PROPOSED NEW AND AMENDED RULES

FOR WATER AND WASTEWATER

DOCKET NUMBER 911082-WS

COMMENTS OF

CHARLES H.HILL

ON BEHALF OF THE STAFF

DOCUMENT NUMBER-DATE

05322 MAY 178

- 1 | Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- A. My name is Charles H. Hill and my business address is 101 E. Gaines
 Street, Tallahassee, Florida.
- 4 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
- 5 A. I am employed by the Florida Public Service Commission, as Director of the Division of Water and Wastewater.
- 7 Q. WHAT IS THE PURPOSE OF YOUR COMMENTS IN THIS DOCKET?
- 8 A. I am recommending that the Commission adopt proposed rule 25-30.433(1) as proposed and adopt proposed rules 25-30.02C, 25-30.432, and 25-30.435, as modified.
- 11 Q. WHAT IS THE PURPOSE OF THE PROPOSED CHANGES TO RULE 25-30.020, FLORIDA

 12 ADMINISTRATIVE CODE?
- 13 Α. Rule 25-30.020, FAC, contains fees that are required in the water and 14 wastewater industry for many types of filings. These fees are assessed 15 to help offset the cost of processing the case. The current fee schedule varies only by size of company for all types of filings that 16 17 require a fee. However, some filings are more complex and require much 18 more time and effort than others to process. The current fee schedule 19 does not recognize this difference in complexity in any way and is, 20 therefore, inadequate. The new fee schedule proposed by the Commission 21 recognizes both size of company and complexity of case and should be 22 adopted.
- 23 Q. DO YOU HAVE ANY COMMENTS REGARDING RULE 25-30.020 AT THIS TIME?
- Yes. The proposed fees for service availability are based only on
 existing capacity and this is in error. In the event the division

processes a service availability case, the entire company is looked at, both existing and proposed customers and capacity. The proposed rule should be changed to clarify that the fee is based on existing and proposed capacity. I have provided modified language that includes this correction as Exhibit CHH 1.

Also, I do not believe subsection 2(i) of the rules should be included. In this section we were trying to codify current policy. Today, and for the past six years, we determine "capacity" for filing fees by combining the capacities of all systems included in the application. I believe we should add language to Section 1 of the rule that simply states our policy and delete subsection 2(i). I have provided language that does that as Exhibit CHH 2.

- Q. WHAT IS THE PURPOSE OF THE PROPOSED NEW RULE 25-30.432, FLORIDA ADMINISTRATIVE CODE?
- A. The purpose of rule 25-30.432 is to codify in rule the Commission's policies with respect to various engineering issues and to provide specific allowances and default formulas for calculating used and useful percentages.

It should not surprise us to see that this particular rule generates the most comments and the most criticism. Nor should we be surprised to find that this issue is the most time consuming and most analyzed in this proceeding. The issue of used and useful with its sub-issues such as margin reserve, unaccounted for water, fire flow, etc., is the biggest issue in this industry. It is the single most time consuming and expensive issue in nearly every proceeding. It, by itself,

represents almost 1/4th of total rate case expense. Any attempt to eliminate this as an issue or to reduce the evaluation of the sub-issues and resulting allowances to a rule will result in controversy. Nevertheless, I believe a rule such as has been proposed by the Commission should be adopted.

In 1988, during an extensive investigation into rate case expense, we

In 1988, during an extensive investigation into rate case expense, we identified used and useful as a major cost component of rate case expense and recommended it somehow be simplified and placed into rule. The goal is an easy to use or apply method for determining used and useful allowances (actually calculated percentages that are applied to various plant accounts).

Most critics of this rule will say that you just cannot have a single formula to apply to all the diverse companies and circumstances that make up this industry. They say you cannot have a single formula or application to use and still be fair, just and reasonable. They will point out that there are hundreds of companies each with distinct characteristics that must be taken into consideration when deciding used and useful allowances.

I certainly agree that a single formula approach to this issue will never work. However, I believe we can develop a combination of formulas and allowance levels that fairly approximate the used and useful allowances granted by the Commission. I believe we can and have developed in these rules a set of formulas that provide a reasonable estimate of what the Commission would allow.

Furthermore, I believe the design of these rules is such that their use

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will be widespread and rate case expense will be significantly reduced. That is, the rules are relatively easy to understand and follow. I believe many of the companies that now employ outside help to evaluate and present and defend their used and useful calculations will now perform these functions in-house. Also, these rules provide advanced knowledge to all parties of how the Commission will be evaluating used and useful issues. This will allow parties to better prepare for areas that in their opinion must be litigated. Finally, by providing as many separate categories as are provided (i.e. source, treatment, storage, transmission, distribution, etc.), a company may use the formulas for most of the categories and provide evidence on a specific category where it is believed that their company has unique characteristics or circumstances.

In summary, while I agree we will never and should never have a single formula to determine used and useful allowances, I believe a set of formulas and allowances can be developed and adopted that provide allowances that are fair, just and reasonable. Furthermore, I believe the adoption of such a rule will ultimately lead to a reduction in rate case expense as a result of companies using these formulas.

