# BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: Application for certificate to provide wastewater service in Charlotte County, Florida by ISLAND ENVIRONMENTAL UTILITY, INC.

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Docket No. 020745-SU

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# DIRECT TESTIMONY OF

## JAMES A. ELDER, P.E.

## FILED ON BEHALF

## $\mathbf{OF}$

# ISLAND ENVIRONMENTAL UTILITY, INC.

07536 AUG 15 3

FPSC-COMMISSION CLERK

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## **Q:** What is the purpose of your testimony?

- A: The purpose of my testimony is to describe the financial condition of the
  Utility and discuss the financial ability of the Utility and its shareholders to
  deliver the wastewater services it is applying for.
- 5 Q: DOES THE UTILITY HAVE THE FINANCIAL ABILITY TO SERVE THE 6 PROPOSED AREA?
- 7 A: Yes. Because the Utility is not yet in operation, nor will it be, unless and 8 until certificated by the Commission, it does not have financial statements 9 based on actual operations. In its day-to-day operations initially, the Utility 10 will rely on the financial resources of its shareholders, Dean Beckstead and 11 Jack Boyer. There are no written financing agreements with the Utility, 12 however, and all permanent funding for the Utility will either come from the 13 Utility's shareholders or through bank financing which will be guaranteed by 14 the Utility's shareholders.
- The Utility has prepared a cost study showing the basis for the Utility's projected investment, CIAC, capital structure, return on investment, expenses, revenues, and customer growth and demand at 80% and 100% of design capacity, the Orcert.wk3 program provided by Commission Staff. The report is attached as Exhibit \_\_\_\_ (JAE -1).

# 20 Q: WHAT IS THE APPROPRIATE RETURN ON EQUITY FOR THE UTILITY?

A: I used the formula established by the Commission in its Order No. PSC-030707-PAA-WS in Docket No. 030006-WS, attached as Exhibit (JAE-

1		2). As shown on Exhibit (JAE-1), the result is 10.1%, which is well
2		within the range of 9.68% to 11.96% established by the Order.
3	Q:	WHAT ARE THE APPROPRIATE WASTEWATER RATES AND CHARGES FOR
4		THE UTILITY?
5	A:	Exhibit (JAE-1) contains a cost study showing the basis for the Utility's
6		projected investment, CIAC, capital structure, return on investment,
7		expenses, and customer growth and demand at 80% of design capacity, a
8		revenue proof, and tariff reflecting the proposed rates and charges for
9		wastewater service. It reflects a base facility charge of \$18.82 per ERC, and
10		a gallonage charge of \$10.20 per 1,000 gallons with a maximum of 10,000
11		gallons. Based on the seasonality of the residence, I believe that a base
12		facility charge of \$45.14 and a gallonage charge of \$2.80 is more appropriate.
13	Q:	WHAT ARE THE APPROPRIATE SERVICE AVAILABILITY CHARGES FOR THE
14		UTILITY?
15	A:	Exhibit (JAE-1) also contains a cost study showing the Utility's proposed
16		service availability charges and related charges. It shows that a connection
17		fee of \$4,806 per ERC is appropriate. Of this, \$830 is the plant portion of the
18		Englewood Water District's capacity fee.
19	Q:	HAVE YOU PREPARED A MAP OF THE PROPOSED COLLECTION SYSTEM?
20	A:	Yes. Attached to my testimony as Exhibit (JAE-3) is a map showing the
21		proposed location of the collection system.
22	Q:	DOES THAT CONCLUDE YOUR TESTIMONY IN THIS DOCKET?

A: Yes, it does.

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## BEFORE THE PUBLIC SERVICE COMMISSION

# REGARDING THE APPLICATION FOR CERTIFICATE TO PROVIDE

## WASTEWATER SERVICE IN

# CHARLOTTE COUNTY, FLORIDA BY

## ISLAND ENVIRONMENTAL UTILITY, INC.

Docket No. 020745-SU

## EXHIBITS TO

# DIRECT TESTIMONY OF

## JAMES A. ELDER, P.E.

Exhibit No. \_\_\_(JAE-1)

Pro forma Financial Information

Commission Order PSC-03-

Exhibit No. \_\_\_\_ (JAE-2)

0707-PAA-WS

Exhibit No. \_\_\_ (JAE-3)

Map of Service Area

Exhibit \_\_\_\_ (JAE-1)

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Scheduls, of Wastewater Operations At 80% of Design Capacity

Description	Bolance Per Ublity	Staff Adjust	Bai ance Per Statt
Operating Revenues	432,000	338,854	770,854
Operating and Maintenance	312.651	۵	312,651
Depreciation Expense	31,235	<del>ዘ</del> ዊ	56,243
Takes Other Than Income	19.440	34,690	54,030
Income Takes	20.000	[] [90]	<b>16</b> ,310
Tutal Operating Expenses	383.385	55.948	<u>439,334</u>
Net Operading Iscome	48.6.14	282.906	331250
Rate Base	481337		1405,430
Rate of Aeturn	10.10%		23.59%

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## ISLAMO ENVIRONMENTAL UTILITY, INC. Schedule of Capital Structure Rt 80% of Design Copacity

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DOCHET NO 20745-SU

Schedme No. 3

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Description	Batance Per Filing	Staff Adjust	Balance Per Staft
Utility Plant in Service	1514.046	891.543	2505589
Laná	480,000	120,000	500.00D
Accumulated Depreciation	(3 <del>41,2</del> 30)	[108.964]	["ይርዝ]
Contributions in - aid-of-Construction	(1.556,500)	162,100	(1.394,400)
Accumulated Amortization of C.I.A.C.	249,040	(140,587)	108,453
Working Capital Allowance	39.001	0	39,081
TOTAL	481.337	924,093	1,405,430

ISLAND ENVIRON/ LEWTRE UTILITY, INC.

