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February 8, 2017

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-El

Dear Ms. Stauffer:

Attached is the Rebuttal Testimony of Gulf Power Company Witness Michael T. O'Sheasy.

(Document 12 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 OF MICHAEL T. O'SHEASY

1		GULF POWER COMPANY
2		Before the Florida Public Service Commission Rebuttal Testimony of
3		Michael T. O'Sheasy
4		In Support of Rate Relief
5		Date of Filing: February 8, 2017
6	Q.	Please state your name, business address and occupation.
7	Α.	My name is Mike O'Sheasy. My business address is 5001 Kingswood
8		Drive, Roswell, Georgia 30075. I am a Vice President with Christensen
9		Associates, Inc.
10		
11	Q.	Have you previously filed testimony in this proceeding?
12	Α.	Yes.
13		
14	Q.	What is the purpose of your rebuttal testimony?
15	Α.	I rebut the testimony of Witness Rábago (Southern Alliance for Clean
16		Energy and the League of Women Voters of Florida) and Witness Alderson
17		(Federal Executive Agencies) related to cost of service issues.
18		
19	Q.	Please outline your rebuttal of Mr. Rábago.
20	Α.	First, I correct several mistakes in Mr. Rábago's critique of the Minimum
21		Distribution System (MDS). Then I clarify why MDS is the appropriate
22		methodology for classifying distribution costs and subsequently enables the
23		most appropriate allocation of Gulf's distribution costs.
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1		Second, I explain why a 1 non-coincident peak (1 NCP) allocator is the most
2		appropriate allocator for apportioning Gulf's distribution demand-related
3		costs to the various rate classes.
4		
5	Q.	Please outline your rebuttal of Ms. Alderson.
6	Α.	I explain why the best allocator for Gulf's production investment-related
7		costs is 12 monthly coincident peak (12 MCP) & $1/13^{th}$ energy, and not the 4
8		summer coincident peak (CP) or the 4 summer/1 winter CP methods she
9		recommends.
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11		
12		I. Rábago MDS Testimony
13		
14	Q.	Mr. Rábago recommends that the Commission not approve the use of MDS.
15		Do you agree with Mr. Rábago?
16	Α.	No. As I stated in my direct testimony, use of MDS for Gulf is an accurate,
17		cost causative cost-of-service methodology. Additionally, Mr. Rábago has
18		made several mistakes or mischaracterizations in coming to his conclusion
19		regarding MDS.
20		
21	Q.	Please explain what you mean by mistakes or mischaracterizations.
22	Α.	Throughout his testimony, Mr. Rábago refers to a change from the present
23		rates for the residential revenue requirement. He states that this change
24		was caused by two major factors: first, a change to using MDS in the
25		

1 allocation process (p. 4, lines 15-22), and second, the introduction of the 2 Advanced Pricing Package. 3 4 Q. Is Gulf's use of MDS in the allocation process a change as Mr. Rábago 5 asserts? Α. 6 No. Gulf's present rates and present revenues are based on the MDS 7 methodology. Both the present rates and present revenues shown in 8 Gulf's recommended cost-of-service study provided in Exhibit MTO-2 are 9 based upon the use of the MDS. The cost-of-service study with the MDS was the study used in the Commission-approved Stipulation and 10 11 Settlement Agreement in Gulf's last rate case, Docket No. 130140-EI. 12 The MDS methodology was also included in a cost-of-service stipulation 13 that was approved by this Commission in Gulf's prior rate case, Docket 14 No. 110138-EI. 15 16 Q. Mr. Rábago claims that "through the cost allocation process, the Company 17 proposes to increase the total revenue requirement assigned to the residential class by more than 20%, or more than \$68 million." Is his 18 19 assertion correct? 20 Α. No. The proposed increase is \$61 million as shown in Exhibit MTO-2, 21 Schedule 1.10. Moreover, there is no change in cost allocation between the 22 present revenue requirement (which is based upon Gulf's present rates) 23 and the proposed revenue requirement (which is based on Gulf's proposed 24 rates) for any of the rate classes. 25

