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June 17, 1996

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HAND DELIVERY

Ms. Blanca S. Bayo, Director
Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-1850

RE: Docket No. 951056-WS
Application by PALM COAST UTILITY CORPORATION
for a rate increase in Flagler County, Florida

Dear Ms. Bayo:

Enclosed on behalf of Palm Coast Utility Corporation for filing in the above docket are an original and fifteen copies of Rebuttal Testimony of John F. Guastella and Rebuttal Testimony of Frank Seidman, and Exhibits FS-6 through FS-11, along with our Certificate of Service.

Please acknowledge receipt of the foregoing by stamping the enclosed extra copy of this letter and returning same to my attention. Thank you for your assistance.

Very truly yours,

B. Kenneth Gatlin

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Guastella
DOCUMENT NUMBER-DATE
06526 JUN 17 96
FPSC-RECORDS/REPORTING

Seidman
DOCUMENT NUMBER-DATE
06527 JUN 17 96
FPSC-RECORDS/REPORTING

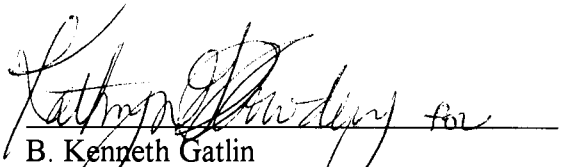
BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Application for rate increase in) Flagler County by PALM COAST) UTILITY CORPORATION)	Docket No. 951056-WS Filed: June 17, 1996

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copyof Palm Coast Utility Corporation's Rebuttal Testimony of John F. Guastella and Rebuttal Testimony and Exhibits of Frank Seidman have been furnished by hand delivery to Mr. Scott Edmonds, Esquire, Division of Legal Services, Florida Public Service Commission, 2540 Shumard Oak Blvd., Tallahassee, Florida 32399-0850, to Mr. Richard D. Melson, Esquire, Hopping, Green Sams & Smith, 123 South Calhoun Street, Tallahassee, Florida 32314, and to Mr. Stephen C. Reilly, Associate Public Counsel, Office of Public Counsel, 111 W. Madison Street, Room 812, Claude Pepper Building, Tallahassee, Florida 32399-1400, on this 17th day of June, 1996.

Respectfully submitted,



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Attorneys for
PALM COAST UTILITY CORPORATION

REBUTTAL TESTIMONY OF JOHN F. GUASTELLA

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

REGARDING THE APPLICATION FOR INCREASED RATES FOR

PALM COAST UTILITY CORPORATION

IN FLAGLER COUNTY

DOCKET NO. ~~951056-WS~~

Q. Please state your name, profession and address.

A. My name is John F. Guastella. I am President of Guastella Associates, Inc., consultants in the utility regulatory field. My mailing address is P.O. Box 371, Peapack, New Jersey 07977.

Q. Have you previously submitted direct testimony in this proceeding?

A. Yes.

Q. What is the purpose of your rebuttal testimony?

A. My rebuttal testimony will address the direct testimony of Public Counsel witnesses, Mr. Ted L. Biddy and Ms. Kimberly H. Dismukes, and Florida Public Service Commission ("FPSC") witnesses, Ms. Karen Amaya and Mr. Robert F. Dodrill, with respect to used and useful and related issues. My testimony also addresses the testimony of Mr. Arsenio

Milian and Mr. Gary L. Moyer, filed on behalf of the Dunes Community Development District ("DCDD") with respect to the proposed rate for effluent reuse sales.

Q. Have you reviewed the testimony of these witnesses, as well as the pre-filed testimony of other witnesses on behalf of the FPSC?

A. Yes.

Q. Do you have any general comments with respect to Mr. Biddy's testimony regarding the issue of used and useful?

A. Yes. My overall impression is that Mr. Biddy would strictly limit recognition of PCUC's cost of providing service to a ratio of the existing test year demands to the capacity of various system components. Mr. Biddy seems to give absolutely no consideration to regulations which require water and sewer utilities to have sufficient capacity to add customers or the rate setting precedents which require that a utility be granted sufficient revenues to cover its current cost of providing service. Mr. Biddy's proposed methodology ignores regulatory requirements with respect to the provision of safe and adequate service, it ignores basic

rate setting principles and it ignores longstanding used and useful policies established by the FPSC not only with respect to PCUC, but other water and sewer utilities as well.

Mr. Biddy attempts to justify his approach, in part, by suggesting it is reasonable to simply shift costs to future customers, without adequate consideration of whether PCUC will be able to recover its current costs of providing service, or whether shifting costs to future customers results in unduly discriminatory rates for those customers.

Q. Has Mr. Biddy departed from the FPSC's decisions with respect to PCUC in prior rate cases?

A. Yes.

Q. Would you list those items where Mr. Biddy has departed from FPSC decisions regarding PCUC?

A. Yes.

1. Mr. Biddy recommends the disallowance of margin reserve, which is contrary to the FPSC's decision with respect to PCUC.
2. One of the arguments Mr. Biddy makes with respect to the disallowance of margin reserve is that the utility receives guaranteed reve-

nues, which is an argument specifically rejected by the FPSC.