## Scheine of her Plant is her CLAC. At 100% of Design Capacity

# DDCH{1 ML 20745-SU

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ISLAND ENVIRONMENTAL UTILITY, INC.

Calculation of Minimum Westerbeter CLAC

At 1029s of Design Capacity

DOCKET ML 20745-50

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ISLAND EMURDAMENTAL UTILLIV, IML Scheddie af Werzewaer Operation and Makinenaace Per Slatt Ducket MD 20745-SU

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## ISLAND ENVIRONMENTAL UTILITY, INC.

## Schedule of Daslewater Yanes Other Than locome Per Staff

## DOCHET NO. 20745-Sti

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Account Number 408 10	Rccount Description Utility Regulatory Rssessment Fees	Balance Per ENIng	Stefi Refust.	Balance Per Statl	Required Reveaue Rejust	Acquireé Acquireé
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#### AND EAVIBORMENTEL UTILITY, INC.

#### reduce of Wastewater Datity Plant In Service

Stall HET NO 20745-50

	Avera	year l	Yeor 1	Year 2	460° 2	Year 3	Year 3	Year 4	469. A
Account	Recount	Bácitions	Belance	Rdélions	Balance	Addices	Balance	Richtions	Balance
fimber	Description	<b>U</b> AMUANS	QPERT E						
351	Organization	20,000	20.000	0	20 000	đ	20.000	۵	20,060
352	Franchises	1.500	1,500	1,500	3.000	1,500	4,500	1,500	5,000
353	Land and Land Pichts	400,000	400.000	g	400.000	\$0.000	450,000	50.000	500,000
354	Structures and Improvements	0	9	184,000	184.000	٥	194,000	٥	184,000
350	Callecoan Sewers - Force	0	0	5	D	0	8	9	0
351	Collection Sewers - Gravity	5	0	210,894	158612	219,894	421,783	210,854	\$32,532
362	Special Collecting Structures	0	5	3	0	8	0	٥	Û
363	Services to Cestomers	ĝ	C	C	8	3	0	0	G
364	Flow Measuring Geoises	0	9	5.000	5.000	0	5.000	0	S,000
355	Flow Measuring Installations	C	σ	٥	0	٥	g	g	5
370	Accessing Wells	8	đ	93 <b>913</b>	93 913	93,913	187 825	93 913	281 738
371	Pumping Equipment	٥	٥	0	٥	đ	٥	0	0
380	Treatment and Oisposal Equipment	G	C	٥	٥	٥	0	٥	0
381	Plan Sewers	0	a	0	0	0	a	0	۵
385	Out til Stater Lines	120,750	120,750	0	120.750	0	120 750	0	120,750
389	Other Plant and Miscellanzous Equipment	0	Q	٥	0	0	0	0	٥
390	Cilice furniture and Equipment	0	Û	0	٥	٥	C	0	0
39}	Transportation Equipment	30,008	30.008	0	30,600	8	30,000	8	30.000
392	Stores Equipment	۵	0	٥	0	0	a	0	٥
393	Teols, Shop and Gerage Louipment	30,000	30,000	0	30 050	۵	30,000	Q	30,000
354	Laboratory Equipment	0	0	3	9	0	٥	0	Q
395	Power Operated Couloment	D	0	264,500	254,500	C	284,500	0	264.500
395	Communication Equipment	5.600	5,660	0	5 600	8	S 000	500	5,580
397	Hiscelleneous (gwymen)	6	G	9	6	0	0	6	Û
398	Elber Tangible Plan	0	00	0	0	ů	0	0	00
	IOTAL PLANT	607,250	507,250	759,806	1,367,055	356,307	1,723,363	355,805	2.080,170
									·
	LAN0 =	400.000	400.000	00	400.009	\$0,000	450 000	58.000	500.000
	TOTAL DEPRECIABLE PLANT	207,250	207,250	759,805	967 055	306,307	1 273,363	305 805	1 500 170
	-			144,004	619.105	101.000	10/3.303	303 609	1,580 170

