

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

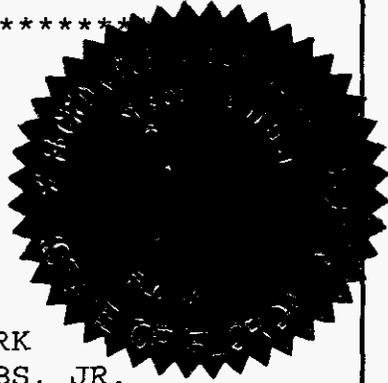
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In the Matter of : DOCKET NO. 960545-WS
:
INVESTIGATION OF UTILITY :
RATES OF ALOHA UTILITIES, :
INC. IN PASCO COUNTY. :

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VOLUME 6

Pages 783 through 950



PROCEEDINGS: HEARING
BEFORE: COMMISSIONER SUSAN F. CLARK
COMMISSIONER E. LEON JACOBS, JR.
COMMISSIONER LILA A. JABER
DATE: Tuesday, April 25, 2000
TIME: Commenced at 9:30 a.m.
Concluded at 4:00 p.m.
PLACE: Betty Easley Conference Center
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REPORTED BY: JANE FAUROT, RPR
FPSC Division of Records & Reporting
Chief, Bureau of Reporting

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8 Counsel, 111 West Madison Street, Room 812,
9 Tallahassee, Florida 32399-1400, appearing on behalf
10 of the Citizens of the State of Florida.

11 RALPH R. JAEGER, and JASON FUDGE, Florida
12 Public Service Commission, Division of Legal
13 Services, 2540 Shumard Oak Boulevard, Tallahassee,
14 Florida 32399-0870, appearing on behalf of the
15 Commission Staff.

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1
2 (REPORTER NOTE: Pursuant to stipulation and
3 agreement reached at Page 283, the direct testimony of
4 Robert C. Nixon and Pete Screnock are hereby inserted into
5 record. Mr. Nixon's exhibits to his prefiled testimony
6 (RCN-1 and RCN-2) will be marked and admitted into the
7 record as Exhibit 28.
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1 BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

2 DOCKET NO. 960545-WS

3 WATER QUALITY INVESTIGATION OF ALOHA UTILITIES, INC

4 PRE-FILED DIRECT TESTIMONY OF ROBERT C. NIXON, C.P.A.

5 Q. Please state your name and professional address.

6 A. R.C. Nixon, 2560 Gulf-To-Bay Boulevard, Suite 200, Clearwater, Florida.

7 Q. By whom are you currently employed?

8 A. Cronin, Jackson, Nixon & Wilson, C.P.A.'s, P.A.

9 Q. In what capacity?

10 A. I am a shareholder and V.P. and Secretary of the firm. I am in charge of our regulated utility
11 services practice.

12 Q. And what type of business is Cronin, Jackson, Nixon & Wilson?

13 A. A full service CPA practice, including accounting and auditing, tax, management advisory,
14 and litigation services. Also, we specialize in utility accounting for regulated water and
15 wastewater utilities.

16 Q. Beginning with college, could you give us a description of your educational experience?

17 A. B.S.B.A. University of Florida, 1967, Marketing major, minors in Management &
18 Economics; B.A. University of South Florida, 1977, Accounting Major; I became a CPA in
19 1980 and have held an active license since that time. A resumé of my experience is attached
20 hereto as **Exhibit RCN-1**.

21 Q. What is the purpose of your testimony?

22 A. In June of 1997 I prepared what was then Volume II to the Water Facilities Upgrade Study
23 Report for Aloha's Seven Springs System that is attached hereto as **Exhibit RCN-2**. My
24 study consisted of calculating the overall affect on rate base, revenues and rates of the
25 alternatives available to Aloha for upgrading its water treatment system. The purpose of my

1 testimony is to sponsor that Water Facilities Upgrade Study Report Volume II - Economic
2 Analysis, dated June 3, 1997 as prepared by me and answer any questions that the
3 Commission may have regarding the rate impact of the proposed changes to the Aloha Seven
4 Springs Water System.

5 Q. Which of the alternatives listed in your Report is the one which Aloha has suggested is more
6 appropriate and offered to install by the letter from the Utility's attorneys dated _____ of
7 1998?

8 A. What is listed in my exhibit as Alternative No. 2 was the one that made the most economic
9 sense and which would help the Utility to conform to future regulatory requirements. It was
10 also the cheaper overall alternative for the Utility and therefore its customers.

11 Q. Would any updates need to be made to this June 1997 Report?

12 A. Yes. There would be some minor updates necessitated by the general change in prices and
13 possibly minor modifications related to cost of capital. However, the affect would not be
14 substantial in the final analysis of rate base impact and revenue requirement impact. Since
15 the cost of capital has gone down slightly since the time of this Report (utilized in the
16 leverage formula and possible borrowing rates), and the cost of facilities has likely gone up
17 slightly. These would tend to offset and minimize any change. There may be other changes,
18 however, none that I know of off hand that would be substantial.

19 Q. Do you have any further testimony to provide in this regard?

20 A. Not at this time.
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24
25

DIRECT TESTIMONY OF PETE SCRENOCK

1 |
2 | Q. Please state your name and business address.

3 | A. Pete Screnock, Department of Environmental Protection, Southwest
4 | District, 3804 Coconut Palm Drive, Tampa, Florida 33619.

5 | Q. Please give a brief description of your educational background and
6 | experience.

7 | A. I received a Bachelor of Science in Environmental Science from Ramapo
8 | College of New Jersey. I am a certified water and wastewater operator and
9 | have approximately six-years experience operating water and wastewater plants.

10 | Q. By whom are you presently employed?

11 | A. I am employed by the Florida Department of Environmental Protection
12 | (FDEP).

13 | Q. How long have you been employed with the FDEP and in what capacity?

14 | A. I have been employed by the FDEP for over eight years, and currently
15 | hold the position of Environmental Specialist, II, in the Drinking Water
16 | Section.

17 | Q. Are you familiar with Aloha Utilities in Pasco County?

18 | A. Yes.

19 | Q. Are you familiar with the "black water" problem experienced by some of
20 | Aloha's customers?

21 | A. Yes.

22 | Q. To your knowledge, has this "black water" problem been experienced
23 | elsewhere in Florida?

24 | A. To the best of my knowledge, yes.

25 | Q. Are you familiar with the report published in Journal AWWA, Volume 90,

1 | Issue 7, July 1998, titled Sulfide Induced Copper Corrosion?

2 | A. No.

3 | Q. Does DEP have a maximum contaminant level (MCL) for hydrogen sulfide in
4 | water provided to a utility's customer?

5 | A. No.

6 | Q. Has Aloha's water been tested at the point of delivery (the meter) to
7 | their customers?

8 | A. It is my understanding that some testing as been done, but I am not
9 | familiar with the results.

10 | Q. Does the Aloha Utilities water meet the standards set by EPA/DEP?

11 | A. Yes.

12 | Q. Is Aloha Utilities under any Consent Order, Notice of Violation, or any
13 | other corrective action ordered by DEP?

14 | A. As it relates to drinking water, no.

15 | Q. At the time of the last hearing in this case Aloha Utilities exceeded
16 | the action levels imposed by EPA for Lead and/or copper. Is that correct?

17 | A. Yes.

18 | Q. Does Aloha Utilities now meet those action levels?

19 | A. Yes, to the best of my knowledge.

20 | Q. Do you have anything further to add?

21 | A. No.

22 |

23 |

24 |

25 |

1 COMMISSIONER CLARK: Call the hearing to order.

2 MR. JAEGER: Yes, Commissioner, I will read the
3 notice. Pursuant to notice from the bench at the
4 conclusion of the second day of hearing on March 30th,
5 Commissioner Clark noticed that this hearing would be
6 continued at 9:30 a.m. on April 25th in Tallahassee.

7 Also pursuant to notice issued on April 11th,
8 2000, this time and place was set aside for continuation
9 of the formal hearing in Docket Number 960545-WS,
10 investigation of utility rates and quality of service to
11 the Seven Springs Division of Aloha Utilities, Inc., in
12 Pasco County.

13 The purpose of this hearing is to continue to
14 collect evidence concerning this investigation and to
15 consider what actions, if any, the utility should be
16 required to take to improve the quality of the service.

17 Finally, pursuant to supplemental notice issued
18 on April 17th, 2000, the Commission clarified that it
19 could rule from the bench on any pending matters or
20 issues.

21 COMMISSIONER CLARK: Okay. Thank you. Are
22 there preliminary matters? There is no need to take
23 appearances, is there?

24 MR. JAEGER: Okay. There are quite a few
25 preliminary matters. One of the first things I thought we

1 might discuss are the briefing dates. Pursuant to when we
2 thought the hearing was going to conclude on March 30th,
3 we had briefs due on April 27th. The court reporter now
4 tells me that if we can conclude today that she could have
5 the transcripts on May 2nd, and the normal two-week period
6 would be -- briefs would be due on May 16th. And so staff
7 suggests with the idea that we do finish today that the
8 due dates for briefs be May 16th. And transcripts would
9 be one week from today.

10 COMMISSIONER CLARK: All right.

11 MR. JAEGER: Finally, on Exhibit 3, I think we
12 have a stipulation. There has been some confusion, but
13 that was the Black Water Study done for Pasco County, the
14 Department of Environmental Protection. There were eight
15 pages of cover memos. I think the parties are agreed that
16 those eight pages should be stripped off and not admitted,
17 but the study itself starting on Page 9 through 99 should
18 be admitted into evidence. And it is my understanding
19 that we have a stipulation on that.

20 COMMISSIONER CLARK: Mr. Deterding.

21 MR. WHARTON: We would agree, Commissioner.
22 Just so there is no misunderstanding, we will probably
23 address to what extent -- it has been authenticated and
24 thus admissible, but we will address in our brief what has
25 been proven up in there and what hasn't.

1 COMMISSIONER CLARK: Okay. So the Pasco County
2 Black Water Study, Pages 9 through 99, will be admitted in
3 the record. That is Exhibit 3.

4 (Exhibit 3 received in evidence.)

5 MR. JAEGER: Okay. Finally, we have two
6 questions concerning official notice. And on March 21st I
7 sent a memo to all the parties for official notice of
8 three orders. And pursuant to 90.202 and .203 those
9 should be taken, you know, the Commission should take
10 official notice of that.

11 COMMISSIONER CLARK: Do you have the order
12 numbers?

13 MR. JAEGER: Yes. The order number is 19093
14 issued April 4th, 1988 in Docket Number 870532. Also,
15 Order Number PSC-96-1320-FOF-WS issued October 30th, 1996
16 in Docket Number 950495-WS. Actually, and we state in the
17 memo specifically Pages 29 and 38, but that was the part
18 that dealt the quality of service and black water. Also,
19 the final order is Order Number PSC-99-0513-FOF-WS, that
20 is issued March 12th, 1999 in Docket Number 980214-WS.

21 COMMISSIONER CLARK: Those orders will be
22 officially recognized.

23 MR. JAEGER: Okay. I have seen in some cases
24 where they actually make this an exhibit with a list of
25 official notice. Did you want to make that -- or I think

1 there is some case law about whether you have to, and it
2 might be safer to go ahead and make this an exhibit. And
3 so we would like to identify that as Exhibit 16.

4 COMMISSIONER CLARK: Have you given me a copy of
5 that?

6 MR. JAEGER: I've got the copies. Jason, could
7 you pass these out for me to everybody.

8 COMMISSIONER CLARK: So Exhibit 16 is the list
9 of three orders we will take official recognition of.

10 (Exhibit 16 marked for identification and
11 admitted into the record.

12 MR. JAEGER: That's right. Finally, in
13 reviewing the transcripts, in light of the testimony of
14 the DEP witness on March 30th, there was some confusion
15 about the Jacksonville ordinance and we are requesting
16 that the Commission take official notice of the
17 Jacksonville ordinance. And this is under -- under 202 it
18 says you may take judicial notice. And under 203 it says
19 you shall take judicial notice if there is adequate
20 notice.

21 And there is some question about since we are
22 doing this this morning whether there would be adequate
23 notice. But staff believes in any circumstances there is
24 no prejudice and you may take judicial notice of this
25 ordinance. And I don't think the parties have any problem

1 with it, either.

2 MR. WHARTON: We have no objection.

3 COMMISSIONER CLARK: We will take official
4 notice of the Jacksonville city ordinance, and we will
5 label the memo and attached ordinance as Exhibit 17. And
6 it will be admitted in the record.

7 (Exhibit 17 marked for identification and
8 entered into the record.)

9 MR. JAEGER: Okay. The final question we have
10 is a stipulation of the annual report, certain pages of
11 the annual report in. And, Jason, I'm going to let you
12 handle that since you were talking to the parties. I
13 haven't had a chance to talk to the Office of Public
14 Counsel about that.

15 COMMISSIONER CLARK: Mr. Fudge.

16 MR. FUDGE: The parties have agreed to stipulate
17 to Pages 19, 22, 27 and 24 of the 1998 annual report.

18 COMMISSIONER CLARK: And is that the pages that
19 staff is interested in having in the record?

20 MR. FUDGE: Yes, ma'am.

21 COMMISSIONER CLARK: All right. And is that
22 what is being handed out now?

23 MR. JAEGER: That is what is being passed out.

24 COMMISSIONER CLARK: All right. We will mark it
25 as Exhibit 18, pages from the 1998 annual report. And it

1 will be admitted in the record.

2 (Exhibit 18 marked for identification and
3 entered into the record.)

4 MR. JAEGER: Okay. All those, 16, 17 and 18
5 have been admitted then.

6 COMMISSIONER CLARK: That is correct.

7 MR. JAEGER: I have no further preliminary
8 matters that I am aware of. I'm not sure if the parties
9 have any or not.

10 COMMISSIONER CLARK: Mr. Wharton.

11 MR. WHARTON: We have none.

12 COMMISSIONER CLARK: Mr. Shreve.

13 MR. SHREVE: Ms. Chairman, we have one thing
14 that we need to talk about, and I'm not real clear on
15 exactly what the situation is on it. We have received
16 reports, letters, and a press release was put out by the
17 company concerning contacts by their witness with the
18 witnesses that testified, the customers.

19 Routinely the Commission has companies report
20 back to them on problems and whether or not those problems
21 have been solved. This obviously has gone much further
22 than that.

23 In the press release that was put out by Aloha,
24 and this was furnished to me by Mr. Jaeger, not by the
25 company, Aloha plans to prepare a report detailing all the

1 information gathered during the engineer's visits to the
2 customers' homes and submit it to the Florida Public
3 Service Commission at the next hearing date, presently
4 scheduled for April 25th, 2000.

5 We have seen nothing about this, and it sounds
6 to me like it would be direct testimony anyway. And I
7 think it is clearly improper for a consulting witness, for
8 the expert witness in a case to be contacting laywitnesses
9 for whatever purpose it may be.

10 We would like to have discovery of the witness,
11 of Mr. Porter, have the Commission instruct him not to
12 destroy any notes that he might have taken from these
13 customers. We have had allegations going back and forth
14 as to what was said to the customers. I think that needs
15 to be clarified.

16 Generally speaking, when the Commission has had
17 problems taken care of, it has been by employees of the
18 company going out to see if they could take care of
19 legitimate problems of the company. And I'm sure that is
20 what the Commission had in mind on this. Not having an
21 engineer go out and discuss with laywitnesses -- in many,
22 many cases elderly people -- their testimony, and then try
23 to come in with something that would in a sense, I guess,
24 rebut their testimony.

25 And if that is the case, then these witnesses

1 who are going to be testified about in those meetings
2 should have the opportunity to hear what Mr. Porter has to
3 say about them.

4 There have evidently been allegations made about
5 the Public Service Commission, about Mr. Fasano, about the
6 whole process being political and the private utilities
7 not being treated as well as public utilities, and the
8 problems should have been solved a long time ago without
9 all of these hearings. All of this needs to be looked
10 into, gotten under oath, and we want an opportunity to
11 talk to all of the witnesses that Mr. Porter talked to and
12 discover what Mr. Porter has in his possession before any
13 testimony is taken along these lines.

14 COMMISSIONER CLARK: Mr. Wharton.

15 MR. DETERDING: Commissioner, Mr. Porter, as we
16 will told the Commission, intended and did go out to visit
17 those customers who had testified and complained in order
18 to investigate their complaints and to try to provide them
19 as much information as he could about what they could do
20 in their specific situations. That was all for the
21 purpose of reporting back to the Commission, and I think
22 more importantly, to filing the late-filed exhibit that we
23 promised we would file, and as is the norm for this
24 Commission.

25 I can't see that there is anything improper

1 about a utility consultant going to review the situation
2 that these customers have. In fact, I thought that was
3 what the Commission would want us to do is investigate the
4 complaints by the customers.

5 As to Mr. Porter's comments and as to what
6 occurred at those meetings with customers, he is certainly
7 available today. We would be glad to put him on the stand
8 and have him explain what went on, what occurred. And if
9 they are concerned about what he said, which as far as I
10 know is only third-hand, we will be glad to submit him for
11 cross-examination on those issues, on anything and
12 everything related to those visits. But we certainly are
13 going to file a late-filed exhibit that would incorporate
14 the results of his investigation.

15 COMMISSIONER CLARK: The person who is on the
16 stand now is Mr. Watford. We are through with his summary
17 and we are now in cross-examination. I do recall that
18 Aloha indicated that Mr. Porter would be investigating and
19 responding to the concerns that the customers had at the
20 hearing. I remember that coming up at the hearing. What
21 I would like to do is go ahead with the hearing and then
22 give you the opportunity at break for Public Counsel,
23 staff, and the utility to get together to discuss what
24 Mr. Porter may be responding to with respect to customer
25 complaints.

1 MR. SHREVE: Thank you, Commissioner. We would
2 like to see the report. And also I don't doubt that Mr.
3 Deterding feels exactly the way he expressed, because I'm
4 sure they would not have had Mr. Porter do anything
5 unethical by contacting these witnesses. However, these
6 witnesses were available for cross-examination at the last
7 hearing, and they could have elicited any information
8 concerning their testimony that they wanted at that time
9 without having an expert witness come into their homes.

10 And I understand at some point some of the
11 customers refused to let him in. And I don't know that
12 this was the case, but I was told that they were even told
13 in some situations the Public Service Commission said they
14 had to talk to him. We need to get to the bottom of it.
15 And we may not be able to do it with just Mr. Porter's
16 testimony, because I feel he would have a different view
17 than the customers might, and we want to talk to the
18 customers and find out what is going on with the whole
19 thing.

20 COMMISSIONER CLARK: Okay. What I would propose
21 is we go ahead with the hearing and then at either a break
22 or lunch break that you all can get together and discuss
23 the concerns and maybe work out a resolution.

24 Mr. Watford, will you go ahead and take the
25 witness stand over there. And I believe, Public Counsel

1 is -- it is cross-examination by Public Counsel.

2 MR. DETERDING: Commissioner, just one thing I
3 wanted to note for your information and for Mr. Shreve's
4 information. A report on this is the late-filed exhibit.
5 That is the only report as far as written report is
6 concerned that we had any intention of submitting, and it
7 is not prepared yet in any way, shape, or form.

8 Mr. Porter does have notes of his meetings with
9 those customers. I don't even know if he has them in
10 written form. But he has some photographs, he has some
11 samples of water, he has some sort of notes or
12 recollections that he is prepared to discuss today if that
13 is your pleasure.

14 COMMISSIONER CLARK: As I said, you can get
15 together at lunchtime.

16 Mr. McLean.

17 MR. McLEAN: As I understand, this is to be my
18 cross of Mr. Watford's direct testimony, correct?

19 COMMISSIONER CLARK: Correct.

20 MR. McLEAN: That is where we are. Good. I
21 have no questions for Mr. Watford on his direct testimony.
22 Thank you.

23 COMMISSIONER CLARK: Okay. Staff.

24

25

STEPHEN G. WATFORD

1 resumed the stand as a witness on behalf of Aloha
2 Utilities, and, having been previously sworn, testified as
3 follows:

4 CROSS EXAMINATION

5 BY MR. FUDGE:

6 Q Mr. Watford, are you aware that a customer of
7 Aloha who had complained of black water had their home
8 repiped by Goodrich CPVC Division?

9 A I'm sorry, I didn't hear the beginning of your
10 question.

11 Q Are you aware that a customer of Aloha --

12 COMMISSIONER CLARK: Just a minute. Can you see
13 the witness?

14 MR. FUDGE: Yes.

15 COMMISSIONER CLARK: Mr. Deterding and Mr.
16 Shreve, the witness is having trouble hearing the
17 questioning.

18 MR. SHREVE: Sorry, Commissioner.

19 COMMISSIONER CLARK: And I think you need to
20 switch seats so you can see him a little bit better.

21 Go ahead, Mr. Fudge.

22 BY MR. FUDGE:

23 Q Mr. Watford, are you aware that a customer of
24 Aloha who had complained of black water had their home
25 repiped by Goodrich CPVC Division?

1 A Yes, I am.

2 Q Did that remedy the black water problem?

3 A As a matter of fact, the customer was actually
4 determined, because he had more complaints registered for
5 black water than any other customer in our system at the
6 time, and he reported to us approximately six months after
7 the fact that he had never seen black water the day after
8 his house was repiped, and has reported that to us
9 continually since then. It immediately took care of the
10 problem and he never saw it again. And prior to that he
11 saw it on almost a daily basis.

12 Q Were there any side effects?

13 A Not that I am aware of other than that the black
14 water disappeared.

15 Q There weren't any complaints of other color
16 problems or odor?

17 A No color. Now, he has consistently maintained
18 that he has an odor in his water. As a matter of fact,
19 when Commissioner Clark and Commissioner Johnson visited
20 his home with me, he expressed to them the same sentiment,
21 that there was an odor in the water. He asked them to
22 step into the bathrooms to see if they could smell it,
23 which as I recall they said they could not detect an odor,
24 but he has consistently said that. But as far as the
25 black water, it immediately alleviated it and has not been

1 seen since then.

2 Q In your opinion, would repiping the homes of
3 those customers who complained of black water fix the
4 problem?

5 A Oh, absolutely. And as far as we know at this
6 point that is the only immediate solution to eliminating
7 that problem.

