers?

MR. BURGESS: That's been asked and answered, so I object.

COMMISSIONER JABER: Sustained. It's been asked and answered.

MR. WHARTON: Okay.

BY MR. WHARTON:

Q Since you've indicated that you believe that buying greater quantities of water from Pasco County Utilities will improve the quality of Aloha's water, would you therefore support the purchase of greater quantities from the Pasco County Utilities Department?

A All things being equal, all the compatibility problems solved, yes, to the extent that it's needed to be purchased, not nearly to the extent that Mr. Porter computed.

Q Well, don't you agree that the water that will be purchased from Pasco County will be only the water that is necessary to provide the service over and above the water use permit limits for Aloha?

A I agree with that and that is a total of 744 million some odd gallons per year. Anything over that, yes, I'd support that if the compatibility problems are solved.

Q Now you do think Pasco County's rates are burdensome

to the customer though, don't you?

A I think they're high, yes.

Q Have your discussions with the Water Management District led you to believe that Aloha is unlikely to secure an increase in its withdrawal allocations prior to 2006?

A Yes.

Q And you doubt that Aloha has had any option open to them to get allocations in the last several years; correct?

A Aloha has not had that option as far as increasing their use permit. They have had the option of finding other water sources for the last three or four years that they haven't pursued. And I'm told by the Water Management District that, to investigate an RO system, for instance, which is what they're proposing to do in the consent order, that we're talking about three to four years before you could get it online. So, no, they haven't had the option of increasing their water use permit. But in the same vein they haven't done anything about their water supply and yet they've known about it all these years.

Q Do you agree that whether Aloha pumps more from its present wells than allowed by its WUP or whether they buy the water from Pasco County, there's no net effect on the water resource because these two entities are getting their water from the same source?

A Yeah, I do agree with that. And I would hope that,

you know, you could convince the Water Management District of that. And I know heretofore they've turned thumbs down on that.

There's something in the new consent order that I don't understand. A statement that says that they, they provided you to comply with its consent order that says so long as the permittee remains in compliance with the requirements and terms of this consent order, the district will withhold taking action against the permittee for any overpumpage with regard to its permit. That sounds like they're going to let you overpump. I'd like them to clarify that issue.

Q Are you a lawyer, Mr. Biddy?

A Hardly.

Q Are you reading from a draft?

A Yes.

Q Do you know whether Aloha will have certain rights with regard to that document under the Administrative Procedure Act?

A I'm sure they will, yes.

Q Are you pretty much indicating that you're not real sure what that language means and that's why you'd need clarification?

A Well, I said to read it, it reads as if they're going to let you overpump is what it reads like.

Q But you're not sure if that's what's intended by the

language?

A I would sure like that qualified and explained by the Water Management District.

Q Okay. Now back to my question about Aloha pumping, overpumping from their water use permits. You would agree if Aloha would have begun to buy more water from Pasco County so as to avoid these problems with their water use permits, that, in fact, that meant the customers would have had to have started to pay a higher price at an earlier time?

A Perhaps so. Certainly it would have also at that -- if they'd gone to that level, it would have also been investigating other sources which are going to start now, would be three years ahead in that, that investigation.

Q But do you agree that if Aloha would have started --

A I said yes.

Q -- purchasing water -- well, I'm asking a new question.

Do you agree that if Aloha started purchasing water from Pasco County at an earlier date, that that would have been revenue neutral to Aloha but the customers would have benefited?

A Yeah. I said yes.

Q Okay. Let's talk about reverse osmosis for a second.

A All right.

Q Now you don't know whether reverse osmosis was

available at Aloha two years ago and you're not sure whether it's available at Aloha now; right?

A I don't know. I'm not an expert in RO. I've talked to the experts at the Water Management District. Some of them have grave doubts as to the technical feasibility of the RO system primarily because of the difficulty in disposing of the brine concentrate effluent that's produced by the system.

Q Do you agree -- strike that. You do agree, don't you, that the only thing you really believe Aloha could have done three or four years ago to avoid this situation would have been to have investigated going to RO?

A Yes.

Q And you agree that the feasibility of RO increases as the county increases its rate?

A That's true.

