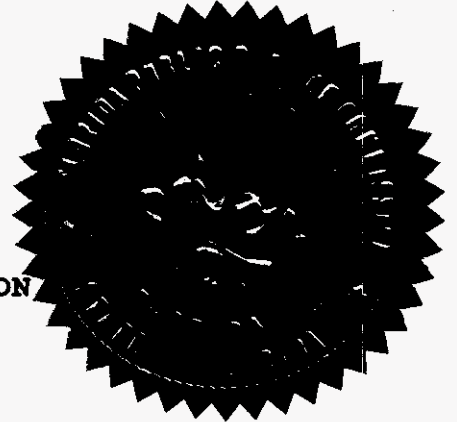


BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of : DOCKET NO. 951056-WS

Application for rate :
increase in Flagler :
County by Palm Coast :
Utility Corporation. :



SECOND DAY - MORNING SESSION

VOLUME 4

Pages 359 through 492

PROCEEDINGS: HEARING

BEFORE: COMMISSIONER J. TERRY DEASON
COMMISSIONER JULIA L. JOHNSON
COMMISSIONER DIANE K. KIESLING

DATE: Tuesday, July 2, 1996

TIME: Commenced at 8:45 a.m.

PLACE: The Knights of Columbus Building
51 Old Kings Road
Palm Coast, Florida

REPORTED BY: JOY KELLY, CSR, RPR
Chief, Bureau of Reporting
ROWENA NASH HACKNEY
Official Commission Reporters

APPEARANCES:

(As heretofore noted.)

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P R O C E E D I N G S

1
2 (Transcript follows in sequence from
3 Volume 3.)

4 (Hearing reconvened at 8:45 a.m.)

5 **COMMISSIONER DEASON:** I believe
6 Mr. Guastella was on the stand when we broke yesterday
7 evening to conduct the customer hearing, and I
8 believe, Mr. Melson, you were inquiring.

9 **MR. MELSON:** Correct. Commissioners, right
10 at the close of the hearing yesterday I handed out a
11 three-part diagram. I wondered if we could mark that
12 as the next-numbered exhibit.

13 **COMMISSIONER DEASON:** Yes. That will be
14 identified as Exhibit 16.

15 (Exhibit No. 16 marked for identification.)

16 **MS. REYES:** Excuse me, Commissioner, can we
17 have a short title for that?

18 **COMMISSIONER DEASON:** Mr. Melson?

19 **MR. MELSON:** Conceptual layout of Palm Coast
20 Plant Site.

21 - - - - -

22 **JOHN F. GUASTELLA**

23 resumed the stand as a witness on behalf of Palm Coast
24 Utility Corporation and, having been previously sworn,
25 testified as follows:

1 A Under the "Original Configuration."

2 Q Yes, sir.

3 A You have two squares in each of the basins,
4 1 and 2.

5 Q Okay. Let me ask you again, because I think
6 you're answering a different question.

7 When the wastewater -- when the effluent
8 leaves Palm Coast's treatment plant, where does it
9 enter this whole picture, not where does it go to do
10 this, but where does it enter into this diagram?

11 A The chlorine contact chamber.

12 Q Okay. And does it then proceed through the
13 chlorine basin Pond 1, Pond 2, Basin 1, Basin 2 and 3
14 in that order?

15 A I don't know off the top of my head what
16 order it proceeds.

17 Q And is it your understanding that initially
18 Palm Coast took effluent out of Basins 1 and 2 to
19 transport it to the Dunes site for further treatment?

20 A As the configuration shows, that's correct.

21 Q And is it your understanding that Dunes
22 experienced some algae problems then due to algae
23 growth particularly in Pond 2 and the series of
24 basins?

25 A I don't know from which ponds the particular

1 problem was occurring. I believe it was occurring
2 just generally from all points of in-take.

3 Q Are you aware that in about 1993 Dunes, at
4 its cost, extended a main to Pond 1 right where the
5 effluent comes out of the chlorine basin in order to
6 try to take effluent that was immediately leaving the
7 wastewater treatment plant?

8 A I'm familiar with the modified
9 configuration. I wasn't aware at whose cost that was
10 installed.

11 Q And let me ask this question: Do you know
12 where the Palm Coast effluent is tested to determine
13 whether it meets the DEP permit limitations for
14 secondary wastewater?

15 A Where the water is taken from, effluent
16 taken from?

17 Q Yes, sir.

18 A I don't know specifically where the points
19 of taking are.

20 Q Okay.

21 A It's my understanding that it's all of the
22 effluent in the ponds are tested, however.

23 Q Let's look at the current configuration
24 which shows the addition of the 6 million gallon
25 storage tank. Is it your understanding that when that

1 storage tank was added that the chlorine basin, the
2 two polishing ponds, and three storage basins were
3 essentially retired?

4 A No. The basins, I believe -- the ponds, I
5 think, are retained, not retired, but they are not
6 used for service to the Dunes or for effluent at this
7 point. There's also an adjustment you need to make to
8 your configuration that's not correct.

9 Q All right. Could you give that to us,
10 please?

11 A You have a line coming out of the storage
12 tank, but you don't have any line going into the
13 storage tank.

14 Q All right. Where's the line that's going
15 into the storage tank?

16 A If you take -- if you're looking at this
17 diagram and the right side is east, if you directly
18 cross the diameter to the west side, there's a line
19 that runs from the tank then to the first pipe that
20 you show.

21 Q All right. So on the diagram it would be a
22 line drawn, Mr. Guastella, from this point to this
23 point?

24 A That's correct.

25 MR. GATLIN: Which diagram are you looking

1 at, Mr. Guastella?

2 MR. MELSON: The one labeled "Current
3 configuration."

4 MR. GATLIN: Okay. Where are the lines?

5 MR. MELSON: It goes into the west side of
6 the storage tank from the north-south line,
7 immediately to the west of that.

8 Q (By Mr. Melson) And isn't it correct,
9 Mr. Guastella, that under the current configuration
10 effluent that goes to Dunes can either go directly
11 from the chlorine contact chamber through that 16-inch
12 main to the pump station or it can go to the storage
13 tank.

14 A Correct.

15 Q And are you aware whether or not the
16 modified configuration, as shown in the middle of the
17 page, essentially solved any algae problems that Dunes
18 was having with effluent that it received from Palm
19 Coast?

20 A I am aware that there were still algae
21 problems with the modified configuration.

22 Q Would you agree that they were at least
23 substantially improved?

24 A I don't know the degree of improvement over
25 previous times. I know that they were still having

1 problems with the design of the Dunes filter --
2 filters; were still having problems with the effluent
3 being furnished to them from Pond 1.

4 Q All right. Let's leave the diagram a
5 minute, if we could. I'd like to go back to your cost
6 allocation study, which I believe was JFG-2 that's
7 part of Exhibit 15. Could you turn to Table G at
8 Page 9 of that study?

9 A I have it.

10 Q Oh, you're ahead of me. Hang on just a
11 minute. (Pause)

12 The bottom of that page shows various O&M
13 expenses that you allocated to effluent reuse for
14 purposes of setting your proposed effluent rate; is
15 that correct?

16 A Yes.

17 Q At Line 25, chemicals, the \$11,000 shown
18 there is the total amount of chlorine expense that
19 Palm Coast incurred to treat its effluent to secondary
20 standards; is that correct?

21 A Yes.

22 Q And that cost would have been incurred with
23 or without the effluent agreement with Dunes; is that
24 correct?

25 A Yes.

1 Q And would you also agree with me that the
2 sewer operating salaries and administrative and
3 general salaries that are allocated to effluent reuse
4 would have been incurred with or without the Dunes?

5 A Yes, that's correct.

6 Q In general then is it fair to say that Palm
7 Coast incurs no incremental expenses associated with
8 the provision of unfiltered effluents to the Dunes?

9 A I believe that's correct.

10 Q Is it also fair to say that if the effluent
11 agreement were terminated today, that Palm Coast would
12 incur additional effluent disposal costs?

13 A There may be some minor additional costs for
14 pumping. They probably would have some -- I don't
15 know the extent of that. There probably would be some
16 additional cost for pumping. They could handle the
17 dry weather flows without Dunes. However, there would
18 be some additional cost for pumping the effluent to an
19 alternate site.

20 Q Would there also be some additional cost of
21 either now or in the near future of replacing the
22 million-gallon-a-day average disposal capacity that
23 the Dunes site represents?

24 A I don't know. I don't know whether or not
25 there would be -- I mean if I'm guessing about the

1 future, I don't know whether there would be other
2 effluent customers who would be willing to take
3 effluent from the site as well. I just don't -- I'm
4 unable to predict that far into the future.

5 Q Well, if the agreement terminated today,
6 there are no other effluent disposal customers on the
7 horizon for unfiltered effluent, are there?

8 A Not today is my understanding.

9 Q And in fact hasn't the Utility submitted --
10 recently submitted a wet weather discharge analysis to
11 DEP that indicates that the four other existing golf
12 courses in the area are not candidates for taking
13 effluent at this time?

14 A I don't recall the details of what you're
15 referring to. There are potential candidates and I
16 don't know whether or how immediate that potential is.

17 Q I believe you testified yesterday that Palm
18 Coast regards Dunes as an integral part of its
19 effluent disposal system. Am I recalling that
20 correctly?

21 A Yes, I believe you're recalling that
22 correctly. The disposal of effluent that goes to the
23 spray fields or to Dunes or the RIBs, it's all part of
24 an integrated operation.

25 Q And I believe I asked you this question

1 yesterday but maybe in a little different context.
2 Your cost allocations study did not take into account
3 the costs that Dunes incurs to treat the unfiltered
4 effluent to tertiary standards, nor did it give Dunes
5 any credit for having incurred those costs; is that
6 correct?

7 **A** I certainly didn't give Dunes -- I did not
8 adjust Palm Coast's expenses for expenses incurred by
9 Dunes, and I didn't include any cost that Dunes was
10 incurring for Palm Coast to charge Dunes through an
11 effluent rate.

12 So the answer to that is yes, that's
13 correct.

14 **Q** All right. Let me change gears a minute.

15 In your direct testimony, when you
16 calculated the projected revenue that would be
17 produced by the effluent rate, you used 800 gallons a
18 day -- 800,000 gallons a day of average daily flow as
19 a basis for that calculation; is that correct?

20 **A** Yes.

21 **Q** And that was based on 1994 flow data?

22 **A** I think 1994 flow data was used to project
23 1995 projection given to me by the company.

24 **Q** We handed out another document yesterday
25 that is labeled "Palm Coast Utility Corporation" with

1 this docket number, Attachment A. Are you familiar
2 with that document?

3 A Yes.

4 Q And does that show on a month-by-month basis
5 the effluent produced by the Palm Coast wastewater
6 treatment plant and the effluent provided to Dunes?

7 A Yes.

8 Q And if we were to average the effluent to
9 Dunes from January of '95 forward, would you agree,,
10 subject to check, that we'd find that averages about
11 a million gallons a day?

12 A For 1995 alone, yes.

13 Q All right.

14 MR. MELSON: Commissioners, could we have
15 this marked as the next numbered exhibit?

16 COMMISSIONER DEASON: Yes, Exhibit 17.

17 (Exhibit No. 17 marked for identification.)

18 Q (By Mr. Melson) And Dunes opposes any
19 effluent rate.

20 A Yes.

21 Q If the Commission did establish an effluent
22 rate, however, would it be appropriate in looking at
23 the amount of revenues to be produced by that rate, to
24 use the more current flow data reflected on
25 Exhibit 17?

1 A The flow data could be used. I don't think
2 it would be more appropriate. I believe the company
3 has made projections of what its year end test year
4 was going to produce in the way of revenues as well as
5 expenses, and this is just one of a revenue
6 requirement item that may fluctuate along with others.

7 I don't know whether or not January through
8 December of 1995 is representative of what a normal
9 level is.

10 If I look at March and April, for example,
11 we have a decline in the effluent, so it looks like
12 it's fluctuating to some extent. And if Mr. Sirkin's
13 mini price elasticity is correct, and there is now a
14 charge, there may be some adjustment to conservation.
15 So I think looking at the projected test year as a
16 whole with all of the projections that were made, it's
17 probably more appropriate to use the figure that I
18 used; more consistent with the rest of the company's
19 filing.

20 Q Is it fair to say that if you look
21 historically at the effluent taken by Dunes, the
22 amount of effluent on an average daily basis has
23 increased each year over the preceding year?

24 A We have a rather brief history, but I think
25 that's correct, yes.

1 Q Mr. Guastella, you've got over 15 years
2 experience in utility ratemaking in Florida; is that
3 correct?

4 A Yes.

5 Q Are you aware of any other utility in
6 Florida that provides unfiltered effluent to a
7 customer for further disposal?

8 A I'm not -- there may be, but I'm not
9 familiar with it.

10 Q Are you familiar with cases where the
11 Commission has authorized a charge for filtered
12 effluent, that is effluent that's suitable as is for
13 application to public access areas?

14 A Yes.

15 Q And would you agree that there are other
16 cases in which the Commission has considered the
17 provision of filtered effluent and has determined that
18 no charge is appropriate?

19 A I'm not familiar with those cases. There
20 may be, but I'm not familiar with them.

21 Q Would you agree with me that your proposed
22 rate of 67 cents per 1,000 gallons is over -- or
23 unfiltered effluent is over two and a half times the
24 highest charge the Commission has ever approved for
25 filtered effluent?

1 A I don't know. It's not something that is of
2 any significance to me.

3 Q Okay.

4 MR. MELSON: I've got no further questions.
5 Thank you, Mr. Guastella.

6 WITNESS GUASTELLA: Thank you.

7 COMMISSIONER DEASON: Staff.

8 **CROSS EXAMINATION**

9 **BY MS. REYES:**

10 Q Good morning, Mr. Guastella.

11 A Good morning.

12 Q Isn't it your testimony that the reuse rate
13 was developed so that it would be applicable to all
14 customers, including the Dunes, and any future
15 customers?

16 A Yes.

17 Q Would any of these future customers require
18 effluent that is treated to secondary standards, or
19 would they require effluent that has undergone
20 additional filtration?

21 A I don't know. I believe what they take from
22 the Dunes -- I'm sorry, what they take from Palm Coast
23 is going to be the same as what Palm Coast is
24 delivering to Dunes. So if there's any additional
25 treatment required, I'm assuming they would provide

1 that treatment.

2 Q Wouldn't you agree that if a customer
3 requires a higher level of treatment, the reuse rate
4 would need to be recalculated in order to consider the
5 additional cost incurred as a result of the higher
6 level of treatment?

7 A If PCUC incurred that cost, yes. Or there
8 could be other arrangements to accomplish the payment
9 for that additional treatment.

10 Q During your deposition you testified that a
11 reuse rate should always have a cost allocation to
12 recognize some of the costs for effluent reuse; is
13 that correct?

14 A Yes.

15 Q You also testified, however, that there is
16 no standard as to which costs should be allocated or
17 how to allocate those costs, correct?

18 A That's correct. I believe unlike the rest
19 of the utility industries, the effluent rates are
20 relatively new, and I don't think there's been the
21 volumes of cases and precedence established that has
22 developed a consistent way of looking at effluent
23 reuse and related rates and charges that would be
24 appropriate. I think it's kind of an evolving rate
25 setting technology.

1 Q And isn't it your testimony that a reuse
2 cost allocation study is based somewhat on judgment?

3 A Yes, as are all cost allocation studies.

4 Q During your deposition you testified that
5 one of the reasons that you had never recommended a
6 market rate is that there really isn't a reuse market.
7 Is that correct?

8 A Yes. I think in my deposition I was
9 alluding to the fact that I'm not that familiar with
10 so many effluent rates that you can take a sampling of
11 all of the effluent rates and say it provides for a
12 given utility. There just aren't enough utilities
13 that are selling take and not enough rates that would
14 really establish a bank of comparable data.

15 Q Could I have you refer to Table A of the
16 study.

17 A I have it.

18 Q Isn't it true that operation and maintenance
19 expenses should contain the \$3,000 allocated for rate
20 case expense on Table G?

21 A Yes.

22 Q And could I have you now refer to Table G.

23 A I have it.

24 Q Isn't it true that the 50% weighting factor
25 was based on your judgment?

1 A Yes.

2 Q An exhibit is being passed out which
3 contains Pages 24 and 25 of your deposition
4 transcript. Would you agree that these two pages are
5 excerpts from your deposition transcript?

6 A They appear to be.

7 Q And if I were to ask you the questions
8 contained on these pages again would your answers be
9 the same today?

10 A I assume they would, if you'd give me a
11 second just to --

12 Q Sure. Take your time. (Pause)

13 A I believe I'd testify in a similar manner.
14 I understand what this is saying. I'm not sure it's
15 the best way of describing how Allocation Symbol D
16 works, but I understand what it's saying.

17 **MS. REYES:** Chairman, could we have that
18 exhibit marked for identification?

19 **COMMISSIONER DEASON:** Yes. Exhibit 18.

20 **MS. REYES:** Short title, "Guastella
21 deposition excerpts."

22 (Exhibit No. 18 marked for identification.)

23 Q **(By Ms. Reyes)** If there's a better way to
24 explain it than what is done in the deposition, could
25 you do that for us?

1 **MR. GATLIN:** Is the question, the start of
2 the Orange question on Page 24, or --

3 **MS. REYES:** The question begins beginning at
4 Line 19, on Page 24 and ending on Line 10 at Page 25,
5 and the question goes to his calculation of the
6 allocation using 50% weighting factors. (Pause)

7 **WITNESS GUASTELLA:** I don't think I can
8 explain it any better. I think this does the job.