8 Q What do you think would be the average cost of
9 repiping those homes?

10 A I really don't know definitively. Numbers that
11 I have heard run anywhere from 1,500 to \$5,000. Obviously
12 a lot of that is governed by the size of the home.

13 Q In your estimation, how many homes would need to
14 be repiped?

15 A Well, that is a very good question. I really
16 don't know. Obviously, I think a lot of that would be
17 governed by the parameters under which the program was put
18 together. If it was at no cost to a customer, I think you
19 would have a much bigger response than if there was a cost
20 to the customer. And then, again, that would be dependent
21 upon how great a cost to the customer.

22 I think we have said that our feeling based on
23 numbers of complaints or repeat complaints from locations
24 somewhere in the neighborhood -- it could be anywhere from
25 nothing to a couple of hundred homes. But I honestly feel

1 that a lot of that would be driven more by the parameters
2 under which the program was structured. I think if there
3 was a program put out there for \$5, would you like to have
4 your house repiped, we would probably have 12,000 takers.

5 COMMISSIONER JACOBS: Do you have any kind of
6 data or information which tracks the frequency of
7 complaints or looks at -- and puts that on a map?

8 THE WITNESS: We have -- well, we have a very
9 complete data base. We can actually pull that information
10 in a myriad of ways. Obviously I think probably what
11 would be most pertinent to what you are asking would be
12 numbers of complaints by subdivision, for instance. We
13 have done that.

14 COMMISSIONER JACOBS: Did that give you any
15 information about potential causes? When you look at
16 where most of the complaints are coming from, does it
17 relate to a particular main that might be in your
18 distribution system, or there is no relationship such as
19 that?

20 THE WITNESS: Not really. As I think has been
21 borne out by customer testimony, the majority of the
22 complaints of black water now I'm talking about, not odor
23 and other issues, but the black water seem to be
24 concentrated in the Wyndtree and Chelsea area. That is
25 where we see the greatest number of repeat complaints, and

1 I guess what you would call unresolved problems.

2 COMMISSIONER JACOBS: And you have -- those are
3 only two of how many subdivisions you serve?

4 THE WITNESS: Well, that gets to be -- defining
5 what a subdivision is sometimes is kind of tricky. For
6 instance, Wyndtree has what they call communities.
7 Chelsea -- or, I'm sorry, Wyndtree has villages, Chelsea
8 has communities, and there are multiple communities within
9 those communities.

10 At the earlier hearing I believe it was
11 Commissioner Jaber asked me for some dates as to when
12 homes were built in various areas. And, again, for
13 instance, we talk about Trinity. Trinity is an area of
14 multiple communities. So everybody has to understand what
15 we are talking about, I guess is what I'm trying to say,
16 as to being able to define those limits. I mean, Wyndtree
17 is a defined subdivision. She had also asked about
18 Wyndgate, which is the last two villages of Wyndtree. So,
19 I mean, there is an awful lot of overlap there.

20 But I guess if I wanted to break it into basic
21 units as we keep track of them within our office, and this
22 is an estimate on my part, I think there is probably about
23 35 major subdivisions. And within each one of those there
24 might be 20 sub-subdivisions, or communities, or villages,
25 or whatever.

1 COMMISSIONER JACOBS: And I recall one witness,
2 let me get my notes on that, but there was a witness who
3 had moved from, I think, Trinity to Wyndgate. And, I'm
4 sorry, I don't have his name. But, anyway, he indicated
5 that in the prior subdivision they lived at he did not
6 have the black water problem, which you served. And then
7 when he moved into Wyndgate he did experience that
8 problem.

9 THE WITNESS: I'm not saying you're wrong. I
10 recall a customer who testified that he lived in Veterans
11 Village and then moved to -- honestly I don't remember
12 whether it was Wyndtree or Chelsea, and that he began
13 experiencing the problem. Again, that is pretty much in
14 line with the areas where we have seen the problem most
15 prevalent.

16 It is also very much in line with the
17 explanation that we have provided as to how the thing
18 develops and manifests itself, meaning that Veterans
19 Village are typically the smaller homes, smaller water
20 heaters, smaller residence time of the water within their
21 system.

22 And then moving to the bigger home, more
23 bedrooms, a lot of times multiple water heaters, and
24 obviously a much greater residence time of the water
25 within the copper piping. And honestly that is the only

1 one I recall. I mean, if you can give me a specific one
2 we can certainly go look at it and maybe I can give you a
3 better answer.

4 COMMISSIONER JACOBS: No, I think that was the
5 one that I recall.

6 THE WITNESS: We don't see the problem very much
7 at all in Veterans Village, per se. Those are the oldest
8 homes in our area out there, and there is a whole concept
9 that exists out there in this copper corrosion field of
10 study that says once copper gets to a certain age it stops
11 occurring, as well. That would tend to be borne out by
12 these older homes in Veterans Village that don't
13 experience the problem, as well as the other reasons I
14 just stated.

15 COMMISSIONER JACOBS: So if you were to pursue
16 this option of -- not you, but if a customer were wanting
17 to consider this option of replumbing their home, there
18 are quite a list of factors that they might want to
19 consider before they want to incur that kind of a cost,
20 such as how old their house is, the likelihood that the
21 place where they live has or will in the future experience
22 that kind of a problem?

23 THE WITNESS: Well, I'm sorry, I didn't mean to
24 interrupt you.

25 COMMISSIONER JACOBS: No, that's okay.

1 THE WITNESS: I certainly wouldn't suggest,
2 because I know it is a very prevalent problem, and you
3 have heard an awful lot of testimony, but by and large the
4 vast majority of the customers don't experience the
5 problem.

6 I would, you know, I wouldn't recommend to
7 anybody they do it as a preventative measure that they
8 might incur the problem some day, because most people
9 don't. If they are experiencing the problem, and if you
10 asked me today, I mean, there has been an awful lot of
11 testimony here, and there is going to be some continued
12 testimony in reference to the building of the water plants
13 and so forth.

14 But if the question is posed how do you fix this
15 problem today so you don't see black water tomorrow at a
16 location where it exists today, the only answer to that is
17 to repipe that house with a nonmetallic piping. But I
18 certainly wouldn't recommend that to anybody who hasn't
19 experienced the problem.

20 COMMISSIONER JACOBS: Thank you.

21 BY MR. FUDGE:

22 Q In each of those subdivisions that you mentioned
23 do you know how many of the homes are affected with black
24 water problems?

25 A Our data base reflects who -- I mean, I don't

1 know off the top of my head, but our data base reflects
2 the people who have registered complaints with us, yes.

3 Q Can we get that as a late-filed exhibit?

4 A Okay. Tell me exactly what it is you want.

5 Anybody who has ever filed a complaint, or --

6 Q Those who have filed a complaint of black water.

7 A -- somebody who has filed repetitively, or --

8 Q Yes.

9 A -- only once, or how many times in the last
10 year, or how exactly do you want the data?

11 Q Just the number of customers affected in general
12 in those subdivisions.

13 A Okay.

14 COMMISSIONER CLARK: I'm not sure that is clear.

15 MR. DETERDING: It's certainly not to me.

16 MR. JAEGER: Those that have complained about
17 black water, Jason?

18 MR. FUDGE: Yes.

19 COMMISSIONER CLARK: We will be more specific on
20 that in just a minute. I think you -- do you want them
21 who complained, do you want the number of people served in
22 the area?

23 MR. FUDGE: The number of customers served and
24 the number that complained.

25 MR. DETERDING: Do we have a time period we are

1 talking about? Is this ever complained about black water
2 or --

3 MR. FUDGE: Since '95.

4 THE WITNESS: Well, just a point. It is not
5 uncommon, especially when someone moves into a new home to
6 have an initial series of complaints getting over
7 construction sort of issues. I don't know that those are
8 particularly the customers that you want drawn into what I
9 think it is you are trying to get at here. You might want
10 to say people who have complained more than twice in the
11 last 12 months or something along those lines.

12 COMMISSIONER CLARK: Just a minute. What I
13 would like to do is, staff, at a break to consider exactly
14 what they want and perhaps get with the company and Public
15 Counsel and reach a resolution on the parameters of the
16 data request.

17 COMMISSIONER JABER: Could I follow up on a
18 question that Commissioner Jacobs asked? Mr. Watford, you
19 said to Commissioner Jacobs that if someone were to ask
20 you today what the solution going forward for the black
21 water problem is, if I understood you correctly it would
22 include repiping the home. And am I correct in making the
23 assumption that you make that statement because those
24 copper pipes are already damaged by the black water
25 problem?

1 THE WITNESS: Well, maybe I didn't go far enough
2 in that answer. I think I said if you asked me today what
3 is the immediate solution to that problem so that you
4 don't see it tomorrow, the only answer that I know that
5 exists for that is to repipe those homes.

6 As I stated, we have put a proposal before this
7 Commission several years ago to build some water plants
8 that will remove as opposed to convert all the sulfur
9 compounds or almost all the sulfur compounds from our
10 water. We believe long-term that would have the same
11 effect. That is not going to be an overnight solution.
12 Obviously it will take a year to get the first one on
13 line, I'm sure, if we started tomorrow, aside from
14 financing issues and so forth.

15 COMMISSIONER JABER: Those new plants, though,
16 any kind of construction of the packed tower aeration
17 facilities or any new plants are good going forward, it is
18 your testimony, but they don't -- I thought you testified
19 back in New Port Richey that that doesn't help the current
20 customers who have copper pipes that are already pitted
21 and have the holes in them.

22 THE WITNESS: Okay. Well, if we are talking
23 about pinhole leaks in their piping, obviously those
24 either have to be repaired with new copper or replaced
25 with another material. Obviously we would never recommend

1 that you replace the copper with copper again, but it is
2 done very frequently.

3 COMMISSIONER JABER: So then the plants you are
4 talking about then are not the long-term solution as long
5 as those residential homes have the copper pipes that is
6 already damaged.

7 THE WITNESS: No, that is not what I'm trying to
8 say. I believe that over the long-term, yes, the people
9 who experience black water will see an improvement.
10 Again, I have to refer back to the study that was
11 published in the American Waterworks Association Journal
12 that was conducted by Sara Jacobs. She saw decreases in
13 corrosion rates, but it took six months, a year before
14 those things started to decline.

15 I can't help but believe that if in the sulfur
16 compounds are removed totally from the water, which
17 eliminates the ability of the sulfur-reducing bacteria to
18 reconvert them back to a sulfide, which is what causes the
19 problem, that that is not going to improve it.

20 What I can't tell you, and I wish I could is
21 that three months from now you are going to see an 80
22 percent improvement. I don't know the answer to that.
23 She saw an improvement. I think she went out almost a
24 year, or approximately a year in her study and she saw
25 decreasing rates of corrosion. My answer is, boiled down,

1 if you want it solved today, there is only one solution,
2 that is to repipe the homes.

3 Overall I think it will prevent homes that have
4 copper today, which is the vast majority of the homes in
5 our service area who don't experience the problem, I think
6 it will prevent them from every beginning to experience
7 the problem. I think those who chose not to incur the
8 cost of repiping a house but to endure it for awhile
9 longer, they will see improvements. I think they will
10 probably be gradual, but they will see improvements that
11 will run out over a longer period of time.

12 But I can't help but believe that if you remove
13 the sulfur from the water in any form so that it is not
14 available to be reconverted back in these hot water heater
15 to sulfide that you are not going to see an improvement in
16 the problem. I wish I could give you a better feel for
17 how quickly, but I honestly don't know.

18 COMMISSIONER JABER: You alluded to the answer
19 to my question with respect to when those houses were
20 built. The first houses were built in Chelsea Place,
21 Wyndgate and Trinity. Do you have an answer to that now?

22 THE WITNESS: Yes, I do. In Chelsea, the first
23 connect date that we have, now just bear in mind these
24 were probably -- or I could just about promise you these
25 were the initial builder connects that would have then

1 reverted to a single-family homeowner, but the initial
2 connect in Chelsea was in July of 1990. The initial
3 connect in Trinity Oaks, and Trinity is a very large
4 community, the first part of what we call Trinity would
5 have been Trinity Oaks, was in March of 1991. In Wyndtree
6 itself, the earliest connect that we had there was in
7 April of 1989.

8 COMMISSIONER JABER: And is Wyndtree the large
9 subdivision that encompasses Wyndgate or is it the other
10 way around?

11 THE WITNESS: Wyndtree is the large one.
12 Wyndgate is the last two villages that came on-line of the
13 overall Wyndtree project. Wyndgate, the first home in
14 there connected in January of '97.

15 COMMISSIONER JABER: And when was the first
16 report of black water made to your company? And I'm
17 talking about the black greasy water, I'm not talking
18 about new construction turning on the faucet.

19 THE WITNESS: Commissioner Jaber, I honestly
20 don't know the answer to that question sitting here right
21 now. I would have to go back and research some data.

22 COMMISSIONER JABER: Could you do that today by
23 making a call to your office?

24 THE WITNESS: Yes.

25 COMMISSIONER JABER: I would like to know by the

1 conclusion of the hearing when you received the first
2 report of black water.

3 COMMISSIONER CLARK: Mr. Fudge.

4 BY MR. FUDGE:

5 Q Mr. Watford, have you examined how much it would
6 cost to offer loans to customers so they could repipe
7 their homes?

8 A I haven't examined how much it would cost. That
9 idea was floated about and we did contact our lender as to
10 the viability of that, and it became quite clear for a
11 number of reasons that that probably would not be
12 feasible. First and foremost, our lender stated to us
13 that what would be required was that it would have to be a
14 direct arrangement between them, the lender, and the
15 homeowner. All the homeowners would have to go through
16 the usual processes of qualifying for those loans.

17 They would not and they will not entertain the
18 utility, in essence, being an intermediary in that
19 process. They say they don't allow anyone to collect on
20 their loans, they deal with them directly. I'm referring
21 to Bank of America. Obviously it was troublesome for a
22 lot of reasons. The amount of money involved in this
23 1,500 to \$5,000 range is not a market that they are really
24 interested in pursuing. It is not a large enough amount
25 of money for them to warrant doing it even when approached

1 about doing a large number of them. They still look at it
2 as a bunch of \$3,000 loans, each one having to be
3 administered separately, dealing with all the loan
4 documentation and so forth that would go with that.

5 And it became pretty clear, both to them and to
6 us as they started going through the logistics of it, that
7 that probably would not work. And we asked them to
8 consider any various iterations that they could come up
9 with that might work. And they really said for that sum
10 of money is what they call more of a Visa type credit
11 line. It is not really even enough money to get into some
12 of the entry level home equity loan products that they
13 have.

14 Q So are you saying the banks weren't willing to
15 make loans without the utility guaranteeing the loans?

16 A Well, the utility would not be in a position of
17 guaranteeing the loans anyway, because the loans wouldn't
18 be made to the utility, they would be made to the
19 homeowners.

20 Q What if Goodrich CPVC Division were willing to
21 work out a program, such as low interest loans or
22 discounting the cost of repiping customers homes, would
23 Aloha be willing to administer such a program?

24 A Well, Mr. Fudge, without knowing all of the
25 parameters of what you just said, I really can't answer

1 that question. I don't know what all that entails, what
2 you mean by administer. We are very willing, which is
3 obviously the reason we contacted our bank to begin with,
4 to see what thoughts they might have or any vehicles that
5 they might have to effectuate getting this done. But I
6 really don't have enough information with what you just
7 said to answer that question.

8 I mean, we will certainly be interested in
9 talking to you about whatever it is you have on your mind.
10 But I can't sit here and tell you, yes, we would be
11 willing to do anything, without knowing what the
12 parameters of it are.

13 Q Has Aloha examined any other options that would
14 help its customers repipe their homes?

15 A Well, there is something that has come up quite
16 recently that certainly seems to be a much viable option.
17 I think it has been talked about or talked around a lot in
18 previous hearings, and that is something called an MSTU or
19 an MSBU. And I'm certainly not the expert on that, you
20 would have to get one of the attorneys here to give you
21 additional information on that.

22 But we have reason to believe that there is one
23 of those vehicles that could be used to put something like
24 that together that would provide something. And the best
25 I understand how they work -- I have never done one, so

1 I'm not an expert on that by any means, but something like
2 that could be done for a select group of people. As I
3 understand it, it amortizes the cost over a very long
4 period of time. It has to be approved by the county.
5 Somebody mentioned interest rates of 2 or 3 percent, and
6 they could pay it off over 20 years. So the cost would be
7 very insignificant.

8 The other advantage to it, as I understand it,
9 the cost is attached, in essence, to their property. So
10 if they decide to sell their home halfway through it, that
11 encumbrance goes with it and it is not an issue for the
12 homeowner as it relates to a property value.

13 We certainly have involved in this proceeding a
14 gentleman, Mr. Fasano, who ought to be able to get something
15 like that done through the county. And I believe, at
16 least from everything I have heard, that is the only thing
17 that I have heard to date that seems remotely viable, and
18 there are certainly questions about it that remain, as
19 well.

20 Q Have you talked to the county about that option?

21 A No, we have not.

22 Q Has Aloha examined the possibility of providing
23 to those customers who repipe their homes a one-time
24 rebate of 500 to \$1,000?

25 A Again, that was something that was circulated

1 around, and there was no -- as I understood that
2 discussion, which I got second or third-hand, there was
3 some talk about increasing the rates of the utility to
4 cover the cost of this rebate to the customers.

5 Again, without knowing all the parameters of
6 this proposal, I can't -- have we discussed it? Yes, we
7 have discussed it. Would we be willing to do something
8 like that? Obviously until everybody knows what the
9 parameters are, the numbers, how you are going to qualify,
10 who is going to be selected, are we talking 50 homes or
11 7,000 homes, I can't answer any of those questions. I
12 just don't know.

13 Q If you were willing to offer a one-time rebate,
14 how much would Aloha be able to finance before it would
15 have to obtain outside financing?

16 A I think that with the present financial
17 situation of Aloha we would probably require outside
18 financing from the very beginning on this project.

19 Q Do you still believe that packed tower aeration
20 is the best available technology for the removal of
21 hydrogen sulfide?

22 A Absolutely. And it is the one that everybody in
23 the industry is either moving towards or completing as we
24 speak.

25 Q When was the last time Aloha had an increase in

1 its service availability charges?

2 A A long time ago. I don't know when the date
3 was.

4 Q If the company believes that water plant
5 improvements are necessary, why has the company not filed
6 a request with the Commission to increase its service
7 availability charges?

8 A I missed the -- If the company believes what?

9 Q If water plant improvements are necessary, why
10 has the company not filed for an increase in its service
11 availability charges?

12 A Because at the present time I believe we would
13 be foolish to file for an increase in service availability
14 charges, when as a result of even our last two annual
15 reports, we are in a position where we already exceed the
16 75 percent contributed guideline that is in the Commission
17 rules today.

18 Q Does the company believe that hydrogen sulfide
19 removal systems will have to be installed within the next
20 two years?

21 A I don't believe that -- I can't say that we
22 believe that. I don't believe that the next two years
23 will be a timetable that we would be required to install
24 that anyway. I believe we are looking probably more five
25 to seven years. If you are talking about by rule or

1 implementation of new MCLs by the other regulatory
2 agencies.

3 Q Why has the company not filed an increase in the
4 service availability charges and have the increased
5 escrowed for future plant improvements if you believe that
6 plant improvements will be needed within the next five to
7 seven years?

8 A Well, I thought I just answered that question.
9 I don't -- as my counsel has informed me, we would be
10 foolish to file for increased service availability charges
11 when we are presently already overcontributed according to
12 the PSC guidelines. As a matter of fact, about a year and
13 a half, possibly two years ago, we received a letter from
14 PSC staff that said upon review of our annual report, why
15 should you collect any impact fees because you are
16 overcontributed.

17 And we responded to that and, you know, that was
18 the end of that. But as I understand your rules and so
19 forth, when we are in an overcontributed position right
20 now, it would be rather foolish for us to ask for an
21 increase in service availability charges.

22 Q If the utility was told to file an application
23 for increased service availability charges, how much time
24 would it need to file such an application?

25 A How much time would we need to process the

1 application?

2 Q To get it ready and file it?

3 A Well, the first issue would be what are we
4 filing it on. I don't think anybody knows the answer to
5 that question. I can't tell you how long it would take me
6 to prepare an application to file for increased service
7 availability charges when I don't even have a clue at this
8 point what we are building or what we are going to be
9 trying to cover the costs of.

10 Q If the Commission were to allow you to file an
11 application for increased service availability charges
12 based on the proposed growth figures and the plant
13 additions, how long would it take you to file?

14 A Well, all I can tell you is if that were part of
15 a complete package, and we knew what it is we were
16 building, and the Commission authorized us to build what
17 we proposed, we would get the application processed as
18 quickly as possible. As you alluded to, we haven't done
19 one for a very, very long time and I would have to talk to
20 my consultants before I could tell you how long it would
21 actually take to pull it together. I don't think it would
22 be that long.

23 COMMISSIONER JABER: Mr. Watford, what is your
24 projected growth rate percentage for the next five years?

25 THE WITNESS: On a percentage -- well, I don't

1 know on a percentage basis off the top of my head. Our
2 standard growth rate fluctuates between 2 and 250 units
3 per year. And, honestly, without some economic changes,
4 such as maybe a big increase in service availability
5 charges, we don't see anything that would necessarily
6 indicate that that is going to change.

7 COMMISSIONER JABER: You don't think that the
8 percentage growth rate is affected by the quality of
9 service problem? And when I say quality of service
10 problem, I'm referring to the black water issue.

11 THE WITNESS: We haven't seen it. It has never
12 been expressed to us as an issue by any of our developers.
13 And I'm sure they would certainly be sharing that with us
14 if they thought it was affecting their home sales.

15 COMMISSIONER JABER: Do the developers disclose
16 to the home buyers that there might be a problem with the
17 water?

18 THE WITNESS: Well, ma'am, as we have said
19 throughout, the water meets all state and federal
20 standards. All new homes that are being built are being
21 built with CPVC piping, to the best of our knowledge.
22 Obviously we don't control what people put in their homes
23 I mean, we have no ability to do that.