- Q. DO YOU HAVE ANY COMMENTS REGARDING CHANGES IN RULE 25-30.432, FLORIDA ADMINISTRATIVE CODE?
- A. Yes. While the provisions of proposed rule 25-30.432 represent a major step in the right direction, I believe we can fine tune these provisions to obtain a better rule.
- The rule, as proposed, contains an inherent bias towards design

criteria. This is only natural since we started the process with the idea of what is correct from both a long run economic perspective and an engineering design perspective. As a result, the proposed formulas and allowances yield results that are biased towards these perspectives. Since the purpose here (or goal of these rules) is to obtain a simple to understand set of formulas and allowances that fairly approximate what the Commission would allow, I believe we can modify certain aspects of the proposed rule and obtain better results and, therefore, a better rule. I have examined the expected results of the proposed rules, applied Commission policy and practice as evidenced in previous decisions and identified several areas where I believe changes should be made and clarification is needed.

- Q. WOULD YOU PLEASE IDENTIFY THE AREAS IN QUESTION AND EXPLAIN WHAT CHANGES AND CLARIFICATIONS YOU RECOMMEND?
- A. Yes. The first area of clarification and fine tuning is margin reserve. I believe language should be added that clarifies the current Commission practice of allowing margin reserve if a utility requests it. In addition, I believe the allowance of 20% of capacity is too high and should be reduced to 12%. Also, because utilities like Palm Coast exist where available capacity is in place to serve more than ten times the existing customer base, a cap needs to be placed on this allowance. For these situations, I believe anticipated customer base five years in the future is a reasonable level of capacity to use for a margin.

A second area is the buildout provisions of the rule. Currently the rule states that if a system is expected to be built out within 36

months, the system is considered 100% used and useful. To begin, the language needs to be cleaned up to clearly state this. In addition, the period of 36 months should be reduced to 24 months. This shorter period is a more reasonable planning period to work with. Also, language needs to be added to provide for a phase-in of the revenue effect of the build out provisions over the same 24 month period.

Third, the automatic 100% used and useful provisions for water transmission, non-developer related water distribution, non-developer related wastewater collection system and pumping stations and wastewater force mains should be replaced with the formulas for developer related systems. This better reflects the allowances granted by the Commission and eliminates the distinction between developer related and non-developer related companies. Finally, the 100% used and useful provision for other water facilities and other wastewater facilities should remain.

Fourth, the fire flow provisions should be modified to better reflect Commission practice. Specifically, language should be added that provides for a fire flow allowance only up to the capacity of the system. This is current Commission practice. Also, it should be clarified that the Commission may order a utility to add capacity to meet fire flow requirements and, if so, may include the additional investment in rate base. Finally, the inclusion of fire flow in the used and useful calculations for the distribution system should be simplified more. The current rule is too involved and implies an accuracy that I do not believe exists. I believe the fire flow

allowance for the distribution should be calculated by counting each working fire hydrant as one ERC.

Fifth, the allowance for inflow should be reduced from 10% to 7% of treated flows and the rule language should be clarified to eliminate force mains from the from the infiltration provisions. Seven percent is a more reasonable amount for this allowance and it is my understanding that force mains are sealed and infiltration is not a factor.

Sixth, the definition of fill-in lots should be changed. While I agree with the concept of a fill-in allowance, I believe the proposed method is difficult to administer and apply, very time consuming and creates an area of controversy rather than eliminating one. Instead, I believe a fill-in allowance of 7% of the actual test year ERCs is appropriate and should be used.

Finally, seventh, there are several definitions that should be added to the rules. These are gallons per day, gallons per minute, equivalent residential connection and single family residence. The addition of these definitions will make the rules more easily understood.

In summary, I believe the proposed rule can be modified to better reflect the allowances granted by the Commission. I recommend the changes I have discussed and have provided language that does this as Exhibit CHH 3.

- Q. WHAT IS THE PURPOSE OF THE PROPOSED NEW RULE 25-30.433, FLORIDA ADMINISTRATIVE CODE?
- 25 A. The purpose of Section 1 is to codify Commission practice and policy and

to clearly delineate for all parties what is and is not considered by the Commission in determining whether or not a utility's service is satisfactory. For many years the issue of quality of service was considered by the Commission without any standards for what constituted satisfactory or unsatisfactory service. Over the past six years we have developed factors to be considered and established standards to be used in every proceeding to determine quality of service. Since these factors and standards have been established and are being used consistently, they should be codified in the rule. I believe Section (1) does this and should be adopted.

- Q. DO YOU HAVE ANY COMMENTS REGARDING CHANGES IN RULE 25-30.435, FLORIDA ADMINISTRATIVE CODE?
- A. Yes. Mr. Willis has provided comments regarding the Commission's proposed rule 25-30.435 which I agree with. However, I do not believe that this rule is broad enough for the industry and it should be modified. Specifically, I believe the Commission should adopt both the Commission proposed rule and the alternative rule included in the recommendation for the March 5th, Special Agenda Conference. The Commission proposed rules require a company with multiple systems to file all systems when requesting rate relief. I believe this rule will work well for many multi-system companies and save both time and money for all. However, I believe for some companies the alternative rule would work much better. For example, the alternative rule requires a company with multiple systems to file all joint and common cost information necessary for the Commission to determine allocated costs

and factors for the individual systems. The company may then file for rate relief for a single system without involving the other systems. This rule would work better than the Commission proposed rule, for a company with only a few large systems. I believe we should have both options available in the industry and recommend we adopt both. I have provided language that does this as Exhibit CHH 4.

