1		BEFORE THE
2	FLORIDA PUB	LIC SERVICE COMMISSION
3		DOCKET NO. 080121-WS
4	In the Matter of:	
5	APPLICATION FOR INCRE	ASE IN WATER AND
6	WASTEWATER RATES IN A DESOTO, HIGHLANDS, LA	
7	ORANGE, PALM BEACH, F SEMINOLE, SUMTER, VOL COUNTIES BY AQUA UTIL	PASCO, POLK, PUTNAM, JUSIA, AND WASHINGTON
8		
9		VOLUME 8
10	Dage	es 981 through 1190
11		
12	A CONVENIE	RSIONS OF THIS TRANSCRIPT ARE NCE COPY ONLY AND ARE NOT
13		TRANSCRIPT OF THE HEARING. N INCLUDES PREFILED TESTIMONY.
14		
15	PROCEEDINGS:	HEARING
16	BEFORE:	CHAIRMAN MATTHEW M. CARTER, II
17		COMMISSIONER LISA POLAK EDGAR COMMISSIONER KATRINA J. MCMURRIAN
18		COMMISSIONER NANCY ARGENZIANO COMMISSIONER NATHAN A. SKOP
19	DATE:	Wednesday, December 10, 2008
20	TIME:	Commenced at 9:30 p.m.
21		Recessed at 7:26 p.m.
22	PLACE:	Recessed at 7:26 p.m. Betty Easley Conference Center Room 148 4075 Esplanade Way Tallahassee, Florida
23		4075 Esplanade Way Tallahassee, Florida
24	REPORTED BY:	Recessed at 7:26 p.m. Betty Easley Conference Center Room 148 4075 Esplanade Way Tallahassee, Florida MARY ALLEN NEEL, RPR, FPR (As heretofore noted.)
25	PARTICIPATING:	(As heretofore noted.)
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PROCEEDINGS
(Transcript follows in sequence from
Volume 7.)
Thereupon,
CATHERINE A. WALKER
continues her testimony under oath as follows:
COMMISSIONER ARGENZIANO: Let me stop you for
a second, because what I'm hearing you say and I
don't mean this with disrespect. I mean it with true
angst, I guess, because I'm not sure if you're hearing
what I'm saying. The bureaucratic answer goes all over
the place. What I'm trying to get to is, are there
limitations on what is allowed to be flushed?
First of all, I can't believe they're just
allowed to flush water out in the street, and I think
you're telling me they are. And when it comes to the
wetlands, which are so protected I mean, if an
average homeowner walks in a wetland, he's got a
violation of some kind on him. You have to have some
kind of standards that says if you're going to flush
water that's been treated with chemicals, that has
chemicals in it, or whatever it is, there must be some
type of standards, parts per million, something, that
you are allowing or permitting, because I'm sure that
the utility can't just go out there and flush whatever

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they want into the wetlands. That's what I'm trying to get at, and I'm trying to get at who checks to see what is actually being flushed out.

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THE WITNESS: Well, I'll respond to your question by saying that in the consumptive use permitting program, what we look at is the quantity of what that is used for that particular purpose. Where it is discharged, we --

9 COMMISSIONER ARGENZIANO: If you're going to 10 tell me you don't care, I'm going to jump out of my seat 11 and scream.

12 THE WITNESS: No, I'm not going to tell you --13 CHAIRMAN CARTER: Don't jump out of your seat. 14 THE WITNESS: I'm not going to tell you that 15 we don't care. I'm going to tell you that the 16 environmental resource permitting program evaluates 17 discharges to wetlands, although --

18 COMMISSIONER ARGENZIANO: You're talking about 19 the ERPs, which you now have control over, not DEP 20 anymore.

THE WITNESS: That's correct. That's correct. And what I'll tell you is, specific to the complaints that the District has received with respect to flushing in this area, District staff have gone out and responded to complaints and investigated, and our staff has not

documented any harm to wetlands as a result of this activity.

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COMMISSIONER ARGENZIANO: Okay. That's great. 3 4 But what I want from you, and I don't expect it in a 5 minute, and if I have to, I'll ask someone in the Senate to request it. I don't think I'll have to do that. 6 But 7 what I want is some type of formula or something that you use in regards to flushing in wetlands and out in 8 people's streets and neighborhoods as to what's allowed, 9 10 because truthfully, I've had cases when I was in the 11 Legislature when the average homeowner was in so many 12 violations for flushing something.

13 I don't know. The point I'm trying to get is, 14 I would like to know what your specifics are. Tell me 15 the amounts of water and what they're allowed to flush, 16 because you can't be telling me, and I hope you're not 17 telling me that a utility can flush out anything they 18 want as long as there's, you know, a million gallons to 19 -- there's got to be chemicals that are not allowed to 20 be flushed, or if they are, to be certainly mixed or 21 diluted with parts per million in water, or whatever, 22 however it's done. So if you can, in the near future, 23 maybe get something to my office that would give me a 24 better understanding of how it's allowed.

And then to answer the other question, I

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guess, in the CUP, you're indicating that that is the 1 permit to allow the utility to flush -- or under the 2 ERP, to flush the water out, whether it's out in the 3 street or out in the wetland? 4 5 THE WITNESS: No. What I said is that the flushing is an authorized use under the consumptive use 6 7 permit. We do not have a numerical standard or a formula to determine what the correct amount is or what 8 the quality that comes out of a potable water 9 distribution main has to be before it is discharged. 10 11 COMMISSIONER ARGENZIANO: So even though they 12 use chemicals in the water, there's no standard for what chemicals get released into the wetlands? 13 THE WITNESS: I'm trying to think if there's a 14 standard in the ERP or the DEP program, and I think I'm 15 going to defer to the DEP witness that will follow me on 16 17 that. 18 COMMISSIONER ARGENZIANO: Okay. Whatever you 19 could find out, I would appreciate it. 20 THE WITNESS: Generally, our CUP standard 21 requires that a water use not cause harm to a resource, 22 and we have --23 COMMISSIONER ARGENZIANO: But if you have no 24 standards or no criteria to meet, the harm would already 25 be caused before you knew about it, wouldn't it?

THE WITNESS: Not necessarily.

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COMMISSIONER ARGENZIANO: Really? How would you know? Let's say Utility A was flushing out arsenic or large levels of arsenic today. How would you know until you went and tested it if you didn't have them follow some type of standards?

THE WITNESS: Well, no disrespect intended, but I think if the utility had distribution system lines full of arsenic, they would have a lot of problems before they started discharging it.

11 COMMISSIONER ARGENZIANO: Well, we're talking 12 about a utility that has a lot of problems. That's what 13 I'm trying to get at, and I'm trying to get at what the 14 standards are. I just cannot believe -- I really 15 thought you were going to tell me there's a certain 16 formula to allow the release of water, you know, that 17 comes from a plant.

Maybe the company could answer something or 18 19 whatever that would make more sense to me than just 20 saying, "Well, under the ERP, we allow for a utility to 21 flush whatever you want out into the wetland." But God 22 forbid the little homeowner does it. Boy, let's put him 23 up on the cross and, you know, do whatever we've got to 24 do. And I hate to be sarcastic, but I had years and 25 years of that stuff and know exactly, you know, what

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happens, and I'm just curious how this comes about with 1 any kind of formula. 2 And, Mr. Chair, I'm sorry to belabor the 3 4 point, but it really boggles my mind that I have no 5 formula. And maybe afterwards -- I know it's putting 6 her on the spot, but maybe afterwards there may be 7 something that they come up with that may ease my concern in that area that I would appreciate. 8 9 CHAIRMAN CARTER: Okay. MS. FLEMING: Chairman, if I may. 10 11 CHAIRMAN CARTER: You're recognized. 12 MS. FLEMING: At this point, I would suggest a late-filed exhibit from staff on behalf of witness 13 14 Walker to address some of the questions raised. 15 CHAIRMAN CARTER: And that will be Number 201, 16 Commissioners, Exhibit Number 201. 17 MS. FLEMING: And I'm looking, and I'm 18 thinking with respect to the late-filed exhibit, we can 19 address the consumptive use standards and how they 20 address possibly the flushing discharge and any concerns 21 that Commissioner Argenziano has raised. 22 CHAIRMAN CARTER: Okay. That's fine. 23 Commissioner, we'll have that as a late-filed exhibit, 24 so we'll have it before we complete our deliberations on 25 that.

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7	COMMISSIONER ARGENZIANO: Great. Thank you,
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2	Mr. Chair.
3	(Late-filed Exhibit 201 was identified for the
4	record.)
5	CHAIRMAN CARTER: Anything further for
6	Ms. Walker?
7	BY MS. FLEMING:
8	Q. Ms. Walker, have you completed your summary?
9	A. Yes, I have.
10	MS. FLEMING: Okay. This witness is now
11	tendered for cross.
12	CHAIRMAN CARTER: Wait. Mr. Reilly.
13	MR. REILLY: I'm just waiting for cross.
14	CHAIRMAN CARTER: Okay. Well, wait no longer.
15	MR. REILLY: Okay. Thank you very much.
16	CHAIRMAN CARTER: You're recognized.
17	CROSS-EXAMINATION
18	BY MR. REILLY:
19	Q. Good afternoon, Ms. Walker.
20	A. Good afternoon Mr. Reilly.
21	Q. We really do appreciate you being here this
22	afternoon and offering your expertise to address these
23	water quality issues. If I could, I'll just try to
24	touch on a few questions so that I can comprehend a
25	little better your exchange with Commissioner
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Argenziano.

The first question is, what are the District requirements for, say, a single-family residential homeowner who decides that it's in his interest to sink a well for personal home irrigation purposes? Is there some threshold that the District looks at to even -whether that person would even be required to have a permit to sink that small well? A. The District -- within Seminole County and

A. The District -- within Seminole County and
Chuluota, well construction permits for wells less than
six inches in diameter fall below the District
consumptive use permitting threshold.

However, the District regulates irrigation use through those wells under what we refer to as the general permit by rule, which is in 40C-2.042, and that limits irrigation currently to two days a week, and it prohibits irrigation between the hours of 10:00 a.m. and 4:00 p.m.

The construction of the well requires the submittal of a well completion report to the Water Management District, and that assures that the well is constructed by a licensed contractor and meets well construction standards. But the use of it is regulated under the general permit by rule.

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Q. So that's anything below six inches in

1	diameter? I mean, that's a pretty big well.
2	A. That's correct.
3	Q. I mean, even like a four-inch well would draw
4	a tremendous amount of water, would it not?
5	<b>A.</b> Well, we have a number of different thresholds
6	for permitting in the CUP program. The six-inch
7	diameter is one threshold. If a use exceeds 100,000
8	gallons per day on an annual average day, or if it has a
9	capacity of withdrawing more than 1 million gallons per
10	day, it's required to come in to the District and get a
11	consumptive use permit.
12	Q. Now, more typically, a private residential
13	well, it would be more what? A two-inch?
14	A. Generally, yes.
15	Q. More generally?
16	A. Yes.
17	<b>Q.</b> Did I understand your testimony earlier to be
18	that all things being equal, meaning not considering
19	more or less quantity of water, that having multiple,
20	multiple irrigation, residential irrigation wells
21	throughout the service territory might cause more harm
22	to the water source than having Aqua provide that water
23	through its facilities?
24	A. Theoretically, that scenario could cause an
25	acceleration of the deterioration in the water quality,
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particularly salt water intrusion.

Okay. Now, in addition to that -- and I don't 2 ο. 3 pretend to understand the reasons for that, but I'm 4 going to take it as a given. But in addition to that, 5 would you --COMMISSIONER ARGENZIANO: Mr. Chair. 6 7 MR. REILLY: Excuse me? COMMISSIONER ARGENZIANO: Mr. Chair. 8 CHAIRMAN CARTER: Commissioner Argenziano. 9 10 COMMISSIONER ARGENZIANO: I'm sorry, but I'm 11 going to have to make a statement that I don't think the 12 witness said that, and I don't think it is a given. 13 That's misleading, and at some point down the line, if 14 you want to get a water expert in, we can do that. But 15 I just want to get it on the record that the company is 16 pumping -- and I'm not saying it is, but any well 17 pumping is detrimental, not just a person's right to 18 have their own irrigation well, which, by the way, an 19 average homeowner's irrigation well is far less than six 20 inches. It's about two inches. 21 MR. REILLY: Sure. 22 COMMISSIONER ARGENZIANO: And I just think 23 that's an inaccurate statement, and I want to be on the 24 record saying that. I'm not trying to say that the 25 utility is causing harm, but any well, whether it's the

utility -- the utilities probably would not want those 1 irrigation wells in there, for several reasons. 2 And one, it would be because if -- what I 3 heard the Water Management District say and what I'm 4 thinking I'm understanding -- and I will look at the 5 maps of those water zones. What I understand it to be 6 7 saying is that those wells, those irrigation wells are 8 at a higher level than the utility's wells, and, of 9 course, it would take the water that the utility -laterally first, which, if they have the right to do, 10 11 that would be their right. That's one of the reasons 12 the utility wouldn't want that to happen. But I don't want it as a given. Until you get 13 a real expert in there who can tell you whether that's 14 15 true or not, I have concerns that that is not a given. 16 And I thank you, Mr. Chairman, for letting me cut in 17 there. 18 CHAIRMAN CARTER: Thank you Commissioner. 19 MR. REILLY: Thank you, Commissioner. 20 BY MR. REILLY: 21 Well, just setting aside that entire issue, ο. 22 the genesis of this whole question of irrigation and 23 whether people will go out and sink wells came from 24 Ms. Kelly's comments on the first day of the hearing 25 when she, I guess, speculated that if a very substantial

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rate increase was put into place as a result of this 1 case, and even that rate increase, as substantial as it 2 is, was weighted for usage above 5,000 gallons per day, 3 4 which would be essentially your irrigation usage, that 5 there would be a tremendous financial incentive for many, many people in the Chuluota area to go out and get 6 7 unpermitted two-inch wells and begin paying for those facilities and, according to her numbers, depending on 8 what the rate increase is, basically recovering the cost 9 of that private well within the first year of operation, 10 11 and then saying that this is an unintended consequence 12 of this proceeding, that it could accelerate the water resource problem. 13

Would you comment on that observation? 14 15 Yes, I would. And I mentioned to you that A. 16 that irrigation usage is regulated by the Water 17 Management District under general permit by rule. And we currently -- just yesterday our board considered some 18 19 amendments to that general permit by rule that would 20 strengthen it to further limit the use of irrigation, 21 regardless of whether it comes from the utility or 22 whether it comes from a private irrigation well or 23 whether it comes from a lake. We also had consideration 24 for limiting sources, including reclaimed water, in 25 terms of how much irrigation could be allowed from

reclaimed water, because we want to encourage people to be efficient in their irrigation practices.

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One of the steps that we took yesterday in the 3 rulemaking is to include a provision in that rule that 4 prohibits the use of a private irrigation well if 5 reclaimed water is available. It may be the case that 6 7 we could further do rulemaking to prohibit the use of irrigation wells under different circumstances, the 8 9 point being that we want to encourage people to be 10 conservative in their water use and irrigate no more than is necessary. Regardless of what source it is, we 11 12 really want to reduce consumption that is directed towards irrigation. 13

Q. Chuluota's water system, what is -- the consumptive use permit, what is the average annual gallons per day allotted withdrawal?

17A. I think I have the technical staff report here18with me.

19The current permit authorizes 581,000 gallons20per day on an annual average basis.

Q. And what is your understanding of how much of this allotment has historically, say, the last year the Chuluota system been using?

A. I don't have that number in front of me. I
would be able to find that for you.

Q. In a little bit, we'll get into it a little bit more, but that is not one of the problems with the consent order with Chuluota, overwithdrawing, which we'll talk about in a minute, the Chuluota consent order?

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A. Yes, there's a consent order that has been finalized and closed. There's not an active consent order for Chuluota.

9 Q. Okay. You had said that the City of Oviedo, 10 there was some discussion about them providing water for 11 Chuluota, but problem is, Oviedo's consumptive use 12 permit was not of sufficient size to really allow them 13 to supply Chuluota. Did I understand you to say that?

Basically what the Oviedo permit now --14 Α. Yes. 15 it contemplates the service area for the City of Oviedo, so their allocation should be matched with the 16 anticipated demand from Oviedo's service area. In order 17 18 to service Chuluota, that service area would need to be 19 incorporated into the other permit. And to increase the 20 other permit by half a million gallons per day, more or less, to serve Chuluota, I'm not -- I would have to --21 22 you know, we would have to go through and review that, 23 but based on the regional resource impacts, I think we 24 would be hard pressed to recommend an increase in 25 groundwater allocation for Oviedo.

My question with regard to that would be, if Q. Oviedo and Aqua negotiated some arrangement where Oviedo did provide water, and to the extent that water kept Aqua from spending a great deal of money and effort to clean up its water, could not some of Aqua's consumptive 5 use permit be assigned or sold or otherwise allocated to 6 7 Oviedo so that the Oviedo water could, in effect, 8 replace the withdrawals, and you could have an effect 9 where the consumptive use permit for Aqua would be 10 reduced and a commensurate increase by Oviedo?

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11 What we would have to do is analyze the Α. 12 difference in shifting the location of the pumpage from Oviedo's wellfield to -- or from Chuluota's wellfield 13 over to Oviedo and determine whether or not that would 14 15 cause or contribute to resource impacts.

We don't do -- you know, you can't buy and 16 sell allocations. You can't trade allocations. 17 Τt 18 doesn't quite work that way. We look at the reasonable 19 beneficial need, and we evaluate the impacts associated 20 with the withdrawals.

Is that something that has been done in the 21 Q. District before? 22

23 Well, certainly there are a number of Α. 24 utilities that have acquired other utilities and 25 redistributed withdrawals such that they achieve a

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scenario that is permittable under our criteria.

Okay. Moving right along, and time is of the 2 0. essence, you did offer an incredibly helpful two-page 3 exhibit, CAW-3, which is our comprehensive Exhibit 4 5 Number 129. And what I was hoping to do this afternoon briskly, but taking advantage of your presence here, is 6 7 to basically go through that exhibit and look at the material violations and see if we have in the record the 8 most updated and true, accurate representation of what 9 10 the status is of the various systems, and focusing our attention only on those systems, you know, that had 11 12 problems and violations with the District.

13 So if I could direct your attention to page 1 14 of 2 to begin with, and we'll just try as quickly as we 15 can -- because there was some testimony, rebuttal 16 testimony to your testimony that questioned some of your 17 statements, and if we could just get your last 18 pronouncement on each of these things.

19 The first system is Arrendondo Estates and 20 Farms, and you say there are violations. And at the 21 time that you prepared this, you said that that permit 22 was still not in the name of Aqua Utilities Florida. 23 Has that been corrected? Have they come in, and what is 24 the status of that permit holder?

**A.** Well, I think I stated at the beginning of my

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testimony that this exhibit is current to the best of my knowledge, so as far as I know, there should not be any changes to each of these comments here.

Q. Okay. And that's true all the way down the line?

Let me ask you this. I notice you have 6 7 violations, and then you have -- it results in either -there has been no enforcement, and you have an NOV or 8 notice of violation, and the next step is a consent 9 10 order. Could you share with us the process from having a problem and you notify the company and it gets to a 11 12 high enough level where you give them a notice of violation, and then it seems to go to the next step, 13 which is an actual consent order? Could you share how 14 that occurs so we can better understand this schedule? 15

Well, if there's a "yes" in this violation 16 Α. 17 comment, it could be anything as minor as a water use 18 report that was submitted a week late. If it didn't 19 come in specifically on time in accordance with the due 20 date, we would have identified that there was a 21 violation. If we get the report in, you know, a week 22 later, it's very likely that we're not going to send an 23 NOV or pursue any further enforcement, because we've 24 gotten the reporting that we need.

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If we send an NOV, it typically is something

that we have sent a reminder letter and asked the 1 utility to please submit the report, and it's either 2 gone unacknowledged or it comes in significantly late, 3 and we'll send a notice of violation. If we send a 4 notice of violation and the permittee comes in pretty 5 quickly after that and gets into shape, so to speak, 6 after they get a nastygram, then very often we do not 7 pursue enforcement. We typically do enforcement if 8 9 there is no cooperation on the part of the permittee or 10 if the violation is significant enough that we 11 anticipate that there could be potentially harm to the resource, or if we're not getting information that we 12 need to evaluate the condition of the resource, then we 13 14 would step up the enforcement.

Q. There are a number of these systems where you say they have exceeded their allocation. How long does that go on before the district feels it's appropriate to really begin this -- the nasty letter and then follow up with the consent?

A. Well, utilities report every six months, and their allocation is on an annual basis. If they have one year where they exceed their allocation by, you know, maybe, you know, a slight percentage, maybe percent, typically what we'll do is, we'll ask them to submit a corrective action plan and evaluate the causes

of why they have exceeded their allocation and come up with a plan to either reduce the demand, or if the allocation is exceeded because growth has occurred in the area that they didn't anticipate when they applied for their permit, they would need to come in and request a modification and provide documentation that an increase in allocation is warranted.

Q. Okay. So you stand by all the comments made on this two-page exhibit at this point?

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A. Yes, sir.

Are you aware that Chuluota, because of the 11 Q. 12 quality of water problems, has very recently begun to 13 embark on what they call an aggressive and extensive 14 water flushing program? And my question to you is, I 15 guess that wouldn't have an impact or concern to you, except to the extent that that program might cause them 16 17 to exceed their drawdown? Is that pretty much the 18 District's position?

19 Well, I have not been informed that they have Α. 20 embarked on a new aggressive flushing program. As I 21 mentioned before, it is considered a reasonable 22 beneficial use, and it is necessary to maintain 23 distribution water quality. If in fact that caused them 24 to exceed their permit allocation, we would need to sit down and talk to them about whether or not that's the 25

most efficient and effective thing they could do to 1 remediate the water quality and provide a plan for 2 either staying in compliance or demonstrating that it's 3 essential that they continue on this program. 4 And that is particularly true because Chuluota 5 Q. is located in a priority water resource caution area; is 6 7 that correct? 8 Α. Yes. I mean, conservation is critical in a 9 priority water resource caution area, but the need for 10 them to stay within their allocation is really 11 independent of being in a priority water resource caution area. 12 13 MR. REILLY: I think that concludes our 14 questions at this time. 15 CHAIRMAN CARTER: Thank you, Mr. Reilly. 16 Ms. Bradley. 17 MS. BRADLEY: Thank you. 18 CROSS-EXAMINATION 19 BY MS. BRADLEY: 20 Q. Ms. Walker, I was looking at your chart here, 21 and it indicates that Chuluota's permit expired 22 4/12/2007? Α. 23 That's correct. 24 What happened --Q. 25 Α. They have submitted a renewal application, and FLORIDA PUBLIC SERVICE COMMISSION

when they submit a renewal application prior to the 1 expiration date, their current permit is 2 administratively continued until the application is 3 complete and a new permit is issued. 4 Did they do that before their permit expired? 5 Q. 6 A. Yes. And it also indicates that they're under a 7 Q. consent order? 8 The consent order was issued and completed in 9 Α. January of this year. 10 11 ο. And what does that --And that means the consent order is closed. 12 A. 13 There are no further activities required under that consent order. 14 15 Q. And that's the consent order for your Water Management District? That doesn't have anything to do 16 with the DEP one; is that correct? 17 18 That's correct. The consent order that the Α. 19 District issues is specific to Water Management District 20 rule and permit violations. Your chart says that was issued for multiple 21 ο. 22 violations. Could you be more specific? 23 I don't have the document in front of me. I'm Α. 24 sorry. I could provide that at a later date if that 25 would be helpful.

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1	MS. BRADLEY: I would certainly be interested
2	if we could do that, Mr. Chairman.
3	CHAIRMAN CARTER: Okay. That will be
4	Late-filed Exhibit Number 202, Commissioners.
5	COMMISSIONER ARGENZIANO: Mr. Chair.
6	CHAIRMAN CARTER: You're recognized,
7	Commissioner.
8	COMMISSIONER ARGENZIANO: If Ms. Bradley is
9	finished, I would just like to ask Ms. Walker another
10	question.
11	CHAIRMAN CARTER: I think she's she looks
12	like she's getting second wind, Commissioner.
13	MS. BRADLEY: But I'll be happy to defer if
14	the Commissioner would like to ask
15	CHAIRMAN CARTER: Hang on a second. Let's get
16	the title for the late-filed.
17	MS. BRADLEY: I guess Consent Order Specifics.
18	CHAIRMAN CARTER: Okay. Ms. Walker, does that
19	give you enough information to know what we need on
20	that?
21	THE WITNESS: Yes, sir.
22	(Late-filed Exhibit 202 was identified for the
23	record.)
24	CHAIRMAN CARTER: Okay. Commissioner
25	Argenziano.
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COMMISSIONER ARGENZIANO: I can wait for 1 Ms. Bradley to finish. That's not a problem at all. 2 CHAIRMAN CARTER: Ms. Bradley, you're 3 recognized. 4 5 MS. BRADLEY: Thank you. BY MS. BRADLEY: 6 7 With this consumptive use permit, who measures 0. 8 how much they're withdrawing? I mean, is that something 9 you all do or something Aqua does? Aqua does that. They're required to have 10 Α. 11 meters on their withdrawal points, and they're required to calibrate and certify those meters on a regular 12 basis. 13 And are you involved in the calibration or 14 0. certification? 15 16 Α. They submit calibration reports to the District as a requirement of their permit. 17 And is there any check by your district? 18 ο. 19 I'm sorry? Α. 20 Is there any checkup on that by your district? 0. 21 Yes. We review the calibration reports that Α. are submitted by the utility. 22 How often are they submitted? 23 ο. 24 Once every three years, I believe. A. 25 Q. Do you know when the last time you got one of FLORIDA PUBLIC SERVICE COMMISSION

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those reports was?

A. Not at this time. That is something I could find out, though.

All right. Now, you said you met with the Q. 4 consumers in this area and talked to them about 5 conservation. And we've had testimony at different 6 7 hearings about people taking three-minute showers. Some said they were only watering once a week, or a few 8 9 people said they had pretty much just let their lawns go because they couldn't afford to water, and they're 10 11 checking their water consumption morning and evening to make sure it has decreased. Is that the type things 12 13 that you were talking about as far as water conservation? 14

Well, in the community meetings, we talked 15 Α. 16 about basically limiting irrigation, that if you're 17 going to irrigate, you need to have an efficient irrigation system and have not deliver any more water 18 19 than is necessary for the survival of the landscape. We 20 talked about just being conscious of how much water you 21 use in your home and not letting the water run. We did 22 provide some materials that had to do with landscape design and the installation of plants that would require 23 24 minimal supplemental irrigation.

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Q. Have you had an opportunity to review any of

the testimony for this case or the hearings where the people have talked about doing exactly the type things you're talking about?

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A. No, ma'am, I haven't.

When you said something about -- and this may 5 Q. have already been asked, and forgive me if it has, but 6 you said something about you wouldn't do anything about 7 the amount they were taking out unless it was excessive; 8 9 is that correct? Actually, that may have been in regard 10 to flushing. You were asked about the flushing, and I 11 believe your statement was that that wouldn't affect anything unless you found that it was excessive. 12

A. Well, I think what I tried to communicate is
that we consider it a necessary and reasonable
beneficial use. And I did say that provided that it's
not excessive, but we don't have a real standard. It
really has to do with judgment.

But one thing that I think I would suggest is that, you know, it costs the utility money to run the pumps and discharge water that they're not able to sell, so I would think that they would flush the minimum required to maintain the water quality.

Q. Do you have any idea what that would be, orwhat you would consider reasonable?

A. It really depends on the distribution system

configuration and a number of factors that affect the water quality in the distribution system. And I think the DEP witness might be more qualified to testify to the factors that affect distribution system water quality and public health associated with what is needed to maintain the disinfectant residual.

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Q. Have you gotten any complaints from that area about -- there was testimony that one lady complained to somebody because -- I don't even think she was in that, but she was living close enough, and the water was piling up in her yard and that type of thing. Have you gotten any of those complaints?

A. The District has received complaints from residents in Chuluota, and we have gone out and investigated a number of those complaints. And what the staff has reported to me is that they have not observed any harm that's associated with the flushing of the mains.

Q. What about the nuisance value to the customers
who suddenly have their yards filled up with water? Is
that something that comes within your jurisdiction?

A. Well, that particular issue hasn't been brought to my attention.

Q. Okay. This water that's being flushed, wheredoes it go?

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A. I'm sorry?

2 Where does this water go when it's flushed? Q. Well, it's my understanding that it's often 3 Α. discharged into the roadways, where it might go to a 4 storm drain and eventually into a stormwater management 5 And I've heard from the witnesses here, the 6 area. testimony of others that it is discharged to wetlands, 7 but to my knowledge it basically goes into a stormwater 8 management system. 9 10 0. And where does that water go? 11 Well, it either gets retained there in that Α.

12 stormwater management area, where it eventually 13 recharges into the ground, or it may overflow. I'm not 14 specifically familiar with the layout of the stormwater 15 management system there.

16 Q. For those of us who are not familiar with this 17 issue like you are, when you say recharges into the 18 ground, does that mean eventually it all goes back to 19 the aquifer?

A. It would percolate into the ground, and
eventually it would go back into the aquifer, yes.

COMMISSIONER ARGENZIANO: Mr. Chair. CHAIRMAN CARTER: You're recognized. COMMISSIONER ARGENZIANO: Just to interject something, not all of it would go back. There's plenty

lost to evaporation. But, yes, it would go back, but I
 just wanted to add that, because not all of it returns
 as recharge.