3. Mr. Biddy recommends that no allowance for fire demand be included in the used and useful calculations with respect to source of supply and treatment plant, which was specifically rejected by the FPSC.

4. Mr. Biddy argues against the use of the maximum day with respect to the calculation of used and useful for the water plant, which is contrary to the FPSC's finding with respect to PCUC in previous cases.

5. Mr. Biddy fails to adjust the total well capacity in order to recognize that on any given day some wells will be out of service, which is contrary to the FPSC's findings with respect to PCUC in previous cases.

6. Mr. Biddy calculates a used and useful percentage with respect to water treatment plant without an allowance for plant uses, contrary to the FPSC's finding with respect to PCUC in previous cases.

7. With respect to water and wastewater mains, Mr. Biddy recommends the use of a ratio of connected lots to total lots in his calcula-

tion of used and useful, which is contrary to the FPSC's acceptance of the ratio of ERCs to lots in the PCUC's previous rate cases.

8. Mr. Biddy makes no individual analysis with respect to transmission (off-site) mains, which is contrary to the method accepted by the FPSC in PCUC's previous rate cases.

9. Mr. Biddy utilizes a "lot count method," without a separate analysis with respect to the wastewater pumping plant, contrary to the FPSC's finding in PCUC's previous rate cases.

10. Mr. Biddy makes no separate adjustment for hydrants, but instead apparently uses his lot count method, which is contrary to the FPSC's finding in PCUC's previous rate cases.

11. Mr. Biddy makes no separate analysis with respect to force main and gravity main, which is contrary to the FPSC's finding with respect to PCUC in previous cases.

Q. Do you agree with Ms. Amaya's testimony that while the FPSC does not currently have rules which set out a specific methodology for used and useful determinations, it has been working with industry

and the Department of Environmental Protection ("DEP") to establish such rules?

A. Yes. I have been a participant in that process, which has been open to all interested industry and regulatory representatives.

Q. Have any specific methods been established with respect to used and useful calculations?

A. To my knowledge no final recommendation has been prepared for submission to the FPSC. The used and useful workshop, however, has identified certain principles which should be recognized in any rules which establish specific methods or calculations with which to make used and useful determinations. It has been recognized that water and sewer utilities must provide safe and adequate service to both existing and future customers and should be encouraged to construct economically-sized facilities in order to do so. While the characteristics of water and sewer utilities differ from such other utilities as electric and gas, and require different considerations with respect to used and useful, it must also be recognized that those other utility industries construct facilities with sufficient capacity to meet both short and long term growth,

the costs of which are recognized for rate setting purposes. The used and useful determinations for water and sewer utilities which serve growing real estate developments should not produce rates which deny a reasonable level of current costs. Used and useful determinations for water and sewer utilities should not be so stringent as to deny similar reasonable rate allowances, nor should they foster within the water and sewer industry a disincentive to construct reasonably-sized facilities.

Margin Reserve

Q. Do you agree with Mr. Biddy's recommendation to disallow any margin reserve as part of the used and useful calculation?

A. No. The FPSC has recognized for this utility as well as others that margin reserve represents a cost for utility facilities which must be incurred to serve both existing and new customers. It has recognized that existing customers will be present in the future when new customers are added, and both must receive adequate service. The FPSC has recognized that service must be provided to all customers on a continuous basis, now and in the future, to not only meet growth but also changes in

demand characteristics of all customers. The FPSC has recognized that the requirements to serve customers are the same for all utility companies regardless of whether the utility company is serving affiliated or unaffiliated developers. The FPSC has recognized that the provision of service to existing and new customers is a statutory requirement. Mr. Biddy does not recognize or adequately address any of those FPSC findings.

Moreover, he does not explain how a utility would recover a reasonable level of costs which it is incurring on a current basis. The FPSC has specifically rejected, in its past decisions for PCUC and in other cases, Mr. Biddy's argument that margin reserve should be denied because carrying charges for plant needed to serve future customers may be paid to the utility by guaranteed revenues.

Q. Do you agree with Mr. Biddy's argument regarding AFPI charges?

A. No. An AFPI charge is not and should not be a mechanism to shift to future customers costs which are appropriately recovered through general rates for service. The new customers who pay a proper level of AFPI charges will also pay a proportionate

level of the costs related to margin reserve when they pay general rates for service. There is no need to improperly shift costs to future customers simply to hold rates artificially low. In addition, the level of collection of AFPI charges is uncertain and spread over future periods. Accordingly, shifting costs to AFPI for margin reserve would deny PCUC its unavoidable and reasonable current cost of providing service.