1	Q.	Mr. Rábago states that the change in residential revenue requirements is
2		accomplished through use of a proposed minimum system method, as well
3		as through increases in costs. Even though use of MDS is not new and is
4		indeed used for current rates and revenue requirements, can you estimate
5		the impact of using MDS or not using MDS for proposed rates?
6	Α.	Yes, the two versions shown on MFR E-6b can be used for such an
7		estimation. By comparing the revenue requirement on line 13, column (4) of
8		MFR E-6b, page 1 of 2 with MDS to page 2 of 2 without MDS, the difference
9		would be \$6,829,000. This amount is less than 2 percent of the residential
10		rate class's overall revenue requirement.
11		
12	Q.	So, Gulf is not introducing a change to the cost-of-service methodology
13		upon which present rates are based?
14	Α.	That is correct. Both Gulf's present rates and proposed rates are based on
15		the use of MDS.
16		
17	Q.	Does MDS have a logical cost-causative foundation?
18	Α.	Yes. This is explained in my direct testimony beginning on page 17.
19		
20	Q.	Is MDS accepted by National Association of Regulatory Utility
21		Commissioners (NARUC) as a reasonable methodology?
22	Α.	Yes.
23		
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- 1 Q. Is MDS commonly used by other utilities?
- A. Yes. It is used by several nearby utilities, including all utilities in the
 Southern Electric system, Duke North Carolina, and South Carolina Electric
 and Gas (SCE&G), as well as other utilities in Florida.
- Q. Mr. Rábago says that Professor James Bonbright (a respected utility
 economist and author) rejected the MDS. Do you agree with his
 characterization as a "rejection"?
- 9 A. No. In Professor Bonbright's often-referenced book *Principles of Public*10 *Utility Rates*, he opines that including a minimum-sized distribution system
 11 among the customer-related costs seems 'indefensible,' but he continues to
- 12 add that it is even less reasonable to place them in demand-related costs.
- 13 He therefore suggests that the MDS should be recognized "as a strictly
- 14 unallocable portion of total costs." (Page 492) Despite Mr. Rábago's
- 15 assertions otherwise, Professor Bonbright ultimately does not address
- 16 where to place these costs in ratemaking.
- 18

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- 19 II. Rábago 1 NCP Testimony
- 20
- Q. Beginning on page 19 of his testimony, Mr. Rábago criticizes the use of the
 1 NCP for primary and secondary distribution cost allocation. Why does Gulf
 use the 1 NCP?
- A. To address this question, one needs to consider how Gulf decides upon the
 sizes and amount of equipment to install. Gulf makes these decisions by

1 estimating the maximum loads that will need to be served at any time. This 2 maximum loading may be different in size and occur at a different time for 3 one circuit versus another, or even one line transformer versus another. 4 The peak loading on these pieces of equipment does not occur when the 5 system peaks. The system peaks are referred to as the system coincident 6 peaks (CP). They drive production and transmission equipment costs but not distribution equipment costs. The peaks that drive primary and 7 8 secondary distribution costs are best reflected by each rate class's 9 maximum non-coincident peak demand for the year (1 NCP). Gulf's 1 NCP allocator considers that some equipment is driven by a rate class's specific 10 11 peak. For instance, line transformers serving residential customers may be 12 driven and sized for the incremental air-conditioning loads in the summer 13 which cause the residential rate class peak.

14

Q. What about circumstances in which the equipment is being shared bymultiple rate classes?

A. Because the 1 NCP allocator is comprised of multiple rate classes, it shares
these costs amongst the rate classes.

19

Q. So, if different distribution equipment may be expected to have different
individual peak demands that occur at different times, does Gulf track by
asset the specific peak expectations, when they occur, and who will cause
them?

A. No, and to my knowledge, no utility does so for cost allocation purposes.
Instead, utilities and regulators have agreed over time to use an NCP that is