24 COMMISSIONER JABER: To the best of your
25 knowledge, do these developers tell the home buyers that

1 when they turn on their water it might be black?

2 THE WITNESS: No, because they are talking with
3 new home buyers, people who will have CPVC. And to this
4 date we have never seen black water in a home with CPVC
5 piping.

6 COMMISSIONER JABER: All of the new homes that
7 are built in your subdivisions have the CPVC piping?

8 THE WITNESS: Again, to the best of our
9 knowledge, yes. We don't inspect interior plumbing. The
10 county building department does that. We have sent
11 letters to our developers and encouraged them all to use
12 CPVC. And to the best of my knowledge, all of them are.
13 I mean, I can't tell you ever single one does, because we
14 don't inspect the inside of people's homes.

15 COMMISSIONER JABER: What was the growth rate
16 for 1999, do you know that off the top of your head?

17 THE WITNESS: I really don't. I mean, we would
18 have to pull the annual reports to look at that.

19 COMMISSIONER JABER: It is in the annual report?

20 THE WITNESS: The number of connections
21 increased each year, yes.

22 BY MR. FUDGE:

23 Q Mr. Watford, you estimated that the growth rate
24 was between 200 and 250 ERCs a year?

25 A I believe it was 200 to 250 connections a year.

1 Q Okay. In Mr. Porter's exhibit, Page 14, he has
2 estimated growth for five-year periods and that doesn't
3 appear to be the same growth rate that you have stated.
4 So are these numbers wrong in his estimate?

5 A You would have to ask Mr. Porter how he
6 determined his number. That report was written 2-1/2
7 years ago, I really don't recall the methodology. I
8 believe that there was some population growth numbers that
9 were used from the University of Florida, I believe, to
10 make growth estimates, but he certainly can address that
11 for you when he is on the stand. I honestly don't know
12 what his methodology was.

13 Q Would you like to see the page or are you
14 willing to rely on Mr. Porter's numbers?

15 A I will rely on Mr. Porter's numbers.

16 MR. DETERDING: What page of Mr. Porter's report
17 are you referring to?

18 MR. FUDGE: Page 14.

19 BY MR. FUDGE:

20 Q At the hearing last month, Mr. Porter stated
21 that Aloha had many deadend lines built by developers that
22 are not looped. Do you remember that statement?

23 A Not exactly. If you say so.

24 Q Did you also hear Mr. Porter state that Aloha
25 was now having to pay to loop those lines?

1 A I don't know. Could read me exactly what the
2 statement was, or can you tell me where it is in the
3 transcript, or the context of the statement?

4 Q No, we don't have it right now.

5 A In generalities, Mr. Fudge, I remember the
6 discussion about deadend lines. I don't know the
7 specifics of exactly what he said. There are -- we do the
8 best that we can when we work with developers. I assume
9 this is the point of your question. We do the best that
10 we can when we review subdivisions from developers to
11 ensure that they loop the lines where it is feasible and
12 where it is possible.

13 That generally is possible when it is all
14 contained within a single subdivision and you are working
15 with a single developer. However, as in any utility
16 system, when you have a project that is developed and then
17 a vacant piece of property that sits next to it and then
18 15 years later another developer comes in to that project,
19 sometimes there are lines that the utility has to
20 interconnect and so forth because it is not really the
21 responsibility of the new developer.

22 We try as best we can, as anybody does, to
23 master plan. But the fact is a lot of developers tend to
24 hold their plans close to the vest for marketing reasons.
25 And as best as we can, when a developer does a project,

1 where we think that it is responsible to require him to
2 make extension for future connections, we do require that.

3 I would have to differ with Mr. Porter somewhat
4 to say there is a lot of deadend lines. There are lines
5 that appear to be deadends, as in cul-de-sacs and so
6 forth, but even on cul-de-sacs we require the developers
7 to loop those.

8 Now, in any system you will have some deadend
9 areas. Especially systems that are growing because you
10 can't, in essence, build the looping into the system until
11 the system is complete. The way development occurs or
12 tends to occur in Pasco County is what we call the
13 subdivision method. A bunch of little subdivision
14 daisy-chained along main corridors. It is not like a city
15 that is laid out with streets from one corner of the
16 service area to the other. It is done by multiple
17 developers.

18 We don't -- we have a certain amount of control
19 over that, obviously, because we review all of their plans
20 before they are constructed, and we approve, and we
21 require them to do interconnects where we think it is
22 necessary. The problem is we don't have a crystal ball,
23 and can't see what it is they are going to do four or five
24 years down the road next door. And on those occasions,
25 occasionally we do have to do something to interconnect

1 systems, but it is actually a very, very small amount.

2 Q If the utility was ordered or decided on its own
3 to go to packed tower aeration, how long would it be
4 before it would be up and running?

5 A Well, now you are asking me to speak for DEP and
6 their permitting process, which I'm always very hesitant
7 to do. But I would say that probably -- I mean, from our
8 perspective, we could immediately begin on the design and
9 so forth of that project.

10 If you go to the study that was provided by Mr.
11 Porter, we feel and today feel very strongly it would be
12 very foolish to begin on that without doing an in-depth
13 pilot study program. And without going back into Mr.
14 Porter's report, I don't remember what the time frame was
15 on that. He can certainly address that for you if you
16 like.

17 But as far as construction of the facilities, we
18 could begin immediately preparing the permitting
19 application for the pilot study. I believe the pilot
20 study would have to run for a certain period of time
21 before Mr. Porter felt comfortable sizing all the plant
22 components. And honestly I don't remember what that was.
23 I believe maybe it was six months he wanted to see them
24 operate.

25 A lot of that is going to be driven by DEP in

1 the permitting process. I mean, we could begin
2 immediately, I think, probably construction. What would
3 tend to make the most sense to us would be to construct
4 the first facility down there by Wyndtree and Chelsea.
5 The second facility, which we called, I believe, the
6 Mitchell Road facility next. And then the third facility,
7 which would be the one out in the eastern edge of our
8 service area, I don't even think at this point that we
9 need to look at a specific date for that, because there is
10 an awful lot of unknowns still on the eastern edge of the
11 service area as to what is going to be there.

12 You know, we could begin immediately. But there
13 is going to be a period of pilot testing before we are
14 even in that a position to submit to DEP what it is we
15 ultimately are going to permit.

16 COMMISSIONER JACOBS: A lot of questioning came
17 up previously about Wells 8 and 9. And I can't recall to
18 what extent there was testimony of this; so if there was,
19 please forgive me. Those two wells serve divisions other
20 than the two where you have the most problems, is that
21 correct?

22 THE WITNESS: Well, I think Mr. Porter testified
23 at length about the fact that our system is totally looped
24 internally. There is no isolation of one well serving one
25 facility versus one well serving another area. Now,

1 obviously common sense tells us that the people that are
2 right across the street from this well are getting the
3 predominance of their water from this well. But the
4 dynamics that exist in the system, especially the way they
5 are today with the sprinkling bans and so forth that are
6 going on that put huge hydraulic demands on our system,
7 there is uniform mixing of our water throughout the
8 system.

9 COMMISSIONER JACOBS: Okay. My purpose for
10 asking that question was there would be no benefit gained
11 by focusing your implementation of the new treatment
12 facilities on those two?

13 THE WITNESS: Well, as I said, I think that what
14 would to us make the most sense is to begin that facility
15 first, the one down by Wells 8 and 9. We will pilot test
16 the entire facility. This will tell us an awful lot about
17 this balancing effect of the dynamics of flows of one area
18 versus another. It doesn't make sense certainly to do the
19 pilot testing three separate times. I mean, that just
20 doesn't make any sense for anyone. So I think what we
21 would do would be pilot test the entire system.

22 What would make the most sense would be to begin
23 construction of the facility down by Wells 8 and 9. If
24 nothing else, the customers will see something being done
25 right across the street from where they live where the

1 majority of the complaints are. But I think it needs to
2 be a cohesive plan where we move from the first facility
3 into the second facility.

4 And, again, I think the third facility can
5 probably wait awhile because that side of our service area
6 still -- there is the lot of unknown as to what is going
7 to develop out there, what the demands are going to be,
8 and we certainly don't want to build something that we are
9 going to have to change down the road.

10 So, I think it is critical to get the first two
11 on track, starting with the ones down by Wells 8 and 9.
12 Upon completion with that one, move directly to the what
13 we call the Mitchell Road facility. That one will
14 actually be the lowest cost one, the second one, because
15 there is an existing water plant there that is only a
16 matter of adding certain components as opposed to starting
17 from scratch like we would be down at Wells 8 and 9. But
18 I think that is probably what makes the most sense as far
19 as an implementation schedule.

20 COMMISSIONER JACOBS: This may not be a question
21 for you, probably more appropriately a question for Mr.
22 Porter, but I will ask just in case you are aware of it.
23 In his report, specifically on Page 26, he speaks about a
24 proposed study that was going to be done by the United
25 States EPA. And specifically that study was to gauge the

1 effects of sulfates in concentration in water systems.
2 And the indication was as of the time of his report that
3 that had not been done, but at its completion there might
4 be ramifications as to what treatment there might be on
5 water to deal with sulfate and that that might have an
6 impact on Florida systems that have a high concentration
7 of sulfates in their water.

8 Forgetting all the dynamics and logistics of the
9 report, per se, but if a requirement were to come out of
10 the EPA having to do with sulfate concentration in waters,
11 is it likely that you would be impacted by that?

12 THE WITNESS: Again, that report is a couple of
13 years old, and I'm not looking at it. But if it is the
14 EPA study that I am familiar with, I can't even begin to
15 imagine that it would affect us. Our sulfates, as we
16 talked about here in our treated water, run anywhere from
17 8 to 16 milligrams per liter. The present MCL for that is
18 250 milligrams per liter.

19 Now, typically if you see an MCL reduction you
20 will see a 5, or 10, or 15 percent reduction, not a 95
21 percent MCL reduction. If it got to a point where they
22 were looking at reducing sulfates below 8 to 16, you are
23 talking billions and billions of dollars just statewide to
24 come into compliance with that. Because many of your
25 large municipalities, their sulfates run 50, 60, 70, 80.

1 Our sulfates are actually quite low. I can't imagine that
2 a sulfate rule, and there was a little bit of talk about
3 one, I haven't heard really that it has gathered any
4 momentum whatsoever.

5 COMMISSIONER JACOBS: Thank you.

6 BY MR. FUDGE:

7 Q Last month, an overwhelming number of customers
8 expressed their lack of confidence in Aloha's customer
9 service. Do you believe that Aloha is addressing customer
10 satisfaction?

11 A Well, I would tend to characterize that slightly
12 differently than you did, Mr. Fudge. I believe that what
13 the customers testified to is that we are very responsive,
14 but the problem hasn't been taken care of. As I believe I
15 talked about at the last hearing, and as a matter of fact,
16 you yourselves as staff over there, I think, characterized
17 very good in your previous recommendation, until we can
18 give an answer to these customers that is a uniform
19 unified answer where they can, if nothing else, make an
20 intelligent decision, even if it is not something that
21 they are ultimately pleased with, they are not going to
22 tell you they are satisfied.

23 I think by and large you heard over and over and
24 over from customers that we were responsive. That we gave
25 them information. I can't make the black water go away

1 for the customers that have copper piping who are going to
2 keep their copper piping other than under the parameters I
3 have already specified to you. And it is the same
4 parameters I believe that we specified two or 2-1/2 years
5 ago.

6 They are not happy because the problem hasn't
7 been remedied. I wouldn't be happy, either. I will be
8 the first to tell you that. I have said it here
9 repeatedly. I wouldn't be happy, either. But even -- and
10 I don't remember the gentleman's name who was speaking for
11 the Chelsea Homeowners Association who gave quite a
12 detailed discussion about the little survey that they did.
13 He said Aloha was responsive, they were courteous, but the
14 people aren't satisfied. And I believe Mr. Deterding even
15 asked him a question as a follow-up to that regard, when
16 you say not satisfied, is that because the problem hasn't
17 been solved or something to that effect, and his answer
18 was, yes, the problem hasn't been solved.

19 So we have done everything that I know to do
20 really for a problem that is something that is beyond the
21 point of delivery, beyond the point of connection, and by
22 all rights up until this case has typically been something
23 that was not a responsibility of the utility to address
24 that with these customers.

25 I don't have any ability to repipe the

1 customers' homes or to require them to use any particular
2 building material. You know, we have done what we could
3 in that regard. The Department of Community Affairs has
4 issued a recommendation that was submitted to all building
5 departments largely due to the suggestions of Commissioner
6 Johnson to form that panel, as I understand it,
7 recommending against the use of it.

8 But it is related to a product that is used in
9 construction of homes. That is not our business. We
10 don't have anything to say in that regard. I can't force
11 that on customers. All we can do is make the
12 recommendations that we make.

13 We are continually responsive to the customers.
14 You have heard customer after customer testify they see
15 more of us than they want to see I would even tend to say.
16 But I don't think you are going to get from them that they
17 are satisfied until the problem is solved one way or
18 another.

19 Q Exhibit 18 consists of pages of Aloha's 1998
20 annual report. If staff wanted to estimate a plant
21 capacity charge for water, would it be correct to use the
22 1998 annual report as a starting point to calculate these
23 charges?

24 A Well, I would tend to say that the 1998 annual
25 report to the best of my knowledge accurately represents

1 the status of our CIAC at that point in time. I'm not
2 saying that I would agree that from that point there ought
3 to be charges calculated. As I have already stated, I
4 mean, there is an awful lot of unknown parameters here
5 that we are talking about. Aside from the issue of the
6 fact that the specific report that you are talking about I
7 believe shows about an 82 percent contributed level which
8 is in excess of your guideline amount.

9 Q Wouldn't you agree that if Aloha were to start
10 collecting plant capacity charges based on the projections
11 of the plant that needs to be built, wouldn't that lower
12 the rate impact for future customers?

13 A For future customers?

14 Q And current customers.

15 A Well, I believe that it is always a balancing
16 act between the CIAC or the impact fees and the rates.
17 That is always a balancing act that we look at.
18 Historically, I believe that we have looked at impact fees
19 to pay for new development and rates to cover costs for
20 existing treatment as well as upgrades to existing
21 treatment, if necessary.

22 The problem -- I mean, I think there is, you
23 know, several problems. One obviously is the fact that we
24 presently exceed the guidelines. Number two, there are
25 some resent tax issues that have come about as a result

1 of -- and I'm not the expert on this, either -- but as a
2 result of recent rulings from the IRS about the
3 expenditure of CIAC within a defined period of time that
4 could very greatly affect us and the ability of doing what
5 I think it is you are proposing.

6 You know, throughout this proceeding Mr. Fasano
7 has suggested that we erred somehow in not collecting 3,
8 4, or \$5,000 impact fees from each of these customer that
9 are present customers of the system. You know, one other
10 thing that maybe the Commission would want to consider is
11 to surcharge existing customers to bring up the impact fee
12 to those customers to what Mr. Fasano says we should have
13 charged all along. It certainly would go a long ways
14 toward paying for the facilities.

15 To get back to your original question, obviously
16 the balancing of CIAC with the rates is something that we
17 anticipate this Commission would look at in setting the
18 rates and the service availability charges going forward.
19 And it is something that isn't unexpected by this utility,
20 but to try to -- there are a lot of factors you have to
21 look at. One, the ultimate build-out of this utility.
22 Are there enough new customers out there to pay for these
23 facilities? The answer to that is no.

24 You know, forgetting the fact that we already
25 exceed the guideline amount in the rule, one big issue

1 that probably is the driving force in this discussion is
2 we, to build these facilities, have to get financing from
3 a bank. A bank is not interested typically in your
4 projected service availability charges. That is nothing
5 that is guaranteed to them that is going to service the
6 debt. What they want to see is a directive by the
7 Commission or rule that would require this Commission to
8 implement rates to cover the cost of these facilities. So
9 although we could --

10 COMMISSIONER JACOBS: You would agree that
11 revenues is going to be important to them, as well, isn't
12 it?

13 THE WITNESS: I'm sorry.

14 COMMISSIONER JACOBS: You would agree that your
15 potential revenues is going to be important to them, as
16 well, wouldn't you?

17 THE WITNESS: Oh, absolutely. And that is what
18 they are going to look for is for us to be able to show
19 them a guaranteed revenue stream that is going to be able
20 to service the debt before they would even entertain the
21 loan.

22 COMMISSIONER JACOBS: And that revenue stream is
23 going to come from the projected growth in large part,
24 isn't it?

25 THE WITNESS: Well, I think in much larger part

1 the revenue stream is going to come from the existing
2 customers. And that is where the bulk of this is
3 ultimately going to have to lie as far as the costs go.

4 COMMISSIONER JACOBS: Well, if I recall in the
5 report that was referenced here a moment ago, your growth
6 projection over the next five years is substantial. Is
7 that in line at all or is it totally out of line?

8 THE WITNESS: Well, I think our growth
9 projection -- I don't know exactly what substantial means,
10 but, yes, we have a good growth rate. There is a good
11 growth rate going on in Pasco County. But not to the tune
12 of \$6 million in service availability charges in the next
13 year or two by any means.

14 COMMISSIONER JACOBS: Okay.

15 THE WITNESS: You know, we have to look at --
16 you have to actually look at the dollars and multiply them
17 out and see. And there is just -- there is no way that
18 that can all be recovered out of service availability
19 charges. It is just not possible. Aside from the fact
20 that no bank is going to entertain funding a loan for
21 something that is not -- they view rates as guaranteed.
22 Customers that are out there are going to have to have
23 water and sewer and rates will be paid. Their bills will
24 be paid. That is something that they look at.

25 I'm not going to tell you that they totally

1 ignore service availability charges, but they realize that
2 recessions come and recessions go. Building rates go up,
3 building rates go down. That is not something that they
4 look as security to satisfy a loan typically. They might
5 give it some minor consideration, but not very much. They
6 want to see a revenue stream which will come in the form
7 of rates because people will have water and sewer service
8 whatever the rates are that will be able to service a
9 loan.

10 COMMISSIONER JACOBS: Thank you.

11 BY MR. FUDGE:

12 Q If the Commission did grant an increase in
13 service availability charges and required the utility to
14 escrow the difference between the increase and the current
15 charge to future customers, wouldn't the bank look at that
16 escrow amount favorably?

17 A Again, I believe that they would give it some
18 consideration. I mean, obviously, if it is cash dollars
19 and there was something that said it was going to flow to
20 the bank, certainly they would look at that. But, again,
21 you are not looking at anywhere near the number of dollars
22 we are talking about for this project.

23 Q Does Mr. Porter's exhibit contain appropriate
24 information of pro forma costs to project service
25 availability charges?

1 A I really don't know the answer to that. I would
2 have to go back and study that and, again, look at Mr.
3 Porter's methodology and probably talk to Mr. Porter about
4 that. I think probably what would be more accurate for
5 the Commission's purpose in doing that would be to look at
6 the past annual reports and see the growth rate the
7 company has experienced. I think -- again, I don't have
8 the report in front of me and I would need to discuss with
9 Mr. Porter what his methodology was. I don't know the
10 answer to that.

11 Q In the affected subdivisions, do you notify new
12 customers of the potential for black water problems?

13 A No, we do not. And, again, when you say new
14 customers, new customers coming into the system would
15 typically be coming into homes that have PVC piping. Now,
16 as far as relocating customers and things like that, no,
17 we do not.

18 Q At the hearing last month the customers spoke of
19 discolored water coming from hydrants during flushing,
20 noting that the water was very dark. What causes the dark
21 color?

22 A From a fire hydrant?

23 Q Yes.

24 A Well, predominantly a fire hydrant is, as was
25 discussed earlier, a deadend. From wherever it comes off

1 the main up until he hydrant is a deadend pipe. It is
2 only flowed, obviously, when that hydrant is opened. It
3 is also normally -- well, at least in our case in all
4 situations that I am aware of an iron pipe. It discolors
5 because it is sitting in contact with iron, it is sitting
6 in an iron pipe. You know, it is unknown, depending upon
7 the hydrant, when the last time that particular hydrant
8 was opened. And it is very, very common. I have never
9 seen a fire hydrant opened that didn't run discolored for
10 awhile before it cleared up.

11 Q Concerning hydrogen sulfide in Pasco County's
12 water supply, are you aware of any inquiry that Pasco
13 County or any city in the county has made to DEP about
14 possible remedies to the copper sulfide problem?

15 A I'm sorry, as it relates to hydrogen sulfide in
16 Pasco County's water?

17 Q In the water in Pasco County, not just Pasco
18 County's water.

19 A Could you read me the question one more time.

20 Q Well, you have testified that the water in Pasco
21 County contains a high level of hydrogen sulfide, and I
22 was wondering has the county or the city contacted DEP to
23 work out any remedies to the high levels of hydrogen
24 sulfide?

25 A Well, I don't know what contacts Pasco County or

1 anybody else has had with DEP and typically wouldn't know
2 that information. However, I believe what we testified
3 to, or at least what I testified to was based upon data
4 that we received from DEP, again, looking at the sulfate
5 levels because utilities do not test for hydrogen sulfide,
6 they test for sulfate, which is indicative of the level of
7 sulfide that would have been in the raw water, that their
8 wells slightly exceeded ours.

9 But, again, we are talking levels of 20 to 25
10 milligrams per liter with an MCL of 250 in the case of
11 Pasco County's. Ours were around 8 to 16 was the range of
12 our waters. It is nobody that is -- I mean, neither
13 utility is in any danger of exceeding an MCL that would
14 require some corrective action by a regulatory agency. To
15 the best of my knowledge, and I'm certainly not an
16 authority on Pasco County's utility system.

17 Q Are you aware of any corrective measures that
18 Pasco County Utilities has taken to correct the problem?

19 A I am aware that Pasco County at one time did a
20 black water study of their system for copper corrosion.
21 What flowed from that I honestly really don't know. We
22 have talked a lot about Pinellas County which actually
23 pulls from the same aquifer in Pasco County, and Pinellas
24 County has constructed a packed tower aeration facility at
25 the Keller Road facility exactly like we proposed. As a

1 matter of fact, their study came out, I think, within days
2 of Mr. Porter's study finding exactly the same thing.

