

SOUTHERN ENVIRONMENTAL LAW CENTER

Telephone 205-745-3060

2829 2ND AVENUE SOUTH, SUITE 282
BIRMINGHAM, AL 35233-2838

Facsimile 205-745-3064

August 20, 2019

Via Electronic Delivery

Mr. Walter L. Thomas, Jr., Secretary
Alabama Public Service Commission
RSA Union Building
100 North Union Street, Suite 950
Montgomery, AL 36104

**RE: Docket Nos. 32767 and U-4226
James H. Bankston, et al. v. Alabama Power Company**

Dear Secretary Thomas:

In accordance with the Procedural Ruling from the Alabama Public Service Commission dated June 25, 2019, enclosed please find Complainants/Intervenors' Reply to Responses of Alabama Power Company to Alabama Public Service Commission Staff's June 25, 2019 Supplemental Data Requests in the above dockets. This is filed on behalf of James Bankston, Ralph Pfeiffer and Gasp, Inc. in the above referenced matter.

Complainants/Intervenors are submitting this filing to the Commission through its e-filing system consistent with the rules and practices of the Commission. The original and one copy of this filing are being delivered to the Commission via overnight mail.

Please call if you have any questions or concerns.

Sincerely,


Keith Johnston
Southern Environmental Law Center

**Complainants/Intervenors' Reply to Responses of Alabama Power Company to
Public Service Commission Staff's June 25, 2019 Supplemental Data Requests**

Complainants/Intervenors' ("Complainants") appreciate the opportunity to offer the following replies to the responses filed by Alabama Power Company ("Alabama Power" or "the Company") on July 23, 2019. Taken together, the Company's responses reveal that it lacks adequate justification to continue imposing the capacity reservation charge (or the super-peak charge applicable to Rate RTA) on solar customers in either the original form instituted more than six years ago or as proposed to be increased in the current rate modification docket. It is equally apparent that an effort by the Company to supply the necessary justification by gathering the requisite data and performing a sufficiently detailed analysis will take up to three years. Complainants and other similarly situated customers should not have to pay these charges in the interim. Indeed, both federal and state law prohibit such unjust and discriminatory treatment.

As the Company acknowledges, its assessment of charges for back-up service against solar customers and other customer-generators must comply with the Public Utility Regulatory Policies Act of 1978 ("PURPA") and its implementing regulations. PURPA proscribes the very sort of monopoly abuses present here—charges for service that lack empirical support and have the effect of undermining customer investments in self-generation technology like solar. PURPA's "[r]ates for sales" provisions specifically contemplate "formulation of rates on the basis of traditional ratemaking (*i.e.*, cost-of-service) concepts." FERC Order No. 69, 45 Fed. Reg. 12,214, 12,228 (Feb. 25, 1980). As FERC elaborates, "[a] qualifying facility is entitled to purchase back-up or standby power at a nondiscriminatory rate which reflects the probability that the qualifying facility will or will not contribute to the need for and the use of utility capacity." *Id.* FERC's underlying assumption is that utilities will not need to reserve capacity on a one-to-one basis to meet any back-up requirements of qualifying facilities. *Id.* at 12,229. Utilities may seek to refute that assumption, but it must be on the basis of "factual data," such as a probabilistic analysis of the diversified demand of solar customers. *Id.*

On this key analytical point—the extent to which, considering customer diversity, any solar customer may require back-up in the event of a "unscheduled outage"—the Company offers no hard data but falls back on its "judgment." And in doing so, the Company obscures any meaningful distinction between supplemental and back-up service (customers pay capacity costs associated with the former through normal volumetric energy purchases). The Company's consideration of back-up service as embracing service normally regarded as supplemental is a clear sign that its charges for true back-up service lack analytical support.

It is apparent now that the proposed increases to the charges lack empirical support by the Company, and that these charges suffered from a similar defect when they were quickly approved six years ago. As a result, the only path forward that is both legally defensible and fair to impacted customers is for the Commission—as the designated implementer of PURPA’s protections in the Company’s service territory—to order the Company to cease collecting the charges unless and until such time as it can support them in the manner PURPA and state law requires.

With the above background, Complainants offer the following specific replies to the responses by Alabama Power to Public Service Commission Staff’s five Supplemental Data Requests.

1. Please propose modified language (red-line format and clean format) that may further clarify the intent of the language currently included in Rate Rider RGB, Back-Up Power, Section I.B.