1		based on the rate class or the individual customers as a proxy. In the
2		NARUC Electric Utility Cost Allocation Manual, page 97, it explains,
3		"Consequently, customer-class noncoincident demands (NCPs) and
4		individual customer maximum demands are the load characteristics that are
5		normally used to allocate the demand component of distribution facilities."
6		
7	Q.	Mr. Rábago proposes that this allocator approach overstates demand-
8		related costs. Is Mr. Rábago correct?
9	Α.	No. Demand-related costs are whatever they are regardless of the allocator
10		to the rate classes. The use of 1 NCP as an allocator for primary and
11		secondary distribution costs has nothing to do with the amount of demand
12		costs to be allocated. Moreover, the 1 NCP allocator does a good job of
13		apportioning these demand costs amongst the rate classes in a fair manner,
14		as inferred by NARUC's approval of the methodology.
15		
16	Q.	Has the 1 NCP by rate class methodology been used by Gulf for previous
17		rate case filings?
18	Α.	Yes, at least as far back as rate case filings in the 1980's. It was used in
19		Gulf's last rate filing in Docket No.130140-EI. The use of the 1 NCP
20		allocator produces stable results and is an influencing factor in present
21		rates.
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1	Q.	Does the fact that 1 NCP has been used in the past mean it must be used in
2		the future?
3	Α.	No, not necessarily. A change in methodology, though, should be driven by
4		compelling evidence that there is a better methodology. Having seen none,
5		Gulf is convinced that 1 NCP is the best allocator for distribution demand
6		costs.
7		
8	Q.	Mr. Rábago on page 35 of his testimony, line 9, suggests that modifying
9		"the 1 NCP cost allocator would also reduce the volumetric charge for
10		residential customers and thus the ultimate rate impact." Would this be a
11		good idea?
12	Α.	No, the 1 NCP allocator is not in need of modification. Furthermore, one
13		should not modify a cost-causative allocator because of a desired "ultimate
14		rate impact." One should determine cost as accurately as possible and then
15		decide on what is the desired/proposed rate impact via the rate design.
16		
17	Q.	Please summarize your rebuttal of Mr. Rábago.
18	Α.	The MDS has been Gulf's preferred and most cost-reflective methodology
19		for dividing distribution costs into demand and customer-related. It was
20		included in a stipulation approved by this Commission in Docket No.
21		110138-EI and was a component of the approved settlement of Gulf's last
22		rate case Docket No. 130140-EI. MDS is commonly used by other utilities
23		and approved for use by NARUC. We recommend its approval here.
24		
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1		Gulf has used 1 NCP by rate class for many years to allocate primary and
2		secondary distribution costs, and it has been approved by this Commission
3		in numerous dockets. It produces reasonable and stable results. It is the
4		most practical cost-reflective allocator for Gulf's cost-of-service study. We
5		recommend its approval here.
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7		
8		III. Alderson Production Cost Allocation
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10	Q.	Do you agree with Ms. Alderson's recommendation to adopt a production
11		investment-related cost allocator using either the 4 summer coincident peak
12		(CP) or 4 summer/1 winter CP method rather than 12 MCP & 1/13 th energy
13		allocator?
14	Α.	No, I do not. I think the 12 MCP and 1/13 th energy is a superior allocator of
15		production (generation) investment-related costs for Gulf.
16		
17	Q.	What is the premise of Ms. Alderson's recommendation to use 4 CP (or 4
18		CP/1 CP) for allocation of Gulf's production investment-related costs?
19	Α.	Her argument focuses upon the idea that the target reserve requirement
20		should determine the selection of the production function allocator.
21		Additionally, she claims that the target reserve requirement "ultimately is a
22		formula calculated solely on the system's summer and winter peak
23		demands." However, Gulf Power and the Southern electric system consider
24		much more than the 4 summer and 1 winter peak load demands in setting
25		the Company's reserve margin. In determining its optimal reserve margin,

1 consideration is given to reliability risks in every hour of the year, even 2 though the majority of the risk occurs during the summer and winter peak 3 months. In fact, even though Gulf remains a summer peaking system, 4 reliability risks are growing in the winter and shrinking in the summer. Also, 5 because of necessary heavy scheduling of unit maintenance in the spring 6 and fall and the risk of unplanned outages in those same seasons, reliability 7 risks can be spread across a number of hours of the fall and spring 8 seasons. Finally, I believe there are other factors such as cost minimization 9 influences, allocator stability, fairness, and history of use, which should be 10 considered when selecting the production investment-related allocator 11 besides simply the reserve margin or the month's percent of annual system 12 peak as shown in Ms. Alderson's Exhibit AMA-1.

13

Q. Please expand on why reliability risks are increasing in the winter and
shrinking in the summer.

16 Α. Winter peak loads, which occur primarily during the early morning hours, 17 ramp-up more rapidly than do summer peak loads, which occur more often in the afternoon hours. These more rapidly-climbing winter peak loads 18 19 create more reserve risks per MW of load between winter and those of 20 summer. Additionally, increasing solar photovoltaic (PV) penetration, which 21 may help serve summer afternoon peaks, provides little during early 22 morning winter peaks. Lastly, forced outage rates on generation generally 23 increase during the most extreme winter peaks due to the risks of freeze-24 ups of instrumentation and fuel issues during the extreme cold weather 25 experienced in many winters.