MS. BRADLEY: Thank you.

BY MS. BRADLEY:

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Q. And did you say that you don't have the actual figures on -- or that you all don't keep the actual figures about how much they're using or withdrawing monthly, that that's something that's submitted every three years?

11 No. What I said was that they report their Α. 12 water use twice a year. They are required to submit 13 monthly water use reporting, and they submit it to the 14 District twice a year. So they would collect and record water use on a monthly basis and submit it to the 15 16 District twice a year. So in July, we get a report that 17 shows what they used January through June each month, and then in January, we would get July through December. 18

19 Q. Does it just have a total amount, or does it 20 show we used this much for the plant, we used this much 21 for flushing, we used this much for our consumers. Is 22 there any breakdown on that?

A. Well, it's broken down by the well. It will show how much is used -- or how much is pumped from each well. And the figures in terms of how it's broken down

by use are submitted when they come in either for a 1 permanent application or a renewal. 2 How many wells does Aqua have? ο. 3 I believe they have two or three production Α. 4 wells. Let me see if I can -- it's my understanding 5 that they have two active production wells and two 6 monitoring wells. 7 8 Q. Two active production, and what was the second 9 one? Two active monitoring wells. 10 Α. 11 What are active monitoring wells? Q. 12 These are wells that -- they observe water Α. quality on a regular basis, and water levels. 13 In other words, they don't withdraw from the wells. They just 14 15 use them to sample for water quality. So they don't actually test the active wells? 16 Q. 17 They test these monitoring wells? 18 They test the active wells too, but the Α. 19 monitoring wells are used as an indicator for the 20 movement of the saline water interface. 21 Okay. Now, how far -- where does the water **Q**. 22 for these wells come from, actually? 23 It comes from the Upper Floridan Aquifer. Α. 24 And how many wells does Oviedo have? Q. 25 Α. I don't have that information on the tip of my

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tongue. It is --

Q. Do you know where that water comes from?
A. It generally comes from the same source, the
Upper Floridan Aquifer, yes.

Q. We've had testimony from numerous people that Oviedo is, like, a mile down the road from a lot of these customers, and the testimony is that the water in Oviedo is very clear. They don't seem to have any problem with that, and yet the Chuluota water a mile down the road has black stuff in it, and they refer to the goo and this type thing. Why would the two waters coming from the same source be so different?

MS. FLEMING: Chairman, I would like to object. It sounds to me as if Cecelia Bradley's question is leading more to the quality of the water, which is really not the scope of this --

CHAIRMAN CARTER: That is the DEP witness. Objection sustained. Let's move on, Ms. Bradley.

MS. BRADLEY: Mr. Chairman, can I point out that in her testimony, she indicated that she works with hydrologists and environmental folks? And it was my understanding that was part of what they do.

CHAIRMAN CARTER: Your question went more to
the quality of the water. She did not say that. She
was talking about the quantity. She was saying what the

District's responsibility was was the quantity. So the 1 objection is sustained. Move on. 2 BY MS. BRADLEY: 3 And you indicated that you all -- something Q. 4 about you all go out and monitor the water that's 5 actually being flushed. 6 7 Α. I did not say that we monitor the water that's 8 being flushed. 9 Q. You didn't indicate that you go out and check 10 to see what's coming out in that water? I did not say that we do that. 11 Α. 12 Q. All right. I misunderstood you, then. What were you talking about checking when you got the reports 13 of the flushed water? 14 What I was trying to explain is, when we look 15 Α. 16 at a consumptive use permit application to determine the reasonable need for water, we require them to submit 17 18 water audit reports that identify how much water is used 19 for utility use, water utility use, which includes line 20 flushing. So the quantity of water is reported in their water audit form. 21 So you don't check to see what's being flushed 22 Q. 23 or if there's any problem with the water quality? MS. FLEMING: Chairman, objection. She has 24 25 already answered this question.

CHAIRMAN CARTER: Sustained. Ms. Bradley, 1 we've been down this road, and we said that we're going 2 to get that question answered by the DEP witness. 3 You're asking the same question. The objection has been 4 raised, the objection has been sustained, and I caution 5 6 you. MS. BRADLEY: I was just trying to get the 7 information, sir. 8 9 CHAIRMAN CARTER: From the wrong witness. 10 MS. BRADLEY: I have no further questions if I 11 can't ask my questions. 12 CHAIRMAN CARTER: Thank you. Commissioner Argenziano. 13 14 COMMISSIONER ARGENZIANO: Thank you, Mr. Chairman. Just a couple of questions very quickly. 15 Do you know the average household in 16 17 Chuluota's water use per day, how many gallons? THE WITNESS: I'm sorry. I couldn't hear and 18 19 understand the whole question. 20 COMMISSIONER ARGENZIANO: Okay. Can you hear 21 me now? THE WITNESS: Yes. 22 23 COMMISSIONER ARGENZIANO: This is not a 24 Verizon commercial. Can you hear me now? 25 THE WITNESS: I can hear you now. FLORIDA PUBLIC SERVICE COMMISSION

COMMISSIONER ARGENZIANO: Okay. Do you know 1 the average Chuluota homeowner's use per day, water use 2 per day in gallons? 3 THE WITNESS: Not off the top of my head. 4 Again, that is another number that I could go and find 5 out for you. 6 7 COMMISSIONER ARGENZIANO: I would like that, 8 because I don't know how you can -- I mean, if the 9 utility is using more than its consumptive use permit, it's either for two reasons. One is that there's too 10 11 many people on the system or adding to the system, or that the homeowners are using more than the average 12 13 person throughout Florida does a day. And from what I heard from the hearings down 14 15 there, people were truly, I mean, putting timers, as was 16 indicated before, on their showers, and truly having to 17 because they can't financially afford any more water. They were really conserving. 18 19 So without knowing the gallonage used per day, it may not be the homeowner that's actually not 20 21 conserving water. There may be something else involved 22 there, and the growth. I would like our staff maybe, Mr. Chairman, also to tell me how much that utility has 23 expanded or how many more people have moved into the 24 25 utility's base, you know, adding on more customers and

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how that affects the consumptive use permit, as well as 1 if the utility has an idea of the average use per 2 customer, 125 gallons a day, 150 gallons a day, 3 something like that. And that makes a big difference 4 when it comes to conservation. There's only a certain 5 amount you can conserve, and if they're at that point, 6 then it's not the consumer. There's something else 7 8 going on. 9 The second question I --10 CHAIRMAN CARTER: Hang on. Hang on a second, 11 Commissioner. Ms. Fleming? 12 MS. FLEMING: Chairman, we can get the average use on a per customer basis. I believe that that number 13 14 is available, and we can provide that as a late-filed 15 exhibit. 16 CHAIRMAN CARTER: That will be Number 203, 17 Commissioners, Number 203. It will be a late-filed. 18 (Late-filed Exhibit Number 203 was identified 19 for the record.) 20 CHAIRMAN CARTER: Commissioner, you may 21 proceed. 22 MR. MAY: Mr. Chairman. 23 CHAIRMAN CARTER: Wait one second. Mr. May. 24 MR. MAY: Just to answer -- Commissioner 25 Argenziano, I apologize, but I just wanted to let you FLORIDA PUBLIC SERVICE COMMISSION

know that the average consumption for the Chuluota area is in witness Franceski's Exhibit DTF-1. It's 9,308 gallons per month.

COMMISSIONER ARGENZIANO: Okay. What does that break out to a day?

MR. MAY: I'll have to get my calculator.

COMMISSIONER ARGENZIANO: I don't have one in 7 8 front of me either. And that would give me an idea of 9 whether the consumer is using more and whether they can 10 possibly conserve any more. You know, especially since most of them don't drink the water, I don't think that 11 -- I just have some feeling that it's not on their part. 12 All the testimony we heard sounded like they were 13 14 conserving a lot.

And the other question I had, Mr. Chairman, of course, was how many more people were added to the system, you know, new homes, new people moving in the area, which could be a result of them exceeding their consumptive use permit, which is only logical.

20And the other question I have --21CHAIRMAN CARTER: Hang on a second,

22 Commissioner.

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COMMISSIONER ARGENZIANO: Okay.

24CHAIRMAN CARTER: Staff, did you get that25second one?

1 MS. FLEMING: NO. CHAIRMAN CARTER: Commissioner, can you 2 restate that? We'll make that -- that will be 204. 3 COMMISSIONER ARGENZIANO: Yes. And my concern 4 would be how many new homes, new additions to the 5 utility. If you started out the utility and had 500 6 7 homes, or how many new homes or how many new customers have been included in their base, because that has to 8 9 affect the consumptive use permit if the CUP hasn't 10 changed, reflecting that, you know, there's more water being used, which is a logical thing to look at when 11 12 you're talking about conservation and exceeding the CUP. So I would be concerned with new additions to the 13 14 utility. CHAIRMAN CARTER: Okay. Staff, did you get 15 that? 16 MS. FLEMING: Yes, we did. 17 CHAIRMAN CARTER: And that will be number --18 19 Commissioners, that will be 204. (Late-filed Exhibit Number 204 was identified 20 for the record.) 21 22 CHAIRMAN CARTER: Commissioner, you may 23 proceed. 24 COMMISSIONER ARGENZIANO: Thank you. The 25 other question, in regards to going back to using --FLORIDA PUBLIC SERVICE COMMISSION

whether they're private irrigation wells or the utility's well, in your capacity at the Water Management District, wouldn't you agree that the more water taken out of the ground, even the surface water, but let's say groundwater, the more you take out, if Mother Nature is not replenishing it in a timely manner, you're going to have adverse impacts to that resource no matter how many wells, whether they're private or non-private? Would you agree with that?

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10 THE WITNESS: Absolutely. And that's the 11 point that we were trying to make when we met with the 12 residents in Chuluota in October of 2007.

COMMISSIONER ARGENZIANO: Right, right. And I 13 14 understand that. And I know how the Water Management District works and how they have to work. But my point 15 16 is, if you don't know how much they're using 17 individually, you can't determine whether they're 18 conserving or not. And from what I've heard, these 19 people were conserving beyond what I've seen in 20 conservation, and that is a factor that was not factored 21 in.

And I also understand the Water Management District is trying to protect the resource. But as I stated, whether they put in private irrigation wells or not -- and the reason I mention the private irrigation

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wells is because I've been frustrated, I quess, in the 1 fact that when people have no choice and have to be on a 2 utility and then have problems with that utility, or 3 even if they have no problems with the utility, can't 4 afford it anymore, when their rights are kind of taken 5 away because they can't even put in an irrigation well. 6 And many times it's not even the water management 7 district. It's the city or the county who disallows the 8 9 right of having a well, whether it's for drinking or for 10 irrigation.

11 So, to me, I'm looking at it as if you're 12 going to take somebody's right away, especially when 13 they're financially strapped, to put in an irrigation 14 well, let's make sure it's, you know, for the right 15 reasons. And I understand the Water Management 16 District's reasons really to be -- and as you said it 17 before, and it was the point I originally tried to make, 18 was that the detrimental effects of private irrigation 19 wells really would be that the people aren't paying for 20 it, and the conservation may not take place as if they 21 were paying for it. And I think you stated that when 22 Mr. -- I can't remember who it was. OPC, Mr. Reilly had 23 asked you, and I would be happy to go back into the 24 transcript.

So the other point that I had to make was that

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if we're talking -- and being general here,

Mr. Chairman, excuse me, but if the State, DCA and the counties and the cities allow building and building and building, at some point, no matter what you do to conserve, if you're not using reuse or desalination or something else, you are adversely impacting the resource.

And I guess the point I wanted to make, and I 8 think I just did, was that no matter what you do, if you 9 10 keep overpumping or keep pumping from the traditional 11 source and Mother Nature is not putting it back in time, 12 regardless of anybody's irrigation wells or a utility well, the resource is going to be adversely affected. 13 And it is adversely affected in the State of Florida, 14 15 and I think you agreed with me on that.

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CHAIRMAN CARTER: Absolutely.

COMMISSIONER ARGENZIANO: Okay. So,

18 Mr. Chairman, I quess the things that I had asked staff 19 to get were important in making a decision, whether 20 we're talking about people who are not conserving and 21 whether they are, because no matter what you're talking 22 about, whether it's a private well or a utility's well, 23 if there are other things involved, such as allowing 24 more building in the area, more people on the utility's 25 -- you know, more customers added to the base, that may

be the real reason that the -- or the flushing, maybe 1 excessive flushing to try to get the water where it 2 needs to be, could be the real reasons of them going 3 above the CUP. 4 I think I've asked this witness as much as I 5 can, and if she could provide any information afterwards 6 that would be helpful, I would appreciate it. 7 MS. FLEMING: Chairman, if I may. 8 9 CHAIRMAN CARTER: You're recognized. 10 MS. FLEMING: With respect to -- I think we 11 had a question regarding the Chuluota customers' average 12 use of water, and I believe the utility provided 9,308 per month. I think it turns out to be about 310 gallons 13 14 per day, if that's helpful. 15 And also, with respect to --16 CHAIRMAN CARTER: Hang on a second. 17 Commissioner, did you hear that? 18 COMMISSIONER ARGENZIANO: That is -- that 19 can't be. That just can't be. Mr. Chairman, I would 20 respectfully request that we look into that number, 21 because people in Tampa Bay don't even use that much 22 water per day. And if that's the case, their bills 23 would be extremely high, and they would be drinking a 24 lot of water, which I don't think they are. And I don't 25 see how that can be. I really don't.

CHAIRMAN CARTER: I think what we ought to do 1 is -- I think that was on one of the late-fileds we 2 requested, and I think it's 203. 3 MS. FLEMING: That's correct. 4 5 CHAIRMAN CARTER: So let's just have that. We'll just have that so we can look and do it, and that 6 way we can do our own math on that. 7 8 MS. FLEMING: We can provide calculations as well. 9 COMMISSIONER ARGENZIANO: Thank you. 10 Thank you. Mr. Chair, if the people in Chuluota are using 11 12 310 gallons a day, then they really need to learn conservation. I just have a hard time believing that. 13 14 Even irrigating a lawn, that's just an awful high 15 number. 16 CHAIRMAN CARTER: Okay. And we'll add that in 17 with Exhibit 203 as well as the calculations. 18 Thank you, Commissioner. Let me move forward. 19 Mr. May, I didn't give you an opportunity. 20 You're recognized. 21 MR. MAY: For cross? 22 CHAIRMAN CARTER: Yes, sir. 23 MR. MAY: We have no questions. 24 CHAIRMAN CARTER: Okay. Anything further from 25 the bench?

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1	Staff, you're recognized. I missed staff.
2	Staff, you're recognized.
3	REDIRECT EXAMINATION
4	BY MS. FLEMING:
5	<b>Q.</b> I just have a couple of questions for you,
6	Ms. Walker. There's been a lot of discussion regarding
7	the irrigation wells. Did the District staff meet with
8	the Chuluota residents in October of 2007?
9	A. Yes.
10	Q. And when the customers discussed switching to
11	the irrigation wells, did they also recognize the need
12	to reduce their water consumption?
13	A. I would say yes. I'm not sure that based on
14	the transcript that I read earlier this week that that
15	was the case. I think what I heard was that the
16	customers were looking for another source that's less
17	expensive.
18	<b>Q.</b> Did the District emphasize the need for a
19	reduction in water consumption to the Chuluota
20	residents?
21	A. Absolutely. I mean, we talked about the need
22	to reduce the consumption specific to the service area,
23	but also in the region, because of the regional resource
24	impacts.
25	Q. Is the reduction of landscape irrigation a

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primary tool for customers to reduce their consumption? 1 Α. Yes. 2 MS. FLEMING: We have no further questions. 3 CHAIRMAN CARTER: Okay. Let's do this. On 4 5 exhibits, I've got -- is it 127 through 130? Is that 6 correct. 7 MS. FLEMING: That's correct. CHAIRMAN CARTER: Any objection? Without 8 objection, show it done, Exhibits Number 127 through 9 10 130. (Exhibits 127, 128, 129, and 130 were admitted 11 12 into the record.) CHAIRMAN CARTER: Also -- let me see if I can 13 calibrate this. 201, which would be a late-filed, 14 15 that's the consumptive use permitted discharge of 16 flushing water; 202, which is a late-filed, the consent order specifics; 203, late-filed, which would be the 17 18 average use per customer per day; 204, which would be a 19 late-filed, the number of new homes or new customers that have been added to the base. 20 MS. FLEMING: That's correct, Chairman. And 21 with respect to Late-filed Exhibit 204, it's my 22 23 understanding that the utility can provide that 24 information. MR. MAY: We would be glad to, Mr. Chairman. 25 FLORIDA PUBLIC SERVICE COMMISSION

CHAIRMAN CARTER: Okay. That will be fine. 1 (Late-filed Exhibits 201, 202, 203, and 204 2 were admitted into the record.) 3 CHAIRMAN CARTER: Commissioner McMurrian, 4 you're recognized. 5 COMMISSIONER MCMURRIAN: Thank you. And I 6 7 just thought of this, and I apologize. 8 CHAIRMAN CARTER: Not a problem. 9 COMMISSIONER MCMURRIAN: But with respect to Exhibit 203 -- and I quess it would be best to ask 10 Ms. Walker. Is there a way to have average water use 11 12 per customer per day with respect to the City of Oviedo? I know the utility probably doesn't have that 13 information because they're not -- it's a different 14 utility. But is there some way that we can see what in 15 the City of Oviedo the average customer per day uses? 16 17 THE WITNESS: Certainly. 18 COMMISSIONER MCMURRIAN: So could you include 19 that with Exhibit 203 as well? 20 THE WITNESS: I'll be glad to. 21 CHAIRMAN CARTER: Just make it a composite. 22 COMMISSIONER MCMURRIAN: Thank you, Chairman. 23 CHAIRMAN CARTER: Thank you. Commissioners, anything further for Ms. Walker? 24 25 Thank you, Ms. Walker. You may be excused. FLORIDA PUBLIC SERVICE COMMISSION

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1	THE WITNESS: Thank you.
2	CHAIRMAN CARTER: Staff, you're recognized.
3	MR. JAEGER: Thank you, Chairman.
4	CHAIRMAN CARTER: Wait a minute. Hang on a
5	second. How's our court reporter doing? Are you okay?
6	You're recognized.
7	MR. JAEGER: Staff calls Kimberly Dodson.
8	CHAIRMAN CARTER: Kimberly Dodson.
9	Thereupon,
10	KIMBERLY DODSON
11	was called as a witness on behalf of the Florida Public
12	Service Commission Staff and, having been first duly
13	sworn, was examined and testified as follows:
14	DIRECT EXAMINATION
15	BY MR. JAEGER:
16	Q. Could you please state your name and business
17	address for the record?
18	A. Kimberly Dodson, 3319 Maguire Boulevard, Suite
19	232, Orlando, Florida, 32803.
20	Q. By whom are you employed, and in what
21	capacity?
22	A. Florida Department of Environmental
23	Protection, the drinking water program. I'm the program
24	manager for the compliance and enforcement section.
25	Q. And have you prefiled direct testimony in this
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docket consisting of three pages? 1 Α. Yes. 2 Q. Do you have any changes or corrections to your 3 4 testimony? 5 Α. No. 6 If I were to ask you the same questions, would Q. 7 your testimony be the same today? 8 Α. Yes. MR. JAEGER: Chairman, may we have 9 Ms. Dodson's testimony inserted into the record as 10 11 though read? 12 CHAIRMAN CARTER: The prefiled testimony of the witness will be entered into the record as though 13 read. 14 15 16 17 18 19 20 21 22 23 24 25 FLORIDA PUBLIC SERVICE COMMISSION



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## DIRECT TESTIMONY OF KIMBERLY DODSON

- Q. Please state your name and business address.
- A. Kimberly Dodson, Florida Department of Environmental Protection (FDEP), 3319 Maguire
  Blvd., Suite 232, Orlando, Florida 32803.
- 5 Q. Please provide a brief description of your educational background and experience.
- A. I received a B.A. in Environmental Studies from Rollins College, Winter Park, Florida in
  1995. I worked in environmental analytical laboratories from 1991 to 1996. I have worked
  for the FDEP Potable Water Program since 1996, where my responsibilities have involved
  inspection of drinking water systems, managing the Consumer Confidence Report (CCR) rule
  program, and conducting enforcement. I am currently the Program Manager for the Drinking
  Water compliance and enforcement section.
- 12 Q. What are your general responsibilities at the FDEP?
- A. I oversee all activities of the field and compliance monitoring sections. I review enforcement
   documents, non-compliance letters, and inspection reports generated by compliance and
   enforcement staff.
- 16 Q. Are you familiar with Aqua Utilities Florida, Inc. (Aqua) water systems in Brevard 17 (Kingswood and Oakwood), Lake (48 Estates, Carlton Village, East Lake Harris, Fern 18 Terrace, Friendly Center, Grand Terrace, Haines Creek, Hobby Hills, Holiday Haven, Imperial 19 Terrace, Kings Cove, Morningview, Palms MHP, Picciola Island, Piney Woods/Spring Lake, 20 Quail Ridge, Ravenswood, Silver Lake Estates, Skycrest, Stone Mountain, Summit Chase, 21 Valencia Terrace, Venetian Village and Western Shores), Marion (49th Street, Belleair, 22 Belleview Hills Estates, Belleview Hills, Chappell Hills, Fairfax Hills, Hawks Point, Marion 23 Hills, Ocala Oaks, Westview, and Woodberry Forest), Orange (Tangerine), and Seminole 24 (Chuluota and Harmony Homes) Counties?
- 25 A. Yes. I am familiar with those water systems via review of inspection reports and other

Department records.

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- Q. Is the overall operation and maintenance of the water treatment plants and distribution facilities satisfactory?
- A. Yes. Each of the systems had a sanitary survey inspection during 2007 and were found to be substantially in compliance with all DEP requirements with the exception of the Chuluota water system which is addressed below.
- 7 Q. Has Aqua been the subject of any FDEP enforcement action within the past three years?
- 8 A. Yes. A consent order was sent to Aqua regarding the Morningview system in 2006 for 9 monitoring compliance violations; however, the issues were resolved and the case was closed 10 in 2007. In addition, sanitary survey inspections of the Chuluota treatment plants were 11 conducted on August 29, 2006, and the system was found to be out of compliance for failing to use treatment processes previously approved by FDEP as corrective action for total 12 13 trihalomethane (TTHM) maximum contaminant level (MCL) violations. The utility signed a 14 Consent Order on January 4, 2007 (EX KD-1) and permits to modify the disinfection 15 treatment processes at both water treatment plants were issued by FDEP on March 12, 2007. 16 On February 26, 2008, FDEP issued final clearance for all permitted modifications, and the 17 utility placed these modifications into service on April 7, 2008, changing from free chlorine 18 disinfection to chloramine disinfection. TTHM results for sampling conducted on April 10, 19 2008 were below the MCL; however, TTHM results for sampling conducted on April 22, 2008, were above the MCL. On July 3, 2008, the utility temporarily reverted back to free 20 21 chlorine disinfection due to malfunctioning equipment. New equipment was obtained and the utility returned to chloramine disinfection on September 3, 2008. TTHM compliance 22 sampling for the 3<sup>rd</sup> quarter 2008 was conducted on September 17, 2008, and those results 23 were below the MCL for TTHM; however, the system still exceeds the MCL on a running 24

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annual average.

- Q. Other than the above violations, is Aqua in compliance with all DEP requirements for their water systems in Brevard, Lake, Marion, Orange, and Seminole Counties?
- A. Paul Morrison's testimony addresses bacteriological MCL violations for total coliforms for
   Holiday Haven (2005), Hawks Point (2005), Skycrest (2007), and Chuluota (2008).
- Q. Are you familiar with the independent water testing done after the customer meeting in Oviedo?
- A. Yes. The Seminole County Health department collected water samples at Walker Elementary School on August 5, 2008, and tested for volatile organic contaminants. All of the sample results, with the exception of disinfection by-products (DBPs), were below the detection limit. For the DBPs, the TTHMs exceeded the MCL. On August 4, 2008, the Florida Rural Water Association conducted sampling from 6 locations in the distribution system. The samples were analyzed for nitrate, nitrite, e. coli, total coliform, and heterotrophic plate count. All results were satisfactory.
- Q. Do you have anything further to add?

A. No. I do not.

BY MR. JAEGER: 1 Ms. Dodson, did you also file Exhibit Number 2 Q. KD-1, the Chuluota consent order? 3 A. Yes. 4 Do you have any changes or corrections to that Q. 5 exhibit? 6 7 Α. No. MR. JAEGER: Chairman, that exhibit has been 8 9 identified as Exhibit 109. BY MR. JAEGER: 10 11 Ms. Dodson, you've also indicated you do not **Q**. wish to summarize this testimony; is that correct? 12 13 Α. That is correct. 14 MR. JAEGER: Commissioners, Ms. Dodson may also be able to help shed some light on DEP's role in 15 16 the flushing practices of AUF for its Chuluota system, and she's primarily involved with the Chuluota consent 17 order and the Chuluota system. 18 19 CHAIRMAN CARTER: Before we go to the parties, 20 Commissioner Argenziano. 21 COMMISSIONER ARGENZIANO: Yes. 22 CHAIRMAN CARTER: We have Ms. Dobson from the 23 DEP. Before I go to the parties, I'm going to give you 24 an opportunity to ask your questions. 25 COMMISSIONER ARGENZIANO: Thank you. FLORIDA PUBLIC SERVICE COMMISSION

Ms. Dobson, I had asked -- when we were at Chuluota, I 1 had asked that DEP sample -- do several different 2 things. Are you aware of the things that I asked for? 3 THE WITNESS: I'm somewhat aware of a Q-Tip 4 that was requested to be sampled or analyzed. It was 5 6 not. COMMISSIONER ARGENZIANO: It was not analyzed? 7 THE WITNESS: No. 8 9 COMMISSIONER ARGENZIANO: Why? 10 THE WITNESS: I do not have that information. 11 I was not involved in that at that point. I believe it 12 had to do with limited laboratory means and questions 13 about sampling procedures. 14 COMMISSIONER ARGENZIANO: I can understand 15 sampling procedures, but DEP, you're telling me, has 16 limited laboratory available? 17 THE WITNESS: Yes. 18 COMMISSIONER ARGENZIANO: So why are we still 19 functioning if we have no way to tell -- do the testing 20 and lab results. And I'll get -- as a matter of fact, 21 I'll talk to you about that another time or talk to the 22 Legislature about that. I understand funding, and I 23 understand that there has been a lack of funding. But 24 I've asked for water sampling and several other areas 25 that I think the consumers of the state rightfully

deserve. Has any of that been done? 1 THE WITNESS: There was sampling conducted by 2 the Seminole County Health Department for volatile 3 organic contaminants. There was sampling done by --4 basically funded by the Florida Rural Water Association 5 and conducted by them and taken to an independent lab. 6 COMMISSIONER ARGENZIANO: What did they sample 7 for? 8 9 THE WITNESS: The purpose of that sampling was to look at water quality in the distribution system, 10 11 disinfectant residuals, total coliform bacteria, heterotrophic plate count, nitrate and nitrite, which 12 might be indicative of nitrification. I believe that 13 14 was --15 COMMISSIONER ARGENZIANO: I think I also asked to test if there was hydrogen sulfide in the water in 16 that area, if it was in the Chuluota product that's 17 18 being given to the consumers. 19 THE WITNESS: There was not independent 20 testing done of hydrogen sulfide. 21 COMMISSIONER ARGENZIANO: So basically 22 everything I asked for that day, DEP did none of it. Is23 that what you're telling me? THE WITNESS: I'm not aware of specifically 24 25 what you asked for, so --

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COMMISSIONER ARGENZIANO: Okay. Excuse me. Mr. Chair, I had talked to my staff a few minutes ago, earlier to give DEP a heads-up so they wouldn't be caught, you know, like a deer in the headlights, as they seem to be now. And with all due respect, I gave them the opportunity. And I believe Larry is sitting in the room and could give them the list of things I asked for.

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And I really would like to find out -- you know, I would like to have found out a lot sooner that DEP couldn't or did not choose to do what a Public Service Commissioner had asked. And perhaps in the future, what we need to do is ask the Legislature to ask them, or the Governor, because I really find it incredible that we're smack-dab up against the time now.

And part of this could have solved a lot of problems, because the consumer there really wanted to know about independent testing, and some of those tests could have come out to say that, "Look, this is just what you're saddled with in this area. This is what it is. This is how it is." And we have no results today.

21 So you're telling me the Rural Water 22 Association took some tests and the local Department of 23 Health took some tests, but each thing that I asked DEP 24 for that day -- and I believe the DEP gentlemen that 25 were there were nodding their heads saying, "No problem,

Commissioner," and nothing was done. And I just find that very hard to believe and definitely would like to find out why.

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4 CHAIRMAN CARTER: Why don't we do this. 5 Ms. Dodson, do you think you could maybe as a late-filed 6 get that to us, the information, or maybe do some -- if 7 the information hasn't been -- maybe you can do some 8 additional sampling. And we can get you the -- if you 9 don't have the information requested by Commissioner 10 Argenziano, we can get it to you.

11THE WITNESS: I do need that information.12COMMISSIONER ARGENZIANO: Mr. Chair?13CHAIRMAN CARTER: Yes, ma'am.