3 The point that is to be drawn from that,
4 Pinellas County's water source is in Pasco County. It is
5 piped down to Pinellas. And what their consultants found
6 was that they needed to do packed tower aeration, and that
7 is what they did. And if you read the study prepared by
8 their consultants, some of the issues that they were
9 dealing with were taste, odor, black water, pinhole leaks
10 in copper piping. And their solution to that was to build
11 the packed tower facility at Keller Road. And as I
12 understand it, that is either on-line now or just getting
13 ready to come on-line.

14 Q Are you aware of any other utilities in Florida
15 that have gone to packed tower aeration?

16 A I understand Orlando is now in the process of
17 either permitting, constructing, or whatever. They are in
18 the process. I don't know exactly where they are in the
19 process, and I believe that -- and I can't tell you where
20 it is, but I believe that United Water also has
21 constructed a packed tower facility. I'm not sure exactly
22 where that is located.

23 MR. FUDGE: Thank you. No further questions.

24 COMMISSIONER CLARK: Commissioners. Redirect.

25 MR. DETERDING: Thank you.

REDIRECT EXAMINATION

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BY MR. DETERDING:

Q Mr. Watford, you were asked quite a few questions about a proposal for increasing service availability charges or for filing for such an increase with this Commission. Do you know at this time what specifically Aloha is going to be building in the next two, three, or five to seven years?

A Absolutely not. We hope to have much better guidance at the conclusion of this proceeding, but until we know what we are building, obviously as I think I stated, there is no way we could even begin to put together a service availability filing.

Q Do you know the timing of any planned construction? You say you don't know what you are going to be building, do you know when you might be building something?

A I certainly don't.

Q Do you believe it is a possibility that some direction in that regard might come out of this proceeding?

A Well, I hope so.

Q You were asked by Commission Jacobs some questions about Wells 8 and 9 and the looped system and so forth. Did you give Commissioner Jacobs an idea of how

1 much of the water from Wells 8 and 9 actually flows into
2 the subdivisions that have experienced the black water
3 problem? Do you have a feel for that at all?

4 A I can't quantitatively answer this question.
5 Obviously, geographically they are located close to those
6 subdivisions where we see the problem the most. I would
7 say that there is probably a good portion of their water
8 that comes from there. But we know, we have tracked that
9 there are flow reversals in the system that occur as it
10 relates, especially on sprinkling days where the system is
11 continuously looped, which is the current practice and
12 standard that is out there in distribution system design.
13 But just based upon the fact that the proximity of where
14 they are located is closest to those subdivisions, I would
15 tend to say that a good portion of their water does come
16 from those wells.

17 Q Have you sent information to your customers
18 trying to outline the causes of the black water complaints
19 and possible solutions?

20 A I'm sorry?

21 Q Have you sent to your customers any information
22 in addition to those who file complaints, I know you have
23 testified that you provide some information to customers
24 who have complained about black water outlining something
25 about the black water. First of all, let's start there.

1 What is it you give to these people?

2 A All right. When we get a complaint from a
3 customer and one of our service technicians determines
4 that, in essence, what he is seeing is copper sulfide,
5 they give them an information packet that we have prepared
6 with the assistance -- well, we prepared it, submitted it
7 to the Public Commission staff and the DEP staff for
8 review for accuracy and so forth, and it is about a
9 two-page narrative explaining how it occurs, things that
10 can be done to potentially alleviate, reduce, or possibly
11 eliminate the formation of copper sulfide.

12 It is things that you heard talked about here at
13 great length by Mr. LeRoy; removing anodes, adjusting
14 temperatures in hot water heaters, flushing out pipes in
15 your home in areas that aren't used very frequently, those
16 kinds of things. There is also some manufacturer's
17 literature in there as it relates to hydrogen sulfide, I
18 believe, in hot water heaters and so forth.

19 And at this point, to the best of our knowledge,
20 it is kind of a short synopsis of how the problem occurs
21 and what steps can be taken within a home at least to try
22 to eliminate or alleviate the problem. That's what we
23 give to them.

24 Now, the second part, I believe, of your
25 question is what have we done besides that. We have done

1 several newsletters that were mailed to each and every
2 customer of the utility explaining how the phenomenon
3 occurs. We did that once it was determined. You know, as
4 I stated in my earlier testimony, when it first came up we
5 didn't know what it was. Nobody knew what it was.

6 And as we became aware of what it was, how it
7 occurred after our participation in these various study
8 groups, the University of Florida/DCA group, as we got
9 more information, we shared it with our customers. We
10 have done it in several mailouts to our customers. We do
11 a little newsletter called Water News that I think has
12 been provided to you all in the past where it explained
13 it. So, you know, as new information has come to light,
14 yes, we have shared it with our customers by direct
15 mailings.

16 Q Did you attempt to have similar information
17 published in local homeowner's newspapers?

18 A Yes, and they declined.

19 COMMISSIONER JABER: Mr. Deterding, may I
20 interrupt for just a minute?

21 MR. DETERDING: Certainly.

22 COMMISSIONER JABER: Something you said, Mr.
23 Watford, reminded me of testimony from a customer --
24 actually there were several that testified that they have
25 made general complaints to the servicemen that flushes the

1 hydrants. What is your process, your complaint process
2 for that person reporting back to your office and
3 following up with customers?

4 THE WITNESS: If the complaint is actually
5 registered with someone out in the field as opposed to
6 called in, is that your question?

7 COMMISSIONER JABER: Yes.

8 THE WITNESS: The procedure that is outlined for
9 that is we have what is called a speed memo that exists
10 out in the field. We have service orders, those are
11 things that originate from our office. A customer calling
12 our office is entered into a service order data base that
13 is the information that I mentioned to you that we can
14 provide to you however they decide they wanted it from
15 staff. But ultimately if a customer approaches an
16 employee out in the system, they are to handle it just as
17 if that complaint came through the office, although they
18 will fill out slightly different paperwork that shows that
19 it started there and then came back to the office. Then
20 on the other side, once that information gets back to the
21 office, it is entered as a service order so it ultimately
22 ends up in the same data base so that nobody is missed
23 that way.

24 COMMISSIONER JABER: And what is the process
25 from there on?

1 THE WITNESS: Well, as I said, once -- when they
2 contact them, if it is something obviously -- if somebody
3 were to contact, and typically where that would occur is
4 one of the gentlemen who is part of our flushing program,
5 and that is all he does all day is go to various locations
6 in our service area checking water quality and doing
7 flushing as needed and so forth.

8 A customer might walk up to him and say, hey,
9 I've got such and such going on. If it is something that
10 he can address, he will go address that right then. He
11 will then write that up on a work order -- or, I'm sorry,
12 a speed memo, return that to the office, and it will be
13 entered into our service order system. It just won't come
14 back out again, in essence, is the only difference.

15 COMMISSIONER JABER: Once it is in the service
16 order system, what happens? Does a customer service rep
17 call the customer to say, "Are you now satisfied?" What
18 is the process after it gets logged into your service
19 order system?

20 THE WITNESS: Again, if it is something that the
21 technician could have taken care of while he was there, he
22 would so note that on the speed memo. I looked at it and
23 explained to the customer what was going on, or showed him
24 how to read his meter, you know, whatever the question
25 would have been, and said it was taken care of. If it

1 needed additional follow-up, he would have noted that. At
2 that point it would come back to our office, there would
3 be a regular service order created through our service
4 order system that would go back to a different individual
5 if it was something that required somebody else's
6 attention to go out in the normal process of handling all
7 of the service orders which are printed every morning to
8 go to the field.

9 COMMISSIONER JABER: Do you define resolution to
10 a complaint by the fact that your service people have gone
11 out and explained the situation to the customer, or do you
12 define resolution by customer satisfaction?

13 THE WITNESS: Well, obviously I can't tell you
14 that every customer is satisfied; I think you have heard
15 otherwise. If it is something that we can resolve for
16 them, obviously we define resolution as solving their
17 problem.

18 If it is black water, which I cannot solve for
19 them, no, I can't tell you that I would say that that is
20 resolved. And we handle those, if they call us once a
21 week, we go out there once a week. Again, that is the
22 dilemma here. I can't leave there with that customer
23 satisfied. So, with the exception of the black water
24 issue, yes, I believe that what we call the closing of the
25 issue or the closing of the complaint is when the customer

1 is satisfied.

2 COMMISSIONER JABER: Walk me through -- let's
3 say I'm a customer of yours, and I call your 800 number,
4 or your office number, and say I have turned on my bathtub
5 and black water is coming out. Walk me through what your
6 office does.

7 THE WITNESS: Our office would take down
8 obviously their name and address, and there would be a
9 service order created to go to the field to check the
10 water quality at that location. That would go out --

11 COMMISSIONER JABER: What does that mean, check
12 the water at that location? Outside of the house?

13 THE WITNESS: What we try to do, and this has
14 been something of an evolutionary process. We have tried
15 on one hand to provide a large amount of detail to the
16 service technician. We have actually found that it is
17 better to have the service technician get that information
18 from the customer when he gets to the customer's home.

19 What we don't want is -- a customer may call and
20 say your rates are too high, my water stinks, and I have
21 got black stuff in my toilet tank. What I don't want is
22 one of our service technicians to go out, address those
23 three issues, two other ones that were not mentioned on
24 the telephone because obviously they know that the person
25 they are speaking to on the phone is not ultimately the

1 person that is going to come to their door.

2 We try to encourage them to go out, talk to the
3 customer, find out what the customer's problems are. They
4 report back to us what the customer reported the problem
5 was, what they saw when they were there, and what they did
6 for the customer.

7 COMMISSIONER JABER: Mr. Watford, I have a very
8 short memory span. Your counsel can tell you that. So
9 let me get back to my question before I forget it. You
10 said your service people come out to the home and check
11 the water quality at that location. My question is what
12 does that mean? Where it is that you check the water
13 quality, and then walk me through what happens after that.

14 THE WITNESS: We go to their home, we check
15 their water quality entering their home. We then --
16 either before or after at that point they will attempt to
17 make contact with the customer. A lot of times the
18 customer is not home. But if the customer is home, they
19 will knock on the door, they will talk to the customer,
20 explain to them when that found. At that point many times
21 a customer will walk out with a little bottle of black
22 water, say I dipped this out of my whatever, my water
23 heater, or the back of my toilet tank. They will then try
24 to explain to them this information that I have related in
25 reference to the formation of copper sulfide, and that is

1 about it at that point.

2 They will then -- you know, again, the goal is
3 to leave there with the customer at least satisfied with
4 explanation of what is going on in the home, because I
5 can't change that. There is nothing that we can do to
6 remedy that. That is the source of the frustration that
7 you see. At that point he will then complete his
8 paperwork, which will come back to our office telling us
9 what he found, if he made contact with the customer. If
10 he didn't make contact with the customer then one of our
11 office personnel will attempt to contact that customer by
12 phone to let them know, you know, what the technician
13 found when he was there, and if there is anything else
14 that we can do for them.

15 But, again, the issue of resolution as to
16 whether the black water has disappeared or not won't be
17 resolved until we come up with a resolution to that.

18 BY MR. DETERDING:

19 Q Mr. Watford, you were referred to Mr. Porter's
20 report, Page 14 of that report concerning the growth
21 within the system. Are the figures on Page 14 for growth
22 actual or projected growth figures?

23 A Well, it appears based upon the heading that is
24 here, it is historical and projected served population.
25 Obviously, the dates that are still in the future have to

1 be projected numbers.

2 Q And if you would refer back to Section 13 of
3 that report.

4 A Yes.

5 Q Keeping your finger on the Page 14, as well,
6 Table C-2 on Page 2 of Section 13.

7 A Yes.

8 Q Are there some historic figures there on growth?

9 A Yes, there are.

10 Q And have those -- has your growth in the recent
11 two or three years increased or declined?

12 A It has stayed relatively level. It has
13 decreased for the period that is reflected here. We have
14 actually seen a decrease in the number of connections. We
15 are kind of going through the transition in Pasco County
16 to larger more expensive homes, but not as many of them
17 being built.

18 Q And do the figures shown on that table of
19 actual, how do they compare to the projections on that
20 Page 14?

21 A Well, you said hold my finger too late, so hang
22 on a second. Well, as far as through 1995, which would be
23 the latest data that we have here that is reflected on
24 both tables, it appears that they are the same as far as
25 the equivalent connections.

1 Q Okay. Well, I guess my question is, the
2 historic figures versus those that are projected in that
3 report, how do they compare on average as far as the
4 projected growth figures on Page 13 versus the actual
5 historic figures on Section 13, Page 2, Table C-2?

6 A Well, it would appear that the projected numbers
7 are actually greater than the latest numbers that we had.
8 Without a calculator and spending some time here, I would
9 have to -- I couldn't tell you numerically exactly how
10 much different, but it appears that the projected numbers
11 here, because this is shooting out to 2015 on Page 14, the
12 equivalent -- again, 1995 is data that appears in both
13 tables. Those are real hard numbers.

14 At the time this was prepared, 2000 and forward
15 was a projection. And what we see it appears is probably
16 the rate that was existing back in 1992, '93, '94 is what
17 was being projected. Again, I don't know, again, without
18 talking to Mr. Porter, what was used to do this 2015
19 projection. A lot of times those are just demographic
20 studies that come out of the universities that provide
21 that sort of information.

22 But obviously the more accurate method to try
23 to -- if you are trying to work out something as it
24 relates to a service availability charge would be to look
25 at actual growth rates that the company has actually

1 realized and then plot that going forward. And, as I
2 stated, we are in a period of transition in Pasco County,
3 we see the numbers declining. Average cost of the home
4 going up drastically, but the numbers of connections are
5 declining as we are starting to run out of real estate.

6 Q When was Mr. Porter's report prepared
7 approximately?

8 A It says May 1997 on the front.

9 Q So you have indicated that there have been some
10 changes at least in growth since that time, actual?

11 A Yes. And I think you see that reflected if you
12 look at the actual, the actual growth rate that is
13 projected on Page 2 of Section 13. There is not a great,
14 but a steady decrease in the number of those connections
15 each year, and that is looking from '91 through 1996.

16 Q Have there been any changes in anticipated
17 timing or type of facilities that the utility anticipates
18 needing to construct in the future from what was estimated
19 or proposed in that report?

20 A Well, there are a lot of things talked about in
21 this report. Some of the things that were driving
22 anticipated facilities at the time were proposed
23 regulations that have evolved at a slower rate than what
24 we had originally thought they would evolve at. I'm not
25 exactly sure what it is you are asking, but, yes, there

1 are things obviously since 1997 that have changed to today
2 that changed some of the opinions that I'm sure Mr. Porter
3 would express today as it relates to timing of these
4 issues.

5 Probably the most predominant of that is the
6 backing off of some of the EPA regulations and whether we
7 will actually even fall under that first tier of
8 requirements. So it could even, you know, tremendously
9 back off the timing that would be required to construct
10 these facilities from a regulatory perspective of DEP.

11 Q Okay. And changing subjects here on you. If
12 you can get your arm out --

13 A Am I done in here?

14 Q Yes, you are. You mentioned something that I
15 think you said you are not real familiar with, a situation
16 with the IRS regulations related to CIAC and so forth.
17 And I know the Commission is at least to some extent aware
18 of that situation. Can you relay to us at least what you
19 understand the situation to be with that on-going
20 discussion about IRS regulations on CIAC?

21 A In a very basic manner, because I only recently
22 even became aware that it was even going on. But as I
23 understand it, and I'm not real sure on the time frames,
24 but there is a set period of time upon which you collect a
25 dollar of CIAC that that money has to be expended or else

1 it will be deemed taxable income to the utility. I
2 believe the period was two years, but I'm not sure that
3 that is correct or not. And I'm not real sure at this
4 point, and I'm not sure anybody at this point knows how
5 that has to be tracked or how that has to be accounted for
6 and proved up, in essence. But the best I understand it,
7 it will be like a first-in, first-out type of method, upon
8 which if you don't have that dollar expended that you
9 collected today within -- if it is two years, within two
10 years, all of a sudden that becomes taxable to the utility
11 as taxable income.

12 You know, we all went through the gross-up of
13 CIAC exercise and so forth in this industry, and kind of
14 got that behind us we thought, but it is coming back, I
15 guess, again in a slightly different form in this regard.
16 But obviously for something that would require -- you
17 know, if we are talking about implementing some service
18 availability charge increase today for something that we
19 wouldn't be totally expending those funds by that point in
20 time, and with pilot testing and so forth like we have
21 already talked about, I mean, it is extremely optimistic
22 to think that those monies would be spent in the next two
23 years, certainly a portion of them would, that it could
24 create serious tax issues and tax problems for the
25 utility.

1 And under that scenario, you know, we went
2 through the gross-up scenario with developers to deal with
3 it before. But I don't know how you deal with it on a --
4 if you don't spend it in time, I have no idea how we would
5 deal with that. There is certainly no provision within
6 the rate structure of the utility to cover the taxable
7 impact of that.

8 MR. DETERDING: I don't have anything further.

9 COMMISSIONER CLARK: I don't think there are any
10 exhibits, is that correct?

11 MR. JAEGER: Staff started identifying 19, but I
12 just want to make sure on Exhibit 15 it hadn't been
13 admitted yet. That was Watford's composite exhibits.

14 COMMISSIONER CLARK: That's correct.

15 MR. FUDGE: Commissioner Clark, we still have
16 some recross questions for Mr. Watford. Just two or
17 three.

18 COMMISSIONER CLARK: Go ahead.

19 RECCROSS EXAMINATION

20 BY MR. FUDGE:

21 Q Mr. Watford, you said that the growth
22 projections are a little high in the study, does that mean
23 that the study is no longer reliable?

24 A No. I believe that it -- just like I stated, I
25 mean, when you are looking at a 20-year projection there

1 are ways that those -- the methodologies are done for that
2 by looking at demographics in an area generally provided
3 by some group that provides that sort of information. It
4 certainly isn't something that is specific to the Aloha
5 Utilities service area. If I'm not mistaken -- and again,
6 this is two and a half years ago -- if I'm not mistaken it
7 was provided by the University of Florida with their
8 demographics information just to provide rough estimates
9 for projections going out 20 years. Obviously, we have
10 hard data as it relates to Aloha.

11 You have an annual report every year that
12 relates the number of connections increased. You can go
13 back and look at that as far back as you would like. That
14 is obviously the information that would be pertinent to
15 use for that.

16 Q Since Mr. Nixon based his calculations for rates
17 and revenues on those projections, would those
18 calculations need to be redone?

19 A I believe Mr. Nixon based his on the actual
20 growth rate of the utility and projected that forward is
21 my understanding.

22 MR. FUDGE: Thank you. No further questions.

23 COMMISSIONER CLARK: Exhibits.

24 MR. DETERDING: Move 15.

25 COMMISSIONER CLARK: Without objection, Exhibit

1 15 is entered in the record.

2 (Exhibit 15 received in evidence.)

3 COMMISSIONER CLARK: We will take a ten-minute
4 break and then we will start with Mr. Biddy.

5 (Brief recess.)

6 COMMISSIONER CLARK: Let's go back on the
7 record.

8 Mr. McLean.

9 MR. McLEAN: Yes, ma'am. Citizens call Ted
10 Biddy.

11 Commissioner, you put Mr. Biddy under oath down
12 at the first part of the hearing.

13 Whereupon,

14 TED L. BIDDY

15 was called as a witness by the Office of Public Counsel,
16 having first been duly sworn, was examined and testified
17 as follows:

18 DIRECT EXAMINATION

19 BY MR. McLEAN:

20 Q Would you state your name, please, sir, and by
21 whom you are employed.

22 A My name is Ted L. B-I-D-D-Y. I am a
23 self-employed civil engineering consultant.

24 Q And are you under contact to the Office of
25 Public Counsel for purposes of providing testimony and

1 analysis in this case?

2 A Yes, I am.

3 Q Pursuant to that end, have you prefiled about 13
4 pages of testimony?

5 A Yes, I did.

6 Q Do you have any changes to make to any of that
7 testimony?

8 A No, I do not.

9 Q Mr. Biddy, were I to ask you the same questions
10 that is reflected in that testimony, would your answers be
11 the same were those questioned asked today?

12 A Yes, they would.

13 MR. McLEAN: Madam Chairman, I move that
14 testimony into the record as though read.

15 COMMISSIONER CLARK: It will be inserted in the
16 record as though read.

17 MR. McLEAN: Thank you, Madam Chairman.

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1 DIRECT TESTIMONY OF TED L BIDDY, P.E./P.L.S.

2 ON BEHALF OF THE CITIZENS OF FLORIDA

3
4 BEFORE THE

5 FLORIDA PUBLIC SERVICE COMMISSION

6 DOCKET NO. 960545-WS

7

8 Q. What is your name, and business address?

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

11 Q. By whom are you employed and what is your position?

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

13 Q. What is your educational background and work experience?

14 A. I graduated from the Georgia Institute of Technology with a B.S.
15 degree in Civil Engineering in 1963. I am a registered professional
16 engineer and land surveyor in Florida, Georgia and Mississippi and
17 several other states. I was the vice-president of Baskerville-
18 Donovan, Inc. (BDI) and the regional manager of the Tallahassee
19 Office from April 1, 1991 until February, 1998. I left the
20 employment of BDI on September 30, 1998. Before joining BDI in
21 1991, I had operated my own civil engineering firm for 21 years.
22 My areas of expertise include civil engineering, structural
23 engineering, sanitary engineering, soils and foundation engineering
24 and precise surveying. During my career, I have designed and

25

1 supervised the master planning, design and construction of
2 thousands of residential, commercial and industrial properties. My
3 work has included water and wastewater design; structural design;
4 land surveys; and environmental permitting.

5 I have served as principal and chief designer for numerous utility
6 projects. Among my major water and wastewater facilities designs
7 have been a 2,000 acre development in Lake County, FL; a 1,200
8 acre development in Ocean Springs, MS; a 4 mile water distribution
9 system for Talquin Electric Cooperative, Inc. and a 320 lot
10 subdivision in Leon County, FL.

