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VIA ELECTRONIC FILING

Ms. Carlotta Stauffer Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

Re: Petition for rate increase by Gulf Power Company, Docket No. 160186-EI

Dear Ms. Stauffer:

Attached is the Rebuttal Testimony and Exhibit of Gulf Power Company Witness Dane A. Watson.

(Document 15 of 16)

Sincerely,

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Robert L. McGee, Jr. Regulatory & Pricing Manager

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 160186-EI



REBUTTAL TESTIMONY AND EXHIBIT OF DANE A. WATSON

1		GULF POWER COMPANY
2		Before the Florida Public Service Commission Rebuttal Testimony of
3		Dane A. Watson
4		In Support of Rate Relief
5		Date of Filing: February 8, 2017
6		I. INTRODUCTION, QUALIFICATIONS, PURPOSE OF
7		TESTIMONY, AND RECOMMENDATIONS
8		
9	Q.	Please state your name, business address and occupation.
10	Α.	My name is Dane Watson. My business address is 101 E. Park Blvd, Suite
11		220, Plano, TX 75074. I am the Managing Partner in Alliance Consulting
12		Group (Alliance).
13		
14	Q.	Have you previously filed testimony in this proceeding?
15	Α.	Yes.
16		
17	Q.	What is the purpose of your rebuttal testimony?
18	Α.	The purpose of my testimony is to rebut the positions of Federal Executive
19		Agencies (FEA) Witness Andrews and Office of Public Counsel (OPC)
20		Witness McCullar on the topic of depreciation. Specifically, in the sections
21		that follow, I will discuss:
22		Life parameters for various plant accounts proposed by Mr. Andrews
23		that differ from those used to develop depreciation rates in the
24		Depreciation Rate Study (Study) I sponsored as Exhibit DAW-1 filed on
25		September 20, 2016 in Docket No. 160170-EI;

1		• The computation error in Account 390 that Mr. Andrews and Ms.
2		McCullar address in their respective testimony and that the Company
3		acknowledges and accepts in this rebuttal testimony;
4		The different life recommendations proposed by Ms. McCullar for
5		distribution in Accounts 365 and 369.1;
6		The proposed change to Net Salvage for Account 390 – Structures and
7		Improvements suggested by Ms. McCullar;
8		• The revision to Interim Retirement Ratio (IRR) for Production discussed
9		by Ms. McCullar; and
10		The different fundamental definition of depreciation approach suggested
11		by Ms. McCullar.
12		
13	Q.	Are you sponsoring any rebuttal exhibits?
14	Α.	Yes. I am sponsoring six exhibits. These exhibits were prepared under my
15		supervision, and to the best of my knowledge, the information contained in
16		these exhibits is true and correct.
17		
18	Q.	What recommendations are you making in your rebuttal testimony?
19	Α.	I recommend that the Florida Public Service Commission (Commission)
20		approve the annual depreciation rates as presented in the revised
21		appendices included as Exhibit DAW-4 to my rebuttal testimony that
22		correspond to the appendices to the Depreciation Rate Study. Appendices
23		A-1, A-2, and A-3 list the annual depreciation rates for Steam Production;
24		Other Production; and Transmission, Distribution and General Plant,
25		respectively. Appendix B shows the comparison of the annual

1		depreciation accrual. T	he rev	ised a	ppendi	ces inc	orpora	ate the adj	ustments
2		related to issues raised by intervenors to which the Company is agreeing as							
3		part of its rebuttal case.							
4									
5									
6		II. RESF	ONSE	E TO F	EA'S	POSITI	ONS		
7									
8	Q.	What topics will you add	dress i	n this :	sectior	n of you	r rebu	ittal testim	ony?
9	A.	In this section of my reb	outtal te	estimo	ny, I w	ill addr	ess th	e revised i	individual
10		account life and curve p	arame	eters b	eing p	roposed	d by N	Ir. Andrew	S.
11									
12	Q.	What accounts are beir	ig chal	llenged	d by M	r. Andre	ews?		
13	Α.	Mr. Andrews has recom	mend	ed cha	anges i	n life fo	r four	accounts	in
14		transmission, two accou	unts in	distrib	oution a	and thre	e acc	ounts in g	eneral
15		equipment for a total of	nine a	iccoun	ts. ¹ Ta	ble DA	W-1 F	Rebuttal sh	own below
16		is a summary of the pla	nt acco	ounts:	Existir	ng, Gulf	Prop	osed, and	FEA
17		Revised life and survivo	or curv	e para	meters	6.			
18		Table DAW-1 Rebuttal Summary of Proposed Life Par	ameters by	<u>y Account</u>					
19		Plant Account	Exist	tina	Gulf's F	roposed	FEA's	Revised	
20		Transmission	Life	Curve	Life	Curve	Life	Curve	
21		Transmission	45	50	40	80	40	105	
		353 - Station Equipment 354 - Towers and Fixtures	43 50	R5	40 55	R4	40 56	R3	
22		355 - Poles and Fixtures 358 - Underground Conductor &	38	S0	40	L0.5	41	S0	
<u></u>		Devices	45	R3	50	R4	55	R5	
23		361 - Structures and Improvements	48	R3	50	R2.5	52	R2.5	
24		364 - Poles, Towers and Fixtures General	34	R1	33	R0.5	38	R1	
27		390 - Structures and Improvements	45	S1.5	46	R1.5	48	R1.5	
25		396 - Power Operated Equipment	15 16	R5 S1	16 16	R4 L1 5	18 17	R4 L1.5	
						•			

¹ Direct Testimony of Brian C. Andrews, page 15, Table 2.

Q. Were there differences in Mr. Andrews' approach to this analysis and your
 approach to this analysis?

3 Α. Yes. Mr. Andrews' analysis relied primarily on a mathematically calculated 4 best statistical fit for a single placement and experience band. In contrast, 5 my recommendations relied on the graphical analysis of multiple placement 6 and experience bands. Mr. Andrews has performed his own life analysis 7 using his approach for all transmission, distribution, and general accounts 8 and has made alternative recommendations for nine accounts (eight that 9 used actuarial analysis and one account that used Simulated Plant Record 10 (SPR) analysis).

11

Q. You characterize Mr. Andrews' approach to life analysis as mathematical. Is
 a mathematical approach the standard approach used in performing
 actuarial life analysis?

A. Not to the extent Mr. Andrews has relied upon it. There are various
statistical or mathematical based analytics that we perform and provide, as
Alliance did in this case for the Depreciation Rate Study, to support the
overall life analysis for each account. However, the curve fitting process we
utilize is referred to as a "visual fit." A "visual fit" is the most commonly-used
approach by other depreciation consultants when actuarial data is available,
which it was for this Study.

22

23 Q. Are there weaknesses to solely using a mathematical approach?

A. Yes. There are times that the mathematical approach will produce results
that are not reasonable. For example, in Mr. Andrews' testimony, Account

358 results in a statistical best fit life of 14,184 years and curve O1.² In 1 2 contrast, the National Association of Regulatory Utility Commissioners (NARUC) provides the following guidance: "Depreciation analysts should 3 avoid becoming ensnared in the mechanics of the historical life study and 4 relying solely on mathematical solutions." ³ Here, Mr. Andrews' approach 5 relies solely upon mathematical solutions, which resulted in a facially 6 7 unreasonable result.

8

Mr. Andrews states he performed his analysis using a full placement band 9 Q. and the most recent experience band for all the accounts.⁴ What are the 10 11 implications of this approach?

12 Α. The use of only one placement/experience band combination in the analysis 13 is an unusual practice in actuarial life analysis. A sound actuarial analysis 14 involves the use of multiple bands. The purpose of analyzing multiple 15 bands is to better understand trends in life and the effect of changes in 16 investment mix and Company practices in order to assist in the selection of 17 the appropriate life. Mr. Andrews' analysis of a single band only allowed him to focus on one "snapshot" in time. He did not extend his review to the 18 19 numerous actuarial visual fits that Alliance performs and, as a result, only 20 saw a single point of the account. In sharp contrast, the visual fits we 21 performed encompassed Mr. Andrews' band, as well as a number of others 22 that spanned the various time frames of the Company's assets. Our 23 numerous visual fitting placement and experience (observation) bands, by 24 design, capture retirement experience that is relevant in the life analysis

² Brian C Andrews Direct Testimony, Exhibit BCA-1, Page 26. ³ NARUC Public Utility Depreciation Practices, Page 126.

⁴ Brian C Andrews Direct Testimony, Page 13.

1

(contrary to what Mr. Andrews suggests in his testimony).⁵

2

Q. Please summarize your observations or concerns regarding Mr. Andrews'
life analysis and resulting proposals.

5 Α. As discussed above, Mr. Andrews has not fully utilized a standard life 6 analysis through his reliance solely on mathematical fits. He also focuses 7 only on a singular band and analytic of only the most recent retirement 8 history. The recent retirement history may or may not be applicable to the 9 future. In contrast to Mr. Andrews' approach, the more appropriate 10 approach, as recommended by depreciation literature and as I have done, is 11 to take the analysis further and perform visual fitting using a number of 12 bands (which is one of the most powerful tools in actuarial analysis) to help 13 understand what is happening through time in each account. Looking at only one "snapshot" in time can create confusion and less-than-optimal 14 15 results, especially because actuarial analysis is designed to look at multiple 16 periods. In short, Mr. Andrews' methodology is unreasonably limited and 17 fails to take into account other relevant data.

18

Q. What is the first asset account where Mr. Andrews proposes a different
 curve/life combination than Gulf Power and what is his stated reason for the
 proposed change?

A. Account 353 – Station Equipment. The existing approved life/curve is 45
 S0. My recommendation is to change to 40 S0, decreasing the life by five
 years. Mr. Andrews proposes using a life/curve of 40 L0.5 based on the
 most recent experience band.

⁵ Brian C Andrews Direct Testimony, Page 13

1	Q.	Do you agree with Mr. Andrews' basis for proposing a 40L0.5?
2	Α.	No. Mr. Andrews inappropriately focuses on a singular period contained in
3		the Depreciation Study and indicates the Sum of Squared Differences
4		(SSD) (the statistical match between the Company's actual experience and
5		recommended life/curve combination) for his recommendation is better and
6		therefore a better fit when compared to my 40 S0.6
7		
8	Q.	Is Mr. Andrews proposing the best mathematical fit based on his analysis?
9	Α.	No. In fact, the best fit indicated in Mr. Andrews' analysis is a 41 L0, ⁷ but he
10		recommends a 40 L0.5.
11		
12	Q.	Is there any material difference between Mr. Andrews' recommendation of
13		40 L0.5 and your recommendation of 40 S0?
14	Α.	Yes. Although the life is the same, the dispersion pattern recommended by
15		Mr. Andrews results in a different pattern of retirement for the assets in the
16		account.
17		
18	Q.	Can you explain this further?
19	Α.	Yes. Despite both recommending a 40-year life, when one uses an L0.5
20		dispersion pattern, it results in assets reaching an age of 162.5 years. In
21		comparison, using the S0 dispersion pattern results in assets reaching an
22		age of 79.5 years. This long "tail" in the L0.5 retirement pattern may be
23		reasonable in an account with millions of small assets (such as a pole
24		account), but it is less appropriate for substation equipment. In this account,
25		the assets are generally much larger, and professional judgment would not

⁶ Brian C Andrews Direct Testimony, Exhibit BCA-1, page 13 of 73 7 Brian C Andrews Direct Testimony, Exhibit BCA-1, pages 13 of 73 and 14 of 73

suggest that any of those assets would last well over 150 years. The S0
 curve is a better pattern for these types of assets. Also, in an account in
 which the various components are being impacted by technological
 changes, the L0.5 dispersion pattern is particularly not a good match, and
 the difference is significant.

- 6
- Q. Is the single placement and experience band used by Mr. Andrews moreindicative of the future than your analysis?

9 Α. No. In his analysis, Mr. Andrews uses a placement band of 1900-2014, 10 whereas I used a number of placement bands (including a placement band 11 of 1950-2014). The surviving plant balances for vintages prior to 1950 show 12 less than \$300 thousand of investment with zero retirements for those 13 vintages. Given that the small number of assets from prior to 1950 is not 14 very representative of nearly all of the assets in the account (e.g. old analog 15 relays or oil circuit breakers), the influence they have on the curve selection 16 would not be representative of the future. In other words, the long "tail" of 17 the L0.5 curve is likely driven by those old, non-representative assets. By excluding those vintages from my analysis, I focused on a more relevant mix 18 19 of assets that is a better representation of what we expect in the future. In 20 addition, by limiting the time period of retirement activity in Mr. Andrews' 21 analysis (i.e. experience band only from 1990 to current), Mr. Andrews 22 overemphasizes recent changes to the mix of assets in this account. For 23 example, throughout the 1990's the Company replaced all oil circuit breakers 24 with SF6 breakers, resulting in a different pattern of retirements during that 25 replacement time than experienced at other points in history or that would



As shown above, the 40 L0.5 drops below Gulf Power's actual experience
 from just above the 80 percent surviving and 50 percent surviving. It
 departs again from around 40 percent to the end. The graph below is my 40
 S0 using the same band.

6 Graph DAW-R-2

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20 While the fits are both reasonable, during the most important period (80 21 percent to 20 percent surviving), the 40 S0 is slightly better. The slightly 22 better fit, coupled with the much more appropriate curve pattern for this type 23 of account, make the 40 S0 a better selection for this account.

25

1	Q.	What is Mr. Andrews' next asset account where he proposes a different
2		curve/life combination than Gulf Power and his stated reason for the
3		change?
4	Α.	Account 354 – Towers and Fixtures. The existing life curve is 50 R5. My
5		recommendation is 55 R4, adding 5 years to the life of the account. Mr.
6		Andrews proposes 56 R3 based on his single band and what he shows as a
7		better mathematical fit, which would add six years to the total life of the
8		account, or one year beyond my recommendation.
9		
10	Q.	Do you agree with Mr. Andrews' basis for proposing a 56 R3?
11	Α.	No.
12		
13	Q.	Does Mr. Andrews recommend the mathematical best fit from his analysis?
14	Α.	No. Mr. Andrews' overall approach is not only flawed, but even his life
15		selection does not match the results of his calculations. The mathematical
16		best fit as provided by Mr. Andrews is actually 57 R3, not the 56 R3 he
17		suggests. ⁸
18		
19	Q.	Are there any other aspects in Mr. Andrews' mathematic analysis and
20		results that stand out?
21	Α.	Yes. Many of the mathematical fits shown in his analysis are well beyond
22		his proposal. Six of the 32 mathematical fits have a life over 100 years, and
23		two of those have a life of 249 years. I contrast that with 21 visual fits that
24		encompass several different placement and experience bands, none of
25		which exceed 55 years with the R4 or R5 dispersion pattern.

⁸ Brian C Andrews Direct Testimony, Exhibit BCA-1, pages 16 of 73 and 17 of 73

Q. How does limiting his analysis to a single placement and experience band
 potentially impact his life/curve recommendation?

A. In a long-lived account with a limited number of technology changes (such
as this Tower account), analyzing a longer-term and different levels of
experience is important. As seen in the graphs below, the Company's
experience is not "smooth." The lack of "smoothness" makes both valid
matching (whether mathematically or visually) and the subsequent
interpretation of the matches more challenging.

9

Q. Is Mr. Andrews' proposed 56 R3 a better fit when you compare them? 10 11 Α. No. Although the match between Mr. Andrews' recommendation and the 12 Company's recommendation are similar in his chosen band, looking at the 13 various bands shows that the Company's recommendation is superior. 14 Below are the graphs showing Mr. Andrews' recommendation and the 15 Company's recommendation based on Mr. Andrews' short experience band. 16 His recommendation matches slightly better towards the top of the curve 17 above 80 percent surviving. However, in the middle of the curve during the period where more retirements were experienced, Alliance's selection 18 19 matches slightly better, although neither matches well to the stair-step 20 pattern. 21

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However, when more than the most recent band is analyzed, in each case,
the Company's selection is a much better fit. Graphs of the different bands
with the Company's and Mr. Andrews' selection are shown below. For longlived, stable assets, one would expect the life indications to be fairly stable.
Upon consideration of different bands and observing a consistently better
(or, in the case of the most recent band, as good) fit, a reasonable analyst
would recommend the Company's 55 R4 over Mr. Andrews' 56 R3.





25

1 Graph DAW-R-6





14 It is evident that, when using a wider experience band, the R4 55 is a better 15 visual fit than the R3 56 until dropping below 60 percent surviving, which is a 16 less weighted point on the curve. When comparing these two graphs, one 17 sees slightly more retirements earlier in the more recent experience band. 18 For example, at Age 54, the actual data shows approximately 58 percent surviving plant, while using the broader experience band (1975-2014), one 19 20 sees 60 percent surviving plant at Age 54. The R4 curve shows a higher 21 percent surviving, having already survived 98 percent (54/55) of the assets' 22 average service life than the R3 curve.

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- 24
- 25

1 Q. Are there other factors that should be considered?

2 Α. Yes. Information provided by the Company should also be considered when 3 performing an actuarial analysis. Company experts indicated that the 4 assets in this account include steel poles and towers. The majority of the 5 towers in this account are steel. The Company further explained that steel 6 poles rust faster in its service area when compared to other areas of the 7 country, and galvanization sometimes disappears faster in this environment. 8 Many of the newer towers are aluminum and have a shorter life than steel. 9 With the mix of assets and varying life characteristics in this account, I 10 recommend the more conservative increase in the life of five years instead 11 of moving further to six years. 12

Q. Do you have summary comments on your life and curve recommendationfor Account 354?

A. Yes. A life recommendation should be reflective of all relevant factors, and
 not just mathematical or visual fits. My recommendation reflects not only the
 analytics, but also relies on visual fitting, discussions with Company
 personnel, changes in the assets contained in the account over time, and

- 19 results in a gradual or conservative life increase. My 55 R4
- 20 recommendation is reasonable, is the best estimate for the assets at this
- 21 time, and should be adopted by the Commission.
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1	Q.	What is Mr. Andrews' next asset account where he proposes a different
2		curve/life combination than Gulf?
3	Α.	Account 355 – Poles and Fixtures. The existing, approved life curve is 38
4		S0. My recommendation is to change to 40 L0.5, increasing the life by two
5		years. Mr. Andrews proposes 41 S0 based on the most recent experience
6		band and a mathematical better fit, which would add one additional year to
7		the total life of the account, or one year beyond myrecommendation.
8		
9	Q.	You call Mr. Andrews' proposed 41 S0 a better mathematical fit, not the best
10		mathematical fit. Why?
11	Α.	Mr. Andrews' analysis generates 32 different fits and statistically ranks them
12		by their SSD. The least SSD earns that curve and life the top ranking. As
13		shown in Mr. Andrews' Exhibit BCA-1, page 19 of 73, and on his graph on
14		page 20 of 73, the statistical best fit is 39 R1 (a decrease from both my
15		recommendation and that of Mr. Andrews).
16		
17	Q.	Where is the 41 S0 recommended by Mr. Andrews ranked?
18	Α.	It is ranked fourth. ⁹ The distinction of better and best is confusing, but
19		essentially Mr. Andrews proposes a life/curve combination that has a lower
20		SSD than my proposed 40 L0.5, despite the clearly better visual fit that I will
21		show below in Graph DAW-R-9.
22		
23	Q.	Do you agree with Mr. Andrews' recommendation?
24	Α.	No. Mr. Andrews relies on only the most recent experience band and does
25		not factor in the changes to the asset mix or changes to other life

⁹ Brian Andrews Direct Testimony, Exhibit BCA-1, Page 19 of 73

characteristics of the assets in this account. My recommendation factors in
(a) the recent changes to the assets in this account, (b) a consideration as
to how those changes affect the current mix of assets, and (c) the best
indication of future retirement expectations. As is the case for any
depreciation analysis, an understanding of what has occurred, is occurring,
and is expected to occur operationally must be considered in any life
recommendation, as explained by NARUC. ¹⁰

8

9 Q. What changes are occurring in this account that would indicate the assets in10 this account will have a longer life?

11 Α. The information provided in Company interviews indicates that there has 12 been a slight increase to the number of concrete poles being installed in this 13 account. Concrete poles would have a longer life than the wood poles. 14 Since 2008, the Company has also been replacing all wood cross arms and 15 replacing them with steel, which would also support extending the life of the 16 assets. On the other hand, due to a lot of wet conditions and woodpeckers, 17 the Company is experiencing a shorter life for wood poles, i.e., a total life of approximately 30 years. The Company also switched from creosote to 18 19 Chromated Copper Arsenate (CCA) pole preservative in the 1980's. 20 This change in pole preservatives resulted in a shorter life for wood poles, 21 i.e., because wood poles purchased in recent years do not last as long as 22 those in the more distant past. 23 Considering all these pressures on the life of the account, it seems more 24 reasonable to increase the average service life slightly to 40, rather than the 25 41 years suggested by Mr. Andrews.

¹⁰ NARUC Public Utility Depreciation Practices, Page 111

1 Q. Are there other factors that should be considered?

A. Yes. As is the case with Account 354 and discussed earlier in my rebuttal
testimony, Mr. Andrews' recommendation heavily relies on the mathematical
best fits and looks only at a single analytic. For comparison, both
recommendations are shown in the graph below using a broader experience
band, which is just one of several different bands used in my analysis. In all,
we performed 55 visual fits across multiple placement and experience
bands to assist in making the 40 L0.5 recommendation.

9

10

Graph DAW-R-9



- 24 top and continues until around 20 percent surviving where it comes back to
- 25 fit. The tail of the curve is the least important part of the curve to match.

1 To allow for easier distinction, in the following graphs, the two proposals are 2 shown separately. The first graph shows Mr. Andrews' 41 S0 for the 1926-3 2014 placement band with the 1964-2014 experience band.



21

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A. No. Mr. Andrews' recommendation is based on a better mathematical or
statistical fit, but this does not result in a reasonable fit under the
circumstances (as shown below in Graph DAW-R-12). In reality, this
account has very little retirement experience, either historical or recent, to
justify a 10-year life increase without additional support. Despite this lack of
experience, Mr. Andrews suggests an approximately 20 percent increase in
the asset life.

9

10

Graph DAW-R-12



1		As the graph clearly illustrates, there has been minimal retirement
2		experience historically. The average age of surviving plant is 24.5 years.
3		Nearly all of the investment in this account is a single Hitachi submarine
4		cable running under water and providing power to the Destin area.
5		Typically, submarine cables are replaced due to capacity needs instead of
6		failure of the cable. Given the short period since the last study and the
7		continued growth in the energy needs in the Destin area, an incremental
8		movement in life is warranted. Mr. Andrews' proposed 20 percent increase
9		in the life is not warranted, as there is a lack of data to support any
10		significant movement in life.
11		
12	Q.	Do you have any general comments regarding the mathematical fits
13		provided in Mr. Andrews Exhibit BCA-1, page 25 of 73?
14	Α.	Yes. Due to the minimal retirement experience, the mathematical best fit
15		indicates a life of 14,184.3 years with the O1. ¹¹ Clearly, this life is
16		unreasonable. Furthermore, depreciation experts typically do not fit the O
17		dispersion patterns due to this pattern not being representative of most
18		utility property. For example, the O1 curve exhibits the same level of
19		retirements each year over the life of the asset group, which is not a normal
20		retirement pattern for utility property. Mr. Andrews also appears to
21		recognize this "best fit" is an unrealistic selection.
22		
23	Q.	What is Mr. Andrews' next asset account where he proposes a different
24		curve/life combination than Gulf Power and his stated rationale for the
25		change?

¹¹ Brian C Andrews Direct Testimony, Exhibit BCA-1, Page 25 of 73 and 26 of 73

1	Α.	Account 361 – Structures and Improvements. The existing life is 48 R3. My
2		recommendation is 50 R2.5, which would add two years to the life of the
3		account. Mr. Andrews proposes a 52 R2.5 based on his use of a single
4		analytic and the better mathematical fit when compared to mine. Under Mr.
5		Andrews' proposal, four years are added to the total life of the account, or
6		two years beyond my recommendation. In this case, we are both proposing
7		the same survivor curve or retirement dispersion.
8		
9	Q.	Do you agree with Mr. Andrews' recommendation?
10	Α.	No. As in other accounts, Mr. Andrews relies on a single band, the full
11		placement band and the most recent experience band, and what I call a
12		better mathematical fit. As I stated previously, however, such an approach
13		is unreasonably limited. A valid approach would consider additional data,
14		including multiple bands and other information such as Company input,
15		knowledge of the characteristics of the assets in the account, and asset mix
16		in the account.
17		
18	Q.	What is the best mathematical fit based on Mr. Andrews' analysis?
19	Α.	The best mathematical fit is 54 R2.5. ¹² We both agree on the dispersion
20		pattern but disagree on the best life.
21		
22	Q.	Do you have any general thoughts about the differences between you and
23		Mr. Andrews regarding the average service life?
24	Α.	Yes. In reviewing the fits in Exhibit BCA-1, page 30 of 73, there are
25		extremes in life from the high of 200 years to the low end of life around 51

¹² Brian C Andrews Direct Testimony, Exhibit BCA-1, Page 30 of 73

1 years. To contrast this, our visual fits consisted of 53 fits across various 2 placement and experience bands (not just one) with a low range of 42 years 3 to the high of 53 years. Graph DAW-R-13 illustrates these differences. 4 5 Specifically, the graph below compares the placement and experience band 6 of 1950-2014 with Mr. Andrews' 52 R2.5. 7 8 Graph DAW-R-13 9 Account: 361 Scenario: Gulf Power Actuarial Data @ 2014 10 Actual Data R2.5 52.00 ALL RADING TO AL 11 100-12 80-ALL ALL 13 Percent Surviving 60-14 40-15 16 20-A.... 17 0 0 14 28 42 56 70 18 Age (Years) Vintages: 1950-2014 19 Activity Years: 1950-2014 20 21 In contrast, the graph below illustrates the fit between the same placement 22 1950-2014 and experience 1950-2014 bands, with my recommended 50 23 R2.5. Clearly, my recommended 50 R2.5 is a better match to Gulf Power's 24 actual experience than Mr. Andrews' recommendation. 25



15 It is evident that my recommended curve (50 R2.5) is closer to the actual 16 data throughout the graph, in particular, the portion of the curve from around 17 90 percent to 40 percent surviving on the graph. At that area of the graph, 18 my recommended curve is congruent to the actual data experienced in this 19 account. That is the most concentrated point of retirements on the graph 20 and, therefore, should be the most heavily weighted points on the curve 21 where the assets reach the proposed average service life. As mentioned in the authoritative text, Depreciation Systems (1994), "often the middle 22 23 section of the curve (that section ranging from approximately 80 percent to 24 20 percent surviving) is given more weight than the first and last sections. 25 The middle section is relatively straight and is the portion of the curve that

often best characterizes the survivor curve."¹³ A strictly statistical or
 mathematical approach assigns equal weight to all points along the curve in
 its calculation. When looking at even newer experience bands, the 50 R2.5
 is clearly a better fit than Mr. Andrews' recommendation as seen below.