14 COMMISSIONER ARGENZIANO: Mr. Chair, didn't we 15 also have a pipe in front of us that day with some 16 residue that we had asked just to try to figure out, to 17 determine what was going on that may resolve -- you know, it may be nothing. It may be indicative of that 18 19 There has been farming in that area for years. area. 20 Who knows? It could be just a pocket in the aquifer 21 that, you know, has certain characteristics. But it 22 could have answered a lot of questions one way or the 23 other.

24 CHAIRMAN CARTER: I'll check with staff and 25 see if they still --

MR. JAEGER: Chairman, we have one of the 1 Q-Tips, and we had asked -- Mr. Prather said -- he took 2 the other one, and he was going to test it. I thought 3 that was the -- and I just found out on Monday that that 4 had not been tested. 5 6 Also, I thought that the Florida Rural 7 Waterworks, they did test for quite a few things, and they tested the Walker Elementary School, and they did 8 take six tests from other areas, so they did do a lot of 9 10 testing. They went out immediately and did the testing, 11 and the hydrogen sulfide I guess did not get in that 12 test. COMMISSIONER ARGENZIANO: Can I ask two

COMMISSIONER ARGENZIANO: Can I ask two things? Why was it just till -- what was it, Monday that we found out -- why couldn't DEP tell us ahead of time that they couldn't do the tests or wouldn't do the tests and wait till this close to when we get to this hearing.

And I would like to know the results, especially at the elementary school. And it wasn't DEP who did that. It was the Rural Water Association. And thank God for them, because we wouldn't have had any testing done. But I am very curious now to find out what those results were.

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I mean, making determinations in this case not

just for rates and so on, but for the quality of water, 1 these things are pertinent to our discussion. And I 2 would like to have the benefit -- and I know Larry must 3 have it, and unfortunately I'm not there, but it would 4 have been nice to hear from DEP ahead of time to tell 5 us, "Hey, we made a mistake. We can't do this." We're 6 7 really not the Environmental Protection Agency who can take these samplings. Maybe the Legislature cut our 8 funds, or whatever the case is, it would have been nice 9 10 to hear ahead of time. And I'll be asking the secretary why we couldn't get that information ahead of time 11 12 instead of finding out today. It's really very --

13 CHAIRMAN CARTER: Commissioner, in defense of 14 Larry, he is here. Larry is here in the room with us, 15 and --

16 COMMISSIONER ARGENZIANO: And I'm glad he is. 17 And he probably has a list of the questions or the 18 things that we asked for that day. I believe he 19 researched the transcript to make sure that we were 20 going to get an answer to all of those questions.

And I can understand if it can't be done, but tell me why, and don't wait till we get to this point to tell me you didn't do it. I don't know whether they're just thumbing their nose at the Public Service Commission or they just didn't have time, but it would

1 have been nice to know.

2	CHAIRMAN CARTER: Well, we're going to give
3	Ms. Dodson we're going to give a placeholder.
4	Commissioners, it will be 205, late-filed exhibit by
5	DEP, and Larry will give Ms. Dobson the list again.
6	Also, staff, the testing that was provided by the REA
7	and other independent entities, we would like to have
8	those results provided as well.
9	(Late-filed Exhibit 205 was identified for the
10	record.)
11	MR. MAY: Mr. Chairman, if I may interject.
12	CHAIRMAN CARTER: Mr. May.
13	MR. MAY: Just to clarify the record
14	there's just so many documents in this case. The
15	Florida Rural Water Authority test results were provided
16	by Aqua. They were obtained by Aqua from the Florida
17	Rural Water and were provided to a number of customers.
18	They're part of Mr. Chris Franklin's testimony as an
19	exhibit, just for the record. So if anybody wants to
20	take a look at those, those are there.
21	COMMISSIONER ARGENZIANO: And that's great,
22	Mr. Chairman.
23	CHAIRMAN CARTER: Commissioner.
24	COMMISSIONER ARGENZIANO: If you remember the
25	day, in front of all those people, I asked the question
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and said I would like some type of an independent study that had nothing to do with Aqua or nothing to do with somebody that Aqua hired or whatever. And I'm glad that the study is there from the rural association. I would really like to see that study, and I will.

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But I asked that question, and DEP acknowledged it, didn't say, "Oh, we can't do it." They didn't even say, "Let me find out about it." They acknowledged they could do it. And now we've got to go back and tell those customers that everything we asked for that day sounded great that day, but none of it happened.

So you can understand my being a little bit perturbed, and I'm looking forward to answers from DEP as to why they couldn't do it or couldn't let us know. Or perhaps they can still go ahead and do it, at least some of those things. Testing the water I would think would be the easiest.

You know, I guess we could ask the Commissioner of Agriculture. He has labs, as little funded as they are, that maybe can help us to get to where DEP can't. But I can't help but feel somewhat angst and aggravated thinking that, you know, there I was telling these people, "This is what I'm going to ask as a Public Service Commissioner, and perhaps we can get

it," and I feel like we've just, you know, been blown 1 off. 2 3 So that's my concern, Mr. Chairman, and I'm going to be looking forward to talking with DEP further 4 on it. 5 6 MR. JAEGER: Chairman Carter, I guess Ms. Dodson did testify on page 3, line 8, about the 7 Seminole County Health Department. And about the 60 8 units, that's from Mr. Lihvarcik's testimony. And the 9 10 hydrogen sulfide was what was left out. And we were 11 reviewing, and we saw that the Q-Tip had been taken by 12 Mr. Prather, and that's when I said, "Well, hasn't this been done," and she said no. So I apologize for the 13 14 hydrogen sulfide, but we did have the testing done, and 15 it was by the Department of Health and the Florida Rural 16 Waterworks. CHAIRMAN CARTER: Commissioner McMurrian. 17 18 COMMISSIONER MCMURRIAN: Thank you, 19 Mr. Jaeger. I just wanted to ask you a quick question. 20 If there were more questions about the test results of 21 the Seminole County Health Department and what was done 22 by the Rural Water Association, would those questions be 23 directed to Mr. Franklin? Because I think what 24 Commissioner Argenziano was saying, she wanted to know 25 what those results were, and for us to talk about that,

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1	we need to get it in the record by a witness.
2	MR. JAEGER: That is in Mr. Lihvarcik's
3	testimony.
4	COMMISSIONER McMURRIAN: Okay.
5	MR. MAY: If I may.
6	CHAIRMAN CARTER: Mr. May.
7	MR. MAY: Mr. Chairman and Commissioner
8	McMurrian, and for Commissioner Argenziano's benefit,
9	the necessary witness, Mr. Preston Luitweiler now,
10	Commissioner Argenziano, he is not an independent
11	witness. He is with Aqua. But he can talk about a lot
12	of these issues with respect to testing and talk about
13	the reports that you all are interested in. Again, he's
14	the utility witness. He's not the agency witness. But
15	I do think it would be informative for you all to ask
16	him some questions as well.
17	COMMISSIONER ARGENZIANO: Well, Mr. Chairman,
18	I'm certainly glad somebody can answer those questions,
19	because I really thought they would be forthcoming from
20	DEP.
21	THE WITNESS: Excuse me. I do have
22	information about the test results from the Seminole
23	County Health Department, FRWA, if that's what we're
24	speaking about.
25	CHAIRMAN CARTER: Okay.
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COMMISSIONER ARGENZIANO: Mr. Chairman? 1 2 CHAIRMAN CARTER: You're recognized. COMMISSIONER ARGENZIANO: Are those the same 3 results that we had that day from the health department, 4 or are they additional --5 THE WITNESS: The sampling conducted by the 6 7 Seminole County Health Department was at Walker Elementary for volatile organic contaminants, all of 8 9 which were below the detection limit with the exception of TTHMs. 10 11 COMMISSIONER ARGENZIANO: Mr. Chairman, can I 12 interject? 13 CHAIRMAN CARTER: You're recognized. 14 COMMISSIONER ARGENZIANO: Can you be more specific? How much below? What were the standards? 15 16 What was considered minimal, maximum? How much below 17 were they, and go into specifics about what the exception was, please. 18 19 THE WITNESS: None of the other contaminants 20 were detected. TTHMs, the value was 140 micrograms per 21 liter, which does exceed the MCL. 22 COMMISSIONER ARGENZIANO: By how much, or what 23 is the --24 THE WITNESS: The standard is 80 micrograms 25 per liter, the maximum contaminant level. FLORIDA PUBLIC SERVICE COMMISSION

1COMMISSIONER ARGENZIANO: Okay. And you said2it was 140?

THE WITNESS: Yes.
COMMISSIONER ARGENZIANO: Okay. Thank you.
CHAIRMAN CARTER: Okay. Ms. Dobson, did you
give an overview on both the -- let me see here. Both
the tests by the Health Department and the Florida Rural
Water Association?

9 THE WITNESS: That was Seminole County Health 10 Department sampling. And just to clarify, on the FRWA sampling, Florida Rural Water Association, that was 11 12 actually in conjunction with DEP. Through funding that 13 is provided to Florida Rural Water Association from DEP, 14 we requested a special study, asked that FRWA go out and 15 conduct the sampling. So it was in conjunction with 16 DEP.

17 COMMISSIONER ARGENZIANO: That would have been
18 nice to know ten minutes ago. Thank you.

CHAIRMAN CARTER: You're right, Commissioner.
I was following -- I was trying to follow on that.
So I guess, Commissioners, on Ms. Dodson's

direct, I guess -- is that page 3 we're looking at,
starting at line 8 through 14? Is that correct?
THE WITNESS: Yes.
CHAIRMAN CARTER: Am I in the right

neighborhood?

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THE WITNESS: Yes.

CHAIRMAN CARTER: And this is related to the 3 water samples for Walker Elementary that was done by the 4 Seminole County Health Department and by the Florida 5 Rural Water Association. 6 7 I'm drawing a blank. I'm missing something. COMMISSIONER ARGENZIANO: Mr. Chair, while 8 you're thinking about that, can I just --9 10 CHAIRMAN CARTER: You're recognized. 11 COMMISSIONER ARGENZIANO: -- ask a question? 12 Thank you. 13 To staff, since they do exceed in the one area 14 at the elementary school, those children still not are allowed then to drink the water from the water 15 16 fountains? Is that correct, or do we know. 17 MR. JAEGER: I think it was only the preschool that they were providing the Culligan water and not --18 19 it's not at the Walker Elementary School, is it? 20 COMMISSIONER ARGENZIANO: Okay. Is that 21 correct? But nonetheless, whatever school it is, it's 22 above the maximum standard allowed? MR. JAEGER: I've been advised -- I would have 23 24 to go back to the transcripts from Monday, but the water 25 fountains have been turned off at a school, but I wasn't

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1	sure if it was the elementary school or where. I would
2	have to go back and look at that.
3	COMMISSIONER ARGENZIANO: Thank you.
4	CHAIRMAN CARTER: I believe we can ask the
5	company witness when we get to the company witness on
6	whether or not
7	COMMISSIONER ARGENZIANO: Mr. Chair, I'm
8	sorry.
9	CHAIRMAN CARTER: You're recognized.
10	COMMISSIONER ARGENZIANO: Since the water
11	association, rural water association did the testing,
12	does it reflect the tests that we asked for, and
13	wouldn't it be beneficial to hear the result of those
14	tests?
15	CHAIRMAN CARTER: Ms. Dodson?
16	COMMISSIONER ARGENZIANO: And if it was done
17	in conjunction with DEP, can DEP read us those tests and
18	tell us what was abnormal, what was not abnormal, and if
19	it did reflect the testing that we had asked for, with
20	the exception of the hydrogen sulfide, which we know
21	they didn't do.
22	CHAIRMAN CARTER: I'm going to go to
23	Ms. Dodson, and then I'll come back. After I come back
24	from Ms. Dodson, Commissioner, could you hold for a
25	second? I'm going to go to Commissioner Edgar.
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COMMISSIONER ARGENZIANO: 1 Sure. CHAIRMAN CARTER: Ms. Dodson. 2 THE WITNESS: I cannot answer the question 3 about whether it is what was asked for. I have not seen 4 that list yet. The sampling that was conducted by FRWA 5 6 had the do with the water quality in the distribution It was for nitrate, nitrite, E. coli, total 7 system. coliform, and heterotrophic plate count. All of the 8 9 results came back satisfactory. That would be -nitrate and nitrite were below the MCLs. There was no 10 11 total coliform bacteria, there was no E. coli bacteria, 12 and there were no detects on the heterotrophic plate 13 counts. 14 CHAIRMAN CARTER: Okay. And again, we'll have the Late-filed 205, and Larry will give you the 15 16 information that we had requested earlier so you can get 17 that back to us. Commissioner Edgar. 18 19 COMMISSIONER EDGAR: Thank you, Mr. Chairman. 20 I'm getting a little confused, so I'm going to just back 21 up for a moment, if I may. 22 CHAIRMAN CARTER: I hope I didn't add to that. 23 COMMISSIONER EDGAR: No. It's just been a 24 long day. 25 You described the testing results at Walker FLORIDA PUBLIC SERVICE COMMISSION

Elementary and said that there was the one water quality aspect that exceeded standards. Which one was that again?

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THE WITNESS: Total trihalomethanes. COMMISSIONER EDGAR: Which is T --THE WITNESS: TTHMs.

COMMISSIONER EDGAR: TTHMS. Thank you. What is -- in an instance like this where the TTHMs exceed the standard, what is the enforcement action, and what is standard for those who may have access to that water?

11 THE WITNESS: The results for TTHMs were 12 consistent with what we were finding with compliance 13 monitoring, that they exceeded the MCL, which is why 14 Chuluota is under the consent order and has added new 15 treatment, which is the chloramines, to lower the 16 disinfection by-products.

17 COMMISSIONER EDGAR: So under that consent 18 order and compliance monitoring, then is it normal 19 practice for both DEP and/or, to your knowledge, any 20 public health unit otherwise for use of the water to be 21 recommended to be limited?

THE WITNESS: No. We do not have anything saying that anybody needs to issue a do not drink notice.

COMMISSIONER EDGAR: Thank you.

THE WITNESS: Can I make one point? 1 CHAIRMAN CARTER: Yes, ma'am. 2 THE WITNESS: And I apologize that I missed 3 The fact that Chuluota is currently under a that. 4 consent order to take corrective action for TTHMs, yet 5 we're still seeing the results that were above the MCL, 6 at that time, Chuluota was on a free chlorine burn at 7 the time because of problems with the analyzer, so we 8 9 would have expected, based on the free chlorine use at 10 that point, that it was above the MCL. 11 CHAIRMAN CARTER: Do you guys plan on doing 12 further testing now that the period is over for that? THE WITNESS: We do not have any plans for 13 14 that. COMMISSIONER ARGENZIANO: Mr. Chair. 15 16 CHAIRMAN CARTER: Commissioner Argenziano. 17 COMMISSIONER ARGENZIANO: I quess a question 18 to the response given to Commissioner Edgar. Why, if 19 the trihalomethanes are higher than the maximum allowed, does DEP not issue a do not drink? I know that's some 20 21 of the questions that were asked by the consumers at the 22 time. 23 THE WITNESS: That is not in our rules. It is not in DOH, Department of Health guidance. There are 24 25 public notification requirements that they must supply FLORIDA PUBLIC SERVICE COMMISSION

1	to the public, and that is the extent of it.
2	COMMISSIONER ARGENZIANO: Okay. Then let me
3	ask, why is there a maximum if it doesn't matter if you
4	drink it?
5	THE WITNESS: They base that on the standard,
6	and I can't pull it off the top of my head, but drinking
7	two liters every day for 70 years. So they assume that
8	it is not an acute risk. It is a chronic risk.
9	COMMISSIONER ARGENZIANO: Okay. And in that
10	chronic risk, doesn't it affect different people
11	differently? People with their autoimmune systems
12	deficient, can that be a problem?
13	THE WITNESS: Yes, and there is language
14	included in the public notice for those people to seek
15	additional advice from their medical doctor if
16	necessary.
17	COMMISSIONER ARGENZIANO: Okay. Well, since
18	one of my jobs is to look at quality of water and not
19	figure out why DEP would or would not say do not drink,
20	I know it goes above and beyond all that.
21	Let me ask one other question. In regards to
22	them lowering the disinfection by-product process, why
23	was it so high to begin with? Was there several other
24	times where E. coli was found, or one other time? Why
25	was the disinfection process so high to begin with?
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THE WITNESS: Are we talking about 1 disinfection by-products or E. coli? 2 COMMISSIONER ARGENZIANO: The dis -- you had 3 indicated before that the results of TTHMs was due to --4 or the change in the process was because the 5 disinfection by-products were very high. Now, if they 6 were using so much of a disinfection by-product, why 7 were they using it so high? Were there other problems 8 9 such as E. coli or other indicators to have that 10 disinfection so high? 11 THE WITNESS: Are we talking about the time 12 when Seminole County Health Department sampled? COMMISSIONER ARGENZIANO: I quess. Let me 13 14 replace this. Why was the utility's disinfection process so high? What do you think? What caused it? 15 16 Was that a result of them trying to correct, taking a corrective measure? I don't know the time frame. 17 18 THE WITNESS: Are you asking why the 19 disinfection by-products were so high or the 20 disinfection tech process? 21 COMMISSIONER ARGENZIANO: The process, and the 22 by-products. I guess that's two questions. 23 THE WITNESS: I don't have any indication that 24 the disinfection process was so high. And that 25 terminology doesn't really make sense to me. The

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disinfection by --

COMMISSIONER ARGENZIANO: Okay. Well, let me 2 put it to you this way. Let me put it to you this way. 3 You said before that it was a result -- and I tried to 4 write it down -- that the lower -- let's see. 5 The 6 disinfection by-products were a result of a -- no, you didn't say they were a result of a problem. You had 7 indicated that there was a disinfection by-product 8 problem, and they changed the process, and as a result 9 10 of that process, you would have expected to see the 11 TTHMs higher. Is that what you said? 12 THE WITNESS: I said that during the Seminole County Health Department, they were on a free chlorine 13 14 burn, they were not using the chloramines, and that we would expect increased disinfection by-product formation 15 when they are using free chlorine. 16 17 COMMISSIONER ARGENZIANO: Okay. That makes a 18 difference. So they were not using a higher 19 disinfection product --20 THE WITNESS: No. 21 COMMISSIONER ARGENZIANO: -- to take care of a 22 particular problem they had noticed? 23 THE WITNESS: No. 24 COMMISSIONER ARGENZIANO: Okay. Thank you. 25 CHAIRMAN CARTER: Commissioners, I've just FLORIDA PUBLIC SERVICE COMMISSION

plumb forgot my question. Probably about the only thing 1 I would do is add further confusion to this. 2 Mr. Reilly. Ms. Bradley. 3 MR. REILLY: I do have cross-examination. 4 CHAIRMAN CARTER: Sure. You're recognized, 5 sir. 6 Commissioners, if you have questions you think 7 of during the time, Mr. Reilly will yield to you. 8 9 Mr. Reilly, you're recognized. 10 MR. REILLY: Absolutely. 11 CROSS-EXAMINATION BY MR. REILLY: 12 13 Q. Good afternoon. Good afternoon. 14 Α. 15 Steve Reilly with the Office of Public Q. Counsel. A quick question or two for you. 16 On your testimony, page 2, lines 13 through 17 14, you state Aqua signed a consent order on January 4, 18 19 2007; is that correct? 20 Α. That is correct. 21 And you go on further to state that on 0. 22 March 12, 2007, FDEP actually issued the permits for both water plants to modify their disinfection treatment 23 24 processes; correct? 25 A. Correct. FLORIDA PUBLIC SERVICE COMMISSION

And further, the FDEP permits authorized the Q. 1 construction of facilities to change the plants from 2 free chlorine disinfection to chloramine disinfection; 3 correct? 4 Α. Correct. 5 Now, further, on page 2, line 16, you state Q. 6 7 that FDEP issued final clearance for all permitted 8 modifications, and that occurred as late as February 26, 2008. 9 10 And I quess my first question is, what happened in that considerable time between issuing the 11 12 permits and getting this final clearance, which is almost 11 months? 13 14 Correct. Α. 15 Why did it take so long? Q. 16 Α. The utility -- and I did not bring all of that 17 documentation with me, but the utility had a delay in 18 the construction of the project based on the contractor 19 needing the full 180 days to construct, as I recall. My 20 understanding also was that they only had one contractor 21 that bid, so they were working with one person. 22 Now, on page 2, line 17 of your testimony, you **Q**. 23 say they went ahead and placed the modifications into 24 service on April 7, 2008. 25 Α. Correct.

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So beginning on April 7, 2008, the two water 1 Q. plants began chloramine disinfection instead of the 2 chlorine disinfection? 3 4 Α. Correct. 5 Q. Now, beginning on April 7, 2008, was Aqua's chloramination disinfection process successful? Did it 6 7 correct both the TTHM problem while also controlling the black water problem? 8 It appears to have taken care of the TTH end 9 Α. 10 product problem based on the results of April 10. I am not aware of any black water complaints at Chuluota 11 during that time. 12 However, although the sample was okay on April 13 Q. 10th, didn't they have an above maximum contaminant 14 level a few days later on April 22nd? 15 Yes. 16 Α. And what was the cause of that? 17 ο. 18 My understating of it is that they were having Α. 19 problems with the analyzers properly dosing the chlorine 20 and ammonia, which is why they went to the free chlorine 21 burn while they took the ammonia feed offline and the 22 analyzers offline. 23 So at least temporarily, their effort was **Q**. 24 unsuccessful? 25 Α. Yes. FLORIDA PUBLIC SERVICE COMMISSION

1	Q. If I could have you refer to your Exhibit
2	KD-1, which is our Comprehensive Exhibit Number 109.
3	That is a copy of the consent order; is that not
4	correct?
5	A. Yes.
6	Q. I guess I would direct your attention first to
7	paragraph 5.a. Does this paragraph require Aqua to
8	submit its application to construct the needed
9	improvements within 30 days of signing the consent
10	order, or February 4, 2007?
11	A. Yes.
12	Q. Now, the next paragraph, paragraph 5.b, does
13	that require Aqua to furnish FDEP all information
14	necessary to complete the application within 45 days, or
15	March 10th, 2007?
16	A. Yes.
17	Q. Now, apparently this deadline to complete the
18	application was materially met, because FDEP does issue
19	permits to construct the necessary facilities for both
20	plants on March 12, 2007.
21	A. Correct.
22	Q. So we're okay up to that point?
23	A. Yes.
24	Q. Would you please read paragraph 5.c in the
25	consent order for us?
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"Within 60 days of issuance of any required 1 A. permits, respondent shall complete the modifications 2 approved pursuant to the permits issued in accordance 3 with paragraphs 5.a and 5.b above, and submit to the 4 Department the engineer's certification of completion of 5 construction along with all required supporting 6 documentation. Respondent shall receive written 7 department clearance prior to placing the system 8 modification into service." 9 10 ο. And so this deadline, of course, was quite 11 seriously not met? 12 That is correct. Α. 13 To the tune of about -- well, eight months Q. 14 difference? 15 Α. Correct. 16 Q. And again, the reason you said previously was 17 contract problems? 18 Α. Correct. 19 Or single provider. ο. 20 Would you please read paragraph 5.f briefly? "Within five months of the effective date of 21 A. 22 this consent order, respondent shall complete all 23 corrective actions needed to resolve the MCL exceedances 24 and submit written certification of completion to the 25 Department for all modifications."

Could you help describe what this paragraph Q. means? Does this mean that they've not only completed construction and they've solved the problem and -- is this a complete solution to the problem? That's what 5.f is? It's completing all corrective actions. This Α. is a model consent order that is now being tweaked because of the strange wording. It has been accepted to mean that the construction is complete and that they would be able to begin treatment, and we would see the results fall below the MCL. It does not necessarily mean that they've got four quarters below the running annual average --

Q. Because that would take a year?

15 A. That we would expect for a return to16 compliance.

Q. But otherwise, they're fully up and operational, and it appears that it's working?

A. Yes.

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20 Q. And in my reading of this, that would have 21 been the deadline -- if you follow this consent order, 22 it would have been June 4, '07, instead of -- well, 23 depending on how you interpret it, we might be here 24 today, let's say, in November of 2008, because at least 25 there have been some favorable reports. They are up and

running. And other than the free burn, is it your judgment that our current status today, with at least a couple of quarterly positive reports, that they have satisfied 5.f, or when do they satisfy 5.f?

A. The previous understanding and when this consent order was drafted, which was a model, was that the construction was completed and they began to feed the necessary treatment. It is unclear as to whether or not it actually involves follow-up sampling at this point. They are currently rewording the --

Q. But best case scenario, even without having complete resolution of the problem, we're talking September '08 anyway, and that's when they worked through the kinks of the equipment and were back up and running, and we're now starting to address the TTHM problem?

A. We saw the first set of satisfactory results
in April, April 10th, actually, which is what we
expected to see, until they started having problems with
the analyzer. They sampled again, and the results were
high.

22 Q. So you can't count that as even an immediate 23 success? It ran into problems almost from the 24 beginning.

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A. From a compliance standpoint, the average of

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the samples were actually below the MCL.

**Q.** Okay. Real quickly, I'll have you go ahead and read paragraph 8 of the consent order.

"Respondent agrees to pay the Department Α. 4 stipulated penalties in the amount of \$100 per day for 5 each and every day respondent fails to timely comply 6 7 with any of the requirements of paragraph 5 of this 8 consent order. A separate stipulated penalty shall be 9 assessed for each violation of this consent order. 10 Within 30 days of written demand from the Department, respondent shall make payment of the appropriate 11 12 stipulated penalties to the Department of Environmental Protection." 13

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Q. That's fine. You can stop there.

A. Thank you.

Q. But the idea is that this was -- I guess my question to you is, in light of all these many, many months that went by, did the Department ever notify --

A.

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Q. Explain what --

Yes.

A. Aqua paid stipulated penalties accruing from the date of June 24, 2007. And I only have the final dollar amount in my notes. I didn't write out the number of days, but I believe it was around -- let's see here. 28,000 --

CHAIRMAN CARTER: One second. 1 THE WITNESS: \$28,900. 2 BY MR. REILLY: 3 And that's subsequent to signing the consent Q. 4 order? 5 Α. Yes. 6 7 CHAIRMAN CARTER: Mr. Reilly, let me interrupt you. Don't lose your train of thought. You may want to 8 9 ask that question again. 10 For those of you that are not staffers here at 11 the Public Service Commission, the doors have automatic electronic locks on them, and they lock at 5:30, so just 12 out of an abundance of caution, let's try to use the 13 buddy system, maybe have someone to stand by there to 14 let you back in, because once you get out, you can't get 15 back in. 16 17 I was looking for an appropriate break, Mr. Reilly, and I apologize to you for that. You're 18 19 recognized, sir. 20 MR. REILLY: I'm really coming pretty close to the end here. 21 22 BY MR. REILLY: 23 The last paragraph I would have you direct **Q**. 24 your attention to is paragraph 18. It's a fairly short 25 paragraph. Could you read that? FLORIDA PUBLIC SERVICE COMMISSION

Paragraph 18? 1 Α. 2 Q. Yes, ma'am. "Respondent is fully aware that a violation of 3 Α. the terms of this consent order may subject respondent 4 5 to judicial imposition of damages, civil penalties up to \$5,000 per day per violation, and criminal penalties, 6 7 except as limited by the provisions of this consent order." 8 9 Q. And I guess that's just an additional stick 10 that can be employed when the Department deems it's 11 necessary. 12 A. Yes. 13 Now, that was not utilized in this case? Q. 14 NO. Α. And so your additional penalties were based on 15 Q. 16 the \$100 per day? 17 Α. Yes. 18 Q. Okay. Thank you very much. The last --19 CHAIRMAN CARTER: Mr. Reilly, may I interject? 20 Because I interrupted you before, I did not hear. You 21 said you had the total amount of the penalty, but you 22 didn't have the daily. 23 THE WITNESS: \$28,900. 24 CHAIRMAN CARTER: \$28,900? 25 THE WITNESS: Right, so 289 days. FLORIDA PUBLIC SERVICE COMMISSION

MR. REILLY: And that was computed on \$100 a 1 2 day. CHAIRMAN CARTER: Thank you, Mr. Reilly. 3 You're recognized. 4 BY MR. REILLY: 5 Last question. On page 3, line 4 through 5, 6 Q. you state that Chuluota had bacterial maximum 7 contaminant level violations in -- well, you stated that 8 another witness reported that. 9 10 Α. Yes. 11 And again, I'm just asking you, what do you ο. know about this bacterial maximum contaminant problem in 12 13 2008? Apparently it was total coliforms in April of '08, and the same thing, total coliform exceedance in 14 15 June of '08, as I understand. What can you share additionally with us on that testimony? 16 17 Α. The total coliform positive result in June was not a maximum contaminant level violation. 18 It was a 19 single sample in the distribution system, so that was 20 not a violation. 21 Q. All right. 22 A. For the April one, they sampled on April 24th 23 and April 26th. I believe eight of nine samples in the 24 distribution system were positive, which generated the 25 maximum contaminant level violation. They were required FLORIDA PUBLIC SERVICE COMMISSION

to do follow-up sampling and issue a public notice. 1 2 Q. Do you have any -- is there any way for you to speculate as to why this occurred? 3 Α. I cannot. 4 It could be for sundry reasons? 5 Q. 6 Α. They pop up with systems all the time. I 7 cannot. MR. REILLY: That concludes our questions. 8 CHAIRMAN CARTER: Thank you, Mr. Reilly. 9 10 Ms. Bradley. 11 MS. BRADLEY: Thank you. 12 CROSS-EXAMINATION 13 BY MS. BRADLEY: 14 Ms. Dodson, I have to deal with this 0. frequently, so can I get you to confirm for the 15 16 Commission that even though it's referred to as the 17 Seminole County Health Department and may get some funding from the county, that the Seminole County Health 18 Department is actually a subdivision of the Department 19 20 of Environmental Protection, and its employees are 21 employees of the Department? I don't think that's correct. Of the 22 Α. 23 Department of Environmental Protection? 24 Uh-huh. Q. 25 Seminole County Health Department? Α. FLORIDA PUBLIC SERVICE COMMISSION

1	Q. Uh-huh.
2	A. No.
3	Q. I'm sorry. I apologize. They would be a
4	subdivision of the State Department of Health rather
5	than DEP.
6	A. Yes.
7	<b>Q.</b> Okay. Thank you.
8	<b>A.</b> I thought I was about to learn something new.
9	<b>Q.</b> I get my agencies no, that's okay.
10	CHAIRMAN CARTER: It's late.
11	MS. BRADLEY: It's very late, and later for
12	some of us.
13	BY MS. BRADLEY:
14	Q. Do you all do any testing were you aware
15	that they were doing some flushing to get rid of the
16	TTHMs that kind of, I guess, clogs up in the loops of
17	the system?
18	A. I don't think they're necessarily flushing to
19	get rid of the TTHMs. They use chloramines to control
20	the disinfection by-product formation. They flush to
21	maintain residual in the distribution system and
22	potentially to avoid nitrification in the distribution
23	system. We are aware of their flushing activities.
24	Q. Do you all have any involvement in that as far
25	as testing to see what level of stuff is coming out of

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that?