Q. Do you agree with Ms. Amaya's allowances for margin reserve?

A. I, of course, agree with Ms. Amaya in that she recognized the validity of a margin reserve allowance in used and useful calculations. I disagree, however, with certain adjustments she made with respect to some individual plant components. With respect to the membrane softening plant, Ms. Amaya uses an 18-month period for margin reserve instead of the proposed three-year period, for the reason that the expansion of the plant to accommodate additional membrane skids would not require more than eighteen months. I would first point out that the Company's rate filing and my used and useful calculations do not include the cost of expanding

the plant; they are based on the cost of the existing plant, which in fact required nearly five years from design to completion. It is also conceptually improper to base the period for margin reserve for the existing plant on the period for incremental increases to that plant. I have selected a three-year period with respect to water treatment plants recognizing that it is a reasonable average allowance to design, permit and construct the water plants (with shorter periods for expansion) and allow for regulatory lag.

Ms. Amaya also reduces the period for margin reserve with respect to water and wastewater mains from eighteen months to twelve months, simply stating that the shorter period is sufficient. It is important to recognize that the margin reserve portion of used and useful calculations is part of a rate setting/cost recovery process, and should not be viewed as only a permitting, design and construction process. In my opinion, margin reserve should always be based on a period of at least eighteen months, even if the design, permitting and construction process takes only twelve months. The reason for this duration is that by the time a utility files and receives rate relief, there is usually a regulatory lag with respect to cost recovery. In this case, PCUC is utiliz-

ing a year-end 1995 test year. Accordingly, the period for the regulatory lag between the end of the test year and the full year that the new rates will be in effect will itself exceed twelve months.

With respect to the wastewater treatment plant and effluent disposal (excluding the effluent storage tank), Ms. Amaya uses a three-year margin reserve instead of the proposed five-year margin reserve. The five-year margin reserve was utilized because of the Company's specific experience with respect to design, permitting and construction of wastewater treatment and disposal facilities. In workshop discussions with respect to used and useful rules, DEP representatives have suggested that ten years be considered for margin reserve.

Q. Am I correct that the demands which you use in your used and useful calculations are based on demands for 1995 prior to the allowance of margin reserve?

A. Yes. In fact with respect to the water system, the maximum day demand was actually a 1994 demand. I conservatively used that 1994 demand as being applicable to the mid-point of 1995. Accordingly, before including an allowance for margin reserve, the maximum day demand for "average" 1995 should be adjusted for growth to bring that demand to a year-

end 1995 demand. Thus, the margin reserve period with respect to the water treatment plant is three years for margin reserve and half a year for growth between mid-1995 and year-end 1995. The same is true with respect to the other margin reserve allowances. In other words, half a year should be added to recognize that PCUC's rate filing is based on a year-end test year, and the demands represent mid-point 1995 demands.

Q. Has Ms. Amaya taken the half-year's growth into account in her calculations of the demands which should be used, including margin reserve for used and useful calculations?

A. No. Ms. Amaya applies her respective periods for margin reserve without recognizing that the half-year's allowance should be made for growth.

Q. Has Ms. Amaya made any allowance to recognize economies of scale?

A. Ms. Amaya testifies that in effect her margin reserve allowances enable the utility to build larger increments of plant, thereby taking advantage of economies of scale. It appears, therefore,

that Ms. Amaya considers margin reserve to be a measure of economies of scale.

Q. Do you agree with that assessment?

A. No. As I testified, margin reserve recognizes the need for a utility to have sufficient plant to serve both present and new customers in the relatively near-term future, without sacrificing the level of service provided to any future customer (existing or new). The basis for the allowance has generally been the time period for design, permitting and construction of utility facilities, as well as recognition of regulatory lag with respect to the establishment and implementation of rates which enable a utility to recover its costs. A margin reserve period would be necessary whether or not the facilities being constructed are economically sized. Participants during the used and useful workshop recognized that, in addition to margin reserve, there was a need for some methodology with which to reflect economies of scale as a general allowance. There was a consensus that the cost to build a facility at 80% of a given capacity was likely not much lower than the cost to build a facility at 100% of a given capacity. It is also

recognized that utility facilities will generally have a comfortable level (10% to 20%) of capacity available even for systems which are fully developed. In my opinion, the use of a 20% factor for economies of scale recognize these considerations. It is also a provision which leads to a reasonable balance between rate treatment of water and sewer utilities and that of other types of utilities regulated by the FPSC, which construct economical sized systems with ample extra capacity for which no used and useful calculations are made.

Q. Do you agree with the reasons Ms. Dismukes gives for imputing CIAC with respect to margin reserve?

A. No. Ms. Dismukes is incorrect when she states that the imputation of CIAC is necessary to achieve a proper matching with the margin reserve. The margin reserve is based on the plant which is used and useful for year-end 1995. It is obvious that CIAC will not be received until subsequent to year-end 1995 for the ERCs represented by margin reserve. Moreover, as new customers are added, there is then a need for yet additional margin reserve. Accordingly, the need for margin reserve in order to meet the demands of existing as well as new

customers now and in the near-term future is always current, and the ERCs represented by growth or new customers is always in the future. That is by definition the nature of margin reserve.

Q. Has Ms. Dismukes addressed the reasons which you stated in your pre-filed testimony as to why CIAC should not be imputed with respect to margin reserve?

A. No.

Q. Am I correct that you are recommending that no CIAC be imputed with respect to margin reserve despite the fact that it has been the FPSC's policy to do so?