Q Now it's your understanding that the Water Management District is saying that if Aloha will go forward with their RO study and development, the fine for the overpumping will be waived; right?

A Well, it says in this draft consent order that all but $100,000 of a $439,000 fine would be waived, and if they went ahead and developed the RO system, an additional $50,000 would be waived. So they are, seem to be very liberal in waiving their fines in exchange for Aloha going forward with this investigation and feasibility study and installation of

the RO system.

Q Well, you think that it would be appropriate for the Water Management District to waive the fine if Aloha would go forward with the RO study and development; right?

A Sure. I want this utility to be financially healthful, and perhaps they'd want the customers to pay for this fine.

Yes, I think that's very appropriate if, because this is a conservation measure as well to get brackish water and turn it into good, clean drinking water.

Q Now you think it would be prudent for Aloha to undertake an RO study at this time, you personally?

A I absolutely do. I hope it turns out to be feasible. I'm just telling you what the experts told me.

Q You believe RO is the only option available to Aloha, don't you?

A Well, I told -- we discussed this at deposition and I told you this, that as far as their finding additional water, yes. I told you that an option that I saw was that, you know, they stop in their tracks where they're at, they don't have the ability to go forward, they're not ready, willing and able to serve, legally serve the customers they have because they just don't have the supply. They have had to illegally pump for three years to have the supply. Therefore, it would seem to me with a system setting right there with the county that

negotiation with them for sell of part of the territory or whatever or perhaps the Public Service Commission insisting on that is another alternative.

Q But you didn't indicate to me in deposition that given the position of the Water Management District about increasing allocation, the allocations in Aloha's WUPs, you thought that going to RO was all Aloha could do.

A Yes.

Q Okay. Now the RO feasibility study would be a very involved process, wouldn't it?

A Yes. I'm told it's a 12-month study that will cost 600 to $700,000.

Q And it's your understanding the Water Management District's position is that they would support Aloha going forward with an RO study?

A And pay for it apparently. The draft consent order says that they will process the application for grants to pay for it.

Q Is the reason that you do such a study so that you'll know whether the RO plant is economically and technically feasible?

A Absolutely.

Q And would the study also look at what the quality of the water would be and how the treatment would affect the water?

A Of course.

Q You would expect the Water Management District to actually encourage the feasibility study?

A They have. Yes.

Q Now you -- I asked you kind of a variation of this question earlier. You would agree that the fact that Pasco County's water was cheaper a couple of years ago affected the financial feasibility of pursuing an RO plant?

A I don't know that it did. You asked me the question of the higher the price of the county's water, the better, more feasible perhaps an RO system would be, and I said yes. I don't know and neither do they until they run the study what it's going to cost them per thousand gallons to put in an RO plant.

Q But you would agree the fact that Pasco County's water was cheaper a couple of years ago affected the financial feasibility of pursuing such a project to some extent?

A Well, they didn't run a study, so how could we know? You would think intuitively, yes. But since a study hasn't been run, we don't know.

Q Well, I'm confused by your answer though. The question is whether if because Pasco County was cheaper it made less sense to even undertake the study?

A Again, it depends on what you find out in the RO feasibility study. You might have found it cheaper. But

you're probably right. I'll give you that.

Q Now other than reading the reports Aloha has filed, you don't really have any personal knowledge as to Aloha's diligence in pursuing the study of the pilot project, do you?

A That's correct.

Q We talked a little bit earlier about Pasco County's water. You're not aware of any chemical constituents that render Pasco County Utility Department's water of a higher quality than Aloha, are you?

A I don't have a chemical analysis for the water. I've heard the testimony about the treatment process they use. Start out with aeration, which is an excellent start, and then go through pH adjustment and some other, chlorination, of course. So it sounds like they do extensive treatment, enough to where DEP says they have no complaints from Pasco County.

Q But just to make sure the record is clear, you're not aware of any chemical constituents that render Pasco County's water of a higher quality than Aloha's; right?

A No, I'm not.

Q Okay. Let's talk about this issue of water usage for a moment.

Now you believe the weather started changing rather dramatically in March of 2001?