## ISEAND ENVIRONMENTRE UTILITY. INC Schedule of Wastewater Unity Plant In Service Pår Statt VOCKET ND. 2029/5-50

Account	Account									
fumber		Year 7	¥ear 7	Yest 8						
	Description	Reditions	Balance	-	Year 8	Year g	Year g	Year IC		
351	Dr ga mzatlon			Béditions	Balance	Récilions	Bolsace	Adenticas	Year 10	Usefut
352	Franchises	G	20.000					alling a	Balaace	ili.
353	Land and Land Aughts	1.500	10,500	0	20,000	Ð	20 000			
354	Structures and Improvements	50,000	500.000	1.500	12.000	1,500	13.500	0	20,000	40
369	Eollection Sewers - Force	Û	184 063	Ű	500 000	Û	500,000	1.500	15,000	40
351	Collection Sewers - Growng	Û	8	Û	124,000	۵	184,000	0	600,000	RR.
362	Special Cattering Structures	210,89%	1,054,470	0	٥	Q	101,010 B	8	184,000	32
383	Services to Castomers	ů.	0	210,894	1,265 364	0	1,255,364	٥	ũ	30
35 <del>4</del>	flow Measuring Dewises	0	1	Û	0	a	1223.304	0	L265 354	45
365	flow Measuring Installations	Û	la 652	ũ	0	C	-	C	Ø	40
	Receiving Wells	0	10 509 G	Ø	10,000	0	0 10 mm	0	D	38
371	Pumping Equipment	93,913	469,563	0-	C	0	10 000	5.000	15,000	s
380	Treatment and Disposal Equipment	D		93,913	563,475	n.	0	0	Ū	s
381	Plant Sewers	٥	C C	٥	۵	n	563,475	0	553,475	30
	duttell Sewer Lines	0	a	ũ	٥	C C	0	0	0	18
389 O	Ther Flant and Hiscellanzoes Equipment	D	120,750	D	g	n	0	0	Ø	13
390 Di	flice formure and Equipment	Ø	0	Û	120.750	n	0	٥	D	3
	ensportation Equipment	0	G	D	8	Ċ	120.250	Ø	120,750	30
	ires Equipment	٥	30,000	0	٥	a	0	٥	G	25
393 Toc	NS. Sdop and Gorage Equipment	Ø	0	٥	30.000	0	0	0	0	15
	oretary Louipment	0	30,000	٥	٥	n n	30 600	0	30,000	5
	er Operated Equipment	0	5	0	30 000	a a	D	٥	٥	19
	nunication Equipment	Û	254,500	G	0	а л	30,000	0	30,000	13 18
397 Misc	ellenzous faulament	٥	5.507	٥	264,500	1	0	a	G	15
398 Dther	Tangible Plant	G	ງມນບ	đ	5,500	0	264.500	G	284,500	
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Account

## SLAND EAVIANN (NTR. UTILITY, INC ichedale al wasiewaler utiling Plant in Service

# er Staff

DCKET NO 20745-SU

Accaunt Number	Accoent Description	Commission Depreciation Bate	Weight	Composite Depreciation	
351	Brganization			Bate	
352	Franchises	2.50%	0 80%		
353	Load and Lond Rights	2.50%	0.50%	0.02%	
354	Strozfures and Improvements		0.007	() (31 <b>6</b> 1	
350	Collection Sewers - Force	3.13%	7.32*	0.00%	
351	Collection Sewers - Gravity	1374	7.3C% 0.00%	0 23%	
352	Special Collecting Structures	2.223	50.34%	0 00%	0.00%
363	Services to Eustomers	2.50%	0.00%	1125	100.00%
364	flow Heesenag Bevises	263%	0.00°,	0.00	0.00%
355	flaw Heasuring Instationans	20.00%	0.00-s 0.50-s	6 60%	
370	Receiving Wells	20 00%	9 00%	0125	
37]	Pumping Eaulpment	3 33%	22423	0.00%	
360	Treatment and Disposal Equipment	5.56%	0.00%	0 75 <b>%</b>	
	Plant Sewers	5.55%	0 00% 0 00%	0 00%	
	Duffall Sewer Lines	2855	0 80%) 0 80%)	0 60%	
	ther Plant and Hiscotlaneous Equipment	1.33%		000%	
390 G	fice Forolitore and Equipment	4 60%	4 80% 0.00%	0 15h	
391 Ir	ansportation Equipment	6 67%	0.00%	0 CC*5	
	ores Equipment	15.57		0 BC%	
	%s. Shop and Garage Equipment	5 56%	119%	0.50%	
394 Lai	loratory Equipment	8.25%	0 00% 1 00%	0.00%	
	ier Opersted Equipment	6 <b>57</b> %	1195 0605	0 07%	
	municadoa Equipment	8 33%		0 00%	
	elloneous Equipment	10 004	10.52% 0.22%	0 38%	
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		10 00%	8 00%	0 CG 5	
	TOTAL PLANT		0.03.3	0 00%	
			105 00%	3584	
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000% 2.22% 000%