A. Yes. I believe the FPSC should reconsider its policy for the reasons stated in my pre-filed testimony. The arrangement between real estate purchasers and the affiliated developer of PCUC with respect to the collection of amounts which will ultimately become CIAC merely served to partially offset the significant carrying costs the developer incurred as part of the formation of the new utility. The FPSC's policy with respect to the imputation of CIAC conflicts with its policy with

respect to AFPI (recovery of carrying costs associated with non-used and useful plant). As I stated in my direct testimony, the FPSC established the AFPI charge in order to recognize that future customers should pay for the carrying costs associated with non-used and useful plant. The arrangement established between the Palm Coast developer and real estate purchasers is conceptually the same.

In my opinion, the FPSC has also recognized that margin reserve allowances are essential in order for utilities to construct economically-sized facilities to meet the demands of existing and new customers now and in the future. Allowing the necessary margin reserve but then reducing or eliminating it by the imputation of CIAC creates a disincentive for utilities to build economically-sized facilities. By imputing CIAC, the rates for all customers will eventually be higher because water and sewer utilities will begin to make economic decisions based on the FPSC's rate allowances, which will lead to the construction of facilities which are not economically sized.

Fire Flow

Q. Did Mr. Biddy make any allowance for fire demands in his used and useful calculations for the source of supply and treatment plant?

A. No.

Q. Mr. Biddy states that his primary reason for not making an allowance for fire flow is because PCUC did not provide records or supporting documents in the original filing of the MFRs with respect to fire flows. Is that a valid reason for making no allowance for fire flows?

A. No. PCUC submitted MFRs in accordance with the FPSC requirements, and those MFRs were accepted. In any event, the need for a utility to meet maximum day demands plus fire flows when designing and constructing its system is generally recognized without the need to provide additional documentation. Moreover, my pre-filed direct testimony and used and useful analysis did, in fact, identify the fire flow demands in this case and as accepted by the FPSC in the Company's last case.

With respect to an allowance for fire flow for the source of supply and treatment plant, the FPSC has consistently recognized that such an allowance is appropriate for this utility. PCUC experienced signifi-

cantly higher fire demands (6,000 GPM at peak flow and a duration of about two days) during the 1985 forest fires than the level (2,000 GPM for five hours) included in either this or the last case. I would also note that according to the National Board of Fire Underwriters (now Insurance Service Office), PCUC would be required to meet a fire flow of 4,500 GPM for a ten-hour duration. Because of the configuration of the water utility system, fire demands which may occur throughout the system require the utilization of all components of the system. Mr. Biddy was provided with specific testimony regarding the need for fire demands as well as the FPSC's treatment of those fire demands as part of the rate filing.

Maximum Day Demand

Q. Do you agree with Mr. Biddy's use of an average of the five highest maximum daily flows in the maximum month, instead of the use of the maximum day in used and useful calculations?

A. No. The reasons Mr. Biddy gives for not using the single maximum day flow are that the maximum day may include unusual leaks, flushing or other unusual usage (beyond typical unaccounted-for water) and because good records are hard to keep. The maximum day demand which I used contains no unusual

usage of water. The Company provided me with information which identified ten maximum daily flows, along with any unusual occurrences during those days. The maximum day I used was, in fact, the third highest maximum day; the highest and second highest maximum day flows were rejected because they did include unusual usage. Also contrary to Mr. Biddy's testimony, the FPSC has consistently used the maximum day demand for PCUC instead of the average of five maximum days.

Water Treatment Plant

Q. Do you agree with Mr. Biddy's calculation of the used and useful percentage with respect to the water treatment plants?

A. No. In addition to his failure to use the maximum day, margin reserve or fire flow allowance, which I previously addressed, Mr. Biddy also fails to adjust the total capacity for plant uses. As I indicated in my pre-filed direct testimony, an adjustment of 13.3% is necessary with respect to WTP #1. That level is less than the actual level of plant uses, but higher than the 10% allowed by the FPSC in the last case. The Company's outside engineers have recognized a similar level as pro-

posed in this case in order to allow for backwashing of filters.

I would also note that neither Mr. Biddy or Ms. Amaya have considered the fact that since WTP #1 had reached 100% capacity, requiring the addition of WTP #2, that an adjustment should be made to recognize the integrated use of both treatment plants. Mr. Biddy does not address this item at all. Ms. Amaya calculates a used and useful percentage with respect to WTP #2 apparently on the assumption that it only meets water demands which exceed the capacity of WTP #1. That approach is not consistent with the actual integrated use of the treatment plants. Customer demands cannot be met at PCUC by operating WTP #1 until it reaches capacity and then use WTP #2 for the balance of the demand. My analysis demonstrates the used and useful percentage of the combined operation of the water treatment plants is 89.3%. The cost of WTP #1, however, is 100% used and useful as evident from the need for the addition of WTP #2.

<u>High Service Pumping</u>

Q. Am I correct that you made a used and useful allocation with respect to high service pumping equipment?

A. Yes. The high service pumps were allocated along with other plant allocations. I do not, however, make a separate allocation specifically for high service pumps.