Graph DAW-R-15

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¹³ <u>Depreciation Systems</u>, Iowa State University Press, 1994, by Drs. F. K Wolf and W. C. Fitch, pages 46-47.



\$10,000 of the total investment in this account, which is \$26 million. There
is limited value to including the older vintages in this analysis, as they do not
accurately represent the future mix of assets in this account. My analysis
also incorporates information from the Company, which confirms there is no
change in life characteristics or operations that would support a significant
increase in the life of the assets in this account. The average age of
surviving plant is 13.7 years.

1	Q.	Does Mr. Andrews' suggestion regarding Account 364 Poles, Towers and
2		Fixtures differ from your analysis?
3	Α.	Yes. Mr. Andrews recommends a 38 R1. My recommendation is a 33
4		R0.5. The existing life parameter is 34 R1.
5		
6	Q.	Do you agree with Mr. Andrews' position on Distribution Account 364 Poles,
7		Towers, and Fixtures?
8	Α.	No. This is the only account using the SPR life analysis which Mr. Andrews
9		challenges. He acknowledges his recommendation is based on his
10		judgment, not just the SPR analysis. ¹⁴
11		
12	Q.	Does Mr. Andrews indicate your recommendation is in the top ranked
13		curves across multiple bands analyzed?
14	Α.	Yes. He acknowledges that my recommended 33 R0.5 is the second best
15		ranked curve in eight of the nine bands analyzed. ¹⁵
16		
17	Q.	Mr. Andrews claims the SPR ranking is simply a "least worst" choice. ¹⁶ Do
18		you agree?
19	Α.	No. I do not rely solely on the statistical ranking as Mr. Andrews suggests.
20		However, I do agree the Conformance Indices (CIs) are in the poor to fair
21		range while the Retirement Experience Indices (REIs) are in the excellent
22		range.
23		
24		
25		

 ¹⁴ Direct Testimony Brian C. Andrews, p. 16
 ¹⁵ Direct Testimony Brian C. Andrews, p. 15
 ¹⁶ Direct Testimony Brian C. Andrews, p. 16

1 Q. If you do not rely solely on the statistical ranking, what other information did 2 you use to make your recommendation of 33 R0.5 for this account? 3 Α. I also look at the other fits and average service life indications in each of the 4 bands analyzed. In fact, when viewing the overall band of 93 years, the 5 majority of fits (21 of the 28), indicate a life of 25-29 years. There are only 6 seven of the 28 that are in the 30-year range, and only two of those are 7 higher than my recommendation. In fact, there are no fits with a life as long 8 as Mr. Andrews' recommendation of 38 R1. For illustration of these points, I 9 am including the 93-year SPR analysis as Exhibit DAW-5. 10 11 Q. Are these indications the same across the various bands analyzed? 12 Α. Yes. It is only at the 30-year band when the number of fits with a 30-36 13 year range increased from seven of 28 to nine of 28. This further supports

14 my recommendation of 33 R0.5 as not only reasonable but also

15 conservative when compared to the other fits and indications. For

illustration of these points, I am including the 30-year SPR analysis as
 Exhibit DAW-6.

18

19 Q. Does Mr. Andrews provide other information to support his asserted20 informed judgment?

- A. Yes. He provides benchmarking from Florida Power and Light's (FP&L)
 case, Docket No. 160021-El to form his position.
- 23
- 24
- 25

1	Q.	Do you believe the FP&L benchmarking is relevant to Gulf Power?
2	Α.	No. Gulf Power has many years of specific data available for analysis,
3		which reduces the need to rely solely on benchmarking. While the
4		companies are both in Florida, it does not mean they have the same
5		capitalization thresholds, retirement unit designations, operations and
6		maintenance processes, or the same operating environment. All of these
7		factors impact an account.
8		
9	Q.	Mr. Andrews claims there are more concrete poles than in the past, which
10		should increase, not decrease, the life. Do you agree?
11	Α.	From a conceptual perspective, it follows that concrete poles would have a
12		longer life than wood poles. However, what Mr. Andrews did not say is
13		there are only marginally more concrete poles than before, as stated in the
14		interview notes provided in the Depreciation Study work papers. ¹⁷ He also
15		fails to address the other factors that would tend to reduce the life of the
16		account. There is no information to suggest there are significantly more
17		concrete poles than wood poles in the account. The interview notes also
18		provided that the environment is subtropical (i.e., wet and hot), which
19		decreases the life of wood poles. ¹⁸
20		
21	Q.	Do you have any final comments regarding Mr. Andrews' proposal for
22		Account 364 Poles, Towers, and Fixtures?
23	Α.	Yes. Gulf Power routinely updates and files its depreciation studies as
24		required by the Commission, which will incorporate any future changes in a
25		timely manner. To move the life beyond the existing and beyond the

 ¹⁷ Watson Depreciation Study Work Papers, Interview Notes submitted in Citizens' First PODs, Item No. 3
 ¹⁸ Watson Depreciation Study Work Papers, Interview Notes submitted in Citizens' First PODs, Item No. 3

1 longest indicated life in the analysis is not reasonable, particularly when the 2 analysis shows such a poor match, and information from Company subject 3 matter experts would not support such a move. While it is important to 4 review and consider other information, such as that cited by Mr. Andrews, it 5 should not override the extensive and specific data and information provided 6 by Company operations employees contained in my Depreciation Study and 7 work papers. Finally, I believe Mr. Andrews inadvertently ran my 8 recommended 33 R0.5 in his Exhibit BCA-1, page 37 of 73 instead of his 9 recommendation of 38 R1. That calculation should be updated before consideration by the Commission. That said, my recommended 33 R0.5 is 10 11 reflective of Gulf Power's specific historical experience and is also reflective 12 of its specific operating environment. Therefore, the Commission should 13 adopt my recommended 33 R0.5 as the most appropriate estimate of life for 14 this account at this time.

15

16 Q. What is the next account in which Mr. Andrews challenges the life

17 recommendation of Gulf Power?

18 A. General Plant Account 390 – Structures and Improvements. First, Mr.

19 Andrews noticed we had inadvertently run 45 R1.5 in our accrual rather than

20 our recommendation of 46 R1.5. Beyond the need to make that correction,

- 21 Mr. Andrews proposes increasing the life even further with a 48 R 1.5, even 22 while he indicates the best fit to be a 54L1.¹⁹
- 23

Q. What is the basis for Mr. Andrews' proposal to increase the life from both theexisting and your recommendation?

¹⁹ Brian C Andrews Direct Testimony, Exhibit BCA-1, page 53 of 73

1	Α.	As with all the prior actuarial accounts, Mr. Andrews has relied on the
2		statistical best fit as his guide. However, in this particular instance, the 54
3		L1 best fit is not his proposal. Mr. Andrews' graphic presents the placement
4		band 1950-2014 and experience band 1986-2014 with three different fits.
5		
6	Q.	Do you agree with Mr. Andrews' proposal for Account 390?
7	Α.	No. The graphical presentation certainly shows how close both our
8		recommendations fit Gulf Power's experience, but he does not provide any
9		other information or support for increasing the life further.
10		
11	Q.	What other information or support did you use and/or provide for your 46
12		R1.5 recommendation on this account?
13	Α.	For Account 390, there are 27 different graphical fits across varying
14		placement and experience bands that we performed and evaluated. The
15		majority of those fits had a life at or less than our recommended 46 years.
16		In addition to these fits, we conducted interviews with Company personnel
17		and assessed the average age of retirements and survivors. This additional
18		data helped to form what I consider to be a reasonable estimate based on
19		all the assets in the account.
20		
21	Q.	Was Mr. Andrews' 48 R1.5 one of the 27 fits you made?
22	Α.	Yes. In the placement band 1950-2014 experience band 1986-2014, I fit
23		both 48 R1.5 (Mr. Andrews) and my 46 R1.5. As shown below, the 48 R1.5
24		moves slightly above the actual data between 80 percent and 50 percent
25		surviving.




1	Q.	What is the basis for Mr. Andrews' proposed 18 R4?
2	Α.	Consistent with many of the other accounts, he relies on the statistics as the
3		measure of a better fit. However, he is not recommending what he
4		calculates as the statistical best fit of 25 L0.20
5		
6	Q.	Does Mr. Andrews provide any additional information to support his
7		deviation from the statistical best fit of 25 L0 in favor of his 18 R4?
8	Α.	Not specifically. It appears that Mr. Andrews attempts to moderate the
9		statistical best fits when they are at the high end of a range or outside of a
10		range of reasonableness. In addition, it is evident from his graphic that the
11		best fit (25 L0) is not matching up to Gulf Power's actual data.
12		
13	Q.	Did Mr. Andrews fit other placement or experience bands?
14	Α.	No. Mr. Andrews provided only his fit to a placement band of 1955-2014
15		and experience band of 1994-2014 as shown on his graph. ²¹
16		
17	Q.	Did you perform other fits to varying placement and experience bands?
18	Α.	Yes. As provided in my Depreciation Study work papers, there are 10
19		different curve/life fits across three different placement bands with one
20		experience band.
21		
22	Q.	What additional support do the 10 curve/life fits provide in your
23		recommended 16 R4?
24	Α.	The 10 curve/life fits we performed had a life range of 16 to 17 years with
25		either an R4 or R5 dispersion pattern. Mr. Andrews and I agree on the R4

 ²⁰ Direct Testimony of Brian C. Andrews, Exhibit BCA-1, page 65 of 73
 ²¹ Direct Testimony of Brian C. Andrews, Exhibit BCA-1, page 66 of 73



1 As can be seen in the graph above, the 18 R4 curve hits the data at the 80 2 percent surviving and is somewhat close again when it drops to around 50 3 percent surviving. However, as can be seen in my recommendation of 16 R4 below, the 16 R4 curve hits the data at 80 percent surviving and again at 4 5 50 percent surviving, which is at the16-year age point. Our 6 recommendations are similar, but my 16 R4 is a better overall fit and should 7 be adopted by the Commission. 8 9 Graph DAW-R-20 10 Account: 396 Scenario: Gulf Power Actuarial Data @ 2014 11 🗖 R4 16.00 🔺 Actual Data 100-4 ---12 A 🗖 13 80-Percent Surviving 14 60-A A 🛛 Δ Δ 15 40-16 20-17 • 0 8 32 0 16 24 40 18 Age (Years) 19 Vintages: 1975-2014 Activity Years: 1994-2014 20 21 What is the final account challenged by Mr. Andrews? 22 Q. 23 Α. General Plant Account 397 – Communication Equipment. Mr. Andrews 24 proposes 17 L1.5. My recommendation is 16 L1.5. The existing is 16 S1. 25

1	Q.	What is the basis for Mr. Andrews' recommendation of 17 L1.5?
2	Α.	His recommendation is based solely on the SSD index being less than
3		mine.
4		
5	Q.	Is Mr. Andrews' best fit a 17 L1.5?
6	Α.	No. Interestingly, the best fit curve and life shown by Mr. Andrews is the 16
7		S0.
8		
9	Q.	How is this interpreted?
10	Α.	When looking at Mr. Andrews' Exhibit BCA-1, page 68 of 73, it is evident
11		that only four of the 32 statistical fits have a life of 17 years or higher (not
12		rounded). The remaining 28 fits are in the 15-16 year range (not rounded).
13		
14	Q.	What is the significance of "not rounded"?
15	Α.	The statistical fits are shown rounded to one decimal. When rounded it may
16		change a modest amount, but realistically there is not a lot of difference in
17		Mr. Andrews' proposed 17 L1.5, my 16 L1.5, or the calculated best fit of 16
18		S0.
19		
20	Q.	Did you perform other curve/life fits for this account?
21	Α.	Yes. In my supporting work papers you will find a total of 22 different fits
22		over varying placement and experience bands. Mr. Andrews only fit to one
23		placement band of 1947-2014 and one experience band of 1989-2014.
24		
25		

1	Q.	What are the life indications in those fits?						
2	Α.	Generally, we fit either a 16 or 17-year life with either the L1.5, S0 or even						
3		some R1 dispersion patterns.						
4								
5	Q.	Do you have any final comments on this account?						
6	Α.	Yes. The approved 16 S1 remains reasonable. My recommended 16 L1.5						
7		reflects a curve/life selection that is a good visual fit over several different						
8		bands and also produces a reasonable SSD. The Commission should						
9		adopt the 16 L1.5 as a reasonable estimate of life for this account at this						
10		time.						
11								
12								
13		III. POSITIONS OF OPC WITNESS MCCULLAR						
14								
15	Q.	Describe the differences between OPC Witness Ms. McCullar's analysis						
16		and Gulf Power's previously-filed Depreciation Study recommendations.						
17	Α.	In general, Ms. McCullar proposes different treatment of the following						
18		issues.						
19		1. The Interim Retirement Ratio (IRR) to be used for Steam Production						
20		Accounts: 312 Boiler Equipment, 314 Turbogenerator Equipment,						
21		and 315 Accessory Equipment;						
22		2. The remaining life calculation of General Plant Account 390,						
23		Structures & Improvements;						
24		3. The life recommendations for Distribution Plant Account 365,						
25		Overhead Conductor:						

1		4. The life recommendations for Distribution Plant Account 369.1,
2		Overhead Services;
3		5. The net salvage recommendation for General Plant Account 390,
4		Structures & Improvements; and
5		6. The appropriate definition of depreciation to be used in this
6		proceeding.
7		
8	Q.	After reviewing Ms. McCullar's positions, are there any with which you
9		agree?
10	Α.	Yes. Ms. McCullar has identified two issues which require us to make
11		revisions to Gulf Power's filed Depreciation Study and resulting depreciation
12		rates.
13		
14	Q.	What are the two issues?
15	Α.	First, she proposes to remove terminal retirements related to Plant Crist
16		Units 1-3 from the IRR calculation for Steam Production Accounts 312, 314,
17		and 315. Second, she proposes a correction for the General Plant Account
18		390 accrual to be the stated 46 R1.5.
19		
20	Q.	Regarding the first issue, have you or Ms. McCullar calculated the revised
21		IRRs for Steam Production Accounts 312, 314, and 315?
22	Α.	Yes. We have revised and calculated new IRRs for Accounts 312, 314, and
23		315 and confirm they are the same as Ms. McCullar's, which are Account
24		312, Boiler Plant Equipment IRR of 0.73 percent, Account 314,
25		Turbogenerator Equipment IRR of 0.93 percent, and Account 315,

1		Accessory Electric Equipment IRR of 0.50 percent. ²² These should be
2		incorporated into the Steam Production depreciation rate calculations.
3		
4	Q.	Have you incorporated these revised IRRs into your Steam Production
5		recommended depreciation rates?
6	Α.	Yes. The subsequent inclusion of corrected IRRs in the applicable Steam
7		Production accrual calculations are shown in Exhibit DAW-4, Appendix A-1,
8		which lists the revised depreciation rates by unit and account and Appendix
9		D-2 shows the revised IRRs and Interim Net Salvage for Production Plant.
10		There were no other changes to any other Production Plant depreciation
11		rate calculations noted by Ms. McCullar or Mr. Andrews.
12		
13	Q.	Have you quantified the impact of these revisions?
14	Α.	Yes. The impact is so minimal when viewed at a composite level with
15		rounding, there is no difference. However, when viewed at a detailed level
16		by Plant, Unit, and Account there is a small decrease in the calculated
17		annual depreciation expense of \$545,665, which is provided in Exhibit
18		DAW-4, Appendix A-1.
19		
20	Q.	Regarding the second issue of agreement pertaining to the remaining life for
21		General Plant Account 390 Structures & Improvements, have you revised your
22		calculations?
23	Α.	Yes. Both Ms. McCullar and Mr. Andrews determined we had inadvertently
24		performed an accrual calculation with the 45 R1.5 and not our
25		recommended 46 R1.5.

²² Direct Testimony Roxie M. McCullar, p. 13

1	Q.	Have you quantified the impact on annual depreciation expense based on
2		this revision?
3	Α.	Yes. The calculated remaining life for this account changes from 30.71
4		years to 31.67 years. The proposed rate changes from 2.2 percent to 2.1
5		percent. The annual depreciation expense for Account 390 changes from
6		\$1,850,197 to \$1,794,300, which is a decrease of approximately \$55,898.
7		This calculation is provided in Exhibit DAW-4, Appendix A-3.
8		
9	Q.	Please describe those matters in which you disagree with Ms. McCullar.
10	Α.	First, Ms. McCullar proposes a 50 R0.5 life and dispersion for Distribution
11		Account 365, Overhead Conductor and Devices. I proposed a 45 R1 life
12		and dispersion for Distribution Account 365.
13		
14	Q.	What is the basis for Ms. McCullar's 50 R0.5 for Distribution Account 365,
15		Overhead Conductor and Devices?
16	Α.	It appears to be based on the SPR life analysis statistical fitting and ranking.
17		
18	Q.	Is the statistical fitting and ranking of the SPR life analysis all that is needed
19		to reach a recommendation?
20	Α.	No. As described in my direct testimony Exhibit DAW-1 at pages 25-27, the
21		life analysis is merely one step, but certainly not the only step, in the
22		process that a depreciation analyst should use in making life
23		recommendations. The next step is the evaluation phase in which
24		additional information is sought to provide further insight and understanding
25		to the indications in the SPR analysis. Generally, a depreciation analyst

- does not rely solely upon the life analysis, but takes into consideration other
 information in order to gain a complete picture of what has, what is, and
 what will occur during the life of the assets in an account.
- 4

5

- Q. To what additional information are you referring?
- 6 Α. In the evaluation phase, other information from interviews with Company 7 experts are obtained and considered. Examples include (a) past and 8 present operating and maintenance processes and programs, (b) 9 replacement programs, and (c) expected change in materials or impact of technology on the assets in an account. Other information, such as the mix 10 11 of assets, the average age of the surviving assets, and the average age of 12 retirements, should also be reviewed and considered before making a life 13 and dispersion recommendation. This other information is contained in my 14 supporting Depreciation Study work papers provided in response to 15 Citizens' First Request for Production of Documents Item No. 3.
- 16
- Q. Did Ms. McCullar follow this process in making her life recommendations for
 Account 365, Overhead Conductor and Devices?
- A. Her testimony does not suggest that she did. However, Ms. McCullar did
 cite some of the information that resulted from my interviews and was
 provided in my Exhibit DAW-1 of my direct testimony.²³
- 22
- 23
- 24
- 25

²³ Direct Testimony Ms. Roxie M. McCullar, p.7

1	Q.	Is there other information from the Company interviews you considered in
2		making the recommendation of 45 R1 for this account?
3	Α.	Yes. The on-site interviews with Company operations personnel provided
4		this: "A longer life would not be unreasonable but should be stabilized
5		going forward. Moving from 40 years to 45 years would not be
6		unreasonable for a one time move."24
7		
8	Q.	Is there additional information you considered in making the
9		recommendation of 45 R1 for this account?
10	Α.	Yes. A review of the SPR runs across the various years (bands) indicated
11		the life is generally between the low 30's and mid 40's. In perspective, out
12		of the 28 statistical fits shown in the 40-year band analysis, only three have
13		a life of 50 years or more. In fact, 19 of the 28 have a life between 30-40
14		years, which is even below my 45 R1 recommendation. While I
15		acknowledge that the recommendations that Ms. McCullar and I made are
16		in the top three best ranked curves, it is important to consider the overall
17		indications. More specifically, it is more reasonable to select a life that is
18		not at or near the longest possible life indicated, regardless the ranking.
19		Additionally, the CIs advocated by Ms. McCullar were generally low,
20		resulting in either a poor or fair category. In fact, it is not until the 40-year
21		band that Ms. McCullar's top ranked 50 R0.5 moved into the very bottom of
22		the good category with a CI of 54.28 according to the CI ranking table
23		provided. ²⁵ The REIs across the bands were very high for all the fits. I am
24		including as Exhibit DAW-7 the referenced 40-year band SPR analysis to
25		illustrate these facts. Finally, the concept of gradualism is important in

 ²⁴ Watson Depreciation Study Workpapers, Interview Notes submitted in Citizens' First PODs, Item No. 3
 ²⁵ Direct Testimony Ms. McCullar, p. 8 as provided by footnote 15 citation of NARUC p. 96.

1 estimating the future life of an account. The current or approved life for this 2 account is a 38 R1. The recommendation I have made (45 R1) is already a 3 seven year, or approximately 18 percent, increase in life. Ms. McCullar's 4 proposal (50 R0.5) results in a 12 year, or approximately 32 percent, 5 increase in life at one time when compared to the existing. Given the 6 statistics that she relied upon were poor or fair, a move of this magnitude is 7 neither appropriate nor supportable. 8 9 Q. Do you have any final comments on the life proposal for Account 365? Α. Yes. Gulf Power is required to conduct and file a depreciation study with 10 11 the Commission for approval at least every four years. This ensures that 12 adjustments can be made in a timely manner and negates the need to 13 increase the life of an account so significantly at one point in time. The 14 Commission should adopt my recommended 45 R1 as the best and most 15 reasonable estimate of life for Account 365 at this time. 16 17 Q. Do you agree with Ms. McCullar's proposed life change to Distribution 18 Account 369.1, Overhead Services? 19 No. Ms. McCullar proposes 46 R0.5. My recommendation is 42 R1. The Α. 20 existing is 35 R1. 21 22 Q. What is Ms. McCullar's basis for the 46 R0.5 for Distribution Account 369.1, 23 **Overhead Services?** 24 Α. She based her recommendation primarily on the SPR life analysis statistical 25 fitting and ranking.

Q. Do you have any additional specific information that you believe is important
 for the Commission to consider?

A. Yes. The top three best ranked curves and lives contain my
recommendation as well as Ms. McCullar's. Based on the full band (103
years) the CIs are 16.36 (McCullar) compared to 14.53 (Gulf), both of which
are in the "poor" category. The 40-year band is the first place where Ms.
McCullar's R0.5 has a CI that barely moves to a fair category (25 to 50) at
25.13 as provided in the NARUC CI tables in Ms. McCullar's testimony.²⁶

9

Q. What does this mean to someone who is not a depreciation expert? 10 11 Α. It means there is very little statistical difference in the CIs, which is the 12 measure of closeness of fit. As a practical matter, neither recommendation 13 ever moves to a "good" category across the bands analyzed. The REIs for 14 both recommendations are 100 and considered excellent. This indicates 15 that additional information outside of the SPR statistical analysis and 16 ranking is important to distinguish between the top curve and life rankings. 17 Additionally, the poor or fair CI means that the results must be used with 18 caution and are not necessarily fully representative of the historical life.

19

Q. Did your on-site interviews with Company personnel provide any information
that was considered in your evaluation and recommendation for a 42 R1 for
this account?

A. Yes. The on-site interviews with Company operations personnel provided
the following information: "OH (overhead) longer and UG (underground)
lower life does not seem reasonable due to physical characteristics.

²⁶ Direct Testimony Ms. McCullar, p. 8 as provided by footnote 15 citation of NARUC p. 96.

- Company does not believe anything should have changed enough to create
 the change we are seeing."
- 3

4 Q. Is there additional information to which you are referring?

5 Α. In the evaluation phase of my work in this matter, other information from 6 interviews with Company experts was obtained and considered. Also, I 7 considered (a) past and present operating and maintenance processes and 8 programs, (b) replacement programs, (c) expected change in materials, and 9 (d) impact of technology on the assets in an account. Other information 10 such as the mix of assets, the average age of the surviving assets, and the 11 average age of retirements is reviewed and considered before making a life 12 and dispersion recommendation. All of these are contained in my 13 supporting Depreciation Study work papers provided in response to Citizens' First Request for Production of Documents Item No. 3. 14

15

16 Q. Is there any other information you considered in making the

17 recommendation of 42 R1 for this account?

18 Α. Yes. A review of the SPR runs across the various years (bands) indicated the 19 average service life is generally in the 30-39 year range. In perspective, out 20 of the 28 statistical fits shown in the 40-year band analysis, only three have a 21 life of 46 years or higher (including Ms. McCullar's). In fact, 23 of the 28 have 22 a shorter life than my recommended 42 R1. Although both Ms. McCullar's 23 and my recommendations are in the top three best ranked curves, it is 24 important to consider the overall indications. More specifically, it is more 25 reasonable to select a life that is not at or near the longest possible life

1 indicated despite the ranking. I am including as Exhibit DAW-8 the 2 referenced SPR 40-year band to illustrate these facts. Finally, the concept of 3 gradualism is important in estimating the future life of an account. The 4 current or approved life for this account is a 35 R1. The recommendation I 5 have made (42 R1) is already a seven year, or approximately a 20 percent, 6 increase in life. Ms. McCullar's proposal (46 R0.5) results in an 11-year, or 7 approximately 31 percent, increase in life at one time when compared to the 8 existing. Given that the statistics she relied upon were poor or fair, a move of 9 this magnitude is neither appropriate nor supportable.