2225

TOTAL DEPRECIABLE PLANT

#### SLAMO ENVIRONMENTAL UTILITY, INC.

#### cliegate of Wastewater Accomutated Represiona

er Statt ICKET NO 20245-SU

Vear 3 Year 1 4285 4 Vear 4 9ear 2 Year I 922F 1 Year 2 Account Account Beditlans Bolages 866iusas Belance Salance Sidness Beleace **Bootings** flumber. Description 1,750 500 351 Ør ganization 250 250 500 750 500 1,250 300 56 75 94 169 131 352 Franchises 19 13 Q 353 Lond and Lond Rights û g Û ٥ 0 ۵ 0 354 Strectures and Improvements g 2,875 2.875 5,750 8,625 5,750 N.375 0 350 Collection Sewers - Force 8 ۵ 8 0 ũ. 6 0 Ø 361 Collection Sewers - Gravdu ũ 2,343 2,343 7,030 9.373 11,716 21,089 n 352 Special Collecting Structures Ũ 8 ā 0 8 Ŭ. R Ø 363 Services to Customers đ 3 ប 8 Ũ 8 8 0 364 Flow Measuring Deutses ũ 8 500 500 1.000 1.500 1,000 2.500 365 flaw Measuring Installations ۵ ۵ ۵ 3 8 J 9 û 370 Receiving Bells 8 1.555 Ð 1,565 FH.067 4,636 6.28) 7.926 371 Pemping Equipment Û 8 0 G Q ۵ 0 ٥ 336 Treatment and Disposel Equipment Û Ø ٥ 3 0 1 đ 8 381 Plant Sewers 8 3 n 0 Û ٥ Û ß 382 Butfall Sewer Lines 2,013 2,613 4,025 **6 0**38 4 025 10.063 4,025 14,088 389 Other Plant and Miscellaneous Equipment 9 đ 0 ۵ a ß ٥ Ð 330 Office Furniture and Equipment ថិ ۵ 8 0 9 8 đ ß 391 Fransportation Equipment 2,500 2.500 5,000 7,500 5,000 12,500 17,500 5,000 392 Stores Equipment 8 1 5 ۵ n 9 0 0 Tools Shop and Garage Equipment 393 938 938 1875 2,813 1875 4,588 1,875 6,563 334 Laboratory Equipment Q 8 ð Û 2 A C Q 395 Power Operated Equipment 0 8 11.821 11 021 22 OH 2 33,863 519.55 55.10H 395 Communication Equipment 250 250 590 750 500 1,250 525 1,775 397 Hiscellaneous Equipment 0 Û 0 ۵ û g 0 ٥ 338 Other Tangible Plant 0 Ĝ 8 0 û ٥ 0 8 TOTAL PLANT 5,969 5 959 30,261 35,229 52.51) 88,**7**40 80 390 143,130

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68 770	217,500	73 216	29),116

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## SLADD EAVIADATTENTAL UTILITY, INC. chedule of Wostewater Accumulated Depreciation er Staff XCHET AD 20745-SU

Account	Recount
Number	Bescription
	351 Ofgenization
	52 Franchises
	53 Load and Load flights
3	54 Structores and Improvements
36	0 Collection Sewers - Force
35	1 Edlection Sewers - Gravky
36	
353	
354	
355	flow Measuring Installations
370	Receiving Wells
371	Pumping Equipment
380	Treatment and Disposal Equipment
381	Plant Sewers
385	Outfall Sewer Lines
389	Other Plant and Miscellaneous Equipment
390	Office furniture and Equipment
391	Transportetion Equipment
392	Stores Loupment
393	Tools. Shap and Garage Equipment
334	Lebarotary Lawpment
395	Power Darries Found

- 395 Power Operated Equipment
- 396 Eanmenication Equipment
- 397 Miscellaneous Equipment

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398 - Other Tacquile Plant

#### SLAND ENVIRONMENTAL UTILITY INC.

#### chedule of Wastewater Rocumulated Depreciation

er Stall Icket no 20745-su

Year 10 Year 10 P 1884 Yeat 7 Year 8 Vear 8 922¢ 9 Year 7 Recount Recount Balance 8000iens **Bécilians** Balance Edditions Balance Réditions Belance Description តីមភាជឧក 500 4,750 500 3,750 500 4,250 500 3,250 351 Grganization 319 1,519 358 1,875 135 1 200 352 Franchises 219 919 1 Û 0 8 Û 0 353 Lend and Lend Alghes Q Û 48,875 31,525 5,750 37,375 5,750 43,125 5,750 394 Structures and Improvements 5,750 5 350 6 Collection Sewers - Force 0 Û 0 Ű ð N 159,342 381 Collection Sewers - Gravity 2) 099 77,328 25,778 HOI EDI 28,119 131,223 28,82 382 Special Collecting Structures ۵ 0 9 Ø ٥ ۵ 0 Ũ 363 Services to Costomers 8 8 G 9 Ũ 8 S ۵ 364 Flow Measuring Devises 2.000 8,000 2 898 10 000 2.008 12 000 2.500 14 SCO 365 flow Measuring Installations ۵ Q Ũ 3 ſ 6 8 0 370 Receiving Wells 79 087 51,852 17,217 58 659 18 793 87,652 18 783 106,434 37) Pemping Equipment Ç 0 G 6 ٥ 3 0 8 399 Treatment and Disposal Covipment 8 Û 1 3 9 ũ đ 0 Plant Sewers 38I ۵ ۵ 9 0 8 8 ۵ Û 382 Outical Secure Lines 4,025 25,163 9,025 30,188 4,025 34.213 4 D2S 38,239 389 Miter Plam and Miscellaneous Egoloment 8 8 3 9 8 Ø 8 8 390 Office Ferature and Equipment g Û ß ß 0 Û 0 0 39ł Transportation Compment 5 008 32,500 5,000 37,500 5,000 42,500 5,000 47,500 392 Stores Equipment Q 8 0 8 8 ٥ 8 ٥ 393 Tools, Shop and Garage Equipment 1.875 12,188 1,875 14,063 1,875 15,938 1,875 17,813 39H Laboratory Equipment 8 Q 8 8 8 8 8 0 395 Power Operated Equipment 22,092 121,229 55 GHZ 143,271 22 **0**42 165 313 22.042 187,354 395 Communication Equipment 555 3,425 550 3 975 550 4,525 550 5,07\$ 397 Miscellaneous Equipment ß 0 D 3 0 0 0 8 <u>109</u> Other Tangible Plant 8 8 ٥ û a ß Û ٥ TOTAL PLANT 77,162 358 278 85,015 453,294 88 962 542,255 89,500 531,755

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IS 493	35,413	19,520	\$5.313
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#### ISLAMO ENVIRONMENTAL UTILITY, INC. schedule of Westewater Contributions-In-Ald-of-Coastraction 'er Staf!