9 **MS. REYES:** Thank you.

10 **Q** **(By Ms. Reyes)** If I could now have you
11 refer to Pages 137-A through 137-N of the MFRs, Volume
12 1.

13 **A** I'm going to need to get a copy of that,
14 please. (Hands copy to witness.)

15 I'm at Page 137-N.

16 **Q** A through N.

17 **A** Okay.

18 **Q** Is the information contained within these
19 pages the used and useful calculation analysis which
20 you prepared for the Commission's consideration in
21 Docket 890277?

22 **A** I'd have to accept that,, subject to check,

23 **MR. GATLIN:** That the last docket?

24 **MS. REYES:** Yes.

25 **Q** **(By Ms. Reyes)** And was this methodology

1 accepted by the Commission?

2 A I believe for the most part it was. I think
3 there may have been some adjustments to an individual
4 calculation here and there, but I think the overall
5 methodology was accepted.

6 Q Do you know if there was a change to margin
7 reserve?

8 A That was what I was referring to. There may
9 have been an adjustment to a calculation here or
10 there. There was a change to the calculation, not the
11 concept or not the use of the margin reserve.

12 Q In the last case did you use a margin
13 reserve period of 18 months for the water and
14 wastewater treatment plant?

15 A Yes, I believe I did.

16 Q Have you used a margin reserve of five years
17 for the wastewater treatment plant and three years for
18 the water treatment plant in this case?

19 A Yes, I have.

20 Q Did it take five years to design, permit and
21 construct the recent wastewater treatment plant
22 expansion?

23 A For the membrane plant I believe it did,
24 yes.

25 Q I'm sorry my question was directed to the

1 wastewater treatment plant.

2 A I believe, yes, the planning, designing,
3 construction of the wastewater treatment plant
4 including the effluent and the plant itself, I think
5 that the total time was about five years for that as
6 well.

7 Q Earlier you indicated that the well
8 capacities have dropped from the last case to this
9 case.

10 Is it true that the well capacities have
11 dropped because the well yields decline as they age?

12 A Yes. I hadn't mentioned that earlier, but
13 that was -- I think we responded to a data request on
14 that.

15 Q Are you aware that the Utility has requested
16 a yearly expense for a well rehab and maintenance
17 program?

18 A Yes, I believe that's true.

19 Q Being passed out now is an exhibit
20 identified as CH2M Hill engineering report. Are you
21 familiar with this exhibit?

22 A No.

23 **MS. REYES:** If we could have just a moment,
24 please.

25 Q (By Ms. Reyes) Mr. Guastella, you have seen

1 this document before; is that correct?

2 A I may have. I don't recall it.

3 Q Didn't we go over that report in your
4 deposition?

5 A I don't remember. If you can refer me to a
6 specific question and a specific section, I'll try to
7 remember, but I don't remember this report.

8 Q It's my understanding, I think, that the
9 Utility -- the Utility provided Staff with this report
10 pursuant to a request for production of documents, and
11 I think it was designed to further explain in the used
12 and useful analysis the statement on Page 6 consistent
13 with the plant requirements determined in other
14 engineering studies for the company. I think this was
15 a reference "other engineering studies."

16 MR. GATLIN: What was the page number?

17 MS. REYES: Page 6. The used and useful
18 analysis.

19 A (Continuing) I'm sorry, I really don't know
20 what you are talking about.

21 Q (By Ms. Reyes) In your deposition -- do
22 you have your deposition transcript? On Page 104 of
23 the deposition transcript.

24 A On Page 1 --

25 Q 104.

1 A 104.

2 Q Line 17. I refer you to the CH2M Hill
3 study.

4 A Yes.

5 Q So you have seen this report before?

6 A Apparently you showed me Page 26 from this
7 report during my deposition.

8 Q Right.

9 **MS. REYES:** Can we have that exhibit marked
10 for identification?

11 **COMMISSIONER DEASON:** Yes. It's Exhibit 19.
12 (Exhibit No. 19 marked for identification.)

13 Q **(By Ms. Reyes)** If I could have you refer
14 to Page 9 of this exhibit, Mr. Guastella, specifically
15 the statement in the second paragraph that Palm Coast
16 has a safe yield of 6 MGDs from the water treatment
17 Plant No. 1 well field. Is it correct that you have
18 used a capacity of 4,675,680 gallons per day for these
19 wells in your used and useful calculations?

20 A Please, give me a minute to catch up with --

21 Q Sure. Take your time.

22 **MR. GATLIN:** What's the reference made to
23 Exhibit 19, on Page 6?

24 **MS. REYES:** Page 9 of the exhibit, second
25 paragraph. The statement that PCUC has a safe yield

1 of 6 MGD from the water treatment Plant No. 1 well
2 field.

3 **MR. GATLIN:** And the question is did he
4 use --

5 **MS. REYES:** The question is, is it correct
6 he used a capacity of 4,675,680 gallons per day for
7 these wells in his used and useful calculation.

8 **MR. GATLIN:** As I understand it,
9 Mr. Chairman, that doesn't have anything to do with
10 Page 9. That's a separate question as to whether he
11 used 4 million. Mr. Guastella has not seen this page,
12 I don't believe. It's Page 22 that he identified.

13 **COMMISSIONER DEASON:** Is that an objection
14 to the question?

15 **MR. GATLIN:** Well, it's an objection to the
16 form of the question. If she wants to ask him what he
17 used, that's fine, but there's no basis for him to be
18 requested to compare this 4 million to what is in
19 there. He has not identified or said he's familiar
20 with this. In fact, he said he's not familiar with
21 it.

22 **MS. REYES:** Well, he referred to it in his
23 deposition.

24 **MR. GATLIN:** I think he referred to Page 26
25 in his deposition.

1 **COMMISSIONER DEASON:** I'm going to overrule
2 the objection, allow the question.

3 **WITNESS GUASTELLA:** I did not use this
4 report in performing my used and useful study. The
5 report on Page 9 states that PCUC actually has about 6
6 MGD of safe yield from these wells.

7 If you look at Table B of my report, the
8 yields from the wells I'm showing is 6,730 920, so the
9 number is close. I then made adjustments for used and
10 useful to determine what the capacity with certain
11 wells out of service should be.

12 So I think the basic data is the same, but
13 this report apparently was not doing a used and useful
14 study. (Pause)

15 **MS. REYES:** Can we have a moment, please?

16 **COMMISSIONER DEASON:** Sure. (Pause)

17 **Q (By Ms. Reyes)** If I could have you look at
18 Page 12 of the CH2M Hill report again, doesn't the
19 second sentence on this page indicate that reducing
20 the amount of water needed for flushing would allow
21 the facilities to last longer before expansion is
22 needed?

23 **MR. GATLIN:** Mr. Chairman, I object to
24 continued reference to this document. It cannot be
25 identified by the witness, and it's not a listed

1 exhibit by the Staff, and it seems to me that there
2 needs to be some identification before this witness is
3 asked cross examination questions on it.

4 **COMMISSIONER DEASON:** Where did this
5 document come from?

6 **MS. REYES:** POD request No. 8.

7 **COMMISSIONER DEASON:** The Company provided
8 this document?

9 **MS. REYES:** Yes.

10 **COMMISSIONER DEASON:** I'll overrule the
11 objection, allow the question. Please proceed.

12 **MR. GATLIN:** Mr. Chairman, may I?

13 **COMMISSIONER DEASON:** Yes, you may, Mr.
14 Gatlin.

15 **MR. GATLIN:** I don't know the purpose of
16 the document, but this witness cannot identify it.
17 And if it's used to impeach his testimony he's got to
18 be familiar, identified it and have some reference to
19 this. A lot of documents we provided the company that
20 this witness doesn't know anything about.

21 **COMMISSIONER DEASON:** This witness does not
22 have to be put on notice of every single document
23 which may be presented for a question to impeach his
24 testimony and the conclusions which he makes. This
25 cross examination may proceed. The objection is

1 overruled.

2 Q (By Ms. Reyes) Would you like for me to
3 repeat the question?

4 A Yes, please.

5 Q The second sentence on Page 12 of the
6 report, doesn't it indicate that reducing the amount
7 of water needed for flushing would allow the
8 facilities to last longer before expansion is needed?

9 A That's what it states.

10 Q Are you aware of any past Commission
11 decisions where a factor for economies of scale was
12 included in the used and useful calculation?

13 A As a general factor, no. I believe the
14 Commission has utilized different methods which
15 recognize economies of scale, but not as a general
16 factor similar to the one that I've proposed here.

17 MS. REYES: Thank you. I have no further
18 questions.

19 COMMISSIONER DEASON: Commissioners. Do you
20 have redirect?

21 MR. GATLIN: Yes, I do.

22 REDIRECT EXAMINATION

23 BY MR. GATLIN:

24 Q Mr. Guastella, do you recall some questions
25 from Mr. Melson regarding the RIB and the 6 million

1 gallon storage tank as to whether they were installed
2 for the purpose of serving the Dunes?

3 A Yes.

4 Q Do you recall Mr. Melson asking you whether
5 Palm Coast incurred incremental cost to provide
6 effluent to the Dunes? Do you recall those questions?

7 A Yes.

8 Q When you prepared your effluent rate study,
9 did you take into consideration incremental cost or
10 possible cost just to serve Dunes?

11 A No. Those issues were raised by the
12 testimony of the witnesses on behalf of Dunes, and
13 then I believe in interrogatories.

14 Q What is the relevance of these issues raised
15 by the Dunes as far as the question of whether there
16 were any additional costs to serve the Dunes as far as
17 you're concerned to your study?

18 A In my opinion they really have no relevance.
19 I'm determining a method of allocation to determine a
20 reasonable rate for effluent service. We're dealing
21 with a relatively new rate. We're dealing with a need
22 for effluent for environmental and conservation
23 purposes, and we're dealing with an issue that should
24 address cost sharing.

25 There's a value of service associated with

1 it and there's a wide range of performing cost
2 allocation studies. I don't believe incremental cost
3 pricing develops an appropriate effluent rate, and I
4 didn't perform a fully allocated cost study which
5 would have established a very high rate. I allocated
6 just certain costs to the effluent rate in order to
7 develop a rate which I think accomplishes the goal of
8 having all customers, effluent customers as well the
9 sewer customers, share in the cost of effluent because
10 all the customers share in the benefits of the
11 effluent.

12 Q Are rates generally determined on the basis
13 of incremental cost? Or average cost?

14 A For the most part, rates are based on
15 average cost. You don't usually have an analysis of a
16 customer being added to an existing system for which
17 there is no incremental cost to serve that customer
18 not paying any rates for service. They usually pay
19 the same rates for service as everyone else.

20 There could be circumstances when rates are
21 set on incremental cost, but that doesn't preclude,
22 therefore, the establishment of rates based on other
23 costs, if there are no incremental costs and that's
24 indeed what the practice with respect to water and
25 wastewater and other utility industries have been.

1 Q Would this apply to O&M expenses also?

2 A Yes, of course. Obviously I think --

3 Q Ask you about Table G.

4 A PCUC is incurring costs directly associated
5 with the provision of effluent service. They are an
6 incremental cost because the employees who are
7 performing the service would be there in any event.
8 But they are nonetheless providing services that are
9 particular to the provision of effluent reuse to the
10 Dunes, and it's simply a matter of allocating a fair
11 share of those costs.

12 MR. GATLIN: Thank you.

13 MR. MELSON: Commissioner Deason, I would
14 ask for limited recross. These questions got into
15 matters that were covered in Mr. Guastella's rebuttal
16 testimony. I had some questions about them at that
17 time, but I think it will make more sense if we take
18 them in context now. It's based on questions he was
19 asked about his pricing methodology.

20 COMMISSIONER DEASON: Is this going to
21 eliminate questions you would ask on rebuttal?

22 MR. MELSON: Yes, sir, it will.

23 COMMISSIONER DEASON: Okay. I'll allow you
24 that, Mr. Gatlin. You may then follow up further if
25 you need to.

RE CROSS EXAMINATION

1
2 BY MR. MELSON:

3 Q Mr. Guastella, based on what you just said,
4 I take it you would disagree with the principle that
5 effluent rate should represent a sharing of the
6 incremental costs to recognize the disposal of
7 effluent provides a benefit to the utility, and the
8 use of effluent for irrigation purposes provides a
9 benefit to the customer.

10 A I don't know if what you just described is a
11 principle in terms of an effluent rate.

12 There could be instances and cases where an
13 incremental cost is used to develop an effluent rate.
14 But with the current state-of-the-art of development
15 rates, I don't think that holds as a principle where
16 one decision in one case or one statement in one
17 document has then established forever, and meets all
18 of the various circumstances that you may have and
19 which this Commission may yet to see in terms of the
20 provision of effluent service. I guess I'm not sure I
21 agree that's a principle that's been established
22 anyplace.

23 Q And in fact in your deposition you testified
24 that you disagree with that if it were stated as a
25 principle; is that correct?

1 A I don't understand your question.

2 Q I guess I asked you -- do you recollect your
3 deposition being taken by me in this docket?

4 A Yes.

5 Q Do you recollect my asking you whether you
6 agreed or disagreed with that principle?

7 A I don't remember the precise form of your
8 question. I believe I gave an answer -- if you asked
9 that question, I think I would have given an answer
10 similar to the one I gave here.

11 Q I think you gave a much shorter answer and
12 said no, you don't agree with it.

13 Would you turn to Page 49 of your
14 deposition, please, Line 21.

15 A (Witness complies.) I have it.

16 Q And is the question and answer there, "Would
17 you agree or disagree with the principle that effluent
18 reuse rates should represent a sharing of the
19 incremental cost to recognize that the disposal of
20 effluent provides a benefit to the utility and the use
21 of effluent for irrigation purposes provides a benefit
22 to the customer? Answer: I disagree."

23 A That was my response. I did say I disagree.
24 I guess my testimony now you've learned why.

25 Q All right. Let me show you a document

1 entitled "Direct Testimony of John Guastella" dated
2 February 24th, 1992, and ask if that appears to be the
3 portion of your prefiled testimony describing an
4 effluent disposal rate analysis that you submitted to
5 this Commission on behalf of General Development
6 Utilities in Docket No. 911067?

7 A I'll have to accept it, subject to check. It
8 appears to be.

9 Q Do you recall this docket was dismissed
10 prior to the time of the hearing when the utility was
11 sold to the City of North Port?

12 A I believe that's correct.

13 Q Mr. Guastella, would you turn to Page 43 of
14 that testimony, at Line 21 and read out loud the
15 question and answer that appears at that page?

16 A Yes. "What rate are you proposing for the
17 use of effluent for irrigation purposes? I am
18 proposing a rate of 23 cents per thousand gallons,
19 which represents a sharing of the incremental cost.
20 The reason for the sharing is to recognize that the
21 disposal of effluent provides a benefit to the utility
22 and the use of irrigation purposes provides a benefit
23 to the customer."

24 Q I've got no further questions.

25 **MR. MELSON:** Thank you.

1 **COMMISSIONER DEASON:** Mr. Gatlin.

2 **REDIRECT EXAMINATION**

3 **BY MR. GATLIN:**

4 **Q** Does that testimony mean that your
5 recommendation is that effluent rates be set only on
6 incremental cost?

7 **A** Absolutely not. And that have the reason I
8 responded to Mr. Melson's original question as to
9 being a principle. I didn't set this forth as being a
10 principle that should be followed in every effluent
11 rate study. I performed a specific rate study for the
12 circumstances of this particular utility. As was true
13 then and is true now, dealing with new and emerging
14 circumstances with regard to effluent reuse service as
15 well as effluent rates, and I never said that once you
16 use incremental cost you must forever, for every study
17 under any circumstance, as a principle use incremental
18 cost pricing.

19 **MR. GATLIN:** Thank you.

20 **COMMISSIONER DEASON:** Exhibits.

21 **MR. GATLIN:** Move Exhibit 15, which is
22 Mr. Guastella's exhibits.

23 **COMMISSIONER DEASON:** Without objection
24 Exhibit 15 is admitted. Further exhibits?

25 **MR. MELSON:** Commissioners, I would move 16

1 and 17, and I would ask that the document we just
2 handed out be marked as Exhibit 20.

3 **COMMISSIONER DEASON:** Okay. The document
4 which you just handed out will be identified as
5 Exhibit 20.

6 **MR. MELSON:** And I would move Exhibit 20.

7 **COMMISSIONER DEASON:** You're moving 16, 17
8 and 20. Any objection? Hearing none, Exhibit 16, 17
9 and 20 are admitted.

10 (Exhibit No. 20 marked for identification
11 and received in evidence.)

12 **MS. REYES:** Staff moves Exhibit 18 and 19.

13 **MR. GATLIN:** We object to Exhibit 19,
14 Mr. Chairman. That has not been identified as an
15 exhibit by a witness.

16 **COMMISSIONER DEASON:** Okay. Is there any
17 objection to 18.

18 **MR. GATLIN:** None.

19 **COMMISSIONER DEASON:** Exhibit 18 is
20 admitted. There's an objection to Exhibit 19. Do you
21 care to respond?

22 **MS. REYES:** Yes. Mr. Guastella in his
23 deposition was referred to this document on four
24 separate occasions.

25 **COMMISSIONER DEASON:** He was referred, or he

1 referred to the document.

2 **MS. REYES:** We referred him to it, but this
3 document was provided to Staff pursuant to a request
4 for production of documents in an interrogatory
5 addressing Mr. Guastella's reference to other
6 engineering studies in his used and useful analysis.
7 When asked what were those other engineering studies,
8 the Utility provided Staff with this document.