Q. Do you agree with Ms. Amaya's calculation of the used and useful percentage with respect to high service pumps?

A. No. Ms. Amaya uses a combined capacity of all high service pumps with respect to both treatment plants. If a separate used and useful allocation is to be made for high service pumps, then it should be recognized that the high service pumps at each treatment plant should be allocated separately, making allowance for the highest capacity pump being out of service at each plant.

Source of Supply

Q. Mr. Biddy testified that when storage or high service pumping facilities are available, the "firm reliable capacity" method is not applicable. Do you agree?

A. No. There is no "firm reliable capacity" method with respect to used and useful calculations related to source of supply. The FPSC has recognized

that for used and useful purposes, the capacity of PCUC sources of supply should be adjusted to reflect the reality that some of the wells may not be on line during the maximum day. With respect to the lime softening plant (WTP #1), in the last case the FPSC accepted the Company's elimination of the capacity of the two highest yield wells from the total well capacity. At that time the Company had twenty-two wells in service. There are now twenty-seven wells serving WTP #1. The Company's records show that on any given day at least one well is not in use due to monitoring requirements of the water management district. In addition, PCUC alternates the use of certain wells which have relatively high, naturally occurring color in order to comply with color standard. While PCUC must perform periodic maintenance, it must also be prepared for unanticipated well or pump failures. On average, for the ten maximum days, there were in excess of five wells not in operation for various reasons. Now that the Company has 27 wells instead of the 22 wells it had at the time of the FPSC's last decision, it is appropriate to recognize three wells out of service instead of two with respect to WTP #1.

Storage Facilities

Q. Do you agree with Mr. Biddy's used and useful calculations with respect to water storage facilities?

A. No. Mr. Biddy allows nothing for retention. In my opinion, whether considering elevated or ground storage tanks, used and useful calculations should not be made on the basis that the utility must drain its storage tanks dry before full recognition of their cost is included in rate base. As a practical matter, the utility is simply not going to pump its ground storage facilities to the point of suction, nor is it going to permit its elevated storage facilities to empty down to the mains.

With respect to equalization and emergencies, on the basis of a review of the Company's operating records, it is appropriate to use a 50% factor to meet equalization of flows on the maximum day and also be prepared to handle such emergencies as main breaks and unanticipated plant shutdowns. It should also be recognized that the storage facilities must be capable of delivering water for fires at any point throughout the distribution system, as well as meet coincidental fire demands. Accordingly, a separate allowance for fire demands should

be made for each of the major storage facilities, as I proposed.

Land

Q. Do you agree with Mr. Biddy's recommendation to make a used and useful adjustment to land?

A. No. The cost of land to the utility would be no smaller in order to serve just existing customers and, therefore, should be considered 100% used and useful. I would note that Ms. Amaya recognizes this principle in her discussion with respect to the concentrate blend station where she states that "...the minimum investment that should have been necessary to construct a smaller capacity blend station to meet current demands should be compared with the investment the utility has made to construct the current blend station, and any subsequent used and useful adjustment should not result in a lower percentage of investment in plant than that which would have been necessary for the smaller capacity blend station."

Transmission and Distribution System

Q. Do you agree with either Mr. Biddy's or Ms. Amaya's use of a ratio of connected lots to total lots in

calculating the used and useful percentage with respect to mains?

A. No. Ms. Amaya states that it is necessary to compare connected lots to lots available in order to compare "apples to apples." Her analogy is misplaced. Neither the design or the cost of mains is based solely on the number of lots to be served. Mains are designed for required flows and pressure. The design must take into consideration residential flows with respect to some lots, as well as significantly higher flows with respect to commercial lots. The design must also take into consideration fire flow requirements. Finally, the design must also take into consideration the distances over which the mains must be extended. Thus, the cost of mains is based on the cost to meet flow and pressure requirements as well as to meet the number of lots to be served. Mr. Biddy's and Ms. Amaya's use of connected lots to total lots, which is not the basis for the design and cost of mains, to identify the used and useful cost, creates a mismatch. My use of the ratio of ERCs to lots is consistent with the design as well as the cost of mains, and has been consistently accepted by the FPSC for PCUC.

Q. Do you agree with Mr. Biddy's discussion on page 9 of his pre-filed testimony regarding the used and useful analysis for the water transmission and distribution system?

A. No. Mr. Biddy's discussion is contradictory. On the one hand he recognizes that engineers design water transmission and distribution systems with fire flow delivering capability, and therefore the cost of laying water mains includes the cost for fire flow provision. On the other hand he states that it is inappropriate to use fire flow allowances in the used and useful calculation.

His statements are also contradictory in that he states the fire flow provision is for all existing and future customers, but then he states that PCUC's proposed used and useful calculations shift more cost burden to existing customers especially in new and sparsely developed areas. Mr. Biddy's calculations, however, don't recognize any added cost with respect to mains in order to meet fire flows, and therefore he includes no cost for existing customers with respect to fire flow.