A I think somewhere along in that timeframe, yes, it did. 2001, early summer, late spring you started having a much

more normal rainfall and the year turned out to be essentially a normal rainfall year.

Q Now the Water Management District considered the period 1990 to 2000 to be a period of drought in Aloha's service area, didn't it?

A Absolutely did, yes.

Q When you were viewing the six years' worth of data for Aloha, water usage by Aloha's customers increased every year, didn't it?

A Up to the Year 2000 and then decreased in the Year 2001 based on the actual records.

Q Yeah. But you don't have the complete Year 2001, do you?

A Well, we'll have them by tomorrow. We have nine months of them right now and you are under orders to give the Staff the rest of the interrogatories that they've asked you for.

Q I don't believe that's one of the questions.

A I was told it was by Mr. Jaeger.

Q That ain't what we wrote down at dinner. So that's a surprise to me, if it is.

A Mr. Jaeger thinks it is.

Q He's shaking his head no. Because I've got, I'm going to work late tonight, if it is.

COMMISSIONER JABER: You should work late night

tonight anyway so that tomorrow can go much nicer.

MR. WHARTON: That's fine. I meant really late.

THE WITNESS: Well, my point is that they're available surely because, you know, we're in January and they've sent the December bills out by now. So it's just a matter of pulling those records from their computer and we'll have whatever it is. We've got them through September already.

BY MR. WHARTON:

Q Do you believe that 2001 in terms of rainfall was an aberration over the last 11 years?

A It was a normal year based on the historic average. But, yes, the end of a very severe ten-year drought.

Q So you would agree it was an aberration over the last 11 years?

A Well, you say aberration. It was a normal year that followed a ten-year drought.

Q Well, take a look at page 38 of your deposition, Mr. Biddy, page 38, line 11.

Question, "Would you agree that -- let me ask it this way. Do you consider 2001 in terms of rainfall to be an aberration over the last 11 years?"

Answer, "Yes."

Do you stand by that answer?

A Well, yeah, you can see where I put a big question mark by that on my copy of the deposition.

Q You were kind of sorry you said that, is that why you wrote a question mark?

A Well, no. It's not an aberration. It's a change, of course, from those ten year, ten drought years, but it's not an aberration. It's a --

Q All right.

A Based on averages it's pretty normal. So I made a mistake in saying yes to your characterization of it as an aberration.

Q Now let's talk about this issue of drought. You're not able to quantify how much more water water users used during periods of drought, are you?

A Well, we, we have those records at least through September and I suppose we'll have them from Aloha soon for the whole year and we can make a pretty good estimate of it, yes. We've gone down to the actual usage even including 473 new ERCs for the year 2001 has gone down, has decreased, substantially decreased. I believe Mr. Porter estimated like 1,220,000,000 gallons and the actual usage based on my projection is going to be less than a billion, 994 million. This is a huge difference in a normal year as opposed to a drought year.

Q But you aren't able to quantify, for instance, with, in terms of use of irrigation waters how much more people use during periods of drought as opposed to periods of nondrought.

A Well, I just said we'll have those water records soon and we can make a pretty good estimate of it. Yes.

Q Does that mean that you, as we sit here today you aren't able to quantify it?

A Just based, based on the projections I've made I could. Based on the actual records I'll be able to.

Q Well, let's take a look at page 45, line 13, of your deposition.

A 45/13?

Q Yes, sir.

A Okay.

Q You answered the previous question, "The predominant one, I think, is the use of irrigation water in a drought period and more especially in new subdivisions with new lawns."

A Yeah.

Q Question, "Can you quantify that in any way; how much more water?"

Answer, "No, I can't."

Question, "How would it change the person's habits in terms of how often he would water the plants or the lawns?"

Answer, "I don't have any quantities. I have never measured that."

A And I haven't, and I haven't performed that computation. I --

Q Do you stand by that testimony?

MR. BURGESS: Excuse me. I would like for counsel to allow Mr. Biddy to explain the answer.

COMMISSIONER JABER: Yes. Mr. Wharton, don't interrupt his answer, please.

THE WITNESS: I have not, I have not quantified that yet. I just testified that I could take the projections I made of total flow, compare them to the Year 2000, which was the driest year on record, and we could make a pretty good stab at it. I have not done that and that's what I testified to.