9 **MR. GATLIN:** Mr. Chairman, we certainly
10 would not object to the pages that were referred to.
11 That doesn't identify the whole document. The fact
12 that it's furnished on a request doesn't make it an
13 exhibit at all.

14 **MS. REYES:** But I think the implication is
15 that Mr. Guastella used this document in his used and
16 useful analysis. When it was asked -- in his used and
17 useful analysis it says he referred to other
18 engineering studies. When Staff asked what other
19 engineering studies did he refer to, the Utility
20 provided Staff with this study.

21 **COMMISSIONER DEASON:** Well, I believe that
22 you did not lay that predicate to get the witness to
23 admit that that was a study he relied upon
24 specifically for the conclusions in his testimony.
25 I'm going to allow you the opportunity to excerpt

1 those pages, and if you care to have those pages
2 admitted, I will admit those; otherwise the objection
3 is sustained.

4 **MS. REYES:** The excerpts will be fine.

5 **COMMISSIONER DEASON:** And can you identify
6 those pages, please?

7 **MS. REYES:** Page 12, 26, 3, and Appendix A.

8 **MR. GATLIN:** Mr. Chairman, may I inquire?
9 Is that the representation he referred to those
10 pages -- representations, that's fine.

11 **MS. REYES:** Those references are in the
12 deposition transcript on Pages 93, 104 and 105 --

13 **MR. GATLIN:** I wanted to make sure I got all
14 of the page numbers.

15 **MS. REYES:** The reference to Page 12 of the
16 study is made on Page 93 of the deposition transcript.
17 Page 26 of the study is referenced on Page 104 and 105
18 of the deposition. Study Page 3 is referenced on
19 Page 113 of the depo, and Appendix A of the study is
20 referenced to Page 111 of the deposition.

21 **MR. GATLIN:** That's Page 12, Page 26,
22 Page 3, and Appendix A.

23 **COMMISSIONER DEASON:** Very well. Those
24 sections of the report will be admitted.

25 (Exhibit Nos. 15, 16, 17, 18 & 19 received

1 in evidence.)

2 **MR. GATLIN:** This completes the Company's
3 direct case, Mr. Chairman.

4 **COMMISSIONER DEASON:** Okay. Perhaps now
5 would be a good time to discuss the order of witnesses
6 that we're going to follow for at least today.

7 I understand that Witness Moyer and Witness
8 Wilkening need to testify today; is that correct?

9 **MR. EDMONDS:** That's correct.

10 **COMMISSIONER DEASON:** There should not be a
11 problem because Witness Moyer is the next scheduled
12 witness, but that may necessitate taking Wilkening out
13 of order. I just present that to the parties now. We
14 can go ahead with Moyer. If there's a problem with
15 taking Wilkening out of order, I'd like to hear those
16 responses after we conclude with Moyer.

17 Are there any other concerns? I understand
18 that two Staff witnesses, Witness Sapp, and Witness
19 Martin, are here locally. If we could do those today,
20 it would prevent the necessity of them traveling to
21 Tallahassee for a subsequent day of hearing; is that
22 correct?

23 **MR. EDMONDS:** That's correct.

24 **MR. GATLIN:** We'll stipulate Mr. Martin in.
25 We don't have any questions for him.

1 **COMMISSIONER DEASON:** Do other parties have
2 questions for Witness Martin.

3 **MR. REILLY:** A few questions, yes.

4 **COMMISSIONER DEASON:** And it's also been
5 brought to my attention that Witness Guastella has to
6 come back on rebuttal, and he is an out-of-town
7 witness. It may be preferable to have him conclude
8 today, but that's just a possibility.

9 **MR. GATLIN:** We'd rather take him in order.

10 **COMMISSIONER DEASON:** You'd rather take him
11 in order. Very well.

12 Okay. Are there any other concerns that
13 need to be expressed with the order of witnesses?

14 **MR. HADEED:** Yes, Mr. Chairman. One of the
15 witnesses identified for the Utility is Mr. Spano, who
16 is a appraisor, and his testimony relates to the real
17 estate valuation issues on which Mr. Sapp is
18 testifying. Mr. Spano is from Volusia County, and we
19 have talked some about having Mr. Spano follow
20 Mr. Sapp, although our discussions among counsel have
21 not concluded.

22 **MR. SCHIEFELBEIN:** Pardon me, Commissioners,
23 that is a utility witness, and I don't understand
24 Mr. Hadeed asking that he be taken -- that his
25 interest be accommodated, but it is our interest that

1 Mr. Spano be taken in order.

2 MR. HADEED: Oh, excuse me. May I?

3 COMMISSIONER DEASON: Please proceed.

4 MR. HADEED: The rationale is that I don't
5 know to what degree you're going to be able to
6 complete today the full complement of witnesses. I'm
7 guesstimating that's not likely to occur, that you'll
8 be able to complete all of the witnesses today.

9 If we do not complete all of the witnesses
10 today, there's a possibility that we may only have a
11 single Commissioner hearing the rest of the case.

12 COMMISSIONER DEASON: No, let's set the
13 record straight. That was a possibility that was
14 presented for the convenience of the parties to
15 prevent a day of travel to Tallahassee. I was trying
16 to make that accommodation. When I got negative
17 feedback, then it's no longer a possibility.

18 MR. HADEED: I'm sorry. I didn't know that
19 you had made some determination.

20 COMMISSIONER DEASON: We're trying to
21 accommodate you sir, and you declined the offer, so
22 we're going to welcome you to Tallahassee for a day of
23 hearing in the future.

24 MR. HADEED: That's fine. I don't object to
25 that.

1 Again, the point I was trying to make is
2 they are on a single issue, the two of them.

3 **COMMISSIONER DEASON:** Yes, but there is an
4 order set out in the Prehearing Order, and Mr. Spano
5 is a company witness, and the attorney for the company
6 says he wants him to come in the order as stated and
7 I'm not going to violate that.

8 **MR. REILLY:** I guess the same courtesy will
9 be extended to Staff if they want Mr. Dodrill to stay
10 where he is in the order.

11 **MR. SCHIEFELBEIN:** That's a reference, I
12 think, Commissioners, to my earlier mention yesterday
13 and I withdraw that request.

14 **COMMISSIONER DEASON:** Very well. Okay. I
15 believe now we can proceed with Mr. Moyer's testimony,
16 and that witness is yours, Mr. Melson.

17 **MR. MELSON:** Dunes calls Gary Moyer.
18 Commissioner Deason, I don't believe Mr. Moyer has
19 been sworn, and I'm not sure about Mr. Milian.

20 **COMMISSIONER DEASON:** If Mr. Moyer has been
21 sworn --

22 **MR. MELSON:** No, he has not.

23 **COMMISSIONER DEASON:** I'm going to ask all
24 of those witnesses who were not present yesterday,
25 were not sworn and will be testifying in this

1 proceeding to please stand and raise your right hand.

2 (Witnesses sworn collectively.)

3

- - - - -

4

GARY L. MOYER

5 was called as a witness on behalf of Dunes Community

6 Development District and, having been duly sworn,

7 testified as follows:

8

DIRECT EXAMINATION

9

BY MR. MELSON:

10 **Q** Mr. Moyer, would you state your name and
11 address for the record, please.

12 **A** Gary L. Moyer, 1441 Riviera Drive,
13 Kissimmee, Florida.

14 **Q** Mr. Moyer, you need to move that microphone
15 just a little closer. Thank you.

16 What is your occupation or profession?

17 **A** I'm a professional manager of special
18 purpose tax districts throughout the state of Florida.

19 **Q** And in what capacity are you appearing
20 today?

21 **A** I'm the contract manager of the Dunes
22 Community Development District.

23 **Q** And have you prefiled direct testimony in
24 this docket consisting of 15 pages?

25 **A** Yes, I have.

1 Q Do you have any changes or corrections to
2 that testimony?

3 A No, I do not.

4 Q And if I ask you the same questions today,
5 would your answers be the same?

6 A Yes, they would.

7 MR. MELSON: Mr. Chairman, I'd ask that
8 Mr. Moyer's prefiled direct testimony be inserted into
9 the record as though read.

10 COMMISSIONER DEASON: Without objection it
11 will be so inserted.

12 Q (By Mr. Melson) Mr. Moyer, did you have
13 attached to your direct testimony four exhibits as
14 identified as GLM-1 through GLM-4.

15 A Yes.

16 Q And are the exhibits attached as GLM-2
17 through GLM-4 true and correct copies of the various
18 effluent agreements that have existed between the
19 Dunes and Palm Coast Utility Corporation?

20 A Yes, they are.

21 MR. MELSON: Commissioner, I'd ask those
22 four exhibits be identified on a composite basis.

23 COMMISSIONER DEASON: Yes. Composite
24 Exhibit No. 21.

25 (Exhibit No. 21 marked for identification.)

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **DUNES COMMUNITY DEVELOPMENT DISTRICT**

3 **DOCKET NO. 951056-WS**

4 **PREFILED DIRECT TESTIMONY OF GARY L. MOYER**

5

6 **Q. Please state your name and business address.**

7 A. My name is Gary L. Moyer. My business address is 10300 N.W. 11th Manor,
8 Coral Springs, Florida 33071.

9

10 **Q. In what capacity are you appearing in this proceeding?**

11 A. I am appearing as Manager of the Dunes Community Development District
12 ("District"). The District is a bulk water customer of Palm Coast Utility
13 Corporation ("PCUC"). The District also obtains unfiltered effluent from
14 PCUC for ultimate reuse by the District's irrigation customers.

15

16 **Q. Please describe your education.**

17 A. I have a Bachelor of Science Degree from Penn State University and a Master's
18 Degree in Business Administration from Notre Dame University.

19

20 **Q. What is your occupation and the nature of your work?**

21 A. I am the principal of my company, Gary L. Moyer, P.A. My firm provides
22 management services to special-purpose taxing districts, including community

1 development districts. These services include planning, finance, staffing,
2 purchasing, reporting and intergovernmental coordination.

3

4 **Q. How long have you served as Manager of the Dunes Community**
5 **Development District?**

6 A. Since the District's establishment in 1985.

7

8 **Q. What is a community development district and what does it do?**

9 A. A community development district, or CDD, is a unit of local special-purpose
10 government created pursuant to Chapter 190, F.S. A CDD has special powers
11 to provide for the installation and maintenance of infrastructure facilities to
12 coincide with the development of property within the district. Infrastructure
13 that may be provided by a CDD includes water management, water supply,
14 sewer, wastewater treatment, roads, street lighting, bridges and, when
15 authorized by the local general-purpose government, may also include parks and
16 recreation, fire prevention and control, security, mosquito control, school
17 buildings, and waste collection and disposal.

18

19 **Q. Where is the Dunes Community Development District located?**

20 A. The District is located in unincorporated Flagler County, and is bounded on the
21 north by Malacompra Road and the Johnson Beach Subdivision, on the west by
22 the Atlantic Intracoastal Waterway, on the east by the Atlantic Ocean and on the

1 south by Beverly Beach. The District consists of approximately 2,114 acres.
2 The District is adjacent to PCUC's service territory. As shown on the map
3 attached as Exhibit ___ (GLM-1), PCUC's wastewater treatment plant site is
4 across the Intracoastal Waterway from the District.

5
6 **Q. What are your responsibilities as Manager of the District?**

7 A. As District Manager, my responsibilities include supervising work undertaken
8 by the District, preserving and maintaining any improvements or facilities
9 provided by the District, and ensuring the smooth operation of the equipment
10 and facilities owned by the District. I also provide administrative services to
11 the District, including the generation of various required reports. In short, I
12 have overall responsibility for managing the day-to-day operations of the
13 District.

14
15 **Q. To whom do you report?**

16 A. I report to the Board of Supervisors of the District. This is the governing body,
17 and consists of five members currently elected by the landowners of the
18 District.

19
20 **Q. Please describe the District's facilities and services.**

21 A. The District owns, operates and maintains major infrastructure for the
22 Hammock Dunes community in Flagler County. This infrastructure includes

1 the Hammock Dunes Bridge and toll facility, and the potable water, wastewater
2 and effluent utility for the lands within the District. The District also maintains
3 a portion of the storm water management system for the lands in the District.

4

5 **Q. Is the water, wastewater and effluent utility operated by the District**
6 **regulated by the Florida Public Service Commission?**

7 A. No. As a governmental utility, the District is exempt from PSC jurisdiction.
8 That exemption was acknowledged by the Commission in Order No. 18503
9 issued on December 7, 1987.

10

11 **Q. How was the construction of the District's potable water, wastewater and**
12 **effluent utility system funded?**

13 A. It was funded by the issuance of tax exempt revenue bonds issued by the
14 District.

15

16 **Q. How does the District operate its utility system?**

17 A. The District has three on-site employees who supervise and assist in the
18 operation of the District's utility system on a part-time basis. The day to day
19 operation of the plant is done by an independent licensed contractor/operator,
20 Culligan Inc., retained by the District to operate its water, wastewater and
21 effluent treatment facilities. Utility billing and accounting is handled partially
22 on site and partially through my offices in Coral Springs.

1 **Q. Does the District's utility system serve all lands within the District?**

2 A. At this time, development is taking place only in the southern portion of the
3 District, which consists of approximately 1,000 acres. The existing utility
4 system was designed to serve this portion of the development. The system may
5 be expanded in phases as development occurs in the northern portion of the
6 District.

7

8 **Q. Tell me about the District's potable water system.**

9 A. The District provides potable water for household use to all residences and
10 other customers in the Hammock Dunes community. The District maintains all
11 of the potable water distribution system serving its residents.

12

13 **Q. Is potable water used for irrigation?**

14 A. No. Potable water is no longer provided for irrigation use. The District has
15 installed an effluent distribution system, and both residential and non-residential
16 customers in the District are required to use effluent reuse water for irrigation
17 purposes. In addition, effluent is used to irrigate roadways and other common
18 areas in the District. The District currently provides effluent irrigation for an
19 estimated 351 acres.

20

21 **Q. Where does the District obtain potable water for its customers?**

1 A. The District purchases potable water from PCUC under an agreement dated
2 April 8, 1988, pursuant to which PCUC is obligated to sell water to the District
3 on a bulk basis (the "Water Agreement"). The Commission approved the terms
4 of the Water Agreement in Order No. 21606. PCUC provides water to the
5 District through meters located within PCUC's service territory at the junction
6 of Highway A1A and Jungle Hut Road. The District performs additional
7 chlorination, then provides this water to its customers through an extensive
8 distribution system owned, operated and maintained by the District.

9

10 **Q. Please describe generally the terms of the bulk water agreement between**
11 **the District and PCUC.**

12 A. Under the Water Agreement, the District initially paid for the right to receive
13 potable water from PCUC based on an estimated maximum average demand of
14 100,000 gallons per day (GPD). The District paid an Advance Capacity Charge
15 (ACC) and a Water Facility Tax Impact Charge (WFTIC) of \$715,000.00 and
16 \$335,389.55, respectively, for this initial capacity purchase. The District also
17 pays monthly charges to PCUC, consisting of a tariffed base facility charge and
18 gallonage charges based on actual consumption, at rates set by the Commission.
19 The Water Agreement provides a mechanism for the District to purchase
20 additional capacity upon payment of additional sums to PCUC. Both the ACC
21 and WFTIC for future purchases are subject to adjustment pursuant to the
22 Water Agreement.

1 **Q. Has Dunes purchased additional capacity from PCUC since the date of the**
2 **original agreement?**

3 A. Yes. An additional 100,000 gpd bulk purchase of potable water advanced
4 capacity was made in August, 1995 for \$1,125,000. Thus the District currently
5 has a commitment from PCUC for up to 200,000 gpd of bulk potable water.

6

7 **Q. What is the District's position on PCUC's application for an increase in the**
8 **base facility charge and the gallonage rate for bulk water service?**

9 A. The District has not taken a position on the magnitude of the proposed increase.
10 With respect to the rate structure, it appears that PCUC has proposed a rate
11 structure which spreads the requested water rate increase on an equal percentage
12 basis to all of its water customers. The District is interested in ensuring that
13 the final rates approved by the Commission equitably treat all water purchasers.

14

15 **Q. You mentioned that the District also provides wastewater utility services.**
16 **Could you describe that operation?**

17 A. Yes. Wastewater is collected by the District and treated to secondary standards
18 at a 250,000 gpd wastewater treatment plant owned and operated by the
19 District.

20

21 **Q. Is the unfiltered effluent from that plant suitable for reuse?**

1 A. Not without further treatment. It is my understanding that secondary treated
2 effluent can be disposed of through percolation ponds or through land
3 application only at non-public access areas such as a traditional spray irrigation
4 fields. Such unfiltered effluent must be treated to higher standards before it can
5 be used for general irrigation purposes, particularly if used on public access
6 areas.

7
8 **Q. Please describe the District's effluent reuse facilities.**

9 A. The District owns and operates effluent reuse facilities with a permitted capacity
10 of 1.6 MGD average daily flow. These facilities consist of a sand media filter
11 rated at 3.2 MGD, two chlorine contact chambers for high level disinfection,
12 and two effluent storage ponds with a combined capacity of approximately
13 15,200,000 gallons. In addition, the District operates the pumps and effluent
14 transmission and distribution system necessary to provide reuse water to its
15 irrigation customers. One customer, a golf course, takes reuse water from the
16 District at the plant site and is responsible for its own pumping, transmission
17 and irrigation system. In total, the District has over \$4 million of investment in
18 its effluent reuse facilities.