Complainants’ Reply: The Company has provided a redline version of Rate Rider RGB in response to Staff’s request that it “propose modified language (red-line format and clean format) that may further clarify the intent of the language currently included in Rate Rider RGB, Back-Up Power, Section I.B.” The Company’s proposed revised version appears designed to address flawed and confusing wording in previous versions of the Rider regarding application of the Rider to otherwise applicable rates. *See Rábago Testimony at 6:16-7:17*

The Company’s proposed revisions do appear to clarify its intended application of Rate Rider RGB in the context of otherwise applicable rates. However, the revisions do not cure the other fundamental deficiencies that result in unjust discrimination against customer-generators.

Instead of allowing the Company to modify only this language of Rate Rider RGB, the Commission should order the Company to withdraw and cease collecting charges under Back-Up Power Part I.B. of Rate Rider RGB.

2. Please propose a method and timeframe to replicate the study reflected in Exhibit ND Reply-7, or to develop a comparable basis supportive of the 35% credit to unrecovered fixed costs associated with FD customers who install on-site generation.

Complainants’ Reply: The Company provided a narrative response to Staff’s request that it “propose a method and timeframe to replicate the [2015 EPRI] study reflected in Exhibit ND Reply-7, or to develop a comparable basis supportive of the 35% credit to unrecovered fixed costs associated with FD customers who install on-site generation.” The Company states that:

- The study contained in Exhibit ND Reply-7 was not used to determine actual customer generator output diversity in the capacity reservation charge.
- The Company’s determination was based on “a number of factors” that the Company has not detailed and which all appear to involve the exercise of its subjective “judgment.”

- The equipment installed by the Electric Power Research Institute (“EPRI”) when the study was conducted in 2015 is no longer in place.
- In order to conduct a new version of the study, the Company would first have to develop a cost estimate, then conduct the study and analyze the results. The Company estimates that the time required for the new study would be 30-36 months.
- The Company also indicates that it could analyze the variability among generator outputs on installed customer facilities, and that such analysis would also require a comparable 30-36 months.

The Company’s response confirms the lack of any empirical foundation for one of the many key values used by the Company in setting the charges under Part I.B. of Rate Rider RGB. The Company’s response further confirms that to properly assess the costs and benefits associated with customer-owned distributed generation would be both time and resource intensive. In the context of this proceeding, it is important to note that the Company did not even identify the EPRI study as a source of information for its Rate Rider RGB until it submitted reply testimony on behalf of Company witness Dean, even though the study has been available since 2015. The Company notably did not cite the study in support of its initial filing of proposed modifications to Rate Rider RGB, which were filed in response to Complainants’ complaint. The Company’s belated reference to the EPRI study appears to be another attempt to supply an after-the-fact justification for its arbitrary and discriminatory charge.

Principles of cost-causation require the gathering of metered and empirical data to support charges and rates by regulated electric utilities. The Commission should require the Company to conduct a study that fully measures the costs and the benefits of distributed generation. Such a study should be scoped through an open process that engages and includes recommendations from stakeholders, including competitive solar system providers, customers, and others. The Commission should direct the Company to submit a proposal for a study that conforms with these recommendations, and to take the time to make an honest, transparent, technically and methodologically sound assessment of the full range of costs, avoided costs, and benefits of distributed generation before the Company proposes any rates or charges on customer-generators. In the meantime, to end the continued unjust discrimination against customer-generators, the Commission should order the Company to withdraw and cease collecting the current charges under Back-Up Power Part I.B. of Rate Rider RGB.

3. Please propose a method and timeframe to collect the necessary data to design an FD demand rate for those FD customers who install on-site generation.

Complainants’ Reply: The Company responded to the Staff’s request that it “propose a method and timeframe to collect the necessary data to design an FD demand rate for those FD customers who install on-site generation” by stating that it could develop a demand rate proposal for residential customer-generators within 18-24 months.

A demand rate is not a fix for the Company's flawed and unjustly discriminatory Rate Rider RGB. A demand rate charges for the demand imposed by a customer; the Company's Rate Rider RGB imposes unjust and unsupported flat charges based on energy (and computed associated capacity) that customer-generators *do not use*. To the extent that they rely on energy supplied from the grid to supplement the normal production of their own generation equipment, solar customers pay both the energy and capacity costs they cause under the Company's normal volumetric rate. For a demand rate to be worthy of consideration as a substitute, the Company would need to show that its normal volumetric rate is failing to recover fixed system costs caused by the solar customer's supplemental service requirements.

Because back-up power is for unscheduled outages—unplanned for, non-ordinary reductions in solar output (a far rarer event than routine fluctuations in output)—a demand rate for back-up service is unlikely to be appropriate. At a minimum, the introduction of a demand rate for that more narrow purpose raises a whole range of issues that require the development of a full record.