A. No. We would expect it's treated drinking water that's being served to the homes. We wouldn't expect that it's anything different than treated drinking water.

Q. Okay. You mentioned some testing that was done by the County Health Department at Walker Elementary School. Can you tell me when that was done?

A. That was done -- well, let me look at my testimony. That might be an easier way to tell. August 5, 2008.

Q. If you have testing that's being done in the system that shows that it has dropped below the maximum TTHM level, but you have testing that's done at a location like the school that's above it, how do you handle that?

A. I don't know, and that's not the situation here.

Q. Okay. Excuse me. Was the TTHM level elevated throughout the system at that time?

A. Yes. Likely, yes.

Q. All right. Have you all done any subsequent
testing, or do you know if the health department has
done any subsequent testing to see if that's still high?
A. No. We are relying on compliance monitoring.

Do you have any indication from the compliance Q. 1 monitoring that would show whether or not Walker 2 Elementary has dropped below? 3 Walker Elementary, no. Levels in the 4 Α. distribution system where they are required to sample, 5 which is the maximum residence time point, are below the 6 7 MCL. You said maximum --8 Q. 9 Maximum residence time, the point in the Α. distribution system piping where water would stand the 10 11 longest and you would expect more formation of 12 disinfection by-products. 13 Q. And you know from the system where exactly 14 that would be so that you can go to that place each 15 time, or is that something that changes? It should not change. It would probably 16 A. 17 change if there's changes to the distribution system and the piping, but at this point, we would expect that it 18 19 remains the same. 20 Q. Can you clarify -- one of the witness or 21 someone testified that DEP can't testify inside of 22 lines. And I think this may have come up in conjunction 23 with -- at one of the hearings, they talked about --24 somebody brought in a piece of pipe that had some gunk 25 on the inside. And I don't know whether it was in

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relation to that, but one of the witnesses said 1 2 something about that you all didn't test inside lines. Α. Well, speaking for the drinking water program, 3 we rely on self-monitoring. The utilities do -- they 4 have people collect the samples and take them to the 5 laboratory. So the drinking water program does not have 6 provisions for conducting sampling. 7 Do you know if anybody else would have Q. 8 authority to test something like that if the folks are 9 complaining about qunk in their lines? 10 11 Α. I do not. We typically deal with drinking 12 water samples, water. 13 Q. Okay. Mr. Reilly was asking you about the consent order and the penalty and all of that, and you 14 said it was 28,900, I believe. 15 16 Α. Yes. 17 Is that a usual penalty for water companies, 0. or how does that relate to other companies that you have 18 been involved with? 19 20 A. I don't have any information about that. This 21 was actually my first MCL -- I was a field person, so it 22 was my first MCL violation dealing with a consent order. 23 So I don't have that information readily --So you don't have any information from the 24 Q. 25 people you were working with whether was this was FLORIDA PUBLIC SERVICE COMMISSION

average, or extremely high, or anything along those 1 lines. 2 The initial penalty was average, was typical. 3 Α. The stipulated penalties is not something that we've had 4 to use a lot as far as I know. 5 Okay. Has there been more than one consent 6 Q. 7 order? Α. For? 8 9 Aqua. Let me be with direct with it. There Q. was some testimony or something from someone that 10 11 indicated that there was another consent order recently that was entered into. Is that true or not? 12 13 Α. You may be referring to Morningview for 14 monitoring violations. Does that --15 COMMISSIONER ARGENZIANO: Mr. Chair? 16 CHAIRMAN CARTER: Commissioner, you're 17 recognized. COMMISSIONER ARGENZIANO: I'm sorry. 18 If 19 Ms. Bradley would speak into the mike. I think she's 20 turning away. I'm getting every other word. 21 CHAIRMAN CARTER: She's doing it on purpose. 22 MS. BRADLEY: Thank you, Mr. Chairman. 23 CHAIRMAN CARTER: Just kidding, Ms. Bradley. 24 MS. BRADLEY: I really needed that. CHAIRMAN CARTER: She's getting some papers, 25 FLORIDA PUBLIC SERVICE COMMISSION

1	Commissioner.
2	BY MS. BRADLEY:
3	Q. It may have been Imperial.
4	MR. JAEGER: (Microphone off.) No, it was
5	(inaudible).
6	BY MS. BRADLEY:
7	Q. Never mind. I apologize.
8	A. Okay.
9	Q. I got my testimony confused again.
10	A. Okay.
11	MS. BRADLEY: I don't think I have any further
12	questions, but I thank you.
13	CHAIRMAN CARTER: Thank you. Commissioner
14	Argenziano.
15	COMMISSIONER ARGENZIANO: Mr. Chair.
16	CHAIRMAN CARTER: You're recognized.
17	COMMISSIONER ARGENZIANO: I think I've asked
18	the questions I needed to ask and would just ask that we
19	get those results. I wish they would have been on
20	record today, because I think it's important and
21	pertinent to our discussion when it comes to water
22	quality. But, I think if there's any other questions
23	that I have, I think we've already asked them, and
24	hopefully we'll get the answers to those sometime soon.
25	CHAIRMAN CARTER: Thank you, Commissioner.

1 Mr. May. 2 CROSS-EXAMINATION BY MR. MAY: 3 Ms. Dodson, I just have one -- well, two Q. 4 questions, very briefly, and appreciate your patience. 5 Does Aqua report quarterly on TTHM compliance? 6 7 Α. Yes. And has the past three guarter results been in 8 Q. compliance for TTHMs? 9 As far as I know, as of yesterday, we had two 10 Α. quarters of samples that were below the MCL. 11 12 You haven't got your most recent third **Q**. 13 quarter? Α. Correct. 14 15 MR. MAY: Thank you. No further questions. CHAIRMAN CARTER: Thank you. 16 Staff. 17 COMMISSIONER ARGENZIANO: I'm sorry. CHAIRMAN CARTER: You're recognized, 18 19 Commissioner. COMMISSIONER ARGENZIANO: I did remember one 20 other question, a follow-up question to what Ms. Bradley 21 had asked before about the water being tested. And I 22 23 think your answer was where the water resides most of 24 the time, where it sits the longest. Would that be 25 holding tanks of some type, and is that where you

actually do the testing from? 1 THE WITNESS: No, it's in the distribution 2 3 system. COMMISSIONER ARGENZIANO: Okay. What part of 4 the distribution system would the water reside the 5 6 longest? THE WITNESS: For Chuluota? 7 COMMISSIONER ARGENZIANO: Uh-huh. 8 THE WITNESS: I don't have that information in 9 front of me. 10 11 COMMISSIONER ARGENZIANO: So then you couldn't 12 answer where the testing is done then either? THE WITNESS: You know what? I have test 13 results. It appears 390 Lake Lenelle and 803 Mazurka 14 15 are the two maximum residence time sampling points for 16 Chuluota. 17 COMMISSIONER ARGENZIANO: Okay. And if you could follow up with them and get answers to what those 18 19 are in the distribution system. Are they holding tanks? 20 Are they -- is it water moving more or less --21 obviously, it's got to be less in some capacity if it's 22 residing there the longest, and just let me know if that's where the actual testing occurs. 23 24 THE WITNESS: Okay. 25 COMMISSIONER ARGENZIANO: Thank you. FLORIDA PUBLIC SERVICE COMMISSION

MR. JAEGER: Chairman, would that be another 1 late-filed exhibit then for where the testing points 2 3 are? CHAIRMAN CARTER: It's related to the last 4 Ms. Dodson, do you think you could just make it a 5 one. composite and add it to 205? Would that be okay for 6 7 you? THE WITNESS: That will work for me. 8 9 CHAIRMAN CARTER: Because it's really related 10 to testing, and I think we'll just kind of -- since 11 we're on that subject, we'll just make it a composite exhibit on Late-filed 205. 12 13 MR. JAEGER: Chairman Carter, I have just one or two questions in relationship to where Bruce started. 14 15 CROSS-EXAMINATION BY MR. JAEGER: 16 This quarterly testing, until they get a four 17 Q. 18 months -- I'm sorry, fourth quarters running average below the maximum contaminant level, they have to keep 19 20 testing; is that correct? 21 They will remain on quarterly testing until Α. 22 the running annual average is below the MCL. 23 MR. JAEGER: Thank you. THE WITNESS: You're welcome. 24 25 CHAIRMAN CARTER: Anything further from staff? FLORIDA PUBLIC SERVICE COMMISSION

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1	MR. JAEGER: I would move Exhibit 109.
2	CHAIRMAN CARTER: Any objections?
3	MR. MAY: No objections.
4	CHAIRMAN CARTER: Without objection, show it
5	done, 109.
6	(Exhibit 109 was admitted into the record.)
7	CHAIRMAN CARTER: Also, just FYI,
8	Commissioners, I think for Ms. Dobson, we've got Exhibit
9	205, which will be a late-filed, testing of the water
10	per Commissioner Argenziano's list. Also on that has
11	been added the testing locations in terms of
12	Ms. Dodson, you understand in terms of the locations and
13	where is it at those locations they're actually testing?
14	THE WITNESS: Yes.
15	CHAIRMAN CARTER: Okay. Does that reflect
16	what you were asking, Commissioner Argenziano?
17	COMMISSIONER ARGENZIANO: It does if you just
18	add it this way. What I'm looking for is where it was
19	indicated that the water resides the longest, because
20	that would be the place, as she had explained, that
21	would have a residual of any problems. It would be
22	there in higher concentrations, so I would like to know
23	that the tests are done in those places where the water
24	resides the longest.
25	CHAIRMAN CARTER: You said it much better than

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I did. Thank you. Ms. Dodson will do that. 1 (Late-filed Exhibit 205 was admitted into the 2 record.) 3 CHAIRMAN CARTER: Commissioners, staff, 4 parties, anything further for this witness? 5 MR. JAEGER: May Ms. Dodson be excused? 6 CHAIRMAN CARTER: You just made it too, 7 Ms. Dodson, before the doors locked. You may be 8 9 excused. Thank you for your time. 10 THE WITNESS: Thank you. CHAIRMAN CARTER: Okay. Commissioners and 11 12 staff, we are now about to move into rebuttal, and that would be -- Mr. May, you're recognized. 13 MR. MAY: Aqua would call its rebuttal 14 15 witness, Mr. Preston Luitweiler. CHAIRMAN CARTER: Mr. Luitweiler. 16 MR. MAY: Chairman Carter, Mr. Luitweiler has 17 18 arrived today, so I don't think he has been sworn yet. 19 CHAIRMAN CARTER: Okay. Would you please 20 remain standing, Mr. Luitweiler, and raise your right 21 hand. 22 (Witness sworn.) CHAIRMAN CARTER: Thank you. You may be 23 seated. 24 25 Thereupon, FLORIDA PUBLIC SERVICE COMMISSION

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1	PRESTON LUITWEILER
2	was called as a rebuttal witness on behalf of Aqua
3	Utilities Florida, Inc. and, having been first duly
4	sworn, was examined and testified as follows:
5	DIRECT EXAMINATION
6	BY MR. MAY:
7	Q. Good afternoon, Mr. Luitweiler.
8	A. Good afternoon.
9	Q. Would you please state your name and business
10	address for the record?
11	A. My name is Preston Luitweiler. My business
12	address is 762 Lancaster Avenue, Bryn Mawr,
13	Pennsylvania.
14	Q. Mr. Luitweiler, did you prepare and cause to
15	be filed in this proceeding 12
16	CHAIRMAN CARTER: Excuse me, Mr. May. I
17	apologize to you. Just give me everybody just kind
18	of hold for one second. We're off the record.
19	(Off the record briefly.)
20	CHAIRMAN CARTER: Let me just apologize to the
21	Commissioners and to the parties here. I was on a roll,
22	and I forgot to give the court reporter a break. We're
23	going to go for remember, I said don't make any early
24	dinner plans. So let's do this, Commissioners. Let's
25	give the court reporter at least 20 minutes so she can

FLORIDA PUBLIC SERVICE COMMISSION

get her fingers a little limber. Twenty be okay? Ten? 1 Okay. Do I hear five? We're on recess for ten minutes. 2 3 (Short recess.) CHAIRMAN CARTER: We are back on the record. 4 5 And when we left, we had completed with Ms. Dodson. Staff, are there any other preliminary matters before we 6 move further? 7 MR. JAEGER: I know of no other preliminary 8 9 matters, Chairman. 10 CHAIRMAN CARTER: No? Then we recognize Mr. May, who had called Mr. Luitweiler. Did I get it 11 Right. 12 13 MR. MAY: Yes, Mr. Chairman, you did. 14 CHAIRMAN CARTER: You're recognized. BY MR. MAY: 15 16 Mr. Luitweiler, you've been sworn, have you Q. 17 not? 18 A. Yes. 19 Q. Did you prepare and cause to be filed 12 pages of rebuttal testimony in this proceeding? 20 21 Α. Yes. 22 Do you have that rebuttal testimony before you Q. today? 23 24 Α. Yes. Do you have any corrections or revisions to 25 Q. FLORIDA PUBLIC SERVICE COMMISSION

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that testimony?

One correction on page 7, line 11, the word Α. "two" should be replaced by "three."

> ο. Thank you.

MR. REILLY: Excuse me. What was the location 5 6 again? THE WITNESS: Page 7, line 11. 7

MR. REILLY: And two should be?

THE WITNESS: Three.

10 BY MR. MAY:

11 Q. With those corrections noted, if I were to ask 12 you the questions that are contained in your rebuttal 13 testimony, would your answers be the same?

> Α. Yes.

15 Mr. Luitweiler, have you attached Exhibit 1, Q. which is designated as PL-1, to your rebuttal testimony? 16 17

Α. Yes.

Do you have any corrections to that exhibit? 18 0. 19 Α. No.

20 Q. Have you prepared a summary of your rebuttal 21 testimony?

> Yes, I have. Α.

Could you please provide that --Q.

24 CHAIRMAN CARTER: The prefiled? You want to 25 insert the prefiled before he does his summary?

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1	MR. MAY: The exhibit?
2	CHAIRMAN CARTER: The prefiled testimony.
3	MR. MAY: I'm sorry. I'm sorry, Mr. Chairman.
4	I apologize. I was trying to I was getting ahead of
5	myself. Mr. chairman, we would ask that the rebuttal
6	testimony of Mr. Luitweiler be inserted into the record
7	as though read.
8	CHAIRMAN CARTER: Mr. Luitweiler, first of
9	all, let me apologize to you for your name, Luitweiler.
10	I said however I said it, I'm glad I've forgotten it.
11	The prefiled testimony of the witness will be
12	entered into the record as though read.
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	FLORIDA PUBLIC SERVICE COMMISSION

### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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#### AQUA UTILITIES FLORIDA, INC.

#### **REBUTTAL TESTIMONY OF PRESTON LUITWEILER**

#### DOCKET NO. 08121-WS

1	Q.	What is your name and business address:
2	A.	My name is Preston Luitweiler. My business address is 762 W. Lancaster
3		Avenue, Bryn Mawr, Pennsylvania 19010.
4	Q.	Have you previously submitted testimony in this proceeding?
5	A.	No.
6	Q,	By whom are you employed and in what capacity?
7	A.	I am Vice President and Chief Environmental Officer of Aqua Services, Inc.
8	Q.	Please describe your education and business experience.
9	A.	I have a B.S. degree in Civil Engineering from Drexel University and an M. S.
10		in Environmental Engineering from Drexel University. I am a licensed
11		Professional Engineer in Pennsylvania. I have worked for Aqua (and its
12		predecessor, Philadelphia Suburban Water Company) for 24 years in various
13		capacities, including Design Engineer, Research Engineer, Manager of
14		Research, Vice President, Water Resources, and presently Vice President and
15		Chief Environmental Officer.
16	Q.	What are your duties as Vice President and Chief Environmental Officer?
17	A.	I am responsible for water quality and environmental compliance for Aqua
18		facilities in 13 states, including Florida. I supervise Aqua's corporate
19		environmental compliance staff and central laboratory in Bryn Mawr, and
20		provide indirect supervision to state and regional environmental compliance
21		personnel who report to state and regional presidents.

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What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to address and respond to water quality issues raised by Kimberly H. Dismukes who prefiled testimony in this case on behalf of the Office of Public Counsel.

#### 5 Q. Are you sponsoring an exhibit to your rebuttal testimony?

6 A. Yes, I'm sponsoring Exhibit PL-1.

Q. Ms. Dismukes addressed water quality issues in Chuluota. Can you
generally comment on the water quality issues that she raises?

A. Yes. Ms. Dismukes overlooks the fact that the raw water from the four wells in
the Chuluota system is difficult to treat, and has presented treatment challenges
for decades, long before AUF acquired the system in July 2004. The fact that
AUF inherited these water quality issues when it acquired the Chuluota system
was recognized by residents and State Officials in their testimony at the public
input hearings.

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## Q. Before you address details of Ms. Dismukes' testimony regarding water quality, can you generally describe disinfectants and disinfection byproducts?

Α. Disinfectants are an essential element of drinking water treatment because of 18 the barrier they provide against waterborne disease-causing microorganisms. 19 The most commonly used disinfectant for primary disinfection of drinking 20 water is chlorine applied as gaseous chlorine or as liquid chlorine bleach. 21 Either form of chlorine produces free chlorine in water. Another common 22 disinfectant is a form of chlorine called combined chlorine, or chloramine. 23 24 Both chlorine and chloramines are commonly used as residual disinfectants to maintain disinfection in a water utility's distribution system. 25

Disinfection byproducts (DBPs) form when disinfectants used to treat drinking water react with naturally occurring organic carbon in the water. Total trihalomethanes (TTHMs) are a type of disinfection byproduct formed during disinfection with chlorine and chloramine. As a general rule, free chlorine generally forms more of these DBPs than are formed with chloramines.

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#### Q. Can you explain what chloramination is?

A. Chloramination is the use of chloramines as a disinfectant, usually to maintain a disinfectant residual in public water supply distribution systems. Ammonia and chlorine are added to water at carefully controlled levels to form chloramines, also referred to as combined chlorine residual. Chloramines are weaker than free chlorine as a primary disinfectant, but they are effective for maintaining a disinfectant residual in a distribution system and they do not continue to form DBPs in the distribution system.

#### Q. Has AUF implemented chloramination at Chuluota?

A. Yes. The FDEP issued a consent order in December 2006 requiring AUF to
 implement chloramination. As I've stated, chloramination typically reduces
 levels of certain by-products of chlorination.

Q. Can you briefly describe the challenges in treating the raw water in
Chuluota?

A. Yes. The water in Chuluota contains high levels of hydrogen sulfide. This must be removed by air stripping or oxidized by chlorination to control "rotten egg" taste and odor in the distribution system. The tray aerators at both of the water treatment plants in Chuluota remove about 20% of the hydrogen sulfide at the prevailing operating conditions and pH of the water from the Chuluota wells.

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The remaining hydrogen sulfide requires high doses of free chlorine to I treat. This high dose of chlorine also reacts with moderate levels of natural 2 3 organic carbon in the water and produces TTHMs. The TTHMs continue to be formed in the distribution system unless the disinfectant is changed to 4 chloramines after primary disinfection. This is what Florida Water Service tried 5 6 to do in the treatment process prior to Aqua's acquisition of the system. Unfortunately, in Florida's climate, and with residual elemental sulfur in the 7 treated water, the distribution system became very vulnerable to nitrification - a 8 condition where all chlorine residual is lost and where metal sulfides can be 9 formed and released in the system creating "black water." These were the 10 prevailing conditions in the Chuluota system in July 2004 when Aqua acquired 11 the system. At that time, the primary water quality issues were a loss of 12 residual disinfectant, discolored water, and taste and odor. Aqua quickly 13 addressed these conditions with reversion to free chlorine. However, free 14 chlorine also caused higher levels of a chlorine disinfection by-products in the 15 system. As you can see, it is somewhat of a balancing act. 16

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**Q**.

## that Ms. Dismukes overlooks?

Are there other challenges in treating the raw water quality in Chuluota

A. Yes. One very important system management tool to control nitrification, and
to respond to "black water" conditions, is aggressive and extensive flushing of
the distribution system. AUF is limited in the amount of water it has access to.
The Consumptive Use Permit (CUP) from the St. Johns River Water
Management District restricts the amount of water that can be withdrawn from
the Chuluota wells, limiting the frequency, duration and volume of flushing
that can be done to manage and maintain the distribution system.

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- Does Ms. Dismukes take those treatment challenges into account in her prefiled testimony?
- A. No.

**Q**.

# Q. Please explain what method the Company is currently using to disinfect the Chuluota raw water.

The Company is utilizing free chlorine in the ground storage tanks for primary A. 6 disinfection, and combined chlorine, or chlormination, in the distribution 7 system to minimize the formation of TTHMs in the distribution system. 8 Sufficient chlorine, in the form of bleach (sodium hypochlorite) must be fed 9 into the ground storage tanks after the tray aerators so that a minimum free 10 11 chlorine residual can be measured at the outlet of the tank. This residual value is the value FDEP requires utilities to use to monitor and calculate primary 12 disinfection effectiveness. If the chlorine residual is lost in the tank, there is also 13 a risk of nitrification occurring in the tanks. 14

After the ground storage tank, the chlorine residual is boosted and then immediately "quenched" with ammonia to form chloramines. This process must be carefully controlled to prevent overfeeding of chlorine or ammonia. In the system Aqua had designed and installed in 2007, this is done automatically with residual analyzers that continuously measure free chlorine and total chlorine levels, and chemical dosing pumps that are adjusted continuously to meet flow and chemical demand.

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## Q. Can you briefly explain how a water system becomes out of compliance for TTHMs?

A. Yes. All water systems are required to test their water initially at least once a year for TTHMs at locations in the distribution system that have been selected

1		to represent potential worst case conditions for the formation of TTHMs.
2		Results are compared with the U.S. Environmental Protection Agency drinking
3		water standard, or Maximum Contaminant Level (MCL) of 80 micrograms per
4		liter (or parts per billion). If initial annual testing shows elevated levels of
5		TTHMs, then samples are collected and tested quarterly. When the Running
6		Annual Average (RAA) of all quarterly test results exceeds the MCL, the
7		system is in violation of the standard. In Chuluota's case, when AUF converted
8		the system to free chlorine, a sample for TTHMs tested above the MCL, and in
9		subsequent quarterly sampling, the RAA exceeded the MCL.
10	Q.	What is the current status of the water quality in Chuluota?
11	А.	TTHM results in the distribution system have been below the MCL for the
12		successive quarters. The RAA is still slightly above the MCL.
13	Q.	How does a system come back into compliance?
14	А.	To return to compliance, the RAA must fall below the MCL. In Chuluota's
15		case, TTHM results in the distribution system have been below the MCL for
16		two successive quarters, but the RAA remains slightly above the MCL.
17	Q.	What other tests have been taken since the public input hearings?
18	А.	On August 4, 2008, Florida DEP and Florida Rural Water Association took
19		samples at six sites throughout the Chuluota distribution system monitoring for
20		nitrate, nitrite, E. coli, total coliform, and Heterotrophic Plate Count. All
21		samples were negative for all parameters tested. The purpose of this sampling
22		was to ensure that disinfection was being maintained in the distribution system
23		and nitrification was being controlled while the system was being prepared to
24		return to chloramination.
25		On August 5, 2008, the Florida Department of Health collected samples

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of raw water at the four Chuluota production wells. The purpose of that testing was to determine whether or not there was any contaminant heretofore untested present in the raw water. All samples came back negative for a wide array of analytes for which testing was done.

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## Q. Has AUF conducted tests at Chuluota subsequent to the public input hearings?

A. Yes. On July 25, 2008, AUF collected similar raw water samples from the wells
and sent them to Aqua's central laboratory in Bryn Mawr. Sensitive broadrange screening tests were done for a wide array of potential possible
contaminants, and nothing was found to suggest any kind of contamination of
the wells except for naturally occurring sulfides.

I would also note that AUF has retained Dr. James Taylor, a renowned
scientist and researcher in water treatment chemistry, processes and technology.
AUF has engaged Dr. Taylor to assist in evaluating the challenges of water
treatment at Chuluota.

On September 5 and September 10, 2008, students from the University of Central Florida (UCF) under Dr. Taylor's supervision conducted raw water and process control tests at the Chuluota wells and water plants. The testing provided a baseline for levels of naturally occurring hydrogen sulfide in the raw well water, and performance of the tray aerators.

In September, Dr. James Taylor recommended an extensive protocol for testing distribution samples to monitor for early signs of nitrification. Since September 25, sampling and testing has been conducted weekly at seven locations in the distribution system by Aqua personnel.

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Q. Can you report on any updated progress for the Chuluota water system

since filing Mr. Franklin's supplemental direct testimony?

Yes. As mentioned in Mr. Franklin's supplemental direct testimony, AUF 2 A. purchased new analyzers for the chloramination system. The analyzers are 3 testing instruments that provide continuous feedback on the levels of 4 disinfectant at critical points in the treatment process. The analyzers provide a 5 6 signal that is used by the process control computer to adjust the chemical doses to achieve optimum levels for maintaining disinfection and controlling TTHM 7 formation. Because of the challenging raw water quality at Chuluota, the 8 9 treatment processes are a delicate balancing act, and must be adjusted frequently to react to changes in raw water quality, water temperature, and 10 system demand that all affect the levels of disinfectant residual at various points 11 12 in the process. Too much chlorine, or excessive detention time in the presence 13 of free chlorine can result in elevated TTHMs. Too little chlorine in the ground storage tank, too little chloramine or too much ammonia at the point of entry 14 15 can lead to nitrification in the distribution system and episodes of "black water."

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## Q. Has AUF taken other proactive steps to address the quality of water in and around Chuluota?

As I previously stated, AUF has engaged Dr. James Taylor to assist in 18 A. 19 addressing the challenges of water treatment at Chuluota. Dr. Taylor reviewed the work that had been done by AUF's staff, our consulting engineer, Boyd 20 Environmental, and other consultants. He recommended special sampling, and 21 22 arranged for graduate students at UCF to conduct thorough baseline sampling at 23 both Chuluota water plants. He prepared a report summarizing his findings 24 (ASR1), a copy of which is attached to this testimony as Exhibit PL-1. That report was reviewed with FDEP on October 31, 2008. Dr. Taylor has also 25

evaluated data when the system was returned to chloramination in September,
 and made recommendation on process changes such as the target chlorine to
 ammonia ratio at the treatment plants.

Dr. Taylor continues to advise AUF and has established an extensive distribution system sampling protocol to evaluate the treatment process and distribution system operation, guide distribution system flushing, and provide early warning of nitrification conditions.

Dr. Taylor is also collaborating with Boyd Environmental in evaluating additional treatment process alternatives to improve removal of sulfides in the raw water and reduce chlorine demand and disinfection by-product formation.

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I also note that since July 2004, AUF has added 14 automatic flushing valves in the distribution system. These automatic valves flush predetermined amounts of water from the dead ends during hours of low use to keep the water from stagnating in the mains. These are critical for maintaining water quality at dead ends and extremities of the distribution system where nitrification would otherwise first occur.

AUF has also designed, bid, and awarded a contract to provide new water mains to loop some of the dead ends of the distribution system to avoid stagnation of water in the system and improve flows.

AUF has also applied and received Florida DEP approval for a carbon dioxide (CO2) system at the Chuluota water plant #2. Because of the unique water quality in Chuluota, everything we can do to improve the raw water quality ahead of the disinfection processes gives us greater flexibility in the chemical balancing act required to meet the multiple competing goals of water treatment in this system. As stated previously, the raw water in Chuluota

contains high levels of hydrogen sulfide. Adding CO2 ahead of the tray aerators
at water plant #2 will lower the pH of the water in the aerators and in this way
greatly improve the removal of hydrogen sulfide in the aerators. With less
hydrogen sulfide in the raw water, less chlorine will have to be added to react
with the sulfides that remain. Lowering the chlorine dose will lower the TTHM
formation.