19
20 **Q. What is the source of effluent for the District's reuse facilities?**

21 A. There are two sources. The first source is secondarily treated effluent from the
22 District's own wastewater treatment plant. This source currently provides about

1 61,000 gpd of effluent. The second source is secondarily treated effluent
2 obtained from PCUC under an effluent agreement.

3
4 **Q. Is this effluent agreement the first such agreement between the District and**
5 **PCUC?**

6 A. No. The District's first effluent agreement with PCUC was dated February 23,
7 1990. A copy of that agreement is attached as Exhibit ___ (GLM-2). Under
8 the 1990 agreement, the District installed, at its own expense, a pump station
9 located at PCUC's wastewater treatment plant site. The District also installed,
10 at its own expense, a 12" effluent transmission main approximately 19,400 feet
11 in length to transport unfiltered effluent from the pumping station, across the
12 Intracoastal Waterway, to the District's effluent treatment facilities. In addition
13 to these capital facilities, the District supplies the utilities (primarily electricity)
14 necessary to operate the effluent pumping station. Under the 1990 agreement,
15 PCUC agreed to provide up to 920,000 gallons per day of secondary treated
16 effluent, as and when available, to the District's pumping station. The 1990
17 agreement was approved by the Commission in Order No. 23372 issued August
18 20, 1990.

19
20 **Q. Was this agreement subsequently amended?**

21 A. Yes. On May 13, 1994, the District and PCUC entered into an Addendum to
22 the 1990 agreement. At that time, PCUC needed additional effluent disposal

1 capacity and additional wet weather effluent storage capacity while additions to
2 its own disposal and storage facilities were under construction. The District
3 provided this assistance to PCUC under the 1994 Addendum, a copy of which
4 is attached as Exhibit ___ (GLM-3).

5

6 **Q. Is the 1990 Agreement, as amended by the 1994 Addendum, still in effect?**

7 A. No. On September 20, 1995, the District and PCUC entered into a new
8 effluent agreement (1995 Agreement) which replaced the prior agreements. A
9 copy of the 1995 Agreement is attached as Exhibit ___ (GLM-4).

10

11 **Q. Please describe in general terms how effluent is provided under the 1995**
12 **Agreement.**

13 A. PCUC provides secondary treated effluent to the District at the District's pump
14 station at the PCUC wastewater treatment plant site. This unfiltered effluent is
15 delivered to the District from a closed system -- that is, it comes either directly
16 from PCUC's wastewater treatment process (the chlorine contact chamber) or
17 from PCUC's 6.0 MGD effluent storage tank. As under the prior agreement,
18 the District continues to pay all costs of operating and maintaining its effluent
19 pumping station and the effluent transmission line.

20

21 **Q. Does PCUC have any obligation to deliver specific amounts of unfiltered**
22 **effluent to the District?**

1 A. No. PCUC is not obligated to provide any specific amounts of unfiltered
2 effluent to the District. The District does, however, have a "first call" on up to
3 1.6 MGD of PCUC's unfiltered effluent. This means that PCUC must provide
4 up to this amount of unfiltered effluent to the District before it provides effluent
5 to any other third party.

6

7 **Q. Does the District have any obligation to take specific amounts of unfiltered**
8 **effluent from PCUC?**

9 A. Yes. The District has committed to take an annual average of 600,000 gpd of
10 unfiltered effluent, with no less than 300,000 gpd to be taken on any given day.
11 The District also has agreed to use its best efforts to take up to 1.6 MGD of
12 unfiltered effluent on an annual average basis. In effect, this allows PCUC to
13 use this agreement as part of its effluent disposal system.

14

15 **Q. Does the District pay PCUC for this unfiltered effluent?**

16 A. No. Inasmuch as the District has been disposing of PCUC's unfiltered effluent,
17 which has only been treated to secondary standards, the District does not pay
18 PCUC for the effluent it gets from PCUC. The District has, however,
19 reimbursed PCUC for any operational costs incurred.

20

1 **Q. Other than the pump station and the effluent transmission main, has the**
2 **District paid for any other capital improvements at PCUC's plant site in**
3 **connection with its acceptance of effluent from PCUC?**

4 A. Yes. In 1993, the District paid for the installation of an additional effluent line
5 connecting the District's pump station to the PCUC percolation/holding pond
6 located closest to the PCUC wastewater treatment plant. That line was
7 subsequently sold to PCUC at cost when PCUC completed its recent wastewater
8 treatment plant improvements and wanted to reconfigure and use the line on its
9 plant site. Because the new Effluent Agreement had clarified the point and
10 source of delivery, the District determined that line was no longer needed by
11 the District.

12
13 **Q. Does the District oppose PCUC's application to create a new class of**
14 **effluent service and to impose a rate of \$0.67 per 1,000 gallons for effluent**
15 **delivered to the District?**

16 A. Yes. Mr. Milian will discuss this matter in more detail. From the perspective
17 of District management, we are providing a benefit to PCUC by enabling them
18 to dispose of unfiltered effluent that they would otherwise have to build
19 additional disposal facilities to handle. The District owns and operates the
20 pumping station and effluent main used to transport unfiltered effluent from
21 PCUC to our effluent plant, where further treatment is required before the
22 effluent is suitable for application in public access areas. I am unaware of any

1 cost incurred by PCUC in providing unfiltered effluent to the District that they
2 would not incur in any event as part of their normal treatment process. In this
3 situation, we believe that it is inequitable and unfair to charge the District for
4 this unfiltered effluent.

5

6 **Q. Does the District charge its customers for the various utility services it**
7 **provides, including effluent provided for irrigation purposes?**

8 A. Yes. As a special-purpose unit of local government governed by Chapter 190,
9 Florida Statutes, the District follows the provisions of Section 190.035, F.S., in
10 setting its utility rates. These rates are set in an administrative rulemaking
11 process under Chapter 120, F.S. The District sets its rates to recover the costs
12 incurred by the District in providing utility service. This includes the capital
13 and operating expenses of the District for its treatment and distribution
14 facilities, and any payments to third parties, such as the cost of bulk potable
15 water purchased from PCUC.

16

17 **Q. Are those rates set to earn a return or profit for the District?**

18 A. No. As a governmental body, the District operates on a non-profit basis. Its
19 rates are set solely to recoup its costs, including debt service on the bonds used
20 to fund the construction of the utility system.

21

1 **Q. What will be the impact on the District and its ratepayers from this PCUC**
2 **rate case?**

3 A. To the extent that the Commission approves an increase in the bulk water rate
4 charged to the District, the District will have to reset rates to recover this
5 additional cost from its customers. Similarly, if the Commission were to
6 approve an effluent rate, the District would have no choice but to increase its
7 rates and pass this charge along to its customers. The District is required by
8 law and by its bond covenants to maintain an adequate revenue stream to pay
9 the District's operating costs, and to make debt service payments on its bonds.

10

11 **Q. Has the District attempted to quantify the impact on its customers of**
12 **PCUC's proposal for an effluent rate of \$0.67 per 1,000 gallons?**

13 A. Yes. The District's current rate for effluent water service consists of a monthly
14 base charge which varies with meter size (\$21.25 for a 5/8" x 3/4" meter) plus
15 a commodity charge of \$0.70 per 1,000 gallons. The golf course, which
16 provides its own pumping equipment and irrigation lines, pays a base charge of
17 \$10,362 per month plus a commodity charge of \$0.35 per gallon. If PCUC's
18 proposed effluent rate were adopted and passed-through directly to the District's
19 customers as an increased gallonage charge, the residential gallonage rate would
20 almost double and the golf course gallonage rate would be increased almost
21 200%. Of course the District's Board would have to approve the rates used to
22 recover these additional costs. Any rate study would have to consider a number

1 of factors, such as the effect of price on demand for effluent reuse, and the
2 proper price relationship between potable water and effluent reuse water.

3

4 **Q. What action are you asking the Commission to take in this proceeding?**

5 A. The District is asking the Commission to deny PCUC's request for a new class
6 of service, and not to approve an effluent rate. We are also asking the
7 Commission to ensure that any water rate increase is spread equitably among
8 PCUC's various classes of water service.

9

10 **Q. Does that conclude your testimony?**

11 A. Yes.

12

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1 Q (By Mr. Melson) Mr. Moyer, could you
2 briefly summarize your testimony?

3 A Yes. The District is here, Mr. Chairman and
4 Commissioners, this morning really to give testimony
5 on two parts of this rate case, one dealing with the
6 bulk water rate and the other on the establishment of
7 an effluent rate relative to the bulk water rate.

8 We do not take a position at this time on
9 what is being proposed, although we do want the
10 Commission to recognize that the District has paid in
11 excess of \$2 million to secure capacity for 200,000
12 gallons per day of water, and as part of your
13 deliberations going forward, we'd want to ensure that
14 the District is treated fairly and whatever rate
15 increase this Commission may approve as it relates to
16 the bulk rate agreement that we currently have with
17 the utility, and that it should continue to reflect
18 that we've already paid for capacity that we'll be
19 using within the Utility system.

20 On the effluent matter, we're urging the
21 mission not to approve the requested establishment of
22 a rate category for the Dunes Community Development
23 District. The reason for that is quite simple. The
24 District has expended in excess of \$4 million to
25 provide for upgraded treatment of secondary treated

1 effluent that we received from the Commission. We
2 currently have available 1.6 million gallons a day in
3 capacity, which consists of filtering, storage ponds.
4 We constructed over 19,000 lineal feet of pipe to
5 connect Hammock Dunes to the utility's effluent
6 system, and we have incurred a substantial cost to do
7 that. In addition, the District pays for all of the
8 incremental cost that the Utility incurs in providing
9 us with that effluent.

10 From my understanding, the Utility is not
11 incurring any cost in providing that effluent to the
12 District. They've even billed us for such minor items
13 as fuses. I'm not being critical of the utility,
14 because frankly that's what the agreements provide for
15 and that's exactly what they should be doing, but in
16 all cases they have followed that agreement and have
17 billed us every incremental cost that they have
18 incurred historically in providing that effluent to
19 the district.

20 In addition, I think it's important for the
21 Commission to understand the working relationship
22 between the District and Palm Coast Utilities.

23 As I mentioned in all cases, the District
24 has been responsible for providing the additional
25 treatment that is necessary to treat this effluent to

1 provide it to public spaces.

2 In the normal course of our business
3 dealings with the Utility, if there were any costs
4 incurred, they would have come to the District and
5 asked the District to bear that expense. That has
6 been the normal, historical way we have operated with
7 the Utility. They make the statement that they
8 supplied a 6 million-gallon-per-day ground storage
9 tank for the benefit of Hammock Dunes and the Dunes
10 Community Development District. Again, we were not
11 consulted on that. And if we had been consulted and
12 if there were a reason for the District to provide
13 additional storage, again going back and looking at
14 our historical relationship, we, the District, would
15 have financed and constructed those improvements; not
16 the Utility. So we suspect for the Utility to go
17 forward and provide the ground storage tank and the
18 RIB simply is to benefit the Utility and has nothing
19 to do with the Dunes Community Development District.

20 And for that reason we do not think it's
21 appropriate for the Utility to charge Dunes any rate.
22 If we are charged a rate, simply we have to pass that
23 on to our consumers. What's being proposed today
24 would basically double what our customer would pay for
25 irrigation water, and the effects of that, frankly, we

1 don't know as we sit here today, but it may reduce the
2 amount of effluent that the District would take from
3 the Utility to provide to our customers.

4 So for a variety of reasons we're objecting
5 to the creation of that effluent rate.

6 Q Does that conclude your summary?

7 A Yes, sir, it does.

8 MR. MELSON: Witness is available for cross.

9 COMMISSIONER DEASON: Mr. Gatlin.

10 Mr. Schiefelbein.

11 CROSS EXAMINATION

12 BY MR. SCHIEFELBEIN:

13 Q Good morning, Mr. Moyer.

14 A Good morning.

15 Q I've distributed a document entitled
16 "Hammock Dunes Actual Monthly Consumption Gallons."

17 Do you have that before you?

18 A Yes, I do.

19 Q Have you seen this document before?

20 A Yes. You have provided that to me as part
21 of the deposition.

22 MR. SCHIEFELBEIN: Commissioners, could I
23 get the next exhibit number?

24 COMMISSIONER DEASON: Yes, Exhibit No. 22.

25 (Exhibit No. 22 marked for identification.)

1 Q (By Mr. Schiefelbein) Mr. Moyer, does this
2 schedule show actual monthly consumption of the Dunes
3 over the period January '94 through April of '96.

4 A Yes, sir.

5 Q Does it appear to be an accurate rendition
6 of that data?

7 A It does appear to be accurate.

8 Q Is it true from January through September of
9 1994 usage was fairly stable?

10 A That is correct.

11 Q And from October 1994 through approximately
12 April 1995 there was a tremendous increase, was there
13 not?

14 A Yes.

15 Q And beginning in May 1995 and continuing
16 through April '96, did that usage subside to more
17 normal levels?

18 A Yes it did.

19 Q What would be the expectation for usage from
20 May 1996 forward?

21 A We would expect it to be in the ranges that
22 are shown there from May through -- May of 1995
23 through April of 1996.

24 Q Do you know why -- for the period October
25 1994 through April 1995, do you know why there were

1 inflated levels of use?

2 A Yes.

3 Q Would you please explain?

4 A Certainly. The District is required
5 pursuant to our permits with FDEP to maintain certain
6 chlorine residuals on the potable water that we
7 distribute as a consecutive system to PCUC, and we
8 were having a difficult time maintaining those minimum
9 chlorine residuals. The only way we could address
10 that at that point in time is through some very
11 extensive flushing that we undertook in that October
12 through April time period, during which the District
13 did contract for, and did provide and install, booster
14 chlorination facilities within our own distribution
15 system.

16 We provided two such booster stations, one
17 at Jungle Hut Road and one at A1A, and we continue to
18 monitor that, but as can be seen from May of '95
19 through the current reporting period of April of '96,
20 we have now been able to reduce our flushing down to a
21 more normal level which is reflected in those
22 consumption numbers.

23 Q Mr. Moyer, what benefits does the Dunes
24 Community Development District receive from using Palm
25 Coast Utility's effluent?

1 A It is a source of irrigation water to the
2 district.

3 Q Is there a benefit to the district in
4 avoiding development of its own source of supply?

5 A To my knowledge we have not undertaken any
6 extensive analysis of alternatives other than the use
7 of potable water take we receive from the Utility.

8 Q May I have an answer to my question, sir?
9 Do you need me to repeat it?

10 A Please.

11 Q Is there a benefit to the district in
12 avoiding development of its own source of supply?

13 A Again, I'll stand on my answer. We've not
14 analyzed all available alternatives for me to
15 determine if there is a benefit. There is a benefit
16 to the district using the effluent as compared to
17 using potable water.

18 Q Mr. Moyer, do you have your deposition
19 transcript available?

20 A Yes, I do.

21 Q Would you please turn to Page 18 of that
22 deposition.

23 A Okay.

24 Q I'm looking at beginning on Line 17, do I
25 not ask there "Is there a benefit to the district in

1 avoiding development of its own source of supply?"

2 A And my answer was that "I suppose," but
3 within your question I think --

4 Q I beg your pardon, what was your answer at
5 the deposition?

6 A "I suppose."

7 Q Thank you.

8 COMMISSIONER KIESLING: Could you speak more
9 into the mike.

10 MR. SCHIEFELBEIN: I apologize.

11 COMMISSIONER KIESLING: When you look down I
12 can't hear you very well.

13 MR. SCHIEFELBEIN: I apologize.

14 Q (By Mr. Schiefelbein) Mr. Moyer, would you
15 also agree that there's a benefit to the district in
16 not having to buy potable water from Palm Coast
17 Utility for irrigation purposes?

18 A Yes.

19 Q Do you know whether or not the District is
20 required by a DRI, development of regional impact, to
21 use effluent for irrigation?

22 A It is my understanding that we are required
23 to use effluent for the golf course.

24 Q Does the District have a alternative source
25 of supply of water for irrigation purposes if effluent

1 is not received from Palm Coast Utility?

2 A Again, we have not done that research but we
3 believe there probably are additional sources, yes.

4 Q And what are those alternative sources, sir?

5 A To utilize surface waters lying west of the
6 intercoastal or reverse osmosis treatment to be
7 provided by the District.

8 Q Would another alternative be purchase of
9 bulk water from Palm Coast Utility?

10 A Yes.

11 Q And I'm not certain if you mentioned this is
12 one of the alternatives, but would alternatives
13 include going west of the intercoastal?

14 A Yes.

15 Q Is that where you would draw from surface
16 waters or groundwater?

17 A That is correct.

18 Q Do you know whether the cost of obtaining
19 water from such alternative sources west of the
20 intercoastal, whether the cost would be prohibitive to
21 the district?

22 A Again, as I previously stated, we've not
23 undertaken that type of an analysis.

24 Q Is it fair to say that the District has not
25 actually considered that?

1 A That is fair to say.

2 Q Is it also fair to say that you have not
3 considered what the cost would be to the District to
4 meet its irrigation needs through potable water
5 purchased from Palm Coast Utility?

6 A The District's engineers have looked at that
7 and have concluded and recommended to the board that
8 we spend in excess of \$4 million to receive untreated
9 effluent from the Utility for irrigation purposes, so
10 we have looked at that.

11 Q That \$4 million does not include the payment
12 of additional capacity charges to the utility, does
13 it?

14 A Again the \$4 million has been expended for
15 us to be able to accept currently from the Utility the
16 secondary treated effluent that we are filtering and
17 chlorinating and redistributing to our residents.