Now I suggest we wait until we can get Mr. Watford to pull the, the records of the full flows for the full year, which he should have, and let's make a computation of it.

BY MR. WHARTON:

Q But you agree as we sit here today you don't have any quantities and you've never measured that?

A That's correct.

Q Okay. Now do you agree that the Water Management District's restrictions -- well, strike that.

You do agree, don't you, that the Water Management District's restrictions in Aloha's service area have not been rescinded?

A Have not been rescinded? That's correct.

Q And you would anticipate that once the Water Management District considers the drought to be over, the restrictions will be lifted?

A Yes. When the, when all factors of the drought index, which includes not only rainfall but moisture content and other items such as stream flow, aquifer levels, when all that is normal. And they're all coming up. They're not down where they were but they're not quite back to where the district would like to see them. When that happens, they will take the restrictions off.

Q You would agree that if restrictions go from one day a week to two days a week, you would expect irrigation to go up?

A Not necessarily, but perhaps. I think people that just get, irrigate one day a week just heavily irrigate. We'll have to see.

We know that there's a tremendous difference between the Year 2001 with normal rainfall and the Year 2000 with a drought condition. So that's all we can say at this point in time.

Q Let's take a look at your deposition, page 50, line 17.

Question, "If the restrictions go from one day a week to two days a week, would you expect irrigation use to go up?"

Answer, "Yes."

Do you stand by that answer?

A Probably would to some extent, but I'd like to test that versus what happened in the Year 2000.

(Pause.)

Q Mr. Biddy, are you aware of the fact that the Thousand Oaks neighborhood in Aloha's service area has water use of about 16,000 gallons per month despite the fact that that neighborhood has residential reuse?

A I'd have to check that, but I, subject to check, I agree.

Q And you would agree that at least one reason for that particular fact would be that that's one of Aloha's more affluent neighborhoods?

A That's one factor, yes.

Q Now you, you're not able to quantify in any way, shape or form in what way you believe restrictions have affected watering for new homes; correct?

A Not at this time until I get the full records for the full year's flow. I'll be able to make a stab at it later.

Q Let's talk about the calculations you made based on the partial year records that you had.

A All right.

Q You agree that numbers for water usage vary from month to month?

A Yes.

Q And you agree that in terms of projecting water usage on a going-forward basis that a nine-month sample is a very small sample?

A For a year? No, not necessarily.
Q No? That a nine-month sample is a very small sample to use to project water usage.
A When I first did it, it was six months' of records and then confirmed it by the nine-month records for the Year 2001. And I'm, I'm assuming, and we'll see, the 12-month records verify that.
Q Well, that's, it's interesting, Mr. Biddy. But would you agree with my statement that in terms of projecting water usage on a going forward basis a nine-month sample is a very small sample?
A If I were doing that exercise, yes. But as you remember, I did an estimate of the test year which was 2001 and I think a very accurate, excuse me, projection of what actually happened. I told you --
Q Now there are a lot of variables that go into water usage for a particular month, aren't there?
A Oh, sure.
Q Such as the weather?
A Weather is one primary one.
Q The day of the month that the meters are read?
A Of course.
Q Things like special events that would bring larger groups of people into the service area?
A That's a factor. Sure.

Q And you would expect the availability of residential reuse to suppress water usage, wouldn't you?

A If everybody is hooked to it, perhaps so as far as irrigation water. Sure.

Q Now you had talked about that Aloha had not purchased as much water from the county as they indicated they would, correct, in your testimony?

A That is absolutely correct.

Q Don't you agree that Aloha is not going to purchase as much water from the county as they've indicated they will until they get this rate increase and that's why the figures were low for the year you looked at?

A Well, I don't know why they, they indicated that they were going to then.

Q But you would agree that's probably the explanation for why they didn't?

A That's what they've testified to.

Q Let's talk about unaccounted for water, Mr. Biddy.

You've indicated that your review reveals that Aloha's unaccounted for water is in excess of ten percent.

A Yes, it is. Based on the records for the Year 2001 through June I first computed 17 point something percent. Then when I got the September records it dropped to 14.1 percent, I believe it was. So there's about four percent that's in excess of the ten percent that is normally allowed for flushing and

plant losses and et cetera.