11 Q. What are your professional affiliation?

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

17 Q. Have you previously testified before the Florida Public Service
18 Commission (FPSC)?

19 A. Yes. I have testified before the PSC for Docket Nos. 940109-WU,
20 950495-WS, 9503870-SU, 951056-SU, 960329-WS and the
21 remand cases Docket Nos. 950387-SU and 971065-SU on various
22 engineering issues and used and useful analyses.

23 Q. Have you previously testified before a state or federal court as an
24 engineering expert witness?

25 Yes, I have had numerous court appearances as an expert witness

1 for cases involving roadways, utilities, drainage, stormwater, water
2 and wastewater facilities designs.

3 Q. What is the purpose of your testimony?

4 A. The purpose is to present testimony in connection with a water
5 quality investigation which I have concluded of the Aloha Utilities
6 Seven Springs Water System specifically in connection with "black
7 water" complaints by the customers of Aloha Utilities..

8 Q. What documents have you reviewed in preparation for your
9 testimony?

10 A. I have reviewed the pre-filed direct testimony of Aloha's President
11 Stephen G. Watford and the pre-filed direct testimony of Aloha's
12 Consulting Engineer David W. Porter, P.E., along with all of their
13 exhibits which included an extensive study by Mr. Porter entitled
14 "Water Facilities Upgrade Study Report." I also reviewed the
15 "Notice of Proposed Agency Action" of the Public Service
16 Commission dated January 7, 1999..

17 Q. During your review of the "Water Facilities Upgrade Study Report",
18 did you form an opinion as to whether this document adequately
19 addressed the Commission's March 12, 1997 order to Aloha to
20 prepare a report that evaluated the costs and efficiencies of several
21 treatment options for the removal of hydrogen sulfide from its
22 source water?

23 A. Yes, I formed the opinion that the report did not adequately address
24 the Commission's order in that the report did not attempt to isolate
25 the problem area(s) and then study ways to upgrade the water

1 quality at the problem area(s) but the study included extensive new
2 water treatment, storage, and pumping facilities for all nine existing
3 well sites and even added additional well sites. Indeed, the
4 recommended system, known as Alternative 2 - Centralized Water
5 Facilities, includes new and expanded facilities for this utility's needs
6 through the year 2015 and beyond at a cost of 9.5 million dollars.
7 This broad brush approach would obviously be good for the utility
8 but in no way solves the problem in a cost effective manner.
9 I believe that the study should have concentrated a study into the
10 cause and cure of the water quality problems at the southwest
11 portion of the service area served by well nos. 8 and 9 where most
12 of the water quality complaints have come from. Indeed, the
13 Chelsea, Wyndtree and Wyndgate Subdivisions and surrounding
14 areas are the locations of most of the complaints of "black water"
15 and all of these areas are served by wells nos. 8 and 9. During my
16 investigation, I asked several of the customers in these areas when
17 they first started experiencing the "black water" problem. Without
18 exception, each consumer stated that is had only been 4 to 5 years
19 ago and they then volunteered that is was at the time that the new
20 wells nos. 8 and 9 were added to the system.
21 Therefore, the water source from wells nos. 8 and 9 is highly
22 suspect as being involved with the water quality problems in this
23 area. At the very least, a detailed study of these wells should be
24 performed. If a single packed tower aeration unit at these wells
25 could solve the water quality problem, the cost would only be a

1 fraction of the estimates which the utility's study concluded for the
2 entire system.

3 Q. What independent studies did you perform during your investigation
4 of the water quality of Aloha Utilities Seven Springs water system?

5 A. I employed an independent testing laboratory, Savannah
6 Laboratories & Environmental Services, Inc. to accompany me to
7 the Aloha service area to collect samples at five of the eight Aloha
8 wells for testing. It was necessary for the Office of Public Counsel's
9 (OPC) attorney to arrange for access to the well sites with the
10 attorney for Aloha Utilities who wanted to be present during the
11 sampling along with Aloha officials and their testing lab.

12 With these arrangements made, I traveled to the Aloha service area
13 along with OPC's attorney and the lab technician from Savannah
14 Laboratories. We were met at the site by Alohas' attorney,
15 Corporate President and their system superintendent along with a
16 technician from their testing lab. Additionally, Attorney Ralph
17 Jaeger and Engineer Robert Crouch were present representing the
18 Public Service Commission. Together we all traveled to well sites
19 1, 3, 6, 8 & 9 and obtained raw and finished water samples for
20 testing. Photographs of each of these well sites were taken.
21 (Attached hereto as Exhibit TLB-1).

22 Q. What parameters did the Savannah Laboratories test for and what
23 was the results of the testing of the raw and finished water from
24 these wells?

25 A. The test results (Attached hereto as Exhibit TLB-2) are very

1 puzzling. The Lab tested for Copper, Hardness, Sulfate, Color,
2 Odor, pH and Sulfides in both the raw and finished water. The test
3 results are remarkable for their lack of detection of sulfides and
4 sulfates in both the raw and finished water samples. All samples
5 tested for each of the five wells found sulfides below 0.10 mg/l
6 which is the detection limit. Similarly, the tests for sulfates at all
7 wells were below 5 mg/l which is the detection limit for this
8 parameter. This is indeed a strange finding when the utility has
9 previously admitted that their raw well water contains modest
10 amounts of hydrogen sulfide and the finished water has these
11 sulfides converted to sulfates. The test results show a moderately
12 hard water with hardness ranging from 180 mg/l to 220 mg/l. The
13 test results for copper were also below the detection limit of 0.02
14 mg/l for both raw and finished water for all wells except for a
15 copper level of 0.046 mg/l in the finished water from well no. 9.
16 Test for pH and color also showed these parameters to be within the
17 acceptable range.

18 These test results would lead one to think that the water
19 from these five Aloha Wells was almost pristine and of a very high
20 quality. However, the tests for odor from the raw and finished
21 water of all of the wells except for well no. 6 have Threshold Order
22 Numbers in excess of the Florida DEP Secondary Drinking Water
23 Standard of 3. The tests for the finished water from well nos. 1, 3
24 & 9 showed Threshold Odor Numbers of 16 which is more than 5
25 times the FDEP standard for drinking water.

1 Q. What do you conclude from these test results?

2 A. I was at first extremely puzzled by the seemingly high quality of the
3 well water tested in light of the history of this utility with water
4 quality problems at the customer residences consisting of odor, taste
5 and discolored water. I then investigated the very high odor test
6 results from well nos. 1, 3 & 9. The Laboratory informed me that
7 the odor was a very strong chlorine odor.
8 It then became clear to me that the utility or someone had heavily
9 dosed the raw and finished water of the wells with chlorine on the
10 morning of August 4, 1999 prior to our arrival at the site for
11 sampling. The heavy chlorine dosing would have lowered the
12 sulfides and sulfates below detection limits and therefore the testing
13 was rendered worthless. Certainly the utility cannot operate the
14 water system with such high chlorine dosing. In fact, the utility had
15 to lower the chlorine dosage rate in September, 1995 in response to
16 EPA requirements for lowering of trihalomethanes which are
17 disinfection by-products which are formed when natural organics in
18 water react with chlorine. The trihalomethanes are considered by
19 the EPA to be primary contaminants and possibly carcinogenic. It is
20 certainly interesting to note that the discolored water complaints
21 began to increase shortly after the chlorine dosage was lowered
22 which is of course also the time when wells nos. 8 and 9 were added
23 to the system in December, 1995.

24 Q. Can you prove that Aloha Utilities intentionally tried to rig the test
25 results by adding a heavy dosage of chlorine to the raw and finished

1 well water before you and Savannah Laboratories arrived at the
2 area?

3 A. No, I cannot prove that the utility added the heavy doses of chlorine
4 to the raw and finished well water. I do have strong suspicions
5 about the matter based on the results of the odor tests of the raw
6 and finished water. Obviously, someone added the chlorine.

7 Q. Mr. Biddy, can you say to a reasonably scientific certainty that both
8 the raw and finished well water was subjected to extraordinary
9 chlorination, such that the testing you had performed for sulfides
10 was affected?

11
12 A. Yes, I can. That is my professional opinion.

13 Q. What specifics lead you to this conclusion?

14 A. Three considerations: first, that the Utility itself reported to this
15 commission that its water contained sulfides and sulfates, whereas
16 the samples taken and analyzed did not. Second, it is my experience
17 over many years of working in environmental engineering in the
18 costal areas of our state that water from these areas invariably
19 contains significant, measurable sulfides and sulfates, whereas the
20 samples taken and analyzed did not. Lastly, that the water samples
21 taken retained significant evidence of chlorination, long after
22 chlorine residue should have dissipated entirely.

23 Q. Have you excluded every other reasonable hypothesis which would
24 explain the characteristics of the water you had tested?

25 A. I believe that I have. It is my professional opinion that the water

1 which was tested had been chlorinated to an extent atypical of that
2 normally provided by Aloha Utilities.

3

4 Q. What other actions did you take in connection with your
5 investigation of the water quality of the Aloha Utilities Seven
6 Springs Water System?

7 A. On the morning following the sampling of the Aloha Wells which
8 was August 5, 1999, I took the same Savannah Laboratories
9 technician to six different residences in the Southwest portion of
10 Aloha's service area that is served by well nos. 8 & 9 for purposes
11 of taking water samples for testing from inside and outside the
12 homes. I interviewed each homeowner and obtained three water
13 samples from each house. I also took photographs at the residences
14 which are attached hereto as Exhibit TLB-3. The water samples
15 were taken from both a hot water and cold water faucet in the house
16 and an additional cold water sample was taken from a yard hose bib
17 between the house and the meter. The Savannah Laboratories
18 technician then carried the samples to the lab for testing.

19 Q. What parameter were tested for at these homes and what did the
20 testing show?

21 A. The same parameters were first tested for as with the water at the
22 wells with Copper, Hardness, Sulfates, Color, Odor, pH and
23 Sulfides begin obtained for all three samples at each home. The
24 results for sulfides and sulfates showed the same low levels as with
25 the well samples since this water had been super-chlorinated less

1 that twenty-four hours before. Color and pH were also found in the
2 same acceptable range as with the well tests. Odor was now
3 undetectable since the excess chlorine and reacted with all water in
4 the distribution system in that area and was essentially used up.
5 Hardness in the water from outside hose bibs was hard with values
6 between 170 mg/l and 240 mg/l. In several homes with water
7 softening units, the water inside the homes was very soft.
8 The big variable in the testing was at the level of copper. The test
9 values ranged from 0.02 mg/l at the Straighter residence on
10 Byrnwood Dr. to an astonishing high of 16.0 mg/l at the cold water
11 faucet in the Coogan residence on Davenport Dr. The hot water
12 sample in the Coogan residence showed a cooper level of 10.0 mg/l.
13 These high copper contents are very much more than the FDEP
14 action required level of 1.3 mg/l and the secondary drinking water
15 standard of 1.0 mg/l. Further testing was then ordered from
16 Savannah Laboratories consisting of qualitative anion screen to
17 determine what anions might be present in the black water residue in
18 the Coogan residence. The lab found chlorides at a level of 30 mg/l
19 and sulfates at 20 mg/l and no sulfides. Therefore, the black water
20 is not being caused by copper sulfide as has been the claim of Aloha
21 Utilities in the past. Further testing was also ordered on the finished
22 water of well no. 9 which had a strong chlorine odor. The lab found
23 1.4 mg/l of free chlorine in the sample even though testing was
24 performed three weeks after the sample was taken. This chlorine
25 level would have been many times higher if tested on the day the

1 sample was taken. See Exhibits TLB-4 & TLB-5 for lab tests.

2 Q. What can you conclude from the water testing at the residences?

3 A. It is difficult to tell anything about the sulfate and sulfide
4 concentrations since the well water had, in my opinion, been
5 excessively chlorinated the day before the testing. What can be
6 concluded from the limited testing program at the residences is that
7 all the water faucets tested showed some amount of copper and the
8 Coogan residence had very excessive amounts in both the cold and
9 hot water taps. These copper levels of 10 to 16 mg/l are greatly in
10 excess of the FDEP Secondary Drinking Water Standard for copper
11 of 1.0 mg/l. The black residue in the Coogan water was screened
12 for anions and no sulfides were found. Therefore, at least at the
13 Coogan residence, the very black water is not due to copper sulfide
14 but from some other unknown chemical combined with cooper..

15 Q. What other investigations did you perform in connection with this
16 matter?

17 A. I investigated methods available for removing the sulfides and
18 sulfates from the well water and the cost of these facilities. I found
19 that pressure filters would be by far the most cost effective method
20 for sulfide and sulfate removal. The pressure filters are installed on
21 line with the existing pressurized system and therefore do not
22 require an additional storage tank or high service pumping as
23 packed tower aeration require. The pressure filters are said to
24 remove all sulfides and sulfates and the cost for complete installation
25 at a 500 gpm well would be about #225,000 to \$250,000. This cost

1 is only about 25 percent of the cost of the packed tower installation
2 cost at a 500 gpm well as contained in the "Water Facilities Upgrade
3 Study Report" as prepared by Aloha Utilities and attached to Mr.
4 Porter's Testimony as Exhibit DWP-1.

5 Q. What would be your recommendation to the Public Service
6 Commission in this matter?

7 A. Well, first I would tell the Commission that the source of the
8 problem has not been determined yet by me or by the utility. This is
9 clear from the analysis of the black water residue at the Coogan
10 residence which does not contain any sulfides which have previously
11 been blamed by the utility as being combined with copper at the
12 residences to cause the black water problem. Therefore, I would
13 recommend to the Commission that the Utility again be ordered to
14 study the problem in a comprehensive manner by concentrating an
15 investigation in the areas of black water complaints including the
16 wells which serve these areas and determine for certain what is
17 causing the water quality problems and that the utility develop a
18 cost effective solution to these problems. I would recommend that
19 the study further include a comparison with other nearby systems
20 such as the Pasco County system particularly in regards to this
21 system's customers who have home water softening units. And
22 finally, I would request that the Commission order the Utility to
23 make their well sites accessible to Office of Public Counsel's experts
24 and that the Utility do nothing to frustrate any testing which these
25 experts may make.

1 Q. Do you have anything else to add to your testimony?

2 A. No, not at this time.

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1 BY MR. McLEAN:

2 Q Mr. Biddy, and further pursuant to that goal,
3 did you prepare five exhibits?

4 A Yes, I did.

5 Q Do you have any changes to make to those
6 exhibits?

7 A No, I do not.

8 MR. McLEAN: Madam Chairman, may I have the
9 exhibits marked for identification, they are TLB-1 through
10 5. They could be marked as a composite or individually,
11 your choice.

12 COMMISSIONER CLARK: We will mark them as
13 Composite Exhibit 20.

14 (Exhibit 20 marked for
15 identification.)

16 BY MR. McLEAN:

17 Q Mr. Biddy, have you prepared a summary of your
18 testimony?

19 A Yes, I have.

20 Q Would you offer it to the Commissioners, please,
21 sir?

22 A All right. As a civil engineering consultant to
23 the Florida Office of Public Counsel, I was given the task
24 in July of 1999 to investigate the water quality
25 complaints of the customers of Aloha Utilities in

1 connection with this case. The focus of my water quality
2 investigation was to be the black water complaints by the
3 customers as well as the odor and low pressure complaints.

4 In starting my investigation, I reviewed the
5 prefiled testimony of Mr. Stephen Watford and Mr. David
6 Porter. I also reviewed in detail Mr. Porter's extensive
7 study entitled Water Facilities Upgrade Study Report.
8 After a review of these documents, I formed the opinion
9 that Mr. Porter's report did not adequately address the
10 Commission's 3/12/97 order to Aloha to prepare a report
11 that evaluated the cost and efficiencies of several
12 treatment options for the removal of hydrogen sulfide from
13 its source water.

14 Having determined that, I found that Mr.
15 Porter's report did not concentrate a study on the problem
16 or in the problem area, but rather he did a complete and
17 very thorough projection of Aloha's needs for the next 15
18 years, including three centralized treatment facilities,
19 additional wells, additional water mains, and everything
20 that would be needed for the Aloha system to handle the
21 customers for the next 15 years, all at a cost of about
22 \$9.5 million. That, in my opinion, was not what they were
23 supposed to do, and therefore we began to study the
24 problem ourselves.

25 Aloha, of course, asked that that study be ruled

1 prudent and go forward with their construction. And, of
2 course, they would do so with that much dollars added to
3 the rate base and the guaranteed return on that. And, by
4 the way, they did include packed tower aeration in three
5 different systems, which is an excellent system for
6 removal of hydrogen sulfide. But that seemed just as an
7 afterthought that was added to their massive study for
8 their needs for the next 15 years.

9 I don't doubt at all that the packed tower
10 aeration facility would take the hydrogen sulfide out of
11 the Aloha water. If indeed that is the problem with the
12 black water, it would cure the black water problem, as
13 well. I do believe that there are well-known technologies
14 that would be more cost-effective in doing this cure of
15 the hydrogen sulfide problem, namely oxidizing pressure
16 filters that I will talk about in a little bit. I believe
17 that to be a more cost-effective solution.

18 We began to study the black water problem by
19 hiring a laboratory that has a very good reputation,
20 Savannah Laboratories. We hired their Tampa office to do
21 some testing both on the Aloha wells and upon the houses,
22 some of the residences that had experienced the black
23 water problem.

24 The first thing we did was go on August 4th of
25 1999 to Wells Number 1, 3, 6, 8 and 9, five different

1 wells. We were taking samples of both the raw water and
2 the finished water. The sampling was performed by the lab
3 technician on the site. Aloha officials were present, I
4 believe attorneys for Aloha were present, attorneys and
5 engineers for the Public Service Commission were present.
6 The sampling was taken for testing of copper, hardness,
7 sulfates, color, odor, pH and sulfides.

8 On the next morning, August 5th, I took the same
9 Savannah Labs technician to six residences. I took him
10 alone without anybody from the Public Service Commission
11 or Aloha present and obtained water samples from outside
12 the six houses, and a hot water sample and a cold water
13 sample inside the residences, all for the same parameters
14 to be tested.

15 While I was at the Aloha service area, I took a
16 map of the service area from Mr. Porter's report and
17 became familiar with the location of each well site in
18 connection with the various subdivisions and showing the
19 relationship of the different subdivisions. I noted that
20 Wells Number 8 and 9 were located in close proximity to
21 Chelsea Place, Wyndgate, Trinity Oaks, and Wyndtree
22 subdivisions in the southwest portion, a very isolated
23 southwest portion of the service area. These were where
24 the most, if not all the black water complaints come from.

25 Now, when the lab reported the test results of

1 the well water, we were very surprised. The presence of
2 sulfates and sulfides could not be found up to the testing
3 limits, that is both in the raw water and in the finished
4 water of all of those wells. The tests for hardness
5 showed a moderately hard water with a hardness of between
6 180 and 220 milligrams per liter. Copper was below the
7 detection limit of .02, except for a level of .046
8 milligrams per liter in the finished water at Well 9.
9 Tests for pH and color were also within the acceptable
10 range.

11 However, the tests for odor for raw and finished
12 water for all wells, except for Number 6, had threshold
13 odor numbers in excess of the Florida DEP secondary
14 drinking water standards of 3. And the odor number for
15 Wells Number 1, 3, and 9 had odor numbers of 16, which is
16 over five times the Florida secondary drinking water
17 standard.

18 So immediately I concluded that these wells had
19 strong odors, and indeed the water did not meet the
20 Florida secondary drinking standards. I then asked the
21 lab to tell me what that strong odor was. And they said
22 immediately it was a strong chlorine odor.

23 Now, just to tell you in passing that while I
24 was at the wells witnessing the test, I thought I smelled
25 hydrogen sulfide at each one. Now, that is just standing

1 in the general area, and perhaps thinking I smelled it and
2 expecting to smell it, I don't know, but I thought I
3 smelled hydrogen sulfide.

4 The lab in testing this, and what they do when
5 they test for these odor numbers, they dilute it 16 parts
6 to one in a series of tests before they finally get no
7 odor. And this 16 is a very high odor. And this is a
8 panel of people at the testing lab that does this, they
9 are expert in it. They smelled a strong chlorine odor.

10 It then became clear to me why I didn't find any
11 sulfides and sulfates, since the utility had previously
12 admitted that they have sulfides and some sulfates in
13 their raw and finished water, perhaps not so much in their
14 finished water, they claim. But it became clear if there
15 is a very strong chlorine content to this water that the
16 sulfates and sulfides had all been oxidized out of the
17 water, so I could not find any sulfates or sulfides due to
18 this excessive chlorination.

19 I asked the lab -- the report came to me 21 days
20 after we had taken the samples. I asked the lab could
21 they test the sample that was left in their lab for
22 chlorine at this point. And they informed me that it
23 would not be a valid test because it was out of date and
24 had not been refrigerated or prepared in accordance with
25 standards.

1 But I asked them, well, can you test it anyway
2 and tell me how much chlorine is left in it after all of
3 this period of time. So they did so, and they came up
4 with a lab result of 1.4 milligrams per liter of free
5 chlorine. And what this indicates is nothing more than it
6 would have been much, much higher 21 days later, because
7 chlorine dissipates and reacts with everything it can in a
8 short period of time. Just how much that was 21 days
9 previous would be a guess. Nobody knows.

10 Now, the tests at the residences next was given
11 to me. Again, the color and the pH were in the acceptable
12 range. Hardness was from 170 to 240 milligrams per liter,
13 fairly hard water. Odor was none from the six residences.
14 The chlorine that was in the water had reacted with all --
15 everything it could and was used up. Again, sulfates and
16 sulfides, we found none up to the detection limits. Now,
17 the detection limits that we tested for both at the wells
18 and at the homes for sulfides was up to .1 milligrams per
19 liter for sulfides and 5 milligrams per liter for
20 sulfates.

21 What we did find in the homes was a copper
22 content, as you might expect. It ranged from a low of .02
23 at the Stauder residence where they had PVC piping, to an
24 astonishing high of 16 milligrams per liter in the cold
25 water sample and 10 milligrams per liter for the hot water

1 sample at the Coogan residence on Davenport Drive. That
2 is in Chelsea Place. Now, of course, these are much
3 higher than the secondary drinking water standards of 1.0.
4 These high copper levels in the water were at the same
5 residence where the lady was able to go to her bathtub and
6 draw a bathtub full of black ink water.