25-30.020 EXHIBIT CHH 1

2. (h) For an application for approval of charges or conditions for service availability filed pursuant to section 367.101, Florida Statutes, the amount of the fee shall be as follows:

- 1. For utilities with the existing and proposed capacity to serve up to 100 ERCs, \$100;
- 2. For utilities with the existing and proposed capacity to serve from 101 to 200 ERCs, \$200;
- 3. For utilities with the existing and proposed capacity to serve from 201 to 500 ERCs, \$500;
- 4. For utilities with the existing and proposed capacity to serve from 501 to 2,000 ERCs, \$1,000;
- 5. For utilities with the existing and proposed capacity to serve from 2,001 to 4,000 ERCs, \$1,750;
- 6. For utilities with the existing and proposed capacity to serve more than 4,000 ERCs, \$2,250.

25-30.020 EXHIBIT CHH 2

(1) When a utility files any application for a certificate of authorization certification, extension, transfer pursuant to sections 367.045, 367.071 and 367.171, Florida Statutes, or files any request for a rate change pursuant to sections 367.081, 367.0814 and 367.0822, Florida Statutes, rate change, (except an index or pass-through), or files for authorization to collect or change service availability charges pursuant to section 367.101, Florida Statutes, the utility shall remit a fee. A separate fee shall apply for water service and wastewater service. A separate fee shall also apply for each section listed above. For purposes of this rule, capacity is determined by combining the capacities of all systems included in the application. For purposes of this rule, an equivalent residential connection (ERC) is 350 gallons per day (gpd) for wastewater service.

(2) fill For utilities filing persuant to Rule 25 30.435, F.A.C...
"Application for a Rule Therease by an Applicant that Owns Muleiple
Systems", or 25 30.565, "Application for Approval of New c. Revised
Service Availability Policy or Charges", the feet in paragraphs
(2)(e), (a), and (b) above, shall be determined by combining the
supposity of all systems included in the application.

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(1) The Commission shall allow a utility to recover, through authorized rates, charges and fees, the costs incurred in meeting its statutory obligations to provide safe, efficient and sufficient

25-30.432 Used and Useful in Rate Case Proceedings.

its statutory obligations shall be considered used and useful.

- (2) It is the policy of the Commission to encourage utility planning that recognizes conservation, environmental protection, economies of scale, and which is economically beneficial to its customers over the long term.
- (3) In determining those portions of water and wastewater systems that are used and useful in serving the public, the Commission shall consider:
- (a) the design and construction requirements set forth in Chapter 17-555, F.A.C., Permitting and Construction of Public Water Systems and Chapter 17-600, F.A.C., Domestic Wastewater Facilities;
- (b) the investment in land acquired or facilities constructed or to be constructed in the public interest within a reasonable time in the future;
- (c) the prudence of the investment, taking into consideration such factors as the treatment process, water storage capacity, economies of scale, the historical and projected rate of growth in customers and demand, seasonal demand characteristics, residential

and commercial mix, and the configuration of the service area.

(4) To encourage long-term planning and least cost system design, the Commission, at a minimum, shall consider as used and useful the level of investment that would have been required had the utility designed and constructed the system to serve only its existing customer base.

(5) For the purpose of calculating used and useful, the following specific factors shall apply. When applying these factors, references to customer demand shall mean the demand per equivalent residential connection (ERC) used for design or permitting or the actual historical demand per ERC, whichever is greater.

(a) Margin Reserve

1. The Commission recognizes that for a utility to meet its statutory responsibility, it must have sufficient capacity and investment to meet the existing and changing demands of present customers and the demands of potential customers within a reasonable time. The investment needed to meet the demands of potential customers and the changing demands of existing customers is defined as margin reserve. As a matter of policy, the Commission recognizes margin reserve as a component of used and useful rate base. The Commission shall include an allowance for margin reserve if requested by the utility.

2. In determining the allowable investment in margin reserve, the Commission shall consider, but not be limited to, the

functions of each component of plant (treatment, transmission, distribution, etc.), the treatment process, regulatory requirements, including those requiring plant redundancies, regulatory lag, the rate of growth in customers and demand, seasonal demand characteristics, the economies of scale, and the construction time frame.

3. As a part of its rate filing, the utility shall submit historical data for a minimum of five years preceding the test year for the year-end number of customers by class and meter size; the annual sales by class; the annual treated or pumped flows for the system; and monthly system peak day flows.

- 4. Unless otherwise justified, the following margin reserve allowances shall be used:
- a. Water source and treatment facilities and wastewater treatment and disposal facilities: 12 20 percent of the permitted or actual ERC capacity, whichever is greater;
- b. Prudently constructed water transmission mains and offsite wastewater force and gravity collector mains and pumping
 stations: 12 percent of the ERCs capable of being served. enall be
 considered 100 percent use; and useful, and margin reserve shall
 therefore not be a factor.
- c. Non-contributed on-site water distribution mains and services and on-site wastewater collection mains, pumping stations and laterals: 12 26 percent of the ERCs capable of being served.

 d. However, Where the utility demonstrates that such portions

the system will likely reach build-out within 24 36 months after the test year, such portrons of the system shall be considered 100 percent used and useful, and margin reserve shall therefore not be a factor.

e. Where the available capacity exceeds test year required capacity by 500% or more, available capacity shall be the capacity required to serve the anticipated customer base five years in the future.