## OCKET NO. 20745-SU

Accoani Number 271	EMTER EACS CLAC - Unes	Accean Description	 Year I Bildileos 30	Vesr   Sələner 30	Yzar 2 Rdáltons	Ven 2 Balance	Year 3 Additeas	Year 3 Bola <u>nce</u>	Year 4 Adaliicas	Veor 4 Belonce
	LIAC - Cosk CIAC - Other	TOTRL	 0 0 0 0	0 8 0	80 199,200 0 51	0 03.291 01	80 199200 0 0	190 398,400 6 0	80 199,200 0 0	270 597,500 0
				<u>U</u>	199,200	199,200	199 200	398.400	199,200	597 500

## ) ENVIRONMENTAL UTILITY, INC.

ute of Accumulated Amortization of Wasizwater C.I.R.C.

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NO 20745-SU

Rccord Description Rccom Amortization of CIRC, - Lines Rccom Amortization of CIRC, - Cash Rccom, Rmortization of CIRC, - Cash Rccom, Rmortization of CIRC, - Other	Year } Additions O	4ser I Bèlagos	Year 2 Bidddags D 2.213	Year 2 Balaece 2,233	Year 3 Réditions	Year 3 Balance	Year 9 Rádacteas	¥zar 4 Bolosce
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ISLAND ENVIRONMENTAL UTILITY, INC. Schedule of Wastewater Contribution<del>s in all of Construction</del>

Per Staff

### DOCHET NO 20745-SU

Recount Tumber		Account Description	
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271	CIAL - Lines		
	LIRC Cash		
	LIRC - Other		
		TOTR	

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touat nder	RECOUNT	
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272	Rccum Rmartization at CIRC Lines Rccum, Rmartization at CIRC Cash Accum, Rmartization at CIRC Caher	

TOTAL

#### ISLAND ENVIRONMENTAL UTILITY, INC.

#### Scheeme of Wastemater Contributions-In-818-01-Construction

Per Stall

DOCKET NO 20745-SU

Rccount Komber	Account Bescription	Year 7 Additions	4eer 7 Balo <u>nce</u>	Yzər 8 Ródizens	Veor B Balance	Yesc 9 Rdd:160s	Year 9 Belance	Year 10 <u>R</u> éditions	Vear 10 Relance
	LATER EACS	80	510	80	590	80	670	80	750
271	CIRC - Lines	195,200	1,195,200	199,200	1,394,400	199,200	1,593,600	٥	1,593,600
	CIRC - Casa	0	0	C	δ	۵	٥	9	8
	CIRC - Other	0	0	1	Ĵ	0	0	00	0
	TOTRE	199 200	1.195.200	199 200	1,394,400	199 200	1.593,600	<u>0</u>	1,593,600

10 EAVIAGOMMENTRE UTILITY, INC.

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T NO. 20745-SU

Count mber	Accourt Description	Veor 7 Additous	Year 7 Belsace	Year 8 Adduons	¥zar 8 Balagce	Year 9 Activitors	Year 9 Balance	Year 10 Additions	Year 10 Belance	Amortization Ente
272	Recum, Amortizellon of CLAC - Eines Accum, Amortizellon of CLAC, - Eesh Accum Amortizellon of CLAC - Ether	24.347 0 0	79.580 D D	29,773 0 0	108.453 D D	13,209 0 0	141.653 0 0	35,413 0 0	177,067 Q	2 22% 3 53% 0 00%
	JOTAL	<u>14,15</u>	79 580	28 773	105,453	005 66	191 653	35,413	177,057	

Exhibit \_\_\_\_ (JAE-2)

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## BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Water and wastewater industry annual reestablishment of authorized range of return on common equity for water and wastewater utilities pursuant to Section 367.081(4)(f), F.S.

DOCKET NO. 030006-WS ORDER NO. PSC-03-0707-PAA-WS ISSUED: June 13, 2003

The following Commissioners participated in the disposition of this matter:

LILA A. JABER, Chairman J. TERRY DEASON BRAULIO L. BAEZ RUDOLPH "RUDY" BRADLEY CHARLES M. DAVIDSON

# NOTICE OF PROPOSED AGENCY ACTION ORDER ESTABLISHING AUTHORIZED RANGE OF RETURNS ON COMMON EQUITY FOR WATER AND WASTEWATER UTILITIES

BY THE COMMISSION:

NOTICE is hereby given by the Florida Public Service Commission that the action discussed herein is preliminary in nature and will become final unless a person whose interests are substantially affected files a petition for a formal proceeding, pursuant to Rule 25-22.029, Florida Administrative Code.