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# Q. Can you comment on Ms. Dismukes' reference to coliform bacteria in Chuluota?

A. Yes. As is standard procedure for any water utility company, AUF tests for
coliform bacteria. There was one instance where we received a positive sample
for coliform bacteria. I agree with Mr. Prather's testimony that it is not
uncommon for samples to test positive for bacteria [Oviedo Service Hearing
Transcript Page 134]. I also agree with Mr. Prather that further tests were done
and the samples came back negative. We have not had any further problems
with this issue.

## Q. Can you please provide an update on AUF's negotiations with the City of Oveido?

A. I have not been directly involved in the negotiations with the City, but I
understand that Mr. Franklin will be providing an update in his rebuttal
testimony.

### Q. Finally, can you please give a brief update on the MCL violation in The Woods?

A. The Woods is a small system with one well that a previous owner had equipped
 with an unconventional iron removal filtration system constructed of precast
 concrete tanks. The configuration of the system resulted in highly variable

1091 detention times and operational challenges for controlling chemical doses and disinfection. These factors along with raw water quality, variability of system demand, and the configuration of the distribution system, resulted in occasional high levels of DBPs in water samples from the distribution system. In the first quarter of 2006, the Running Annual Average of test results for TTHMs exceeded the MCL. In 2007, Aqua designed a new, more conventional pressure greensand

filter treatment system. Construction of the new system was completed in June
2008. Samples collected in September 2008 tested below the MCL for TTHMs
at 39.4 ppb.

#### Q. Does that conclude your rebuttal testimony at this time?

12 A. Yes.

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1	CHAIRMAN CARTER: Mr. May.
2	MR. MAY: Just wait until you see
3	Mr. Szczygiel tomorrow.
9 4	CHAIRMAN CARTER: I've got a few hours before
5	that one. You may proceed.
6	BY MR. MAY:
7	Q. Mr. Luitweiler, would you please provide a
8	summary of your rebuttal testimony at this time?
9	A. Yes. Good afternoon, Mr. Chairman and
10	Commissioners. As vice president and chief
11	environmental officer of Aqua Services, Inc., I'm
12	responsible for water quality and environmental
13	compliance for Aqua's water and wastewater systems.
14	My rebuttal testimony addresses the water
15	quality issues in Chuluota raised in testimony by
16	Kimberly H. Dismukes for the Office of Public Counsel
17	and addresses some of the longstanding issues involving
18	the water in Chuluota. It further contains an update on
19	the measures we have taken in Chuluota to address these
20	water quality issues.
21	As discussed in my testimony, the water from
22	the Chuluota wells contains high levels of natural
23	hydrogen sulfide that must be removed or oxidized to
24	control odors at customers' taps. The tray aerators at
25	the Chuluota water plants currently remove about

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20 percent of the hydrogen sulfide. The rest is oxidized with free chlorine. Free chlorine is also used as a primary disinfectant. Chlorine reacts with moderate levels of natural organic carbon in the water to produce disinfection by-products.

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Total trihalomethanes are one category of distinct by-products. As described in my rebuttal testimony, it is a difficult balancing act to address the natural hydrogen sulfide and at the same time, keep within the total trihalomethane limits, and it requires daily monitoring.

12 However, Aqua Utilities Florida has been aggressively addressing the issue, and to date, total 13 14 trihalomethane results in the distribution system have 15 been below the maximum contaminant level of 80 parts per billion for three successive quarters. And I would just 16 17 like to point out that although Kim Dodson just testified that there were two quarters in compliance, 18 19 the last quarterly results should have been reported by 20 the laboratory by today, and we have received those 21 results prior to this. So that's the reason for the 22 apparent discrepancy.

In September, new analyzers were installed at the new water treatment plants, and since then, as I previously mentioned, total trihalomethane results in

the distribution system have been below the MCL.

Aqua Utilities Florida has also retained 2 Dr. James Taylor, a renowned scientist and researcher in 3 water treatment chemistry, processes, and technology. 4 Under Dr. Taylor's supervision, his team has conducted 5 raw water and process control tests at the Chuluota 6 wells and water plants. Dr. Taylor has also reviewed 7 the work that has been done by Aqua Utilities Florida's 8 9 staff and consultants. He prepared a report summarizing 10 his findings that was reviewed with Florida DEP on 11 October 31, 2008, and that report is attached to my 12 rebuttal testimony. In addition, Dr. Taylor is 13 collaborating with Boyd Environmental to evaluate 14 additional treatment process alternatives. 15 Also described in my rebuttal testimony is the

16 project that Aqua Utilities Florida has contracted out 17 to provide new water mains to loop some of the dead ends 18 in the distribution system to improve water quality at 19 these locations.

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Thank you.

MR. MAY: Thank you, Mr. Luitweiler. We would tender Mr. Luitweiler for cross-examination.

23 CHAIRMAN CARTER: Thank you. Mr. Reilly,
24 you're recognized, sir.

MR. REILLY: Thank you very much.

1	CROSS-EXAMINATION					
2	BY MR. REILLY:					
3	Q. Good evening, Mr. Luitweiler.					
4	A. Good evening.					
5	Q. There were questions posed to Mr. Lihvarcik					
6	that were referred to you. One of those questions was					
7	I had asked what was the principal water quality					
8	problem with the Chuluota system in 2004 immediately					
9	after Aqua purchased it, and I think he wanted you to					
10	answer that question.					
11	A. In July of 2004, the principal water quality					
12	problem in the Chuluota distribution system was a black					
13	water condition that was caused by, we believe, an					
14	episode of nitrification in the distribution system.					
15	Q. Okay. Thank you. I had a number of					
16	cross-examination questions to Mr. Lihvarcik concerning					
17	the decision by Aqua to immediately begin construction					
18	of a new Chuluota wastewater treatment plant after					
19	purchasing the system. I would like to ask you a few					
20	questions about that area.					
21	Mr. Lihvarcik stated that the capacity of the					
22	old Florida Water wastewater treatment was 100,000					
23	gallons per day in 2004. Is that was that the case?					
24	A. I believe it was in that area, yes.					
25	Q. Nevertheless, he stated that I believe he					
	FLORIDA PUBLIC SERVICE COMMISSION					

stated that there was a need to expand the capacity and that Florida Water was already proceeding with the project, and that basically Aqua sort of inherited the project from Florida Water. A. That is correct. At the time that we purchased the system, Aqua -- Florida Water Service had already done preliminary design work for a replacement and expanded plant there. The plant was both old and in poor condition, and there was a capacity issue. **Q**. What was the capacity of the disposal facilities at the time that Aqua purchased the Chuluota wastewater system? About 100,000 gallons per day. Α. **Q**. Okay. And what type of disposal facilities serve that plant? Α. It's a spray irrigation field. So it would be your testimony today that the Q. old wastewater treatment plant was properly matched with its disposal facilities in the range of approximately 100,000 gallons per day? Α. Yes. What is the treatment capacity of the new Aqua Q. expanded wastewater treatment plan?

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24A. The design capacity is 400,000 gallons per25day. Again, that was the capacity of the plant that had

been preliminarily designed by Florida Water Service. There was a lot of thinking and projections by Florida Water Service and representations by Florida Water Service as to why they had selected that capacity.

We did some both value engineering in looking 5 at their preliminary design and also looking at their 6 projections, and I actually did some alternatives 7 analysis to look at what could have been done to build a 8 smaller plant. And because of the duplication of some 9 10 of the key processes that were required, there would have been minimal savings in building a smaller plant 11 12 there, because some of the processes had to be 13 duplicated, some of the key -- it was a ring type 14 standard activated sludge plant with clarifiers. You have to have two of those units, because if anything 15 16 goes wrong with one or it has to be taken down for 17 painting or coating, you have to have some redundancy.

Q. Nevertheless, since the new wastewater treatment plant has been constructed with this increased capacity, would it be fair to say there's a serious mismatch between at least the treatment capacity and the disposal capacity to support that treatment?

A. We currently have more treatment capacity than
we have disposal capacity. There had --

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Q. A factor of -- excuse me. Go ahead.

A. There had been plans by Florida Service to acquire additional disposal area. We are currently in negotiations with Utilities, Inc. to actually acquire some of the treated wastewater, and that was actually in the back of our minds when we built the upgraded plant. In the process of upgrading the plant, we put in processes, including a disk filter to provide a very good quality effluent so that this could be used for public access reuse water.

Q. Although some plans were on the table, obviously, Aqua made a corporate decision to go forward with a major expansion of the wastewater treatment plant, and at the same time, made the decision to not expand the disposal facilities; is that true?

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A. That's true.

And yet Mr. Lihvarcik's testimony was that we 16 Q. 17 were immediately embarking on this major wastewater 18 treatment expansion because of the demands that were being placed on that system required an expansion. And 19 yet isn't it counter -- it's not consistent to then --20 21 since this entire wastewater treatment plant was started 22 in 2004 and finished in 2006, there has been no attempt 23 to really increase by one gallon per day the permitted 24 capacity to treat wastewater.

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A. Well, I'll take exception with the

representation in the question. We have been working for at least two years on alternatives for additional disposal at the Chuluota facility, including the negotiation with Utilities, Inc.

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Q. If there truly was an immediate growing demand for wastewater services, Aqua would have had to expand its disposal facilities. So obviously, there was no immediate demand in 2004, because here we are in 2008, and there is no expansion of the disposal.

10 As I explained previously, there were two Α. 11 drivers for this project. The first driver was the condition of the existing plant. The second driver was 12 13 the fact that the plant was at capacity or very close to being at capacity, and certainly projected to be over 14 capacity very soon. Those were the conditions that we 15 16 inherited from Florida Water Service, and those were the 17 conditions that we believed prevailed at the time.

I can almost assure you that had we made the decision to not rebuild this plant and not expand the plant, we would be sitting here today, and I would be answering questions about the condition of the wastewater facilities in Chuluota as well as questions about the drinking water facility.

The reconstruction, the rebuilding of that plant is one of the things that I am proud of and I

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think Aqua can be proud of.

Q. Nevertheless, what was the pressing problem that everybody was concerned about at the time Aqua purchased Chuluota. Was it not the black water problem? And had the company committed more of its resources to address that problem during these four years of TTHMs and all the things that we've lived through all these four years, might that water problem have played out differently than it has for the last four years?

MR. MAY: Mr. Chairman, I think there's about
three or four questions intertwined into one. So,
Mr. Reilly, could --

13 BY MR. REILLY:

Q. Restating it, had the company committed itself, as Mr. Lihvarcik testified at the New Port Richey hearing, that given our finite resources, we were going to address environmental compliance and water quality problems, had the company done that in Chuluota, would we have had a different history of the water quality program in Chuluota for the last four years?

A. 20/20 hindsight is nice to have, and Monday morning quarterbacking is easy to do. At the time that we acquired the system from Florida Water Service, the water system from Florida Water Service, with the problems that were going on with the black water and the

nitrification problems, it was our belief that those conditions could be addressed by going to a free chlorine burn-out, which is what was being recommended by Florida Water Service and also recommended and approved by DEP, and then eventually returning to chloramination if an issue with disinfection by-products arose. That in fact is the substance of the letter from Tetra Tech, which I believe you sponsored as an exhibit.

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That's correct. Speaking of the change from 9 Q. 10 chloramination to -- or rather, from free chlorine to 11 chloramination, which is what we've been involved in the 12 last few years, when I asked Mr. Lihvarcik a question 13 which suggested that Aqua had quickly switched from 14 chloramination disinfection to free chlorine disinfection after purchasing the system in 2004, 15 16 counsel for Aqua objected to the reference to quickly 17 switching. And since I was told that was your terminology, I would ask you to tell us what you meant 18 19 by quickly switching.

A. Well, I can say it was as quickly as possible
under the direction and encouragement of Florida DEP put
in place, actually set in place by Florida Water
Service. The first call that I recall on this issue was
about June 25th of 2004 from Craig Anderson from Florida
Water Service. This was just days before our closing,

when he called to tell me that they were having a few discolored water complaints and odor complaints in Chuluota, and they felt that they needed to go to free chlorine.

And after digging and asking for explanations, 5 and he was quite insistent that this what needed to be 6 done and that Florida DEP was insisting on this also, I 7 spent the 4th of July weekend and the 4th of July on the 8 phone with Kim Dodson and Vivian Garfein working out 9 10 language for a boil water notice that they insisted be 11 distributed within the community and working on actions 12 that would be taken to try to address this immediate 13 water quality concern.

14Q. Referring to the consent order on page 4, line1516 through 18 of your testimony, if you could take a16look at that.

A. Yes.

Q. Let me find it myself here.

19Okay. Here you say, "The FDEP issued a20consent order in December 2006 requiring AUF to21implement chloramination." And my question to you is,22is that really true? Is there any requirement in the23consent order requiring Aqua to implement24chloramination?

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A. I'm not sure. I believe certainly the consent

order required the THM issue to be addressed. And we had already engaged an engineer to start working on a design for a system to return to chloramination after we had had several successive quarters of THM results above the maximum contaminant level. That is one of the reasons that we were able to submit a design and application package in December almost immediately after receiving the draft of the consent order from Florida DEP.

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10 And as you'll note in Ms. Dodson's testimony, 11 Mrs. Dodson's testimony, that consent order was actually 12 signed in January. So we had actually submitted the 13 application in December, and our engineers had had 14 consultations with Florida DEP leading up to that 15 consent order being issued. So it was clearly our 16 understanding that it was their expectation that the 17 only thing that we could do within the time frame that 18 they were proposing in their consent order was a return 19 to chloramination, and it was our expectation that 20 that's what they wanted us to do.

Q. I was just going by the terms of the consent order that was signed by DEP and Aqua, where it required the company to hire a professional engineer and submit a plan to deal with the ongoing TTHM problem. And my question was going to be, well, what other options did

the company consider, and why were they rejected and so 1 2 forth. And you're saying you didn't consider any other options, and --3 I'm saying we were already on the way to 4 Α. making that decision. And again, I'll refer back to the 5 Tetra Tech exhibit which you sponsored as an exhibit --6 Certainly. 7 ο. -- which had recommended that we might have to Α. 8 go back to chloramination as a -- in the event that we 9 10 were not able to get the TTHMs into compliance. We had already hired one engineering firm that gave us that 11 12 recommendation in 2004. 13 Q. And speaking of the 2004 time period, when 14 Aqua did its due diligence, I assume it was aware of the black water problem at the time that it purchased the 15 16 system. 17 Well, we were aware of it as of June 25th, Α. 2004. 18 19 And again referring to the Tetra Tech/Hartman Q. 20 & Associates report that clearly identified the dead-end 21 lines as an issue and the need to loop the lines, I 22 guess the follow-up question to you would be, why after 23 all these years only now has the company begun a program 24 to loop those lines? 25 Well, I think it's incorrect to characterize Α. FLORIDA PUBLIC SERVICE COMMISSION

that there has been nothing done up to date, up to the time of the project described by Mr. Lihvarcik yesterday to loop and eliminate dead-end lines. In fact, Aqua has done pipeline improvement projects in the distribution system in Chuluota prior to this particular project. Mr. Lihvarcik testified that there were limitations on opening roads to replace pipe, and we were trying to coordinate pipeline replacement with the municipalities. We also installed auto flushers, which was one of the recommendations in the Tetra Tech report, to address the dead-end lines that we were not able to loop.

12 Q. In my question, I wasn't inferring that Aqua 13 had done nothing to try to address water quality 14 problems from 2004. But with the specific 15 recommendation on the looping of the lines, my question 16 was, why did not that specific action -- why did it take 17 four years to take that action? I guess that was the 18 question.

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A. Well, I think I answered that.

20 Q. That you did other things besides looping the 21 lines? Was that your answer?

A. There were many dead ends in the Chuluota system. Even the project that is being done as we speak, there will still be unlooped dead-end lines in the Chuluota system. There are portions of the system

that are designed with cul-de-sacs, which will probably 1 always be dead ends. We have installed auto flushers on 2 3 those lines. MR. REILLY: No further questions. 4 CHAIRMAN CARTER: Thank you, Mr. Reilly. 5 Ms. Bradley. 6 CROSS-EXAMINATION 7 BY MS. BRADLEY: 8 9 Mr. Luitweiler, are you aware that some of the Q. 10 physicians or pediatricians in the Chuluota area have advised parents that they should not let their children 11 drink or even bathe in the water? 12 13 No, I'm not. Α. 14 Have you not reviewed any of the testimony at **Q**. 15 the hearings? 16 Α. I have reviewed some of the testimony at the hearings, not all of it. I have no independent 17 18 knowledge that a pediatrician has made that 19 recommendation to any of our customers. I have seen 20 testimony from others, secondhand knowledge, secondhand 21 testimony, that that kind of recommendation has been 22 made. 23 Q. So you haven't reviewed the Chuluota 24 testimony? The entire testimony, no, I have not. 25 Α. FLORIDA PUBLIC SERVICE COMMISSION

1 Q. Do you understand how the parents that testified at that hearing are concerned about the water 2 quality when their pediatricians and their veterinarians 3 are telling them not to wash their kids or their animals 4 in this? 5 MR. MAY: I object to that. There was no 6 7 pediatrician that testified at the Chuluota hearing. MS. BRADLEY: As I said, several parents 8 testified that their pediatricians had told them. 9 10 MR. MAY: For the record, that's hearsay. 11 CHAIRMAN CARTER: You may proceed. 12 MS. BRADLEY: Thank you, sir. 13 BY MS. BRADLEY: Do you remember the question? 14 Q. 15 Α. I am aware and certainly sympathetic to the 16 fact that there are many people in Chuluota who have been unhappy with their water quality for a very long 17 time, including the period of time of black water, when 18 they had a boil water notice delivered to their door in 19 20 July of 2004, and every quarter that we have delivered notices of total trihalomethane MCL exceedances. 21 Ι 22 consider that to be a serious challenge for our company 23 and something that we are committed to resolve and that we have worked very hard in the past year and a half to 24 25 resolve.

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Are you aware of the testimony at the hearings 1 Q. 2 when people talked about the number of pipes they had had to replace or faucets they had had to replace 3 because they had essentially been eaten out? 4 5 Α. I have seen some of that testimony. Do you understand the concern that people have 6 **Q**. about their own health if they're drinking something 7 that has eaten out the pipes? 8 9 Well, I can see where people may make that Α. 10 connection. On the other hand, this is not to me a 11 mystery in terms of what may be happening with the 12 pipes. Similar to the black gunk that I have heard 13 testimony about here, this is an outgrowth and a result 14 of the hydrogen sulfide, the natural hydrogen sulfide 15 that is in the raw water. In my rebuttal testimony and in my summary that I just read, I tried to very quickly 16 address that issue about what happens to the sulfide. 17 18 I would just like to refer you to page 3 of 6 19 of my exhibit to the paragraph at the bottom. This is a 20 report by Dr. Taylor. Dr. Taylor is a retired Ph.D. 21 from the University of Central Florida and a very well 22 respected expert in water treatment in Florida. And if 23 you'll bear with me, I'll read this paragraph. 24 "Another treatment challenge at Chuluota is the presence of sulfides in the raw water. The tray 25

aerators at both water treatment plants intended to 1 remove hydrogen sulfide have only a limited effect on 2 the sulfides at Chuluota. Addition of free chlorine 3 after aeration forms sulfur from the remaining sulfides. 4 Colloidal elemental sulfur contributes to turbidity in 5 the treated water and can form iron and copper sulfide 6 when exposed to either metal in distribution systems. 7 This process has been described in the literature, Lyn 8 9 and Taylor, Journal AWWA, 1993. The resulting sulfide films are not hard and provide an opportunity for 10 11 biofilm growth. These deposits can be released into the 12 bulk water, resulting in occurrence of black water in distribution systems." 13

Are you aware that the people are still **Q**. complaining about the water quality and the qunk and the 16 ooze and the black stuff floating in their water?

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17 Α. I am not aware of recent complaints from residents of Chuluota about those particular conditions. 18 19 I am aware this has been a longstanding problem, and it 20 would not surprise me if people are still seeing 21 evidence of those deposits that are in the distribution 22 system and in the plumbing.

And do you understand how people don't feel 23 0. comfortable drinking something with stuff floating in 24 it? 25

Yes, I can understand that. A. 1 You talked about the automatic flushers that 2 Q. you put in. Can you tell me when that was done? 3 It was done over a number of years. I can't Α. 4 tell you -- there are 13 or 14 automatic flushers that 5 have been installed in the system from 2004 until today. 6 I can't tell you when each one of them went in. 7 You don't have that information? Q. 8 I can get that if it's important. 9 Α. No. 10 ο. When did you hire Dr. Taylor? 11 In July or August of this year. I believe it Α. 12 was August. 13 Q. And you said you hired him before you got the 14 consent order requiring you to hire someone? MR. MAY: Ms. Bradley, could you please 15 16 rephrase that question? BY MS. BRADLEY: 17 The consent order that you got from DEP 18 **Q**. 19 indicated that you could pay a fine, or in the 20 alternative, I think it said -- actually, I think it 21 said it ordered you to hire an engineer. Was Dr. Taylor 22 the engineer that you hired? 23 Α. No. 24 Okay. Have you hired an engineer? Q. 25 Α. Yes. FLORIDA PUBLIC SERVICE COMMISSION

And who is that? 1 Q. 2 Boyd Environmental. Α. Excuse me? 3 ο. Boyd Environmental. 4 Α. And where are they located? 5 Q. James Boyd. Outside of Orlando. 6 Α. I keep getting people that don't know or seem 7 Q. to avoid it, but if there's TTHMs, during the time that 8 9 there has been TTHMs in the water, if you were doing 10 flushing, would that not return the TTHMs to the 11 aquifer? 12 Α. Very unlikely, for two --13 Q. Do they disappear in -- go ahead. 14 Α. Total trihalomethanes are volatile, and they 15 generally do not survive long in the environment. They 16 volatilize. So discharging treated drinking water to 17 the ground will not introduce trihalomethanes into the 18 groundwater. 19 You're aware, are you not, that this is an **Q**. 20 area -- the Chuluota area is an area that -- actually, 21 that whole territory has had a water shortage recently; 22 correct? 23 Α. I'm aware that Hurricane Faye came by in 24 August and that there was rather severe flooding in the entire St. Johns basin. I'm aware that there was a 25 FLORIDA PUBLIC SERVICE COMMISSION

drought in much of Florida about a year or a year and a 1 So there have been times of abundant water, 2 half ago. 3 and there have been times of drought in the last several 4 years. Did you hear the testimony of Ms. Dodson where 5 **Q**. 6 she advised that everyone needs to be conserving water? Yes. 7 Α. In light of that need for conservation, did 8 **Q**. you all consider alternatives other than flushing that 9 10 uses so much water? 11 As I explained in my testimony and in my brief Α. 12 summary, maintaining compliance with total trihalomethanes, maintaining hydrogen sulfide levels, or 13 14 preventing hydrogen sulfide levels from forming in the 15 distribution system, controlling hydrogen sulfide, and 16 most importantly, controlling nitrification is a very difficult balancing act. And flushing is a very 17 18 important element recommended, again -- I'll go back to the Tetra Tech report, recommended in that report and 19 20 acknowledged by most water professionals. 21 Let me say a few things about flushing, 22 because I've heard a lot of things said about it in the 23 last day and a half, almost two days now. Flushing is 24 not an appropriate long-term substitute for optimized 25 treatment, but it is and always will be an important

adjunct to treatment to maintain distribution system water quality, especially in distribution systems that have experienced nitrification.

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Under the guidance of Dr. Taylor, since September, September 25th, to be exact, Aqua has undertaken an intensive distribution system monitoring program to detect the early signs of nitrification. This program will now allow us to optimize the timing and duration and hopefully reduce flushing.

In Chuluota, flushing serves two purposes, one, to reduce the hydraulic residence time, especially in the ground storage tank at Water Plant Number 2, and thereby reduce total trihalomethane formation in that ground storage tank where the water is in contact with free chlorine; and secondly, to control nitrification in the distribution system.

In the first instance, I mentioned Hurricane 17 18 Faye in August. In August, we were struggling to get 19 the chloramination system up and running, and one of the 20 challenges that we had was suddenly, the demand in the 21 system was way down because we had just had a hurricane 22 and many inches of rain, and nobody was using water for 23 irrigation. So we had very long hydraulic retention 24 time in the ground storage tank at Water Plant 2. We 25 needed to do a lot of flushing at a time when there was

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already a lot of water on the ground.

I have heard about pictures that were 2 presented on Monday. I don't know where or when those 3 pictures were taken, but if any of them were taken in 4 5 August of this year, we had a lot of water to get rid of and move around in order to maintain water quality in 6 7 the Chuluota system because of a variety of factors that all came together in a perfect storm for us in August of 8 9 this year.

For the control of nitrification, compared to manual flushing, auto flushers allow more effective targeting of flushing in time and location to do the most good to control water quality complaints. And so we have installed 13 or 14 auto flushers in the Chuluota system, and we believe, as Tetra Tech had believed in 2004, that was the right thing to do.

Q. If we can go back to my question, though, did you consider other options in light of the water shortage?

A. Other options being what? Can you --

21 Q. You tell me. I'm asking did you consider 22 other options?

A. When you have a system that is subject to
nitrification and you have that system on chloramination
and you have to maintain water quality at the dead ends

of that system, there is no other option to flushing. You indicated that although that's the ο. recommendation of the engineers, that it's not a 3 long-term solution. So what is the long-term solution 4 you're looking at? I would like to turn your attention to page 4 Α. of 6 and 5 of 6 of my -- of the attachment to my 7 testimony, where Dr. Taylor describes four treatment 9 processes that we are actively considering in the Chuluota system. 10 11 **Q**. And have you --12 A. Carbon dioxide enhancement of tray aeration, 13 Thermax ion exchange, Miex ion exchange, and Adedge. And where are you in that deliberation? 14 Q. 15 We have applied for and received a permit from Α. 16 Florida DEP for a full-scale pilot of CO<sub>2</sub> enhanced tray 17 aeration at Water Treatment Plant 2. We have just 18 received from the engineer the estimate for that system. 19 It has morphed from a full-scale pilot into a project 20 that would be a full-scale, virtually permanent 21 installation at a cost that is at least half, if not

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23 Dr. Taylor has strongly recommended, and we 24 have accepted his recommendation, that we start piloting on a much smaller scale at least two of the other 25

more, than the cost of one of the other options.

alternatives, which we believe would probably give 1 2 better long-term treatment, and that's the Thermax ion exchange and the Adedge treatment. We have not yet 3 installed those pilots. We need to do piloting on 4 either of those to determine the sizing and the backwash 5 and regeneration water disposition from those systems, 6 7 but we expect to be doing that piloting probably early -- probably beginning in January of this year. 8 And that is for the Chuluota area? 9 ο. 10 Α. Yes. 11 And do you have any idea how long it's going Q. 12 to take before you make a final decision after your 13 piloting? What is a piloting period? Let me just ask 14 that.

We are in consultation with Dr. Taylor right 15 Α. now on what an appropriate piloting period would be. 16 Ι 17 think it may depend a little bit on how the initial piloting goes. We may need to run the pilot through 18 19 warm water rather than just cold weather, so we might 20 have to run it into the spring or early summar. We may be able to make a decision sooner than that. 21

22 Q. And you said you were using a piloting of two, 23 but there was a third one that was the one that was much 24 less expensive. Are you going to be piloting that one 25 as well, or -- I didn't understand what you said about

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it.

Well, the CO<sub>2</sub> process, we know what it's going 2 Α. to cost now, or at least have a reasonably good 3 estimate, since we have a full-scale design that we had 4 to develop for the permitting. It's difficult to do a 5 small-scale pilot of  $CO_2$  because it uses the tray 6 aerators, the existing tray aerators, which are 7 full-scale. So we are probably not going to go ahead 8 with the CO<sub>2</sub> pilot, but I think that's still up in the 9 10 air. 11 Our concern, Dr. Taylor's concern is that if 12 we go ahead with the full-scale CO<sub>2</sub> pilot, we are 13 virtually committed to moving forward with that 14 particular process, and we're looking at whether that is 15 the most prudent thing to do. 16 You will also notice at the bottom of page 5 17 of 6 that there were quite a few other processes, forced 18 draft packed tower aeration, ozone, UV, RO/NF, membrane filtration, and GAC/Cl<sub>2</sub>, which were also evaluated and 19 20 considered and rejected as inappropriate for Chuluota. 21 Q. Mr. Reilly I believe asked you about the due 22 diligence process when you all purchased this facility.

And you were on that team; correct?

A. I was on the team. I had not been to the
Chuluota facility, actually had not been to any of the

facilities, but I had reviewed every CCR for the Florida Water Service systems, and I had reviewed a lot of the documentation, including the due diligence from people on the ground who had visited those systems.

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Q. You indicated in your testimony that the citizens are aware of the problems that existed when you purchased it, but you were also aware of those problems as well, and in fact, that's why you were able to purchase it at a lower price, is because of those problems; correct?

I would not characterize that as the situation 11 Α. 12 at all. This was an arm's-length transaction with a seller who was exiting the state, an electric utility 13 14 who was getting out of the water business. They had already sold every system that they could to a 15 neighboring municipal system. We were picking up what 16 17 was left. And we were making the best evaluation of the value of those systems that we could, based on what we 18 19 believed at that time and their representations to us 20 about the quality of those systems.