(b) Fire Flow

- 1. Fire flow shall be considered in used and useful calculations for any utility that requests that fire flow be a consideration it its system requirements.
- 2. An allowance for fire flow shall be included in used and useful calculations up to the capacity of the system. Insufficient capacity to provide adequate fire flows shall not be grounds to exclude fire flows as a factor in determining used and useful; however the Commission may require the utility to take the steps necessary to provide adequate fire flow capacity. In doing so, the Commission shall set a reasonable timetable for compliance and may withhold that portion of the rates associated with the required additions and fire flow capacity allowed, until the requirements set by the Commission are met.
- 3. When fire flow requirements are set by a governmental authority, those requirements shall be the basis for determining the fire flow component of used and useful. In such cases, as part

of its rate filing, the utility shall identify and file with the Commission a copy of the applicable governmental fire flow requirements. In all other cases, unless specific support is provided, the Commission shall consider a minimum fire flow demand to be 500 gallons per minute (gpm) for single family and 1,500 gpm for multiple family and commercial areas for a duration of 2 hours for needed fire flows up to 2500 gpm, and 3 hours for needed fire flows of 3000 and 3500 gpm. Such requirements shall be satisfied without causing deterioration of water pressure below 20 pounds per square inch (psi).

(c) Unaccounted for Water

- 1. The Commission's policy is to recognize conservation of water as a fundamental and proper concern of water system operation. The Commission encourages water utilities to exercise good operational and economic management toward preventing depletion and wasteful use of this important natural resource. Good modern water utility practice dictates that, wherever possible, all customer services and plant output and plant uses be metered and reasonable records be kept.
- 2. Unaccounted for water is all water produced or purchased by a water utility that is neither sold, metered nor accounted for in the records of the utility. Water, other than that sold, that shall be accounted for includes, but is not limited to, water for plant operations, line flushing, hydrant testing, hydrant use, sewer cleaning, street cleaning, line breaks, leakage, theft,

unauthorized use, malfunctions and meter errors.

3. The Commission recognizes that some uses of water are readily measurable and others are not. The Commission encourages each utility to establish procedures to measure or estimate the quantity of water used but not sold, by cause, and to maintain documentation for those measurements and estimates.

4. The Commission shall consider the amount of unaccounted for water in determining used and useful plant percentages expenses and shall allow the American Water Works Association's Standards' design level of leakage (2-3 percent plus the standard 10 percent for a maximum of 12.5 percent) without further explanation. The Commission may impute revenues or reduce purchased power and chemical expenses where inadequate explanation is given for unaccounted for water in excess of this amount.

(d) Infiltration and Inflow

1. The Commission's policy is to consider the impact of infiltration and inflow on wastewater treatment and collection systems in determining the appropriate level of operation and maintenance expenses. Infiltration refers to those extraneous flows (usually from groundwater sources) that enter the wastewater system through openings in pipes that may be caused by normal deterioration, corrosion, or damage from ground movement or structural overload. Inflow refers to extraneous flows from sources other than infiltration, such as surface water run-off into manholes or from unauthorized connections to surface water sources.

Although a utility has little control over the amount of inflow, it shall provide an estimate, with support, of the annual flows in its system due to inflow. Without specific support, allowable inflow will be 7 10 percent of treated flows.

- 2. The Commission recognizes as reasonable the Infiltration Specification Allowances set forth in Water Environment Federation Manual of Practice No. 9. Absent sufficient justification to the contrary, excess infiltration is defined as flows in excess of 500 gallons per day per inch diameter of pipe per mile (gpd/in. diam/mile) for all gravity lines, including service laterals.
- (e) Cost/benefit Analysis The Commission may order a utility to perform a cost/benefit analysis to determine the amount of water losses or wastewater infiltration that may be economically eliminated. If the cost/benefit analysis is ordered by the Commission in the course of evaluating a rate application, the actual or estimated prudent cost of the analysis shall be recovered through the revenues authorized in that rate proceeding, and the cost shall be amortized over three years. If the analysis is ordered outside of a formal rate proceeding, the utility may request the cost be recovered through a limited proceeding pursuant to section 367.0822, F.S.
 - (f) Used and Useful Analysis -
- 1. As a part of its rate filing, each utility shall provide
 a determination of the used and useful percentage for each primary
 plant account along with the supporting formulas and documentation.

2. In lieu of presenting evidence in support of used and useful percentages, the utility may elect to use the default formulas in Rule 25-30.432(6), F.A.C., for calculating used and useful percentages for water supply, treatment, pumping and storage equipment, water transmission and distribution systems, wastewater treatment and effluent disposal equipment, and wastewater pumping and collection systems. The terms used in the default formulas are defined in Rule 25-30.432(7).

- (6) Used and useful default formulas. When the utility demonstrates that the system will likely reach buildout within 24 months after the test year, the system shall be considered 100 per int used and useful. The revenue requirement resulting from this provision shall be phased in over a period of 24 months with a minimum of four steps in rates. The level of anticipated growth must occur for each phase prior to implementation of the respective approved rates.
- (a) Small water systems (less than 1 million gallons per day (MGD) capacity).
- 1. Small water systems (less than 1 MGD capacity) with adequate reliable finished water storage capacity to meet the local fire flow ordinances and to meet the peak hour demand of its customers shall use the following formulas:
 - a. Water source of supply: (Maximum Day Demand + Margin Reserve) / Firm Reliable Capacity