18 Q Can you quantify for me what the additional
19 capacity charges would be if you were to increase your
20 capacity of potable water from the Utility?

21 A To increase the potable water allocation to
22 serve the Phase I demand, we estimated approximately
23 \$11 million.

24 Q Do you have any knowledge as to what time
25 frames would be involved in permitting any new sources

1 of supply say west of the intercoastal?

2 A I do not.

3 Q Would you agree that using reused water for
4 irrigation for residential and common areas is the
5 most cost effective approach available to the
6 district?

7 A Given the alternatives that we've looked at
8 which primarily is using potable, that is the
9 conclusion, yes.

10 Q Do you have your prefiled testimony
11 available?

12 A Yes, I do.

13 Q Would you please turn to Page 8.

14 On Page 8 I believe you describe Dunes'
15 effluent disposal facilities consisting of filters,
16 chlorine contact chambers and storage ponds with
17 15.2 million gallon capacity; is that correct?

18 MR. MELSON: Page 8.

19 A (Continuing) Do you have a line for me where
20 you were referring to the 15 million gallon storage
21 capacity?

22 Q That would take me a moment, please.

23 (Pause)

24 Do you find that now? When were those
25 facilities constructed and placed into service? What

1 year?

2 A I believe that would have been in the late
3 '80s or early '90s.

4 Q Subject to check, in 1990?

5 A Subject to check.

6 Q You also refer in your testimony to the May
7 13, 1994 agreement in which Dunes provided temporary
8 assistance?

9 A Yes.

10 Q To Palm Coast Utility by taking 600,000
11 gallons a day of effluent, and making available
12 1 million gallons a day of wet weather storage for up
13 to seven days; is that correct?

14 A Yes.

15 Q Did Dunes construct any additional
16 facilities in 1994 in order to provide that assistance
17 to Palm Coast Utility?

18 A Not that I'm aware of.

19 Q Did Dunes incur any incremental capital
20 costs to provide that service to Palm Coast Utility?

21 A We did, and the engineers had identified
22 that as part of that agreement provided that those
23 incremental costs would be paid for by the Utility.

24 **COMMISSIONER DEASON:** Incremental capital
25 costs?

1 **WITNESS MOYER:** No, operational cost. It
2 ended up for some \$500 a month, I believe, that we
3 charged the Utility.

4 **Q** **(By Mr. Schiefelbein)** You agree there were
5 no incremental capital costs to provide that service
6 to the utility.

7 **A** That's right.

8 **Q** You provided within your Exhibit GLM-3, the
9 addendum agreement with respect to that service,
10 correct?

11 **A** That's correct.

12 **Q** Would you turn to Page 3 of that agreement.

13 **A** Okay.

14 **Q** Am I correct that in addition to being
15 responsible for all costs of permits, taxes and
16 assessments, Dunes required the Utility to pay for the
17 right to dispose of effluent and the lease of the
18 partial use of Dunes' facilities?

19 **A** That's correct.

20 **Q** What did Dunes charge Palm Coast Utility for
21 the right to dispose of effluent and to lease the
22 storage?

23 **A** \$3,341 per month.

24 **Q** Do you believe those charges were
25 reasonable?

1 A Given the investment that the District had
2 in those facilities, yes, I do.

3 Q That would be true even those Dunes incurred
4 no incremental capital costs to serve Palm Coast
5 Utility?

6 A Keep in mind, Dunes is paying principal and
7 interest on the facilities that it provided, so it is
8 incurring costs.

9 Q Whether or not they provide the service to
10 the Utility or not?

11 A Sounds like the similar thing we're talking
12 about, yes.

13 MR. SCHIEFELBEIN: Thank you.

14 COMMISSIONER DEASON: Mr. Schiefelbein, are
15 you finished?

16 MR. SCHIEFELBEIN: Yes, sir.

17 COMMISSIONER DEASON: Okay. Very well.

18 **CROSS EXAMINATION**

19 BY MR. SIRKIN:

20 Q Good morning, Mr. Moyer. Just two
21 questions. Who regulates the charges for water and
22 sewer in the district?

23 A The District is a political subdivision of
24 the state of Florida. Then as such we set our rates
25 pursuant to Chapter 120, the Florida Administrative

1 Procedures Act, and that is set by the Board of
2 supervisors of the district after public hearing.

3 Q Are you familiar with the Company's request
4 for a gross in plant to used and useful in rate base
5 for a margin reserve and economy of scale factor?

6 A I am not intimately familiar with that, no,
7 I'm not.

8 Q Are you familiar with how the 200,000 gallon
9 capacity up-front charge was determined?

10 A Yes. Generally, yes.

11 Q Did that include a factor for margin reserve
12 and gross-up?

13 A That's my understanding.

14 Q The basic 200,000 gallon rate did include a
15 margin reserve calculation?

16 A I don't know about marginal reserve. My
17 understanding is that it represented -- 70% of the fee
18 represented capacity, and 30% represented gross-up.

19 Now, how the rate that 70% of that was
20 calculated, I don't have that knowledge.

21 MR. SIRKIN: Thank you.

22 COMMISSIONER DEASON: Mr. Reilly.

23 MR. REILLY: No questions.

24 COMMISSIONER DEASON: Staff.

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CROSS EXAMINATION

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BY MR. EDMONDS:

Q Hello, Mr. Moyer.

A Good morning.

Q We're passing out an exhibit.

COMMISSIONER DEASON: Do you wish to have
this identified?

MR. EDMONDS: Yes.

COMMISSIONER DEASON: Exhibit 23.

MR. EDMONDS: Thank you.

(Exhibit No. 23 marked for identification.)

Q (By Mr. Edmonds) Would you agree that this
exhibit indicates the annualized cost that the Dunes
pays for operating and maintaining the effluent pump
station located at Palm Coast's wastewater treatment
plant site?

A Yes, sir.

Q And this was provided by you to Staff as a
late-filed deposition exhibit?

A That's correct.

MR. EDMONDS: I have no further questions,

MR. EDMONDS: Thank you.

COMMISSIONER DEASON: Redirect.

MR. MELSON: One on redirect.

REDIRECT EXAMINATION

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BY MR. MELSON:

Q Mr. Moyer, do you still have a copy of your deposition in front of you?

A Yes, I do.

Q Would you turn back to Page 18 where Mr. Schiefelbein referred you earlier.

A Yes.

Q I believe he focused on Line 17 through 22; is that correct?

A That's correct.

Q Would you read for me the question and answer that appears beginning at Line 8?

A Starting at Line 8?

Q Yes, sir?

A "Is it fair to say that there is a benefit to the District in that the District avoids having to develop its own source of supply for effluent for irrigation purposes? Answer: That is yet to be determined since we didn't actually identify or review or look at those alternatives, so I don't know the answer to that." When you say "we", the answer, the District. "Question: Well, I guess I'm asking for your personal professional opinion on that. Wouldn't you agree that there's a benefit to the District? I'm

1 not asking you to quantify it but in avoiding
2 development of its own source of supply. Answer: I
3 suppose."

4 **MR. MELSON:** Thank you. No further
5 questions.

6 **COMMISSIONER DEASON:** Exhibits.

7 **MR. MELSON:** Move Exhibit 21.

8 **COMMISSIONER DEASON:** Without objection 21
9 is admitted.

10 **MR. SCHIEFELBEIN:** Move Exhibit 22.

11 **COMMISSIONER DEASON:** Without objection
12 Exhibit 22 is admitted.

13 **MR. EDMONDS:** Staff moves Exhibit 23.

14 **COMMISSIONER DEASON:** Without objection
15 Exhibit 23 is admitted.

16 **MR. MELSON:** And I'd ask that Mr. Moyer be
17 excused.

18 **COMMISSIONER DEASON:** Yes, Mr. Moyer, you
19 may be excused.

20 **WITNESS MOYER:** Thank you very much.

21 (Exhibit Nos. 21, 22 & 23 received in
22 evidence.)

23 (Witness Moyer excused.)

24 **COMMISSIONER DEASON:** We're going to take a
25 ten-minute recess at this time. I'm going to ask the

1 parties to review the list of witnesses, and if any
2 agreement can be reached as to the next witness to
3 take, I would appreciate that.

4 Ten-minute recess.

5 (Brief recess.)

6 - - - - -

7 **COMMISSIONER DEASON:** Call the hearing to
8 order. Mr. Melson, your witness is next scheduled. I
9 understand there is agreement that we follow that
10 order, at least for now.

11 **MR. MELSON:** That's correct.

12 **COMMISSIONER DEASON:** Very well.

13 - - - - -

14 **ARSENIO MILIAN**

15 was called as a witness on behalf of Dunes Community
16 Development District and, having been duly sworn,
17 testified as follows:

18 **DIRECT EXAMINATION**

19 **BY MR. MELSON:**

20 **Q** Mr. Milian, have you been sworn?

21 **A** Yes.

22 **Q** Would you state your name and address for
23 the record, please?

24 **A** My name is Arsenio Milian. My address is
25 2525 Southwest 32nd Avenue, Miami, Florida.

1 Q And what is your occupation or profession?

2 A I'm a professional, civil and environmental
3 engineer.

4 Q And you're appearing today on behalf of the
5 Dunes Community Development District?

6 A Yes.

7 Q Have you prefiled direct testimony in this
8 docket consisting of 13 pages?

9 A Yes.

10 Q Do you have any changes or corrections to
11 that testimony?

12 A No.

13 Q And if I were to ask you the same questions
14 today, would your answers be the same?

15 A Yes.

16 MR. MELSON: Mr. Chairman, I ask that Mr.
17 Milian's direct testimony be inserted into the record
18 as though read.

19 CHAIRMAN DEASON: Without objection it will
20 be inserted.

21 Q (By Mr. Melson) And did you have one
22 exhibit attached to your testimony, which is your
23 professional resume.

24 A Yes.

25 MR. MELSON: Mr. Chairman, I ask that

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Exhibit AM-1 be identified as Exhibit 24.

COMMISSIONER DEASON: It will be so
identified.

(Exhibit No. 24 marked for identification.)

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**
2 **DUNES COMMUNITY DEVELOPMENT DISTRICT**
3 **DOCKET NO. 951056-WS**
4 **PREFILED DIRECT TESTIMONY OF ARSENIO MILIAN, P.E.**

5
6 Q. Please state your name and business address.

7 A. My name is Arsenio Milian. My business address is 2025 S.W. 32nd
8 Avenue, Miami, Florida 33145.

9
10 Q. By whom are you presently employed, and in what capacity?

11 A. I am President of the firm Milian, Swain & Associates, Inc. (MSA), which
12 was established to provide civil and environmental engineering consulting
13 services as well as utility management, systems valuation and rate
14 consulting services.

15
16 Q. Please state your educational background and professional experience.

17 A. I have received both B.S. and M.E. degrees from the University of
18 Florida. After graduating, I worked for Post, Buckley, Schuh, & Jernigan,
19 Inc. in Miami for one year. I was then employed by The Deltona
20 Corporation in August, 1969, as Utilities Engineer. In 1972, I became
21 Chief Utilities Engineer for Deltona, a position in which I served until
22 December 1975, when I became Vice-President of Utility Operations. In
23 December 1982, I became President of all Utility Divisions, a position I

1 held until June 1989. I have been President of MSA since that time.

2

3 Q. What professional licenses do you hold?

4 A. I have been a licensed professional engineer in the State of Florida since
5 1972.

6

7 Q. What professional and civic organizations are you associated with?

8 A. A complete list of my professional and civic activities is included in the
9 resume attached as Exhibit ___ (AM-1). For example, I am a member of
10 the American Water Works Association, American Society of Civil
11 Engineers, Water Environment Federation, and National Association of
12 Water Companies. I am a member of the Dade County Environmental
13 Task Force and the Technical Advisory Committee of the Governor's
14 Commission For a Sustainable South Florida. I am also President of
15 Citizens for a Better South Florida, a Council member of the Wilderness
16 Society, Board member of 1000 Friends of Florida, and Governor's
17 appointee to the Miami River Coordinating Committee. I serve as a Board
18 member of the National Audubon Society and as Chairman of its
19 Everglades Campaign. I served a four year term as a member of the
20 Governing Board of the South Florida Water Management District and was
21 its representative on the Policy Advisory Committee on the Dade County
22 West Well field, the Committee on Inter-District Water Transfer and the
23 Lake Okeechobee Technical Advisory Committee. I have also served on

1 the State Environmental Land Management/Study Committee (ELMS III)
2 and the Florida Economic Growth & International Development
3 Committee.

4

5 Q. Have you attended professional seminars?

6 A. Yes, I have attended numerous seminars relating to water quality and
7 treatment, wastewater treatment and disposal, utility management,
8 environmental issues, NARUC seminars on rates and regulation of water
9 utilities, and others.

10

11 Q. Have you previously testified before regulatory bodies?

12 A. Yes, I have testified as an expert witness in rate hearings before the
13 Florida Public Service Commission. Additionally, I have appeared before
14 the St. Johns, Hillsborough, and Collier County Boards of County
15 Commissioners in water and sewer rate proceedings.

16

17 Q. In each of these proceedings, were you qualified as an expert witness?

18 A. Yes, I was qualified as an expert in connection with utility engineering,
19 utility operations and utility regulation.

20

21 Q. Have you previously testified before this Commission on the issue of
22 Effluent Reuse Rates?

23 A. Yes. I testified in the following Dockets on this issue: No.850151-WS,

1 No. 870743-SU and No. 870980-WS.

2

3 Q. What is the nature of your assignment in this rate case?

4 A. I have been engaged by Dunes Community Development District (Dunes)
5 to address Palm Coast Utility Corporation's (PCUC) proposed Effluent
6 Reuse Rate.

7

8 Q. What documents have you reviewed in this regard?

9 A. I have reviewed documents filed by PCUC in its Application for rate
10 increase, including the "Effluent Reuse Rate Analysis," the "Used and
11 Useful Analysis" and the portions of MFR's and prefiled testimony related
12 to the proposed effluent reuse rate. In addition, I have reviewed Effluent
13 Agreements between Dunes and PCUC, public records on file with the
14 Florida Department of Environmental Protection (DEP) and the St. John's
15 River Water Management District related to PCUC, and engineering,
16 financial and administrative records of Dunes.

17

18 Q. In your opinion is the effluent reuse rate proposed by PCUC consistent
19 with the policies of DEP and the Water Management Districts?

20 A. These agencies have made it policy to encourage and in many cases require
21 reuse of effluent for irrigation. Both agencies require water reuse in their
22 permits to PCUC. To the extent that higher rates for effluent reuse will
23 discourage reuse for irrigation, the proposed rates would, in effect, be

1 contrary to the implementation of the policies of these agencies.

2

3 Q. In your opinion, what factors should be considered in determining whether
4 a reuse rate should be established and in setting a rate if one is determined
5 to be appropriate?

6 A. There should be a feasibility analysis which evaluates the alternatives
7 available to the wastewater utility and the recipient of the effluent, the
8 costs of these alternatives and the benefits received by each party. The
9 costs of the additional treatment necessary to meet regulatory requirements
10 for effluent irrigation to public access areas should be identified. The
11 appropriate sharing of these incremental costs should be determined based
12 on the relative benefits received by each party.

13

14 Q. Does PCUC's Effluent Reuse Analysis and the proposed rate take these
15 factors into consideration?

16 A. No. Apparently these factors were not considered in calculating the
17 proposed rate. I believe if they had been properly considered, no rate
18 would have been proposed. PCUC provides unfiltered effluent to Dunes
19 under the Effluent Agreement between PCUC and Dunes. This unfiltered
20 effluent is wastewater which has received secondary treatment, making it
21 suitable for disposal via land application only in non-public access areas.

22

23 The point of delivery is defined in the Effluent Agreement as the pump

1 station located at PCUC's wastewater treatment facility. Dunes installed,
2 owns and operates the pump station. The unfiltered effluent is transported
3 through a 12" main (also installed, owned and operated by Dunes) to
4 Dunes' wastewater treatment facilities, where it is treated further so that it
5 is suitable for use in public access areas.

6
7 PCUC has incurred no incremental capital investment in facilities and no
8 incremental operating and maintenance costs in facilities required to
9 provide acceptable effluent to Dunes. PCUC is the primary beneficiary in
10 the arrangement in that it has avoided the investment and operating and
11 maintenance costs associated with disposal of effluent that would be
12 required in the absence of an agreement with Dunes. The rate base
13 charged to Effluent Reuse in the Analysis represents plant that PCUC has
14 constructed for its own use - plant which it had to construct whether or not
15 it provided unfiltered effluent to Dunes. None of PCUC's plant was
16 constructed for Dunes' benefit. Dunes has installed at its own cost all of
17 the plant constructed for Dunes' effluent reuse system and has paid all
18 operating and maintenance costs associated with pumping, additional
19 treatment and distribution.

20
21 Q. What are the alternatives available to PCUC for effluent disposal and
22 associated costs?

23 A. Utilities in Florida generally utilize one or a combination of the following

1 for effluent disposal: spray irrigation, percolation ponds, deep injection
2 wells, ocean outfall.