Q Now your 14 percent water included -- your 14 percent unaccounted for water included water that was used by the utility in treatment loss and flushing; right?

A That's correct.

Q Well, since your deposition have you learned whether the PSC, whether when the PSC reviews the utility it allows ten percent after flushing?

A No, I haven't looked.

Q All right.

CHAIRMAN JABER: Mr. Wharton, just give me an idea of how much more cross you have.

MR. WHARTON: Moments.

COMMISSIONER JABER: Good.

(Pause.)

BY MR. WHARTON:

Q Mr. Biddy, are you aware of the fact that Pasco County is about to start a second pilot study using MIEX, using their chlorinated water?

A Chloramine treated water?

Q Yes, sir.

A No, I'm not, but I'm glad to hear that.

Q I want you to make the assumption that they are going to do that.

A All right.

Q Now isn't the reason they would be doing that because they want to see the effect of the changing water chemistry they will experience when they receive water treated with chloramine from Tampa Bay Water?

A Yes.

Q Should Aloha exercise the same caution that Pasco County has shown by waiting to evaluate the new water chemistry?

A I've already answered that several times, and I say yes for the overall system, perhaps not for the, if you were to design an isolated system.

MR. WHARTON: That's all we have.

COMMISSIONER JABER: Thank you, Mr. Wharton.

Mr. Burgess -- Commissioners, do you have questions?

COMMISSIONER PALECKI: Yes, I have a few questions.

I'd like to follow-up on that last question regarding the isolated Wells 8 and 9 and treating them with MIEX.

THE WITNESS: Yes, sir.

COMMISSIONER PALECKI: Let me ask you, if we went ahead and let's assume that we're treating Wells 8 and 9 with MIEX and it's working really well.

THE WITNESS: Uh-huh.

COMMISSIONER PALECKI: Do we have a compatibility problem if we go ahead and mix that water in the existing looped system that, that Aloha has?

THE WITNESS: Yes, we would, if we did it in the whole looped system. But we'd have to alter the looped system to isolate just that southern portion of the area that's served by, primarily by 8 and 9. Otherwise, we would have the compatibility problem.

COMMISSIONER PALECKI: And would that be something that would be difficult or expensive to accomplish?

THE WITNESS: Well, I think not. And I'd like to see a study made on it.

The southern part of the system -- this is a map of the area. The southern part of the system where all the black water problems are is down on the southern part and Wells 8 and 9 are there. We'd have to physically disconnect the loop that goes on out to Wells 6 and 1, in those areas and so on, and simply serve this area with, with Wells 8 and 9 with a MIEX-treated system. And I'd love to see some study done on that. I believe it would show that it would be technically and financially feasible, but it just hasn't been done.

COMMISSIONER PALECKI: And I want to ask you about one other area that's been troubling me.

You have testified that when you conducted your test of the Aloha wells or the tests you had conducted, you believed that the wells were doctored or spiked with chlorine.

THE WITNESS: Absolutely. And that's what I testified to in the quality case.

COMMISSIONER PALECKI: Now we heard that these wells are anywhere between 500 to 1,000 gallon per minute wells.

THE WITNESS: That's correct.

COMMISSIONER PALECKI: How could they be spiked with chlorine if the flow is that great?

THE WITNESS: They have a test access pipe on the side of the well. They could very easily have poured liquid chlorine down those test pipes. I believe that was what was done. I believe that Aloha intentionally doctored, and that's what I, this is not new news, I testified to this at the prior hearing, so that we wouldn't know. How else could there be no sulfides at all and the lab tell me that there was a very strong chlorine odor in the raw water?

COMMISSIONER PALECKI: Now let me ask you a question. Have you heard the testimony of the DEP person who, who does the testing of Aloha's water?

THE WITNESS: Yes, sir, I did.

COMMISSIONER PALECKI: Were -- I guess the question I have is could he have been tricked in the same manner that you believe you were?