7 We did take a sample of the black water, took it
8 to the lab. The residue in the bottom of the sample
9 container is a black residue. I asked the lab to run a
10 qualitative screen on this black residue and tell me what
11 the black residue was. The lab found that the black
12 residue had chlorides, which are compounds of chlorine, up
13 to a level of 30 milligrams per liter and sulfates up to
14 20 milligrams per liter, but no sulfides. No sulfides.
15 Therefore, copper sulfide at least in this residence with
16 this black water was not the cause of the black water.

17 Now, of course, when you are testing you are
18 just shooting in the dark, because if you don't
19 specifically ask the lab what to test for, they are not
20 going to test for everything in the world. There are
21 other possibilities that if we were allowed to do more
22 testing and go back and study this problem further, we
23 would test for things like tannic acids, which I
24 understand the health department of Pasco County has
25 stated may be a part --

1 MR. WHARTON: Commissioner Clark, we are getting
2 beyond the summation now. There is nothing in his
3 testimony about what else he would test for.

4 COMMISSIONER CLARK: Mr. Bidy, please keep it
5 to your testimony. And the summary has now gone 15
6 minutes, so if you could wrap it up.

7 THE WITNESS: All right.

8 MR. McLEAN: Madam Chairman, may I inquire how
9 that compares with Mr. Porter's summary, which I recall to
10 be more than an hour.

11 COMMISSIONER CLARK: I don't recall, but we
12 probably could have read the testimony.

13 MR. WHARTON: There were numerous questions of
14 Mr. Porter.

15 THE WITNESS: Let me move on, then, to a point
16 in my direct testimony. I looked into ways to treat this
17 water if, indeed, it was hydrogen sulfide, assuming that
18 hydrogen sulfide was the problem. I went to the Internet
19 and went to Alta Vista, and I simply typed in the question
20 or the statement hydrogen sulfide removal in drinking
21 water. Alta Vista pulled up 716,000 pages that related to
22 that subject.

23 The second item of the first ten that was pulled
24 up was a paper from Wilkes University, which had a very
25 good treatment of oxidizing pressure filters to take out

1 hydrogen sulfide from well water. I then went to -- found
2 the people who make filters, and the one I picked or the
3 first one I picked was Pacific Keystone, a company out on
4 the west coast. I found that they had oxidizing pressure
5 filters all over the country, anywhere from 100 to 1,000
6 gallons per minute capacity, and that they worked well on
7 relatively small systems, such as Aloha's systems.

8 Most of Aloha's wells are 500-gallon per minute.
9 There is one that is 250, and I believe there is one that
10 is 1,000 gallons per minute. So these pressurized filters
11 using an oxidizing agent to remove the hydrogen sulfide
12 would work well in those areas. I received a cost
13 estimate of \$250,000 per well for the installation of
14 these pressure filters at these wells.

15 So my direct testimony wound up saying that I
16 did not prove the cause of the black water problem. I do
17 not believe that Aloha has proved the black water problem.
18 I think there is something in the Aloha water that is
19 causing some of this problem other than hydrogen sulfide,
20 although hydrogen sulfide may well be a major problem with
21 the black water.

22 And I recommended that the Commission order the
23 utility to concentrate a study in areas of the black
24 water, that the OPC and the PSC engineers be allowed to
25 work with them in that endeavor, and that we do a

1 comprehensive testing program to once and for all pin down
2 what the problem is, what is causing the problem and find
3 ways to fix it in a cost-effective manner. This is not
4 rocket science. Certainly it is complex water chemistry,
5 but, you know, we can fix the problem. And that
6 essentially is the summary of my testimony.

7 MR. McLEAN: Commissioner, Mr. Bidy is ready
8 for cross examination.

9 COMMISSIONER CLARK: Mr. Wharton.

10 CROSS EXAMINATION

11 BY MR. WHARTON:

12 Q Good afternoon, Mr. Bidy.

13 A Good afternoon.

14 Q Let's make sure the record is clear about what
15 is not the purpose of your testimony here today. You
16 don't know the source of the black water problem, do you?

17 A I do not.

18 Q And based on all the tests you have seen, based
19 on your participation in this case, based on everything
20 you have looked at and everything you know about this
21 matter, you are only making an assumption about what the
22 problem is, isn't that correct?

23 A I'm assuming that hydrogen sulfide is a major
24 part of the problem, yes.

25 Q But that is just an assumption on your part?

1 A That is an assumption because I could find no
2 sulfides in the testing.

3 Q And as we sit here today, you really don't know
4 what the cause of these water quality problems are,
5 correct?

6 A I do not know for sure.

7 Q And what you have actually recommended in your
8 prefiled testimony is that the matter be studied further?

9 A Yes.

10 Q Okay. Sir, I noticed that you did not mention
11 in your summary the fact that your prefiled testimony
12 contained an allegation that the August 4, 1999 well tests
13 you referred to that you said were attended by yourself
14 and OPC and representatives of the utility, is that right
15 so far?

16 A That's correct.

17 Q That those well tests had been rigged because
18 someone super-chlorinated both the raw and finished water,
19 is that correct?

20 A I did not -- I said I could not prove that they
21 has been rigged, but that obviously they had excessive
22 chlorine in them.

23 Q Your testimony says, does it not, sir, that it
24 was your opinion within a reasonable scientific certainty
25 that the raw and finished water had been super-chlorinated

1 prior to those well tests?

2 A By someone, yes, sir.

3 Q Okay. But that water, raw and finished at those
4 five wells had been super-chlorinated?

5 A Absolutely.

6 Q And, sir, you defined super-chlorination as
7 heavily shocked with chlorine to probably 25 to 50 parts
8 per million?

9 A Well, that was a guess at the deposition, the 25
10 to 50 parts per million. Let's just say excessively
11 chlorinated.

12 Q But that is what you said at your deposition,
13 correct?

14 A Yes, I did.

15 Q And you have gone back and reviewed that
16 deposition?

17 A Well, 25 to 50 may be heavy, it may not be
18 heavy. You know, I told you that we tested the water for
19 chlorine after 21 days of sitting in a lab and still found
20 1.4 parts per million. It obviously was much higher
21 before that. How much higher, I don't know. I can't
22 prove that.

23 Q And we are going to discuss that in detail, Mr.
24 Bidy, when we get to that. Right now let's talk about
25 the raw water.

1 And just to make sure the record is very clear,
2 it is your opinion to a reasonable scientific certainty
3 that the raw water was super-chlorinated?

4 A Absolutely. Because you cannot have raw water
5 that supposedly constantly contains hydrogen sulfide, test
6 it and find none unless you have got some kind of an
7 oxidizing compound that gets rid of the hydrogen sulfide.
8 And we proved that it was chlorine. To what level of
9 chlorine, I don't know. It could be as high as 25 parts
10 per million that was added to it, I don't know.

11 Q Sir, when you physically attended the sampling
12 event of August 4, 1999, you testified earlier that you
13 thought you smelled hydrogen sulfide, correct?

14 A That's correct.

15 Q That smells like rotten eggs, right?

16 A Yes, it does.

17 Q Okay. So based on what you actually saw at the
18 sampling event, you did not form the opinion at that time
19 that the wells had been super-chlorinated, correct?

20 A No, I did not.

21 Q You only subsequently formed that opinion based
22 on information which was provided to you from Savannah
23 Labs, correct?

24 A From testing of the water, yes.

25 Q And the opinion that the water at the wells,

1 both raw and finished, was super-chlorinated is not based
2 on anything other than the information you have received
3 from Savannah Labs, correct?

4 A That is correct.

5 Q Okay. And you had subsequent information from
6 Savannah Labs where you understood them to communicate to
7 you that there was a strong chlorine odor coming out of
8 the raw samples from the five wells that were taken back
9 to Savannah Labs, correct?

10 A The raw and finished water samples that were
11 tested and found to have a 16 threshold odor number, the
12 lab told me that the odor was a strong chlorine odor.

13 Q Okay. But that would include your opinion about
14 the raw water being super-chlorinated, correct?

15 A That is correct.

16 Q Right now I'm just trying to concentrate on the
17 raw water. We will get to the finished in a minute.

18 A That is correct.

19 Q You formed this opinion regarding the
20 super-chlorination of the raw water based on this
21 information from Savannah Labs without going through any
22 mental exercises about how one physically would
23 super-chlorinate a raw water well, is that correct?

24 A Well, I knew how they could do it. Just simply
25 pour it into the well at some point in time, somebody

1 could.

2 Q In fact, those wells were pumping, I believe you
3 told me in your deposition one at the rate of 250 gallons
4 per minute, one 1,000 gallons per minute, and the rest at
5 500 gallons per minute?

6 MR. McLEAN: Pardon me. I want to object to the
7 second reference now to the deposition. Unless it be
8 shown that the witness is testifying differently than
9 something he testified in deposition, I don't believe what
10 he said in the deposition is remotely admissible in this
11 case.

12 If Mr. Wharton wants to ask him something, and
13 if Mr. Wharton thinks he said something different, then
14 let's hear what he said in the deposition. But the
15 continued reference to the deposition, I believe, is
16 improper.

17 MR. WHARTON: Commissioner Clark, if I find
18 something written on a napkin in the men's restroom, I can
19 ask him about it. If he says no, then maybe I will
20 impeach him with the deposition. I'm trying to
21 short-circuit the matter. Every question I've got here I
22 got from the deposition.

23 MR. McLEAN: It is perfectly proper to ask him a
24 question about anything. But what you may not do is
25 reference what he said in his deposition. I would have

1 interposed many objections in the deposition if we didn't
2 play by those rules.

3 MR. WHARTON: We will do it Mr. McLean's way. I
4 will withdraw the question.

5 MR. McLEAN: You will do it by the rules of
6 evidence if I have anything to say about it.

7 MR. WHARTON: Well, I don't believe that is
8 correct, but we will go ahead and move forward.

9 BY MR. WHARTON:

10 Q Sir, in fact, you have formed the opinion -- and
11 since we are going to have to go to the deposition for
12 every question, I'm going to go back and ask the last
13 question, which I don't believe I got a responsive answer
14 to. You have formed the opinion regarding the
15 super-chlorination of the raw water without going through
16 any mental exercises whatsoever about how physically one
17 would super-chlorinate a raw water well, is that correct,
18 sir?

19 A I did not have to go through the mental
20 exercises when the lab told me there was a very strong
21 chlorine odor and that the threshold odor number was 16.
22 It was perfectly obvious that the water was heavily
23 chlorinated.

24 Q Does that mean that my statement is correct,
25 sir?

1 A Well, you know -- yes.

2 Q Thank you. In fact, sir, those wells were
3 pumping on that morning, one at a rate of 250 gallons per
4 minute, one at 1,000 gallons per minute, and the rest at
5 500 gallons per minute, correct?

6 A That is correct.

7 Q Mr. Bidy, you told me -- well, let's don't do
8 it that way. Would you agree that to use your phrase you
9 do not have a well-calibrated nose?

10 A No, I would not put my nose up as equivalent to
11 a lab testing, no.

12 Q In fact, you are a smoker, right?

13 A Yes, I am.

14 Q Now, the people of Savannah Labs do have
15 well-trained noses, don't they?

16 A Well, they have a panel of trained experts to do
17 the odor tests, yes.

18 Q And those people specifically have been assigned
19 that task at Savannah Lab because they have
20 well-calibrated noses, for lack of a better phrase,
21 correct?

22 A I would think so, yes.

23 Q Sir, do you recall that after we took your
24 deposition and about three weeks before this matter went
25 to trial, that the office of Public Counsel took the

1 deposition of Ms. Kathy Sheffield at Savannah Labs?

2 A Yes, I remember it.

3 Q Who is Kathy Sheffield?

4 A She is the project manager for the Tampa office
5 of Savannah Labs.

6 Q And she is the person that you dealt with at
7 Savannah Labs and that you relied upon the information she
8 gave you in the formation of the opinions we have been
9 talking about, correct?

10 A Yes, indeed.

11 MR. WHARTON: Commissioner Clark, I would like
12 to get this marked for identification. I believe we are
13 on 21.

14 (Exhibit 21 marked for
15 identification.)

16 BY MR. WHARTON:

17 Q Mr. Bidy, can you identify what has been marked
18 as Exhibit 21?

19 A Yes, this is the Savannah Labs' worksheets for
20 the odor panel. People are testing for odor indicating
21 the different wells that were tested and what the odor
22 number was obtained for each test.

23 Q And where it has got panel written down in the
24 left-hand corner, do you understand that to be this panel
25 of persons who have a particular expertise, or they have

1 these calibrated noses, and they come up with these total
2 odor numbers?

3 A Yes.

4 Q Okay. And do you recall that this was a
5 document that was produced for the first time at
6 Ms. Sheffield's deposition?

7 A Yes.

8 Q Which was taken at the request of Public
9 Counsel?

10 A Yes.

11 Q Okay. Sir, do you see that the word chlorine is
12 written down at the bottom with a star by it?

13 A Yes.

14 Q And going under the column that says Sample ID,
15 do you understand MW1, which is there twice, MW6, MW3,
16 that column, that that is referring to Wells 1, 6, 3, 8
17 and 9?

18 A Yes.

19 Q In fact, those are the five wells that the
20 samples came from, correct?

21 A Yes.

22 Q And then off to the -- you have got a
23 parenthetical reference by each of those, RF, RF, is that
24 raw and finished?

25 A That is what it stands for, yes.

1 Q Would you agree, Mr. Bidby, that Exhibit 21
2 reveals that a star has been put on this document, on the
3 bottom by the word star there, by the star there is the
4 word chlorine, and that a star has been put on this
5 document by all of the finished water samples?

6 A Yes. It does that, yes.

7 Q But there is no star by any of the raw water
8 samples, is there?

9 A That's correct.

10 Q Okay. Do these bench notes reveal to you that,
11 in fact, the odor panel at Savannah Labs did not detect
12 any chlorine odor in any of the raw samples?

13 A No, it is silent on the subject. I was told
14 that they did have chlorine odor in the raw samples, as
15 well, but the big numbers, which have a 16 odor number for
16 the most part, they did indicate by an asterisk, which I
17 assume that star represents, that it was chlorine that was
18 producing this large number.

19 Q But for reasons unknown to you, they did not
20 indicate chlorine odor by any of the raw water samples,
21 did they?

22 A They did not, no.

23 Q Okay. Sir, let's look at TLB-5, which I guess
24 is part of Composite Exhibit 20. And let me know when you
25 are there, Mr. Bidby?

1 A All right.

2 Q Sir, going to the last page of that exhibit, you
3 have got a memo dated August 30, 1999, project Aloha
4 Utilities, that begins with the words 10 aqueous samples,
5 are you with me?

6 A Yes, I am.

7 Q Would you identify that document for the record?

8 A Yes. This is a memorandum from Kathy Sheffield,
9 the project manager for Savannah Labs, telling of the
10 results of the sampling test of the finished water at Well
11 9 after a 21-day period of sitting in the lab, indicating
12 that she found 1.4 milligrams per liter of residual
13 chlorine, even though the sample had been out of holding
14 time and had not been refrigerated per the analytical
15 method. And she says that this would be indicative of a
16 high residual chlorine value at the time of collection.

17 Q And we will talk about that in some detail in a
18 minute, Mr. Biddy.

19 Does this document reveal in any way, shape, or
20 form that there were any odors of chlorine in any of the
21 raw water samples?

22 A It does not say so.

23 Q Okay. Sir, did you attend the deposition of
24 Kathy Sheffield?

25 A Yes, I did.

1 Q And, in fact, you sat about three or four feet
2 from Ms. Sheffield while she was testifying?

3 A Well, I think it was further than that, but I
4 sat close enough to hear.

5 Q We had a whole crowd of people in there, didn't
6 we?

7 A Sure did.

8 Q Do you recall that Ms. Sheffield -- first of
9 all, did you say Ms. Sheffield was the project manager on
10 this particular file?

11 A Yes, I did.

12 Q And she is also a chemist, correct?

13 A She is a chemist, that is correct.

14 Q Do you recall that she indicated that the raw
15 water did not evidence any chlorine odor?

16 A Well, that was her memory at the time, yes.

17 Q Okay. And she was under oath at the time,
18 right?

19 A Well, it was her best memory at the time.

20 Q But she was under oath, correct, we were at a
21 deposition?

22 A Yes.

23 Q Do you remember that she indicated that the raw
24 water had not been super-chlorinated in her opinion?

25 A Well, I heard her say that, yes.

1 Q Okay. And do you recall that when I asked her
2 if it would surprise her that one of your conclusions in
3 your prefiled testimony was that the raw water had been
4 super-chlorinated she replied, "I think Mr. Bidy was
5 confused." Do you recall that statement by her?

6 A I heard her say it, yes.

7 Q And just to clarify for the record, all the
8 information on which you base your opinion that the raw
9 water was super-chlorinated came from Savannah Labs?

10 A Yes.

11 Q And this was the deposition of the project
12 manager?

13 A Yes. Can I comment on that?

14 Q Well, I think that your lawyer will probably ask
15 you some questions on this subject, sir.

16 MR. McLEAN: I will also stand for the notion
17 that witnesses have always been allowed to explain their
18 answers, and I believe that is what Mr. Bidy wants to do.

19 COMMISSIONER CLARK: That is correct,
20 Mr. Wharton.

21 THE WITNESS: When you say all the information
22 that Savannah Labs furnished me I base my opinion on, yes,
23 but also the glaring absence of hydrogen sulfide in the
24 raw water was probably the biggest factor that caused me
25 to believe that the water had been chlorinated to the

1 extent that the hydrogen sulfide had been oxidized out of
2 the raw water.

3 BY MR. WHARTON:

4 Q Let's just make sure, though, what we have been
5 able to glean on this matter of the chlorine in the raw
6 water. It is your testimony that you didn't smell any
7 chlorine during the sampling event of August 4, '99?

8 A That is correct.

9 Q And what has now been marked as Exhibit 21 does
10 not reveal that there was any detection of odor of
11 chlorine by the Savannah Labs odor panel, correct?

12 A Where are you at?

13 Q The odor panel analysis.

14 A Yes.

15 Q It does not reveal that there was any detection
16 of an odor of chlorine by the odor panel at Savannah Labs,
17 correct?

18 A There is no asterisk by the raw water sample,
19 no.

20 Q And Savannah Labs didn't do any tests at any
21 time that found chlorine in any of the raw water samples,
22 did they?

23 A No, they did not.

24 Q And the project manager testified that if you --
25 that Savannah Labs had no odor hits on the raw water for

1 chlorine, correct?

2 A I don't remember her testifying to that, but
3 that would not be true. If you would notice the raw water
4 had higher than three odor numbers, which are certainly
5 above the minimum allowable by the Florida secondary
6 standards.

7 MR. WHARTON: Let me have one moment,
8 Commissioner Clark.

9 BY MR. WHARTON:

10 Q Mr. Biddy, do you happen to have the deposition
11 of Ms. Sheffield?

12 A Yes, I believe I do.

13 Q Okay. I would like for you to look at Page 148
14 of that deposition to refresh your recollection with
15 regard to the question I just asked you. Are you there,
16 Mr. Biddy?

17 A I'm sorry, I haven't found it yet. What was the
18 page?

19 Q Page 148.

20 A I have it.

21 Q Sir, do you see on Page 148 of the deposition of
22 Ms. Sheffield, Line 5: Question: "Did the raw water
23 evidence any chlorine odor? Answer: The raw water sample
24 did not come back with chlorine odor hits."

25 A That's what it says.

1 Q Okay. So now you recall her saying that. You
2 said a minute ago you didn't.

3 A I said if she did say it, we obviously have
4 numbers on the lab sheet that shows the higher than
5 allowable odor numbers.

6 Q Are you saying that you have got a document, Mr.
7 Bidy, that shows that there were chlorine odor hits for
8 any of the raw water?

9 A I explained to you that one of the primary
10 reasons I considered the raw water had been excessively
11 chlorinated was, number one, the hydrogen sulfide was not
12 detectable to levels of .1 milligrams per liter, and the
13 fact that the raw water still exhibits odors higher than
14 the three that is the minimum -- or the maximum level for
15 state standards.

16 Q Mr. Bidy, I think you can be assured of two
17 things in order to save time. One is that Mr. McLean will
18 give you a chance to address these subjects, the other is
19 that I will get an answer to these questions.

20 MR. McLEAN: I am going to object to any
21 instructions given to the witness from counsel. It should
22 come from the bench, if at all.

23 BY MR. WHARTON:

24 Q Do you have a document, Mr. Bidy, which shows
25 that Savannah Labs found odor hits on any raw water

1 sample?

2 MR. McLEAN: Objection, cumulative, and the
3 question has been answered twice. Asked twice and
4 answered twice.

5 COMMISSIONER CLARK: I haven't heard a clear
6 answer.

7 THE WITNESS: I have no document that has an
8 asterisk by it that says chlorine. Would that answer your
9 question?

10 BY MR. WHARTON:

11 Q Well, do you have any document which shows that
12 Savannah Labs detected chlorine odors in the raw water?

13 A Well, I believe I do.

14 Q Okay. What document is that?

15 A I believe this same document, this lab document
16 that shows the raw water from Wells, 9, 8, 3, and 1 all
17 have threshold odor numbers of 4 which is in excess of the
18 maximum that the state secondary standards allow.

19 That to me is indicative -- in combination with
20 the fact that we could find no sulfides, those two items
21 are indicative that something, whether it be chlorine or
22 some other oxidizing agent, had been added to the water to
23 cause the lack of the sulfides.

24 Q Even though the trained noses at Savannah Labs
25 did not indicate on Exhibit 21 any evidence of chlorine

1 odor in the raw water samples, correct?

2 A Well, you notice they only got a reading of 4.
3 So that means they had to dilute it four times to come up
4 with the no odor indication, that is the way the tests are
5 done. The ones with 16 had to be diluted 16 parts to come
6 up with the threshold odor number of 4. So that means it
7 was a weak odor, but that is probably because the
8 oxidation process had used up the chlorine.