3
4 PCUC has one existing spray irrigation site which it uses for disposal of
5 unfiltered effluent. An additional non-public access spray irrigation site, if
6 one could be found, would require high investment in land plus mains,
7 pumps, sprinkler systems and additional wet weather storage facilities.
8 PCUC has considered the use of other golf courses in the Palm Coast
9 development as possible reuse sites. The purchase of land would not be
10 required under this alternative, but PCUC would have to invest in filters
11 and expanded disinfection facilities to make unfiltered effluent suitable for
12 application to public access areas. This alternative has apparently been
13 discussed and dismissed as unfeasible. According to DEP files, "the costs
14 would be enormous, and some of the golf courses have consumptive use
15 permits to irrigate with stormwater."

16
17 The second alternative identified is percolation ponds. PCUC had several
18 ponds on its plant site prior to construction of the 6.0 MG storage tank and
19 the second rapid infiltration basin (RIB). These ponds were taken out of
20 operation. My experience with percolation ponds in a nearby community
21 was that they did not function effectively due to the poor permeability of
22 the soils in the area. If percolation ponds could be used for effluent
23 disposal, PCUC would have to invest in land, pumps and mains to

1 transport effluent from the plant site to the ponds and additional wet
2 weather storage facilities. Without an extensive study, it is impossible to
3 know whether percolation ponds are a viable option, how much land would
4 be required and what the cost would be.

5
6 The third and fourth alternatives identified - disposal into a deep injection
7 well and ocean outfall - are undesirable alternatives from an environmental
8 and water resources standpoint. DEP and the Water Management Districts
9 do not encourage the use of deep injection wells for effluent disposal
10 because the water is a limited resource that should be returned to the
11 aquifer. Obtaining a permit for deep injection well or ocean outfall is a
12 long and costly process. It is unlikely that either of these effluent disposal
13 methods would be feasible for PCUC.

14
15 Effluent disposal to Dunes is by far the best and least-cost alternative to
16 PCUC. In fact, it is a no-cost alternative since PCUC has incurred no
17 incremental costs in providing effluent to Dunes. Dunes has invested over
18 \$4 million in its effluent reuse facilities, including the cost of the pumps
19 located on PCUC's wastewater treatment plant site, the 12" main which
20 transports effluent to Dunes, filters, chlorination facilities, wet weather
21 storage, meters and distribution mains within the Community Development
22 District. In addition, Dunes pays all of the operating and maintenance
23 costs associated with disposal of the unfiltered effluent it receives from

1 PCUC, including the power costs for operation of the effluent pump station
2 located at PCUC's wastewater treatment plant. I have never seen an
3 effluent reuse arrangement so clearly beneficial to the utility since disposal
4 of the effluent is accomplished solely at the expense of the recipient of the
5 effluent. Usually the utility must pay for most of the investment associated
6 with effluent reuse, including pumps, mains and additional treatment
7 equipment.

8
9 Q. What other benefits does PCUC receive as a result of its arrangement with
10 Dunes?

11 A. In addition to reduced costs associated with effluent disposal as described
12 above, PCUC benefits from its agreement with Dunes in that PCUC's
13 requirements for wet weather storage facilities are reduced by the amount
14 of effluent disposal Dunes is obligated to take. PCUC is not obligated to
15 supply Dunes with any quantity of effluent, but Dunes is obligated to take
16 at least 300,000 gallons each day and an annual average of 600,000 gallons
17 per day. Dunes has agreed to use its best efforts to take an annual
18 average of 1.6 MGD. It is likely that PCUC would not have received a
19 permit for expansion of its wastewater treatment plant if it did not have the
20 Effluent Agreement with Dunes. In February, 1994, DEP cited PCUC for
21 heavy ponding and run-off from its spray field sites into neighboring
22 wetlands. The addendum agreement between Dunes and PCUC provided
23 PCUC with an interim solution to this problem. The current Effluent

1 Agreement has provided an ongoing solution for PCUC. PCUC's permit
2 for expansion of the wastewater treatment plant, issued June, 1994 and
3 modified February, 1995, designates Dunes as one of the reuse areas
4 where unfiltered effluent will be sent.

5

6 Q. Does Dunes also receive benefits under the Effluent Agreement?

7 A. Yes. Under the agreement, Dunes has a source of water for irrigation
8 that, even with the additional treatment costs required to make it suitable
9 for application to public areas, is less expensive than the alternative -
10 potable water. But it is important to note that Dunes has incurred all of
11 the incremental costs associated with receiving the unfiltered effluent it
12 receives from PCUC. In other words, it is a symbiotic arrangement where
13 both parties benefit.

14

15 Q. Should an effluent reuse rate be established?

16 A. No. In prior cases, the Commission has taken the position that where both
17 parties benefit there should be a sharing of the incremental costs. In this
18 case both parties benefit and 100% of the incremental cost is already borne
19 by Dunes.

20

21 Q. Do you have any additional comments about PCUC's Effluent Reuse Rate
22 Analysis?

23 A. Yes. The analysis does not take into account the fact that the unfiltered

1 effluent PCUC provides to Dunes does not meet the regulatory
2 requirements for land application to public access areas. Most utilities
3 utilizing spray irrigation to public access areas as a means of effluent
4 disposal have been required to invest in all or most of the facilities
5 associated with additional filtering and chlorination/disinfection as well as
6 delivery of effluent to its final destination (e.g.: golf course). If PCUC
7 provided this level of service to Dunes, then an allocation of some of the
8 incremental cost to Dunes may be appropriate.

9
10 The rate base identified as Effluent Reuse in PCUC's Analysis consists
11 primarily of land and treatment and disposal equipment associated with the
12 6.0 MG effluent storage tank and 1.0 MGD RIB "necessary to provide
13 effluent reuse water for irrigation purposes." These two items of plant are
14 not necessary to provide effluent reuse water to Dunes. The 6.0 MG
15 effluent storage tank was constructed to provide wet weather storage for
16 PCUC. Dunes would be happy to accept its effluent directly from the
17 wastewater treatment plant if the 6.0 MG storage tank had not been
18 constructed. Dunes has its own facilities for wet weather storage of reuse
19 effluent. As for the 1.0 RIB, PCUC is prohibited under paragraph I. C.
20 of the Effluent Agreement from providing unfiltered effluent to Dunes
21 from the RIB: "Delivery of effluent to DCDD [Dunes] shall be from the
22 ground storage tank, chlorine contact chamber or other closed system via
23 piping owned and maintained by PCUC." The RIB is not within the

1 delivery train. PCUC's investment and operating costs associated with
2 these facilities are in no way allocable to unfiltered effluent delivered to
3 Dunes. Therefore, no rate base should be charged to Dunes.

4
5 In the Analysis, operating and maintenance costs allocated to Effluent
6 Reuse include Sewer Operating Salaries, Administrative and General
7 Salaries allocated based on Sewer Operating Salaries, Chemicals and Rate
8 Case Expense. Paragraph I. A. of the Effluent Agreement provides that,
9 "DCDD [Dunes] shall be responsible for all costs associated with the
10 operation and maintenance of the pump station, including but not limited to
11 labor, materials, utilities and additional and replacement equipment."

12 Dunes has paid these costs and others incurred by PCUC related to the
13 unfiltered effluent it receives. I have reviewed PCUC's invoices to Dunes
14 for direct costs incurred in 1995 totaling \$1,064.87. The invoices include
15 charges for chlorine, fuses and labor for work at the pump station and on
16 effluent lines owned by Dunes. It appears that PCUC has invoiced Dunes
17 for even very minor expenses incurred in providing unfiltered effluent to
18 Dunes and Dunes has reimbursed these expenses.

19
20 I do not believe that PCUC has incurred any incremental labor costs that
21 are allocable to Dunes. Chlorine used in the treatment process at the
22 wastewater treatment plant is a cost that would be incurred regardless of
23 the means of effluent disposal employed by PCUC. It is not an

1 incremental cost and is therefore not attributable to Dunes.

2

3 All other costs allocated to Effluent Reuse in the Analysis are allocated
4 based on those items of rate base and operating and maintenance expense
5 discussed above. Since no incremental investment and no operating and
6 maintenance expenses are attributable to Dunes, there should be no
7 allocation of PCUC's Administrative and General Salaries, Rate Case
8 Expense, Intangible Plant, Common Plant and associated Accumulated
9 Depreciation and Depreciation expense, Regulatory Assessment Fees and
10 Return on Rate Base. Consequently, no Effluent Reuse Rate should be
11 established.

12

13 In analyzing the arrangement - the costs incurred by Dunes and the benefits
14 received by both parties - I conclude that Dunes has paid the lion's share
15 of the costs while PCUC is the primary beneficiary under this
16 arrangement. In effect, Dunes has provided adequate effluent disposal to
17 PCUC at no cost to PCUC and its customers. PCUC's rates to its
18 customers are already kept lower as a result of the agreement with Dunes.

19

20 Q. Does this complete your direct testimony at this time?

21 A. Yes.

22

23

1 Q (By Mr. Melson) Mr. Milian, would you
2 please summarize your testimony?

3 A Yes.

4 As previously indicated, I have been
5 retained by Dunes Community Development District to
6 address some of the major -- some important issues,
7 such as how inappropriate it is to be proposing
8 effluent rate use for Dunes, and also to look at the
9 prior policy, the historical criteria that in the past
10 the Commission has utilized in establishing reuse
11 rates.

12 One of the things that I have found is that
13 in prior cases the Commission has ruled that where
14 both parties benefit, from the purchase and the sale
15 of the effluent, the incremental cost should be
16 shared.

17 The effluent agreement in this case between
18 Dunes and Palm Coast Utility is definitely a benefit
19 to both parties, as indicated in my testimony. It's a
20 symbiotic relationship where Palm Coast Utilities is
21 able to dispose of their effluent at no cost to them.
22 And also Dunes is receiving the most economical method
23 of irrigation at the time, because there was no
24 charges. They made all of the investments associated
25 with that.

1 Specifically Dunes in this particular case,
2 the entire 100% of the investment necessary to bring
3 that effluent, the secondary effluent, into the
4 standards that are required to dispose of that
5 effluent for irrigation and to public access, has been
6 done by Dunes. They have constructed the pump
7 stations, the transmission lines. The effluent
8 filters that are necessary to bring the total
9 suspended solids into a level that is required by
10 regulatory agencies before its disposal to the public.
11 They also have provided all of the wet weather storage
12 capacity that is necessary to handle the flows for
13 their purpose.

14 The investment and the expenses that have
15 been included in the rate study done by Palm Coast
16 Utility is actually not an incremental cost. They
17 would have to be treating that sewage if Dunes were
18 not in existence. All of the associated cost for the
19 treatment will still be there, so there is really not
20 an incremental cost. All of the incremental cost has
21 been done by the Dunes facilities.

22 In particular, the 6 million gallon storage
23 tank that has been included, and also the 1 million
24 gallons RIB, I have to say I've read, as in accordance
25 with my testimony, I've read all of the engineering

1 reports that have been prepared by our engineering
2 firm -- the engineers, consulting engineers for Palm
3 Coast Utilities, including some of the -- their own
4 reports. And they've invariably indicated that the
5 6 million gallon storage tank is being built
6 specifically to handle the wet weather flows for their
7 spray irrigation fails. And they go into more detail,
8 and they say that Dunes facilities wet weather storage
9 requirements are being handled by their own facilities
10 that handle more than 11.6 million gallons of storage
11 which they do have in their own facility.

12 So there is no indication in their own
13 records, including the applications they made to the
14 Department of Environmental Protection that that was
15 used for that purpose.

16 It goes even beyond that. I think if it is
17 for flexibility purposes, there were a lot more
18 prudent ways to handle that, the flows going into
19 Dunes, than by building a storage tank. In fact, Palm
20 Coast would have incurred a lot more costs if it were
21 not because of the facilities that have been
22 constructed by Dunes. In other words, their existing
23 customers are already receiving a benefit because they
24 did not have to build the 1 million gallon or
25 1.6 million gallons of storage, wet weather storage or

1 disposal of the facilities that they would have to do
2 themselves if Dunes were not in existence.

3 So there is a definite benefit, and that's
4 why when you look the an integrated cost, you're going
5 to have to look at the benefits being received from
6 the other parties.

7 So, therefore, in this particular case where
8 the effluent rate user is doing all of the upgrading
9 of the -- that is necessary, has done all of the
10 investment, to bring that effluent into the standards
11 that are necessary for public access disposal, where
12 the effluent reuse customer has paid all of those
13 incremental costs of treating that effluent, and where
14 the Utility gets an additional means of effluent
15 disposal at no incremental cost to them, I definitely
16 believe in my professional opinion that there should
17 not be any effluent use established.

18 And that concludes my summary.

19 **MR. MELSON:** Tender the witness for cross.

20 **COMMISSIONER DEASON:** Mr. Gatlin.

21 **CROSS EXAMINATION**

22 **BY MR. GATLIN:**

23 Q You're not saying if this Commission
24 establishes a rate for the effluent, that Dunes would
25 seek other sources for irrigation?

1 A I think the Dunes is receiving the most
2 economical matter for irrigation now because it's
3 receiving this effluent at no cost. Now, you start
4 charging 67 cents, I would certainly recommend, as a
5 professional engineer, that these utilities start
6 looking for alternate sources that are available. And
7 they already have infrastructure that goes all the way
8 west of the intercoastal waterway. And they can
9 obtain a lesser quality of water just like the other
10 golf course in the area are doing, taking water from
11 canals or surface waters.

12 And bear in mind that irrigation does not
13 have to meet the drinking water standards that potable
14 water is being delivered to Dunes.

15 So there is no requirement of that much of a
16 treatment process, and they could go into a lesser
17 quality -- as a matter of fact, in their own report of
18 Palm Coast Utilities, if you read the report, they
19 indicate they cannot dispose of their effluent into
20 the other golf courses because it would be
21 tremendously expensive; it would be very prohibitive
22 in extending lines and upgrading their facilities and
23 bringing it into class 1 reliability. And they also
24 say that the golf courses have a lesser quality of
25 water, which is one of the requirements that the Water

1 Management District will consider, because they are
2 taking waters either from lakes or canals and that is
3 a possibility for Dunes as well.

4 Q Is the answer to the question that if the
5 Commission did set a rate you would seek other means?

6 A I would recommend that to the other -- to
7 Dunes facilities because it will have an impact. I
8 think it will be a bad precedent because it would
9 lower the amount of consumption.

10 The customers of Dunes are already paying 70
11 cents to defray the costs of all of their investments
12 plus the cost of operation. You will add another 67
13 cents, it becomes now more than \$1.37, and it's been
14 my experience that the consumption starts --
15 consumption is reduced when the prices go up when
16 we're dealing with irrigation water.

17 Q Is that a yes or no?

18 A The answer is no.

19 Q No, you will not seek other sources?

20 A They would if the cost is prohibitive, of
21 course.

22 Q You're saying 67 cents is prohibitive.

23 A 67 cents plus 70 cents is \$1.37.

24 Q You're saying that is prohibitive?

25 A I think it's high, and it gives them the

1 opportunity to look for alternative sources that might
2 be more economical.

3 Q But your position is that there had been no
4 charge because there are no incremental costs?

5 A Absolutely. My position is all of the
6 incremental costs associated with the disposal of the
7 effluent and upgrading of the effluent is being
8 carried by Dunes. And that is providing Palm Coast
9 Utilities With the source of disposal that actually
10 reduces the costs that they would have to have were it
11 not, because Dunes is handling that effluent.

12 Q For Dunes to do this they would have to have
13 some approval or some concurrence from the Water
14 Management District, would they?

15 A Yes. Bear in mind that the requirements of
16 the Water Management District have to comply with
17 three different tests and the three legs they stand
18 on. One of them is environmental sound. Number two
19 is it technically possible. And number three, is it
20 economical.

21 And all those three tests, I think the
22 Utility can demonstrate, number one, it is
23 environmentally sound to go look for surface water
24 which is of lesser quality than the effluent that is
25 being produced by Dunes. Number two, it's technically

1 sound, it's technically possible. And number three
2 it's economic, because they can demonstrate that the
3 cost they will be charged right now will be too
4 expensive. So they have other sources. They have
5 other alternatives.

6 Q Do you know the measure that the Water
7 Management District uses to determine economics?

8 A Absolutely. You have to consider -- first
9 of all, the Water Management District --

10 Q What I'm asking you, is there a rule or
11 standard you can look to with the Water Management
12 District?

13 A It's just a feasibility study that is being
14 done to demonstrate a cost associated with it.

15 Q On individual cases?

16 A Yes.

17 MR. GATLIN: That's all the questions I
18 have. Thank you.

19 **CROSS EXAMINATION**

20 **BY MR. SIRKIN:**

21 Q Good morning. My name is Arthur Sirkin. I
22 represent Flagler County in this proceeding.

23 A Good morning.

24 Q You mentioned, I believe, that the effluent
25 use is price elastic; is that correct?

1 A Irrigation.

2 Q Irrigation is price elastic?

3 A Yes.

4 Q Is sewage use price elastic as well?

5 A That, I don't think so.

6 Q How about water use?

7 A Domestic water consumption to me is not.

8 **MR. SIRKIN:** Thank you.

9 **CROSS EXAMINATION**

10 **BY MR. REILLY:**

11 Q Very few questions. So essentially if the
12 67 cent per thousand gallon rate is adopted by the
13 Commission, Hammock Dunes, you believe, will reduce
14 its use of water for irrigation purposes?

15 A It has been my experience in other
16 communities that that has been the case.

17 Q So that irrigation is something of a --

18 A Even in wealthy communities.

19 Q So it's sort of a discretionary use of
20 water. It's a matter of how green and how lush the
21 community wants to make its foliage?

22 A Yes.

23 Q As opposed to essential water uses?

24 A Yes.

25 **MR. REILLY:** Thank you.

1 **COMMISSIONER DEASON:** Staff.