10

11 Q. Do you have any final comments on the life proposal for Account 369.1? 12 Α. Yes. Gulf Power is required to conduct and file a depreciation study with 13 the Commission for approval at least every four years. This ensures that adjustments can be made in a timely manner and negates the need to 14 15 increase the life of an account so significantly at one point in time. The 16 Commission should adopt my recommended 42 R1 as the best and most reasonable estimate of life for Account 369.1 at this time. 17

18

Q. Do you agree with Ms. McCullar's proposed net salvage change to General
 Plant Account 390, Structures & Improvements?

A. No. Ms. McCullar raises a question as to Gulf Power's accounting for the
sale of its Pace Boulevard general office building in 2008 and the net
salvage analysis. The accounting entries for the sale will be addressed by
Gulf Power Witness Hodnett. I will address the net salvage analysis and
recommended negative 5 percent for this account.

1	Q.	What is the basic premise of Ms. McCullar's analysis regarding the net
2		salvage for the 2008 sale of Gulf Power's Pace Boulevard building?
3	Α.	Ms. McCullar believes the receipts from the sale should have been included
4		as salvage.
5		
6	Q.	Does Ms. McCullar's premise adhere to common depreciation principles
7		related to sales of a large asset such as the Pace Boulevard office?
8	Α.	No. If the information of the sale is known, generally it would be excluded
9		from the net salvage analysis.
10		
11	Q.	Why are receipts from a sale of a building, such as the Pace Boulevard office,
12		generally excluded from salvage in the net salvage analysis?
13	Α.	Such exclusions are made so that the analysis will reflect the routine and
14		recurring transactions in an account rather than a one-time or unique
15		occurrence that isn't expected to reoccur with any frequency. To retain such a
16		transaction will inappropriately skew the results of an account, a particularly
17		important consideration given the prospective nature of utility depreciation.
18		
19	Q.	Have you evaluated the net salvage analysis including the proceeds from
20		the sale of the Pace Boulevard building as salvage?
21	Α.	Yes. Since there are a number of issues raised by Ms. McCullar regarding
22		the accounting and possible requirements of the Commission, I have
23		prepared Exhibit DAW-9, which is the net salvage analysis including the
24		Pace Boulevard sales proceeds. Although not appropriate, if one assumes
25		that the sale proceeds are treated as net salvage, the result is \$4,297,789 in

2008 as salvage. It does impact the most recent full (10-year) moving
 average to move from a negative 7.74 percent to a positive 44.60 percent.
 However, as shown in the most recent three and five-year moving
 averages, the analysis still results in a negative 8.73 percent and negative
 17.99 percent net salvage, respectively. These figures are consistent with
 our original analysis.

7

Q. Based on both analyses, i.e., including and excluding the sale proceeds
from salvage, would you change your negative 5 percent net salvage
recommendation?

11 Α. No. A depreciation analyst would consider both full and short band 12 indications along with the more routine activities contained within the 13 account. Despite inclusion of the sale proceeds as salvage, I would weigh 14 the other routine transactions more heavily and rely on the more recent 15 indications. My recommended negative 5 percent is still more conservative 16 than the negative 8 percent shown in the most recent three-year average; 17 my recommendation is certainly more conservative when compared to the most recent five-year average of negative 17.99 percent. 18

19

Q. Do you have any final comments on the net salvage for Account 390?
A. Yes. The Commission should approve my recommended negative 5
percent net salvage as it is the best estimate and reflective of the future
expectations for the account at this time. Furthermore, it represents no
change from the approved net salvage for this account.

25

1 Q. What is the last issue in dispute between Gulf Power and Ms. McCullar in 2 this proceeding regarding depreciation? 3 Α. Ms. McCullar takes exception to the definition of depreciation stated in my 4 direct testimony. 5 6 What definition of depreciation do you propose for this proceeding? Q. 7 Α. I believe the appropriate definition is the one offered by AICPA as stated in 8 my direct testimony. The learned treatise, Depreciation Systems,²⁷ expand 9 the FERC definition of depreciation to include the following concepts: "To evaluate depreciation, we must go back to accounting theory. In the 10 11 accounting framework, depreciation is defined as an allocation procedure, 12 not a valuation process." 13 Four accounting assumption concepts are necessary to apply depreciation 14 15 to the world of public utilities: entity, time period, going concern, and stable 16 monetary unit. By adding these concepts, <u>Depreciation Systems</u> describes 17 depreciation as "an allocation process that operates within the bounds of the four basic assumptions to help accomplish income determination 18 through matching."28 19 20 The following quote from Depreciation Systems,²⁹ melds the FERC definition 21 22 with the allocation concept. The dictionary defines depreciation as a loss in 23 value. Value can be measured in many ways. The valuation expert may 24 use market value, replacement cost, reproduction cost, and even 25 sentimental value as different approaches to establishing value. A study of

²⁷ <u>Depreciation Systems</u>, Iowa State University Press, 1994, by Drs. F. K Wolf and W. C. Fitch, p 4.

²⁸ Depreciation Systems, Iowa State University Press, 1994, by Drs. F. K Wolf and W. C. Fitch, p 5.

²⁹ Depreciation Systems, Iowa State University Press, 1994, by Drs. F. K Wolf and W. C. Fitch, p 13.

1		the history of depreciation as applied to regulated public utilities reveals a
2		narrowing of the meaning of depreciation to the allocation of cost concept.
3		Some might call depreciation, as defined earlier in this chapter, depreciation
4		accounting rather than depreciation. Nevertheless, an understanding of
5		basic accounting is necessary to provide an understanding of what
6		depreciation does and does not do.
7		
8	Q.	Do you believe there are other considerations regarding the definition of
9		depreciation?
10	Α.	Yes. The concepts of "loss of service value" and "allocation of costs" are
11		linked when giving consideration to the depreciation study process,
12		calculating depreciation rates, and incorporating depreciation expense into
13		the cost of service.
14		
15	Q.	Is the "definition of depreciation" relevant to the approval of depreciation
16		rates in this proceeding?
17	Α.	No. It is simply a theoretical and/or semantic discussion. Ms. McCullar's
18		unique interpretation on this should not have any bearing on the evaluation
19		and approval of the Depreciation Study and results I submitted in this
20		proceeding. The parameters and calculations would be exactly the same
21		regardless of the outcome of the theoretical or semantic discussion.
22		
23		
24		
25		

1		IV. CONCLUSION
2		
3	Q.	Do you have any concluding remarks?
4	Α.	Yes. The depreciation rates, as provided here in my rebuttal testimony as
5		Exhibit DAW-4, Appendices A and B, should be applied to Gulf Power's
6		plant in service. The attached Appendices incorporate the changes the
7		Company made where we are in agreement with intervenors. My revised
8		depreciation rates, when applied to Gulf Power's plant-in-service balances
9		provide fair and reasonable recovery to both Gulf Power and its customers
10		and should be adopted by this Commission.
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AFFIDAVIT

STATE OF TEXAS

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Docket No. 160186-EI

Before me the undersigned authority, personally appeared Dane A. Watson, who being first duly sworn, deposes, and says that he is the Managing Partner of Alliance Consulting Group, and that the foregoing is true and correct to the best of his knowledge, information, and belief. He is personally known to me.

a. Wats

Dane A. Watson Managing Partner

Sworn to and subscribed before me this 2 day of FERRUARY, 2017.

2

Notary Public, State of Texas Commission No. _____ My Commission Expires _<u>07-01-2019</u>



Exhibit

GULF POWER Computation of Composite Accrual Rate For Steam Production Plant As of December 31, 2016

					Pi	roposed	
					Annu	ual Accrual	
Unit	Acct	Description	Plant Balance	Book Reserve	Rate	Amount	
CRIST PLANT							
4	312	Boiler Plant Equipment	\$ 34,765,256	\$ 21,085,292	2 5.2%	\$ 1,815,063	
4	314	Turbogenerator Equipment	10,894,270	5,520,254	4 6.6%	718,645	
4	315	Accessory Electric Equipment	3,808,075	1,826,136	6.7%	253,867	
5	312	Boiler Plant Equipment	35,572,540	20,126,719	9 4.7%	1,662,487	
5	314	Turbogenerator Equipment	13,297,373	2,004,435	5 9.1%	1,210,775	
5	315	Accessory Electric Equipment	4,147,091	2,016,301	1 5.3%	219,918	
6	312	Boiler Plant Equipment	265,342,980	35,174,223	3 5.1%	13,492,644	
6	314	Turbogenerator Equipment	47,744,495	13,118,901	1 4.4%	2,107,849	
6	315	Accessory Electric Equipment	34,168,446	8,742,892	2 4.1%	1,417,601	
7	312	Boiler Plant Equipment	218,187,178	45,405,542	2 4.1%	8,909,799	ח ע ע
7	314	Turbogenerator Equipment	100,410,669	21,716,000	0 4.2%	4,196,269	evi ag
7	315	Accessory Electric Equipment	27,095,838	14,105,733	3 2.3%	634,808	bit I e 1
Common	311	Structures and Improvement	127.423.259	73.610.728	3 2.0%	2.525.163	of 3
Common	312	Boiler Plant Equipment	490,157,683	129,493,866	6 3.8%	18.664.800	pei
Common	314	Turbogenerator Equipment	26,780,017	14,449,285	5 2.6%	684,576	ndi D
Common	315	Accessory Electric Equipment	101,348,754	29,330,511	1 3.5%	3,498,137	XA
Common	316	Miscellaneous Power Plant Equipment	10,786,966	2,006.363	3 4.0%	426,452	>
		Total Crist	1,551,930,888	439,733,184	4.0%	62,438,853	4)

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. (DAW-4)

GULF POWER Computation of Composite Accrual Rate For Steam Production Plant As of December 31, 2016

					Pro	oposed	
					Annu	al Accrual	
Unit	Acct	Description	Plant Balance	Book Reserve	Rate	Amount	
DANIEL PLANT							
Rail Car	311	Structures and Improvements	2,828,013	1,508,465	1.6%	45,248	
Easements	310.1	Land Rights	77,160	44,753	1.4%	1,080	
1	311	Structures and Improvement	8,887,842	8,072,879	0.4%	33,855	
1	312	Boiler Plant Equipment	146,254,617	32,853,792	3.5%	5,071,666	
1	314	Turbogenerator Equipment	27,688,825	10,860,080	2.9%	797,483	
1	315	Accessory Electric Equipment	13,972,309	8,431,568	1.7%	233,343	
1	316	Miscellaneous Power Plant Equipment	133,722	(3,252)	4.3%	5,695	
2	311	Structures and Improvement	9,337,214	8,581,737	0.3%	27,749	~~~~~
2	312	Boiler Plant Equipment	152,274,745	29,842,725	3.2%	4,845,596	
2	314	Turbogenerator Equipment	26,717,999	13,212,346	2.2%	583,813	
2	315	Accessory Electric Equipment	12,977,551	8,986,521	1.1%	149,080	
2	316	Miscellaneous Power Plant Equipment	190,580	37,369	2.9%	5,593	Apr Sf 3
Common	311	Structures and Improvement	38,605,472	14,868,760	2.1%	823,510	ER ne / Denc
Common	312	Boiler Plant Equipment	182,680,844	25,298,652	3.4%	6,202,758	
Common	314	Turbogenerator Equipment	3,483,091	2,486,963	1.3%	46,922	P ≷ S M H N
Common	315	Accessory Electric Equipment	17,552,673	1,358,605	3.4%	588,967	$^{-1}$ $^{+1$
Common	316	Miscellaneous Power Plant Equipment	4,684,486	1,566,417	2.4%	114,041	Ŭ Ž Č
		Total Daniel	645,441,969	166,455,162	3.0%	19,530,070	r n

nission

GULF POWER Computation of Composite Accrual Rate For Steam Production Plant As of December 31, 2016

					Pro	posed
				-	Annua	Accrual
Unit	Acct	Description	Plant Balance	Book Reserve	Rate	Amount
SCHERER P	LANT					
	311	Structures and Improvement	37,765,761	21,648,703	1.2%	472,031
	312	Boiler Plant Equipment	282,887,490	79,700,704	2.5%	6,991,418
	314	Turbogenerator Equipment	38,601,240	23,275,983	1.6%	601,207
	315	Accessory Electric Equipment	16,036,614	6,121,133	1.9%	308,272
	316	Miscellaneous Power Plant Equipment	5,908,516	3,485,687	1.3%	75,817
		Total Scherer	381,199,620	134,232,210	2.2%	8,448,745
SCHOLZ PL	ANT					
311	311	Structures and Improvement	4,386,828	4,792,336	0.0%	0
312	312	Boiler Plant Equipment	1,033,193	1,415,336	0.0%	0
314	314	Turbogenerator Equipment	1,377,880	2,082,312	0.0%	0
315	315	Accessory Electric Equipment	1,682,895	2,116,319	0.0%	0
316	316	Miscellaneous Power Plant Equipment	414,408	269,610	0.0%	0
		Total Scholz	\$ 8,895,204	\$ 10,675,914	0.0%	\$0

Revised	90,463,996
Originally Filed	91,009,661
Difference	(545.665)

Revised Appendix A-1 Page 3 of 3	Exhibit No(DAW-4)	Witness: Dane A. Watson	GULF POWER COMPANY	Docket No. 160186-EI	Florida Public Service Commissior	
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Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-4) Revised Appendix A-2 Page 1 of 1

Computation of Composite Accrual Rate Other Production Plant As of December 31, 2016 GULF POWER

						•	Prop	- osed
Account	Donariation	0	ant Balanco	D		Pato An	nual	Accrual
ACCOUNT				ç		Nale		
PEA RIDO	GE FACILITY							
343	Prime Movers	θ	7,332,158	θ	5,851,056	10.1%	θ	740,548
344	Generators	S	3,484,216	θ	2,551,490	13.4%	θ	466,885
345	Accessory Electric Equipment	ഗ	679,779	ω	453,186	16.7%	θ	113,523
	Total Pea Ridge Facility	\$	11,496,153	\$	8,855,731	11.5%	\$	1,320,956
PERDIDO	DLANDFILL							
341	Structures and Improvements	θ	2,221,640	θ	280,795	7.8%	θ	173,288
342	Fuel Holders	θ	797,165	÷	162,851	6.7%	θ	53,410
343	Prime Movers	θ	3,993,649	÷	776,143	7.6%	θ	303,517
345	Accessory Electric Equipment	θ	1,056,282	÷	224,856	6.7%	θ	70,771
346	Misc. Power Plant Equipment	ക	170,350	ω	184,540	0.0%	φ	1
	Total Perdido Landfill	÷	8,239,086	÷	1,629,185	7.3%	¢	600,986
SMITH C	-							
341	Structures and Improvements	θ	1,369,495	θ	228,002	8.6%	θ	117,777
342	Fuel Holders	ŝ	946,035	θ	20,635	9.5%	θ	89,873
343	Prime Movers	ŝ	2,608,493	θ	294,983	9.5%	φ	247,807
344	Generators	ŝ	3,856,145	θ	3,001,457	2.0%	φ	77,123
345	Accessory Electric Equipment	ŝ	3,305,588	θ	955,780	7.0%	θ	231,391
346	Misc. Power Plant Equipment	ഹ	50,915	ω	(10,911)	12.2%	မ	6,212
	Total Smith CT	↔	12,136,671	↔	4,489,946	6.3%	÷	770,182
SMITH C	C							
341	Structures and Improvements	Ф	28,036,877	θ	2,730,556	4.7%	θ	1,317,733
342	Fuel Holders	θ	4,698,022	θ	(569,072)	5.1%	θ	239,599
343	Prime Movers	ŝ	158,457,670	÷	2,430,265	5.7%	ŝ	9,032,087
344	Generators	ŝ	84,589,044	ŝ	26,301,332	2.7%	θ	2,283,904
345	Accessory Electric Equipment	ŝ	14,007,856	θ	1,449,565	4.2%	θ	588,330
346	Misc. Power Plant Equipment	S	2,640,194	ω	(934,984)	6.6%	မ	174,253
	Total Smith CC	÷	292,429,663	÷	31,407,661	4.7%	↔	13,635,906
	Total Other Production	S	324,301,572	ŝ	46.382.523	5.1%	÷	16,328,031
		ŀ	•	ŀ	•		ŀ	

GULF POWER
Computation of Depreciation Accrual Rates for Transmission, Distribution, and General Plant
At December 31, 2016

	Plant	Book	Net	Net				
	In Service	Depreciation	Salvage	Salvage	Unaccrued	Remaining	Annual Ac	crual
Account Description	12/31/16	12/31/16	%	Amount	Balance	Life	Amount	Rate
Transmission Plant								
350.1 Easements	\$ 12,654,559	\$ 7,310,897	0%	\$-	\$ 5,343,662	27.66	\$ 193,211	1.5%
352.0 Structures and Improvements	24,391,124	6,029,828	-5%	(1,219,556)	19,580,852	46.65	419,779	1.7%
353.0 Station Equipment	250,073,126	33,409,988	-10%	(25,007,313)	241,670,450	33.49	7,215,956	2.9%
354.0 Towers and Fixtures	42,290,155	24,879,312	-25%	(10,572,539)	27,983,382	30.79	908,837	2.1%
355.0 Poles and Fixtures	230,339,009	28,946,820	-75%	(172,754,256)	374,146,445	35.30	10,597,785	4.6%
356.0 Overhead Conductors & Devices	123,801,393	27,851,093	-30%	(37,140,418)	133,090,718	42.14	3,158,157	2.6%
358.0 Underground Conductors	14,402,363	8,392,435	0%	0	6,009,928	24.16	248,729	1.7%
359.0 Roads and Trails	235,918	51,951	0%	0	183,967	42.00	4,381	1.9%
Total Transmission Plant	698,187,647	136,872,324		(246,694,082)	808,009,404		22,746,835	3.3%
Distribution Plant								
360.1 Easements	204,176	38,383	0%	0	165,792	44.50	3,726	1.8%
361.0 Structures and Improvements	26,412,569	8,307,855	-5%	(1,320,628)	19,425,342	37.06	524,225	2.0%
362.0 Station Equipment	213,071,996	48,190,373	-10%	(21,307,200)	186,188,823	28.03	6,641,352	3.1%
364.0 Poles, Towers, and Fixtures	140,464,604	79,425,237	-75%	(105,348,453)	166,387,819	23.94	6,948,834	4.9%
365.0 Overhead Conductors & Devices	153,061,774	52,068,507	-50%	(76,530,887)	177,524,154	32.53	5,458,007	3.6%
366.0 Underground Conduit	1,159,696	802,585	0%	0	357,110	27.34	13,060	1.1%
367.0 Underground Conductors	158,145,619	63,904,565	-15%	(23,721,843)	117,962,897	30.52	3,864,802	2.4%
368.0 Line Transformers	282,436,706	104,889,760	-22%	(62,136,075)	239,683,021	24.96	9,600,819	3.4%
369.1 Overhead Services	61,968,191	38,141,620	-75%	(46,476,143)	70,302,715	29.46	2,386,736	3.9%
369.2 Underground Services	57,120,322	20,106,639	-20%	(11,424,064)	48,437,747	32.87	1,473,483	2.6%
370.0 Meters	36,567,578	(288,419)	10%	3,656,758	33,199,239	11.46	2,897,120	7.9%
370 AMI Meters - AMI Equipment	41,794,941	18,329,633	0%	0	23,465,308	11.82	1,985,437	4.8%
373.0 Street Lighting	75,546,351	41,162,451	-20%	(15,109,270)	49,493,171	15.85	3,122,730	4.1%
Total Distribution Plant	1,247,954,522	475,079,189		(359,717,806)	1,132,593,139		44,920,331	3.6%

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-4) Revised Appendix A-3 Page 1 of 2

	Plant	Book	Net	Net				
	In Service	Depreciation	Salvage	Salvage	Unaccrued	Remaining	Annual Ac	crual
Account Description	12/31/16	12/31/16	%	Amount	Balance	Life	Amount	Rate
General Plant								
390.0 Structures and Improvements	84,247,313	31,641,511	-5%	(4,212,366)	56,818,168	31.67	1,794,300	2.1%
396.0 Power Operated Equipment	931,916	671,383	20%	186,383	74,150	4.56	16,247	1.7%
397.0 Communications Equipment	24,528,470	9,823,909	0%	0	14,704,561	10.61	1,386,219	5.7%
Total General Plant	109,707,699	42,136,803		(4,025,983)	71,596,879		3,196,766	2.9%
Transportation								
392.1 Automobiles	29,848	16,553	15%	4,477	8,818	3.59	2,456	8.2%
392.2 Light Trucks	7,519,254	4,220,267	5%	375,963	2,923,023	2.21	1,321,436	17.6%
392.3 Heavy Trucks	24,527,733	13,863,301	15%	3,679,160	6,985,272	3.18	2,195,336	9.0%
392.4 Trailers	1,320,796	709,817	8%	105,664	505,316	10.26	49,255	3.7%
Total Transportation	33,397,631	18,809,939		4,165,264	10,422,429		3,568,483	10.7%
Total Transmission, Distribution,	\$ 2,089,247,499	\$ 672,898,255		\$ (606,272,607)	\$ 2,022,621,850	· -	\$ 74,432,415	3.6%
General and Transportation Plant						•		

GULF POWER Computation of Depreciation Accrual Rates for Transmission, Distribution, and General Plant At December 31, 2016

Originally Filed 9/2016 74,488,313 3.6% Difference \$ (55,898)

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-4) Revised Appendix A-3 Page 2 of 2

GULF POWER Comparison of Depreciation Accrual Rates Total Company Summary As of December 31, 2016

		Plant		Exi	isting		Pro	posed		
Account Description		In Service	Anr	iua	Accrual	An	nua	Accrual	Accrual	
		 12/31/2016	Rate		Amount	Rate		Amount		oifference
Steam Produc	ction Plant									
Cris	t Plant	\$ 1,551,930,888	3.5%	\$	54,317,581	4.0%	\$	62,077,236	\$	7,759,654
Dan	iel RR Track	2,828,013	1.5%		42,420	1.6%		45,248		2,828
Dan	iel Easement	77,160	1.4%		1,080	1.4%		1,080		0
Dan	iel Plant	645,441,969	2.8%		18,072,375	3.0%		19,363,259		1,290,884
Sch	erer Plant	381,199,620	2.0%		7,623,992	2.2%		8,386,392		762,399
Sch	olz Plant	8,895,204	4.1%		364,703	0.0%		0		(364,703)
	Total Steam Production Plant	 2,590,372,854	3.1%		80,422,152	3.5%		89,873,215		9,451,062
Other Produc	tion Plant									
Pea	Ridge Facility	11,496,153	5.3%		609,296	11.5%		1,322,058		712,761
Perc	dido Landfill	8,239,086	5.0%		411,954	7.3%		601,453		189,499
Smit	th CT	12,136,671	3.6%		436,920	6.3%		764,610		327,690
Smit	th CC	292,429,663	2.8%		8,188,031	4.7%		13,744,194		5,556,164
	Total Other Production Plant	 324,301,572	3.0%		9,646,201	5.1%		16,432,315		6,786,114
	Total Production Plant	 2,914,674,427	3.1%		90,068,354	3.6%		106,305,530		16,237,176

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-4) Revised Appendix B Page 1 of 3

GULF POWER Comparison of Depreciation Accrual Rates Total Company Summary As of December 31, 2016

		Plant	E	xisting	Pi	oposed		
		In Service	Annu	ual Accrual	Annu	ual Accrual		
Account	Description	12/31/2016	Rate	Amount	Rate	Amount	Difference	
Transmis	ssion Plant							
350.1	Easements	12,654,559	1.6%	202,473	1.5%	189,818	(12,655)	
352	Structures and Improvements	24,391,124	2.0%	487,822	1.7%	414,649	(73,173)	
353	Station Equipment	250,073,126	2.3%	5,751,682	2.9%	7,252,121	1,500,439	
354	Towers and Fixtures	42,290,155	2.3%	972,674	2.1%	888,093	(84,580)	
355	Poles and Fixtures	230,339,009	3.6%	8,292,204	4.6%	10,595,594	2,303,390	
356	Overhead Conductors & Devices	123,801,393	2.5%	3,095,035	2.6%	3,218,836	123,801	
358	Underground Conductors	14,402,363	2.1%	302,450	1.7%	244,840	(57,609)	
359	Roads and Trails	235,918	2.0%	4,718	1.9%	4,482	(236)	
	Total Transmission Plant	698,187,647	2.7%	19,109,058	3.3%	22,808,435	3,699,377	
Distribut	ion Plant							
360.1	Easements	204,176	1.8%	3,675	1.8%	3,675	0	
361	Structures and Improvements	26,412,569	2.2%	581,077	2.0%	528,251	(52,825)	
362	Station Equipment	213,071,996	2.2%	4,687,584	3.1%	6,605,232	1,917,648	
364	Poles, Towers, and Fixtures	140,464,604	5.0%	7,023,230	4.9%	6,882,766	(140,465)	ige ge
365	Overhead Conductors & Devices	153,061,774	3.1%	4,744,915	3.6%	5,510,224	765,309	bit 2
366	Underground Conduit	1,159,696	1.3%	15,076	1.1%	12,757	(2,319)	
367	Underground Conductors	158,145,619	3.3%	5,218,805	2.4%	3,795,495	(1,423,311)	$\omega \overline{p}$
368	Line Transformers	282,436,706	4.0%	11,297,468	3.4%	9,602,848	(1,694,620)	
369.1	Overhead Services	61,968,191	3.8%	2,354,791	3.9%	2,416,759	61,968	
369.2	Underground Services	57,120,322	2.6%	1,485,128	2.6%	1,485,128	0	× A <
370	Meters	36,567,578	2.7%	987,325	7.9%	2,888,839	1,901,514	™≷≦
370 AMI	Meters - AMI Equipment	41,794,941	6.7%	2,800,261	4.8%	2,006,157	(794,104)	4. Its
373	Street Lighting	75,546,351	5.0%	3,777, <u>3</u> 18	4.1%	3,097,400	(679,917)) on
	Total Distribution Plant	1,247,954,522	3.6%	44,976,653	3.6%	44,835,531	(141,122)	