Section 367.081(4)(f), Florida Statutes, authorizes the Commission to establish, not less than once each year, a leverage formula to calculate a reasonable range of returns on equity for water and wastewater utilities. In Docket No. 020006-WS, the Commission established the current leverage formula by Order No. PSC-02-0898-PAA-WS, issued on July 5, 2002. Order No. PSC-02-1252-CO-WS, issued September 11, 2002, made final the leverage formula methodology. This Order utilizes the current leverage formula methodology, with updated financial data, as set forth in Order No. PSC-01-2514-FOF-WS, which uses returns on equity from financial

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models based upon an index of natural gas utilities. We hereby approve the following leverage formula:

Return on Common Equity = 8.16% + 1.518/Equity Ratio

Where the Equity Ratio = Common Equity / (Common Equity + Preferred Equity + Long-Term and Short-Term Debt)

Range: 9.68% @ 100% equity to 11.96% @ 40% equity

We note that the leverage formula depends on four basic assumptions listed below:

Business risk is similar for all WAW utilities.
 The cost of equity is an exponential function of the equity ratio.
 The marginal weighted average cost of investor capital is constant over the equity ratio range of 40% to 100%.
 The cost rate at an assumed Moody's Baa3 bond rating, plus a 50 basis point private placement premium and a 50 basis point small utility risk premium, represents the average marginal cost of debt to a Florida WAW utility over an equity ratio range of 40% to 100%.

For these reasons, the leverage formula is assumed to be appropriate for the average Florida WAW utility.

The leverage formula relies on two return on equity (ROE) models and several adjustments for differences in risk and debt cost in order to conform the results of the models to the average Florida WAW utility. Both models include a four percent adjustment for flotation costs. The models are as follows:

- A Discounted Cash Flow (DCF) model applied to an index of natural gas utilities (NG) that have publicly traded stock and are followed by the <u>Value Line Investment Survey</u> (<u>Value Line</u>). The DCF model is an annual model and uses prospective growth rates.
- A Capital Asset Pricing Model (CAPM) using a market return for companies followed by <u>Value Line</u>, the average yield on the Treasury's long-term bonds projected by the Blue Chip

Financial Forecasts, and the average beta of the index of NG utilities. The market return is adjusted to assume a quarterly model by adding 20 basis points to the result.

The indicated returns of the above models are averaged and the resulting estimate is adjusted in the following manner:

- A bond yield differential of 44 basis points to reflect the difference in yields between an A/A2 rated bond, which is the average bond rating for the NG utility index, and a BBB-/Baa3 rated bond. Florida WAW utilities are assumed to be comparable to WAW companies with the lowest investment grade bond rating, which is Baa3. This adjustment compensates for the difference between the credit quality of "A" rated debt and the credit quality of the minimum investment grade rating.
- A private placement premium of 50 basis points is added to reflect the difference in yields on publicly traded debt and privately placed debt, which is illiquid. Investors require a premium for the lack of liquidity of privately placed debt.
- A small utility risk premium of 50 basis points is added to reflect that the average Florida WAW utility is too small to qualify for privately placed debt.

After the above adjustments are made, the resulting cost of equity estimate is included in the average capital structure for the NG utilities. The cost of equity is determined at a 40% equity ratio and the leverage formula is derived. The leverage formula derived using the current methodology with updated financial data is presented in Attachment 1.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the leverage formula methodology, summarized herein and in Attachment 1, used to calculate a range of returns on equity for water and wastewater utilities, is hereby approved. It is further

ORDERED that Attachment 1 is herein incorporated by reference. It is further

ORDERED that returns on common equity are hereby capped at 11.96 percent for all water and wastewater utilities with equity ratios of less than 40 percent in order to discourage imprudent financial risk. It is further

ORDERED that the provisions of this Order, issued as proposed agency action, shall become final and effective upon the issuance of a Consummating Order unless an appropriate petition, in the form provided by Rule 28-106.201, Florida Administrative Code, is received by the Director, Division of the Commission Clerk and Administrative Services, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on the date set forth in the "Notice of Further Proceedings" attached hereto. It is further

ORDERED that in the event this Order becomes final, this docket shall remain open to allow our staff to monitor the movement in capital costs and to readdress the reasonableness of the leverage formula as conditions warrant.

By ORDER of the Florida Public Service Commission this <u>13th</u> Day of <u>June</u>, <u>2003</u>.

BLANCA S. BAYÓ, Director Division of the Commission Clerk and Administrative Services

By: Kay flyn Kay Flynh, Chief

Bureau of Records and Hearing Services

(SEAL)

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#### NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing that is available under Section 120.57, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing will be granted or result in the relief sought.

Mediation may be available on a case-by-case basis. If mediation is conducted, it does not affect a substantially interested person's right to a hearing.

The action proposed herein is preliminary in nature. Any person whose substantial interests are affected by the action proposed by this order may file a petition for a formal proceeding, in the form provided by Rule 28-106.201, Florida Administrative Code. This petition must be received by the Director, Division of the Commission Clerk and Administrative Services, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on July 4, 2003.

In the absence of such a petition, this order shall become final and effective upon the issuance of a Consummating Order.

Any objection or protest filed in this/these docket(s) before the issuance date of this order is considered abandoned unless it satisfies the foregoing conditions and is renewed within the specified protest period.