THE WITNESS: Well, he goes, they take him, he goes with them. He says he's always found a residual amount in the remote part of the system. And the reason for that, I believe, is that this is a spasmodic occurrence, it's not a regular occurrence, where the inordinate concentrated hydrogen sulfide

slugs come through the system, and the meter on the chlorine is set for the ordinary concentration. I believe he hasn't been there at that time.

Now I've been told that when people complain about the black water that Aloha sends a technician out there, takes a sample, puts it in a reagent that will turn pink when chlorine is indicated, and they will go to the curb and pull a sample and tell the owners, look a there, you've got chlorine; therefore, you can't have hydrogen sulfide at this point.

I've also been told there's been instances where there was no pink and that the technician just had to get in the truck and drive away. Now that's all anecdotal and hearsay just from talking to these various customers.

COMMISSIONER PALECKI: But if you have the black water, if you have the water reacting in this manner with the copper pipe, your testimony is there has to be hydrogen chloride?

THE WITNESS: Not hydrogen chloride. Hydrogen sulfide.

COMMISSIONER PALECKI: Hydrogen, excuse me, sulfide.

THE WITNESS: Either piped directly in or some manufactured by this sulphur-reducing bacteria inside the house. You know, there's some probably that is getting manufactured in the house with that, in the hot water heaters. But the problem is so invasive and so massive in some of these

areas and it's going to take huge amounts of hydrogen sulfide. You saw those black-lined copper tubes and the people have all the pinhole leaks and so on; it takes a lot of hydrogen sulfide to do that.

COMMISSIONER PALECKI: But you believe it's sporadic, it's something that is just happening on occasion, is that your belief?

THE WITNESS: Yes, sir, I do. Because Wells 8 and 9 being new wells put in five or six years ago, and many of the customers told me that that's when the black water problem started, that they have a varying concentrate of the hydrogen sulfide that they can't manage with a simple chlorinator that's set at one reading.

COMMISSIONER PALECKI: It sounds to me as if isolating Wells 8 and 9 might be expensive and difficult. Wouldn't it be more feasible to figure out a way to treat Wells 8 and 9 with the MIEX system and then figure out a way to make that water compatible with the rest of the water in the Aloha system?

THE WITNESS: That's, that's another alternative, yes, sir.

COMMISSIONER PALECKI: But, I mean, it would --

THE WITNESS: I would like to see both alternatives looked at. You'd have to change from regular chlorination at all your wells to a chloramine system, number one. And that's

essentially it, I think. Mr. Porter probably knows a little more about this than I do and he'll be testifying tomorrow and you can ask him. I think that's the only other change you'd have to make. But I'd like to see both alternatives looked at. But the point I was making is that they hadn't done any of that. It stopped as of July until now.

COMMISSIONER PALECKI: Thank you.

COMMISSIONER JABER: Mr. Burgess?

MR. BURGESS: Yes, I, I have some redirect and I hope it won't take long.

REDIRECT EXAMINATION

BY MR. BURGESS:

Q You were asked, Mr. Biddy, a myriad of questions about things that might make usage go down or go up. One of the things, more recent things you were asked by counsel was if usage would go down because of the availability of residential reuse. Do you recall that question?

A Yes, I do.

Q If it did, would you expect it to go back up later for any reason if the residential reuse continues to be made available?

A No.

Q So whatever factor it has, would, would you expect it to be continuing?

A Yes, I would.

Q You were asked about the demographics, a number of questions about demographics and new connections.

If you were to try to isolate the new connections and, with those demographics and determine the effect that they would have on future usage, would you do it in a fashion that would assume that everybody would connect on January 1st of the new year?

A No. No, I would not.

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

COMMISSIONER JABER: Thank you. Thank you, Mr. Biddy.

(Witness excused.)

CHAIRMAN JABER: We have Exhibit 10, which is admitted into the record without objection.

(Exhibit 10 admitted into the record.)

CHAIRMAN JABER: And, Mr. Burgess, you can call your next witness.

(Transcript continues in sequence with Volume 7.)

- - - - -

STATE OF FLORIDA)

: CERTIFICATE OF REPORTER

COUNTY OF LEON)

I, LINDA BOLES, RPR, 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 24th DAY OF JANUARY, 2002.

LINDA BOLES, RPR
FPSC Official Commissioner Reporter
(850) 413-6734