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A Watson

GULF POWER Comparison of Depreciation Accrual Rates Total Company Summary As of December 31, 2016

		Plant	E	kisting	Pro	oposed	
		In Service	Annu	al Accrual	Annu	al Accrual	
Accoun	t Description	12/31/2016	Rate	Amount	Rate	Amount	 Difference
General	Plant						
390	Structures and Improvements	84,247,313	2.3%	1,937,688	2.1%	1,769,194	(168,495)
396	Power Operated Equipment	931,916	4.7%	43,800	1.7%	15,843	(27,957)
397	Communications Equipment	24,528,470	6.3%	1,545,294	5.7%	1,398,123	(147,171)
	Total General Plant	109,707,699	3.2%	3,526,782	2.9%	3,183,159	 (343,623)
Transpo	ortation						
392.1	Automobiles	29,848	12.1%	3,612	8.2%	2,448	(1,164)
392.2	Light Trucks	7,519,254	9.3%	699,291	17.6%	1,323,389	624,098
392.3	Heavy Trucks	24,527,733	7.9%	1,937,691	9.0%	2,207,496	269,805
392.4	Trailers	1,320,796	4.8%	63,398	3.7%	48,869	 (14,529)
	Total Transportation	33,397,631	8.1%	2,703,991	10.7%	3,582,202	 878,210
	Total Transmission, Distribution,	2,089,247,499	3.4%	70,316,485	3.6%	74,409,327	 4,092,842
Ge	eneral, and Transportation Plant						
	Total Company Depreciable Plant	\$ 5,003,921,925	3.2% \$	160,384,838	3.6% \$	180,714,857	\$ 20,330,018

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-4) Revised Appendix B Page 3 of 3

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-4) Revised Appendix D-2 Page 1 of 1

GULF POWER

Proposed Interim Retirement Rates and Interim Net Salvage At December 31, 2016

Interim Retirement

Interim Net

Proposed as Revised

Account	Description	Ratio	Salvage
All Units E	kcept Scherer		
311	Structures and Improvement	0.21%	-10%
312	Boiler Plant Equipment	0.73%	-30%
314	Turbogenerator Equipment	0.93%	-30%
315	Accessory Electric Equipment	0.50%	-10%
316	Miscellaneous Power Plant Equipment	0.56%	-5%
Scherer			
311	Structures and Improvement	0.21%	-10%
312	Boiler Plant Equipment	0.73%	-30%
314	Turbogenerator Equipment	0.93%	-30%
315	Accessory Electric Equipment	0.50%	-10%
316	Miscellaneous Power Plant Equipment	0.56%	-5%
Combustio	n Turbines		
341	Structures and Improvements	2.20%	-5%
342	Fuel Holders	1.30%	-5%
343	Prime Movers	3.00%	-5%
344	Generators	0.25%	-5%
345	Accessory Electric Equipment	1.50%	-5%
346	Misc Power Plant Equipment	1.80%	-5%
Combined	Cycle Turbines		
341	Structures and Improvements	2.20%	-5%
342	Fuel Holders	1.30%	-5%
343	Prime Movers	3.00%	-5%
344	Generators	0.25%	-5%
345	Accessory Electric Equipment	1.50%	-5%
346	Misc Power Plant Equipment	1.80%	-5%

GULF POWER	
Production Interim Retirement and Interim Net Salvage	Analyiss
As Adjusted December 31, 2014	

Transaction			Gross	Cost of	Net	Net	2- yr Net	3- yr Net	4- yr Net	5- yr Net	6- yr Net	7- yr Net	8- yr Net	9- yr Net	10- yr Net
Year	Description	Retirements	Salvage	Removal	Salvage	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %
1981	Production Excluding ARO	421,850	9,363	113,237	(103,874)	-24.62%									
1982	Production Excluding ARO	1,647,246	111,433	392,090	(280,657)	-17.04%	-18.58%								
1983	Production Excluding ARO	2,639,895	93,225	828,537	(735,312)	-27.85%	-23.70%	-23.78%							
1984	Production Excluding ARO	3,610,444	195,307	431,556	(236,249)	-6.54%	-15.54%	-15.86%	-16.30%						
1985	Production Excluding ARO	3,781,871	131,573	848,640	(717,067)	-18.96%	-12.90%	-16.83%	-16.86%	-17.13%					
1986	Production Excluding ARO	3,143,870	24,356	724,415	(700,059)	-22.27%	-20.46%	-15.69%	-18.13%	-18.01%	-18.19%				
1987	Production Excluding ARO	3,501,713	15,162	845,803	(830,641)	-23.72%	-23.03%	-21.56%	-17.70%	-19.30%	-19.10%	-19.22%			
1988	Production Excluding ARO	5,455,544	64,801	476,385	(411,583)	-7.54%	-13.87%	-16.05%	-16.74%	-14.85%	-16.40%	-16.45%	-16.59%		
1989	Production Excluding ARO	6,100,196	469,085	870,732	(401,646)	-6.58%	-7.04%	-10.92%	-12.88%	-13.92%	-12.88%	-14.28%	-14.43%	-14.58%	
1990	Production Excluding ARO	8,386,850	188,856	1,826,975	(1,638,119)	-19.53%	-14.08%	-12.29%	-14.00%	-14.98%	-15.47%	-14.52%	-15.49%	-15.55%	-15.65%
1991	Production Excluding ARO	7,624,035	106,113	997,523	(891,410)	-11.69%	-15.80%	-13.26%	-12.13%	-13.43%	-14.24%	-14.71%	-14.01%	-14.83%	-14.91%
1992	Production Excluding ARO	1,033,681	195,148	413,900	(218,752)	-21.16%	-12.82%	-16.12%	-13.61%	-12.45%	-13.68%	-14.45%	-14.88%	-14.18%	-14.98%
1993	Production Excluding ARO	7,078,262	393,496	2,862,980	(2,469,485)	-34.89%	-33.14%	-22.75%	-21.63%	-18.59%	-16.90%	-17.51%	-17.87%	-17.96%	-17.13%
1994	Production Excluding ARO	10,885,104	113,349	3,268,697	(3,155,348)	-28.99%	-31.31%	-30.76%	-25.30%	-23.92%	-21.35%	-19.73%	-20.01%	-20.14%	-20.06%
1995	Production Excluding ARO	8,420,567	35,825	1,596,005	(1,560,180)	-18.53%	-24.43%	-27.23%	-27.00%	-23.67%	-22.87%	-20.87%	-19.54%	-19.79%	-19.92%
1996	Production Excluding ARO	10,162,352	216,671	1,441,516	(1,224,845)	-12.05%	-14.99%	-20.16%	-23.01%	-22.96%	-21.06%	-20.82%	-19.37%	-18.38%	-18.65%
1997	Production Excluding ARO	1,626,119	15,160	248,570	(233,410)	-14.35%	-12.37%	-14.94%	-19.86%	-22.64%	-22.60%	-20.83%	-20.63%	-19.23%	-18.28%
1998	Production Excluding ARO	2,831,929	11,535	1,832,883	(1,821,348)	-64.31%	-46.09%	-22.43%	-21.01%	-23.57%	-25.52%	-25.41%	-23.31%	-22.76%	-21.22%
1999	Production Excluding ARO	10,673,181	86,116	1,916,249	(1,830,133)	-17.15%	-27.04%	-25.67%	-20.20%	-19.78%	-22.03%	-23.79%	-23.74%	-22.22%	-21.89%
2000	Production Excluding ARO	6,416,363	610,276	2,332,998	(1,722,722)	-26.85%	-20.79%	-26.98%	-26.02%	-21.55%	-20.91%	-22.64%	-24.13%	-24.08%	-22.66%
2001	Production Excluding ARO	4,125,742	50,996	2,704,922	(2,653,926)	-64.33%	-41.52%	-29.26%	-33.38%	-32.18%	-26.47%	-24.96%	-25.76%	-26.79%	-26.70%
2002	Production Excluding ARO	14,582,749	310,474	4,225,754	(3,915,281)	-26.85%	-35.11%	-33.00%	-28.28%	-30.92%	-30.25%	-26.58%	-25.43%	-25.98%	-26.80%
2003	Production Excluding ARO	7,559,694	308,678	3,957,644	(3,648,966)	-48.27%	-34.16%	-38.90%	-36.53%	-31.76%	-33.76%	-33.10%	-29.41%	-28.03%	-28.16%
2004	Production Excluding ARO	7,336,958	88,832	1,632,363	(1,543,531)	-21.04%	-34.86%	-30.90%	-35.00%	-33.69%	-30.21%	-32.01%	-31.49%	-28.47%	-27.33%
2005	Production Excluding ARO	17,590,813	346,984	4,847,003	(4,500,019)	-25.58%	-24.24%	-29.83%	-28.91%	-31.76%	-31.22%	-29.02%	-30.42%	-30.06%	-27.86%
2006	Production Excluding ARO	7,780,688	798,620	2,980,102	(2,181,482)	-28.04%	-26.33%	-25.15%	-29.49%	-28.79%	-31.27%	-30.84%	-28.92%	-30.19%	-29.87%
2007	Production Excluding ARO	18,097,592	286,297	6,180,928	(5,894,631)	-32.57%	-31.21%	-28.93%	-27.79%	-30.44%	-29.72%	-31.58%	-31.21%	-29.62%	-30.63%
2008	Production Excluding ARO	12,501,010	1,329,573	7,240,220	(5,910,647)	-47.28%	-38.58%	-36.44%	-33.03%	-31.64%	-33.41%	-32.29%	-33.77%	-33.31%	-31.69%
2009	Production Excluding ARO	19,794,184	216,339	5,462,498	(5,246,159)	-26.50%	-34.55%	-33.84%	-33.06%	-31.32%	-30.42%	-31.91%	-31.20%	-32.45%	-32.14%
2010	Production Excluding ARO	12,004,716	299,685	2,229,989	(1,930,304)	-16.08%	-22.57%	-29.54%	-30.42%	-30.16%	-29.24%	-28.61%	-30.05%	-29.66%	-30.83%
2011	Production Excluding ARO	21,210,903	1,513,427	9,673,053	(8,159,627)	-38.47%	-30.38%	-28.93%	-32.43%	-32.46%	-32.09%	-31.04%	-30.41%	-31.50%	-31.01%
2012	Production Excluding ARO	21,624,054	841,703	17,218,298	(16,376,596)	-75.73%	-57.28%	-48.26%	-42.49%	-43.18%	-41.35%	-40.44%	-38.44%	-37.51%	-38.07%
2013	Production Excluding ARO	18,717,020	381,065	1,453,252	(1,072,188)	-5.73%	-43.25%	-41.60%	-37.44%	-35.12%	-36.56%	-35.97%	-35.51%	-34.34%	-33.71%
2014	Production Excluding ARO	10,403,093	981,400	3,383,327	(2,401,926)	-23.09%	-11.93%	-39.12%	-38.93%	-35.66%	-33.91%	-35.35%	-34.98%	-34.60%	-33.60%

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-4) Revised Appendix E-1 Page 1 of 14

GULF POWER Production Interim Retirement and Interim Net Salvage Analyiss As Adjusted December 31, 2014