1	<u>b.</u>	Water treatment equipment:						
2		(Maximum Day Demand + Margin Reserve) / Firm Reliable						
3		Capacity						
4	c. Finished water storage:							
5	(Equalization Volume + Fire Flow Requirement + Emergency							
6	Storage + Margin Reserve) / Firm Reliable Capacity							
7	d.	Water high service pumping:						
8		(Instantaneous Demand + Margin Reserve) / Firm Reliable						
9		Capacity						
LO		or, if the utility chooses:						
11		(Peak Hour Demand + Fire Flow Requirement + Margin						
L2		Reserve) / Firm Reliable Capacity						
L3	e.	Other water facilities: 100 percent used and useful						
L4	£.	Water transmission system and distribution systems						
L5		100 percent weed and wseful						
16	g.	Water distribution system non developer related:						
L7	100% used	and vactul						
18	h.	Water distribution system developer related, single						
19	family de	velopments:						
20		((Lots Served + Fill-in Lots + Margin Reserve) / Lots						
21		with Service Available) + Fire Flow Allowance						
22	$g, \frac{1}{4}$	Water transmission and distribution system developer						
23	related,	mixed developments (e.g., single family, multi-family and						
24	commercia	1):						
25		((Connected ERCs + Fill-in ERCs + Margin Reserve) / ERC						

1		Capacity) + Fire Flow Allowance						
2	2.	Small water systems (less than 1 MGD capacity) with no						
3	storage	facilities other than hydropneumatic tanks or with						
4	insuffici	ent storage to buffer the instantaneous demands of its						
5	customers shall use the following formulas:							
6	<u>a.</u>	Water source of supply:						
7		(Instantaneous Demand + Margin Reserve) / Firm Reliable						
8		Capacity						
9		or, if the utility chooses:						
10		(Maximum Day Demand + Fire Flow Requirement + Margin						
11		Reserve) / Firm Reliable Capacity						
12	b. Water treatment equipment:							
13		(Instantaneous Demand + Margin Reserve) / Firm Reliable						
14	Capacity							
15	or, if the utility chooses:							
16		(Maximum Day Demand + Fire Flow Requirement + Margin						
17		Reserve) / Firm Reliable Capacity						
18	c.	Finished water storage: 100 percent used and useful						
19	d.	Water high service pumping:						
20		(Instantaneous Demand + Margin Reserve) / Firm Reliable						
21		Capacity						
22		or, if the utility chooses:						
23		(Peak Hour Demand + Fire Flow Requirement + Margin						
24	Reserve) / Firm Reliable Capacity							
25	e.	Other water facilities: 100 percent used and useful						

+	1.	water transmission system and distribution system t 100
2		percent used and useful
3	g.	Water distribution system non developer related:
4	100 perse	nt used and useful
5	h.	Water distribution system developer related, single
6	family de	velopments:
7		((Lots Served + Fill-in Lots + Margin Reserve) / Lots
8		with Service Available) + Fire Flow Allowance
9	g.i.	Water transmission and distribution system - developer
10	related,	mixed developments (e.g., single family, multi-family and
11	commercia	<u>1):</u>
12		((Connected ERCs + Fill-in ERCs + Margin Reserve) / ERC
13		Capacity) + Fire Flow Allowance
14	(b)	Medium water systems (1 MGD to 5 MGD Capacity):
15	1.	Medium water systems (1 MGD to 5 MGD capacity) with
16	adequate	reliable finished water storage capacity to meet the local
17	fire flow	ordinances and to meet the peak hour demand of its
18	customers	shall use the following formulas:
19	a.	Water source of supply:
20		(Maximum Day Demand + Margin Reserve) / Firm Reliable
21		Capacity
22	<u>b.</u>	Water Treatment Equipment:
23		(Maximum Day Demand + Margin Reserve) / Firm Reliable
24		Capacity
25	C.	Finished water storage:

1		(Equalization Volume + Fire Flow Requirement + Emergency
2		Storage + Margin Reserve) / Firm Reliable Capacity
3	d.	Water high service pumping:
4		(Peak Hour Demand + Margin Reserve) / Firm Reliable
5		Capacity
6		or, if the utility chooses:
7		(Maximum Day Demand + Fire Flow Requirement + Margin
8		Reserve) / Firm Reliable Capacity
9	e.	Other water facilities: 100 percent used and useful
LO	f.	Water transmission and distribution system: 100 percent
11	used	and weeful
L2	9.	-Water distribution system non developer related: 100
L3	percent u	used and useful
L4	b.	Water distribution system developer related, single
15	family de	evelopments:
16		((Lots Served + Fill-in Lots + Margin Reserve) / Lots
L7		with Service Available) + Fire Flow Allowance
18	g.i.	Water transmission and distribution system developer
19	related ,	mixed developments (e.g., single family, multi-family and
20	commercia	11):
21		((Connected ERCs + Fill-in ERCs + Margin Reserve) / ERC
22		Capacity) + Fire Flow Allowance
23	2.	Medium water systems (1 MGD to 5 MGD capacity) with no
24	storage	facilities other than hydropneumatic tanks or with
25	insuffici	ent storage to buffer the instantaneous demands of its