9 Q Well, let me ask you something. Did you ever
10 see this document before Kathy Sheffield's deposition?

11 A No, I did not.

12 Q And yet now it seems to be the linchpin of your
13 opinion.

14 A No, not at all. I was told that they had
15 chlorine odors. I was told verbally that it was chlorine
16 odors. Now, Ms. Sheffield didn't remember that. She said
17 there was no chlorine odor. Well, people sometimes don't
18 remember later.

19 Q So you think that when Ms. Sheffield testified
20 in her deposition she testified erroneously?

21 A Yes, I think she had forgotten that the raw
22 water had some odor.

23 Q Okay. So, let me just make sure that we are
24 clear on this point and then we will move on. Despite the
25 fact that you say that Savannah Laboratories and the

1 information you got from them was the source of the
2 information which forms the basis for your opinion on the
3 super-chlorination of the raw water, and despite the fact
4 that Ms. Sheffield said under oath that that wasn't the
5 case, it is still your testimony today that within a
6 reasonable scientific certainty the raw water was
7 super-chlorinated?

8 A Yes. And that is also based on 36 years
9 experience added to that mix that you just mentioned.

10 Q Well, what does it mean to have an opinion to a
11 reasonable scientific certainty?

12 A It means you can exclude every other reasonable
13 hypothesis.

14 Q Let's talk about the sampling event of August 4.
15 Who attended that sampling event?

16 A On August 4th?

17 Q Yes.

18 A Lord have mercy, it must have been a bunch.
19 You --

20 Q It was actually Marty.

21 A Was it Marty?

22 Q Yes.

23 A Representatives from the water system, Mr.
24 Porter, the lab technician from Short Laboratories,
25 myself, Mr. Harold McLean from the Office of Public

1 Counsel, Mr. Marty Walker from the Savannah Labs was their
2 sampling technician, Mr. Ralph Jaeger from the Public
3 Service Commission. Let's see. Your engineering staff.
4 Was there more than one, Bob? Bob Crouch, of course, and
5 I believe another individual. There had to be nine or ten
6 people at this sampling of each well.

7 Q Well, and one of the people who was there with
8 you was a technician from Savannah Labs, correct?

9 A That's correct.

10 Q And then Aloha had a technician from their
11 laboratory there, correct?

12 A That's correct.

13 Q And these technicians are people who are trained
14 to go out and take these samples because the way that you
15 take the samples is very important, correct?

16 A Yes, indeed.

17 Q Okay. Sir, you authored a memorandum to your
18 file, did you not, with a copy to Mr. McLean reporting on
19 your trip of August 4 and 5, 1999?

20 A Yes, I did.

21 MR. WHARTON: Commissioner Clark, I would like
22 to have that document marked as Exhibit 22 for
23 identification.

24 COMMISSIONER CLARK: It will be marked as
25 Exhibit 22.

1 (Exhibit 22 marked for
2 identification.)

3 BY MR. WHARTON:

4 Q Will you identify Exhibit 22, Mr. Bidy?

5 A Well, it is my August 9th, 1999 memorandum after
6 coming back from the investigating trip of August 4th and
7 5th concerning the Aloha system and the well testing we
8 did, and also the home testing we did.

9 Q And August 4 was the date of the well test and
10 August 5th was the date of the test in the residences and
11 homes that you talked about earlier?

12 A That's correct.

13 Q Okay. What was the purposes of this memo?

14 A Well, I always document all investigations.

15 Q So it was to document your impressions during
16 the sampling event?

17 A Yes, it was.

18 Q Sir, looking at Page 2 of what has been marked
19 as Exhibit 2 in the top paragraph, isn't it true that with
20 regard to Well Number 1, you indicated some hydrogen
21 sulfide odor was obvious at the raw water tap?

22 A I said that, and I said that before when I gave
23 my summary that I thought I smelled hydrogen sulfide at
24 each and every well.

25 Q And you used the word obvious in your memorandum

1 because that was your impression based on what you smelled
2 at the time, right?

3 A Yes.

4 Q And you said -- didn't you just say a minute ago
5 you have been in this business 36 years?

6 A Yes, I have.

7 Q What business are you talking about, water and
8 wastewater?

9 A Water and wastewater.

10 Q I bet you have smelled a lot of hydrogen sulfide
11 during that time, haven't you?

12 A I have.

13 Q And I bet you have also smelled a lot of
14 chlorine?

15 A I have.

16 Q Hydrogen sulfide has a rotten egg smell, doesn't
17 it?

18 A It does.

19 Q Chlorine has a bleachy smell, like Clorox
20 bleach?

21 A It does.

22 Q Okay. But at that time the smell of hydrogen
23 sulfide to you was obvious, and that is why you put that
24 in your memo?

25 A Yes. And hydrogen sulfide if there is any at

1 all present it will overwhelm all other odors. So if
2 there is any residual hydrogen sulfide smell -- gas in the
3 area, you will smell it.

4 Q And then this whole group traveled over to Well
5 Number 6, didn't they?

6 A Yes, it did.

7 Q And at Well Number 6 your impressions as
8 recorded in this exhibit were that the raw water sample
9 had a hydrogen sulfide odor, and it is your belief that
10 odor was obvious, isn't it?

11 A Yes, I smelled it. I thought I smelled it.

12 Q Okay. Then the group traveled to Well Number 3,
13 and your memo says here again there was a hydrogen sulfide
14 odor in the raw water?

15 A That's what it says.

16 Q And then for Wells 8 and 9, your memorandum says
17 both of these wells had a strong hydrogen sulfide odor and
18 taste in the finished water?

19 A That is correct.

20 Q Okay. And, in fact, your recollection at the
21 time was that it was both your impression and Mr. McLean's
22 impression that there was an odor of hydrogen sulfide and
23 a taste of hydrogen sulfide in the water from Wells 8 and
24 9, correct?

25 A Yes.

1 Q The belief that you subsequently formed that, in
2 fact, you were not smelling hydrogen sulfide during the
3 sampling event, but that you were smelling chlorine was
4 again based on the information you got from Savannah Labs,
5 correct?

6 A Well, I didn't tell you that I was smelling
7 chlorine at the wells. Would you repeat the question?

8 Q Right. You subsequently formed a belief that
9 what you smelled that day was chlorine, correct?

10 A No.

11 Q Okay. So it is your testimony then that you
12 smelled chlorine during the sampling event?

13 A I did not, no.

14 Q Okay. But it is your testimony as we sit here
15 today that you didn't smell hydrogen sulfide, right?

16 A No, I didn't say that, either. I think that
17 there could be some residual hydrogen sulfide gas in the
18 area. And it is such a strong odor that it will overwhelm
19 any other odor that might be present.

20 Q Sir, you agree, don't you, that if the water was
21 super-chlorinated the hydrogen sulfide would have been
22 driven away to sulfate and then to an elemental sulfur?

23 A That's correct, yes.

24 Q And if there is no hydrogen sulfide present, it
25 is not possible to smell hydrogen sulfide or to taste

1 hydrogen sulfide, is it?

2 A Not in the water itself, no.

3 Q And there is no way to reconcile your
4 observations at the time that we have just been discussing
5 with the information you received from Savannah Labs, is
6 there? Either Savannah Lab's information is wrong or what
7 you perceived at the time regarding taste and odor was
8 wrong?

9 A I don't believe that is correct. I do believe
10 it is possible for the hydrogen sulfide residuals to be
11 inside the building at the raw water to some extent, some
12 minor extent. It is a gas. It is an overwhelming odor
13 when you smell it. It well could have been there before
14 the chlorination -- the water was chlorinated. I simply
15 don't know. I gave my impressions that I received at the
16 site and reduced them to this report, and I thought I
17 smelled hydrogen sulfide at each one of the areas.

18 Q Sir, you gave a similar explanation when we
19 talked earlier, but you prefaced it with a more definitive
20 answer. So I want you to take a look at your deposition,
21 Page 130.

22 A All right.

23 Q Do you recall that on your deposition of October
24 15th, 1999 on Page 130 at Line 15, Question: "No way to
25 reconcile your observations at the time that we have been

1 talking about with these well tests, is there? Either the
2 tests are wrong or what you perceived at the time
3 regarding taste and odor were wrong. Answer: Yes." And
4 then you gave an explanation, is that correct?

5 A Well, and then I said that I thought perhaps
6 that the interface of the water with air -- anytime you
7 have an interface with the water containing hydrogen
8 sulfide that the hydrogen sulfide flows out very rapidly
9 and that that hydrogen sulfide may have been coming out as
10 it always does and the rest being subject to the chlorine,
11 and maybe I smelled that. Because the human nose can
12 smell hydrogen sulfide and identify it, according to the
13 literature, down to half a part per million.

14 So I do believe there is -- I believe I smelled
15 the hydrogen sulfide. I believe the lab's report that the
16 water was heavily chlorinated, therefore there is some
17 explanation, and that is one of them, that the hydrogen
18 sulfide residuals could be coming out of the water. I
19 will immediately, upon contact with air it will come out
20 of the water. It is in solution, but it will come out
21 into the air immediately when it is contacted with air.

22 Q With regard to the raw water, what lab report
23 are you talking about, the one you didn't see until three
24 months after I took your deposition?

25 A Wait. Repeat your question, please.

1 Q You just said -- I will strike the question
2 rather than have the court reporter read it back.

3 Let me ask you something. If the water was
4 super-chlorinated, would there have been any hydrogen
5 sulfide?

6 A In the water, no.

7 COMMISSIONER JABER: Mr. Wharton, I do want to
8 go back to that question. I was interested in the answer.
9 You said it was the lab report that showed you that the
10 water was overchlorinated. I'm assuming you are talking
11 about Exhibit 21, the Savannah Lab report.

12 THE WITNESS: Two or three reports I'm talking
13 about. Verbal reports to me that it had a strong chlorine
14 odor. I'm talking about the 4s that you see on this
15 tabulation where the raw water has an odor number of 4.

16 COMMISSIONER JABER: What is the standard odor
17 number?

18 THE WITNESS: Three is the maximum permitted by
19 secondary standards.

20 COMMISSIONER JABER: Three is the maximum, and
21 this indicates 4 on Well Number 9, I guess.

22 THE WITNESS: Yes, it does.

23 COMMISSIONER JABER: And you think that one
24 point differential equates to overchlorination?

25 THE WITNESS: And the fact that we could not

1 find the hydrogen sulfide. You see, the chlorine reacts
2 with the hydrogen sulfide and completely oxidizes it, so
3 it is used up. The chlorine is basically used up. So the
4 odor of the chlorine would not be as high.

5 COMMISSIONER JABER: But I think you just agreed
6 that the chlorine level would have overshadowed the
7 hydrogen sulfide odor.

8 THE WITNESS: Yes. But you have got to
9 understand that this is a gas, and this chlorine is in
10 solution. You see, hydrogen sulfide is in solution when
11 it comes out of the ground, it is heavily soluble in
12 water. But it has the property that immediately upon
13 contact with air it comes out of solution violently. That
14 is the reason sewers smell so bad. But in this case the
15 chlorine was in the water itself.

16 BY MR. WHARTON:

17 Q Well, perhaps I have confused myself, Mr. Bidy.
18 Is it your testimony that you mistakenly believed that
19 what you smelled at the time of the sampling event was
20 hydrogen sulfide and that now you believe it was chlorine,
21 or is it your testimony that you smelled hydrogen sulfide?

22 A I smelled what I thought was hydrogen sulfide,
23 and I still think I smelled it as hydrogen sulfide. The
24 lab tests showed no hydrogen sulfide in the water that was
25 put in the sample container. I believe there are

1 explanations that would explain that and I think I have
2 stated those.

3 COMMISSIONER JABER: Let me summarize your
4 testimony to make sure I understand it. You smelled
5 hydrogen sulfide. And what you are saying now is that
6 could have been in the air, that was the residual effect.
7 It is not your testimony today that you know there was
8 hydrogen sulfide in the water?

9 THE WITNESS: No, indeed there was not.

10 COMMISSIONER JABER: I'm sorry?

11 THE WITNESS: I say no, hydrogen sulfide was not
12 in the water.

13 COMMISSIONER JABER: And we know that, your
14 testimony is that you know that because of the Savannah
15 lab report?

16 THE WITNESS: That is correct.

17 BY MR. WHARTON:

18 Q Mr. Biddy, to follow up on the last question, I
19 asked you about what it was you were smelling during the
20 sampling event of August 4, and I believe you said that it
21 was residual hydrogen sulfide?

22 A Yes.

23 Q I want you to take a look at your deposition on
24 Page 127, sir.

25 A All right.

1 Q Sir, on Page 127 of your deposition which I took
2 on October 15th, 1999, do you recall this question and
3 answer at Line 25: "Question: If the wells had been
4 super-chlorinated would there have been hydrogen sulfide?
5 Answer: No. And if there is no hydrogen sulfide, is it
6 possible to smell and taste hydrogen sulfide? Answer:
7 No."

8 Are you changing that testimony today, sir?

9 A No, I am not changing that testimony.

10 Q Do you stand by that testimony today?

11 A Yes, I do.

12 Q Okay. Thank you. Let's change the subject.

13 Let's talk about the chlorine tests. Now, we have gone
14 and we have gotten ten samples of water from five wells,
15 correct?

16 A That is correct.

17 Q Five finished and five raw?

18 A That is correct.

19 Q Of those ten samples, how many were actually
20 tested for chlorine?

21 A One.

22 Q One. And that was a sample from the finished
23 water at --

24 A Well 9.

25 Q -- Well 9. And, in fact, TLB-5, which is part

1 of Composite Exhibit 20 that we referred to earlier, in
2 that document Ms. Sheffield says there is a chlorine odor
3 in three of the samples, correct, and that was the
4 finished water from Wells 1, 3 and 9?

5 A That is correct?

6 Q And it is your testimony that she also told you
7 apparently on the phone she could smell chlorine from
8 those three samples?

9 A Yes. She said that the panel reported to her
10 that it was a strong chlorine odor.

11 Q Let's shift gears for a second and we will come
12 back to that point. Savannah Labs had an employee that
13 was with you during the sampling event of August 4,
14 correct?

15 A Repeat the question.

16 Q Marty Walker, this fellow from Savannah Labs who
17 was their field technician, he was the one that came with
18 you on August 4 and made the samples, correct?

19 A That is correct, yes.

20 Q And you heard during the deposition of Ms.
21 Sheffield that this fellow has considerable experience
22 taking these samples, right?

23 A Yes, he did.

24 Q Okay. And to some extent you rely upon his
25 expertise in taking those samples because the way the

1 samples are taken is very important, correct?

2 A Well, certainly he needs to take the samples
3 properly. But the primary reliance is on the lab test of
4 those samples.

5 Q Right. Mr. Walker took field notes during that
6 sampling event, didn't he?

7 A Yes, he did.

8 MR. WHARTON: I would like to get this marked as
9 Exhibit 23, Commissioner Clark.

10 COMMISSIONER CLARK: Mr. Wharton, would you give
11 me a title?

12 MR. WHARTON: Marty Walker's field notes.

13 (Exhibit 23 marked for
14 identification.)

15 BY MR. WHARTON:

16 Q Mr. Biddy, would you agree that these are
17 Mr. Walker's field notes for the finished water from Wells
18 1, 3 and 9?

19 A Yes, they have his initials on them that he
20 sampled them. He was the one who did the sampling.

21 Q And Wells 1, 3 and 9 are the same three finished
22 samples that Ms. Sheffield said she smelled the chlorine
23 in and wrote you the memo that is in TLB-5, correct?

24 A You are talking about Ms. Sheffield smelling,
25 Ms. Sheffield did not smell the samples. She had a panel

1 of experts that tested them and found the threshold odor
2 numbers of 16 in them.

3 Q Well, just with regard to the chlorine odor, are
4 the wells that are the subject of this exhibit the same
5 wells that Ms. Sheffield mentioned in her memo to you that
6 is Exhibit TLB-5?

7 A Yes.

8 Q And that is the finished samples from Well 1, 3
9 and 9?

10 A Correct.

11 Q Mr. Walker made contemporaneous impressions on
12 these field notes, didn't he, of what he saw and sensed
13 during these field tests, correct?

14 A He did.

15 Q And for the finished water on Well 1,
16 Mr. Walker, who is the Savannah Labs employee, indicated
17 color none, odor none, appearance clear, correct?

18 A That's what it says.

19 Q But you don't agree with him about odor none, do
20 you? You thought there was an odor?

21 A Well, you have got to understand I was standing
22 in the area and not right over him and the finished water.

23 Q Well, that is a good point. He has to get down
24 on top of this water to fill these bottles, doesn't he?

25 A That's right.

1 Q Okay. And with regard to the finished sample at
2 Well 3, again, Mr. Walker's impressions as recorded on
3 this exhibit were color none, odor none, appearance clear,
4 correct?

5 A That's correct. That's what he wrote.

6 Q And with regard to the finished sample from Well
7 9, again, his impressions were color none, odor none,
8 appearance clear?

9 A That's what it says.

10 Q Okay. So the Savannah Lab employee who attended
11 this sampling event put odor none for all three of those
12 examples, right?

13 A Yes, he did.

14 Q Wouldn't you expect something to smell more like
15 chlorine at the time that you were pouring it out of the
16 tap than three weeks later?

17 A Yes.

18 Q Okay. Sir, I noticed that your testimony does
19 not bother to mention that the three-week period that
20 expired between the sampling event and when the sample of
21 the finished water from Well Number 9 was taken destroys
22 the scientific validity of the test. Do you agree with
23 that?

24 MR. McLEAN: I want to object. And I may have
25 to enter a continuing objection, because this happened in

1 the deposition, too. That it didn't bother to mention
2 something implies somehow that should have, and that is
3 the lawyer's implication, certainly not the witness.

4 MR. WHARTON: I will withdraw the question. I
5 apologize.

6 BY MR. WHARTON:

7 Q Sir, do you believe that the three-week period
8 that expired between the sampling event and when the
9 chlorine test was conducted on the finished sample from
10 Well 9 destroyed the scientific validity of the test?

11 A Well, it depends on what you mean by scientific
12 validity. It did, as I explained when I gave my summary
13 of my testimony, it was not taken in accordance with
14 standards for taking the tests because it had not been
15 refrigerated, it was sitting in the open on top of a lab
16 table. It had not been preserved for testing, it was way
17 out of time, it should be done immediately upon taking the
18 sample.

19 But I still wanted to know could they just tell
20 me how much chlorine was still in that water irregardless
21 of whether it was indicative of what was going on at the
22 time of sampling or not, and they told me they could and
23 they did.

24 Q You are not a chemist, right?

25 A Well, I'm an engineer who studied a lot of

1 chemistry.

2 Q You don't hold yourself out as being an expert
3 in chemistry?

4 A Well, to the extent an engineer studies
5 chemistry, I am, yes.

6 Q In fact, that sample, which was the only sample
7 of these ten samples that was tested for chlorine, had sat
8 on a counter and had not been properly preserved, correct?

9 A That's what I have testified to, yes.

10 Q And that sample had been retained far outside of
11 the accepted holding time, which was it had sat there for
12 three weeks, and the accepted holding time is that you
13 test for chlorine at the time of collection or right away,
14 isn't that true?

15 A That's correct.

16 Q And having sat on the counter for three weeks,
17 Ms. Sheffield testified at the deposition you attended
18 that the chlorine test was not something she was
19 comfortable at all doing, correct?

20 A Yes.

21 Q And she said that it was not a valid test,
22 correct?

23 A It was not a valid test for the sample of August
24 4th, no. It is a valid test for what is left after all
25 this period of time of residual chlorine 21 days later.

1 Q Sir, what I'm asking you is if you recall Ms.
2 Sheffield saying it is not a valid test. You and Mr.
3 McLean can talk about the test on redirect.

4 A Yes, from her perspective of holding time and
5 refrigeration, yes, that is what she said.

6 Q And, in fact, she described that data as flawed
7 and that it would not be considered court defensible,
8 correct?

9 A Yes. It doesn't prove anything about how much
10 was in the sample is what she is saying, and that is true.
11 I simply had it done, and she told me that at the time I
12 asked for this test. I said, "Well, can you test it and
13 tell me how much is left after these 21 days." She said,
14 yes, she could. So that was the whole purpose of the
15 subsequent test for chlorine. I didn't know to test for
16 chlorine on the first day.

17 Q Mr. Bidy, did Ms. Sheffield testify that the
18 data was flawed and would not be considered court
19 defensible?

20 A That's right. And she is referring to the
21 sample at the time of taking. She could not -- it was
22 flawed and would not be court defensible.

23 Q Sir, you state in your direct testimony, don't
24 you, that the chlorine level found in the test, which was
25 performed three weeks after the sampling event, would have

1 been many times higher if tested on the day the sample was
2 taken?

3 A That is correct.

4 Q And, in fact, it is your belief, wasn't it, that
5 the milligrams of chlorine per liter was greatly reduced
6 by the fact that the bottle in which the chlorine was
7 taken wasn't kept refrigerated over that three-week
8 period?

9 A That's right. And sitting in the light, as
10 well.

11 Q In fact, didn't Ms. Sheffield testify that there
12 is no way of telling whether or not these samples had a
13 higher chlorine content the day they came in than the day
14 they were tested three weeks later?

15 A No, I don't believe she said that. I think she
16 said --

17 Q Have you got a copy of her deposition?

18 A Yes.

19 Q I want you to take a look at Page 125.

20 A 125?

21 Q Yes, sir.

22 A All right.

23 Q Do you remember this question and answer at Line
24 7, "Question: I'm asking you if you know whether the day
25 that water came in it had any higher chlorine content than

1 the day you tested it? Answer: I have no way of telling
2 that." Does that refresh your recollection about her
3 testimony, sir?

4 A Yes, I see that she said that. Her report that
5 you quoted awhile ago that I read from said the opposite,
6 though, didn't it? It said that the chlorine content
7 would have been much higher.

8 Q In fact, she testified that the fact that the
9 chlorine was still there three weeks later after the fact
10 only would indicate that there was some chlorine there
11 when the sample initially came in, but there was no way to
12 tell how much chlorine?