Aujusiei	Decen	iber 3	1, 20	14

International Vetar Description Retirements Salaryge Reture Year Year <th>Transaction</th> <th></th> <th></th> <th>C</th> <th>Cost of</th> <th>Not</th> <th>Not</th> <th>2-yr</th> <th>3-yr</th> <th>4- yr</th> <th>5- yr</th> <th>6- yr</th> <th>7- yr</th> <th>8- yr</th> <th>9- yr</th> <th>10- yr</th>	Transaction			C	Cost of	Not	Not	2-yr	3-yr	4- yr	5- yr	6- yr	7- yr	8- yr	9- yr	10- yr
Teal Description Neuron Metrix Cality, A <	Veer	Description	Detiromente	Selvere	Bomoval	Selvere	Solu %	Solu %	Solv %						Solv %	Solv %
Stam Stam Stam Production Partician Pari	Tear	Description	Retirements	Salvage	Removal	Salvaye	Salv. 70	Salv. 76	Salv. 76	Salv. 76	Sdiv. 76	Salv. 76	Salv. 70	Salv. 70	Sdiv. 76	Salv. 7
Steam Production Plant 1.4.7.4/2 111.4.3 392.090 (220.67) -1.6.9% -1.5.27/M -3.2.7% -2.3.7% 1983 Steam Production Plant 3.0.1.0.44 195.30 43.1.56 (226.2.49) 6.5.6% -1.5.6% -1.5.8% -1.5.2% -1.5.8% -1.5.	1981	Steam Production Plant	421,850	9,363	113,237	(103,874)	-24.62%									
Sitean Production Pirett 2,8,9,89 99,28 28,28,37 (77,53,71) 27,26% 42,76% 42,78% 42,78% 42,78% 42,78% 41,80% 11,713% 11,81,81 131,81,81 131,81,81 131,81,81 131,81,81 131,81,81 131,81,81 131,81,81 131,81,81 131,81,81 131,81,81 131,81,81 131,81,81 131,81,81 131,81,81 142,81 142,81 142,81 142,81 142,81 142,81 142,81 142,81 142,81 142,81 142,81 144,81 144,85 <td>1982</td> <td>Steam Production Plant</td> <td>1,647,246</td> <td>111,433</td> <td>392,090</td> <td>(280,657)</td> <td>-17.04%</td> <td>-18.58%</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	1982	Steam Production Plant	1,647,246	111,433	392,090	(280,657)	-17.04%	-18.58%								
1848Steam Production Plant3,10,444195,377431,557431,55741,55%-15,57%-16,30%-12,07%1868Steam Production Plant3,743,47024,356724,415(700,069)-22,27%-20,40%-16,80%-17,73%-19,10%-19,10%1867Steam Production Plant3,501,77315,152845,803630,641-22,27%-20,40%-16,80%-16,40%-16,40%-16,50%1868Steam Production Plant5,455,4444,801476,385(411,683)-76,44%-13,87%-14,20%-12,82%-12,88%-12,82%-12,88%-12,82%-12,84%-14,85%-14,43%-14,55%1969Steam Production Plant6,00,16816,86512,826,75(16,31,19)-11,69%-12,22%-14,00%-14,69%-14,64%-14,85%-14,64%1969Steam Production Plant1,03,86119,7523(80,140)-11,69%-12,27%-13,61%-12,65%-14,64%-14,84%-14,45%1969Steam Production Plant1,03,86119,61,61-12,66,169-31,44%-22,75%-22,65%-23,62%-17,67%-17,87%-17,87%-17,87%-17,87%-17,87%-17,87%-14,97%1969Steam Production Plant1,042,36224,869-24,64%-31,44%-22,75%-23,65%-23,65%-23,67%-22,87%-20,87%-22,87%-20,87%-22,87%-20,87%-20,87%-20,87%-20,14%-20,14%-20,97%-22,97%	1983	Steam Production Plant	2,639,895	93,225	828,537	(735,312)	-27.85%	-23.70%	-23.78%							
1986Steam Production Plant3,74,877191,573848,400(717,087)-12,80%-12,80%-16,80%-17,13%1986Steam Production Plant3,161,37024,355(72,445)(700,059)-22,7%-20,46%-15,60%-15,10%-18,10%-18,10%-18,10%-18,10%-19,22%1987Steam Production Plant54,65,54464,001476,385(411,583)-7,74%-16,26%-16,26%-12,20%-12,80%-14,28%-14,28%-14,43%-14,55%1989Steam Production Plant63,86,805183,856116,351,19-12,52%-12,62%-12,62%-12,85%-14,24%-14,24%-14,54	1984	Steam Production Plant	3,610,444	195,307	431,556	(236,249)	-6.54%	-15.54%	-15.86%	-16.30%						
Steam Production Plant 3,14,370 2,356 72,445 (700,089) -22,27% -20,46% -16,80% -18,10% -18,10% -18,20% 1987 Steam Production Plant 3,60,17.13 15,162 445,036 (411,638) -7,54% 13,87% -16,20% -16,40% -14,50% -14,50% -14,50% -14,50% -14,50% -14,50% -14,50% -16,50% -16,60% -16,70% -14,20% -14,50% -16,50%	1985	Steam Production Plant	3,781,871	131,573	848,640	(717,067)	-18.96%	-12.90%	-16.83%	-16.86%	-17.13%					
Steam Production Plant3,540,71315,16244,803(830,41)-23,72%-23,07%-21,07%-10,27%-10,40%-10,22%-12,27%-14,25%-16,24%-14,25% <t< td=""><td>1986</td><td>Steam Production Plant</td><td>3,143,870</td><td>24,356</td><td>724,415</td><td>(700,059)</td><td>-22.27%</td><td>-20.46%</td><td>-15.69%</td><td>-18.13%</td><td>-18.01%</td><td>-18.19%</td><td></td><td></td><td></td><td></td></t<>	1986	Steam Production Plant	3,143,870	24,356	724,415	(700,059)	-22.27%	-20.46%	-15.69%	-18.13%	-18.01%	-18.19%				
1988Sheam Production Plant5,465,54464,801476,385(401,646)-7.64%-16,26%-16,26%-16,24%-14,28%-16,42%-16,42%-14,28%-14,27%-15,58%-13,28%-14,28%-14,28%-14,27%-15,58%-13,28%-14,28%-14,27%-14,28%-14,27%-14,28%-14,27%-14,28%-14,27%-14,28%-14,27%-14,28%-14,27%-14,28%-14,17%-14,27%-14,28%-14,17%-14,27%-14,28%-14,17%-14,27%-14,28%-14,17%-14,27%-14,27%-12,37%-22,67%-23,26%-23,26%-23,26%-23,27%-22,27%-21,25%-14,85%-14,28%-14,18%-14,18%-14,18%-14,28%-14,18%-14,28%-14,18%-14,28%-14,27%-12,37%-23,67%-23,67%-23,67%-23,67%-23,67%-22,67%-23,67%	1987	Steam Production Plant	3,501,713	15,162	845,803	(830,641)	-23.72%	-23.03%	-21.56%	-17.70%	-19.30%	-19.10%	-19.22%			
1999Steam Production Plant6,100,196469,065870,73240,1469-7.64%-10.92%-12.28%-13.28%1-12.28%-14.28%	1988	Steam Production Plant	5,455,544	64,801	476,385	(411,583)	-7.54%	-13.87%	-16.05%	-16.74%	-14.85%	-16.40%	-16.45%	-16.59%		
Sheam Production Plant8,386,860188,8661,828,975(1,818,975(1,828,975(1,818,97	1989	Steam Production Plant	6,100,196	469,085	870,732	(401,646)	-6.58%	-7.04%	-10.92%	-12.88%	-13.92%	-12.88%	-14.28%	-14.43%	-14.58%	
1919Steam Production Plant7,624,005106,113997,523(891,410)-11.69%-15.80%-12.28%-12.43%-14.47%-14.47%-14.01%-14.83%-14.18% <t< td=""><td>1990</td><td>Steam Production Plant</td><td>8,386,850</td><td>188,856</td><td>1,826,975</td><td>(1,638,119)</td><td>-19.53%</td><td>-14.08%</td><td>-12.29%</td><td>-14.00%</td><td>-14.98%</td><td>-15.47%</td><td>-14.52%</td><td>-15.49%</td><td>-15.55%</td><td>-15.65%</td></t<>	1990	Steam Production Plant	8,386,850	188,856	1,826,975	(1,638,119)	-19.53%	-14.08%	-12.29%	-14.00%	-14.98%	-15.47%	-14.52%	-15.49%	-15.55%	-15.65%
1992Steam Production Plant1.033,881195,148413,900(218,752)-21.16%-12.82%-16.12%-13.61%-14.86%-14.86%-14.86%-14.86%1993Steam Production Plant10.885,104113,3493.286,897(3.155,348)-28.99%-31.31%-30.76%-25.30%-23.92%-21.35%-19.73%-10.73%-19.74%-20.01%-20.14%-20.06%1995Steam Production Plant16.2,35221.66711.41.516(1.260,180)-18.53%-24.43%-27.23%-27.00%-23.67%-22.06%-20.82%-19.54%-19.54%-19.25%1996Steam Production Plant1.62,51221.66711.41.516(1.22.448)-12.05%-24.43%-22.06%-22.06%-20.82%-20.83%-19.23%-18.25%1998Steam Production Plant1.626,11815.160(233.410)-14.35%-12.37%-14.94%-19.86%-22.64%-22.64%-20.83%-20.37%-22.37%-22.76%-22.64%1999Steam Production Plant1.667,381286.1161.916.249(1.83.133)-17.15%-27.04%-26.07%-22.05%-22.64%-22.37%-23.74%-22.37%-23.74%-22.37%-23.74%-22.67%-20.76%-22.67%-20.0%-24.54%-24.37%-24.74%-24.37%-24.96%-24.13%-26.54%-24.37%-24.74%-24.67%-24.75%-24.74%-24.67%-24.54%-24.13%-26.64%-24.13%-26.64%-24.13%<	1991	Steam Production Plant	7,624,035	106,113	997,523	(891,410)	-11.69%	-15.80%	-13.26%	-12.13%	-13.43%	-14.24%	-14.71%	-14.01%	-14.83%	-14.91%
1993 Steam Production Plant 7,072,822 393,486 2,462,980 324,89% 331,4% -22,75% -21,63% -18,59% -116,90% -17,13% 17,90% -12,01% -20,01% -22,87% -20,87% -19,54% -19,25% -19,25% -19,25% 143,25% -11,25% -14,39% -21,01% -22,86% -22,86% -20,03% -19,25% -18,25% -18,25% -20,63% -19,25% -23,17% -22,86% -22,06% -21,05% -22,05% -22,16% -20,03% -19,25% -22,76% -20,01% -22,65% -22,05% -22,16% -22,17% -24,15% -22,05% -22,16% -22,17% -22,05% -22,17% -22,05% -22,12% -21,25% -22,17% -22,05% -22,17% -22,07% -22,07% -22,07% -22,07% -22,07% <td< td=""><td>1992</td><td>Steam Production Plant</td><td>1,033,681</td><td>195,148</td><td>413,900</td><td>(218,752)</td><td>-21.16%</td><td>-12.82%</td><td>-16.12%</td><td>-13.61%</td><td>-12.45%</td><td>-13.68%</td><td>-14.45%</td><td>-14.88%</td><td>-14.18%</td><td>-14.98%</td></td<>	1992	Steam Production Plant	1,033,681	195,148	413,900	(218,752)	-21.16%	-12.82%	-16.12%	-13.61%	-12.45%	-13.68%	-14.45%	-14.88%	-14.18%	-14.98%
1994 Steam Production Plant 10.885,104 11.349 3.286.807 (3.155,348) -28.39% -21.37% -22.32% -21.35% -19.73% -20.01% -21.01% -21.35% -19.73% -20.01% -21.01% -21.35% -19.73% -20.01% -21.01% -21.05% -21.05% -21.05% -21.05% -21.05% -21.05% -21.05% -21.05% -21.05% -22.96% -21.05% -22.60% -20.05% -22.60% -20.05% -22.05% -20.05% -22.05% -20.05% -22.05% -20.05% -22.05% -20.05% -22.05% -20.05% -22.05% -22.05% -20.05% -22.05% -20.05% -23.07% -22.05% -20.05% -23.07% -22.05% -20.05% -23.07% -22.05% -20.05% -23.07% -22.05% -20.05% -23.07% -22.05% -20.05% -23.07% -22.05% -20.05% -23.07% -23.07% -23.07% -23.07% -23.07% -23.07% -23.07% -23.07% -23.07% -23.07% -23.07% -23.07% -23.07% -23.07% -23.07% -23.07% -23.07% -23.07%	1993	Steam Production Plant	7,078,262	393,496	2,862,980	(2,469,485)	-34.89%	-33.14%	-22.75%	-21.63%	-18.59%	-16.90%	-17.51%	-17.87%	-17.96%	-17.13%
1995Steam Production Plant8, 42, 6575, 26, 571, 560, 50(1, 560, 180)-18, 53%-24, 43%-27, 23%-27, 03%-22, 67%-22, 67%-20, 25%-19, 25%-19, 25%-19, 25%-19, 25%-19, 25%-19, 25%-19, 25%-19, 25%-19, 25%-19, 25%-19, 25%-19, 25%-19, 25%-19, 25%-19, 25%-12, 35%-12, 25%-22, 67%-22, 67%-22, 67%-22, 67%-20, 25%-20, 25%-20, 25%-19, 25%-12, 25%-12, 25%-12, 25%-22, 67%-22, 26%-22, 26%-22, 25%-22, 25%-22, 25%-22, 25%-22, 25%-22, 25%-22, 25%-22, 25%-22, 25%-22, 25%-22, 25%-22, 25%-22, 25%-22, 25%-22, 25%-22, 25%-22, 26%-22, 25%-22,	1994	Steam Production Plant	10,885,104	113,349	3,268,697	(3,155,348)	-28.99%	-31.31%	-30.76%	-25.30%	-23.92%	-21.35%	-19.73%	-20.01%	-20.14%	-20.06%
1996Steam Production Plant10,162,352216,6711,41516(1,22,3445)-12,05%-14.99%-20,16%-22,01%-22.67%-22.6%-20.83%-10.87%-13.89%-18.65%1997Steam Production Plant1,665,1181,5160248,570(1,821,348)-64.31%-40.90%-22.43%-21.01%-23.51%-20.83%-20.83%-20.83%-22.67%-22.67%-25.52%-25.41%-23.31%-22.76%-22.16%-22.03%-23.79%-23.74%-22.67%-22.16%-22.03%-23.79%-23.74%-22.22%-21.89%1998Steam Production Plant10,673,81286,1161,916,249(1,821,722)-26.85%-20.79%-25.67%-20.20%-19.78%-25.67%-26.14%-24.13%-24.06%-26.67%2001Steam Production Plant14,562,749310,4744,225,754(3,915,281)-26.85%-35.30%-33.13%-33.13%-33.13%-33.13%-33.13%-33.13%-33.13%-33.13%-33.13%-23.07%-26.67%-26.07%	1995	Steam Production Plant	8,420,567	35,825	1,596,005	(1,560,180)	-18.53%	-24.43%	-27.23%	-27.00%	-23.67%	-22.87%	-20.87%	-19.54%	-19.79%	-19.92%
1997Steam Production Plant1,626,1181,5161,48,570(23,3140)-14,35%-12,37%-14,44%-19,86%-22,64%-22,60%-20,83%-20,63%-12,37%-11,23%1998Steam Production Plant1,067,31286,1161,1916,24%(1,830,133)-17,15%-27,04%-25,65%-20,07%-25,52%-25,54%-23,37%-23,37%-22,27%-22,16%2000Steam Production Plant6,416,363610,2762,332,998(1,722,722)-26,65%-20,79%-26,65%-20,07%-21,55%-20,91%-22,64%-24,13%-24,24%-22,66%-22,66%-22,64%-26,67%-26,67%-20,07%-33,17%-23,07%-26,56%-26,54%-25,64%-25,64%-26,67%-26,6	1996	Steam Production Plant	10,162,352	216,671	1,441,516	(1,224,845)	-12.05%	-14.99%	-20.16%	-23.01%	-22.96%	-21.06%	-20.82%	-19.37%	-18.38%	-18.65%
1988Steam Production Plant2,831,30011,5351,832,833(1,821,348)-64.31%-46.09%-22.43%-21.01%-25.57%-25.67%-25.67%-22.67%-23.17%-23.17%-23.17%-22.77%-22.27%-23.17%-22.67%-22.67%-20.09%-23.17%-22.67%-22.67%-20.09%-23.17%-22.67%-22.67%-20.09%-23.17%-23.17%-22.67%-22.67%-20.09%-23.17%-23.17%-22.67%-22.67%-20.09%-23.17%-23.17%-22.67%-22.67%-20.09%-23.17%-23.17%-23.17%-22.67%-24.13%-22.67%-20.09%-26.87%-26.02%-25.63%-25.09%-26.87%-26.02%-25.63%-26.07% <td>1997</td> <td>Steam Production Plant</td> <td>1,626,118</td> <td>15,160</td> <td>248,570</td> <td>(233,410)</td> <td>-14.35%</td> <td>-12.37%</td> <td>-14.94%</td> <td>-19.86%</td> <td>-22.64%</td> <td>-22.60%</td> <td>-20.83%</td> <td>-20.63%</td> <td>-19.23%</td> <td>-18.28%</td>	1997	Steam Production Plant	1,626,118	15,160	248,570	(233,410)	-14.35%	-12.37%	-14.94%	-19.86%	-22.64%	-22.60%	-20.83%	-20.63%	-19.23%	-18.28%
1999Steam Production Plant10,673,81286,1161,916,249(1,830,133)-17,15%-27,04%-26,67%-20,20%-19,78%-22,03%-23,79%-23,74%-22,22%-21,89%2000Steam Production Plant4,026,49150.9662,332,998(1,722,722)-26,65%-20,91%-22,30%-25,61%-22,60%-22,60%-22,30%-26,64%-24,13%-24,60%-22,66%-26,64%-26,74%-26,65%-23,30%-33,13%-33,25%-33,10%-30,32%-26,63%-26,64% <t< td=""><td>1998</td><td>Steam Production Plant</td><td>2,831,930</td><td>11,535</td><td>1,832,883</td><td>(1,821,348)</td><td>-64.31%</td><td>-46.09%</td><td>-22.43%</td><td>-21.01%</td><td>-23.57%</td><td>-25.52%</td><td>-25.41%</td><td>-23.31%</td><td>-22.76%</td><td>-21.22%</td></t<>	1998	Steam Production Plant	2,831,930	11,535	1,832,883	(1,821,348)	-64.31%	-46.09%	-22.43%	-21.01%	-23.57%	-25.52%	-25.41%	-23.31%	-22.76%	-21.22%
2000Steam Production Plant6,416,363610,2762,332,998(1,722,72)-26.85%-20.79%-26.98%-26.02%-21.55%-20.91%-22.64%-24.13%-24.08%-26.08%-26.67%2001Steam Production Plant14,562,47430,4744,225,754(3,512,81)-26.85%-33.13%-33.52%-32.00%-36.65%-26.67%-26.63%-26.67% <td< td=""><td>1999</td><td>Steam Production Plant</td><td>10,673,812</td><td>86,116</td><td>1,916,249</td><td>(1,830,133)</td><td>-17.15%</td><td>-27.04%</td><td>-25.67%</td><td>-20.20%</td><td>-19.78%</td><td>-22.03%</td><td>-23.79%</td><td>-23.74%</td><td>-22.22%</td><td>-21.89%</td></td<>	1999	Steam Production Plant	10,673,812	86,116	1,916,249	(1,830,133)	-17.15%	-27.04%	-25.67%	-20.20%	-19.78%	-22.03%	-23.79%	-23.74%	-22.22%	-21.89%
2001Steam Production Plant4,026,49150,9962,704,922(2,653,26)-65,81%-41,91%-29,39%-33,52%-32,30%-26,63%-25,02%-26,84%-26,84%-26,74%2002Steam Production Plant14,582,749310,474(3,415,281)-26,85%-33,13%-33,13%-33,65%-31,83%-33,13%-28,63%-26,13%-26,84%-26,84%2003Steam Production Plant7,356,95888,8321,632,363(1,543,51)-21,04%-34,86%-30,90%-35,10%-33,78%-30,27%-32,07%-31,55%-28,51%-27,37%2005Steam Production Plant17,590,812346,9844,847,003(4,500,019)-25,58%-24,44%-29,83%-28,01%-31,32%-30,07%-30,07%-30,07%-30,07%-30,07%-30,07%-30,07%-30,07%-30,07%-30,07%-30,07%-29,65%-22,90%2006Steam Production Plant7,780,688786,2172,980,102(2,181,481)-28,04%-32,17%-27,65%-30,31%-30,24%-31,52%-31,52%-31,52%-31,52%-31,61%-30,04%-31,61%-31,62%-31,52%-31,52%-31,61%-29,65%-30,31%-32,62%-31,61%-32,64%-32,64%-32,64%-32,64%-32,64%-32,64%-32,64%-32,64%-32,64%-32,64%-31,64%-31,64%-31,64%-31,64%-31,64%-31,64%-31,64%-31,64%-31,64%-31,64%-31,64%-31,64% <td>2000</td> <td>Steam Production Plant</td> <td>6,416,363</td> <td>610,276</td> <td>2,332,998</td> <td>(1,722,722)</td> <td>-26.85%</td> <td>-20.79%</td> <td>-26.98%</td> <td>-26.02%</td> <td>-21.55%</td> <td>-20.91%</td> <td>-22.64%</td> <td>-24.13%</td> <td>-24.08%</td> <td>-22.66%</td>	2000	Steam Production Plant	6,416,363	610,276	2,332,998	(1,722,722)	-26.85%	-20.79%	-26.98%	-26.02%	-21.55%	-20.91%	-22.64%	-24.13%	-24.08%	-22.66%
2002 Steam Production Plant 14,582,749 310,474 4,225,754 (3,915,281) -28,65% -33,13% -28,35% -31,00% -33,23% -26,63% -25,47% -26,62% -26,62% -26,84% 2003 Steam Production Plant 7,536,958 388,632 1,635,2363 (3,648,966) -48,27% -34,16% -30,05% -33,78% -33,07% -24,04% -28,07% -28,07% -28,07% -28,07% -28,07% -28,07% -28,07% -28,07% -28,07% -28,07% -28,07% -28,07% -28,07% -23,07% -31,05% -33,78% -30,07% -30,07% -30,07% -31,05% -28,07% -23,07% -24,04% -28,07% -32,07% -31,05% -28,07% -30,07% -20,07% -30,07% -28,07% -30,07% -20,07% -31,05% -28,07% -30,07% -29,06% -30,07% -30,07% -30,07% -30,07% -30,07% -30,07% -30,07% -30,07% -30,07% -30,07% -30,07% -30,07% -30,03% -28,05%	2001	Steam Production Plant	4,026,491	50,996	2,704,922	(2,653,926)	-65.91%	-41.91%	-29.39%	-33.52%	-32.30%	-26.54%	-25.02%	-25.80%	-26.84%	-26.74%
2003 Steam Production Plant 7,559,694 308,678 3,957,644 (3,648,966) -48.27% -34.16% -39.05% -36.65% -31.83% -33.17% -29.46% -28.07% -28.07% 2004 Steam Production Plant 7,590,812 346,894 (1,543,531) -21.04% -34.86% -30.09% -31.83% -33.78% -30.27% -30.07% -30.55% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -29.05% -30.17% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -29.05% -30.47% -30.27% -29.05% -30.47% -30.45% -30.45% -30.45% -30.45% -30.45% -30.45% -30.45% -31.6% -31.	2002	Steam Production Plant	14,582,749	310,474	4,225,754	(3,915,281)	-26.85%	-35.30%	-33.13%	-28.35%	-31.00%	-30.32%	-26.63%	-25.47%	-26.02%	-26.84%
2004 Steam Production Plant 7,336,968 88,832 1,632,363 (1,543,531) -21.04% -34.68% -30.09% -33.78% -30.27% -32.07% -31.55% -28.61% -27.37% 2005 Steam Production Plant 17,590,812 346,984 4,847,003 (4,500,19) -25.85% -24.24% -29.83% -28.04% -31.27% -30.68% -30.47% -30.10% -27.97% 2006 Steam Production Plant 17,890,88 786,21 2,980,102 (1,841) -28.04% -26.33% -22.67% -31.32% -30.88% -30.28% -30.88% -30.28% -30.88% -30.28% -30.88% -30.28% -30.88% -30.28% -30.88% -30.28% -30.88% -30.28% -30.88% -30.28% -30.88% -30.28% -31.52% -30.88% -30.28% -31.68% -30.28% -31.68% -30.28% -31.68% -33.28% -32.18% -31.68% -33.28% -32.68% -30.24% -32.68% -30.28% -30.68% -31.68% -30.24% -32.68	2003	Steam Production Plant	7,559,694	308,678	3,957,644	(3,648,966)	-48.27%	-34.16%	-39.05%	-36.65%	-31.83%	-33.83%	-33.17%	-29.46%	-28.07%	-28.20%
2005 Steam Production Plant 17,590,812 346,984 4,847,003 (4,500,019) -25,89% -24,24% -29,83% -28,81% -31,27% -29,06% -30,47% -30,047% -27,89% 2006 Steam Production Plant 17,790,688 798,621 2,980,102 (2,181,481) -28,04% -28,83% -28,19% -31,32% -30,06% -20,47% -29,05% -30,23% -29,05% -30,31% -28,79% -31,15% -29,62% -31,52% -31,15% -29,05% -30,23% -29,05% -30,31% -20,62% -31,52% -31,15% -29,05% -30,23% -29,05% -30,31% -20,62% -31,52% -31,15% -29,62% -31,15% -30,16% -29,62% -31,52% -32,15% -32,15% -31,16% -29,62% -31,52% -31,16% -32,15% -33,16% -32,14% -31,65% -32,15% -32,15% -32,16% -31,16% -31,16% -32,15% -32,16% -34,16% -31,52% -32,16% -32,15% -32,16% -32,15% -32,15% -32,16% -32,15% -32,16% -32,16% -32,16% -32,16% <t< td=""><td>2004</td><td>Steam Production Plant</td><td>7,336,958</td><td>88,832</td><td>1,632,363</td><td>(1,543,531)</td><td>-21.04%</td><td>-34.86%</td><td>-30.90%</td><td>-35.10%</td><td>-33.78%</td><td>-30.27%</td><td>-32.07%</td><td>-31.55%</td><td>-28.51%</td><td>-27.37%</td></t<>	2004	Steam Production Plant	7,336,958	88,832	1,632,363	(1,543,531)	-21.04%	-34.86%	-30.90%	-35.10%	-33.78%	-30.27%	-32.07%	-31.55%	-28.51%	-27.37%
2006 Steam Production Plant 7,780,688 798,621 2,980,102 (2,181,481) -28.04% -26.33% -25.15% -29.49% -31.32% -30.88% -28.95% -30.23% -29.90% 2007 Steam Production Plant 13,349,337 286,297 6,181,135 (5,894,888) -32.13% -30.91% -28.77% -27.65% -30.14% -30.26% -31.52% -31.16% -32.95% -30.58% 2008 Steam Production Plant 12,620,134 1,329,574 7,240,028 (5,910,454) -46.83% -38.12% -30.69% -31.13% -30.24% -32.15% -31.16% -32.16% -33.12% -31.67% -32.16% -32.	2005	Steam Production Plant	17,590,812	346,984	4,847,003	(4,500,019)	-25.58%	-24.24%	-29.83%	-28.91%	-31.83%	-31.27%	-29.06%	-30.47%	-30.10%	-27.89%
2007 Steam Production Plant 18,349,337 266,297 6,181,135 (5,894,838) -32,13% -30.91% -27,65% -30,1% -29,62% -31,16% -29,57% -30,58% 2008 Steam Production Plant 12,620,134 1,329,574 (5,910,454) -46,83% -38,12% -30,09% -32,81% -31,46% -32,24% -32,15% -33,67% -32,64% -32,04% -30,04% -31,65% -30,65% -30,04% -31,65% -30,65% -30,04% -31,65% -30,65% -30,65% -29,07% -29,52% -28,16% -30,65% -30,65% -30,65% -30,65% -28,01% -31,65% -30,65%	2006	Steam Production Plant	7,780,688	798,621	2,980,102	(2,181,481)	-28.04%	-26.33%	-25.15%	-29.49%	-28.79%	-31.32%	-30.88%	-28.95%	-30.23%	-29.90%
2008 Steam Production Plant 12,620,134 1,329,574 7,240,028 (5,910,454) -46.83% -38.12% -36.09% -32.81% -31.46% -33.24% -32.15% -33.67% -33.21% -31.61% 2009 Steam Production Plant 19,897,978 216,339 5,462,274 (5,245,935) -26.36% -34.31% -33.27% -31.46% -33.24% -31.06% -32.44% -32.04% 2010 Steam Production Plant 13.035/77 299,865 2,229,899 (1,30.04) -14.81% -21.79% -28.17% -31.66% -28.65% -28.16% -29.62% -28.75% -28.16% -29.62% -29.86% -30.44% -30.44% -30.45% -30.45% -30.45% -30.45% -29.65% -28.16% -28.65% -28.16% -29.65% -28.16% -31.66% -31.66% -31.66% -30.45% -30.45% -30.45% -30.45% -30.45% -30.45% -29.66% -30.45% -30.45% -31.66% -31.66% -31.66% -31.66% -31.66% -31.66% <t< td=""><td>2007</td><td>Steam Production Plant</td><td>18,349,337</td><td>286,297</td><td>6,181,135</td><td>(5,894,838)</td><td>-32.13%</td><td>-30.91%</td><td>-28.77%</td><td>-27.65%</td><td>-30.31%</td><td>-29.62%</td><td>-31.52%</td><td>-31.16%</td><td>-29.57%</td><td>-30.58%</td></t<>	2007	Steam Production Plant	18,349,337	286,297	6,181,135	(5,894,838)	-32.13%	-30.91%	-28.77%	-27.65%	-30.31%	-29.62%	-31.52%	-31.16%	-29.57%	-30.58%
2009 Steam Production Plant 19,897,978 216,339 5,462,274 (5,245,935) -26.36% -34.31% -33.52% -32.79% -31.13% -30.24% -31.06% -32.34% -32.04% 2010 Steam Production Plant 13,035,707 299,685 2,229,899 (1,303,030) -14.81% -21.79% -28.7% -29.52% -28.75% -28.16% -29.62% -29.28% -30.44% 2011 Steam Production Plant 21,815,120 1,513,427 9,673,053 (8,159,627) -37.40% -28.75% -28.16% -30.64% -30.54% 2012 Steam Production Plant 21,637,090 841,703 17,218,298 (16,376,596) -56.47% -40.55% -41.62% -40.54% -39.69% -33.71% -33.13% -33.71% -33.13% -33.71% -33.13% -34.24% -35.71% -36.94% -37.52% 2013 Steam Production Plant 19,664,717 981,400 3,383,327 (2,01,926) -22.52% -11.57% -38.43% -38.12% -33.61% -33.07%	2008	Steam Production Plant	12,620,134	1,329,574	7,240,028	(5,910,454)	-46.83%	-38.12%	-36.09%	-32.81%	-31.46%	-33.24%	-32.15%	-33.67%	-33.21%	-31.61%
2010 Steam Production Plant 13,035,707 299,685 2,229,989 (1,930,304) -14.81% -21.79% -28.73% -29.70% -28.75% -28.16% -29.62% -29.82% -29.87% -29.62% -28.75% -28.75% -28.75% -28.75% -28.75% -28.75% -28.75% -28.75% -28.75% -29.62% -29.82% -29.82% -30.48% 2011 Steam Production Plant 1,613,427 9,673,053 (8,159,627) -37.40% -28.55% -28.01% -31.54% -31.66% -31.66% -30.65% -30.45% -30.45% -30.45% 2012 Steam Production Plant 21,637,090 841,703 17,218,298 (16,376,596) -75.69% -46.85% -41.52% -40.54% -35.71% -35.19% -37.82% -30.64% -37.52% 2013 Steam Production Plant 19,656,475 1,637,6596 -5.54% -42.57% -40.77% -36.11% -35.71% -34.78% -33.71% -33.13% 2014 Steam Production Plant 10,664,171 9	2009	Steam Production Plant	19,897,978	216,339	5,462,274	(5,245,935)	-26.36%	-34.31%	-33.52%	-32.79%	-31.13%	-30.24%	-31.74%	-31.06%	-32.34%	-32.04%
2011 Steam Production Plant 21,815,120 1,51,3427 9,673,053 (8,159,627) -37.40% -28.55% -28.01% -31.54% -31.65% -30.45% -29.86% -30.97% -30.54% 2012 Steam Production Plant 21,637,000 841,703 17,218,298 (16,376,563) -75.69% -66.47% -46.85% -41.52% -40.54% -30.45%<	2010	Steam Production Plant	13,035,707	299,685	2,229,989	(1,930,304)	-14.81%	-21.79%	-28.73%	-29.70%	-29.52%	-28.75%	-28.16%	-29.62%	-29.28%	-30.48%
2012 Steam Production Plant 21,637,090 841,703 17,218,298 (16,376,596) -75.69% -56.47% -46.85% -41.52% -42.27% -40.54% -39.69% -37.82% -36.94% -37.52% 2013 Steam Production Plant 19,355,436 381,065 1,453,252 (1,072,188) -5.54% -42.57% -40.77% -36.31% -34.24% -35.71% -35.19% -34.78% -33.71% -33.13% 2014 Steam Production Plant 10,664,171 981,400 3,383,327 (2,401,926) -22.52% -11.57% -38.43% -38.12% -34.61% -33.07% -34.53% -34.21% -33.07% -34.53% -32.98%	2011	Steam Production Plant	21,815,120	1,513,427	9,673,053	(8,159,627)	-37.40%	-28.95%	-28.01%	-31.54%	-31.66%	-31.36%	-30.45%	-29.86%	-30.97%	-30.54%
2013 Steam Production Plant 19,355,436 381,065 1,453,252 (1,072,188) -5.54% -42.57% -40.77% -36.31% -34.24% -35.71% -34.78% -33.71% -33.13% 2014 Steam Production Plant 10,664,171 981,400 3,383,327 (2,401,926) -22.52% -11.57% -38.43% -34.61% -33.07% -34.53% -34.21% -33.88% -32.98%	2012	Steam Production Plant	21,637,090	841,703	17,218,298	(16,376,596)	-75.69%	-56.47%	-46.85%	-41.52%	-42.27%	-40.54%	-39.69%	-37.82%	-36.94%	-37.52%
2014 Steam Production Plant 10,664,171 981,400 3,383,327 (2,401,926) -22.52% -11.57% -38.43% -38.12% -34.61% -33.07% -34.53% -34.21% -33.88% -32.98%	2013	Steam Production Plant	19,355,436	381,065	1,453,252	(1,072,188)	-5.54%	-42.57%	-40.77%	-36.31%	-34.24%	-35.71%	-35.19%	-34.78%	-33.71%	-33.13%
	2014	Steam Production Plant	10,664,171	981,400	3,383,327	(2,401,926)	-22.52%	-11.57%	-38.43%	-38.12%	-34.61%	-33.07%	-34.53%	-34.21%	-33.88%	-32.98%

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-4) Revised Appendix E-1 Page 2 of 14

GULF POWER	
Production Interim Retirement and Interim Net Salvage A	nalyiss
As Adjusted December 31, 2014	

			_				2- yr	3- yr	4- yr	5- yr	6- yr	7- yr	8- yr	9- yr	10- yr
Transaction			Gross	Cost of	Net	Net	Net	Net	Net	Net	Net	Net	Net	Net	Net
Year	Description	Retirements	Salvage	Removal	Salvage	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %					
1994	311 - Structure & Improvements	787,308	13,023	1,919,867	(1,906,844)	-242.20%									
1995	311 - Structure & Improvements	143,694	1,407	137,109	(135,703)	-94.44%	-219.39%								
1996	311 - Structure & Improvements	733,828	70,732	79,535	(8,803)	-1.20%	-16.47%	-123.22%							
1997	311 - Structure & Improvements	285,810	-	8,615	(8,615)	-3.01%	-1.71%	-13.16%	-105.60%						
1998	311 - Structure & Improvements	108,743	990	11,826	(10,836)	-9.96%	-4.93%	-2.50%	-12.89%	-100.55%					
1999	311 - Structure & Improvements	499,433	-	86,644	(86,644)	-17.35%	-16.03%	-11.87%	-7.06%	-14.15%	-84.31%				
2000	311 - Structure & Improvements	246,555	813	28,781	(27,969)	-11.34%	-15.36%	-14.68%	-11.75%	-7.62%	-13.80%	-77.90%			
2001	311 - Structure & Improvements	51,903	-	311,975	(311,975)	-601.08%	-113.90%	-53.46%	-48.25%	-37.41%	-23.61%	-28.53%	-87.40%		
2002	311 - Structure & Improvements	563,694	-	121,282	(121,282)	-21.52%	-70.38%	-53.50%	-40.24%	-38.00%	-32.30%	-23.14%	-27.03%	-76.55%	
2003	311 - Structure & Improvements	125,341	-	1,106,427	(1,106,427)	-882.73%	-178.18%	-207.80%	-158.75%	-111.26%	-104.35%	-88.96%	-64.33%	-65.90%	-105.04%
2004	311 - Structure & Improvements	2,038,837	-	67,145	(67,145)	-3.29%	-54.23%	-47.47%	-57.80%	-54.02%	-48.82%	-47.66%	-44.41%	-37.59%	-39.30%
2005	311 - Structure & Improvements	637,726	-	654,727	(654,727)	-102.67%	-26.97%	-65.25%	-57.93%	-66.18%	-62.49%	-57.07%	-55.87%	-52.56%	-45.44%
2006	311 - Structure & Improvements	77,333	-	(20,043)	20,043	25.92%	-88.76%	-25.48%	-62.80%	-56.04%	-64.14%	-60.66%	-55.56%	-54.42%	-51.25%
2007	311 - Structure & Improvements	776,592	-	221,221	(221,221)	-28.49%	-23.56%	-57.38%	-26.15%	-55.51%	-50.97%	-57.66%	-55.13%	-51.37%	-50.49%
2008	311 - Structure & Improvements	526,445	-	38,681	(38,681)	-7.35%	-19.95%	-17.38%	-44.33%	-23.71%	-49.45%	-46.13%	-52.14%	-50.14%	-47.19%
2009	311 - Structure & Improvements	430,229	-	1,957,946	(1,957,946)	-455.09%	-208.71%	-127.96%	-121.39%	-116.51%	-65.07%	-87.29%	-80.12%	-85.30%	-81.97%
2010	311 - Structure & Improvements	855,259	-	(1,101,233)	1,101,233	128.76%	-66.64%	-49.42%	-43.14%	-41.13%	-53.01%	-34.04%	-53.49%	-50.50%	-55.20%
2011	311 - Structure & Improvements	1,516,986	-	(30,043)	30,043	1.98%	47.69%	-29.50%	-25.99%	-26.47%	-25.50%	-35.71%	-26.07%	-41.44%	-39.96%
2012	311 - Structure & Improvements	299,316	-	44,560	(44,560)	-14.89%	-0.80%	40.68%	-28.09%	-25.08%	-25.68%	-24.79%	-34.49%	-25.60%	-40.35%
2013	311 - Structure & Improvements	106,209	-	20,301	(20,301)	-19.11%	-15.99%	-1.81%	38.39%	-27.79%	-24.91%	-25.52%	-24.66%	-34.18%	-25.51%
2014	311 - Structure & Improvements	235,179	(782)	12,311	(13,093)	-5.57%	-9.78%	-12.17%	-2.22%	34.96%	-26.27%	-23.76%	-24.54%	-23.73%	-32.94%
	Average Retirement	546,127													
	PIS	248,629,180													
	IRR	0.2197%													

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GULF POWER
Production Interim Retirement and Interim Net Salvage Analyiss
As Adjusted December 31, 2014