1	customers	shall use the following formulas:
2	a.	Water source of supply:
3		(Peak Hour Demand + Margin Reserve) / Firm Reliable
4		Capacity
5		or, if the utility chooses:
6		(Maximum Day Demand + Fire Flow Requirement + Margin
7		Reserve) / Firm Reliable Capacity
8	<u>b.</u>	Water treatment equipment:
9		(Peak Hour Demand + Margin Reserve) / Firm Reliable
10		Capacity
11		or, if the utility chooses:
12		(Maximum Day Demand + Fire Flow Requirement + Margin
13		Reserve) / Firm Reliable Capacity
14	c.	Finished water storage: 100 percent used and useful
15	d.	Water high service pumping:
16		(Peak Hour Demand + Margin Reserve) / Firm Reliable
17		Capacity
18		or, if the utility chooses:
19		(Maximum Day Demand + Fire Flow Requirement + Margin
20		Reserve) / Firm Reliable Capacity
21	e.	Other water facilities: 100 percent used and useful
22	f.	Water transmission and distribution system : 100 percent
23	used and	u seful
24	q.	Water distribution system non developer related:
25	100 perce	nt used and useful

1	A.	water distribution system developer related, single					
2	family de	velopments:					
3	((Lots Served + Fill-in Lots + Margin Reserve) / Lots						
4	with Service Available) + Fire Flow Allowance						
5	g.i. Water transmission and distribution system - developer						
6	related,	mixed developments (e.g., single family, multi-family and					
7	commercia	1):					
8		((Connected ERCs + Fill-in ERCs + Margin Reserve) / ERC					
9		Capacity) + Fire Flow Allowance					
10	(c)	Large water systems (over 5 MGD Capacity):					
11	1.	Large water systems (over 5 MGD capacity) with adequate					
12	reliable	finished water storage capacity to meet the local fire					
13	flow ordi	nances and to meet the peak hour demand of its customers					
14	shall use	the following formulas:					
15	a.	Water source of supply:					
16		(Average 5 Maximum Days Demand + Margin Reserve) / Firm					
17		Reliable Capacity					
18	b.	Water treatment equipment:					
19		(Average 5 Maximum Days Demand + Margin Reserve) / Firm					
20		Reliable Capacity					
21	c.	Finished water storage:					
22		(Equalization Volume + Fire Flow Requirement + Emergency					
23		Storage + Margin Reserve) / Firm Reliable Capacity					
24	đ.	Water high service pumping:					
25		(Peak Hour Demand + Margin Reserve) / Firm Reliable					

- 1		Capacity
2		or, if the utility chooses:
3		(Maximum Day Demand + Fire Flow Requirement + Margin
4		Reserve) / Firm Reliable Capacity
5	e.	Other water facilities: 100 percent used and useful
6	f.	Water transmission and distribution system : 100 percent
7	used end	usefuk
8	gı	Water distribution system non-developer related: 100
9	percent-	ised and useful
10	h	Water distribution system developer related, single
11	family de	evelopments:
12		((Lots Served + Fill-in Lots + Margin Reserve) / Lots
13		with Service Available) + Fire Flow Allowance
14	g. 1	Water transmission and distribution system - developer
15	related,	mixed developments (e.g., single family, multi-family and
16	commercia	<u>al):</u>
17		((Connected ERCs + Fill-in ERCs + Margin Reserve) / ERC
18		Capacity) + Fire Flow Allowance
19	2.	Large water systems (over 5 MGD capacity) with no storage
20	facilitie	es other than hydropneumatic tanks or with insufficient
21	storage t	to buffer the instantaneous demands of its customers shall
22	use the	following formulas:
23	a.	Water source of supply:
24		(Maximum Day Demand + Fire Flow Requirement + Margin
25		Reserve) / Firm Reliable Capacity

-	<u> </u>	water creatment equipment:
2		(Maximum Day Demand + Fire Flow Requirement + Margin
3		Reserve) / Firm Reliable Capacity
4	c.	Finished water storage: 100 percent used and useful
5	<u>a.</u>	Water high service pumping:
6		(Peak Hour Demand + Fire Flow Requirement + Margin
7		Reserve) / Firm Reliable Capacity
8	<u>e.</u>	Other water facilities: 100 percent used and useful
9	f.	Water transmission and distribution system : 100 percent
10	uecă ană	weeful
11	9.	Water distribution system non developer related: 100
12	pe gent v	ocă ană usoful
13	b.	Water distribution system developer related, single
14	family de	evelopments:
15		((Lots Served + Fill-in Lots + Margin Reserve) / Lots
16		with Service Available) + Fire Flow Allowance
17	g. <u>i.</u>	Water transmission and distribution system developer
18	related,	mixed developments (e.g., single family, multi-family and
19	commercia	1):
20		((Connected ERCs - Fill-in ERCs + Margin Reserve) / ERC
21		Capacity) + Fire Flow Allowance
22	<u>(d)</u>	Wastewater systems:
23	1.	Wastewater collection system and pumping stations - non-
24	developer	related: 100 percent used and useful
25	2.	Wastewater collection system and pumping stations

1	developer related, single family developments:
2	(Lots Served + Fill-in Lots + Margin Reserve) / Lots with
3	Service Available
4	2.3. Wastewater collection system and pumping stations
5	developer related, mixed developments (e.g., single family, multi-
6	family and commercial):
7	(Connected ERCs + Fill-in ERCs + Margin Reserve) / ERC
8	Capacity
9	4. Nastewater force mainer 100 percent used and useful
10	3.5. Wastewater treatment equipment:
11	(Maximum Month Flow + Margin Reserve) / Firm Reliable
12	Capacity
13	4.6. Effluent disposal facilities:
14	(Maximum Month Flow + Margin Reserve) / Firm Reliable
15	Capacity
16	5.7. Other wastewater facilities: 100 percent used and useful
L7	(7) Definitions - the following definitions apply to the
18	default formulas in Rule 25-30.432(6), F.A.C., for determining used
19	and useful water and wastewater facilities.
20	(a) Average 5 Maximum Days Demand - the average of the 5 days
21	with the greatest demand attained by a water system during the past
22	5 years, exclusive of emergency or fire flow events.
23	(b) Effluent Disposal Facilities - this includes, but is not
24	limited to, the transmission lines, percolation and evaporation
25	ponds, sprayfields, irrigation systems, and deep wells utilized in

the disposal of effluent or reclaimed water.