Q. And if you had purchased a plant without those problems, you would have paid a lot more, wouldn't you?

Q. In your business, you haven't had any
experience that if there are problems, it usually lowers

That's pure speculation.

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I have no idea.

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the price of a facility?

MR. MAY: I think he has already been asked that question, and he has answered it.

MS. BRADLEY: I asked him in his experience. 4 You have a seller and a buyer who have to come A. 5 to terms. Had we not come to terms, had we agreed to 6 walk away or decided to walk away, you would be dealing 7 with Florida Water Service here today, I suspect, 8 9 because it's my understanding that the City of Oviedo 10 and Seminole County had both declined to acquire the 11 Chuluota system.

Q. Have you been involved in the buying andselling of systems prior to this?

A. I have been involved in environmental due diligence prior and subsequent to this, yes.

Q. Based upon that, isn't it fair to say that if you purchase a facility without problems, that you're generally going to expect to pay more for it?

A. The existence of problems in the system,
compliance issues in the system, systems that need
capital improvements, are an incentive for a buyer to
sell at a lower price and a reason for a purchaser to
expect a lower price.

24 MS. BRADLEY: I think you may have gotten that 25 twisted, but I think you answered my question.

No further questions, Mr. Chairman. 1 CHAIRMAN CARTER: Thank you. 2 COMMISSIONER ARGENZIANO: Mr. Chair. 3 CHAIRMAN CARTER: Commissioner Argenziano, 4 you're recognized. 5 COMMISSIONER ARGENZIANO: Just a couple of 6 7 quick questions. I know the hour is very late, and everybody must be tired. 8 9 To the point that you made before to Ms. Bradley's question about the TTHMs not making it 10 11 down to the aquifer, could you just briefly explain to 12 me why not, why it wouldn't? 13 THE WITNESS: THMs are fairly volatile. When you take THMs at the level that they would occur in 14 15 drinking water and spread them on the ground, particularly in the Florida climate, the THMs will 16 17 volatilize long before the water evaporates, so that the water that is left to percolate into the ground will 18 19 have very low levels of THMs. There's also --20 COMMISSIONER ARGENZIANO: Would that be -- I'm 21 sorry. You weren't finished. Go ahead. 22 THE WITNESS: No, go ahead. Go ahead. 23 COMMISSIONER ARGENZIANO: Would that be the 24 same if the ground was saturated also, saturated prior 25 to the flushing, in other words, a lot of rain, a lot of

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flooding.

THE WITNESS: It would actually probably be more so if the ground was saturated, because the water would actually have a longer period of time to be in contact with the air, the ambient air.

COMMISSIONER ARGENZIANO: Okay. Okay. The 6 second and last question I have, in regards to the 7 hydrogen sulfide, I understand that you're correct that 8 9 the aeration is not working. Would it work -- let me 10 ask you this, because I know that there's this problem 11 throughout the State of Florida. It's just inherent in 12 where we live and the type of spaces in the aquifer. It really doesn't -- it's not that you're putting hydrogen 13 14 sulfide into the water. It's there, and it's been a problem there for a long time, as I remember. 15 And I 16 know I have the problem up in Citrus County.

But would there be a better solution and a 17 18 cheaper solution -- the CO<sub>2</sub> solution to me sounds like 19 it would cost a fortune, and these people are paying a 20 ton of money now or can't afford any more. Would it be 21 a better solution if each homeowner -- and I don't want 22 anybody to jump up and scream, because I don't want to 23 cost the homeowner any more money. Perhaps the company 24 would give an incentive or a break for a homeowner to 25 put their own aerator system at home, like a, 600, \$700

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aerator system that would stop the black staining and the smell from the hydrogen sulfide? Could that be a cheaper solution, or could it be a solution to the hydrogen sulfide levels that you are currently are seeing.

THE WITNESS: Okay. I'll do my best to answer that question. It's a very good question that unfortunately engenders a fairly complicated answer.

9 The short answer is no, and I'll try to give you an explanation of why. The issue with hydrogen 10 11 sulfide in the raw water is that it has to be removed by 12 some process before chlorine is added, which chlorine is 13 necessary for disinfection, or what happens is, it 14 reacts very quickly with chlorine. Once the water has 15 been chlorinated, subjected to free chlorine, there is no hydrogen sulfide left. The hydrogen sulfide becomes 16 oxidized to something called colloidal sulfur. 17 That colloidal sulfur gets out in the distribution system, 18 19 and if conditions of nitrification occur in the 20 distribution system, it gets converted back into 21 hydrogen sulfide. It also gets converted into these 22 metal sulfides which form black water.

Putting an aeration system at each individual house would probably be -- and I'm trying to be very respectful here -- would probably be the worst solution

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that we could try to implement, even if we --

COMMISSIONER ARGENZIANO: And that is because of the chlorine process. So in other words, if those people -- if the people had their own wells and had hydrogen sulfide, in that case they could, because there's no chlorination, use an aerator at their home and from their own well, and that would probably solve the problem.

9 THE WITNESS: Well, they could. But if you'll notice in my testimony, if you get a chance to look at 10 my testimony, one of the things that we had rejected, 11 12 with Dr. Taylor's very sage advise, was forced draft packed tower aeration. This happens to be the treatment 13 that they're using in Chuluota. This would be the kind 14 15 of thing that you would do on a small scale. Actually, my former boss had a patent for an individual home 16 aeration system that never really got off the ground 17 because of a variety of problems. But the problem is 18 19 that with this water and with the hydrogen sulfide, in 20 an aeration system, you have conditions ripe for the 21 growth of bacteria, and you can have bacterial slimes 22 growing in those aeration systems, and the average -you definitely will have those conditions if you do not 23 24 chlorinate the system, the water before. So you almost 25 have to chlorinate before the aeration system, which the

average homeowner won't do. And for the average 1 homeowner to try to maintain a small packed tower 2 aeration system in their basement or on the side of 3 their house would be just a recipe for disaster. 4 The other thing that I would mention is that 5 the off-gas of the hydrogen sulfide has a rotten egg 6 7 odor. Most homeowners wouldn't want that coming out of a little box in their basement or on the side of their 8 9 house. COMMISSIONER ARGENZIANO: Well, let me just 10 11 tell you, with all due respect -- and I understand to a certain degree what you're saying is correct. I have 12 13 one of those aerator systems, and I wouldn't keep it in 14 my basement. In Florida you don't find too many of 15 those anyway, basements, that is. It is on the outside 16 of the house, and almost everybody in the area and in several different counties of the state use those 17 aerators to relieve that smell and the black water. 18 And 19 to my knowledge right now, nobody has had any bacteria 20 problems with the -- what you've said makes me cringe a 21 little bit, to wonder if that could be a problem or a 22 potential problem down the line or how much of a problem 23 it really is.

And I guess I'm asking the question because, you know, it seems that that is one of the biggest

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problems. You know, when you look at your sinks and your toilets and you have these back stains, and then you say to yourself, "Well, I'm paying for this water," unfortunately, it is found throughout the state in many, many places.

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I'm trying to figure out, I guess, using my 6 7 experience with my aerator, and coming from a very large district that I had before I came to the PSC, most of 8 9 that district has hydrogen sulfide, and most of the time 10 the problem is corrected with an aerator, and it has 11 worked pretty well. So with respect to the cost and the 12 smell, I think the people I've seen in my history with this and my experience with this would rather pay the 6-13 14 or \$700 and get water that they could drink and not 15 stain their faucets and their -- I mean, their sinks, and so on and so on. 16

I guess you've answered my question to the best of your ability, and I appreciate that.

19 THE WITNESS: Let me try to add a little bit 20 I know it's late, but let me say a few things more. 21 about hydrogen sulfide and the levels of hydrogen 22 sulfide. The levels in Chuluota are higher than in any 23 other system that Aqua has, on the order of 2-1/2 to 24 5 milligrams per liter of hydrogen sulfide. And that is 25 higher than is recommended to be treated with tray

aerators, which is the system that we inherited when we purchased the system. It is higher than is recommended for some forced draft aeration systems.

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One of the reasons that it took us a while to 4 recognize how high the hydrogen sulfide levels were goes 5 to the heart of the question that you had of DEP as to 6 why hydrogen sulfide wasn't tested in the distribution 7 system samples that were taken in August. Hydrogen 8 9 sulfide, as I explained before, is oxidized as soon as 10 you have free chlorine. We would not expect to have 11 found or expect DEP to have found hydrogen sulfide in those distribution system samples where there was not a 12 13 nitrification episode going on.

14 Hydrogen sulfide volatilizes very quickly, and it oxidizes very quickly. If you take a sample and you 15 16 allow air into the sample, even if you take it head 17 space free, which means there's no air in the container that you ship it to the laboratory in, it will oxidize. 18 19 So when it gets to the laboratory and they test for 20 hydrogen sulfide or sulfide, they'll get a low number. 21 And we were having samples sent back to our lab of the raw well water, which we suspected had high levels of 22 23 hydrogen sulfide, and the numbers were all over the 24 place because of how much of the hydrogen sulfide was 25 dissipating in the time that it took the sample to get

to the laboratory.

It wasn't until Dr. Taylor got involved with a 2 couple of graduate students and set them up with on-site 3 testing kits to test hydrogen sulfide that we finally 4 5 got good numbers on what the hydrogen sulfide levels were in the raw water in the Chuluota wells. 6 7 COMMISSIONER ARGENZIANO: Then let me just ask you, you're saying that they're high levels. Are they 8 9 high enough that people shouldn't be breathing? 10 THE WITNESS: As I explained before, the 11 hydrogen sulfide gets oxidized to elemental sulfur in 12 the ground storage tanks when it gets hit with chlorine. 13 The hydrogen sulfide is gone by the time it leaves the water plant. 14 I got you, because I COMMISSIONER ARGENZIANO: 15 16 forgot you had mentioned that. That's true. Well, 17 they're still having problems with the metals, because they have stains and the smell. They're still having 18 19 that problem. 20 But let's go to just a different question, and 21 then I'll end my questioning. If that's the case and 22 the only answer to that is -- because obviously, it's 23 something in that well, in that -- a characteristic of 24 that area where that water is being taken. Of course, I 25 wanted some other testing done, knowing the history of

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that area for farming and the old pesticides that used to be used, and that's something else I'm looking at.

But in regards to the hydrogen sulfide, would it not be cheaper to sink a different well possibly in a different space, a different level, a different zone in the aquifer, if there is such a thing in that area that may, you know, have a different outcome? Would it be cheaper to do that?

9 THE WITNESS: We have four wells in the system 10 at two different -- two in each of two locations at the 11 two water plants. All of the wells have high levels of 12 hydrogen sulfide.

We might get less hydrogen sulfide in the very 13 14 shallow aquifer. We would get a lot more iron, we would 15 get bacteria potentially, and we would be in the 16 situation that Catherine Walker was describing about 17 impacts on the shallow aquifer. I don't think St. Johns would even let us put a production well of the magnitude 18 19 that we would need for Chuluota into the shallow 20 aquifer.

21 COMMISSIONER ARGENZIANO: So then basically 22 what you're saying is the problem with the hydrogen 23 sulfide is geographic? It is there, and it's one that 24 even if you sunk another well, you're going to come up 25 pretty much with the same result.

THE WITNESS: I would virtually guarantee it. 1 Is there anything 2 COMMISSIONER ARGENZIANO: that either USGS or the Water Management District have 3 indicated is specific to that area that make it so much 4 I mean, I know there's high levels in so many higher? 5 parts of the state, but that would indicate that that is 6 just a problem there? I mean, I can't blame the company 7 for hydrogen sulfide. Okay? That's just a natural 8 9 phenomenon. And I'm trying to find a way, and it looks 10 like the company is trying to find a way to get rid of 11 it, but it's almost to me at this point like you can't, and it's going to cost a lot more to go to the  $CO_2$  or 12 other places, and it seems like the only answer is going 13 to Oviedo. 14

I guess that's just my impression at this point, because what you're saying is that you recognize the problem, you know what it is, but it can't be corrected unless you spend more and more -- a lot more money, and that's not the solution for these people who just can't pay any more.

21 So with that, I appreciate your answering my 22 questions. And thank you, Mr. Chairman.

23 CHAIRMAN CARTER: Thank you, Commissioner.24 Thank you.

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Did I come to you already, Mr. May? Okay.

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1	Staff, you're recognized.
2	MR. JAEGER: Thank you, Chairman. I have just
3	a very few questions.
4	CROSS-EXAMINATION
5	BY MR. JAEGER:
6	Q. First of all is just your correction from two
7	tests to three quarterly tests that have passed. Can
8	you give me the dates for those passing tests?
9	A. I'm afraid that I can't, because I don't have
10	those documents with me. It was the last round of tests
11	that were taken in November. They were reported from
12	the lab to us in late November. They are due in to DEP
13	by today, December 10th.
14	CHAIRMAN CARTER: Mr. May?
15	MR. MAY: We would be glad to provide a
16	late-filed exhibit that would provide those dates if you
17	would like, Mr. Chairman.
18	CHAIRMAN CARTER: That will be Exhibit 206.
19	And these are Staff, give me a title.
20	MR. JAEGER: Testing dates for
21	trihalomethanes, TTHMs.
22	CHAIRMAN CARTER: You died on me. You're
23	getting wimpy on me at the end, now. Give me that title
24	again.
25	MR. JAEGER: Testing dates for TTHMs, the last
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three. And we could ask for the reports too. 1 (Late-filed Exhibit 206 was identified for the 2 3 record.) BY MR. JAEGER: 4 Part of my quandary is, you went to a free 5 Q. chlorine burn in -- I think July 3rd, and you didn't go 6 back to chloramines until September 3rd, and it seems 7 like one of those quarterly tests would have been right 8 9 in the middle of that free chlorine burn, so I'm trying 10 to figure out how in the world -- you know, why did you 11 change if you were meeting all standards? Why did you 12 go to the free chlorine burn? I don't believe we were meeting the standards 13 Α. 14 while we were on the free chlorine. I'll have to check that. But I think the multiple quarters that we had had 15 16 out of compliance in the past had convinced us that we were not going to be able to meet those standards while 17 on free chlorine. 18 I understand your question, and I hope that 19 20 we'll be able to answer that with the testing dates that 21 we supply and the results. 22 Thank you. On page 5, lines 22 through 25, Q. 23 you discuss that the consumptive use permit limits the 24 frequency, duration, and volume of flushing that can be 25 done to manage and maintain the distribution system.

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But then on page 10, line 11, you talk about the installation of 14 automatic flushing valves in the distribution system. Can you tell me how those automatic flushing valves work? Are they more efficient than manual flushing?

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I had previously testified that the 6 Α. Yes. 7 automatic flushers are more efficient at maintaining water quality in the distribution system than manual 8 9 flushing, and that is because they can be programmed for 10 the duration, and they can be sited at locations for optimum effect, which is difficult to do with manual 11 12 flushing. Generally the optimum time to flush is when the water is stagnant in the pipes. That's usually 13 14 going to be between like midnight and -- if you have sprinkler systems, they'll go on at, you know, maybe 15 16 four o'clock in th mornings, but during that period of 17 time. Most people don't want our guys banging around 18 outside their home or on the streets operating flushing valves at those hours of the night, so the automatic 19 20 flusher does that very efficiently.

Q. Well, when you chose a siting location, in addition to being like where it dead ends or where that stuff would accumulate, do you also look to see if there's like a wetland next to it or will the flushing go onto private property? Do you also take that into

consideration? 1 2 Yes, we do. And to my knowledge, we are not Α. discharging any of the automatic flushers into any 3 wetlands. 4 What about private property? 5 0. Some of the automatic flushers may discharge 6 Α. onto private property, and if they create problem -- and 7 I know of at least one case where we did have a 8 9 complaint about ponding water, and we actually 10 eliminated the auto flusher at that location. We're trying to maintain the water quality at that location 11 12 without having the auto flusher there. Going to your exhibit where you talked about 13 Q. 14 the four methods of getting rid of hydrogen sulfide, I was a little confused why you were giving up CO<sub>2</sub> tray 15 aeration. 16 17 There is scant precedent for that type of Α. 18 treatment working at the levels of hydrogen sulfide that we have in the Chuluota wells. 19 20 The reason that we have even embarked on the 21 CO2 pilot goes back to the Tetra Tech report. One of 22 the recommendations that they had made was that we lower 23 the pH. And even Dr. Taylor will concede that by lowering the pH with  $CO_2$  -- and he recommends that 24 that's the best way to lower pH -- that lowering the pH 25

with CO<sub>2</sub> could get a threefold, as much as a threefold increase in removal of hydrogen sulfide. So we go from 20 percent removal to 60 percent removal, best case. We've still got 40 percent. Forty percent of 4 milligrams per liter is still a fair amount of hydrogen sulfide.

So we had embarked on this. We knew that it 7 would improve where we were. The idea of the pilot had 8 originally been a fairly inexpensive, short-term pilot. 9 10 But because it had to be full-scale to test the effect 11 on the existing aerators -- we can't model those 12 aerators with something real tiny and expect those 13 results to automatically scale up to full-scale 14 implementation. We needed a DEP permit. In order to 15 get the DEP permit, we needed an engineer, which ended 16 up being a full-scale design that morphed into other 17 opportunities for improvements at the plant. And now 18 we're, you know, like I say, almost half the cost of a 19 full-scale Thermax or Adedge treatment system. So it 20 has caused us to step back and think a little bit about 21 whether another treatment option might be the best.

Q. If you do go to a Thermax ion exchange system, what would be the best case and worst case scenario for having that online?

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A. Boy. Whatever I say will come back to haunt

me. But I would think that probably the best case would be the end of 2009, early 2010. Worst case might be mid to late 2010.

Q. Just one last line of questioning. You were talking about the hydrogen sulfide and the difficulty with testing, and DEP I guess has a problem with that. You say Mr. Taylor can do that testing?

Yes. He actually had a couple of graduate 8 Α. 9 students, and he set them up with the equipment and the methods. He has done a tremendous amount of testing for 10 11 the AWWA Research Foundation, for Tampa Bay, for many 12 utilities all over Florida and is very familiar with 13 hydrogen sulfide, colloidal sulfur, you know, all of the 14 things that have to do with hydrogen sulfide water in 15 Florida.

Q. And finally, metal sulfides, are you talking about iron sulfide and copper sulfide primarily?

A. Yes.

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Q. What color is iron sulfide?

20 A. Generally black.

Q. And copper sulfide?

A. Generally black.

Q. So is there any easy way to tell other thandoing a test?

A. No. But if you wanted to do a test, you could

do a test and figure out how much copper sulfide and how 1 much iron sulfide you had. It would vary probably from 2 sample to sample, depending on whether it was taken out 3 of a copper pipe or out of an iron main. 4 I think you anticipated my next question. But Q. 5 all that would tell you is that it was reacting with 6 either copper or iron; is that correct? 7 That's correct. A. 8 9 MR. JAEGER: No further questions. CHAIRMAN CARTER: Commissioners, anything 10 further? Exhibits? 11 Oh, I'm sorry. Mr. May, I know you probably 12 wanted to redirect. 13 MR. MAY: Just very briefly. I understand the 14 hour is getting late here. 15 16 CHAIRMAN CARTER: No, you may proceed. 17 MR. MAY: And to move things along just a 18 couple of points, Ms. Rollini is going to provide 19 Mr. Luitweiler with a copy of Exhibit 192 that 20 Mr. Reilly was questioning him about. 21 REDIRECT EXAMINATION BY MR. MAY: 22 Mr. Luitweiler, do you recall Mr. Reilly 23 Q. 24 questioning you regarding Tetra Tech's recommendations 25 on dead-end issues? FLORIDA PUBLIC SERVICE COMMISSION

1	A. I remember him questioning me on dead-end
2	issues, and I remember part of my response referring
3	back to his exhibit.
4	Q. Can you turn to page 5 of 7 of that exhibit?
5	A. Yes, I'm there.
6	Q. Toward the bottom, there is a recommendation
7	regarding resolution of dead-end issues.
8	A. Yes, I see it.
9	Q. Is that a long-term recommendation?
10	A. Yes, it is, sir.
11	Q. Okay. You were questioned extensively by
12	Ms. Bradley and also the Commissioners regarding the
13	FDEP and the Florida Rural Water test. Do you recall
14	that?
15	A. Yes.
16	Q. Do you also recall the testing by questions
17	regarding testing done by the Department of Health? Do
18	you recall that?
19	A. I remember testimony on those things. I don't
20	remember specifically being asked about them, but, yes.
21	Q. Could you explain your understanding of the
22	Florida Department of Health testing, because I don't
23	think that has been discussed at length today, very
24	briefly?
25	A. I think the Florida Department of Health came
	FLORIDA PUBLIC SERVICE COMMISSION

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out and tested raw water from our wells, and then I also understand that they tested water from the Walker Elementary School. I wasn't aware of that for some time, and I frankly have not seen any test results, actual lab reports from the Department of Health testing.

7 It was my understanding that the purpose of that testing was to try to determine if there was any 8 peculiar chemical that might have been missed in the raw 9 10 water from the Chuluota wells. Our company had already 11 taken samples and done testing with a different suite of tests, which we actually use for kind of broad scan 12 13 testing of is there anything weird in water. And we 14 have two tests that we use, which are semi-quantitative. 15 These are not quantitative tests, because we don't have 16 standards for anything that we might want to know about 17 in the water. All we can do is see if something is 18 there, and these methods give us a pretty good handle on 19 at least order of magnitude concentration if there is.

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Q. What were the results of those tests?

A. We found nothing but sulfur in either of those batteries of tests. One looks for a broad range of inorganic chemicals, mostly metals, most of the elements on the periodic table. The other looks for organic compounds, and it searches a library of tens of

thousands of chemicals, for fingerprints of anything 1 that shows up on the mass spec. 2 Last guestion. Ms. Bradley and Mr. Reilly 3 0. questioned you on several occasions regarding the 4 condition of the Chuluota wastewater plant. Do you 5 recall those questions? 6 Α. Yes. 7 And the condition of the plant, what I'm ο. 8 specifically referring to is the condition of the plant 9 10 at the time of acquisition. Do you recall those questions? 11 12 Yes, uh-huh. Α. 13 At the time of acquisition, at the time that ο. 14 Aqua acquired the Chuluota wastewater plant from Florida 15 water, is it your understanding that the plant was in compliance with FDEP regulations? 16 17 Α. Yes, it is my understanding that it was. And 18 in fact, there was an order from the Public Service 19 Commission in 2005 which had looked at our statement of 20 environmental compliance and had gone beyond that and 21 actually called DEP to say, "Hey, are these systems in 22 compliance?" And the response had been included in that order, and I'll read from page 3 of the order, 23 PSC-05-1242-PAA-WS, if you'll bear with me just a 24 25 second.

1 "The application contains a statement that the 2 buyer has performed a reasonable investigation of the 3 utility system and found the overall condition of the 4 water and wastewater facilities to be in satisfactory condition and in general compliance with the 5 6 requirements of the Florida Department of Environmental 7 Protection. Our staff contacted DEP and verified that there are no outstanding notices of violation." 8 9 Now, the Chuluota wastewater system was part ο. 10 of the Florida Water systems that Aqua acquired; right? 11 Α. That's correct. 12 Now, at the time of the acquisition of the ο. 13 Florida Water systems, is it your understanding that 14 those systems, including the Chuluota wastewater plant, 15 were in compliance with DEP standards? 16 Α. Yes. 17 MR. MAY: I have no further questions. 18 CHAIRMAN CARTER: Okay. Let's deal with the 19 exhibits. I think based upon our list, it would be Number 148, is that correct? 20 21 MR. MAY: Yes, Your Honor. 22 CHAIRMAN CARTER: Any objections. 23 MR. REILLY: No objections. 24 CHAIRMAN CARTER: Without objection, show it 25 done. FLORIDA PUBLIC SERVICE COMMISSION

(Exhibit 148 was admitted into the record.) 1 CHAIRMAN CARTER: Also, there's a couple of 2 late-filed, which would be -- actually, there's one 3 late-filed, which is 206, and that's the testing dates 4 for the TTHM for the last three quarters; right? 5 MR. JAEGER: That's correct, Chairman. 6 (Late-filed Exhibit Number 206 was admitted 7 into the record.) 8 9 CHAIRMAN CARTER: Let me just kind of -- thank 10 you. You may be excused for now. 11 Commissioners, before we go further and to the 12 parties, let me just kind of let everyone know. There is no other time, so we must finish tomorrow. There is 13 14 no more time on the calendar. We can't give you any 15 more time. So I would caution the attorneys to, you 16 know, wax less philosophical and more on the point. Call your next witness. 17 18 I apologize, Your Honor. I just got MR. MAY: 19 an e-mail from my wife, and she said I better quit 20 asking so many questions. I'm running out of clean 21 shirts. 22 CHAIRMAN CARTER: God bless her. What a great 23 woman. 24 MR. MAY: Aqua would call Mr. Chris Franklin 25 to the stand as a rebuttal witness.

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1	CHAIRMAN CARTER: Okay.
2	Thereupon,
3	CHRISTOPHER H. FRANKLIN
4	was called as a rebuttal witness on behalf of Aqua
5	Utilities Florida, Inc. and, having been first duly
6	sworn, was examined and testified as follows:
7	DIRECT EXAMINATION
8	BY MR. MAY:
9	Q. Mr. Franklin, have you previously been sworn
10	in this proceeding?
11	A. Yes, I have.
12	Q. Would you please state your name and business
13	and address for the record?
14	A. Christopher Franklin, 762 Lancaster Avenue,
15	Bryn Mawr, Pennsylvania.
16	Q. Did you prepare and cause to be filed 29 pages
17	of rebuttal testimony in this proceeding?
18	A. I did.
19	Q. Do you have that rebuttal testimony before you
20	today?
21	A. I do.
22	Q. Do you have any corrections or revisions to
23	that testimony?
24	A. I do not.
25	Q. If I were to ask you the questions that appear
	FLORIDA PUBLIC SERVICE COMMISSION

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1	in your rebuttal testimony today, would your answers be
2	the same?
3	A. They would.
4	MR. MAY: Mr. Chairman, we would ask that
5	Mr. Franklin's rebuttal testimony be inserted into the
6	record as though read.
7	CHAIRMAN CARTER: The prefiled testimony of
8	the witness will be entered into the record as though
9	read.
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	FLORIDA PUBLIC SERVICE COMMISSION

## BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION AQUA UTILITIES FLORIDA, INC. REBUTTAL TESTIMONY OF CHRISTOPHER H. FRANKLIN DOCKET No. 08121-WS

1	Q.	What is your name and business address:
2	A.	My name is Christopher H. Franklin. My business address is 762 W. Lancaster
3		Avenue, Bryn Mawr, Pennsylvania, 19010.
4	Q.	On whose behalf are you submitting rebuttal testimony in this proceeding?
5	А.	I am submitting testimony on behalf of Aqua Utilities Florida ("AUF" or the
6		"Company").
7	Q.	Have you previously submitted testimony in this proceeding?
8	Α.	Yes. I filed direct testimony as part of AUF's initial filing in this rate case and
9		sponsored Exhibit 1.1. I also filed supplemental direct testimony and sponsored
10		Composite Exhibits CHF-1 through CHF-6.
11	Q.	What is the purpose of your rebuttal testimony?
12	A.	The purpose of my rebuttal testimony is to address issues raised by Kimberly H.
13		Dismukes, who filed testimony on behalf of the Office of Public Counsel
14		("OPC"). I will also address issues raised by OPC's witness Earl Poucher. My
15		rebuttal will address Commission complaints, call center and customer service,
16		meter readings and billing, customer service in other Aqua states, quality of
17		service, and some issues relating to return on equity.
18	Q.	Are you sponsoring any exhibits to your rebuttal testimony?
19	A.	Yes, I am sponsoring CHF-7, CHF-8, and CHF-9.