- Q. Did the Southern system peak for 2016 occur during the summer?
 A. Yes, it did, but this was the first such occurrence since 2013.
- 3

4 Q. You mentioned that every hour is analyzed by system planning. Don't the 5 summer months contain the majority of these hours of high reliability risk? Α. 6 Not nearly so much as in the past. Reliability risks associated with a 7 deficiency of generation to serve load at any given time vary throughout the 8 year. Historically on the Southern electric system, about 85 percent of 9 generation deficiency reliability risk fell during the summer months and 15 percent during the winter months. Over the last 10 or 15 years, there has 10 11 been a gradual but growing dependence on natural gas-fired capacity, and in recent years on solar PV resources. Additionally, as customers' heating 12 13 and air conditioning systems are changed out over time, the efficiency 14 improvements in the new systems decrease demand on the summer peaks 15 much more so than they reduce demand on the early morning winter peaks. 16 With these combinations of changes, reliability risks are now closer to 17 50/50.

18

19 Q. If 4 CP using summer months fails to adequately address the growing 20 reliability needs of winter, what do you think about 4 summer/1 winter? 21 Α. A 4 summer/1 winter allocator fails to go far enough in capturing the 22 reliability needs of Gulf Power. Besides the growing winter and shrinking 23 summer reliability risks that I previously mentioned, one winter month is 24 simply not enough winter months, in part because it is impossible to know 25 which of the winter months will have the coldest temperatures and,

1 therefore, the highest winter loads. Furthermore, growing reliability needs in 2 the winter months coupled with on-going summer constraints means that 3 more and more scheduled maintenance will be squeezed into fall and spring 4 seasons. Unit maintenance must be planned accordingly, which can result 5 in unit availability less in non-peak seasons than peak seasons. The 12 MCP & 1/13th energy allocator will best reflect Gulf's reliability constraints. 6 7 8 What are some of those additional factors that you mentioned? Q. As I just explained, 12 MCP & 1/13th energy best reflects Gulf's reliability 9 Α. constraints. It also accounts for Gulf's objective of striving to minimize 10 overall cost of production. 11 12 13 Q. Please continue. Because Gulf must be able to serve load in every hour of the year and strive 14 Α. 15 to do so at the least cost, Gulf, like most utilities, builds base load plants in 16 addition to peakers. While peakers are built basically for serving reliability 17 needs, base load plants have a dual purpose of serving reliability needs as well as minimizing operational costs throughout the year. These base units 18 19 are considerably more expensive than peakers, and their costs go into the 20 overall production function as do peakers. Therefore, it is logical to allocate production costs throughout the year, which the 12 MCP and 1/13th energy 21 does. The 4 CP or 4 CP/1 CP would spread these costs to a much more 22 23 limited number of months and hours. It is conceivable that an allocator with 24 as few as 4 or 5 CPs might enable some rate classes to escape any 25

1		allocation of production costs at all, while a 12 MCP and 1/13 th energy
2		allocator will not do so.
3		
4	Q.	Has Gulf used the 12 MCP and 1/13 th energy allocator for many filings?
5	Α.	It has been used since the late 1980's and obviously influenced present
6		rates. We've found it to produce stable results over time. It has also
7		aligned well with FERC's preferences.
8		
9	Q.	What production allocator does FERC favor?
10	Α.	In the past, FERC has used 12 MCP for both production and transmission in
11		many cases. FERC has also recommended a test of peak loads to suggest
12		whether to use 12 MCP or 4 MCP.
13		
14	Q.	Did you conduct this FERC test for Gulf?
15	Α.	Yes, and it resulted in a recommendation of 12 MCP.
16		
17	Q.	Is it your conclusion that 12 MCP and 1/13 th energy is the most appropriate
18		allocator for Gulf's production costs?
19	Α.	Yes.
20		
21	Q.	Does this conclude your testimony?
22	Α.	Yes.
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AFFIDAVIT

STATE OF GEORGIA

Docket No. 160186-EI

Before me the undersigned authority, personally appeared Michael T. O'Sheasy, who being first duly sworn, deposes, and says that he is a Vice President with Christensen Associates, Inc., and that the foregoing is true and correct to the best of his knowledge, information, and belief.

١

heasv Vice President

Sworn to and subscribed before me this 2^{nd} day of <u>February</u>, 2017.

Notary Public, State of Georgia at Large

Commission No. ____

My Commission Expires <u>01/14/2020</u>

Personally Known _____OR Produced Identification ____

Type of Identification Produced Georgia Driver License