Mr. Biddy is also incorrect when he states that I have added an extra 33.1% to the used and useful percentage for water mains by including a fire flow allowance. In fact, in order not to duplicate the cost of mains con-

sidered used and useful, I applied the 33.1% fire demand allowance only to the portion of mains not previously found to be used and useful according to my density calculation (ERCs to total lots).

Q. Has Mr. Biddy made any other invalid statements with respect to mains?

A. Yes. Mr. Biddy states that the "lot count" method allocates the water main costs evenly to all customers, and that the lot count method gives an equal cost share to all customers. This analysis by Mr. Biddy is simply inconsistent with rate making. A used and useful determination establishes the cost level of investment which should be recognized in rates. Once that level of used and useful cost is established, then studies could be made to determine an allocation of costs among customer classes. Mr. Biddy has made no such cost allocation; he merely uses a ratio of lots to lots in order to exclude more of PCUC's actual costs from rate base. Moreover, all customers are charged the same basic rates for service, and their share of the costs will vary according to their usage (given similar classes of customers). Accordingly, this analysis by Mr. Biddy is

irrevelant to the question of appropriate used and useful calculations. My use of the ratio of ERCs to lots is appropriate for the purpose of used and useful calculations for mains.

Q. Do you agree with Mr. Biddy's statement that "the lot count method will not discourage future development as opposed to the method proposed by PCUC which will probably discourage future development?"

A. No. Mr. Biddy has presented no evidence and I am not aware of any which would demonstrate that future development is at all affected by the difference in rates resulting from the use of proper used and useful allowances, let alone the increment of the rates which is based on used and useful mains. On the other hand, it is obvious that because PCUC installed most of the mains in the early stages of this development, the total cost included as used and useful is much less than if the mains had been installed gradually over the years (because the cost of labor, material and construction costs have increased over the years). The lower embedded cost of mains coupled with used and useful adjustments have produced the lowest cost of service for this utility. In any event,

the process of rate setting is to establish the cost of providing utility service.

Q. Mr. Biddy states that "fire hydrants are part of the distribution system and there is no need to perform a separate used and useful analysis." Is he correct?

A. Mr. Biddy is apparently unaware of the fact that hydrants have not yet been installed throughout the system and the cost of only the active hydrants which are all necessary to provide existing customers with fire protection have been included as used and useful.

Q. Has the FPSC accepted your method with respect to hydrants in previous cases?

A. Yes, and it is still applicable.

Wastewater Collection System

Q. To the extent that Mr. Biddy or Ms. Amaya uses the relationship of connected lots to total lots with respect to the wastewater collection system, would your comments be similar?

A. Yes. They would be similar to those made regarding the water transmission and distribution system.

Q. **Mr. Biddy's June 3, 1996 revision eliminated this sentence on lines 8 to 11 of page 11 of his testimony. "...It is inappropriate and unnecessary to break down the collection system used and useful into gravity main, pre-treatment effluent pumping (PEP) main, PEP tanks, force main and service lines as PCUC has proposed." Did he provide any other explanation regarding those components?**

A. No. He apparently relies on his lot count analysis stating that "lot count provides an equal share for all customers, so that existing customers will not subsidize future customers." Once again, Mr. Biddy seems to consider his used and useful analysis as being an exercise which establishes equal shares of the costs for all customers. He is incorrect. Used and useful analyses establish the utility's cost of providing service which should be recovered through the rates resulting from this rate case. The use of lot counts is not a mechanism with which to establish equal share costs for all customers, individually as a class or existing compared to future. As has been recognized by the FPSC in previous cases and Ms. Amaya in this case, separate treatment with respect to gravity mains, PEP system, force mains and service lines is most appro-

priate for PCUC. Two of the most obvious examples relate to PEP tanks and service lines. Clearly those components may be identified with individual existing customers and should be included as entirely used and useful. Mr. Biddy's lot count analysis which he apparently would apply to those items because he believes it creates an equal share for all customers, existing as well as future, simply does not make sense.

Collection System Pumping Plant

Q. Ms. Amaya has adopted your methodology with respect to the pumping plant with the exception that she uses a peaking factor of two, as was used in the last case, instead of a peaking factor of three, subject to additional justification. Would you explain why you use a peaking factor of three?

A. Yes. According to recommended design criteria with respect to the design of sewers (which have been provided in response to interrogatories), the peaking factor for domestic wastewater flows, with and without commercial flows and inflow and infiltration, show that a peaking factor in excess of three times average is warranted. The factor of two times used in the last case has been found to

be inadequate for peak flows during the course of any given day.

Q. Do you agree with Ms. Amaya's analysis with respect to the effluent disposal facilities?

A. No. First I would point out that the capacity of the spray field is 600,000 gallons per day, not the 800,000 gallons per day used by Ms. Amaya. The second error is with respect to the older RIB site which has a capacity of one million gallons per day, not 1.3 million gallons per day. It also appears that Ms. Amaya did not make adjustment for dry weather capacity, which of course is not available during wet weather periods.