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Attachment 1 Page 1 of 6

#### SUMMARY OF RESULTS

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# Leverage Formula Update

	<u>Updated</u> Results	<u>Currently</u> in Effect
(A) CAPM ROE for Natural Gas Index	9.53%	8.93%
(B) DCF ROE for Natural Gas Index	10.74%	10.13%
AVERAGE	10.13%	9.53%
Bond Yield Differential	.44%	.40%
Private Placement Premium	.50%	.50%
Small-Utility Risk Premium	.50%	.50%
Adjustment to Reflect Required Equity		
Return at a 40% Equity Ratio	.38%	.17%
Cost of Equity for Average Florida WAW		
Utility at a 40% Equity Ratio	<u>11.96%</u>	<u>11.10%</u>

## 2002 Leverage Formula (Currently in Effect)

Return on Common	Equity	=	9.65% + .582/ER
Range of Returns	on Equity	=	10.23% - 11.10%

## 2003 Leverage Formula (Approved)

Return on Common	Equity	=	8.16% +	1.518/ER
Range of Returns	on Equity	=	9.68% -	11.96%

> Attachment 1 Page 2 of 6

### Marginal Cost of Investor Capital Average Water and Wastewater Utility

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Capital Component	Ratio	Marginal <u>Cost Rate</u>	Weighted Marginal <u>Cost Rate</u>
Common Equity Total Debt	44.48% <u>55.52%</u> 100.00%	11.57% 8.16% *	5.15% <u>4.53%</u> 9.68%

A 40% equity ratio is the floor for calculating the required return on common equity. The return on equity at a 40% equity ratio is 8.16% + 1.518/.40 = 11.96%

### Marginal Cost of Investor Capital Average Water & Wastewater Utility at 40% Equity Ratio

Capital Component	Ratio	Marginal <u>Cost Rate</u>	Weighted Marginal <u>Cost Rate</u>
Common Equity Total Debt	40.00% <u>60.00%</u> 100.00%	11.96% 8.16% *	4.78% <u>4.90%</u> 9.68%

Where: ER = Equity Ratio = Common Equity/(Common Equity + Preferred Equity + Long-Term Debt + Short-Term Debt)

\* Assumed Baa3 rate for March 2003 plus a 50 basis point private placement premium and a 50 basis point small utility risk premium.

Source: Moody's Credit Perspectives

#### Attachment 1

Page 3 of 6

## ANNUAL DISCOUNTED CASH FLOW MODEL

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INDEX	NATURAL GAS INDEX								MAF	RCH	
COMPANY	DIV1	DIV2		DIV4	EPS4	B - MARCH ROE4		GR4+	HI-PR	LO-PR	AVER-PR
AGL RESOURCES	1.08	1.08	1.08	1.08	2.10	12.00	1.0000	1.0583	23.70	22.03	22,865
ATMOS ENERGY	1.22		1.29	1.32	2.20	15.00	1.0266	1.0600	21.90	20.85	21.375
CASCADE NATURAL GAS	0.96	0.97	0,97	0.98	1.75	15.00	1.0069	1.0660	19.63	18.20	18.915
LACLEDE GAS	1.34	1.35	1,36	1.37	1.85	10.50	1.0074	1.0272	23.96	21.90	22.930
NICOR, INC.	1.94		2.14	2.24	3.60	18.00	1.0491	1.0680	31.85	23,70	27.775
NORTHWEST NATURAL GAS			1.31	1.33	2.40	11.00	1.0129	1.0490	25.72	24.13	24.925
PIEDMONT NATURAL GAS	. 1.72		1.84	1.90	3.15	14.50	1.0337	1.0575	35,88	33.53	34.705
SOUTHWEST GAS	0.82		0.82	0.82	2.15	10.00	1.0000	1.0619	20.89	19.30	20.095
WGL HOLDINGS	1.29	1.30	1.32	1.33	2.40	12.00	1.0102	1.0535	26.96	25.00	25.980
AVERAGE	1,2944	1.3202	1.3469	1.3744 1.4510	2.40	13.1111	1.0163	1.0557			24.396
k Price w/lour Percent F	lotation Costs 23.4203	Annual 1.1929 23.4203			0.938 <b>3</b>	<b>19.1</b> 780					
	March 2003 av cost.	erage	e sto	ck pi	cice	with	a 4%	flota	tion		
10.74% =	Cost of equit price with th	y req e exp	uire ecte	d to d cas	matc sh fl	h the ows.	curr	ent s	tock		
Sources:											

Stock Prices - S&P Stock Guide, April 2003 Edition.
 DPS, EPS, ROE - Value Line Edition 3, March 21, 2003.

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#### Capital Asset Pricing Model Cost of Equity for Water and Wastewater Industry

CAPM analysis formula

К	=	RF + Beta(MR - RF)
к	=	Investor's required rate of return
RF	z	Risk-free rate (Blue Chip forecast for Long-term Treasury bond)
Beta	El I	Measure of industry-specific risk (Average for water utilities followed by Value Line)
MR		Market return (Value Line Investment Survey For Windows, April 2003)
9.53	k ==	5.34% + .68(11.17% - 5.34%)+ .20%

Note: We calculated the market return using an annual DCF model for a large number of dividend paying stocks followed by Value Line. For March 2003 stock prices, the result was 10.97%. We have added 20 basis points to allow for the quarterly compounding of dividends. The resulting market return is 11.17%. We have also added 20 basis points to the CAPM result to allow for a four-percent flotation cost.