1		COMMISSION SERVICE HEARINGS
2	Q.	Ms. Dismukes discusses AUF customers that responded to the Company's
3		rate request either by attending hearings or submitting written
4		correspondence to the Commission. Can you comment on the customer
5		response?
6	A.	Yes I can. During the hearings, we heard complaints that originated from
7		conditions that existed before AUF owned the company. We also heard
8		complaints that were current and needed the Company's attention. At the
9		conclusion of each of the hearings, AUF dutifully and thoroughly investigated and
10		reported on each of the issues raised at the hearings. Each of those investigations
11		(and resulting actions) was summarized in a letter to the customers and in a
12		detailed, color-coded exhibit to my supplemental direct testimony.
13	0	Can you plage comment in general on My Boucharie testimony?
15	Q.	Can you please comment in general on Mr. Poucher's testimony?
14	Q. A.	Yes. Mr. Poucher disparages the work done by AUF in response to the issues
14		Yes. Mr. Poucher disparages the work done by AUF in response to the issues
14 15		Yes. Mr. Poucher disparages the work done by AUF in response to the issues raised by customers at the hearings. I particularly take issue with Mr. Poucher's
14 15 16		Yes. Mr. Poucher disparages the work done by AUF in response to the issues raised by customers at the hearings. I particularly take issue with Mr. Poucher's baseless claims that the Company's correspondence to customers were just "form
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14 15 16 17 18 19		Yes. Mr. Poucher disparages the work done by AUF in response to the issues raised by customers at the hearings. I particularly take issue with Mr. Poucher's baseless claims that the Company's correspondence to customers were just "form letters." While many of the letters contained similar information, it was due to the fact multiple customers raised the same question or concern. Each letter, a copy of which is attached to my supplemental direct testimony, was specifically
14 15 16 17 18 19 20		Yes. Mr. Poucher disparages the work done by AUF in response to the issues raised by customers at the hearings. I particularly take issue with Mr. Poucher's baseless claims that the Company's correspondence to customers were just "form letters." While many of the letters contained similar information, it was due to the fact multiple customers raised the same question or concern. Each letter, a copy of which is attached to my supplemental direct testimony, was specifically addressed to the concerns raised by the individual customer.
14 15 16 17 18 19 20 21		Yes. Mr. Poucher disparages the work done by AUF in response to the issues raised by customers at the hearings. I particularly take issue with Mr. Poucher's baseless claims that the Company's correspondence to customers were just "form letters." While many of the letters contained similar information, it was due to the fact multiple customers raised the same question or concern. Each letter, a copy of which is attached to my supplemental direct testimony, was specifically addressed to the concerns raised by the individual customer. As a result of sending 97 letters, I am aware only of a single customer that

1		Instead of working to facilitate the closure of any remaining issues, Mr.
2		Poucher found it necessary to do something that I have never seen in my 20 years
3		of experience working in the regulatory arena; he mailed letters to each of the
4		customers that testified. Once those letters were received by the OPC, not a
5		single call to the Company was made by the OPC to begin to close any of what
6		OPC believes to be unresolved issues. This was a disingenuous attempt by the
7		OPC to further degrade the relationship between AUF and its customers, and was
8		in no way designed to work constructively to resolve customer issues.
9	Q.	Do you agree with Mr. Poucher's statement that customer issues from the
10		PSC hearings remain unresolved?
11	A.	No. I believe Mr. Poucher's statement that, "Aqua Florida customer responses
12		solicited by the Office of Public Counsel indicate that Aqua has failed to
13		adequately respond to the concerns of its customers," is a gross
14		mischaracterization of the facts. Mr. Poucher received responses from only 36 of
15		the 97 customers he mailed letters to (Exhibit EP-2). After careful review of
16		those responses, I could find only 3 customers that possibly needed some level of
17		follow up. I would also note that all the follow up associated with these 3
18		customers was not to address the service issues originally raised, but revolved
19		around newly raised questions, such as fire protection ratings. Most of the
20		responses to Mr. Poucher's letter were related to general opposition to the
21		Company's rate filing and to known water quality issues (i.e., Chuluota), or to
22		aesthetic issues that have been discussed in great detail in previous testimony.

Q. Are there instances where customers testified at the hearings or submitted
 written testimony in which the Company found the customer was either
 misinformed or simply did not understand?

A. Yes. I stated in previous testimony that we identified 194 issues that were raised
by 97 customers who testified at the first 8 hearings (hearings 9 and 10 were not
included in the supplemental testimony because transcripts were not yet
available). Out of the 194 issues, AUF identified 33 or 17% that are believed to
be the Company's primary responsibility. However, we also identified many
instances where the Company was not at fault. These are a few instances:

10a.Chuluota - premise 644287 – Ms. Rodriguez claimed her bill doubled after11AUF installed her new meter. AUF visited the property twice to inspect12the equipment and service line. After field and office investigation, AUF13could not identify any problems. After communicating the results to the14customer, the customer paid her bill and no dispute was filed.

b. Chuluota - premise 636650 - Mr. Diehl contacted Aqua 6 times in 2007.
With each conversation, his issues were addressed and no disconnection
took place.

18 On July 5, 2007, Mr. Diehl contacted Aqua to establish service.

- On August 14, 2007, Mrs. Diehl contacted Aqua to correct the spelling of
  their last name and to make a payment through Speedpay. She was having
  issues with credit card acceptance and the issue was resolved.
  On November 11, 2007, Mrs. Diehl called Aqua inquiring about a high
- 23 bill. The CSR walked the customer through the steps to identify possible

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1		high consumption issue within the property and the customer confirmed
2		that she has an irrigation system.
3		On November 27, 2007, Mrs. Diehl called and requested a reread of the
4		meter.
5		On November 30, 2007 Mrs. Diehl called for an update and it was
6		confirmed that the read fell in line with the previous read.
7	c.	Mt. Dora – 638964 – Mr. Tomczak disputed his high usage. The usage on
8		this account fluctuated from month to month, in March, April, May, and
9		June of 2007 consumption reached a high of 35,000 gallons. AUF had
10		continuous communication with the customer. AUF exchanged his meter
11		3 times. AUF field service representatives visited the property 4 times,
12		and AUF customer service representatives and compliance representatives
13		all have assisted the 87 year old customer. AUF worked with the
14		customer to take daily reads of the customer's meter for three weeks. This
15		was not a case of added "extra zero," as suspected by the customer. The
16		three weeks of daily reads confirmed that the customer's consumption is
17		in line with his stated usage. Mr. Tomczak's readings increased while the
18		irrigation system is operating and decreased when the irrigation system
19		was off.
20	d.	Mt. Dora – 639426 – Mr. Spiker disputed a high read and ensuing bill.
21		The Company investigated his reading and discovered other spikes in his

outside of an infrequent spike. Mr. Spiker does operate an irrigation

billing history, although billing appears to be consistent year to year

system. No evidence of the suspected "added zero" issue. AUF offered to conduct a meter test for Mr. Spiker. He did not respond to the offer. Mt. Dora – 628641 – Ms. Iman reported high usage. After a review of her consumption history, it was demonstrated that her usage fluctuates from 2,000 to 6,500 gallons per month. A review of this account demonstrates that the usage is consistent with her usage in the previous year.

Q. On page 5 of his testimony, Mr. Poucher contends that there was no
customer support for the AUF at the hearings he attended. Could you speak
to this contention?

A. Mr. Poucher contends in his testimony that, "There is an absolute dearth of any significant support for this company from customers that has been placed into the record thus far." I'm not aware of Mr. Poucher's experience with rate hearings in Florida or in any other state. I have been attending rate hearings for nearly 20 years. In my experience, customers do not come out in support of utility company's rate increases. I believe Mr. Poucher's statement about the lack of customer support to be naive and irrelevant.

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COMMISSION COMPLAINTS

Q. Ms. Dismukes' testimony includes a summary of complaints filed with the
 Commission, contained in Schedule 3. Do you agree with the conclusions Ms.
 Dismukes makes regarding the data in Schedule 3?

A. No, I do not agree with the conclusions made by Ms. Dismukes regarding the
customer complaints filed with the Commission. Our review of the complaints
filed during the time period of April 1, 2007 through June 2, 2008, indicates 176
complaints were filed.

1		Ms. Dismukes notes that 74 involved apparent violations of Commission
2		rules. I would note that these violations were primarily for failure to respond to
3		the Commission within the requisite time. The vast majority of these issues
4		occurred during 2007, which was a time period in which AUF was working with
5		the Commission Staff on transmittal problems relating to receiving complaints.
6		The issue has been resolved, and we now have a process in place to ensure that
7		we are entering all complaints into our database. We also have periodic
8		conference calls with Commission Staff to review the process and compare
9		complaint data.
10	Q.	Do you agree with Ms. Dismukes that it took an average of 60 days for a
11		customer's complaint to be resolved?
12	A.	No, I do not. Aqua reviewed the items contained in Ms. Dismukes' Schedule 3,
13		which she discussed briefly in pages 6 and 7 of her prefiled direct testimony. Her
14		testimony that, "on average it took 60 days, or two months, for a complaint to be
15		resolved," is intended to imply that Aqua was unresponsive, or at best slow to
16		respond, to Commission complaints. This is not the case.
17	Q.	Did you determine from your review of the complaints lodged with the
18		Commission that it did not take an average of 60 days for a customer's
19		complaint to be resolved?
20	A.	The Company's analysis of the same data on which Ms. Dismukes relied shows
21		that after the transmittal issues of 2007 were remedied, Aqua, on average,
22		responded to the Commission within 14 business days. Furthermore, on average
23		it took nearly 36 days from the date Aqua responded to these complaints for the

Commission to officially close the complaints listed in Schedule 3. Generally utilities have 15 business days to respond.

3		Ms. Dismukes indicated that of the 179 written complaints, "seventy-four
4		of these involved violation of Commission rules." However if you eliminate
5		those counted by Ms. Dismukes as apparent violations due to late response time,
6		then there are only nine that involved a potential violation. Aqua admits that it is
7		not perfect, but Aqua is not a poor performer, nor as slow to respond to its
8		customers and the Commission, as Ms. Dismukes' testimony implies.
9		Aqua also believes that the Commission would agree that our performance
10		with respect to response time has continued to improve throughout 2008.
11	Q.	Ms. Rhonda Hicks of the FPSC also submitted testimony in this proceeding
12		regarding Commission complaints. Can you please comment on her
13		testimony?
14	A.	Yes, I can. I have reviewed Exhibits RLH-1 and RLH-2 which are a summary of
15		complaints filed in 2007 and 2008 against AUF. AUF's analysis reveals the same
16		issues discussed above with respect to Ms. Dismukes' Exhibit 3. After AUF
17		resolved the transmittal issues that occurred in 2007, the number of apparent rule
18		violations cited by the PSC decreased dramatically.
19		CALL CENTER
20	Q.	Ms. Dismukes testimony is critical of the metrics used by AUF's to measure
21		its call center performance. Do you agree?
22	A.	I do not agree with Ms. Dismukes' criticism or her conclusions that we are not
23		tracking the correct information. AUF tracks four primary performance metrics
24		for its call center: the average speed service level, the average speed to answer,

the abandoned call rate, and average handle time. These metrics are significant because they measure customers' access to our Company. It is important that calls are answered quickly and handled efficiently. These metrics allow AUF to monitor performance and allocate resources and make adjustments as needed to make sure that customers are able to reach us.

While certain call center metrics may have different titles and calculations, 6 7 they are measuring comparable performance standards. For example, Ms. 8 Dismukes indicates that AUF may not be able to judge accessibility to our call 9 centers because AUF discontinued tracking average longest wait time. Since the 10 switch to the new cell centers, AUF now employs the more commonly accepted 11 metric, which is average speed to answer. AUF is still evaluating accessibility to 12 the call centers, and measuring essentially the same thing through a different 13 metric.

## Q. Can you please address Ms. Dismukes' assessment of AUF's call center performance?

A. Ms. Dismukes does acknowledge that AUF's call center performance has
improved since 2004, when AUF took over these systems. We agree that
performance has and continues to improve. There are, however, fluctuations in
performance during this time period. This is precisely one of the reasons that
AUF implemented its strategy to modernize and deploy its upgraded call center
management system in 2006. Since implementation, the new system has proven
quite reliable, and call center data is analyzed regularly.

## Q. Ms. Dismukes claims that AUF rarely meets its targets with respect to its call center performance metrics. Do you agree with her claim?

No, I do not. As I stated in my direct testimony, the performance metrics in our 1 A. 2 customer call centers have improved dramatically since the third quarter of 2007, and we are committed to continuing to improve our call center performance. This 3 is why we set targets for these metrics. The call center management teams have 4 specific goals designed to focus the activities of themselves and their CSR teams. 5 These goals are part of their formal performance plans which include goal 6 7 statements typical of call centers, including goals for abandon call rate, service 8 level, and average handle time. While at times we have been challenged to attain 9 these goals, we believe it is important that we have targets and formal goals. We 10 have plans to get to these performance levels and we are moving in the right 11 direction.

## 12 Q. Ms. Dismukes criticizes the performance of the Company's customer service 13 representatives. Do you believe this criticism is fair?

14 No, I believe her criticism to be unfounded. Quality customer service and A. 15 customer satisfaction are important to AUF, and the Company does regularly 16 evaluate its performance. AUF conducts quarterly transactional surveys of its 17 Florida customers who have had recent contact with the Company. Transactional 18 surveys differ from traditional customer satisfaction surveys in that all customers 19 who are interviewed had some issue with the Company that needed resolution. 20 The results of the transactional survey, when reviewed over time, indicate 21 trending and impact on customers from changes or improvements put into place. 22 AUF submits that the results of its transaction survey presents a fairer picture of 23 AUF's customer service performance than that highlighted by Ms. Dismukes, 24 because it surveys more customers that have had contact with the Company.

1		According to AUF's 2008 survey from last summer, Exhibit CHF-7,
2		customer satisfaction has improved steadily since the third quarter of 2007.
3		While the data does confirm that satisfaction declined in the period immediately
4		following the billing system conversion, prior to conversion, overall customer
5		satisfaction for customers with recent contact was at 60%. That percentage
6		climbed to 67% by July 2008. This specifically rebuts Ms. Dismukes' assertion
7		that AUF is not proactively taking measures to provide quality customer service.
8	Q.	What proactive steps has AUF taken to improve the quality of its customer
9		service?
10	A.	AUF has been proactive and, according to survey results, successful in providing
11		better quality customer service. In February 2008, AUF increased staffing,
12		initiated a quality assurance program, launched an internal call center
13		communication tool, and started a new CSR training program that we directly
14		attribute to the improving customer survey results. See Exhibit CHF-8. Since
15		February 2008, the call quality scores have consistently improved, and AUF
16		customers should continue to see positive benefits.
17		The quality monitoring program allows for review of customer calls
1 <b>8</b>		randomly selected for each CSR in the call centers. Each CSR participates in a
19		monthly coaching session with their supervisor with specific feedback from the
20		quality assurance team. This feedback is used to identify areas of good
21		performance and areas where improvement is needed. Systemic issues are
22		identified and rolled into the new training program.

1 A new call center communications tool has been introduced on the Company's intranet site to alert CSRs to training tips, procedural changes and 2 emergency information that may impact customers. 3 Training consists of both corporate and local resources. Formal new hire 4 5 training is conducted by a centralized team that travels quarterly to each call 6 center site. Each of the call centers has a cadre of senior CSRs who sustain the 7 knowledge transfer by providing side-by-side peer training. 8 **Q**. Do the call center complaints enumerated by Ms. Dismukes and Mr. Poucher 9 fairly represent the typical customer interaction with the Company? 10 A. No. AUF believes that most customers have a positive experience when they contact the Company, as the customer satisfaction survey results that I referred to 11 above indicate. In fact, some have an exemplary customer experience. The 12 13 Company routinely receives compliments from our customers. Compliments 14 received during 2007-2008 are shown in Exhibit CHF-9. I note the customerand employee-sensitive information has been redacted for privacy. 15 16 In describing their experiences, customers have used words like: pleased, 17 helpful, professional, empathetic, resolution, impressed, "above and beyond," 18 attention to detail, jubilant, amazing, closure, compassion, knowledge, follow-19 through, empowerment, dedicated, caring, eager, appreciate, fantastic, and 20 delightful. You will notice that compliments are celebrated with the employees, 21 their co-workers, and executives. CSRs appreciate and respond when 22 management recognizes good performance on behalf of our customers.

13

1		METER READINGS/BILLING
2	Q.	Ms. Dismukes indicates in her testimony that there are problems with the
3		accuracy of the meter readings. Does she provide any evidence that the reads
4		are not accurate?
5	A.	No, Ms. Dismukes does not provide any evidence that the reads are not accurate.
6		In 2007, AUF began a meter exchange in various systems. In 2008, Aqua
7		undertook a massive meter change out program that resulted in changing all AUF
8		meters that fall under the jurisdiction of the Commission. The project also
9		included the installation of a radio frequency (RF) device with each meter.
10		The Company installed Neptune Pro-Read Meters and Itron 60W ERT
11		units, each of which was tested by the manufacturer prior to delivery with a copy
12		of the test results attached to the meter for our records. The manufacturer is well
13		established and a national provider of meters to electric, water and gas utilities.
14		The radio frequency units that are being installed by the Company are a product
15		of Itron Inc., another national company with a well-established product used in
16		gas, water and electric utilities across the country. Together these products have
17		an accuracy rate that is nearly perfect.
18		I outlined in my previous testimony that, early in the meter change out
19		project, AUF's installation contractor had some difficulties in providing all
20		necessary information (address, RF device number, meter serial number, meter
21		reading on the old meter, meter reading on the new meter) to the Company after
22		the installation was completed. When incorrect information comes back from a
23		contractor, the Company must issue an estimated bill, and then must visit the
24		customer's property to obtain all of the necessary information so that a bill based

on an actual meter read can be delivered in the future. Once correct information is input into the billing system, the bills are highly accurate. I have not seen any evidence that proves that the meters or the RF devices are anything but accurate.

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Current statistical information indicates that AUF is estimating between 1 4 5 percent and 1.5 percent of its customer bills. AUF expects that estimate rate to continue to drop as it finishes installing all new meters and RF devices by the end 6 7 of November 2008. I stated in earlier testimony that after noting some of the data issues in the early stages of our meter replacement program, we instituted an 8 9 internal audit process. The audit is completed once the contractor finishes work 10 in a particular water system. As a result of the Company's audit and improved 11 information exchange with the contractor, we have improved our results which 12 demonstrate fewer errors and faster response when an error does occur.

13 The final component that ensures that our billing estimate rate will 14 continue to fall is our continuous effort to keep a bill from being estimated more 15 than two consecutive months. On a weekly basis, we review all accounts that 16 have been estimated for consecutive months. These accounts are considered high 17 priority and receive the attention of both office and field staff.

18 Q. Are customer service representatives trained to respond to customer

19 questions regarding the installation of new meters and RF devices?

A. Yes. All customer service representatives are trained to know how a meter and
 RF device operate. Additionally, and in accordance with our standard call center
 procedure, when the call centers became aware of the calls concerning the Florida
 meter exchange, a review session was conducted for all CSRs during refresher
 training sessions.

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1		Despite the training and communication processes, it is difficult for a CSR			
2		to diagnose a problem via telephone if limited information is given by the			
3		customer. At the customer service hearings, some customers who experienced			
4		months with usage spikes believed that it was due to either the meter or the billing			
5		system. AUF CSRs, in many cases, asked the customer appropriate questions			
6		about whether they filled pools, experienced leaks, or operated irrigation systems.			
7		Some customers admitted to these activities; others did not. However, in some			
8		cases, similar spikes existed in the same months of previous years indicating that			
9		the customer was unaware of the amount of water consumed by their activities.			
10		All of the activities mentioned above may cause spikes in consumption of water,			
11		but are difficult for a CSR to diagnose during a telephone conversation. Much of			
12		the research done by AUF has indicated that customers who called the call center			
13		often do not fully understand the amount of water they consume, thinking instead			
14		the meter or the billing system is the culprit.			
15	Q.	In Ms. Dismukes' testimony, on page 23 of her prefiled direct testimony, she			
16		discusses a customer who possesses limited English language skills who was			
17		allegedly given misinformation by the AUF call center. Could you discuss			
18		what AUF knows about this customer and the situation?			
19	A.	A customer who testified at the Palatka service hearing, Mr. Hoffman, alleged			
20		mistreatment of a Vietnamese family, which an AUF customer service			
21		representative later determined was regarding a man named Mr. Nguyen. AUF			
22		investigated this case and the results are as follows:			
23		04-30-08: Mr Nguyen called questioning a high water bill.			

Customer Service Representative created a service order for a high consumption 1 meter reading to be taken in accordance with AUF procedures. 2 05-07-08: Mr. Nguyen called AUF for results. 3 The meter reading was consistent with the prior read. AUF CSR advised the 4 5 customer to check within property for possible issues including silent leaks. 6 (AUF frequently asked questions document submitted with original testimony.) AUF did not advise customer to have plumbing redone in their property. 7 05-14-08: 8 Mr. Nguyen sent email about meter reads and adjusted bills. 9 05-19-08: Mr. Nguyen called and reported all plumbing redone on 05-16-08 10 and that he was taking daily reads and the usage was still high on 11 his meter. Mr. Nguyen believed meter to be faulty. AUF 12 scheduled a meter test. 13 05-20-08: Mr. Nguyen called and the meter read process was explained to 14 customer; reviewed meter testing process also. 15 05-29-08: Consultation with Aqua President Jack Lihvarcik and Sue Gildea 16 determined a meter configuration problem. Issue and bills 17 corrected. 18 07-02-08: Nguyen case was raised at Palatka hearing. 19 07-24-08: Aqua Compliance team member T. Bellamy contacted customer 20 advising of updates and corrections completed. 21 07-28-08: T. Bellamy left another message for customer. 22 There has been no additional contact with the customer and we have not received 23 any confirmation that any plumbing work was done. In fact, the customer never 24 attended a hearing or filed a complaint.

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1	Q.	In Ms. Dism	ukes' testimony, on page 26, she indicates that a customer		
2		received a shut off notice before her dispute was resolved. Could you provide			
3		details on what happened with this customer?			
4	A.	Yes.			
5		01-10-08:	Ms. Burns called Aqua to have her meter reread and check for		
6			leaks due to higher than normal bill.		
7		01-15-08:	E. Ortiz (tech) visited property and obtained read. Noted "no leaks		
8			shown" in Service Order notes.		
9		01-22-08:	Ms Burns called AUF to advise that her check payment was placed		
10			in mail.		
11		02-05-08:	Ms Burns called about shutoff notice received. Customer was		
12			advised to disregard notice.		
13		Ms. Burns' January bill was paid after the due date, resulting in the past due			
14		amount. This automatically generated a shut off notice which she received. The			
15		customer was not in dispute when she received the notice and was told to			
16		disregard it.			
17	<b>CUSTOMER SERVICE ISSUES IN OTHER AQUA STATES</b>				
18	Q.	Ms. Dismukes testifies that there have been customer services issues in other			
19		states where Aqua operates. Do you agree with Ms. Dismukes' statements?			
20	А.	No, I do not.			
21	Q.	What evidence does Ms. Dismukes cite for this proposition?			
22	A.	Beginning with Pennsylvania, Ms. Dismukes cuts and pastes references from			
23		allegations made by the Pennsylvania Office of Consumer Advocate (OCA), and			
24		not the ultimation	ate findings of the Pennsylvania Public Utility Commission. She		

1	claims that the customers of Aqua Pennsylvania ("Aqua PA") had complained of
2	low water pressure, dirty water, and inadequate service, and that the OCA's
3	engineer has investigated the complaints and found that: (1) one of AP's water
4	sources has exceeded one of the Safe Drinking Water Primary Maximum
5	Contaminant Levels ("MCLs"); (2) seventeen of AP's water sources have
6	exceeded some of the Safe Drinking Water Secondary MCLs; and (3) some of
7	AP's systems supply extremely hard water that causes customers' extraordinary
8	expense and inconvenience.

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## Q. Do you agree with Ms. Dismukes' allegations?

10 A. No. Ms. Dismukes' testimony only includes positions argued by the OCA and 11 does not include the ultimate decision in the case. A review of the entire record 12 shows that Aqua PA rebutted the testimony provided by the OCA. In fact, a 13 review of the entire record shows that the witness for Aqua PA, Dr. Hertz, stated 14 in his rebuttal testimony that over 600 Mineral Reports conducted during the 2006 15 and 2008 period were turned over as part of Aqua PA's interrogatory responses. 16 Mr. Fought, the OCA witness, found one sample for 2006 that showed high test 17 results for nitrate. Upon further review, Dr. Hertz found that the sample was, in 18 fact, in compliance.

19 20 Q.

## Did the tribunal in the Pennsylvania case opine on the water quality issues brought up by the OCA and its engineer?

A. Yes. In the recommended decision, on page 72, Judges Rainey and Koster stated
that Aqua PA provided persuasive testimony that the sample taken showed nitrate
levels well below the MCL for nitrates.

Did the tribunal in the Pennsylvania case opine on the assertion that some of Aqua PA's water sources exceeded secondary MCLs under the Safe Drinking Water Act and that some of Aqua PA's water supply contained hard water? The recommended decision found that Aqua PA was in compliance with the Pennsylvania Public Utility Code in regard to secondary MCLs for TDS and water hardness, and the Pennsylvania Public Utility Commission agreed, finding the recommended decision reasonable and in accordance with the record

8 evidence.

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**Q**.

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9 Q. Is it appropriate for Ms. Dismukes to claim in her testimony that she has
10 seen evidence in Pennsylvania that Aqua America has had problems
11 providing adequate water quality and customer service?

A. No, it is not. I believe that Ms. Dismukes has made statements in her direct
testimony regarding water quality and customer service provided by Aqua PA that
are simply not supported by any evidence filed in the Pennsylvania case prior to
decision, which can be determined by reading the Recommended Decision and
Final Order in that case.

17I would add that during the public input hearings during the Pennsylvania18rate case, only 10 customers in the Aqua Pennsylvania service territory (out of19420,000 customers in Pennsylvania) raised water quality issues. In fact, the20Pennsylvania Public Utility Commission awarded Aqua PA a return on equity of2111 percent, which I believe is reflective of the high water quality and customer22service provided.

Q. Can you comment on Ms. Dismukes' reference to providing adequate service
in Ohio?

23		adjust AUF's return on equity due to poor customer service?
22	Q.	Do you agree with Ms. Dismukes' recommendation that the Commission
21		<b>QUALITY OF SERVICE AND REDUCTION TO ROE</b>
20		evidence or substantiates Ms. Dismukes' portrayal of Aqua's customer service.
19		and pasting blurbs of investigative reports from other jurisdictions is credible
18		knowing that there is always room for improvement, I do not think that cutting
17		am not claiming any of our subsidiaries have reached a level of perfection, and
16		which Aqua Missouri implemented or is in the process of implementing. While I
15		effective utility management. The Commission Staff made five recommendations
14		performed a study in which the purpose is to promote and encourage efficient and
13		approximately 50 percent. As part of the small filing rate case, the Missouri Staff
12		Missouri Public Service Commission granting an overall increase in rates of
11		Missouri Staff and Aqua Missouri reached a settlement that was approved by the
10		Missouri filed a rate case in December of 2007. The Consumer Advocate,
9	A.	Yes. While I am not in charge of operations in Missouri, I can report that Aqua
8		operations?
7	Q.	Can you comment on Ms. Dismukes' reference to Aqua Missouri's
6		remaining estimated bills out of 90,000 customers.
5		issue with estimated bills. Upon checking, Aqua Ohio now has only 124
4		return on equity of 10.48 percent. I am aware that Aqua Ohio did have a targeted
3		received 82.5 percent of its filed request and the Ohio Commission approved a
2		filed a rate case in its Lake Division that was approved in May 2008. Aqua Ohio
1	Α.	Yes. While I am not in charge of operations in Ohio, I can report that Aqua Ohio

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1	A.	No, I do not agree. First, I would like to note that the Commission's interim rate
2		order contains a substantial error which has penalized Company. The error amounts
3		to \$588,239 on an annualized basis of revenues which AUF is legally entitled to.
4		This is explained further in Mr. Szyzgiel's testimony. Second, I believe that the
5		record shows that AUF is providing quality customer service. There should be no
6		reduction to the return on equity attributable to AUF's customer service
7		performance. I am also informed by counsel that that this proposed adjustment is
8		contrary not only to past Commission precedent, but also to prior court decisions
9		within Florida.
10		Specifically, in Order No. PSC-96-1320-FOF-WS, issued October 30,
11		1996, the Commission stated:
12 13 14 15 16		Pursuant to Section 367.081(2)(a), Florida Statutes, this Commission must consider the value and quality of the utility's service when fixing rates. While we have elected not to impose sanctions upon SSU for its quality of service, we have considered whether SSU's return on equity should be adjusted.
17 18 19 20 21 22 23		This Commission has the authority to reduce a utility's return on equity, and in certain situations has done so. We begin by observing that, pursuant to Section $367.121(1)(g)$ , Florida Statutes, in the exercise of our jurisdiction, we are empowered to exercise all judicial powers, issue all writs, and do all things necessary or convenient to the full and complete exercise of our jurisdiction and the enforcement of our orders and requirements.
24 25 26 27 28 29 30 31 32 33 34 35		In Gulf Power Co. v. Wilson, 597 So. 2d 270 (Fla. 1992), we determined that Gulf Power's fair rate of return was between 11.75 percent and 13.50 percent and set its rate of return at 12.55 percent. Because of several years of corrupt practices such as theft and misuse of company property and inappropriate political contributions, we reduced Gulf Power's rate of return by 50 basis points to 12.05 percent. On appeal, the Supreme Court held that so long as the final number remains within the authorized range, the Commission could adjust the rate of return for mismanagement. The Supreme Court stated that what constitutes a fair rate of return for a utility depends upon the facts and circumstances of each utility, and that it has expressly recognized that the Commission must be allowed

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broad discretion in setting a utility's appropriate rate of return. Id. at 273. The Court held that the adjustment of Gulf Power's rate of return within the fair rate of return range falls <u>within</u> those powers expressly granted by statute or by necessary implication, and that inherent in the authority to adjust for management efficiency is the authority to reduce the rate of return for mismanagement, as long as the resulting rate of return falls <u>within</u> the reasonable range.

- 8 In United Tel. Co. v. Mann, 403 So. 2d 962, 966 (Fla. 1981), the 9 Supreme Court ruled that while a utility is entitled to a fair or 10 reasonable rate of return, once this Commission establishes a rate of 11 return, further adjustments may be made for areas such as accretion, 12 attrition, inflation and management efficiency.
- 13 Again, referencing another order cited in Ms. Dismukes' testimony on
- 14 page 43, the Commission has found that, based on further court decisions
- 15 in Florida, it is prohibited to go below the allowed return on equity.
- 16 Specifically, the Commission stated,
- 17To answer the question, we must start with the principle set forth in18Bluefield Co. v. Public Service Commission, 262 U.S. 679 (1923). In19that case, the United States Supreme Court held:
- 20The just compensation safeguarded to the utility by the21Fourteenth Amendment is a reasonable return on the property22used at the time that it is being used for the public service.23And rates not sufficient to yield that return are confiscatory.
- 24 Bluefield at 692.