Transaction			Gross	Cost of	Net	Not	2- yr Not	3- yr Net	4- yr Not	5- yr Net	6- yr Net	7- yr Net	8- yr Not	9- yr Net	10- yr Net
Year	Description	Retirements	Salvage	Removal	Salvage	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %
	2000 pilon		Carrage	Homora	Guirage	Carri /C	Call 70	Call /C	Call /C	Call /C	carri /c	Call /C	Call /C	Call /	
1994	312 - Boiler Plant Equipment	9,158,586	95,674	1,126,642	(1,030,968)	-11.26%									
1995	312 - Boiler Plant Equipment	7,297,326	34,419	1,192,484	(1,158,065)	-15.87%	-13.30%								
1996	312 - Boiler Plant Equipment	7,091,155	144,859	996,210	(851,351)	-12.01%	-13.97%	-12.91%							
1997	312 - Boiler Plant Equipment	980,908	10,500	195,657	(185,157)	-18.88%	-12.84%	-14.28%	-13.15%						
1998	312 - Boiler Plant Equipment	1,496,005	6,175	1,490,570	(1,484,395)	-99.22%	-67.40%	-26.35%	-21.81%	-18.10%					
1999	312 - Boiler Plant Equipment	9,273,992	48,573	1,607,446	(1,558,873)	-16.81%	-28.26%	-27.47%	-21.65%	-20.04%	-17.76%				
2000	312 - Boiler Plant Equipment	5,370,359	417,924	2,052,761	(1,634,837)	-30.44%	-21.81%	-28.98%	-28.40%	-23.60%	-21.81%	-19.43%			
2001	312 - Boiler Plant Equipment	3,486,889	18,996	2,294,544	(2,275,548)	-65.26%	-44.15%	-30.16%	-35.43%	-34.64%	-28.85%	-26.14%	-23.05%		
2002	312 - Boiler Plant Equipment	11,316,705	155,338	3,296,300	(3,140,963)	-27.76%	-36.59%	-34.95%	-29.24%	-32.62%	-32.20%	-28.53%	-26.53%	-24.01%	
2003	312 - Boiler Plant Equipment	6,448,330	255,114	2,724,490	(2,469,376)	-38.29%	-31.58%	-37.11%	-35.76%	-30.87%	-33.60%	-33.22%	-29.91%	-27.97%	-25.50%
2004	312 - Boiler Plant Equipment	(6,327)	88,832	52,221	36,611	-578.67%	-37.76%	-31.39%	-36.95%	-35.63%	-30.77%	-33.51%	-33.13%	-29.84%	-27.91%
2005	312 - Boiler Plant Equipment	14,293,704	258,712	4,592,485	(4,333,772)	-30.32%	-30.08%	-32.63%	-30.91%	-34.28%	-33.78%	-30.64%	-32.63%	-32.37%	-29.95%
2006	312 - Boiler Plant Equipment	3,558,325	371,034	2,072,154	(1,701,120)	-47.81%	-33.81%	-33.61%	-34.85%	-32.60%	-35.51%	-34.90%	-31.78%	-33.60%	-33.35%
2007	312 - Boiler Plant Equipment	11,764,370	166,954	4,485,726	(4,318,771)	-36.71%	-39.29%	-34.96%	-34.84%	-35.46%	-33.62%	-35.79%	-35.28%	-32.66%	-34.15%
2008	312 - Boiler Plant Equipment	7,681,069	618,122	5,783,370	(5,165,247)	-67.25%	-48.77%	-48.62%	-41.61%	-41.52%	-41.04%	-38.31%	-39.92%	-39.12%	-36.29%
2009	312 - Boiler Plant Equipment	18,055,310	171,927	2,312,986	(2,141,058)	-11.86%	-28.39%	-31.00%	-32.46%	-31.90%	-31.84%	-32.52%	-31.78%	-33.30%	-33.12%
2010	312 - Boiler Plant Equipment	4,073,597	289,470	1,743,494	(1,454,024)	-35.69%	-16.25%	-29.39%	-31.46%	-32.75%	-32.16%	-32.11%	-32.71%	-31.99%	-33.42%
2011	312 - Boiler Plant Equipment	16,605,451	1,340,397	7,147,791	(5,807,394)	-34.97%	-35.11%	-24.27%	-31.39%	-32.46%	-33.35%	-32.78%	-32.73%	-33.17%	-32.51%
2012	312 - Boiler Plant Equipment	12,306,073	526,599	11,787,101	(11,260,502)	-91.50%	-59.03%	-56.15%	-40.48%	-43.98%	-42.77%	-43.01%	-40.96%	-40.92%	-40.74%
2013	312 - Boiler Plant Equipment	17,318,694	395,218	976,898	(581,680)	-3.36%	-39.97%	-38.18%	-37.98%	-31.08%	-34.73%	-35.00%	-35.50%	-34.80%	-34.76%
2014	312 - Boiler Plant Equipment	8,214,661	951,911	3,040,177	(2,088,265)	-25.42%	-10.46%	-36.81%	-36.25%	-36.21%	-30.47%	-33.82%	-34.18%	-34.66%	-34.12%
	Average Retirement	11,387,125													
	PIS	1,558,536,473													
	IRR	0.7306%													

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GULF POWER
Production Interim Retirement and Interim Net Salvage Analyiss
As Adjusted December 31, 2014

Transaction			Grass	Cost of	Not	Not	2- yr	3- yr	4- yr	5- yr	6- yr	7- yr	8- yr	9- yr	10- yr
Year	Description	Retirements	Salvage	Removal	Salvage	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %
	Becchiption		Cartago	Homoru	Garrage	Call 70	call /c	Call /	Call /	04111 /0	Call 70	Call 70	can /	Carri /	04.11 /0
1994	314 - Turbogenerator Units	723,398	1,902	218,096	(216,194)	-29.89%									
1995	314 - Turbogenerator Units	657,091	-	260,480	(260,480)	-39.64%	-34.53%								
1996	314 - Turbogenerator Units	1,739,556	-	126,437	(126,437)	-7.27%	-16.14%	-19.33%							
1997	314 - Turbogenerator Units	146,000	-	10,680	(10,680)	-7.31%	-7.27%	-15.64%	-18.79%						
1998	314 - Turbogenerator Units	1,045,045	-	268,813	(268,813)	-25.72%	-23.47%	-13.85%	-18.57%	-20.47%					
1999	314 - Turbogenerator Units	660,155	27,542	187,372	(159,830)	-24.21%	-25.14%	-23.73%	-15.76%	-19.45%	-20.97%				
2000	314 - Turbogenerator Units	404,288	189,572	232,690	(43,118)	-10.67%	-19.07%	-22.36%	-21.39%	-15.24%	-18.69%	-20.19%			
2001	314 - Turbogenerator Units	167,999	32,000	74,945	(42,945)	-25.56%	-15.04%	-19.95%	-22.60%	-21.68%	-15.66%	-18.93%	-20.36%		
2002	314 - Turbogenerator Units	1,996,989	155,136	793,382	(638,246)	-31.96%	-31.46%	-28.19%	-27.38%	-26.97%	-26.32%	-20.94%	-22.74%	-23.43%	
2003	314 - Turbogenerator Units	797,492	53,564	72,781	(19,217)	-2.41%	-23.53%	-23.64%	-22.08%	-22.43%	-23.11%	-22.67%	-18.82%	-20.62%	-21.42%
2004	314 - Turbogenerator Units	4,790,385	-	1,353,020	(1,353,020)	-28.24%	-24.56%	-26.51%	-26.49%	-25.70%	-25.59%	-25.60%	-25.34%	-22.66%	-23.56%
2005	314 - Turbogenerator Units	218,391	68,733	(402,154)	470,887	215.62%	-17.61%	-15.52%	-19.73%	-19.85%	-19.41%	-19.76%	-20.38%	-20.19%	-18.31%
2006	314 - Turbogenerator Units	2,196,837	418,449	873,446	(454,998)	-20.71%	0.66%	-18.56%	-16.95%	-19.95%	-20.04%	-19.68%	-19.95%	-20.44%	-20.28%
2007	314 - Turbogenerator Units	4,410,652	118,926	1,345,525	(1,226,599)	-27.81%	-25.45%	-17.74%	-22.07%	-20.81%	-22.35%	-22.39%	-22.07%	-22.16%	-22.39%
2008	314 - Turbogenerator Units	1,141,101	709,908	1,360,763	(650,856)	-57.04%	-33.82%	-30.10%	-23.37%	-25.20%	-23.86%	-24.90%	-24.90%	-24.55%	-24.53%
2009	314 - Turbogenerator Units	838,520	44,412	1,060,383	(1,015,972)	-121.16%	-84.20%	-45.28%	-38.99%	-32.68%	-31.12%	-29.53%	-29.82%	-29.78%	-29.32%
2010	314 - Turbogenerator Units	6,249,585	10,215	1,539,471	(1,529,255)	-24.47%	-35.91%	-38.84%	-34.99%	-32.88%	-29.27%	-29.02%	-28.00%	-28.34%	-28.32%
2011	314 - Turbogenerator Units	2,304,259	130,908	2,422,102	(2,291,194)	-99.43%	-44.66%	-51.49%	-52.09%	-44.93%	-41.82%	-38.58%	-36.35%	-35.17%	-34.91%
2012	314 - Turbogenerator Units	8,935,933	315,103	5,304,437	(4,989,334)	-55.83%	-64.77%	-50.37%	-53.61%	-53.81%	-49.01%	-46.62%	-44.45%	-41.95%	-40.96%
2013	314 - Turbogenerator Units	1,158,638	2,775	192,916	(190,141)	-16.41%	-51.31%	-60.25%	-48.26%	-51.40%	-51.71%	-47.50%	-45.34%	-43.26%	-41.03%
2014	314 - Turbogenerator Units	1,398,230	6,771	196,432	(189,661)	-13.56%	-14.85%	-46.72%	-55.52%	-45.84%	-48.87%	-49.29%	-45.71%	-43.79%	-41.82%
	Average Retirement	2,885,214													
	PIS	311,048,014													
	IRR	0.9276%													

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-4) Revised Appendix E-1 Page 5 of 14

GULF POWER
Production Interim Retirement and Interim Net Salvage Analyiss
As Adjusted December 31, 2014

							2- yr	3- yr	4- yr	5- yr	6- yr	7- yr	8- yr	9- yr	10- yr
Transaction			Gross	Cost of	Net	Net	Net	Net	Net	Net	Net	Net	Net	Net	Net
Year	Description	Retirements	Salvage	Removal	Salvage	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %
1004	245 Assessment Electric Equipment	70.055		202	(202)	0.250/									
1994	315 - Accessory Electric Equipment	79,955	-	283	(283)	-0.35%	0.400/								
1995	315 - Accessory Electric Equipment	114,270	-	5,850	(5,850)	-5.12%	-3.16%								
1996	315 - Accessory Electric Equipment	564,112	-	239,339	(239,339)	-42.43%	-36.14%	-32.37%							
1997	315 - Accessory Electric Equipment	159,848	-	33,619	(33,619)	-21.03%	-37.70%	-33.26%	-30.40%						
1998	315 - Accessory Electric Equipment	164,139	4,000	61,422	(57,422)	-34.98%	-28.10%	-37.20%	-33.54%	-31.09%					
1999	315 - Accessory Electric Equipment	85,734	-	33,707	(33,707)	-39.32%	-36.47%	-30.45%	-37.39%	-34.00%	-31.70%				
2000	315 - Accessory Electric Equipment	292,477	-	3,275	(3,275)	-1.12%	-9.78%	-17.41%	-18.23%	-29.01%	-27.03%	-25.57%			
2001	315 - Accessory Electric Equipment	17,822	-	2,936	(2,936)	-16.47%	-2.00%	-10.08%	-17.38%	-18.19%	-28.84%	-26.90%	-25.46%		
2002	315 - Accessory Electric Equipment	136,803	-	14,711	(14,711)	-10.75%	-11.41%	-4.68%	-10.25%	-16.08%	-17.00%	-27.10%	-25.46%	-24.22%	
2003	315 - Accessory Electric Equipment	120,705	-	27,667	(27,667)	-22.92%	-16.46%	-16.46%	-8.56%	-12.59%	-17.09%	-17.73%	-26.77%	-25.27%	-24.13%
2004	315 - Accessory Electric Equipment	375,020	-	153,983	(153,983)	-41.06%	-36.64%	-31.04%	-30.64%	-21.49%	-22.97%	-24.62%	-24.20%	-29.56%	-28.19%
2005	315 - Accessory Electric Equipment	2,417,945	17,644	25,210	(7,566)	-0.31%	-5.78%	-6.49%	-6.69%	-6.74%	-6.25%	-7.08%	-8.34%	-8.88%	-13.25%
2006	315 - Accessory Electric Equipment	1,876,848	-	54,336	(54,336)	-2.90%	-1.44%	-4.62%	-5.08%	-5.24%	-5.28%	-5.05%	-5.60%	-6.48%	-6.89%
2007	315 - Accessory Electric Equipment	1,050,657	-	127,916	(127,916)	-12.17%	-6.23%	-3.55%	-6.01%	-6.36%	-6.46%	-6.49%	-6.24%	-6.68%	-7.40%
2008	315 - Accessory Electric Equipment	3,136,935	-	40,219	(40,219)	-1.28%	-4.02%	-3.67%	-2.71%	-4.34%	-4.59%	-4.68%	-4.70%	-4.59%	-4.90%
2009	315 - Accessory Electric Equipment	418,477	-	108,254	(108,254)	-25.87%	-4.18%	-6.00%	-5.10%	-3.80%	-5.31%	-5.53%	-5.61%	-5.63%	-5.49%
2010	315 - Accessory Electric Equipment	622,478	-	51,324	(51,324)	-8.25%	-15.33%	-4.78%	-6.27%	-5.38%	-4.09%	-5.49%	-5.70%	-5.77%	-5.79%
2011	315 - Accessory Electric Equipment	776,929	16,928	103,795	(86,866)	-11.18%	-9.87%	-13.56%	-5.79%	-6.90%	-5.95%	-4.63%	-5.91%	-6.10%	-6.15%
2012	315 - Accessory Electric Equipment	36,292	-	79,597	(79,597)	-219.33%	-20.47%	-15.17%	-17.58%	-7.34%	-8.18%	-6.93%	-5.38%	-6.63%	-6.81%
2013	315 - Accessory Electric Equipment	69.579	(16.928)	259.651	(276.579)	-397.50%	-336.42%	-50.19%	-32.84%	-31.33%	-12.70%	-12.61%	-10.33%	-8.00%	-9.15%
2014	315 - Accessory Electric Equipment	284,989	23,500	99,509	(76,009)	-26.67%	-99.44%	-110.57%	-44.45%	-31.86%	-30.72%	-13.45%	-13.24%	-10.89%	-8.50%
	Average Retirement	1.069.113			(· ·)										
	PIS	214.053.764													
	IRR	0.4995%													

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-4) Revised Appendix E-1 Page 6 of 14

GULF POWER	
Production Interim Retirement and Interim Net Salvage A	nalyiss
As Adjusted December 31, 2014	

							2- yr	3- yr	4- yr	5- yr	6- yr	7- yr	8- yr	9- yr	10- yr
Transactio	n		Gross	Cost of	Net	Net	Net	Net	Net	Net	Net	Net	Net	Net	Net
Year	Description	Retirements	Salvage	Removal	Salvage	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %
1994	316 - Misc Power Plant Equipment	135,856	2,750	3,810	(1,060)	-0.78%									
1995	316 - Misc Power Plant Equipment	208,186	-	82	(82)	-0.04%	-0.33%								
1996	316 - Misc Power Plant Equipment	33,701	1,079	(5)	1,085	3.22%	0.41%	-0.01%							
1997	316 - Misc Power Plant Equipment	53,553	4,660	-	4,660	8.70%	6.58%	1.92%	1.07%						
1998	316 - Misc Power Plant Equipment	17,997	370	252	118	0.66%	6.68%	5.57%	1.84%	1.05%					
1999	316 - Misc Power Plant Equipment	153,867	10,000	1,079	8,921	5.80%	5.26%	6.08%	5.71%	3.15%	2.26%				
2000	316 - Misc Power Plant Equipment	102,684	1,968	15,490	(13,523)	-13.17%	-1.79%	-1.63%	0.05%	0.35%	0.21%	0.02%			
2001	316 - Misc Power Plant Equipment	401,130	-	20,522	(20,522)	-5.12%	-6.76%	-3.82%	-3.70%	-2.79%	-2.52%	-1.99%	-1.84%		
2002	316 - Misc Power Plant Equipment	568,557	-	79	(79)	-0.01%	-2.12%	-3.18%	-2.06%	-2.02%	-1.57%	-1.45%	-1.26%	-1.22%	
2003	316 - Misc Power Plant Equipment	67,827	-	26,279	(26,279)	-38.74%	-4.14%	-4.52%	-5.30%	-3.98%	-3.91%	-3.42%	-3.26%	-2.84%	-2.68%
2004	316 - Misc Power Plant Equipment	139,043	-	5,995	(5,995)	-4.31%	-15.60%	-4.17%	-4.49%	-5.19%	-4.01%	-3.95%	-3.50%	-3.36%	-2.96%
2005	316 - Misc Power Plant Equipment	23,047	1,895	(23,264)	25,160	109.17%	11.82%	-3.09%	-0.90%	-2.31%	-3.17%	-2.22%	-2.18%	-1.80%	-1.69%
2006	316 - Misc Power Plant Equipment	71,345	9,138	208	8,930	12.52%	36.11%	12.03%	0.60%	0.20%	-1.48%	-2.35%	-1.53%	-1.51%	-1.16%
2007	316 - Misc Power Plant Equipment	95,321	417	540	(123)	-0.13%	5.28%	17.90%	8.51%	0.43%	0.17%	-1.38%	-2.21%	-1.45%	-1.43%
2008	316 - Misc Power Plant Equipment	15,459	1,543	17,187	(15,644)	-101.20%	-14.23%	-3.75%	8.93%	3.58%	-3.39%	-1.43%	-2.50%	-3.24%	-2.39%
2009	316 - Misc Power Plant Equipment	51,648	-	22,930	(22,930)	-44.40%	-57.48%	-23.82%	-12.73%	-1.79%	-2.68%	-7.95%	-3.58%	-4.01%	-4.62%
2010	316 - Misc Power Plant Equipment	203,797	-	(3,066)	3,066	1.50%	-7.78%	-13.11%	-9.73%	-6.10%	-0.33%	-1.26%	-5.07%	-2.74%	-3.32%
2011	316 - Misc Power Plant Equipment	7,279	25,193	29,409	(4,215)	-57.91%	-0.54%	-9.16%	-14.28%	-10.67%	-6.95%	-1.23%	-1.94%	-5.64%	-3.07%
2012	316 - Misc Power Plant Equipment	46,441	-	2,604	(2,604)	-5.61%	-12.69%	-1.46%	-8.63%	-13.04%	-10.11%	-6.82%	-1.63%	-2.20%	-5.63%
2013	316 - Misc Power Plant Equipment	63,900	-	3,487	(3,487)	-5.46%	-5.52%	-8.76%	-2.25%	-8.09%	-11.79%	-9.49%	-6.67%	-2.05%	-2.49%
2014	316 - Misc Power Plant Equipment	270,034	-	34,898	(34,898)	-12.92%	-11.49%	-10.78%	-11.66%	-7.12%	-10.12%	-12.26%	-10.72%	-8.71%	-5.51%
	Average Retirement	84.827		,	, ,,										
	PIS	15.059.895													
	IRR	0.5633%													

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-4) Revised Appendix E-1 Page 7 of 14

GULF POWER
Production Interim Retirement and Interim Net Salvage Analyiss
As Adjusted December 31, 2014

Transaction Year	Description	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %	
1981	Other Production	-	-	-	-	NA										
1982	Other Production	222,500	1.000	22.345	(21,345)	-9.59%	-9.59%									
1983	Other Production	-	-	-	-	NA	-9.59%	-9.59%								
1984	Other Production	-	-	-	-	NA	NA	-9.59%	-9.59%							
1985	Other Production	633	-	-	-	0.00%	0.00%	0.00%	-9.57%	-9.57%						
1986	Other Production	42,200	-	-	-	0.00%	0.00%	0.00%	0.00%	-8.04%	-8.04%					
1987	Other Production	-	-	-	-	NA	0.00%	0.00%	0.00%	0.00%	-8.04%	-8.04%				
1988	Other Production	-	-	-	-	NA	NA	0.00%	0.00%	0.00%	0.00%	-8.04%	-8.04%			
1989	Other Production	-	-	-	-	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	-8.04%	-8.04%		
1990	Other Production	10,228	-	200	(200)	-1.96%	-1.96%	-1.96%	-1.96%	-0.38%	-0.38%	-0.38%	-0.38%	-7.82%	-7.82%	
1991	Other Production	7,923	-	-	-	0.00%	-1.10%	-1.10%	-1.10%	-1.10%	-0.33%	-0.33%	-0.33%	-0.33%	-7.60%	
1992	Other Production	(7,923)	-	-	-	0.00%	NA	-1.96%	-1.96%	-1.96%	-1.96%	-0.38%	-0.38%	-0.38%	-0.38%	
1993	Other Production	13,446	-	2,981	(2,981)	-22.17%	-53.97%	-22.17%	-13.44%	-13.44%	-13.44%	-13.44%	-4.83%	-4.78%	-4.78%	
1994	Other Production	683	-	96	(96)	-14.02%	-21.78%	-49.58%	-21.78%	-13.45%	-13.45%	-13.45%	-13.45%	-4.92%	-4.88%	
1995	Other Production	2,074	-	(1)	1	0.03%	-3.45%	-18.99%	-37.15%	-18.99%	-12.40%	-12.40%	-12.40%	-12.40%	-4.77%	
1996	Other Production	-	-	-	-	NA	0.03%	-3.45%	-18.99%	-37.15%	-18.99%	-12.40%	-12.40%	-12.40%	-12.40%	
1997	Other Production	-	-	-	-	NA	NA	0.03%	-3.45%	-18.99%	-37.15%	-18.99%	-12.40%	-12.40%	-12.40%	
1998	Other Production	16,574	-	-	-	0.00%	0.00%	0.00%	0.00%	-0.49%	-9.39%	-12.38%	-9.39%	-7.62%	-7.62%	
1999	Other Production	-	-	-	-	NA	0.00%	0.00%	0.00%	0.00%	-0.49%	-9.39%	-12.38%	-9.39%	-7.62%	
2000	Other Production	-	-	-	-	NA	NA	0.00%	0.00%	0.00%	0.00%	-0.49%	-9.39%	-12.38%	-9.39%	
2001	Other Production	-	-	-	-	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	-0.49%	-9.39%	-12.38%	
2002	Other Production	-	-	-	-	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	-0.49%	-9.39%	
2003	Other Production	-	-	10,899	(10,899)	NA	NA	NA	NA	NA	-65.76%	-65.76%	-65.76%	-58.44%	-56.88%	
2004	Other Production	3,035,628	-	236,247	(236,247)	-7.78%	-8.14%	-8.14%	-8.14%	-8.14%	-8.14%	-8.10%	-8.10%	-8.10%	-8.09%	
2005	Other Production	17,614,936	-	1,630,525	(1,630,525)	-9.26%	-9.04%	-9.09%	-9.09%	-9.09%	-9.09%	-9.09%	-9.09%	-9.09%	-9.09%	
2006	Other Production	7,738,683	-	(1,232,583)	1,232,583	15.93%	-1.57%	-2.23%	-2.27%	-2.27%	-2.27%	-2.27%	-2.27%	-2.27%	-2.27%	יס
2007	Other Production	14,249,350	-	809,665	(809,665)	-5.68%	1.92%	-3.05%	-3.39%	-3.41%	-3.41%	-3.41%	-3.41%	-3.41%	-3.41%	മ്ദ
2008	Other Production	777,766	-	22,270	(22,270)	-2.86%	-5.54%	1.76%	-3.05%	-3.38%	-3.40%	-3.40%	-3.40%	-3.40%	-3.40%	Q :
2009	Other Production	177,530	-	272,612	(272,612)	-153.56%	-30.87%	-7.26%	0.56%	-3.70%	-3.99%	-4.01%	-4.01%	-4.01%	-4.01%	CD (
2010	Other Production	20,655,108	4,590,645	2,705,769	1,884,876	9.13%	7.74%	7.36%	2.18%	4.62%	0.62%	0.23%	0.21%	0.21%	0.21%	~ ~ <u>~</u>
2011	Other Production	2,423,189	38,737	76,208	(37,471)	-1.55%	8.00%	6.77%	6.46%	1.94%	4.29%	0.54%	0.16%	0.15%	0.15%	o `
2012	Other Production	1,337,860	-	172,995	(172,995)	-12.93%	-5.60%	6.86%	5.70%	5.44%	1.44%	3.81%	0.26%	-0.09%	-0.11%	
2013	Other Production	20,720,394	-	1,865,500	(1,865,500)	-9.00%	-9.24%	-8.48%	-0.42%	-1.02%	-1.05%	-2.15%	-0.09%	-1.98%	-2.17%	
2014	Other Production	1,451,547	-	143,361	(143,361)	-9.88%	-9.06%	-9.28%	-8.56%	-0.72%	-1.30%	-1.32%	-2.33%	-0.30%	-2.11%	

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-4) Revised Appendix E-1 Page 8 of 14

GULF POWER Production Interim Retirement and Interim Net Salvage Analyiss As Adjusted December 31, 2014