The Commission should not take up the issue of demand rates for residential customers until after a comprehensive and open evaluation of the potential issues and impacts of such rates. The study that the Company should conduct under Staff Request #2 could be modified and expanded to yield additional information needed to fairly consider such a rate and its impacts. For the Company to impose a demand rate on customer-generators without such data and analysis, or even to propose a voluntary demand rate tariff for customer-generators could create additional intra-class and inter-class problems that would only compound the unjust discrimination created by the Company's design and continued imposition of Rate Rider RGB Part I.B.

4. As part of Alabama Power Company's approach to developing a Back-Up Charge for FD customers who install on-site generation, did the Company consider and quantify any benefits that may be provided, on a consistent basis, by such on site-generation?

Complainants' Reply: The Company responded that it had *not* conducted "any independent assessment of the benefits or costs of interconnected, on-site generation in developing the capacity reservation charge and Rate RTA charge under Part I.B of Rate Rider RGB." The Company asserts that it has relied upon cost-of-service analysis to support Rate Rider RGB.

The Company's response makes clear that it has developed and imposed a punitive charge on customer-generators without having assessed the full range of impacts of distributed generation. The Company therefore recognizes only avoided energy costs and geographical diversity as benefits of distributed generation. This fails to capture the full range of benefits created by customer generation. Moreover, the Company's assessment of the diversity benefit (as essentially nothing more than an exercise of its "judgment") is deeply flawed. There are many examples of comprehensive studies that have sought to fully evaluate the benefits of distributed generation.¹ Georgia Power, another Southern Company utility, utilizes an evaluation process that while flawed in some respects, provides a much more robust and comprehensive assessment of the benefits and costs of distributed generation. The Company's decision to ignore the benefits

¹ See G. Weissman, et al., *The True Value of Solar: Measuring the Benefits of Rooftop Solar Power*, Environment America (July 2019), <https://environmentamerica.org/sites/environment/files/resources/AME%20Rooftop%20Solar%20Jul19%20web.pdf>.

of distributed generation appears in keeping with its willful efforts to unjustly discriminate against customer-owned generation.

Despite the Company's claims to the contrary, its charges under Rate Rider RGB Part I.B. are *not* based on an assessment of the costs to serve customer-generators. Rather, as detailed in testimony, the Company relies on hypothetical "representative" profiles of customer-generators and subject assessments of "a number of factors" that are not fully detailed or transparently revealed. For example, the Company does not measure how many times customer-generators have unplanned outages or the actual costs imposed when such outages occur, which are essential data to fairly and accurately calculating the costs to serve such customers.

5. Alabama Power's use of the NREL PVWATTS tool to calculate the "representative profile (with 4.3 kW Solar)" in Exhibit ND-7 takes into account weather variability. The study reflected in Exhibit ND Reply-7 also takes into account weather variability. Please explain how the consideration of weather variability in those two analyses are different.

Complainants' Reply: The Company responded that while modeled data from the NREL PVWATTS tool was used in both references, the approach was dramatically different in each. Specifically, in the Company's words:

- "Exhibit ND-3 [the representative solar production profile developed using the PV WATTS tool] shows the performance of a single generator over time, and thus helps the Company determine the amount of back-up power that generator would require in isolation."
- "By comparison, Exhibit ND Reply-7 [the 2015 EPRI study] shows how multiple generators perform in relation to each other at a single point in time, and . . . provides support for the Company's conclusions regarding the extent to which multiple generators would require full back-up power at the same time."

The Company's response shows that in its initial attempt to justify the charge, it made no quantifiable attempt to account for the variability (due to weather) of multiple generators over an extended period of time. Nor could such analysis have underpinned the original institution of the capacity reservation charge, as made effective in 2013, two years' ahead of the EPRI study. This confirms the lack of any quantifiable foundation for its assignment of a purely subjective 35% diversity benefit for distributed generation.

It's important to note that through its reliance on the PV WATTS tool, the Company has already accounted for weather variability (and associated reductions in solar output) in developing its representative solar production profile. This captures the "energy ordinarily generated by a customer's own generation equipment," as that phrase is used in both the federal and Rate Rider RGB definitions of "back-up power." Ordinary or regular system performance in turn establishes the important distinction between "supplementary" and "back-up" power. The former is "energy or capacity *regularly used* at the premises by a customer *in addition to* energy that is *ordinarily generated* by a customer's own generation equipment." Rate Rider RGB at 1 (emphasis added).