- (c) Emergency Storage that storage required by a water system to meet the emergency-like demands of the customers. Typically, Emergency Storage is made available when it is more cost effective to provide the storage and pumping facilities than to add redundancy to the system for emergency conditions. The quantity of Emergency Storage need is a function of the duration of the emergency condition and is typically assumed to be approximately one half of the average annual daily demand.
- (d) Equalization Volume the quantity of storage in a water system necessary to meet the customers' greatest demands which are beyond the throughput capacity of the source of supply or water treatment equipment.
- (e) Fill-in Lots 7% of actual test year ERCs The total number of unoccupied residential lots on isolatable sections of the distribution system in which at least 25 percent of the lots are currently, or in the past have been provided active water or we stewater service, as applicable.
- (f) Fire Flow Allowance an allowance for the capacity of a water distribution system, calculated as one ERC for each working fire hydrant using the following formula:

Fire Flow Allowance - (Fire Flow Requirement / (Fire Flow Requirement / (Fire Flow Requirement / Maximum Day Demand)) X (1 ((Average number of ERCs connected to the distribution system | Margin Reserve in ERCs) / Capacity of the distribution system in ERCs))

(g) Fire Flow Requirement - as defined in 25-30.432(5)(b), F.A.C.

(h) Firm Reliable Capacity - the capacity of a particular component of a water or wastewater facility in which at least the largest unit is assumed to be out of service. If the used and useful category contains several components, the Firm Reliable Capacity is assumed to be the limiting component in that category with the largest unit out of service. For finished water storage, the Firm Reliable Capacity excludes any unusable or dead storage.

(i) Instantaneous Demand - the greatest demand that a water system attains. It is typically used only as a design criteria for small water systems with no storage and a small distribution system that does not have the ability to absorb these instantaneous demands through depressurization of the distributions system. Rule 25-30.432(8), F.A.C., shall be used to determine the instantaneous demand unless specific quantitative information indicates greater demands.

(i) Large Water System - a system that has a reliable capacity of more than 5 million gallons per day. Based upon Rule 17-699.310(4), F.A.C., operation requirements, a Large Water System would require at least one shift per day of operations for a Category IV or V system (aeration or chlorination) and at least a double shift of operations for Category I, II, or III (filtration, softening or reverse osmosis).

(k) Lots Served - the total number of residential lots that

are currently, or in the past have been, provided active water or wastewater service, as applicable, plus lots occupied but never connected to the system that are capable of being provided service by the existing distribution or collection system.

- (1) Lots with Service Available the total number of residential lots that currently have the water distribution or wastewater collection system, as applicable, immediately available.
 - (m) Margin Reserve as defined in 25-30.432(5)(a), F.A.C.
- (n) Maximum Day Demand the maximum daily demand that a water system attained during the past 5 years of time, exclusive of emergency or fire flow events. Typical design criteria allow .55 gpm per ERC.
- (o) Maximum Month Flow the average daily flow through a wastewater treatment facility for the month with the highest total flow during the past five years.
- (p) Medium Water System a system that has a reliable capacity of between 1 million gallons per day and 5 million gallons per day. Based upon Rule 17-699.310(4), F.A.C., operation requirements, a Medium Water System would require less than 24 hours per day operation but reater operational requirements than a small system.
- (q) Other Wastewater Facilities this includes, but is not limited to, disinfection units, emergency generators, auxiliary engines, customer service laterals, laboratory equipment, utility office and other general plant and equipment used in the operation

of a wastewater system.

(r) Other Water Facilities - this includes, but is not limited to, disinfection facilities, emergency generators, auxiliary engines, customer service lines and meters, laboratory equipment, utility office and other general plant used in the operation of a water system.

- (s) Peak Hour Demand the greatest demand attained by a water system over a sustained period of 60 minutes. Typical design criteria allows for a Peak Hour Demand of 2 times the maximum day demand or 1.1 gpm per ERC.
- (t) Small Water System a system that has a reliable capacity of less than 1 million gallons per day. Based upon Rule 17-699.310(4), F.A.C., operation requirements, a Small Water System would require less than 1 hour per day visit for a Category IV or V system (aeration and chlorination) and less than 8 hours of operation for a Category I, II or III system (filtration, softening or reverse osmosis).
- (u) Wastewater Collection System and Pumping Stations this Includes, but is not limited to, all the gravity collection lines from the customer sewer lateral to and including the wastewater pumping stations.
- (v) Wastewater Force Mains this includes, but is not limited to, the force mains from the discharge of the pumping stations to the influent structure at the wastewater treatment facilities.