Transaction Year	Description	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2- yr Net Salv, %	3- yr Net Salv, %	4- yr Net Salv, %	5- yr Net Salv, %	6- yr Net Salv, %	7- yr Net Salv, %	8- yr Net Salv, %	9- yr Net Salv, %	10- yr Net Salv, %	
	Decemption		Gairago		ourrage	Call /	Call /C	Call /	curr /c	Curri /C	Carri /	Call /	Curr /c		Carri /C	
1981	341 - Structures & Improvements															
1982	341 - Structures & Improvements	-	-	-	-	NA										
1983	341 - Structures & Improvements	-	-	-	-	NA	NA									
1984	341 - Structures & Improvements	-	-	-	-	NA	NA	NA								
1985	341 - Structures & Improvements	633	-	-	-	0.00%	0.00%	0.00%	0.00%							
1986	341 - Structures & Improvements	42,200	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%						
1987	341 - Structures & Improvements	-	-	-	-	NA	0.00%	0.00%	0.00%	0.00%	0.00%					
1988	341 - Structures & Improvements	-	-	-	-	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%				
1989	341 - Structures & Improvements	-	-	-	-	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%			
1990	341 - Structures & Improvements	-	-	-	-	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%		
1991	341 - Structures & Improvements	-	-	-	-	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	
1992	341 - Structures & Improvements	-	-	-	-	NA	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	
1993	341 - Structures & Improvements	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	
1994	341 - Structures & Improvements	683	-	96	(96)	-14.02%	-14.02%	-14.02%	-14.02%	-14.02%	-14.02%	-14.02%	-14.02%	-0.22%	-0.22%	
1995	341 - Structures & Improvements	2,074	-	(1)	1	0.03%	-3.45%	-3.45%	-3.45%	-3.45%	-3.45%	-3.45%	-3.45%	-3.45%	-0.21%	
1996	341 - Structures & Improvements	-	-	-	-	NA	0.03%	-3.45%	-3.45%	-3.45%	-3.45%	-3.45%	-3.45%	-3.45%	-3.45%	
1997	341 - Structures & Improvements	-	-	-	-	NA	NA	0.03%	-3.45%	-3.45%	-3.45%	-3.45%	-3.45%	-3.45%	-3.45%	
1998	341 - Structures & Improvements	14,083	-	-	-	0.00%	0.00%	0.00%	0.00%	-0.56%	-0.56%	-0.56%	-0.56%	-0.56%	-0.56%	
1999	341 - Structures & Improvements	-	-	-	-	NA	0.00%	0.00%	0.00%	0.00%	-0.56%	-0.56%	-0.56%	-0.56%	-0.56%	
2000	341 - Structures & Improvements	-	-	-	-	NA	NA	0.00%	0.00%	0.00%	0.00%	-0.56%	-0.56%	-0.56%	-0.56%	
2001	341 - Structures & Improvements	-	-	-	-	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	-0.56%	-0.56%	-0.56%	
2002	341 - Structures & Improvements	-	-	-	-	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	-0.56%	-0.56%	
2003	341 - Structures & Improvements	-	-	-	-	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	-0.56%	
2004	341 - Structures & Improvements	-	-	-	-	NA	NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	
2005	341 - Structures & Improvements	55,888	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2006	341 - Structures & Improvements	-	-	480	(480)	NA	-0.86%	-0.86%	-0.86%	-0.86%	-0.86%	-0.86%	-0.86%	-0.69%	-0.69%	
2007	341 - Structures & Improvements	-	-	35,174	(35,174)	NA	NA	-63.80%	-63.80%	-63.80%	-63.80%	-63.80%	-63.80%	-63.80%	-50.96%	$0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\$
2008	341 - Structures & Improvements	66,193	-	13,117	(13,117)	-19.82%	-72.95%	-73.68%	-39.95%	-39.95%	-39.95%	-39.95%	-39.95%	-39.95%	-39.95% 🥳	ジャンチョン
2009	341 - Structures & Improvements	113,763	-	175,261	(175,261)	-154.06%	-104.68%	-124.23%	-124.49%	-94.99%	-94.99%	-94.99%	-94.99%	-94.99%	-94.99%	ᅙᄚᄫᆔᅮ
2010	341 - Structures & Improvements	669,544	-	238,000	(238,000)	-35.55%	-52.76%	-50.19%	-54.33%	-54.39%	-51.03%	-51.03%	-51.03%	-51.03%	-51.03% (ດອີ≓ະທີ່"
2011	341 - Structures & Improvements	1,297,654	-	43,371	(43,371)	-3.34%	-14.30%	-21.94%	-21.88%	-23.52%	-23.54%	-22.94%	-22.94%	-22.94%	-22.94%	
2012	341 - Structures & Improvements	1,022,063	-	151,021	(151,021)	-14.78%	-8.38%	-14.46%	-19.58%	-19.59%	-20.70%	-20.71%	-20.35%	-20.35%	-20.35%	₄⊳ <u>ҕ</u> ∷о
2013	341 - Structures & Improvements	300,805	-	-	-	0.00%	-11.42%	-7.42%	-13.14%	-17.85%	-17.89%	-18.90%	-18.92%	-18.62%	-18.62% -	≥% ~ ¢∠
2014	341 - Structures & Improvements	18,545	-	350	(350)	-1.89%	-0.11%	-11.28%	-7.38%	-13.08%	-17.77%	-17.80%	-18.81%	-18.83%	-18.53%	よ <u>す</u> 」 「 ひょ
	Average Retirement	354,446			()	0.00%	-0.09%	-0.05%	-8.93%	-6.51%	-11.81%	-16.10%	-16.16%	-17.08%	-17.09%	역 이 전 귀
	PIS	16.248.806				2.2.570	2.2270		/0	2.2.70						<u>م</u>
	IRR	2,1814%														じょう
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Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-4) Revised Appendix E-1

GULF POWER
Production Interim Retirement and Interim Net Salvage Analyiss
As Adjusted December 31, 2014

Transaction			Gross	Cost of	Net	Net	2- yr Net	3- yr Net	4- yr Net	5-yr Net	6- yr Net	7- yr Net	8-yr Net	9-yr Net	10- yr Net	
Year	Description	Retirements	Salvage	Removal	Salvage	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	
1001																
1981	342 - Fuel Holders and Accessories	-	-	-	-	NA										
1982	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA									
1983	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA								
1984	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA	NA							
1985	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA	NA	NA						
1986	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA	NA	NA	NA					
1987	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA	NA	NA	NA	NA				
1988	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA			
1989	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA		
1990	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1991	342 - Fuel Holders and Accessories	7,923	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
1992	342 - Fuel Holders and Accessories	(7,923)	-	-	-	0.00%			NA 00.170/							
1993	342 - Fuel Holders and Accessories	13,446	-	2,981	(2,981)	-22.17%	-53.97%	-22.17%	-22.17%	-22.17%	-22.17%	-22.17%	-22.17%	-22.17%	-22.17%	
1994	342 - Fuel Holders and Accessories	-	-	-	-	NA	-22.17%	-53.97%	-22.17%	-22.17%	-22.17%	-22.17%	-22.17%	-22.17%	-22.17%	
1995	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	-22.17%	-53.97%	-22.17%	-22.17%	-22.17%	-22.17%	-22.17%	-22.17%	
1996	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA	-22.17%	-53.97%	-22.17%	-22.17%	-22.17%	-22.17%	-22.17%	
1997	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA	NA	-22.17%	-53.97%	-22.17%	-22.17%	-22.17%	-22.17%	
1998	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA	NA	NA	-22.17%	-53.97%	-22.17%	-22.17%	-22.17%	
1999	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA	NA	NA	NA	-22.17%	-53.97%	-22.17%	-22.17%	
2000	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	-22.17%	-53.97%	-22.17%	
2001	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	-22.17%	-53.97%	
2002	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	-22.17%	
2003	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2004	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2005	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2006	342 - Fuel Holders and Accessories	13,400	-	2,253	(2,253)	-16.81%	-16.81%	-16.81%	-16.81%	-16.81%	-16.81%	-16.81%	-16.81%	-16.81%	-16.81%	_
2007	342 - Fuel Holders and Accessories	-	-	466,145	(466,145)	NA	-3495.51%	-3495.51%	-3495.51%	-3495.51%	-3495.51%	-3495.51%	-3495.51%	-3495.51%	-3495.51%	U,
2008	342 - Fuel Holders and Accessories	-	-	-	-	NA	NA	-3495.51%	-3495.51%	-3495.51%	-3495.51%	-3495.51%	-3495.51%	-3495.51%	-3495.51%	ЭС С
2009	342 - Fuel Holders and Accessories	-	-	10,349	(10,349)	NA	NA	NA	-3572.74%	-3572.74%	-3572.74%	-3572.74%	-3572.74%	-3572.74%	-3572.74%	ĕ
2010	342 - Fuel Holders and Accessories	43,147	-	58,289	(58,289)	-135.10%	-159.08%	-159.08%	-1239.45%	-949.72%	-949.72%	-949.72%	-949.72%	-949.72%	-949.72%	
2011	342 - Fuel Holders and Accessories	206,845	-	6,769	(6,769)	-3.27%	-26.02%	-30.16%	-30.16%	-216.63%	-206.46%	-206.46%	-206.46%	-206.46%	-206.46%	5
2012	342 - Fuel Holders and Accessories	23,444	-	-	-	0.00%	-2.94%	-23.79%	-27.58%	-27.58%	-198.05%	-189.59%	-189.59%	-189.59%	-189.59%	Š
2013	342 - Fuel Holders and Accessories	-	-	1,386	(1,386)	NA	-5.91%	-3.54%	-24.30%	-28.08%	-28.08%	-198.56%	-190.07%	-190.07%	-190.07%	억
2014	342 - Fuel Holders and Accessories	284,576	-	15,494	(15,494)	-5.44%	-5.93%	-5.48%	-4.59%	-14.68%	-16.54%	-16.54%	-100.08%	-98.12%	-98.12%	<u>د</u>
	Average Retirement	57,141														4
	PIS	4,504,704														
	IRR	1.2685%														

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-4) Revised Appendix E-1 Page 10 of 14

GULF POWER	
Production Interim Retirement and Interim Net Salva	ige Analyiss
As Adjusted December 31, 2014	

Transaction			Gross	Cost of	Net	Net	2- yr Net	3- yr Net	4- yr Net	5- yr Net	6- yr Net	7- yr Net	8- yr Net	9- yr Net	10- yr Net
Year	Description	Retirements	Salvage	Removal	Salvage	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %
1981	343 - Prime Movers	-	-	-	-	NA									
1982	343 - Prime Movers	-	-	-	-	NA	NA								
1983	343 - Prime Movers	-	-	-	-	NA	NA	NA							
1984	343 - Prime Movers	-	-	-	-	NA	NA	NA	NA						
1985	343 - Prime Movers	-	-	-	-	NA	NA	NA	NA	NA					
1986	343 - Prime Movers	-	-	-	-	NA	NA	NA	NA	NA	NA				
1987	343 - Prime Movers	-	-	-	-	NA	NA	NA	NA	NA	NA	NA			
1988	343 - Prime Movers	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA		
1989	343 - Prime Movers	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1990	343 - Prime Movers	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1991	343 - Prime Movers	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1992	343 - Prime Movers	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1993	343 - Prime Movers	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1994	343 - Prime Movers	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1995	343 - Prime Movers	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1996	343 - Prime Movers	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1997	343 - Prime Movers	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1998	343 - Prime Movers	2,491	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1999	343 - Prime Movers	-	-	-	-	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2000	343 - Prime Movers	-	-	-	-	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2001	343 - Prime Movers	-	-	-	-	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2002	343 - Prime Movers	-	-	-	-	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2003	343 - Prime Movers	-	-	-		NA	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%
2004	343 - Prime Movers	2,911,960	-	236,247	(236,247)	-8.11%	-8.11%	-8.11%	-8.11%	-8.11%	-8.11%	-8.11%	-8.11%	-8.11%	-8.11%
2005	343 - Prime Movers	(0)	-	•	-	0.00%	-8.11%	-8.11%	-8.11%	-8.11%	-8.11%	-8.11%	-8.11%	-8.11%	-8.11%
2006	343 - Prime Movers	7,704,417	-	0	(0)	0.00%	0.00%	-2.23%	-2.23%	-2.23%	-2.23%	-2.23%	-2.23%	-2.22%	-2.22%
2007	343 - Prime Movers	(0)	-	(157,799)	157,799	-175332366.96%	2.05%	2.05%	-0.74%	-0.74%	-0.74%	-0.74%	-0.74%	-0.74%	-0.74%
2008	343 - Prime Movers	572,207	-	9,077	(9,077)	-1.59%	25.99%	1.80%	1.80%	-0.78%	-0.78%	-0.78%	-0.78%	-0.78%	-0.78%
2009	343 - Prime Movers	61,961	-	1,868	(1,868)	-3.01%	-1.73%	23.16%	1.76%	1.76%	-0.79%	-0.79%	-0.79%	-0.79%	-0.79%
2010	343 - Prime Movers	9,558,591	(0)	2,278,434	(2,278,434)	-23.84%	-23.70%	-22.46%	-20.91%	-11.91%	-11.91%	-11.38%	-11.38%	-11.38%	-11.38%
2011	343 - Prime Movers	769,041	18,330	9,904	8,425	1.10%	-21.98%	-21.87%	-20.81%	-19.37%	-11.37%	-11.37%	-10.93%	-10.93%	-10.93%
2012	343 - Prime Movers	249,094	-	(43,464)	43,464	17.45%	5.10%	-21.05%	-20.95%	-19.96%	-18.55%	-10.99%	-10.99%	-10.61%	-10.61%
2013	343 - Prime Movers	19,660,137	-	1,780,880	(1,780,880)	-9.06%	-8.73%	-8.36%	-13.25%	-13.23%	-13.02%	-12.51%	-10.01%	-10.01%	-9.87%
2014	343 - Prime Movers	916,410	-	53,732	(53,732)	-5.86%	-8.92%	-8.60%	-8.26%	-13.04%	-13.02%	-12.81%	-12.31%	-9.91%	-9.91%
	Average Retirement	3,949,186													
	PIS	131,479,007													
	IRR	3.0037%													

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-4) Revised Appendix E-1 Page 11 of 14

Transaction			Gross	Cost of	Net	Net	2- yr Net	3- yr Net	4- yr Net	5- yr Net	6-yr Net	7-yr Net	8- yr Net	9- yr Net	10- yr Net	
Year	Description	Retirements	Salvage	Removal	Salvage	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	
1981	344 - Generators	-				NA										
1982	344 - Generators	222,500	1.000	22.345	(21.345)	-9.59%	-9.59%									
1983	344 - Generators	,	-		-	NA	-9.59%	-9.59%								
1984	344 - Generators	-	-	-	-	NA	NA	-9.59%	-9.59%							
1985	344 - Generators	-	-	-	-	NA	NA	NA	-9.59%	-9.59%						
1986	344 - Generators	-	-	-	-	NA	NA	NA	NA	-9.59%	-9.59%					
1987	344 - Generators	-	-	-	-	NA	NA	NA	NA	NA	-9.59%	-9.59%				
1988	344 - Generators	-	-	-	-	NA	NA	NA	NA	NA	NA	-9.59%	-9.59%			
1989	344 - Generators	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	-9.59%	-9.59%		
1990	344 - Generators	10,228	-	200	(200)	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	-9.26%	-9.26%	
1991	344 - Generators	-	-	-	-	NA	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	-9.26%	
1992	344 - Generators	-	-	-	-	NA	NA	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	
1993	344 - Generators	-	-	-	-	NA	NA	NA	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	
1994	344 - Generators	-	-	-	-	NA	NA	NA	NA	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	
1995	344 - Generators	-	-	-	-	NA	NA	NA	NA	NA	-1.96%	-1.96%	-1.96%	-1.96%	-1.96%	
1996	344 - Generators	-	-	-	-	NA	NA	NA	NA	NA	NA	-1.96%	-1.96%	-1.96%	-1.96%	
1997	344 - Generators	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	-1.96%	-1.96%	-1.96%	
1998	344 - Generators	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	-1.96%	-1.96%	
1999	344 - Generators	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	-1.96%	
2000	344 - Generators	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2001	344 - Generators	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2002	344 - Generators	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2003	344 - Generators	-	-	10,078	(10,078)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2004	344 - Generators	122,367	-	-	-	0.00%	-8.24%	-8.24%	-8.24%	-8.24%	-8.24%	-8.24%	-8.24%	-8.24%	-8.24%	
2005	344 - Generators	-	-	-	-	NA	0.00%	-8.24%	-8.24%	-8.24%	-8.24%	-8.24%	-8.24%	-8.24%	-8.24%	
2006	344 - Generators	-	-	-	-	NA	NA	0.00%	-8.24%	-8.24%	-8.24%	-8.24%	-8.24%	-8.24%	-8.24%	ב ה ע מ
2007	344 - Generators	178,881	-	-	-	0.00%	0.00%	0.00%	0.00%	-3.35%	-3.35%	-3.35%	-3.35%	-3.35%	-3.35%	
2008	344 - Generators	139,366	-	76	(76)	-0.05%	-0.02%	-0.02%	-0.02%	-0.02%	-2.30%	-2.30%	-2.30%	-2.30%	-2.30%	
2009	344 - Generators	1,806	-	-	-	0.00%	-0.05%	-0.02%	-0.02%	-0.02%	-0.02%	-2.30%	-2.30%	-2.30%	-2.30%	
2010	344 - Generators	47,896	-	4,943	(4,943)	-10.32%	-9.94%	-2.65%	-1.36%	-1.36%	-1.36%	-1.02%	-3.08%	-3.08%	-3.08%	n d T v
2011	344 - Generators	29,346	20,407	5,864	14,543	49.56%	12.43%	12.14%	4.36%	2.40%	2.40%	2.40%	1.83%	-0.11%	-0.11%	
2012	344 - Generators	7,462	-	-	-	0.00%	39.51%	11.33%	11.10%	4.22%	2.35%	2.35%	2.35%	1.81%	-0.11%	
2013	344 - Generators	81,185	-	24,779	(24,779)	-30.52%	-27.95%	-8.67%	-9.15%	-9.05%	-4.97%	-3.14%	-3.14%	-3.14%	-2.51%	호 · - 호
2014	344 - Generators	143,956	-	2,982	(2,982)	-2.07%	-12.33%	-11.93%	-5.05%	-5.86%	-5.83%	-4.04%	-2.90%	-2.90%	-2.90%	5 Õ 4
	Average Retirement	62,990														
	PIS	73,938,902														응급감
	IRR	0.0852%														×≍;

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-4) Revised Appendix E-1 Bace 12 of 14

GULF POWER
Production Interim Retirement and Interim Net Salvage Analyiss
As Adjusted December 31, 2014

Transaction			Crees	Cost of	Net	Net	2- yr	3- yr	4- yr	5- yr	6- yr	7- yr	8- yr	9- yr	10- yr
Year	Description	Retirements	Salvage	Removal	Salvage	Salv %	Salv %	Salv %	Salv %	Salv %	Salv %	Salv %	Salv %	Salv %	Salv %
Tear	Description	Retirements	ourrage	Removal	ourrage	Calv. 70	Guiv. 70	Gall. 70	Gaiv. 70	Gall. 70	Guiv. 70	Gaiv. 70	Guiv. 70	Gait. 70	our. /
1981	345 - Accessory Electric Equipment	-		-	-	NA									
1982	345 - Accessory Electric Equipment	-	-	-	-	NA	NA								
1983	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA							
1984	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA						
1985	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA					
1986	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA	NA				
1987	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA	NA	NA			
1988	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA		
1989	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1990	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1991	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1992	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1993	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1994	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1995	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1996	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1997	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1998	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1999	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2000	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2001	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2002	345 - Accessory Electric Equipment	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2003	345 - Accessory Electric Equipment	-	-	821	(821)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2004	345 - Accessory Electric Equipment	1,301	-	-	-	0.00%	-63.15%	-63.15%	-63.15%	-63.15%	-63.15%	-63.15%	-63.15%	-63.15%	-63.15%
2005	345 - Accessory Electric Equipment	14,838	-	2,611	(2,611)	-17.60%	-16.18%	-21.27%	-21.27%	-21.27%	-21.27%	-21.27%	-21.27%	-21.27%	-21.27%
2006	345 - Accessory Electric Equipment	20,866	-	1,309	(1,309)	-6.27%	-10.98%	-10.59%	-12.81%	-12.81%	-12.81%	-12.81%	-12.81%	-12.81%	-12.81%
2007	345 - Accessory Electric Equipment	-	-	-	-	NA	-6.27%	-10.98%	-10.59%	-12.81%	-12.81%	-12.81%	-12.81%	-12.81%	-12.81%
2008	345 - Accessory Electric Equipment	-	-		-	NA	NA	-6.27%	-10.98%	-10.59%	-12.81%	-12.81%	-12.81%	-12.81%	-12.81%
2009	345 - Accessory Electric Equipment	-	-	74,662	(74,662)	NA	NA	NA	-364.09%	-220.10%	-212.36%	-214.58%	-214.58%	-214.58%	-214.58%
2010	345 - Accessory Electric Equipment	964,852	-	111,401	(111,401)	-11.55%	-19.28%	-19.28%	-19.28%	-19.01%	-18.99%	-18.96%	-19.05%	-19.05%	-19.05%
2011	345 - Accessory Electric Equipment	118,001	-	10,299	(10,299)	-8.73%	-11.24%	-18.13%	-18.13%	-18.13%	-17.91%	-17.91%	-17.88%	-17.96%	-17.96%
2012	345 - Accessory Electric Equipment		-	65,437	(65,437)	NA	-64.18%	-17.28%	-24.18%	-24.18%	-24.18%	-23.84%	-23.76%	-23.73%	-23.80%
2013	345 - Accessory Electric Equipment	678,268	-	58,455	(58,455)	-8.62%	-18.27%	-16.85%	-13.95%	-18.18%	-18.18%	-18.18%	-18.05%	-18.04%	-18.03%
2014	345 - Accessory Electric Equipment	84,252	-	70,803	(70,803)	-84.04%	-16.95%	-25.53%	-23.28%	-17.15%	-21.19%	-21.19%	-21.19%	-21.02%	-21.00%
	Average Retirement	207,360													
	PIS	13,767,910													
	IKK	1.5061%													

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-4) Revised Appendix E-1 Page 13 of 14

GULF POWER
Production Interim Retirement and Interim Net Salvage Analyiss
As Adjusted December 31, 2014

Transaction			Gross	Cost of	Net	Net	2- yr Net	3- yr Net	4- yr Net	5- yr Net	6- yr Net	7- yr Net	8- yr Net	9- yr Net	10- yr Net
Year	Description	Retirements	Salvage	Removal	Salvage	Salv. %	Salv. %								
1001	040 Mine Environment														
1981	346 - Misc. Equipment	-	-	-	-	NA									
1982	346 - Misc. Equipment	-	-	-	-	NA	NA NA								
1983	346 - Misc. Equipment	-	-	-	-	NA NA	NA NA	NA NA							
1984	346 - Misc. Equipment	-	-	-	-	NA NA	NA NA	NA NA	NA NA	NIA					
1985	346 - Misc. Equipment	-	-	-	-	NA	NA NA	NA NA	NA	NA					
1986	346 - Misc. Equipment	-	-	-	-	NA NA	NA NA	INA NA	NA	NA	NA				
1987	346 - Misc. Equipment	-	-	-	-	NA	NA NA	NA NA	NA	NA	NA	NA			
1988	346 - Misc. Equipment	-	-	-	-	NA									
1989	346 - Misc. Equipment	-	-	-	-	NA	INA	NA NA	NA	NA	NA	NA	INA	INA	
1990	346 - Misc. Equipment	-	-	-	-	NA	NA								
1991	346 - Misc. Equipment	-	-	-	-	NA NA	NA NA	INA NA	NA	NA	NA	NA NA	INA NA	NA NA	NA
1992	346 - Misc. Equipment	-	-	-	-	NA	NA NA	NA NA	NA	NA NA	NA	NA	NA NA	NA NA	NA
1993	346 - Misc. Equipment	-	-	-	-	NA NA	NA NA	INA NA	NA	NA	NA	NA NA	INA NA	NA NA	NA
1994	346 - Misc. Equipment	-	-	-	-	NA	NA NA	NA NA	NA	NA	NA	NA	NA NA	NA NA	NA
1995	346 - Misc. Equipment	-	-	-	-	NA	NA								
1996	346 - Misc. Equipment	-	-	-	-	NA NA	NA NA	NA	NA NA	NA	NA	NA	NA NA	INA NA	NA
1997	346 - Misc. Equipment	-	-	-	-	NA	NA NA	NA NA	NA NA	NA NA	NA	NA	NA NA	INA NA	NA
1998	346 - Misc. Equipment	-	-	-	-	NA NA	NA NA	NA	NA NA	NA	NA	NA	NA NA	INA NA	NA
1999	346 - Misc. Equipment	-	-	-	-	NA	INA	NA	NA	NA	NA	NA	INA	INA	NA
2000	346 - Misc. Equipment	-	-	-	-	NA	NA								
2001	346 - Misc. Equipment	-	-	-	-	NA	INA	NA	NA	NA	NA	NA	INA	INA	NA
2002	346 - Misc. Equipment	-	-	-	-	NA NA	NA NA	INA NA	NA	NA	NA	NA	NA NA	NA NA	NA
2003	346 - Misc. Equipment	-	-	-	-	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA NA	NA NA	NA
2004	346 - Misc. Equipment	-	-	-	-	NA	NA NA	NA NA	NA	NA	NA	NA	NA NA	NA NA	NA
2005	346 - Misc. Equipment	-	-	-	-	NA NA	NA NA	INA NA	NA	NA	NA	NA	INA NA	NA NA	NA
2006	346 - Misc. Equipment	-	-	-	-	NA	NA NA	NA NA	NA	NA	NA	NA	NA NA	NA NA	NA
2007	346 - Misc. Equipment	-	-	-	-	NA NA	NA NA	INA NA	NA	NA	NA	NA NA	INA NA	NA NA	NA
2008	346 - Misc. Equipment	-	-	-	-	NA	NA NA	NA NA	NA	NA NA	NA	NA	NA NA	NA NA	NA
2009	346 - Misc. Equipment	-	-	10,472	(10,472)	NA 7.00%	NA		NA	NA 10.010	NA	NA 40.040		INA 40.010/	NA
2010	346 - Misc. Equipment	187,274	990	14,702	(13,712)	-7.32%	-12.91%	-12.91%	-12.91%	-12.91%	-12.91%	-12.91%	-12.91%	-12.91%	-12.91%
2011	346 - Misc. Equipment	2,302	-	-	-	0.00%	-7.23%	-12.76%	-12.76%	-12.76%	-12.76%	-12.76%	-12.76%	-12.76%	-12.76%
2012	346 - Misc. Equipment	35,797	-	-	-	0.00%	0.00%	-6.08%	-10.73%	-10.73%	-10.73%	-10.73%	-10.73%	-10.73%	-10.73%
2013	346 - Misc. Equipment	-	-	-	-	NA 0.000/	0.00%	0.00%	-6.08%	-10.73%	-10.73%	-10.73%	-10.73%	-10.73%	-10.73%
2014	346 - IVIISC. Equipment	3,808	-	-	-	0.00%	0.00%	0.00%	0.00%	-5.98%	-10.55%	-10.55%	-10.55%	-10.55%	-10.55%
	Average Kettrement	22,918													
		1,258,525													
	IKK	1.8210%													