2 **MR. EDMONDS:** Staff has no questions. Thank
3 you.

4 **COMMISSIONER DEASON:** Redirect.

5 **MR. MELSON:** No redirect.

6 **COMMISSIONER DEASON:** Exhibits.

7 **MR. MELSON:** Move Exhibit 24.

8 **COMMISSIONER DEASON:** Without objection
9 Exhibit 24 is admitted.

10 **MR. MELSON:** And ask Mr. Milian be excused.

11 **COMMISSIONER DEASON:** Yes, he may be
12 excused.

13 (Exhibit No. 24 received in evidence.)

14 (Witness Milian excused.)

15 - - - - -

16 **COMMISSIONER DEASON:** Is it the concensus
17 that we continue with the list as is?

18 **MR. EDMONDS:** I believe the parties have
19 agreed to take Mr. Wilkening next, and then we would
20 return to the order of witnesses as reflected in the
21 Prehearing Order.

22 **COMMISSIONER DEASON:** Very well. You may
23 call your witness.

24 **MR. EDMONDS:** Call Mr. Harold Wilkening.

25

1 **HAROLD A. WILKENING, III**

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

5 **DIRECT EXAMINATION**

6 **BY MR. EDMONDS:**

7 Q Have you been sworn sir?

8 A Yes, I have.

9 Q Could you please state your name and address
10 for the record?

11 A My name is Harold A. Wilkening, III, and my
12 address is 1828 Lake Edge Drive, Middleburg, Florida.

13 Q And did you prefile testimony in this docket
14 consisting of ten pages?

15 A Yes, I did.

16 Q Do you have any changes or corrections to
17 make at this time?

18 A No, I don't.

19 Q If I were to ask you the same questions
20 today, would your testimony be substantially the same?

21 A Yes.

22 **MR. EDMONDS:** Mr. Chairman, may I have
23 Mr. Wilkening's testimony inserted into the record as
24 though read?

25 **COMMISSIONER DEASON:** Without objection it

1 will be inserted.
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1 DIRECT TESTIMONY OF HAROLD A. WILKENING, III

2 Q. WHAT IS YOUR NAME AND BUSINESS ADDRESS?

3 A. My name is Harold A. Wilkening, III. My business address is St. Johns
4 River Water Management District, Post Office Box 1429, Palatka, Florida 32175-
5 1429.

6 Q. WHO IS YOUR CURRENT EMPLOYER AND WHAT IS YOUR POSITION?

7 A. I am the Assistant Director, Department of Resource Management for the
8 St. Johns River Water Management District ("SJRWMD").

9 Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

10 A. I received a Bachelor's Degree in Civil Engineering from the University
11 of Delaware in 1979 and a Master's Degree in Water Resources Engineering from
12 the University of Maryland in 1982. I then worked for four years as a water
13 resources engineer with SJRWMD, during which my responsibilities included
14 conducting floodplain and flood control studies, agricultural water use
15 investigations, project management of the Upper St. Johns Flood Control
16 project, and development of engineering criteria for the SJRWMD Management and
17 Storage of Surface Waters (MSSW) rule. I then worked for about two years as
18 a Civil Engineer with the U.S. Army Corps of Engineers, planning and managing
19 Federal flood control projects in Florida, Georgia, and Puerto Rico. I
20 returned to SJRWMD in 1987 as Chief Engineer of the Department of Resource
21 Management, where I supervised all engineering conducted as part of the
22 SJRWMD's Management and Storage of Surface Waters and Consumptive Use
23 Permitting programs. In 1993, I assumed the position of Assistant Department
24 Director. I have been a registered Professional Engineer in the State of
25 Florida since 1986.

1 Q. WOULD YOU PLEASE DESCRIBE YOUR PRESENT DUTIES AS ASSISTANT DIRECTOR IN
2 THE DEPARTMENT OF RESOURCE MANAGEMENT.

3 A. I am primarily responsible for directing the SJRWMD's water supply
4 planning and regulatory programs, including Consumptive Use Permitting, Water
5 Well Construction Permitting, Water Supply Needs and Sources, and Groundwater
6 Resource Investigations. Working under the general oversight of the
7 Department Director, I conduct those management duties necessary to implement
8 these programs, including the following: rule development, interpretation of
9 rules, review and approval of staff recommendations on permit applications,
10 review and approval of water supply investigations and studies, budget
11 preparation and administration, and presentations to the SJRWMD governing
12 board, regulated users, and the general public.

13 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

14 A. The purpose of my testimony is to provide assistance to the Public
15 Service Commission (PSC) in reviewing the Palm Coast Utility Corporation
16 (PCUC) rate case, as provided for in the memorandum of understanding between
17 SJRWMD and the PSC. Specifically, I will discuss SJRWMD Consumptive Use
18 Permitting, water conservation and reuse requirements, and water resource
19 concerns in the vicinity of PCUC.

20 Q. WHAT ARE SJRWMD'S OBJECTIVES REGARDING WATER CONSERVATION?

21 A. SJRWMD's goal for water supply is to ensure the availability of an
22 adequate and affordable supply of water for all reasonable-beneficial uses
23 while protecting the water and related resources of the District. To achieve
24 this goal, SJRWMD's objective for water conservation is for all water users
25 to implement all feasible water conservation practices. This is very

1 strategic in maximizing the use of existing potable water supplies to the
2 largest number of users and limiting future water supply problems that will
3 typically result in significantly higher costs for water. For this reason,
4 we seek to promote and establish water conservation through our water use
5 regulatory program, our water supply planning (Needs and Sources), and public
6 outreach program. Since a large percentage of the water use in SJRWMD is for
7 public supply, we believe that it is necessary to encourage and assist all
8 citizens to develop water conserving habits. We have extensive public
9 education material which we share with utilities so that they can distribute
10 these materials to their customers.

11 Q. DOES SJRWMD HAVE ANY SPECIFIC RULES THAT REQUIRE UTILITIES TO IMPLEMENT
12 CONSERVATION MEASURES?

13 A. Yes. Rule 40C-2.301(4)(e), Florida Administrative Code, provides, "All
14 available water conservation measures must be implemented unless the applicant
15 demonstrates that implementation is not economically, environmentally or
16 technologically feasible." Section 12.4.5 of the SJRWMD *Applicant's Handbook:*
17 *Consumptive Uses of Water* provides that a water conservation plan must be
18 implemented with the following minimum elements: a water audit, and if
19 necessary, a leak detection and repair program; a program for making
20 improvements to the applicant's production facility, transmission lines and
21 distribution system to decrease water consumption; a feasibility analysis
22 regarding the use of lowest acceptable quality source, including reclaimed
23 water and stormwater; an employee awareness and customer education program for
24 water conservation; and an implementation schedule. Appendix I of the
25 handbook provides a list of water saving measures applicants may incorporate

1 | in their water conservation plan to reduce consumption. Selection of specific
2 | measures is based on the characteristics of the utility and its customers.

3 | Q. IS PCUC REQUIRED TO IMPLEMENT A WATER CONSERVATION PLAN AS A REQUIREMENT
4 | OF THEIR CONSUMPTIVE USE PERMIT?

5 | A. Yes. As part of their permit application, they submitted a water
6 | conservation plan which must be implemented as a condition of their permit.

7 | Q. DOES SJRWMD HAVE ANY REQUIREMENTS FOR IMPLEMENTING REUSE OF RECLAIMED
8 | WATER?

9 | A. Yes. Rule 40C-2.301(4)(f), Florida Administrative Code, provides, "When
10 | reclaimed water is readily available it must be used in place of higher
11 | quality water sources unless the applicant demonstrates that its use is either
12 | not economically, environmentally or technologically feasible." This
13 | provision is part of the reasonable-beneficial use criterion. SJRWMD requires
14 | utilities to submit a reuse feasibility study with their consumptive use
15 | permit application. We review those feasibility studies in detail to
16 | ascertain whether we can match potential end users with the reclaimed water
17 | utility providers. SJRWMD recently adopted amendments to its Consumptive Use
18 | Permitting Rule governing the duration of consumptive use permits. This rule
19 | states that utilities may be eligible for significantly longer duration
20 | permits when the utility provides reclaimed water to other water users. This
21 | provision is a strong incentive for permittees that has justified recognizing
22 | the benefits of reuse.

23 | Q. HOW IS "REUSE" DEFINED UNDER SJRWMD RULES?

24 | A. Reuse is defined in SJRWMD's *Applicant's Handbook: Consumptive Uses of*
25 | *Water* as "the deliberate application of reclaimed water, in compliance with

1 Department of Environmental Protection (DEP) and SJRWMD rules, for a
2 beneficial purpose."

3 Q. WHAT BENEFITS RESULT FROM REUSE OF RECLAIMED WATER?

4 A. There are two primary benefits. First, when reuse of reclaimed water
5 supplies a demand that would otherwise be met from a higher quality source,
6 such as groundwater, then reclaimed water is serving to replace that
7 groundwater withdrawal and preserve that higher quality resource. The result
8 is that higher quality water sources can be maximized for beneficial uses.
9 Second, reuse of reclaimed water serves as a very effective means to dispose
10 of wastewater effluent, thereby reducing or eliminating water quality impacts
11 from effluent discharge to surface waters.

12 Q. WHO RECEIVES THE BENEFITS FROM REUSE OF RECLAIMED WATER?

13 A. Water and wastewater customers of the utility providing the reclaimed
14 water, along with the user of the reclaimed water all have the potential for
15 benefitting from reuse. Reuse postpones or eliminates costly investment by
16 utilities for development of new water sources and treatment plant expansion,
17 benefiting water customers. By offsetting groundwater withdrawals, the
18 likelihood of adverse environmental impacts requiring mitigation is reduced.
19 By preserving higher quality sources for future demands, reuse serves to
20 reduce the need for development of alternative water supply sources which are
21 more expensive to the utility and its water customers. By providing reclaimed
22 water for reuse, utilities can qualify for longer duration consumptive use
23 permits, further benefiting water customers. Wastewater customers benefit
24 when the utility can dispose of wastewater through reuse at a lower cost than
25 conventional treatment and disposal options. Reclaimed water users receive

1 a very reliable water supply source that is sufficient to meet their needs.
2 Under the existing SJRWMD water shortage plan, reclaimed water is not subject
3 to water shortage restrictions that may be declared by the SJRWMD during
4 periods of drought. Reclaimed water is not subject to the daytime irrigation
5 restrictions between 10 AM and 4 PM under SJRWMD rules. Reclaimed water often
6 contains levels of nutrients that reduce fertilization costs to the user.
7 Finally, users may obtain permits of significantly longer duration than for
8 higher quality sources. Because water, wastewater, and reuse customers all
9 benefit from reuse projects, it is reasonable for each of these user groups
10 to bear part of the cost. In the long run, such an arrangement may be
11 critical to making reuse economically feasible and seeing these projects go
12 forward.

13 Q. WHAT IS A WATER RESOURCE CAUTION AREA?

14 A. Rule 62-40.416(1), Florida Administrative Code, requires all water
15 management districts to designate areas that have water supply problems which
16 have become critical or are anticipated to become critical within the next 20
17 years as Water Resource Caution Areas (WRCA). The reuse of reclaimed water
18 from domestic wastewater facilities is required by both DEP rules and WMD
19 rules within these areas unless reuse is not economically, environmentally,
20 or technically feasible. To comply with this requirement, the SJRWMD
21 Governing Board designated the entire area of the SJRWMD as a Water
22 Conservation Area in order to provide the greatest possible availability of
23 reclaimed water and maximize reuse throughout SJRWMD in order to conserve
24 available water resources. In addition to this designation, SJRWMD has also
25 identified in the SJRWMD Water Management Plan portions of SJRWMD as priority

1 | Water Resource Caution Areas. Within these areas, there is a strong
2 | likelihood that existing or future water supply demands cannot be met from
3 | identified sources without unacceptable impacts. Unacceptable impacts
4 | include: significant saltwater intrusion; adverse impacts to wetlands and
5 | other native vegetation; reduction of springs, streams, lakes below
6 | established minimum flows and levels; and interference with existing legal
7 | users. The legislature has directed the water management districts to assist
8 | users in identifying alternative water supply sources and strategies to meet
9 | future demands without causing unacceptable impacts. In SJRWMD, we are
10 | currently conducting feasibility studies of many alternatives including
11 | surface water, lower quality brackish groundwater, artificial recharge of the
12 | aquifer to increase supplies, aquifer storage and recovery, water
13 | conservation, reuse of reclaimed water and stormwater, mitigation or avoidance
14 | of wetland impacts, wellfield interconnection and optimization of pumping
15 | locations. We plan to provide this information to users in the priority WRCAs
16 | for their use in developing water supply plans.

17 | Q. HAS THE SJRWMD DESIGNATED ANY AREAS WITHIN THE SERVICE AREA OF PALM
18 | COAST UTILITY CORPORATION AS AN AREA OF SPECIAL CONCERN REGARDING EXISTING OR
19 | FUTURE WATER SUPPLIES?

20 | A. Yes, the entire service area of Palm Coast Utility Corporation has been
21 | designated as a priority Water Resource Caution Area by the SJRWMD.

22 | Q. IS THE DUNES COMMUNITY DEVELOPMENT DISTRICT ALSO INCLUDED WITHIN THIS
23 | SAME AREA DESIGNATED BY THE SJRWMD?

24 | A. Yes.

25 | Q. WHAT ARE THE SPECIFIC WATER SUPPLY CONCERNS THAT HAVE RESULTED IN THIS

1 | DESIGNATION FOR THE SERVICE AREA OF PALM COAST UTILITY CORPORATION?

2 | A. PCUC pumps significant quantities of water from the surficial aquifer
3 | system and proposes to increase these quantities to meet future water supply
4 | demands. We have predicted that this increase in pumping from the surficial
5 | aquifer system will cause significant reductions in the water table which in
6 | turn will adversely affect wetlands that are sensitive to these changes in
7 | water level.

8 | Q. DOES PCUC AGREE WITH THIS ASSESSMENT?

9 | A. No. On several occasions representatives of PCUC have told us that they
10 | do not agree with this assessment. Based on groundwater modeling work
11 | performed by their consultants, they believe that existing and planned future
12 | withdrawals will have less of an impact on the surficial aquifer than that
13 | predicted by the SJRWMD. We have provided our data and analysis to PCUC for
14 | their review and we have scheduled a meeting with PCUC and their consultants
15 | to discuss their concerns.

16 | Q. WHAT ARE THE PRACTICAL IMPLICATIONS OF THIS AREA BEING DESIGNATED BY
17 | SJRWMD AS A PRIORITY WRCA?

18 | A. The fact that this area has been designated as a priority WRCA does not
19 | invoke any additional rule criteria. For example, the rule requirements
20 | regarding water conservation and reuse are the same whether or not you are
21 | located in a priority WRCA. However, the need for and immediate benefits of
22 | water conservation and reuse can be seen most clearly in these areas. The
23 | practical implication of the priority WRCA designation is that users will need
24 | to develop alternative sources or strategies to modify existing water supply
25 | plans to meet future anticipated demands. This action will be necessary to

1 | avoid unacceptable impacts and obtain consumptive user permits in the future.

2 | Q. IF THE DUNES DECIDED TO PURSUE ANOTHER WATER SUPPLY SOURCE TO MEET

3 | IRRIGATION DEMANDS, WHAT WOULD BE REQUIRED FROM SJRWMD?

4 | A. They would have to apply to SJRWMD to modify their current Consumptive

5 | Use Permit, which authorizes the use of reclaimed water from PCUC to irrigate

6 | their golf course. If they proposed to use a higher quality source, such as

7 | groundwater, they would need to perform a reuse feasibility study and document

8 | that the use of reclaimed water is not technically, environmentally, or

9 | economically feasible. Since reclaimed water is already being used by the

10 | Dunes, we would assume that reuse is clearly technically and environmentally

11 | feasible. In a case such as this, where there are obvious benefits to both

12 | the wastewater utility and the reclaimed water user, we encourage both parties

13 | to seek an arrangement that is economically feasible to both, either through

14 | direct negotiations or, in the case of investor owned utilities, a rate case

15 | proceeding before the PSC. If such an arrangement is not achieved and the

16 | Dunes wishes to make the case that reuse is not economically feasible, we

17 | would ask the applicant to prepare a present value analysis of their portion

18 | of the cost of using reclaimed water compared to the present value cost of the

19 | other source being proposed. Those portions of the capital and operation and

20 | maintenance costs incurred by the applicant would need to be documented and

21 | considered in the analysis. Economic feasibility is determined on a case by

22 | case basis and we would seek the assistance of the PSC staff in reviewing any

23 | analysis provided by the applicant. In considering economic feasibility, it

24 | would be appropriate to consider factors such as the anticipated cost to the

25 | customer compared to the cost of other sources, typical reclaimed water rates

1 | for other reuse projects, and the significant benefits that reuse provides to
2 | the customer as I discussed earlier.

3 | Q. WOULD PCUC BE REQUIRED TO OBTAIN A MODIFICATION OF THEIR CONSUMPTIVE USE
4 | PERMIT IN THE CASE THAT PCUC NO LONGER PROVIDES RECLAIMED WATER TO THE DUNES?

5 | A. Yes. Under the existing Consumptive Use Permit, PCUC is required to
6 | provide a certain quantity of reclaimed water for irrigation at the Dunes as
7 | well as other locations. They would need to obtain a modification to their
8 | Consumptive Use Permit to reduce the amount of reclaimed water being provided
9 | for irrigation. SJRWMD would review any such application in the same manner
10 | as I explained in the previous question.