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BOND YIELD DIFFERENTIALS Public Utility Long Term Bond Yield Averages

Long-Term Corporate Bond Yield Averages for Avg. Public Utility

120 Month Average -		0.1103		0.1103		0.1103		0.1103	
MONTH/YEAR	A2	SPREAD	A3	SPREAD	Baa1	SPREAD	Baa2	SPREAD	Baa3
Mar-2003	6.79	0.09	6.88	0.09	6.96	0.09	7.05	0.09	7.14
Feb-2003	6.93	80.0	7.01	0.08	7.09	0.08	7.17	0.08	7.25
Jan-2003	7.06	0,14	7.20	0.14	7.33	0.14	7.47	0.14	7.61
Dec-2002	7.07	0.18	7.25	0.18	7.43	0.18	7.61	0.18	7.79
Nov-2002	7.14	0.21	7.35	0.21	7.55	0.21	7.76	0.21	7.97
Oct-2002	7.23	0.26	7.49	0.26	7.74	0.26	8.00	0.26	8,26
Sep-2002	7.08	0.18	7.26	0.18	7.44	0.18	7.62	0.18	7.80
Aug-2002	7.17	0.19	7.36	0.19	7.55	0.19	7.74	0.19	7.93
Jul-2002	7.31	0.26	7.57	0.26	7.82	0.26	8.08	0.26	8.34
Jun-2002	7.41	0.28	7.69	0.28	7.97	0.28	8.25	0.28	8.53
May-2002	7.52	0.27	7.79	0.27	8.06	0.27	8.33	0.27	8.60
Apr-2002	7.57	0.23	7.80	0.23	8.02	0.23	8.25	0.23	8.48
Mar-2002	7.76	0.19	7.95	0.19	8.13	0.19	8.32	0.19	8.51
Feb-2002	7.54	0.21	7.75	0.21	7.97	0.21	8,18	0.21	8.39
Jan-2002	7.66	0.16	7.82	0.16	7.97	0.16	8.13	0.16	8.29
Dec-2001	7.83	0.15	7.98	0.15	8.12	0.15	8.27	0.15	8.42
Nov-2001	7.57	0.13	7.70	0,13	7.83	0,13	7.96	0.13	8.09
Oct-2001	7,63	0.13	7.76	0.13	7.89	0.13	8,02	0.13	8.15
Sep-2001	7.75	0,12	7.87	0,12	8.00	0,12	8,12	0.12	8.24
Aug-2001	7.59	0.12	7.71	0.12	7.83	0.12	7.95	0.12	8.07
Jul-2001	7.78	0.09	7.87	0.09	7.96	0.09	8.05	0.09	8.14
Jun-2001	7.85	\0.06	7.91	0.06	7.96	0.06	8.02	0.06	8.08
May-2001	7.99	0.04	8.03	0.04	8.07	0.04	8.11	0.04	8.15
Apr-2001	7.94	0.04	7.98	0.04	8.02	0.04	8.06	0.04	8.10
Mar-2001	7.68	0.06	7.74	0.06	7.79	0.06	7.85	0.06	7.91
Feb-2001	7.74	0.07	7.81	0.07	7.87	0.07	7.94	0.07	8.01
Jan-2001	7.80	0.06	7.86	0.06	7.93	0.06	7.99	0.06	8.05
Dec-2000	7.84	0.06	7.90	0.06	7.95	0.06	8.01	0.06	8.07
Nov-2000	8.11	0.05	8.16	0.05	8.20	0.05	8.25	0.05	8.30
Oct-2000	8.14	0.05	8.19	0.05	8.24	0.05	8.29	0.05	8.34
Sep-2000	8.23	0.03	8.26	0.03	8.29	0.03	8.32	0.03	8.35
Aug-2000	8.13	0.04	8.17	0.04	8.21	0.04	8.25	0.04	8.29
Jul-2000	8.25	0.03	8,28	0.03	8,30	0.03	8.33	0.03	8.36
Jun-2000	8,36	0.04	8.40	0.04	8.43	0.04	8.47	0.04	8.51
May-2000	8.70	0.05	8.75	0.05	8.81	0.05	8.86	0.05	8.91
Apr-2000	8.35	0.02	8.37	0.02	8,38	0.02	8.40	0.02	8.42
Mar-2000	8.28	0.04	8.32	0.04	8,36	0.04	8.40		8.44
Feb-2000	8.25	0.03	8.28	0.03	8.30	0.03	8.33		8,36
Jan-2000	8.35	0.02	8.37	0.02	8.38	0.02	8.40		8.42

Source: Moody's Credit Perspectives

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Value Line Listed Gas Utilities	S&P Bond Rating	۶ of Gas Rev.	V/L Market Capital (billions)		Value Line Beta
AGL RESOURCES	A-	568	1.30	438	0.75
ATMOS ENERGY	A-	998	0.95	39%	0.60
CASCADE NATURAL GAS	BBB+	100%	0.20	42%	0.65
LACLEDE GROUP	A+	74 %	0.43	418	0.60
NICOR, INC.	AA	81%	1.10	52%	0.90
NORTHWEST NAT. GAS	A	978	0,68	488	0.60
PIEDMONT NAT. GAS	A	638	1.10	54%	0.70
SOUTHWEST GAS CORP.	BBB-	84%	0.65	33%	0.70
WGL HOLDINGS	AA	60%	1.20	48%	0,65
Average:	A			44.48%	0.68

## INDEX STATISTICS AND FACTS

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Source: Value Line Edition 3, March 21, 2003. S.E.C. Form 10Q And 10K For Companies C.A. Turner Utilities Report May 2003 Standard and Poor's Ratings Direct Website Exhibit \_\_\_\_ (JAE-3)

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