13 A Well, that is true. There is no way to tell how
14 much.

15 Q And didn't Ms. Sheffield also admit that while
16 she may have told you on the phone the level of chlorine
17 originally in the sample was much higher when it came in,
18 during the deposition her testimony was more conservative
19 in that regard?

20 A Yes, it seemed to be.

21 COMMISSIONER JABER: I'm sorry, Mr. Wharton. To
22 the degree there are inconsistencies between your
23 testimony and the lab report that has been made an
24 exhibit, and the testimony we have heard regarding
25 Ms. Sheffield's deposition, you would agree with me we

1 should rely on Ms. Sheffield's lab results and her
2 testimony because she did follow proper lab procedures and
3 conducted the tests in the laboratory?

4 THE WITNESS: Well, he specifically -- yes, I
5 certainly would want you to rely on her testing and her
6 lab's testing rather than something I have said. But I
7 believe if you look at her report you will see that she
8 did state at the time of the taking of those tests that
9 finding 1.4 milligrams per liter of chlorine 21 days later
10 was indicative of a higher, or much higher chlorine
11 content on the day of sampling. But she still had no way
12 of knowing what level it was because it wasn't taken at
13 the proper time or under proper conditions.

14 COMMISSIONER JABER: Right. In that regard it
15 was speculative?

16 THE WITNESS: Yes, somewhat, based on just her
17 chemical knowledge.

18 BY MR. WHARTON:

19 Q Mr. Biddy, would you agree that if, in fact, the
20 water from Well 9 was of a very high quality that you
21 would expect the chlorine to still exist after three
22 weeks?

23 A No.

24 Q Did Ms. Sheffield also say that she told you
25 right up front that these tests weren't done according to

1 the proper protocols?

2 MR. McLEAN: Pardon. Which tests are we
3 speaking of now?

4 MR. WHARTON: The chlorine test on the sample
5 from the finished water at Well 9.

6 THE WITNESS: She told me that before I insisted
7 she do it.

8 BY MR. WHARTON:

9 Q Okay. Let's talk about some of the parameters
10 that you gave Savannah Labs when they were testing for
11 this water. You established the constituents which
12 Savannah Labs would test for, didn't you?

13 A I did.

14 Q And you asked Savannah Labs to test for those
15 parameters that you believed should be tested for?

16 A That's correct.

17 Q And it is your testimony, isn't it, that at
18 least at the Coogan residence that the black water is not
19 due to copper sulfide, but from some other unknown
20 chemical combined with copper?

21 A That is correct.

22 Q Because if the dark water is caused by copper
23 sulfide, then it is resulting from something that is
24 happening on the customer's side of the meter, do you
25 agree with that?

1 A Probably, yes.

2 Q Okay. So -- well, I will just strike that
3 question rather than have Harold object to it.

4 And with regard to the black residue you
5 testified about, you never requested a test or tested for
6 copper in the black residue itself, did you?

7 A We tested for copper in the water which had the
8 black residue in it, so you are splitting hairs.

9 Q But you didn't test the black residue?

10 A No, we tested the black residue for anions,
11 which were the negative parts of the compound, but not for
12 the positive parts, which would be the copper.

13 Q And even as to the water, in point of fact, you
14 never asked Savannah Labs to test for copper sulfide, did
15 you?

16 A For copper sulfide, no. Copper and sulfides
17 separately.

18 Q And Ms. Sheffield testified, did she not, that
19 if Savannah Labs has been asked to test for copper sulfide
20 they would have used a different testing method, isn't
21 that true?

22 A Yes.

23 Q And Ms. Sheffield testified that although you
24 gave her a list of the parameters to test for, you didn't
25 ask for a test for copper sulfide?

1 A I did not, no.

2 Q Okay. And Ms. Sheffield testified that
3 therefore Savannah Labs didn't use the method they would
4 have used if that request had been made, correct?

5 A Well, they obviously used the appropriate test
6 methods for the parameters I asked for only.

7 Q But do you recall Ms. Sheffield's testimony that
8 if Savannah Labs didn't use the method they would have
9 used if they would have requested to test for copper
10 sulfide?

11 A Sure, they would have. They would have used the
12 copper sulfide method.

13 Q And Ms. Sheffield said in her deposition that if
14 you wanted to test for copper sulfide you needed to give
15 her different marching orders than what you gave her?

16 A Yes.

17 Q Okay. Ms. Sheffield testified that if Savannah
18 Labs had known that you were looking for acid insoluble
19 sulfides they would have done a proper test for acid
20 insoluble sulfides, but that for whatever reason that
21 desire was never made known to Savannah Labs, is that
22 correct?

23 A That is correct. We asked for sulfides and we
24 asked for copper.

25 Q Okay. So let me kind of get this straight. You

1 have testified quite a bit about chlorine in the water,
2 but you never asked Savannah Labs initially to test for
3 chlorine, did you?

4 A Did not.

5 Q And you have testified quite a bit about copper
6 sulfide, but you never asked Savannah Labs to test for
7 copper sulfide in the black residue, did you?

8 A You're splitting hairs, again, of course,
9 because we did ask for copper, we found copper. We did
10 ask for sulfides, we found no sulfides. We did not ask
11 for the element or the compound copper sulfide, which
12 would have been a different test.

13 Q But you could have hit a home run if you would
14 have had that black residue tested pursuant to this
15 different method, right?

16 MR. McLEAN: Objection unless --

17 COMMISSIONER JABER: Mr. Biddy, why didn't you
18 ask for a test of copper sulfide?

19 THE WITNESS: Why didn't we ask for it, because
20 in solution we were looking for how much copper went into
21 the solution, we found 16 parts per million and 10 parts
22 per million in the Coogan residence. Had there been
23 copper sulfide, there would have been sulfide ions laced
24 throughout the water and the black residue. We found
25 none, zero, up to .1 milligrams per liter which was the

1 detection limit.

2 COMMISSIONER JABER: Well, if it is splitting
3 hairs, though, why is there a totally different test for
4 determining whether there is copper sulfide in the water?

5 THE WITNESS: Well, perhaps it will give you the
6 amount of copper sulfide in the water. But if there is
7 copper sulfide you would have the ions of sulfide and
8 copper in the water. We found plenty of copper, but no
9 sulfides.

10 COMMISSIONER JABER: And in layman's terms, what
11 does that mean to you?

12 THE WITNESS: That means there is no sulfides --
13 there is copper sulfide in the water. Had there been any
14 copper sulfide you would have found sulfide ions.
15 Therefore, the black water, at least in the Coogan
16 residence, is not being caused on that day with those
17 particles by copper sulfide. It is certainly copper, and
18 it is obvious that the copper is being attacked by
19 something in these homes, but it was not sulfide on this
20 day.

21 COMMISSIONER JABER: And the test doesn't
22 determine for you what did result in the black water in
23 that home, at least?

24 THE WITNESS: No, ma'am. I do not know the
25 cause of the black water at this point.

1 BY MR. WHARTON:

2 Q Well, Mr. Bidy, to follow up on Commissioner
3 Jaber's questions, isn't it true that in point of fact the
4 test method that was utilized by Savannah Labs
5 specifically excludes the detection of copper sulfide?

6 A Well, certainly.

7 Q Okay. Sir, let's talk about your August 5th
8 visits to the customers' homes. Regarding these home
9 tests that you have testified about, the list of homes
10 where you went to conduct these water samples and you did,
11 in fact, take samples that you sent to Savannah Labs,
12 right?

13 A No, I didn't take samples; Mr. Walker took
14 samples and took them back to his lab.

15 Q You caused them to be taken?

16 A That is correct.

17 Q Okay. In fact, Mr. McLean chose the houses you
18 went to, right?

19 A Mr. McLean gave me a list of customers, yes.

20 Q And isn't it true that during that sampling
21 event you were unable to ascertain the quality of water at
22 the point of connection outside those homes, you just took
23 samples from inside the homes?

24 A No, that is not true.

25 Q Okay. You only took samples from the customers'

1 side of the point of connection?

2 A Yes. We took three samples at each home; one at
3 the outside spigot before it goes into the house, one at
4 the hot water faucet usually in the bathtub, and one from
5 the cold water fixture inside the house. So we had three
6 samples in each house.

7 MR. WHARTON: Commissioner Clark, I would like
8 to get this document marked as 24, I believe.

9 COMMISSIONER CLARK: Mr. Wharton, how much more
10 testimony on cross examination do you have?

11 MR. WHARTON: Less than 15 minutes.

12 COMMISSIONER CLARK: And what is the title of
13 this exhibit?

14 MR. WHARTON: Marty Walker's residence field
15 notes. Or customers' homes field notes.

16 COMMISSIONER CLARK: It will be marked as
17 Exhibit 24.

18 (Exhibit 24 marked for
19 identification.)

20 BY MR. WHARTON:

21 Q Mr. Bidy, in point of fact, all the sampling
22 points that you utilized at the customers' homes were
23 located at junctures where they would have gone through
24 the customers' piping, including copper piping?

25 A The outside faucets in most instances were not

1 inside the house, therefore there would be a piece of the
2 customer's line between the meter and the house that it
3 would have gone through, yes. But whether that is copper
4 or not is probably a good question. Most times I would
5 say no.

6 Q You don't know one way or the other as we sit
7 here today?

8 A I don't know.

9 Q Okay. Sir, once again, Mr. Walker, this fellow
10 from Savannah Labs, accompanied you to the residents'
11 homes on August 5th, correct?

12 A Yes, he did.

13 Q And he was the guy that took the samples and
14 took them back to Savannah Labs?

15 A That's correct.

16 Q And just as he made fields notes at the well
17 tests on August 4, he also made notes about his
18 impressions in the tests that were conducted in the
19 residences on August 5th, correct?

20 A That is correct.

21 Q Okay. What I have attempted to do here is to
22 hand number this in the corner. With regard to the Davis
23 residence, isn't it true that Mr. Walker noted that for
24 both the cold water and the hot water, and this is Pages 7
25 and 8 as I have numbered this, that for both the cold

1 water and the hot water, color none, odor none, appearance
2 clear.

3 A That is what he has on his notes, yes.

4 Q And also for the outside water at the Davis
5 residence, color none, odor none, appearance clear, Page
6 9?

7 A That's correct.

8 Q And these notes were referring to his
9 contemporaneous impressions of the water, right?

10 A That's right.

11 Q So you would agree, at least with regard to the
12 Davis home, there was no demonstration of black water when
13 you were there?

14 A No, I would not agree with that.

15 Q Okeydoke.

16 A May I explain?

17 Q Well, I think your lawyer will give you a chance
18 to do that, sir.

19 COMMISSIONER CLARK: Mr. Wharton, the witness is
20 allowed to answer the question and then provide an
21 explanation.

22 MR. WHARTON: Okay.

23 THE WITNESS: Mr. Davis and all others except
24 one of the people we tested was able to demonstrate black
25 water residues either in the toilet tank or in connections

1 at their faucets where they unscrewed the faucet in the
2 bathroom and showed the black residue, or in one case Mr.
3 Stauder unscrewed the PVC piping and showed us the black
4 residue in the connection. So, five out of the six were
5 able to demonstrate the black water.

6 Q And Mr. Davis was one of those?

7 A Yes, he was.

8 Q Okay.

9 A The best I remember.

10 Q Okay. Will you take a look at Page 134 of your
11 deposition, sir.

12 A All right.

13 Q Do you recall this question and answer:

14 "Q: He was referring to his impressions of the
15 water in his notes? Answer: Yes.

16 "Q: Is that consistent with Mr. Davis'
17 representation to you that he had black water over the
18 last four to five years? Answer: It can be. I don't
19 know. At the time we tested he did not demonstrate to us
20 black water."

21 A No, he didn't. There was only one of the
22 customers who could take their bathtub and open the faucet
23 and draw a tub of black water, and that was at the Coogan
24 residence. What I'm talking about is evidence of the
25 black water. And that is things like the black granules

1 in the back of the toilet tank and the black residue when
2 you unscrew the faucets and see it trapped on the screen
3 and so on.

4 Q But you stand by the testimony you gave in your
5 deposition?

6 A Yes.

7 Q Okay. With regard to the next residence, St.
8 Arno, this was an individual who had noticed a water
9 problem for the last five years to your understanding,
10 correct?

11 A As best I remember. I would have to
12 specifically look at my description of the St. Arno test.

13 Q It is not a major point. I mean, that is the
14 best of your recollection today?

15 A Yes.

16 Q Okay. You didn't see any evidence of that back
17 water problem when you were there, did you?

18 A As I testified, I saw evidence at five of the
19 six houses. One, and I forgot which one it was, could not
20 demonstrate or did not show us anything in the toilet
21 tank, that is the only place we looked. All of them had
22 residue in the toilet tank except this one. I'm saying
23 that five out of the six could demonstrate that they had
24 had black water problems, one drew us a tub full of ink,
25 essentially. Black as ink water.

1 Q Sir, will you take a look at Page 134 of your
2 deposition?

3 A Yes, I am.

4 Q And at Line 19, "Question: I'm looking up here
5 at St. Arno, and what I'm doing, Mr. Bidy, is trying to
6 ascertain if you didn't make a comment of something you
7 saw that apparently you didn't see at that day. St. Arno
8 has noticed a water problem for the last five years. Did
9 you notice that that day? Answer: No, I did not."

10 Do you stand by that testimony?

11 A Just I minute, I will have to get mine. 134.

12 Q Yes, sir, Page 134.

13 A Now, would you repeat the question. I have Page
14 134.

15 Q And do you stand by that testimony, sir? Lines
16 19 through 25 on Page 134 that I just read into the
17 record?

18 A Yes, I agree with what I said. It's true.

19 Q And directing your attention back to what has
20 been marked as Exhibit 24, Mr. Walkers' notes regarding
21 the St. Arno residence for both hot, cold, and outside
22 noted, color none, odor none, appearance clear, isn't that
23 true?

24 A That's correct.

25 Q And you agreed with those observations, didn't

1 you, sir?

2 A Yes, I do.

3 Q Okay. Now, let's take a look at Oko. Mr. Oko
4 was a person who indicated they had had a problem for
5 about six years. Do you recollect that?

6 MR. McLEAN: Pardon, Mr. Wharton. Could we have
7 a page number?

8 MR. WHARTON: Yes, Harold. That is Pages 16
9 through 18.

10 THE WITNESS: 16 to 18 of the deposition?

11 MR. WHARTON: 16 through 18 of Exhibit 23. 24,
12 sorry.

13 BY MR. WHARTON:

14 Q But the first thing that I asked you isn't in
15 the exhibit, and that is do you recollect that this was a
16 person that said he had had black water problems for about
17 six years?

18 A Yes.

19 Q Okay. And Mr. Walkers' observations for Oko for
20 hot, cold, and outside were color none, odor none,
21 appearance clear, is that correct?

22 A That's correct.

23 Q And you agreed with those observations, didn't
24 you?

25 A Absolutely.

1 Q Okay. Let's talk about Yanna, which I think is
2 Pages 4 through 6. For the Yanna's residence, Mr. Walker
3 noted for cold, hot, and outside, color none, odor none,
4 appearance clear?

5 A That's correct.

6 Q And you agreed with those observations, didn't
7 you?

8 A Yes.

9 Q Let's talk about the Stauder residence. For the
10 Stauder's residence, Mr. Walkers' fields notes reflected
11 for cold, hot, and outside, color none, odor none,
12 appearance clear, and that is Pages 10 through 12, sir.
13 Is that correct?

14 A That's correct.

15 Q And you agreed with that, didn't you?

16 A Yes.

17 Q Okay. Now, let's talk about the Coogan
18 residence. That was the residence with the most notable
19 problems to your perception, correct?

20 A Yes, it was.

21 Q And at the Coogan residence, Mr. Walker on the
22 outside sample noted color none, odor none, appearance
23 clear, correct? And that would be Page 15 of the exhibit,
24 sir.

25 A Yes, that's what he said.

1 Q And you can't explain, can you, sir, why
2 Mr. Coogan seemed to have a problem that was more
3 significant than any of the others you tested on that day
4 with the same source of water?

5 A I cannot explain, you say? I have not
6 determined the cause of the black water, but it was
7 certainly there.

8 Q Oh, and by the way, sir, you didn't smell any
9 chlorine at any of the houses on August 5th, '99, did you?

10 A I did not, no.

11 Q Even though it is your testimony that the wells
12 were super-chlorinated the day before on August 4,
13 correct?

14 A Yes. I believe that is the reason that we are
15 seeing clear, colorless, odorless water is because it has
16 been chlorinated to the extent that all the hydrogen
17 sulfide and sulfates, as well, have been driven out of it.

18 Q But you didn't smell any chlorine, did you, sir?

19 A No, I did not. This is a day later.

20 Q In fact, you thought you smelled hydrogen
21 sulfide at one of those houses, didn't you?

22 A Yes.

23 Q And that smell of hydrogen sulfide is something
24 that can't be reconciled with the super-chlorination of
25 the water source, can it?

1 A It cannot be reconciled if you are talking about
2 the water making the odor, that is correct.

3 Q Did you say correct, sir?

4 A Yes.

5 Q Isn't it true, sir, that you don't know the
6 effect of any on-site water systems, and by on-site I mean
7 the customer's side of the meter relative to the ultimate
8 quality of water the customers received at least as far as
9 color and odor goes?

10 A Well, I have heard customers testify under oath
11 as to what the effect on their water has been. I
12 questioned six of them as to what their units did to the
13 water, and their perception, at least, of what the units
14 did. But I do not know whether the soft water units make
15 the water less or more aggressive to copper pipes. It is
16 obvious that the copper pipes are being eaten up by
17 something, I simply don't know.

18 Q So you don't know how any individual's water
19 systems or series of water systems might be interacting
20 with Aloha's water?

21 A Well, certainly I could see that with Aloha
22 water and the residence on Davenport that was something
23 was causing very black water.

24 Q Sir, will you take a look at Page 152 of your
25 deposition?

1 MR. McLEAN: Would you say the page number
2 again, please?

3 MR. WHARTON: 152.

4 MR. McLEAN: Thank you, sir.

5 THE WITNESS: Of my deposition?

6 MR. WHARTON: Yes, sir.

7 THE WITNESS: Okay.

8 BY MR. WHARTON:

9 Q Line 5, Page 152, "Question: You don't know how
10 any individual's water system or series of water systems
11 might be interacting with that Aloha water? Answer: Do
12 not know."

13 Do you stand by that answer?

14 A That's correct.

15 Q Okay. And you haven't analyzed whether water
16 softeners can have an effect on the formation of copper
17 sulfides, have you?

18 A No, I have not.

19 Q Sir, was Aloha invited to attend these sampling
20 events that occurred in the customers' residences?

21 A No, they were not.

22 Q Okay. Just a few more questions, Mr. Biddy.
23 You have said that because you believe the water was
24 super-chlorinated that the sampling event that occurred at
25 the wells on August 4, the validity of that event is

1 essentially -- well, the tests are no good?

2 A That is correct. No good at all, because --

3 Q Isn't it true that in point of fact after you
4 prefiled your testimony, Aloha provided another
5 opportunity for testing at their well sites?

6 A I understood they were going down, yes.

7 Q And you were aware that if OPC and/or yourself
8 wanted to come down and participate in those tests they
9 could have done that?

10 A Yes, that was told to me the day before you went
11 down to do that, though.

12 Q And yet -- well, is that the reason you didn't
13 go?

14 A Had I had adequate preparation time I would have
15 wanted to go, yes.

16 Q Sir, did you decline to participate because you
17 were assuming that the Public Service Commission would
18 make sure the tests were performed by a qualified lab and
19 those results would be made available to you?

20 A I assumed that the Public Service Commission
21 would have a qualified lab there, yes.

22 Q And is that the only reason you declined to
23 participate?

24 A No, the other reason was because I had one day's
25 notice. And I would have went had I had some week or ten

1 days of notice.

2 Q Well, let's go to the deposition one last time.

3 Page 31, sir.

4 A 31?

5 Q Yes, sir.

6 A Okay.

7 Q Beginning at Line 14, sir. "Question: Were you
8 aware there had been additional tests? Answer: Yes."

9 "Question: Were you aware that if you wanted to
10 come down and participate in those tests you could have?

11 Answer: Yeah."

12 "Question: Why did you decline to do that?

13 Answer: Well, I was assuming, and I'm very eager to see
14 those tests, I was assuming that the Public Service
15 Commission would make sure that they were performed by a
16 qualified lab and that those results would be made
17 available to us."

18 "So, in other words, you did not feel that your
19 presence was necessary in order for those tests to result
20 in a reliable lab report? Answer: I didn't feel a
21 duplication of effort was necessary, no."

22 You didn't mention the short notice at that
23 time, did you, sir?

24 A Well, but I did have one day's notice.

25 Q Do you stand by the testimony in your

1 deposition?

2 A Yes, I do.

3 MR. WHARTON: Okay. Just one moment, please.

4 That is all we have. I want to move the
5 exhibits, Commissioner Clark.

6 COMMISSIONER CLARK: We'll wait on that.
7 Staff, how many questions do you have?

8 MR. JAEGER: Probably 10 to 12 minutes.

9 COMMISSIONER CLARK: We'll go ahead and take a
10 break for lunch. We will break for -- we are going to
11 break for 45 minutes because there is the issue of a
12 late-filed exhibit on responding to customer complaints
13 that you need to resolve.

14 MR. McLEAN: Yes, ma'am, thank you.

15 MR. WHARTON: I mention this with some
16 trepidation because either, A, is it is obvious, or, B,
17 I'm going to get told I'm crazy, but I think that counsel
18 should be admonished that he should not talk to the
19 witness about his testimony.

20 MR. McLEAN: Oh, I never do.

21 MR. WHARTON: I know. That's why I thought it
22 was obvious, but I just --

23 MR. McLEAN: I'm going to talk to the witness,
24 but not about this stuff.

25 MR. WHARTON: Okay. That's fine.

1 COMMISSIONER CLARK: We are going to break until
2 a quarter till 2:00, and we will resume with staff cross
3 examination.

4 (Lunch recess.)

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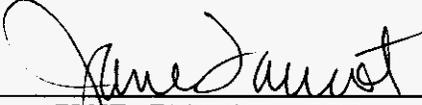
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It is further certified that I stenographically
reported the said proceedings; that the same has been
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