With respect to the effluent storage tank, Ms. Amaya performs a separate calculation using only the spray field capacity (using 800,000 GPD instead of the correct 600,000 GPD), but fails to take into consideration the 1.6 MGD disposal at DCDD during dry weather periods. Accordingly, using Ms. Amaya's proposed three-day minimum requirement would produce a minimum capacity of 6.6 million gallons, which is calculated by multiplying three times the sum of the 600,000 GPD spray field capacity plus the 1.6 MGD disposal at DCDD. I would note, however, that PCUC's actual requirement for storage is

not the minimum amount. PCUC had an outside engineering firm, Dames & Moore, perform a study which indicates that the wet weather flow volume over a 24-day period ranges from 4.3 to 4.6 MGD, which would require significantly more than the minimum capacity when calculated over a 24-day wet weather period. PCUC's internal studies show a wet weather flow in excess of 5 MGD over a 21-day wet weather period. Because of this significant need for wet weather storage in excess of the 6 million gallon storage tank, PCUC is seeking surface water discharges, which it now does not have.

Wastewater Treatment Plant

Q. Do you agree with Ms. Amaya's use of the average annual daily flow in the calculation of used and useful for the wastewater treatment plant?

A. No. Despite the fact that the permitted capacity of wastewater treatment plants is stated as an average annual daily flow, treatment plant must be designed to meet the maximum three-month demand. The cost of wastewater treatment plants is also, therefore, related to the design criteria for the maximum three-month demand at a minimum. PCUC cannot meet the wastewater flow demands of its customers if the capacity of the plant was limited

to the average annual daily flow. Although utilities have a choice of stating the permitted capacity in terms of either annual average, maximum three months or maximum month demands, DEP nevertheless requires the expansion of plants on the basis of the three-month average daily flow. Capacity analysis reports must be submitted to DEP on the basis of the three-month average daily flows. If these reports show that the permitted capacity will be equaled or exceeded within the next five years, DEP requires that the planning and design of the expansion be initiated. Accordingly, the cost which the utility incurs with respect to its wastewater treatment plants is based on its ability to meet the three-month average demands in relation to their permitted capacity, and the used and useful cost should be determined on a similar basis.

Effluent Reuse Rate

Q. Do you agree with Mr. Milian that DEP as well as water management districts encourage and in many cases require reuse of effluent for irrigation?

A. Yes. In addition, I believe the FPSC also supports such a policy. The use of effluent (least quality

water) for irrigation purposes has become sufficiently important that charges for such service have been encouraged by the FPSC. Effluent has been recognized as a valuable commodity by state regulatory agencies.

Q. Do you agree with Mr. Milian that "to the extent that higher rates for effluent reuse will discourage reuse for irrigation, the proposed rates would, in effect, be contrary to the implementation of the policies of these agencies"?

A. Mr. Milian has not quantified the level of rates which would cause DCDD to stop taking effluent reuse for irrigation purposes. The effluent reuse rate of 67 cents per thousand gallons, which I am proposing, is approximately half of the bulk water rate which DCDD is paying for potable water. Although I have not undertaken any studies in this regard, I assume that the bulk water rate is itself significantly less than what it would have cost DCDD to develop its own facilities for potable water. Thus, I doubt that the proposed effluent reuse rate would prompt DCDD to use potable water instead, or find another source of its own, even if that were feasible.

Q. Mr. Milian states that PCUC is the primary beneficiary in the arrangement it has with DCDD. Do you agree that PCUC is the primary beneficiary?

A. No. The customers of both PCUC and DCDD are beneficiaries because of the environmental protection created by the use of effluent reuse water instead of potable water. DCDD will be obtaining effluent reuse water from PCUC at a cost which is less than the bulk rate PCUC is charging for potable water. DCDD is also likely receiving a significant benefit because PCUC is selling potable water to it at a bulk rate instead of what it would have cost DCDD to have obtained its own separate supply of water. It appears that DCDD customers are paying less for effluent reuse water than they would otherwise pay for potable water for irrigation. I would add that if PCUC's rate for effluent reuse is adopted, the resultant revenues would be flowed through to offset PCUC's sewer rates so that PCUC's customers (not stockholders) also receive a benefit.

Q. From a policy perspective, what would be a reasonable rate even if there were no cost study to support PCUC's proposed reuse rate?

A. The FPSC has indicated in other cases that an effluent rate should not exceed the cost of alternatives for irrigation water. On that basis, it seems that the upper limit would be at least the level of PCUC's raw water rate. It is not inconceivable, however, that consideration of value alone would include a determination of what it would have cost DCDD to install all of its own water facilities. From strictly a "value" consideration, in my opinion, the rate of 67 cents per thousand gallons is a reasonable mid-point.

Q. Mr. Milian states that PCUC has not incurred any incremental costs, and ultimately that is one of the reasons that he is recommending that no rate be charged for effluent reuse water. Do you agree?

A. No, in general, rates are not based on incremental cost pricing. Although PCUC did, in fact, incur costs for the six million gallon storage facilities primarily as a means of providing service to DCDD, an effluent reuse rate should not be based on incremental costs. Rate setting is basically an averaging process. Similar classes of customer all pay the same rates for service. For example, residential customers closer to the source of

supply do not pay less for water than customers far from the source of supply. Existing customers do not pay less for water than new customers despite the fact that the cost of facilities today are higher than in the past.