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25 There are limitations and caveats associated with this principle. We 26 have on several occasions reduced a utility's return on equity or denied 27 a rate increase for mismanagement or inefficient service. For instance, 28 in Gulf Power v. Wilson, 597 So. 2d 270 (Fla. 1992), we reduced Gulf 29 Power's return on equity by 50 basis points from the midpoint of the 30 approved range because of a finding of utility mismanagement. With 31 the reduction, the return was still well within the authorized range. 32 The utility argued that this reduction was an unauthorized penalty and 33 was in contravention of the holdings in Florida Tel. Corp. v. Carter, 34 70 So. 2d 508 (Fla. 1954), and Deltona Corp. v. Mayo, 342 So. 2d 510 35 The Supreme Court disagreed and found that this (Fla. 1977). 36 reduction was neither a penalty nor confiscatory, but was merely a 37 recognition of management inefficiency. The Court noted that in both 38 Carter and Mayo the Commission had improperly attempted to deny 39 rates such that the rate of return was "well below the range found by

the Commission as being fair and reasonable," and that this was not 1 2 the case in Gulf Power. Gulf Power at 273. According to the Florida Supreme Court, "it is well established that all a regulated public utility 3 is entitled to is 'an opportunity to earn a fair or reasonable rate of 4 return on its invested capital."" Gulf Power at 273, citing United Tel. 5 Co. v. Mann, 403 So. 2d 962, 966 (Fla. 1981). 6 7 Therefore, I believe it is inappropriate for OPC to now be recommending an 8 unlawful 150 basis point reduction. 9 **O**. Ms. Dismukes also quotes from the above cited order (PSC-96-1320), when 10 referencing prior quality of service complaints from customers of Southern 11 States Utilities, Inc., do you agree that these problems existed prior to AUF's 12 purchase of the same systems addressed in that order? 13 Yes. As pointed out by Ms. Dismukes on page 113 of her testimony, a majority A. 14 of these systems were previously owned by Southern States Utilities, Inc. The name of this utility was subsequently changed to Florida Water Services Corp., 15 16 and the remaining systems were purchased by AUF. It is evident by Ms. 17 Dismukes' testimony that many of these customers in these purchased systems 18 brought forth the same complaints in the past. Specifically, on pages 46 and 47, 19 these complaints were identified. It should be pointed out that these same 20 customer groups brought forth these complaints more than 12 years ago at these 21 systems. 22 However, since purchasing these systems, AUF has invested more than 23 \$30 million upgrading these poorly capitalized systems. AUF has consciously 24 made an effort to address its customer complaints. Ms. Dismukes appropriately 25 references Rule 25-30.433(1), F.A.C., on page 5 of her testimony. This Rule 26 specifically states that the Commission will consider "the utility's **attempt** to

address customer satisfaction." (Emphasis added.) Ms. Dismukes states that the 1 Commission must follow this Rule in determining the quality of service. 2 In the above cited order, the Commission did lower the utility's return on 3 equity 25 basis points for less than efficient management, and an additional 25 4 basis points for the utility's marginally satisfactory quality of service. This 50 5 basis point reduction was put in place for a period of 2 years. The rates were then 6 7 subsequently raised to remove this reduction. Since purchasing these systems, 8 AUF has been aggressive in its efforts to address customer satisfaction, and has 9 been proactive in addressing the quality of service in Florida. Notably, AUF has 10 replaced or will replace all of its water meters with RF meters. AUF has 11 instituted an aggressive program to significantly reduce, if not eliminate, 12 estimated bills. Also, AUF has instituted a program to significantly reduce its delinquent accounts. 13 14 Q. On page 6 of her testimony, Ms. Dismukes addresses an exhibit, Schedule 3, 15 which is a schedule of complaints received by the Commission since the last 16 rate case. Ms. Dismukes indicates that there were 179 written complaints 17 filed. Does that number appear unusually high? 18 No, I do not believe so. In answering this question, I will again refer to an 19 order that Ms. Dismukes cites, Order No. PSC-02-0593-FOF-WS. Concerning 20 the number of complaints received by Aloha Utilities, the Commission states: 21 Staff witness Durbin testified that during the period between January 22 1, 1999, and October 31, 2001, the Commission logged 193 23 complaints against Aloha Utilities. This number of complaints 24 constituted the highest number of complaints per 1,000 customers of 25 any of the similarly sized water and wastewater utility companies reviewed. The similarly sized companies included other Class A and 26 27 B water and wastewater companies in Pasco County plus other

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selected Class A companies outside of Pasco County. The review

indicated that Aloha had 15.16 complaints per 1,000 customers for the 1 period January 1, 1999, through November 13, 2001. The other 2 companies reviewed ranged from a low of .024 complaints per 1,000 3 customers by Florida Cities Water Company Lee County Division, to a 4 high for the other companies of 13.45 complaints per 1,000 customers 5 by Jasmine Lakes Utility Corporation. 6 I bring this up to draw a comparison using Staff witness Rhonda Hicks' Exhibit 7 RHL-1, which refers to complaints received by the Commission. If you compare 8 9 the number of complaints received in 2007—193—to the number of water and 10 wastewater customers in this rate case served by AUF-24.991-this equates to 11 7.72 complaints per 1,000 customers. AUF serviced 24,991 customers during 2007. This comparison based on complaints per 1,000 customers is well within 12 13 the range cited by the Commission in the Aloha order. 14 Q. Do you agree with Ms. Dismukes' investigation and conclusion concerning 15 the 2007 Aqua Annual Report statement that "During certain periods in 16 2007, we temporarily discontinued collection efforts in some of our divisions 17 in connection with the installation of a new billing system which resulted in 18 increased amounts written off and higher bad debt expense," which Ms. 19 Dismukes discussed on page 121 of her direct testimony? 20 A. No. Ms. Dismukes has claimed that this change will lead to higher bad debt 21 expense and should not be included in expenses to set rates. Ms. Dismukes, 22 however, has incorrectly interpreted the statement in the annual report on which 23 her conclusion is based. The annual report comment referred to Aqua activities in 24 states other than Florida, where conversions took place during 2007. The 2007 25 conversions, which did not include Florida, experienced extraordinary 26 complications related to system structure variability and legacy system data 27 quality. Collection activities in states other than Florida were suspended for a

1	longer period of time (4-5 months). These complications were not experienced in
2	Florida during the 2006 conversions. The Florida conversion took place in
3	November 2006. Collection activities in Florida were suspended for
4	approximately three months around the time of system conversion. Collection
5	activities slowed in the month prior to conversion (October 2006) and for two
6	month afterwards (November and December 2006). By January 2007, Florida
7	collections processes were back in place and customer late notices and service
8	terminations had resumed. The suspension of collection activities for this short
9	period of time is normal practice during system conversions. The purpose is to
10	minimize the number of accounts in an active collection mode during the actual
11	conversion (therefore, the suspension before conversion) and to allow the
12	accounts to bill and re-age on the new system to trigger appropriate automatic
13	collections activities. See the following table for service termination counts by
14	month that demonstrates this point.

15 16 17 18	<u>Year</u> 2006	<u>Month</u> October November December	<u>Service Terminations for Collections</u> Low or zero (old billing system) 0 (new billing system) 1	<u>Comment</u> Billing system conversion Billing system conversion Billing system conversion
19 20 21 22 23 24 25 26 27	2007	January February March April May June July August September	106 123 121 321 298 641 241 260 467	Begin normal collection activity
28 29 30 31 32	2008	October November <u>December</u> January238 February	92 103 <u>35</u> 137	Interim rate refund period Interim rate refund period Interim rate refund period
33 34 35 36 37 38		March April May June July August	468 156 256 160 337 380	

1September3102October456

The Florida systems' billing conversion occurred in November 2006. Normal 3 monthly cycle billing on Florida accounts resumed quickly after the billing 4 5 conversion. Due dates assigned to balances converted were actually in November and early December 2006. The first bills post-conversion were issued with due 6 7 dates in mid December. AUF delinquency processes resumed based on the first 8 bills issued on the new system which had due dates during December 2006. 9 In January of 2007, we shut off 106 Florida customers for delinquent bills, 10 and throughout 2007, shut offs averaged 234 per month. In the first 6 months of 11 2008, shut offs averaged 236 per month. On a per-customer basis, these 12 termination rates are roughly double the average termination rate in Aqua. This 13 indicates that AUF customers, on average, are more delinquent than Aqua 14 customers as a whole (and perhaps more than other water and sewer systems in 15 Florida experience); that AUF is appropriately scaling the collection activities to 16 address the higher delinquency; and the resultant bad debt is representative of the

AUF customer base, and not a lack of effort or abnormalities related to systemconversion.

19Our current delinquency processes, final billing, and collection agency20assignment of uncollected accounts has been consistently applied since December212006 to date. Therefore, our bad debt expense realized during these periods are22actual, are unaffected by the system conversion, and are representative of the23reasonably expected bad debt expense in the future.

1 **CITY OF OVEIDO** 2 Can you please provide a update on AUF's negotiations with the City 0. of Oveido? 3 4 A. Yes. At the Chuluota public service hearing, Mayor Andrews made it clear that 5 she was willing to help AUF address the water quality issues in Chuluota. She stated that "we want to see what assistance we may be able to provide." (Tr. Page, 6 7 60, Lines 15-16). She went on to state in her sworn testimony that, 8 The City of Oviedo stands po[i]sed to work with and assist Aqua Utilities, but as I've said, our negotiation[s] have never been 9 10 fruitful. As we will extend our hand again if you need an 11 alternative source, but you need to come to the table and we need 12 to negotiate and we need to talk. But if there's something that the City can do to be of assistance to Agua Utilities, please contact us 13 14 and let's see what we can work out, because we don't want our 15 fellow community in Chuluota going through this anymore. 16 See Oveido Service Hearing, Transcript p. 63, lines 11-18. 17 Aqua has been working proactively with the City on possible 18 solutions. The City's engineers – CHP Engineers – will be evaluating a 19 potential interconnection to pipe drinking water to residents in nearby 20 Chuluota. The proposed water connection could potentially replace Chuluota's community wells which are the current source of drinking 21 22 water. The evaluation will determine the financial and technical 23 feasibility of a new pipeline. Oviedo staff have agreed to help oversee and 24 coordinate the work that will be done by CPH Engineers. 25 **Q**. Does this conclude your direct testimony?

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A. Yes, it does.

BY MR. MAY: 1 Mr. Franklin, do you have attached to your 2 ο. rebuttal testimony three exhibits? 3 A. I do. 4 Do you have any corrections or revisions to 5 Q. those exhibits? 6 7 A. I do not. 8 Q. Have you prepared a very brief summary of your rebuttal testimony? 9 Very brief. 10 Α. Would you please provide that very brief 11 Q. summary? 12 Chairman and Commissioners, the purpose of my 13 Α. rebuttal testimony is to address issues raised by OPC 14 15 witness Kimberly Dismukes. I also address issues raised by OPC witness Earl Poucher. 16 My rebuttal testimony will address Commission 17 18 complaints, call center and customer service, meter 19 readings and billings, customer service in other Aqua 20 states, quality of service, and other issues relating to 21 return on equity. 22 Does that conclude your summary? **Q**. 23 A. Yes, it does. 24 MR. MAY: Thank you, Mr. Franklin. We tender 25 the witness for cross.

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CHAIRMAN CARTER: Outstanding summary, 1 Mr. Franklin. 2 THE WITNESS: Thank you, Mr. Chairman. 3 CHAIRMAN CARTER: Mr. Beck, you're recognized. 4 MR. BECK: Thank you, Mr. Chairman. 5 CROSS-EXAMINATION 6 BY MR. BECK: 7 Q. Good evening, Mr. Franklin. 8 9 A. Good evening. Mr. Franklin, in your supplemental direct 10 Q. testimony, you stated that you would address issues from 11 the Green Acres and the New Port Richey service hearings 12 13 in your rebuttal testimony, did you not? I did, sir. 14 Α. Okay. Did you do that in your rebuttal 15 Q. 16 testimony? 17 No, they were not included, and I apologize Α. for that. 18 19 Why were they not in there? **Q**. 20 The letters -- we felt it was very important Α. 21 to continue to address the, for lack of a better term, 22 the blue form, the incoming issues that were coming in 23 constantly from those customers, so we addressed those 24 first. But we do plan and have begun already to address 25 the issues associated with the other two hearings. As a

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matter of fact, a lot of the follow-up work has been 1 2 done. It's just that those letters have not been issued. 3 Okay. So the letters that we saw and we went 0. 4 over in your supplemental direct, the customers have not 5 6 received any response from the company yet? Those letters have not been received, right. 7 Α. Have you reviewed the exhibit or schedule Q. 8 9 attached to Ms. Dismukes' testimony which contains the customer correspondence file in the case as of October 10 7th? 11 12 I don't recall. Α. 13 Q. Her Schedule 2, which is the letters and the 14 forms that were sent to the Commission and that's shown 15 on the Commission's website? 16 I review so many customer issues, Mr. Beck, I Α. 17 just don't recall. Ms. Dismukes has filed two schedules, or 18 ο. 19 Schedule 2, and there's two volumes, 1 and 2, and we're going to have a late-filed that brings that up to date. 20 21 Did you review that portion of her testimony and the 22 customer complaints that are contained in those 23 schedules? I do recall looking through those, yes. 24 Α. 25 Q. And in your review, did you note that many of FLORIDA PUBLIC SERVICE COMMISSION

the customers filled out a form that the Commission had 1 given them that they could send to the Commission in 2 lieu of testifying live to the Commission? 3 That's what I referred to as the blue form. Α. 4 That's what I meant by that. 5 Okay. Have you responded to the customers who 6 Q. chose to write the Commission in lieu of testifying 7 live? 8 9 Yes, we have. I believe there was even as of Α. this week another stack of letters that were delivered, 10 11 even as late as this week on those follow-up forms. 12 They continued to come in some time after the hearings were over. 13 14 Okay. Have you provided any of those in your ο. rebuttal testimony or shown what your response was to 15 16 the customers who wrote to the Commission? 17 No, I have not done that in my testimony. Α. 18 Could you turn to your Exhibit CHF-9? Q. 19 Yes. Α. 20 Q. And this is an exhibit of 58 pages of e-mails? 21 A. Yes, it is. 22 How were the e-mails compiled to prepare this Q. exhibit? 23 24 Every time that a congratulatory message comes Α. 25 into out call center complimenting one of our call FLORIDA PUBLIC SERVICE COMMISSION

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takers, those are forwarded on to the company executives, particularly in the states, so that they're aware that there was a compliment received by one of the customers -- from one of the customers, I should say.

Q. Now, do you do the same when a customer comes to your call center and complains about the service from a --

A. We don't forward every complaint on to all of
our executives, because they're handled very
specifically by our customer service representatives.
And frankly, it would be difficult to know where to draw
the line on what's a question and what's a concern.

Q. So you forward the congratulatory comments to
the officers of the company, but not the negative --

A. We summarize our issues that come into the call center so that each state president understands the ten reasons that -- the top ten reasons that customers call that particular month from their state so that they can either work on issues or at least be aware of those issues. So we always look at the top ten issues by state.

Q. Okay. But the answer to my question is, you
forward the congratulatory ones, but not the negative
ones?

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A. As you can imagine, Mr. Beck, we receive about

4,500 calls in our call center a week, so it would be 1 virtually impossible to forward every inquiry. 2 On the first page of your Exhibit CHF-9, the 3 **Q**. first e-mail is dated May 22, 2007; is that right? 4 May 22, 2007, that's right. Α. 5 And then the next one is May 30, 2007? 6 Q. 7 Α. Yes. Does that mean a period of eight days elapsed 8 Q. 9 between somebody giving a positive comment to your customer call center? 10 11 Not necessarily. As you know, we make the Α. best attempt, but the fist priority for these folks is 12 to address customer issues. They try to do this the 13 14 best they can between customer calls and between handling issues, so if there's a particularly busy day, 15 16 they may not get to this particular piece of their work. 17 Okay. In your attachment of 58 pages, how Q. many of those compliments came from your customers in 18 Florida? 19 20 Α. I don't know without really doing the research 21 to find out where they were, where they called from. 22 Do you recall --Q. 23 As a matter of fact, you raise a -- the point Α. 24 you raise is a very valid one that I personally 25 addressed, and I've asked that all of these that are FLORIDA PUBLIC SERVICE COMMISSION

forwarded to our company executives come with the state 1 specific information on it so each state president 2 understands what's happening and the compliments that 3 are coming from their own customers. 4 Could you point to me one that comes from 5 Q. Florida? 6 7 I couldn't point to one that comes from any Α. particular state in here. They're not identified. 8 9 They're e-mails. 10 Could you turn to your Exhibit CHP-7? ο. CHF-7. Yes. 11 Α. Let me see if I understand. This is the 12 Q. 13 survey of customers to see how satisfied they are with 14 your service; is that right? That's correct. 15 Α. 16 You have -- going from the right to the left, Q. you have the second quarter of 2008, and then the first 17 18 quarter of 2008, and then the one before that says post third quarter 2007. Do you see that? 19 20 Α. Yes. 21 Why is that labeled post third guarter 2007? ο. 22 The post and the pre are indicated there to Α. 23 show when we changed our billing system so that we could 24 -- what we wanted to do was get information prior to our 25 billing system and post implementation of the billing

system, because this is a transactional survey. This is 1 not just a general survey. This is a survey of only 2 customers that called our call center. 3 And that's the one that you described in your **Q**. 4 direct testimony? 5 I did, right. 6 Α. So for the post third quarter '07, you've got 7 **Q**. 20 percent of your customers are very satisfied and 23 8 9 percent somewhat satisfied? Of those that called the call center. 10 Α. Which means that over half of the customers 11 ο. 12 during that quarter were dissatisfied with the service they received? 13 14 Of those surveyed. Α. Okay. Now, you filed your supplemental direct 15 Q. 16 testimony on November 19th; is that right? Rebuttal testimony, excuse me. 17 My rebuttal testimony on November 19th. 18 Α. 19 Did you have the results from the third Q. 20 quarter of 2008 at the time you filed your testimony? 21 Α. No, we did not. I had hoped to have that, but 22 I did not have those yet. It's done by an outside 23 agency. And it's done company-wide, so they break it 24 down, and it takes some time. 25 MR. BECK: Thank you. That's all I have. FLORIDA PUBLIC SERVICE COMMISSION

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## CHAIRMAN CARTER: Thank you. Ms. Bradley.

## CROSS-EXAMINATION

BY MS. BRADLEY:

Q. Mr. Franklin, let me ask you. We had a number 4 5 of complaints, and you've talked about some of this in your testimony, but what did you do about the consumer 6 service representatives who, when people complained 7 about their bills being excessive just told me, "Well, 8 there's nothing wrong with your bill. You must have a 9 10 leak in your house"? And a number of these people spent 11 considerable amounts of money having somebody to come in and dig up whatever they needed to, and then were told, 12 13 "There's nothing wrong with the pipes at your house." It turned out it was a billing error. What did you do 14 15 with those customer service representatives that had 16 caused such an expense to the consumers?

A. Well, first, the customer service
representatives are taught to inquire of the customer
and take them through a process to better understand and
diagnose what the issue is. And as you look at high
consumption, a couple of things became apparent.

One, customers didn't understand in many cases how much water they used, particular if they had irrigation systems. And I think that has come out multiple times through our discussions in the various

hearings.

2 Secondly, customers didn't always know how to diagnose whether or not they had a leak, whether it was 3 a leaky toilet or a leak in the yard. And so typically 4 a customer service rep will go through a series of 5 questions and try and diagnose. And one of those 6 questions is, "Might you have a leak? Might our toilet 7 be leaking? Would you know how to diagnose it? You 8 would put dye in the toilet. If you still believe that 9 10 you don't have a leak, might you turn off all the 11 water-using appliances in your home and go out to the 12 street and look at your meter. If your meter is still 13 running, there may be a leak. So they typically run 14 through these scenarios and inquire and drill down and make sure that the customer doesn't have a leak so that 15 16 they can immediately get a plumber and get it repaired.

In the case where a diagnosis can't be made by telephone -- and you might imagine that that's very difficult to do in some instances -- then the customer service rep might suggest that they have a plumber look at their internal plumbing. And I think in no instance would we ever -- I know we would never suggest that anybody have their home replumbed.

Q. Did you do anything about the customer service
representatives who in response to complaints of high

bills merely said, "There's nothing wrong with your bill. It's a leak," causing consumers to waste a lot of money trying to check that out?

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A. I'm aware of one single customer that was described at one of the hearings, a Vietnamese family who had their plumbing redone as a result of a leak that they believed they had. But I could not ever see a customer service representative making a full diagnosis and indicating that a customer needs to spend any dollars of their own to make a repair.

Q. Were you aware that a number of people came to the hearings and claimed about errors in bills and bills that were way in excess of what the actual amount used was?

15 Α. I am aware that a number of people talked 16 about billing errors, and we discussed at some length 17 the complicated issue that occurs in a transition that 18 occurs from one meter to the next. And I think the 19 company has worked very, very hard to correct those 20 errors and has replaced all the meters throughout the 21 State of Florida under the AUF umbrella in an attempt to 22 make sure that billing and meter reading are pristine 23 moving forward.

24 Q. Did you hear the testimony by numerous people 25 at the hearings about three-minute showers, the not

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irrigating to the point that their lawns were going 1 2 brown, or only irrigating one day a week, and this type of testimony? Did you hear that? 3 I did. Α. 4 MS. BRADLEY: Thank you. Nothing further, 5 Mr. Chairman. 6 CHAIRMAN CARTER: Thank you, Ms. Bradley. 7 Staff, you're recognized. 8 MR. JAEGER: Thank you, Chairman. 9 10 CROSS-EXAMINATION 11 BY MR. JAEGER: 12 Q. Mr. Franklin, you're aware that staff has been 13 forwarding complaints to Aqua to investigate for the 14 ones they thought needed a response by the utility; is 15 that correct? 16 Yes, I am. A. 17 And are you also aware that a part of the Q. 18 agreed-upon procedures was that Aqua would have a 19 representative contact the customer within 48 hours of 20 receiving a fax of the customer's complaint? 21 Α. Yes. 22 Q. And was it Mr. Lihvarcik or you that was responding to those complaints? 23 24 Neither, I believe. Those complaints are A. 25 typically handled by our elevated complaint resolution FLORIDA PUBLIC SERVICE COMMISSION

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group in our corporate office.

Q. Would it surprise you to know that customers are contacting Commission staff indicating that they never received a call from Aqua at all, much less within 48 hours?

A. Yes, it would surprise me.

Q. I think OPC discussed with you the complaints of several customers, one of them Barbara Baretta and another one Dan Diehl. Could you provide the details concerning the investigation of these two customers showing what you did to investigate? And what I'm wanting is all documents and electronic files associated with the investigation for Barbara Baretta and Dan Diel.

A. I would be happy to. I might point you also
to my testimony, where I outline Mr. Diehl, the issues
with Mr. Diehl. There's a portion in my testimony that
takes each call by call and indicates the actions taken
on Mr. Diehl. I would be happy to provide the other
one, Ms. Baretta, too.

20 MR. JAEGER: Chairman, I would like an exhibit 21 identified as 207, and just any documents and electronic 22 files associated with the investigation of Barbara 23 Baretta and Dan Diehl.

24CHAIRMAN CARTER: Give me those names again.25MR. JAEGER: Barbara Baretta.

CHAIRMAN CARTER: Let's just go with the --1 The investigations for Baretta. okay. 2 MR. JAEGER: And Diehl, all documents. 3 CHAIRMAN CARTER: D-e-i-h-l, or does it --4 MR. JAEGER: D-i-e-h-l. 5 CHAIRMAN CARTER: I before E except after C. 6 7 How do you -- help me here. MR. JAEGER: D-i-e-h-l, Mr. Chairman. 8 CHAIRMAN CARTER: Okay. That will be 9 Late-filed Number 207. 10 (Late-filed Exhibit 207 was identified for the 11 12 record.) BY MR. JAEGER: 13 So are you aware of what the concerns of these 14 Q. 15 customers were? 16 Α. Yes, I am, Mr. Jaeger. As a matter of fact, 17 I'm looking at a document here that was a complaint that 18 came through the PSC that we responded to in regard to 19 Ms. Barbara Baretta, and I believe that at this point, that complaint is closed and concluded with. Well, I 20 can submit the -- what we did for the PSC complaint and 21 22 any other details that may have occurred since that 23 time. 24 Okay. Are you aware that Mr. Lihvarcik signed Q. 25 most of the complaint letters?

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A. Yes, I am.

Q. On page 3, lines 9 through 12 of your testimony, you talk about how AUF dutifully and thoroughly investigated these complaints. Would you or Mr. Lihvarcik, or who would be the one to question on what these investigations entailed?

7 Α. The investigations were very thorough, and both Mr. Lihvarcik and I were detailed in every detail. 8 I have to say that I would be a little challenged to 9 10 operate the billing system as efficiently as many of my colleagues in the billing department, so much of the 11 12 work, including the field work and the research work, 13 was done by our staff. But ultimately, those letters were personally reviewed. I think I personally reviewed 14 almost every one of them, and I know Mr. Lihvarcik 15 16 reviewed, I'm assuming, every one of them as they were 17 going out under his signature.

18 Q. And you stand by your testimony that each 19 witness was contacted, or each complainant was 20 contacted?

A. Yes, I do.

MR. JAEGER: That's all I have, Chairman. CHAIRMAN CARTER: Okay. Anything from the bench?

Exhibits.

MR. MAY: Mr. Chairman, I just had one 1 follow-up question. 2 CHAIRMAN CARTER: Oh, Mr. May, sorry about 3 that. You should listen to your wife more. 4 MR. MAY: I hope my wife is not listening. 5 CHAIRMAN CARTER: You're recognized. 6 7 MR. MAY: I'll be eating a bologna sandwich tonight. 8 9 REDIRECT EXAMINATION BY MR. MAY: 10 Mr. Franklin, you recall being questioned by 11 Q. 12 Mr. Beck regarding follow-up activities on the customer service hearings in Green Acres and New Port Richey? 13 14 Α. Yes. I do. 15 Is it your testimony today that Aqua Utilities Q. 16 Florida will do the follow-up to those customers just as 17 it did the follow-up to the customers at the previous 18 service hearings? 19 Yes, sir. In fact, much of the follow-up has Α. 20 been done. 21 Q. When you send your letters to your customers, 22 are you willing and prepared to copy Mr. Poucher on those letters? 23 24 Α. Yes, I am. 25 MR. MAY: Okay. No further questions. FLORIDA PUBLIC SERVICE COMMISSION

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1	CHAIRMAN CARTER: Okay. To the man who
2	wouldn't listen to his wife, exhibits. I think it's
3	137, 138, and 139, Commissioners. Mr. Beck, any
4	objection?
5	MR. BECK: No objection.
6	CHAIRMAN CARTER: Without objection, show it
7	done, 137, 138, and 139. And also, for the record,
8	Late-filed Exhibit Number 207.
9	(Exhibits 137, 138, 139, and Late-filed 207
10	were admitted into the record.)
11	CHAIRMAN CARTER: Let me just kind of to
12	the parties and also to staff here, let me just kind of
13	let you know that, you know, I believe in full speed
14	ahead, but sometimes you reach a point of diminishing
15	return. We do want a quality product.
16	Let me just kind of do this. I'm down to one
17	court reporter. And bless your heart. You've been a
18	loyal trooper for us this afternoon. Well, I guess this
19	evening now, isn't it?
20	Let's do this. This seems like a good enough
21	breaking point, but tomorrow, eat your Wheaties. And
22	again, I say to the attorneys, I appreciate your
23	professionalism and all like that, but let's kind of
24	understand that tomorrow is it. That's all the time
25	we've got on the calendar, and we want to proceed
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1	further. We want to proceed expeditiously. We also
2	want to proceed judiciously. And as much as possible, I
3	think we can get it done. To my colleagues, I
4	appreciate your patience.
5	With that, we'll kick off tomorrow morning at
6	9:30. We're on recess. That will be 9:30 a.m.
7	(Proceedings recessed at 7:26 p.m.)
8	(Transcript follows in sequence with
9	Volume 9.)
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	FLORIDA PUBLIC SERVICE COMMISSION

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1	CERTIFICATE OF REPORTER
2	
3	STATE OF FLORIDA:
4	COUNTY OF LEON:
5	I, MARY ALLEN NEEL, Registered Professional
6	Reporter, do hereby certify that the foregoing
7	proceedings were taken before me at the time and place
8	therein designated; that my shorthand notes were
9	thereafter translated under my supervision; and the
10	foregoing pages numbered 981 through 1189 are a true and
11	correct record of the aforesaid proceedings.
12	I FURTHER CERTIFY that I am not a relative,
13	employee, attorney or counsel of any of the parties, nor
14	relative or employee of such attorney or counsel, or
15	financially interested in the foregoing action.
16	DATED THIS 11th day of December, 2008.
17	
18	Marin Queen have
19	MARY ALLEN NEEL, RPR, FPR 2894-A Remington Green Lane
20	Tallahassee, Florida 32308 (850) 878-2221
21	(850) 878-2221
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