1	(W) Wastewater Treatment Equipment - this includes, but is
2	not limited to, the influent structure, pretreatment facilities,
3	pumping, aeration, clarification, filtration, chlorine contact and
4	effluent pumping equipment.
5	(X) GPD - Gallons per day.
6	(v) GPM - Gallons per minute.
7	(2) FRC - Equivalent residential connection.
8	(aa) SFR - Single family residence. see ERC.
9	(8) Unless specific quantitative information indicates
10	greater demands, a water system's Instantaneous Demand, for
11	purposes of determining used and useful, will be calculated from
12	the following table:
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. 1	INSTANTANEOUS DEMANDS PER ERC								
2	No.	<u>Instantaneous</u> <u>Demand</u>	No.	<u>Instantaneous</u> <u>Demand</u>	No.	<u>Instantaneous</u> <u>Demand</u>	No.	<u>Instantaneous</u> <u>Demand</u>	
3	ERCs	(GPM)	ERCs	(GPM)	ERCs	(GPM)	ERCs	(GPM)	
4	_1	15	26	124	<u>51</u>	203	_76	279	
5	_2	20	27	128	52	206	77	282	
6	3	25	28	132	53	209	78	285	
7	4	30	29	136	54	212	79	288	
8		35	30	140	55	215	80	291	
	6	40	31	143	56	218	81	294	
9	_7	45	32	146	<u>57</u>	221	82	297	
10	_8	50	33	149	58	224	83	300	
11	9	55	34	152	59	227	84	303	
12	10	60	35	155	60	230	85	306	
	11	64	36	158	61	233	86	309	
13	12	68	37	161	<u>62</u>	237	87	312	
14	13	72	38	164	<u>63</u>	240	88	315	
15	14	76	39	167	<u>64</u>	243	_89	318	
16	<u>15</u>	80	40	<u> 170</u>	<u>65</u>	246	90	321	
17	<u>16</u>	84	41	<u>173</u>	<u>66</u>	249	91	324	
	17	88	42	<u> 176</u>	<u>67</u>	252	92	327	
18	<u>18</u>	92	<u>43</u>	<u> 179</u>	<u>68</u>	255	93	330	
19	19	96	44	182	69	258	94	333	
20	<u>20</u>	100	<u>45</u>	185	<u>70</u>	261	95	336	
21	21	104	<u>46</u>	188	<u>71</u>	264	96	339	
	22	108	<u>47</u>	<u>191</u>	<u>72</u>	267	97	342	
22	23	112	48	194	<u>73</u>	270	98	345	
23	24	116	49	197	<u>74</u>	273	99	348	
24	<u>25</u>	120	<u>50</u>	200	<u>75</u>	<u>276</u>	100	<u>351</u>	
25	For sv	stems greater th	an 100	FRCs. ID = 351	y FRCe	/100 in GPM			
	For systems greater than 100 ERCs, ID = 351 x ERCs/100 in GPM								

25-30.435 EXHIBIT CHH 4

25-30.435 Application for a Rate Increase by an Applicant that Owns Multiple Systems.

This section applies to any applicant filing under Chapters 367.081 or 367.082, F.S., that owns more than one regulated system, either water or wastewater, regardless of county boundaries. This section does not apply to an applicant filing under Chapter 367.0814. In any rate proceeding involving utilities with multiple systems, only those allocated costs established by the commission of suant to this rule shall be allowed. An applicant must file pursuant to either subsection (1) or subsection (2). A waiver of the provisions in this rule may be granted by the Commission for good cause shown.

(1) The applicant shall include and file in a single application for a rate increase, the Minimum Filing Requirements as specified in 25-30.432, 433, 436, 437, 4385, 4415, and 443 for all jurisdictional systems owned.

(1) The applicant shall include and file the required information on all jurisdictional systems owned in the application for a rate increase regardless of whether or not the applicant is seeking a rate increase for all systems.

fa) (2) The determination of the need for a rate increase shall be made based upon the total earnings of all jurisdictional water and wastewater systems owned by the applicant.

(b) (3) After an applicant has filed an application under

this subsection rule, any need for a rate decrease shall be based on the total earnings of all jurisdictional systems owned by the applicant.

(c) (4) The applicant shall file sufficient data for nonjurisdictional systems to demonstrate that the allocation of joint
and common costs to the jurisdictional systems is appropriate.

<u>(d) (5)</u> One capital structure shall be used and is to be calculated based on all jurisdictional and nonjurisdictional systems.

(6) A waiver of the provisions in this rule may be granted by

(2) The applicant shall include and file the Minimum Filing Requirements as specified in 25-30.432, 433, 436, 437, 4385, 4415, and 443 for the jurisdictional system(s) included in the application for a rate increase.

(a) The determination of the need for a rate increase shall be made based upon the earnings of the system(s) included in the application.

(b) The amount of all ocated cost allowed in the application for a rate increase shall be the amount determined by the Commission pursuant to subsection (d) of this rule.

(c) The applicant shall file the following cost information no later than March 31st of each year;

(1) The total costs being allocated prior to any allocation as well as the source of the allocation.

(2) A detailed description of the costs being allocated.

- (3) The allocation method used and the basis for using that method.
- (4) Sufficient data for non-jurisdictional systems to demonstrate that the allocation of joint and common costs to the jurisdictional systems is appropriate.
- (d) The Commission shall enter its vote, before July 1st of each year to:
- (1) Determine the prudency of the total costs filed pursuant to (c) (1) above;
- (2) Establish the appropriate method for allocating the prudent costs, and;
- (3) Establish the specific amount of total cost to be allocated to each system.
- (4) In the even of a protest, the Commission shall hold an evidentiary hearing pursuant to 120.57 F. S.