Q. Assume a utility customer is connected to an existing main and the utility does not have to add plant, employees or any significant expense to provide service. In other words, there is no significant incremental cost to serve that customer. Should that utility not charge that customer for service?

A. No. Such a customer would and should pay the same rates as other customers.

Q. Do you believe your cost allocation study develops a reasonable allocation considering the value of service, the state's policy regarding effluent reuse for irrigation purposes and cost allocation principles?

A. Yes. I believe Mr. Milian's recommendation that there should be no effluent rate is extreme in that it does not recognize the value to all effluent customers or to the state due to the availability

of effluent reuse. The other extreme would have been the allocation of all costs of the wastewater collection and treatment facilities to effluent reuse, justified on the basis that there would be no effluent reuse available to DCDD if PCUC did not collect and treat wastewater. My study is not based on an incremental cost analysis, nor is it based on a fully allocated cost analysis. I have allocated only effluent reuse facilities which are necessary to handle wet weather conditions. Moreover, I have spread those costs over all effluent not just the estimated effluent purchases by DCDD. Accordingly, I believe that the effluent reuse rate establishes a reasonable economic balance among the parties and is consistent with water conservation concerns of the responsible state regulatory agencies.

Audit Disclosure No. 5

Q. Does Mr. Dodrill correctly state in Audit Disclosure No. 5 PCUC's position with respect to the utility assets which were used to establish an effluent reuse rate?

A. No. Mr. Dodrill is incorrect when he characterizes the cost allocation study with respect to the development of an effluent reuse rate as a "dedication" of $2,935,977 of sewer utility plant to effluent reuse (for sale to a customer). All plant and facilities used to dispose of effluent are essential in order to treat wastewater and provide sewerage disposal service to its customers in compliance with DEP regulatory requirements. Since PCUC has an opportunity to sell some of its effluent, it has developed a rate for effluent based on a cost allocation of certain of its sewer utility plant and facilities. The revenues which are estimated to be generated by the sale of effluent have been deducted from the overall sewer system revenue requirement and, therefore, the sewer customers receive the full benefit of the cost allocation to effluent reuse sales. Accordingly, Mr. Dodrill's suggestion to reduce the sewer utility plant accounts by $2,935,977 would not only

constitute, in part, a double deduction but also deny PCUC the ability to recover the cost of effluent disposal which it must incur in order to serve its regular sewer customers.

Non-used CIAC

Q. Do you agree with Ms. Dismukes' recommendation to adjust the capital structure by including "non-used CIAC" as cost free capital?

A. No, for the same reasons which Mr. Seidman describes in detail in his rebuttal testimony.

Q. Is there a broader issue created by Ms. Dismukes' recommendation with respect to non-used CIAC?

A. Yes. Ms. Dismukes' recommendation would in effect require the FPSC to completely overhaul its policies with respect to rate regulation for developer-related water and sewer utilities. In order to establish a regulatory policy with respect to rate regulation of developer-related water and sewer utilities, the FPSC has established over the years a policy with respect to significant used and useful adjustments for such utilities, as well as policies and regulations with respect to service availability charges, including both capacity fees

as well as AFPI charges. The Florida statutes also reflect the FPSC's policies with respect to the exclusion from rate base of contributions in aid of construction. Accordingly, the FPSC policies, rules and regulations and Florida statutes have all evolved over the years in order to develop an appropriate mechanism with which to recognize rate setting for new and/or growing developer-related utilities. Ms. Dismukes' recommendation introduces an element which would necessitate a complete revamping of the FPSC's rate setting treatment regarding such utilities.

It is important to recognize that "non-used CIAC" or "prepaid CIAC" is not contributions in aid of construction, nor is it attributable to existing customers or used and useful investment in accordance with FPSC policy or rules. Instead, the dollars associated with what has been dubbed non-used CIAC or prepaid CIAC represent dollars collected in accordance with agreements between developers and real estate purchasers. While developers may or may not transfer those dollars to a utility as part of the funding of non-used and useful plants, developers also incur enormous costs to create and subsidize new water and sewer utilities during their growth years. With respect to Palm Coast, I estimate

that the carrying costs incurred by the developer since 1980 amount to approximately $60 million. If any rate making consideration were to be given to non-used CIAC, then the developer's carrying costs to create this utility would also have to be given consideration. Accordingly, an entirely different method would have to be created to replace the FPSC's existing policies and rules with respect to rate setting for developer-related water and sewer utilities.

Q. In your opinion would it be possible to undertake such a revamping of the FPSC's rate setting policies?

A. No. The FPSC's policies with respect to service availability charges, levels of CIAC and used and useful analyses have been applied for too many years to now change direction. While each of those specific policies and components may be improved upon, the inter-relationship of all of them with respect to the appropriate regulation of water and sewer utilities cannot change so significantly as to begin to introduce such foreign elements as is being recommended by Ms. Dismukes.

Q. Does that conclude your testimony at this time, pending the receipt of any revisions or additional testimony by other parties?

A. Yes.