11 | Q. DOES THAT CONCLUDE YOUR PRE-FILED TESTIMONY?

12 | A. Yes it does.

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1 Q (By Mr. Edmonds) Have you prepared a
2 summary of your testimony?

3 A Yes, I have.

4 Q Please proceed.

5 A Thank you.

6 Good morning, Commissioners. I'd like to
7 briefly outline my testimony to you today.

8 As representing the Water Management
9 District my purpose in testifying was to assist the
10 Commission in reviewing this case. And my testimony
11 is -- its purpose is to provide information on the
12 Water Management District's policies and rules
13 concerning water conservation reuse, as well as
14 presenting to you a summary of the water resource
15 concerns in this area which is served by PCUC.

16 The Water Management District's goal for
17 water supply is to ensure the availability of an
18 adequate and affordable supply of water for all
19 reasonable beneficial uses, while at the same time
20 protecting the water resources and related
21 environmental resources of the district. We seek to
22 fulfill this goal, meet this goal, through water
23 supply investigations, water supply planning, and
24 water use regulations.

25 In my testimony I discuss the water supply

1 planning that we have done and water use regulations
2 and how they might relate to this case.

3 In late 1994 we completed a comprehensive
4 Water Supply Needs and Sources Assessment. This was a
5 district-wide study that was designed to identify
6 areas in our Water Management District where we
7 anticipate to have water supply problems that may
8 become critical in the next 20 years.

9 As a result of this effort we identified
10 about 30% of the Water Management District as priority
11 water resource caution areas where there's strong
12 likelihood that future water supply demands cannot be
13 met from the identified sources that the water users
14 have provided to us without unacceptable impacts
15 occurring.

16 Now, those impacts cover a wide range of
17 concerns, environmental concerns, such as impacts to
18 wetlands and minimum flows and levels of streams and
19 rivers; significant saltwater intrusion that could
20 affect water quality, interference with other existing
21 legal users. So that's kind of a range of concerns.

22 Now, what we found was that the impacts that
23 we anticipate are going to occur result because we are
24 projecting a significant increase in public supply
25 demand over the next 20 years. In fact, roughly 80%

1 increase from 1990 to 2010 in terms the of public
2 supply demand and that's the reason that we are
3 projecting some unacceptable impacts to occur.

4 Now, Palm Coast Utility is included as a
5 water resource caution area in our Water Supply Needs
6 and Sources Assessment. Because of potential impacts
7 on wetlands in the area of their well fields, both
8 existing and projected well fields, that we project on
9 occur in the future with increased pumping that would
10 be necessary to meet the demands that they have
11 projected over the planning horizon, and we're
12 currently working with Palm Coast to develop
13 additional data collection and groundwater modelling
14 to verify that these projected impacts are, in fact,
15 going to occur. In addition, we're working with Palm
16 Coast as well as all the other water users in the
17 water resource caution areas to identify alternative
18 water supply strategies and sources that would be
19 needed to meet these future demands in a way that
20 would not result in these unacceptable impacts that
21 we've identified.

22 Water conservation and reuse of reclaimed
23 water are two primary strategies that we are looking
24 at, and, in fact, are now requiring of all water
25 users, whether or not they are located in the water

1 resource caution area.

2 These two strategies, of course, are even a
3 greater concern and a higher priority with the water
4 resource caution areas, and, of course, we are very
5 concerned in this case that both water conservation
6 and reuse be maximized.

7 Under our current rules, water users, to
8 obtain a permit, must submit a water conservation
9 plan, and that plan must include water conservation
10 measures to reduce their water use, and they must also
11 use reclaimed water or provide reclaimed water for use
12 unless they can demonstrate that it's not
13 economically, environmentally or technically feasible.

14 In my testimony I discuss the benefits of
15 reuse of reclaimed water, and outline the benefits
16 that accrue to the water utility customers, both water
17 and wastewater, as well as the reuse customers. And
18 the reuse project in this case, which involves the use
19 of reclaimed water by the Dunes, I believe illustrates
20 the benefits that I've outlined in my testimony that
21 accrued to all these different user groups.

22 In my testimony I discussed the fact that
23 the reuse plan is a requirement of both the Dunes
24 consumptive use permit as well as Palm Coast Utility's
25 permit. And any change in that reuse of reclaimed

1 water by the Dunes would require a modification of
2 these permits.

3 We are very supportive of this reuse
4 continuing, and, in fact, expanding. We'll be working
5 with Palm Coast Utility; have you been working with
6 them. We will continue to work this them on their
7 next permit modification to look for other
8 opportunities to expand reuse.

9 That concludes my comments.

10 **MR. EDMONDS:** The witness is tendered for
11 cross examination.

12 **COMMISSIONER DEASON:** Mr. Gatlin.

13 **CROSS EXAMINATION**

14 **BY MR. GATLIN:**

15 **Q** Do you consider it a conservation measure
16 for the Dunes to take this reuse -- reclaimed water
17 from Palm Coast Utility Corporation?

18 **A** Yes.

19 **Q** Has the Dunes approached your Management
20 District to change its consumptive use permits as you
21 described just a moment ago?

22 **A** Not that I'm aware of.

23 **Q** Would that be necessary if the Dunes decided
24 to discontinue the use of the reclaimed water from
25 Palm Coast Utility Corporation?

1 A Yes. If they are going to use some other
2 source to meet that demand they would need to modify
3 the permit.

4 Q And does the Management District, Water
5 District, have a policy on that kind of change or that
6 kind of probable proposal, other than the elements
7 that you listed, the environmental, technical, one
8 other -- conservation, I think. Is that the only
9 criteria?

10 A Yes. The criteria is that reclaimed
11 water -- reuse or reclaimed water needs to occur
12 unless it's demonstrated that it's either not
13 technically feasible, environmentally feasible or
14 economically feasible.

15 Q Is there a measure that you know of for the
16 economically feasible part? What is the criteria for
17 that item?

18 A Okay. Our rule does not define economic
19 feasibility in terms of what is feasible and what is
20 not feasible. As a matter of agency practice, you
21 know, what I can tell you is that in most cases we
22 don't get to a point of having to make that
23 determination because the supplier and the user,
24 because they both are required to implement reuse
25 unless it's demonstrated not to be feasible, get

1 together and work out an arrangement that is mutually
2 beneficial. And, therefore, we don't have too many
3 cases where the applicant is making the case that it's
4 not feasible. There's cases obviously where it is
5 clearly not feasible. I'm saying in cases where you
6 have reclaimed water that is available, it's at the
7 site where it could be used, those kind of cases --

8 Q There's no predetermined measure that 50
9 cents a thousand --

10 A -- no.

11 Q -- or a dollar a thousand, whatever it is?

12 A No.

13 Q -- in answer to the question.

14 And I believe you testified that you would
15 look to the Public Service Commission and the Staff to
16 assist you in determining the economics of a rate if
17 one were charged?

18 A Yes.

19 MR. GATLIN: Thank you.

20 CROSS EXAMINATION

21 BY MR. SIRKIN:

22 Q Good morning. I don't know if you're aware
23 of the fact that there's testimony in this record that
24 indicates that the Utility uses about 18 to 25% of its
25 potable water for line flushing. Do you have any

1 experience with utilities and line flushing?

2 A Do we have any experience with it?

3 Q Yeah. Do you know what is normal for line
4 flushing in a utility?

5 A I don't think it's that high. I don't know
6 what the normal -- I don't know if there is such a
7 normal rate.

8 Q Does the use of this large amount of water
9 for line flushing contribute to the cautionary
10 category?

11 A No. I think the cautionary -- the water
12 resource caution designation does not result from uses
13 that are occurring right now. It's resulting from
14 future uses. In other words, it's a result of water
15 supply demands that are projected to occur in 2010.

16 Now, we are working with utilities, and we
17 had to make certain assumptions in our water supply
18 planning as to water conservation and efficiency of
19 use. And line flushing, that's a good example of an
20 item that we deal with in water conservation plans
21 with the utilities.

22 Q How do you deal with it?

23 A How do we deal with it? We look at their
24 numbers and ask them to make any changes that are
25 technically feasible to reduce that use. I mean

1 that's what the water conservation plan is. It really
2 looks at what that individual utility's situation is
3 in terms of their infrastructure, in terms of their
4 losses, unaccounted losses, line flushing, all of
5 these things that are are unique to each utility. And
6 it's a matter of there's no hard and fast rule in
7 terms of what the number is. You know, I guess at
8 this point we don't have enough experience to be able
9 to, you know, come up with hard and fast numbers. So
10 we deal with each utility. We deal with them on an
11 iterative basis. Their permits expire every so often,
12 typically seven to ten years, and every time they come
13 in we look at their water use and see what can be done
14 to further reduce it.

15 Q In what stages of this iterative process is
16 Palm Coast Utilities now?

17 A I believe their permit is -- will expire in
18 1998; '97 or '98. So they will be coming in and, you
19 know, the current permit they have now was issued in
20 '91, and at that point in time we had just implemented
21 our water conservation provisions and our consumptive
22 use permitting rule. Since that time we further
23 developed strategies and more information on water
24 conservation practices, so we'll be working with them
25 on their permit renewal.

1 **MR. SIRKIN:** I have no further questions of
2 this witness. Thank you.

3 **CROSS EXAMINATION**

4 **BY MR. REILLY:**

5 **Q** Just a few follow-up questions on this issue
6 of flushing. At Page 3, oh, around Lines 13 through
7 21 you speak of the District mandating that all
8 utilities have water conservation programs; is that
9 correct?

10 **A** Yes.

11 **Q** And are you familiar with the water
12 conservation program that's been implemented by PCUC?

13 **A** I'm not really familiar with the details of
14 it, no.

15 **Q** So you don't know any steps that PCUC is
16 undertaking to try to reduce the need for necessary
17 flushing to maintain --

18 **A** No.

19 **Q** -- quality?

20 **A** No. They would have to provide that
21 information to you.

22 **Q** If the District became aware -- if the
23 District received information that, in fact,
24 approximately 19% of total finished water and
25 approximately 25% of water sold was being used for

1 necessary flushing, would that cause concern to the
2 District? And would they then begin to meet with the
3 Utility to see what steps could be taken to reduce
4 this requirement?

5 A Yeah. I think we would certainly want to
6 look at that.

7 Q Moving on to the another subject, isn't it
8 one of the principle goals of all reuse programs to
9 utilize water resources in a manner that will continue
10 to recharge the aquifer so that the water can be
11 reused again and again?

12 A I'm sorry. Could you repeat it?

13 Q It's not one of the primary goals of reuse
14 programs, recharge of the aquifers?

15 A No, I don't know that I would agree with
16 that. I think that the primary goal of reuse programs
17 is to meet demands that would otherwise be met from
18 other sources, such as groundwater sources. That's
19 why we're -- that's what we try to do in our
20 consumptive use permitting program.

21 Q I thought one of the primary goals of the
22 reuse is to protect the groundwater resources?

23 A Yes, that's right.

24 Q And if the groundwater resources, once
25 removed, are never returned, doesn't that have a

1 dilatory impact on those resources? One measure of
2 protecting the resources is to have methods of
3 recharging the --

4 A Well --

5 Q -- aquifer?

6 A Look, if you had a certain quantity of
7 reclaimed water, you could recharge it, put it into
8 the aquifer, or you could use it to meet a demand that
9 would otherwise withdraw water out of the aquifer.
10 And from a practical standpoint that's the most direct
11 benefit. Because there's a lot -- I mean, yes,
12 recharge will help the aquifer, but there are
13 certainly a lot of areas of the aquifer you can't
14 recharge aquifer, but you can certainly offset
15 withdrawals from the aquifer and that's the primary
16 benefit. I'm not saying that a secondary benefit
17 isn't a -- rather than actually using that water to
18 meet an irrigation demand, you take it somewhere and
19 you recharge the aquifer. That is a secondary
20 benefit.

21 Q Doesn't water used for irrigation purposes
22 in the Hammock Dunes essentially leach out into the
23 ocean or into the intercoastal waterway and is
24 essentially lost forever from the aquifers located on
25 the mainland?

1 A If they are irrigating more than what they
2 need for their golf course, yes. But most -- when you
3 are irrigating, you're irrigating to meet an
4 irrigation demand. The turf grass has an irrigation
5 demand and most of that irrigation water is going to
6 be taken up in meeting that demand.

7 So I guess the answer to your question is
8 yes if you irrigate much more than what is needed to
9 satisfy the irrigation requirement of the turf grass
10 you will lose that water.

11 Q Wouldn't it be true that you're going to
12 lose 100% of the water that leaves the mainland and
13 goes over to Hammock Dunes for irrigation purposes,
14 that for practical purposes that water is lost forever
15 as far as being available to the mainland's aquifers
16 for future uses, because that water -- because of the
17 nature of a barrier island being surrounded by
18 saltwater?

19 A I agree with your statement that you're
20 losing it but it's going to meet a demand. It's going
21 to irrigate a golf course. It's not just lost.

22 Q I know --

23 A -- it's meeting a demand.

24 Q But it is forever lost as far as the
25 mainland aquifer?

1 A Yes.

2 Q Okay. So to the extent that Hammock Dunes
3 can be encouraged to restrain its use of water
4 resources for its irrigation, the mainland's water
5 resources will be conserved for continued reuse on the
6 mainland; is that not correct? I guess we're talking
7 about the degree of greenness that Hammock Dunes is
8 going to be at. If Hammock Dunes is a little less
9 green that means there's going to be a little more
10 water left in the mainland's aquifer for continued
11 use. Would that be true or false?

12 A Right now the irrigation demand is being met
13 from reclaimed water. So if you reduce your
14 irrigation at Hammock Dunes that's not going to
15 translate into less water withdrawn from the aquifer
16 on the mainland. It means you'll have additional
17 reclaimed water that could go to some other reasonable
18 beneficial use.

19 Q Well, it would be available for other means
20 of disposal on the mainland. Of those means of
21 disposal could be means of disposal that in effect
22 recharges the aquifer on the mainland; is that not
23 correct?

24 A No. I don't think there's much potential
25 for recharge. There may be some minimal recharge,

1 but --

2 Q What is your understanding of the RIB sites?
3 What happens to the water which is disposed of by use
4 of the RIB sites? Does it not leach out and go into
5 the swamp, essentially, or into the shallow aquifer,
6 or what is your understanding of what happens to that
7 water?

8 A I haven't reviewed -- I haven't reviewed the
9 hydrogeology specifically of the RIB site. But just
10 as a general understanding of the area, I don't think
11 that there's a lot of recharge to the upper Floridan
12 occurring from those RIB sites. It's probably more
13 surficial aquifer.

14 Q Are there not different levels of aquifers.
15 Doesn't PCUC have a large number of shallow --

16 A Yes.

17 Q -- as well as deep wells?

18 A Yes.

19 Q And that in terms of preserving water
20 resources, I would think there would be some value --
21 or is there a value to recharging these shallow
22 sources of water?

23 A I would be cautious there to attribute too
24 much benefit to regionally looking at the benefits of
25 the surficial aquifer. It depends on where the

1 withdrawal points are, where the recharge points are.
2 And there is a lot of -- the surficial aquifer is
3 intercepted by a lot of surface water features. So
4 you're not going to get any kind of regional impact on
5 the surficial aquifer, I don't believe.

6 Q Isn't the largest amount of water produced
7 by PCUC come from the surficial aquifer as far as
8 opposed to the deeper aquifer?

9 A Yeah, I believe that's the case.

10 Q Okay.

11 MR. REILLY: No further questions.

12 CROSS EXAMINATION

13 BY MR. MELSON:

14 Q Mr. Wilkening, I'm Rick Melson representing
15 the Dunes Community Development District.

16 Are you familiar in general with the
17 existing effluent reuse arrangements between Palm
18 Coast and Dunes?

19 A In very general terms, yes.

20 Q And would you agree that under the existing
21 arrangement, that has been mutually beneficial to both
22 parties, Palm Coast and the Dunes?

23 A I believe it's been mutually beneficial to
24 have this reuse occur, yes.

25 Q And if you were evaluating -- when you look

1 at the economic feasibility of reuse -- I understand
2 you said you don't have any specific standards in your
3 rule -- in looking at economic feasibility would you
4 evaluate about the the cost to the utility that
5 provides the effluent and any cost incurred by the
6 customer in dealing with that effluent, either further
7 treatment or cost of disposal?

8 A Yes.

9 Q Are you aware of any other situation within
10 your district where an effluent reuse customer takes
11 from a utility effluent that is not suitable for
12 application in public use areas?

13 A I'm not aware of any. I'm not saying there
14 isn't one somewhere in our 19-county area but I can't
15 think of a case right now.

16 Q In a typical case the utility treats the
17 effluent to the standard so it's useable by the
18 customer?

19 A Yes.

20 Q I've got no further questions.

21 MR. MELSON: Thank you.

22 COMMISSIONER DEASON: Redirect.

23 MR. EDMONDS: No redirect.

24 COMMISSIONER DEASON: I believe we have no
25 exhibit. Thank you, Mr. Wilkening.

1 **MR. EDMONDS:** I ask the witness be excused
2 as well.

3 **COMMISSIONER DEASON:** Yes, he may be
4 excused.

5 (Witness Wilkening excused.)

6 **COMMISSIONER DEASON:** We're going to revert
7 back to normal order at this point. Mr. Reilly, I
8 believe your witness is scheduled next.

9 **MR. REILLY:** Mr. Bidy.

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11 (Transcript continues in sequence in
12 Volume 5.)

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