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-5) Page 1 of 1

Simulated Plant Record Analysis Gulf Power

Account :364Version:Gulf Power SPR @ 2014Method:Simulated BalancesNo. of Test Points:93Interval:0Observation Band:1922 - 2014

Dispersion	<u>Avg Service</u> <u>Life</u>	Sum of Squared Differences	Index of Variation	Conformance	<u>Retirement</u> Experience Index
LO	36.1	4.29E+14	72.6937	13.76	98.52
R0.5	33.0	4.35E+14	73.1714	13.67	100.00
L0.5	33.6	4.91E+14	77.7281	12.87	99.62
R1	31.1	5.05E+14	78.8459	12.68	100.00
S0	31.1	5.51E+14	82.3403	12.14	100.00
L1	31.8	5.60E+14	83.0288	12.04	100.00
R1.5	29.7	5.61E+14	83.1178	12.03	100.00
S0.5	29.7	6.04E+14	86.2368	11.60	100.00
L1.5	30.4	6.16E+14	87.1005	11.48	100.00
R2	28.7	6.21E+14	87.4546	11.43	100.00
S1	29.0	6.61E+14	90.2004	11.09	100.00
R2.5	27.9	6.65E+14	90.5010	11.05	100.00
L2	29.3	6.78E+14	91.3802	10.94	100.00
S1.5	28.2	6.96E+14	92.5702	10.80	100.00
L2.5	28.6	7.13E+14	93.6989	10.67	100.00
R3	27.2	7.14E+14	93.7096	10.67	100.00
S2	27.5	7.35E+14	95.1320	10.51	100.00
L3	27.9	7.54E+14	96.3341	10.38	100.00
S2.5	27.1	7.56E+14	96.4446	10.37	100.00
R4	26.3	7.71E+14	97.3897	10.27	100.00
S3	26.7	7.79E+14	97.9152	10.21	100.00
L4	26.6	7.92E+14	98.7027	10.13	100.00
S4	26.0	8.06E+14	99.5908	10.04	100.00
R5	25.9	8.09E+14	99.7799	10.02	100.00
L5	26.1	8.12E+14	99.9531	10.00	100.00
S5	25.9	8.16E+14	100.1837	9.98	100.00
S6	25.8	8.25E+14	100.7731	9.92	100.00
SQ	28.1	1.36E+15	129.1805	7.74	100.00

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Florida Public Service Commission Docket No. 160186-El GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-6) Page 1 of 1

Simulated Plant Record Analysis Gulf Power

Account :	364				
Version:	Gulf Power SPR @	2014			
Method:	Simulated Balances				
No. of Test Points:	30	Interval:	0	Observation Band:	1985 - 2014

Dispersion	Avg Service	Sum of Squared	Index of	Conformance	Retirement		
	<u>Life</u>	<u>Differences</u>	Variation	Index	Experience Index		
LO	36.4	3.29E+14	43.0483	23.23	98.38		
R0.5	33.5	3.31E+14	43.1562	23.17	100.00		
L0.5	33.9	3.75E+14	45.9438	21.77	99.57		
R1	31.2	3.81E+14	46.2859	21.60	100.00		
R1.5	30.1	4.19E+14	48.5409	20.60	100.00		
S0	31.1	4.19E+14	48.5424	20.60	100.00		
L1	32.2	4.28E+14	49.0767	20.38	99.99		
S0.5	30.0	4.56E+14	50.6415	19.75	100.00		
R2	28.8	4.59E+14	50.7990	19.69	100.00		
L1.5	30.8	4.68E+14	51.2850	19.50	100.00		
R2.5	28.1	4.86E+14	52.3074	19.12	100.00		
S1	29.0	4.96E+14	52.8381	18.93	100.00		
L2	29.7	5.15E+14	53.7990	18.59	100.00		
R3	27.4	5.19E+14	54.0121	18.51	100.00		
S1.5	28.5	5.20E+14	54.0666	18.50	100.00		
L2.5	28.7	5.36E+14	54.9211	18.21	100.00		
S2	27.8	5.45E+14	55.3821	18.06	100.00		
R4	26.7	5.55E+14	55.8901	17.89	100.00		
S2.5	27.4	5.57E+14	55.9720	17.87	100.00		
L3	28.0	5.63E+14	56.2676	17.77	100.00		
S3	27.0	5.71E+14	56.6857	17.64	100.00		
L4	26.7	5.81E+14	57.1929	17.48	100.00		
R5	26.3	5.82E+14	57.2354	17.47	100.00		
S4	26.3	5.84E+14	57.3054	17.45	100.00		
S5	26.2	5.87E+14	57.4604	17.40	100.00		
L5	26.4	5.90E+14	57.5993	17.36	100.00		
S6	26.0	5.93E+14	57.7456	17.32	100.00		
SQ	28.1	1.01E+15	75.3683	13.27	100.00		

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ____(DAW-7) Page 1 of 1

Simulated Plant Record Analysis

Gulf Power

Account :	365				
Version:	Gulf Power SPR @	2014			
Method:	Simulated Balances				
No. of Test Points:	40	Interval:	0	Observation Band:	1975 - 2014

Dispersion	Avg Service Sum of Squared		Index of	<u>Conformance</u>	<u>Retirement</u>
Dispersion	<u>Life</u>	<u>Differences</u>	<u>Variation</u>	Index	Experience Index
R0.5	50.3	7.57E+13	18.4242	54.28	99.94
LO	55.7	1.03E+14	21.4695	46.58	87.99
R1	44.8	1.10E+14	22.2262	44.99	100.00
L0.5	49.8	1.38E+14	24.8862	40.18	94.31
R1.5	41.3	1.53E+14	26.1697	38.21	100.00
S0	44.4	1.62E+14	26.9861	37.06	100.00
L1	45.5	1.92E+14	29.3777	34.04	98.23
S0.5	41.3	2.06E+14	30.4135	32.88	100.00
R2	38.8	2.08E+14	30.5534	32.73	100.00
L1.5	42.3	2.32E+14	32.2765	30.98	99.55
R2.5	37.1	2.49E+14	33.4211	29.92	100.00
S1	39.3	2.64E+14	34.4380	29.04	100.00
L2	39.8	2.90E+14	36.0317	27.75	99.97
R3	35.4	2.97E+14	36.5232	27.38	100.00
S1.5	37.5	2.98E+14	36.5544	27.36	100.00
L2.5	38.0	3.15E+14	37.6079	26.59	100.00
S2	36.2	3.39E+14	38.9909	25.65	100.00
R4	33.9	3.49E+14	39.5320	25.30	100.00
L3	36.4	3.51E+14	39.6614	25.21	100.00
S2.5	35.3	3.53E+14	39.7982	25.13	100.00
S6	32.2	3.65E+14	40.4325	24.73	100.00
R5	32.7	3.72E+14	40.8164	24.50	100.00
S3	34.4	3.72E+14	40.8608	24.47	100.00
S5	32.7	3.74E+14	40.9589	24.41	100.00
L4	34.2	3.76E+14	41.0746	24.35	100.00
L5	33.1	3.78E+14	41.1944	24.28	100.00
S4	33.2	3.79E+14	41.2450	24.25	100.00
SQ	35.1	7.71E+14	58.7888	17.01	100.00

10/15/2015

Florida Public Service Commission Docket No. 160186-EI GULF POWER COMPANY Witness: Dane A. Watson Exhibit No. ___(DAW-8) Page 1 of 1

Simulated Plant Record Analysis

Gulf Power

0

Account :	369.1						
Version:	Gulf Power SPR @ 2014						
Method:	Simulated Balances	;					
No. of Test Points:	40	Interval:					

33.0

2.52E+14

Observation Band:

n Band: 1975 - 2014

Avg Service Sum of Squared Index of Retirement **Dispersion** Conformance Index Life Differences Variation Experience Index R0.5 46.9 5.62E+13 39.7902 25.13 100.00 L0 51.4 23.13 92.17 6.63E+13 43.2308 R1 41.7 22.28 7.15E+13 44.8866 100.00 L0.5 46.9 8.12E+13 47.8264 20.91 96.61 R1.5 38.8 8.91E+13 50.1016 19.96 100.00 S0 41.4 9.01E+13 50.3898 19.85 100.00 42.8 L1 1.02E+14 53.5553 18.67 99.33 S0.5 39.3 18.16 1.08E+14 55.0727 100.00 R2 36.5 1.12E+14 56.0746 17.83 100.00 L1.5 40.2 1.19E+14 57.9057 17.27 99.87 S1 37.0 1.30E+14 60.4589 16.54 100.00 R2.5 35.2 1.30E+14 60.4842 16.53 100.00 L2 37.9 1.43E+14 63.4296 15.77 100.00 S1.5 35.7 1.45E+14 63.9084 15.65 100.00 R3 34.0 1.52E+14 65.4096 15.29 100.00 L2.5 36.2 1.56E+14 66.2315 15.10 100.00 S2 34.8 67.9072 14.73 100.00 1.64E+14 L3 14.32 34.9 1.73E+14 69.8221 100.00 S2.5 33.9 1.74E+14 69.9301 14.30 100.00 R4 32.5 1.80E+14 71.2973 14.03 100.00 S3 33.1 1.86E+14 72.3790 13.82 100.00 L4 32.8 1.91E+14 73.3205 13.64 100.00 S6 31.0 74.7884 13.37 100.00 1.98E+14 R5 31.7 1.98E+14 74.7983 13.37 100.00 S4 31.9 2.00E+14 75.0148 13.33 100.00 L5 31.8 2.00E+14 75.1535 13.31 100.00 S5 13.29 31.4 2.01E+14 75.2477 100.00

84.2932

11.86

SQ

100.00

Gulf Power
Retirements, Gross Salvage, and Cost of Removal
Account 390 Structures & Improvements Pace Rebuttal Adjustment Analysis

Transaction			Groce	Cost of	Not	Not	2- yr	3- yr	4- yr Not	5- yr	6- yr Not	7- yr	8- yr	9- yr Not	10- yr	
Voor	Description	Potiromonte	Salvage	Removal	Salvade	Salv %	Salv %	Salv %	Salv %	Salv %	Salv %	Salv %	Salv %	Salv %	Salv %	
Teal	Description	Retirements	Galvage	Renova	Galvage	Gaiv. 76	Galv. 70	Jaiv. 70	Galv. 76	Galv. 70	Galv. 70	Gaiv. 70	Galv. 76	Gaiv. 70	Jaiv. 76	
REMOVAL OF PA	CE OFFICE BUILDING RETIREMENT AND SALVAGE															
1981	Account 390 - Structures & Improvements	147,286	200	31,113	(30,913)	-20.99%										
1982	Account 390 - Structures & Improvements	-	-	-	-	NA	-20.99%									
1983	Account 390 - Structures & Improvements	19,580	100	300	(200)	-1.02%	-1.02%	-18.65%								
1984	Account 390 - Structures & Improvements	66,964	290	15,008	(14,718)	-21.98%	-17.24%	-17.24%	-19.60%							
1985	Account 390 - Structures & Improvements	-	-	-	-	NA	-21.98%	-17.24%	-17.24%	-19.60%						
1986	Account 390 - Structures & Improvements	136,600	195	25,305	(25,110)	-18.38%	-18.38%	-19.56%	-17.94%	-17.94%	-19.15%					
1987	Account 390 - Structures & Improvements	830,914	22,365	96,123	(73,758)	-8.88%	-10.22%	-10.22%	-10.98%	-10.79%	-10.79%	-12.04%				
1988	Account 390 - Structures & Improvements	36,365	-	1,327	(1,327)	-3.65%	-8.66%	-9.98%	-9.98%	-10.73%	-10.56%	-10.56%	-11.80%			
1989	Account 390 - Structures & Improvements	241,423	5,735	8,506	(2,771)	-1.15%	-1.48%	-7.02%	-8.27%	-8.27%	-8.97%	-8.85%	-8.85%	-10.06%		
1990	Account 390 - Structures & Improvements	83,793	6,900	233	6,667	7.96%	1.20%	0.71%	-5.97%	-7.25%	-7.25%	-7.95%	-7.86%	-7.86%	-9.09%	
1991	Account 390 - Structures & Improvements	277,474	23	2,165	(2,142)	-0.77%	1.25%	0.29%	0.07%	-4.99%	-6.13%	-6.13%	-6.76%	-6.70%	-6.70%	
1992	Account 390 - Structures & Improvements	234,464	73,332	15,109	58,223	24.83%	10.95%	10.53%	7.16%	6.71%	-0.89%	-2.18%	-2.18%	-2.88%	-2.86%	
1993	Account 390 - Structures & Improvements	16,974	-	4,283	(4,283)	-25.23%	21.45%	9.79%	9.54%	6.52%	6.11%	-1.13%	-2.40%	-2.40%	-3.08%	
1994	Account 390 - Structures & Improvements	1,690	-	5,397	(5,397)	-319.27%	-51.86%	19.18%	8.74%	8.64%	5.88%	5.49%	-1.44%	-2.68%	-2.68%	
1995	Account 390 - Structures & Improvements	168,287	39,838	11,121	28,717	17.06%	13.72%	10.18%	18.33%	10.75%	10.45%	7.72%	7.33%	0.21%	-1.04%	
1996	Account 390 - Structures & Improvements	310,396	54,469	2,462	52,007	16.75%	16.86%	15.68%	14.28%	17.66%	12.60%	12.24%	9.82%	9.46%	2.54%	
1997	Account 390 - Structures & Improvements	236,660	-	48,595	(48,595)	-20.53%	0.62%	4.49%	3.73%	3.06%	8.33%	6.30%	6.41%	5.25%	5.04%	
1998	Account 390 - Structures & Improvements	265,895	-	142,491	(142,491)	-53.59%	-38.02%	-17.11%	-11.25%	-11.78%	-12.01%	-5.01%	-4.23%	-3.59%	-3.27%	
1999	Account 390 - Structures & Improvements	610,967	-	22,579	(22,579)	-3.70%	-18.83%	-19.19%	-11.35%	-8.35%	-8.68%	-8.85%	-4.57%	-4.08%	-3.62%	
2000	Account 390 - Structures & Improvements	126,909	-	4,598	(4,598)	-3.62%	-3.68%	-16.90%	-17.60%	-10.72%	-8.00%	-8.31%	-8.47%	-4.51%	-4.05%	
2001	Account 390 - Structures & Improvements	183,538	-	14,035	(14,035)	-7.65%	-6.00%	-4.47%	-15.47%	-16.31%	-10.40%	-7.97%	-8.24%	-8.39%	-4.78%	
2002	Account 390 - Structures & Improvements	554,790	1,864	101,208	(99,345)	-17.91%	-15.36%	-13.64%	-9.52%	-16.25%	-16.76%	-12.22%	-10.21%	-10.42%	-10.52%	
2003	Account 390 - Structures & Improvements	301,326	1,000	72,194	(71,194)	-23.63%	-19.92%	-17.75%	-16.22%	-11.91%	-17.34%	-17.67%	-13.54%	-11.68%	-11.86%	
2004	Account 390 - Structures & Improvements	209,263	-	109,233	(109,233)	-52.20%	-35.34%	-26.26%	-23.52%	-21.69%	-16.16%	-20.57%	-20.57%	-16.43%	-14.53%	
2005	Account 390 - Structures & Improvements	74,931	-	54,578	(54,578)	-72.84%	-57.64%	-40.14%	-29.32%	-26.32%	-24.33%	-18.22%	-22.26%	-22.10%	-17.90%	
2006	Account 390 - Structures & Improvements	263,031	76,862	42,439	34,423	13.09%	-5.96%	-23.64%	-23.64%	-21.37%	-19.78%	-18.59%	-14.67%	-18.67%	-18.82%	
2007	Account 390 - Structures & Improvements	225,781	-	169,141	(169,141)	-74.91%	-27.56%	-33.58%	-38.62%	-34.41%	-28.79%	-26.65%	-25.14%	-20.01%	-23.18%	
2008	Account 390 - Structures & Improvements	181,810	-	115,609	(115,609)	-63.59%	-69.86%	-37.33%	-40.90%	-43.37%	-38.64%	-32.29%	-30.02%	-28.44%	-22.91%	
2009	Account 390 - Structures & Improvements	324,975	-	60,719	(60,719)	-18.68%	-34.79%	-47.16%	-31.24%	-34.15%	-37.10%	-34.54%	-30.22%	-28.43%	-27.14%	
2010	Account 390 - Structures & Improvements	83,198	-	15,561	(15,561)	-18.70%	-18.69%	-32.52%	-44.26%	-30.28%	-33.04%	-35.98%	-33.74%	-29.78%	-28.09%	
2011	Account 390 - Structures & Improvements	78,277	5,580	143,043	(137,463)	-175.61%	-94.77%	-43.94%	-49.28%	-55.76%	-40.11%	-42.10%	-43.56%	-40.12%	-34.75%	
2012	Account 390 - Structures & Improvements	852,561	-	46,745	(46,745)	-5.48%	-19.79%	-19.70%	-19.45%	-24.73%	-31.22%	-25.42%	-27.12%	-29.41%	-28.74%	
2013	Account 390 - Structures & Improvements	236,169	-	13,408	(13,408)	-5.68%	-5.53%	-16.93%	-17.05%	-17.39%	-22.17%	-28.17%	-23.34%	-24.94%	-27.20%	
2014	Account 390 - Structures & Improvements	250,129	-	56,770	(56,770)	-22.70%	-14.43%	-8.73%	-17.95%	-17.99%	-18.12%	-22.23%	-27.56%	-23.28%	-24.72%	

Gulf Power					
Retirements, Gross Salvage, and Cost of F	Removal				
Account 390 Structures & Improvements Pace Rebuttal	Adjustme	ent Analysi	s		
	2- yr	3- yr	4- yr	5- yr	

							2- yr	3- yr	4- yr	5- yr	6- yr	7- yr	8- yr	9- yr	10- yr	
Transaction			Gross	Cost of	Net	Net	Net	Net	Net	Net	Net	Net	Net	Net	Net	
Year	Description	Retirements	Salvage	Removal	Salvage	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	Salv. %	
PACE OFFICE B	UILDING with RETIREMENT AND SALVAGE															
1981	Account 390 - Structures & Improvements	147,286	200	31,113	(30,913)	-20.99%										
1982	Account 390 - Structures & Improvements	-	-	-	-	NA	-20.99%									
1983	Account 390 - Structures & Improvements	19,580	100	300	(200)	-1.02%	-1.02%	-18.65%								
1984	Account 390 - Structures & Improvements	66,964	290	15,008	(14,718)	-21.98%	-17.24%	-17.24%	-19.60%							
1985	Account 390 - Structures & Improvements	-	-	-	-	NA	-21.98%	-17.24%	-17.24%	-19.60%						
1986	Account 390 - Structures & Improvements	136,600	195	25,305	(25,110)	-18.38%	-18.38%	-19.56%	-17.94%	-17.94%	-19.15%					
1987	Account 390 - Structures & Improvements	830,914	22,365	96,123	(73,758)	-8.88%	-10.22%	-10.22%	-10.98%	-10.79%	-10.79%	-12.04%				
1988	Account 390 - Structures & Improvements	36,365	-	1,327	(1,327)	-3.65%	-8.66%	-9.98%	-9.98%	-10.73%	-10.56%	-10.56%	-11.80%			
1989	Account 390 - Structures & Improvements	241,423	5,735	8,506	(2,771)	-1.15%	-1.48%	-7.02%	-8.27%	-8.27%	-8.97%	-8.85%	-8.85%	-10.06%		
1990	Account 390 - Structures & Improvements	83,793	6,900	233	6,667	7.96%	1.20%	0.71%	-5.97%	-7.25%	-7.25%	-7.95%	-7.86%	-7.86%	-9.09%	
1991	Account 390 - Structures & Improvements	277,474	23	2,165	(2,142)	-0.77%	1.25%	0.29%	0.07%	-4.99%	-6.13%	-6.13%	-6.76%	-6.70%	-6.70%	
1992	Account 390 - Structures & Improvements	234,464	73,332	15,109	58,223	24.83%	10.95%	10.53%	7.16%	6.71%	-0.89%	-2.18%	-2.18%	-2.88%	-2.86%	
1993	Account 390 - Structures & Improvements	16,974	-	4,283	(4,283)	-25.23%	21.45%	9.79%	9.54%	6.52%	6.11%	-1.13%	-2.40%	-2.40%	-3.08%	
1994	Account 390 - Structures & Improvements	1,690	-	5,397	(5,397)	-319.27%	-51.86%	19.18%	8.74%	8.64%	5.88%	5.49%	-1.44%	-2.68%	-2.68%	
1995	Account 390 - Structures & Improvements	168,287	39,838	11,121	28,717	17.06%	13.72%	10.18%	18.33%	10.75%	10.45%	7.72%	7.33%	0.21%	-1.04%	
1996	Account 390 - Structures & Improvements	310,396	54,469	2,462	52,007	16.75%	16.86%	15.68%	14.28%	17.66%	12.60%	12.24%	9.82%	9.46%	2.54%	
1997	Account 390 - Structures & Improvements	236,660	-	48,595	(48,595)	-20.53%	0.62%	4.49%	3.73%	3.06%	8.33%	6.30%	6.41%	5.25%	5.04%	
1998	Account 390 - Structures & Improvements	265,895	-	142,491	(142,491)	-53.59%	-38.02%	-17.11%	-11.25%	-11.78%	-12.01%	-5.01%	-4.23%	-3.59%	-3.27%	
1999	Account 390 - Structures & Improvements	610,967	-	22,579	(22,579)	-3.70%	-18.83%	-19.19%	-11.35%	-8.35%	-8.68%	-8.85%	-4.57%	-4.08%	-3.62%	
2000	Account 390 - Structures & Improvements	126,909	-	4,598	(4,598)	-3.62%	-3.68%	-16.90%	-17.60%	-10.72%	-8.00%	-8.31%	-8.47%	-4.51%	-4.05%	
2001	Account 390 - Structures & Improvements	183,538	-	14,035	(14,035)	-7.65%	-6.00%	-4.47%	-15.47%	-16.31%	-10.40%	-7.97%	-8.24%	-8.39%	-4.78%	
2002	Account 390 - Structures & Improvements	554,790	1,864	101,208	(99,345)	-17.91%	-15.36%	-13.64%	-9.52%	-16.25%	-16.76%	-12.22%	-10.21%	-10.42%	-10.52%	
2003	Account 390 - Structures & Improvements	301,326	1,000	72,194	(71,194)	-23.63%	-19.92%	-17.75%	-16.22%	-11.91%	-17.34%	-17.67%	-13.54%	-11.68%	-11.86%	$\pi m < 0$
2004	Account 390 - Structures & Improvements	209,263	-	109,233	(109,233)	-52.20%	-35.34%	-26.26%	-23.52%	-21.69%	-16.16%	-20.57%	-20.57%	-16.43%	-14.53%	$a \times \leq \Theta$
2005	Account 390 - Structures & Improvements	74,931	-	54,578	(54,578)	-72.84%	-57.64%	-40.14%	-29.32%	-26.32%	-24.33%	-18.22%	-22.26%	-22.10%	-17.90%	
2006	Account 390 - Structures & Improvements	263,031	76,862	42,439	34,423	13.09%	-5.96%	-23.64%	-23.64%	-21.37%	-19.78%	-18.59%	-14.67%	-18.67%	-18.82%	е Ба́н
2007	Account 390 - Structures & Improvements	225,781	-	169,141	(169,141)	-74.91%	-27.56%	-33.58%	-38.62%	-34.41%	-28.79%	-26.65%	-25.14%	-20.01%	-23.18%	N ≓ ö _
2008	Account 390 - Structures & Improvements	5,822,914	4,297,789	115,609	4,182,180	71.82%	66.35%	64.13%	62.52%	58.88%	55.28%	49.83%	48.45%	47.59%	43.85%	o Z ^S O
2009	Account 390 - Structures & Improvements	324,975	-	60,719	(60,719)	-18.68%	67.04%	62.01%	60.07%	58.59%	55.24%	51.95%	46.96%	45.70%	44.93%	ŤΘΠΥ
2010	Account 390 - Structures & Improvements	83,198	-	15,561	(15,561)	-18.70%	-18.69%	65.89%	60.97%	59.10%	57.64%	54.36%	51.14%	46.27%	45.04%	\sim $a \geq$
2011	Account 390 - Structures & Improvements	78,277	5,580	143,043	(137,463)	-175.61%	-94.77%	-43.94%	62.90%	58.14%	56.39%	54.98%	51.82%	48.74%	44.08%	5 m
2012	Account 390 - Structures & Improvements	852,561	-	46,745	(46,745)	-5.48%	-19.79%	-19.70%	-19.45%	54.76%	50.79%	49.50%	48.31%	45.66%	43.13%	0 R
2013	Account 390 - Structures & Improvements	236,169	-	13,408	(13,408)	-5.68%	-5.53%	-16.93%	-17.05%	-17.39%	52.83%	49.05%	47.85%	46.71%	44.18%	
2014	Account 390 - Structures & Improvements	250,129	-	56,770	(56,770)	-22.70%	-14.43%	-8.73%	-17.95%	-17.99%	-18.12%	50.36%	46.77%	45.68%	44.60%	