In contrast, back-up power is energy or capacity supplied to the customer “to *replace energy ordinarily generated* by a facility’s own generation equipment during an *unscheduled outage* of the facility.” 18 C.F.R. § 292.101(9) (emphasis added).

Solar PV is, to be sure, an intermittent resource, which means that it can only supply power when its fuel source (the sun) is available and its means of converting solar energy to useful electricity energy (the PV panels, inverter, etc.) is functioning. But that does not mean that normal, routine, and predictable reductions in solar output should be considered “unscheduled outages” triggering the need for back-up power. As solar output dips in the ordinary course of hours, days, months, and years, solar customers meet their electricity needs by purchasing supplementary service from the Company under a volumetric rate that is designed to recover both variable energy and fixed capacity costs. In other words, to the extent of their ordinary needs, solar customers pay fully for the costs to serve them.

For the Company again to consider weather variability in defining back-up power needs is to double count and thereby unjustly penalize the solar customer. As Company witness Dean’s reply testimony shows, the Company continues to make no intelligible distinction between supplementary and back-up power. Ms. Dean goes so far as to claim that “back-up service covers *all* reductions in on-site generation, including outages associated with the absence of sunlight.” Dean Reply Testimony at 17, lines 3-5 (emphasis added). In that case, what is supplementary power? The Company provides no coherent answer. Indeed, the Company’s absurdly broad conception of back-up power would embrace nighttime, which, as surely as the Earth revolves on its axis, must be considered a form of *scheduled* outage. At nighttime, as during other foreseeable reductions in solar system output, the solar customer meets its electric needs by purchasing power from the Company under a volumetric rate that covers both energy and fixed capacity costs caused by such purchases. The Company fully recovers the costs associated with providing such supplemental service.

The effect of customer diversity is to reduce the impact of any one unscheduled outage. Even if cloud cover, which constitutes variability and not an unscheduled outage, causes a single solar array’s output to reduce to zero, this is the normal operation of solar systems for which supplementary service is required—solar systems are, in effect, “scheduled” to not operate during the evenings, or when clouds are present. Tools like PVWATTS provide highly-reliable estimates of output of solar output based on historical insolation and weather information.

When the solar system has reduced output due to clouds during daytime hours, the likelihood is that another solar generator, distantly located, is at normal output—meaning that from the Company’s perspective, there is no net draw on its capacity. For this reason, as FERC states in Order No. 69,

an electric utility supplying back-up or maintenance power will not have to plan for reserve capacity to serve such facilities on the assumption that every facility will use power at the same moment. The Commission believes that probabilistic analyses of the demand of qualifying facilities will show that a utility will probably not need to reserve capacity on a one-to-one basis to meet back-up requirements. Paragraph (c)(1) prohibits utilities from basing rates on the

assumption that qualifying facilities will impose demands simultaneously and at system peak unless supported by factual data.²

Were it not for PURPA, the Company would claim that it needs to reserve capacity on a one-to-one basis for any period of daytime or nighttime non-generation.³ In deference to PURPA, however, the Company lessens its claim by 35 percent—hence for every 10 kW of solar on its system, the Company claims it needs to have 6.5 kW in reserve at all times, even though solar systems are extremely reliable—operating 95% of the time or more when sunlight is available. This adjustment, the Company asserts, is in acknowledgment of the effect of generator diversity. But as the Company's own testimony and responses make clear, the amount of the Company's adjustment—which relates directly to the amount of the charge—has no basis in quantifiable fact. Even with the opportunity afforded by these supplemental data requests, the Company can point to no probabilistic analysis supporting its assumption that any given moment fully 6.5 kW of every 10 kW of solar on its system will be completely unavailable to serve customer needs. PURPA and state law do not allow the Company to punish solar customers based on purely subjective considerations.

The Company cites no other example of a utility that has followed its approach—not even from nearby states with far higher levels of solar penetration. This should give the Commission pause. If the Company is indeed simply following “standard rate design practices,”⁴ one would expect to see similar examples from other jurisdictions. Instead, despite extremely low levels of customer-sited solar, Alabama Power stands alone. Indeed, the Company's punitive rates appear to be a major reason why sun-rich Alabama has so few solar generating facilities owned and operated by customers.

While the Company is certainly free to develop a defensible probabilistic assessment of the benefits of customer diversity, and take as long as it needs to do so, solar customers should not be punished in the interim with a charge that has no actual cost-of-service basis. Indeed, for all its attempts to dispute that solar customers provide capacity savings, the Company's own analysis of “a number of factors” shows that the representative solar customer is \$330 *less costly* to serve than the non-solar customer. That \$330 differential includes up to \$194 worth of demand savings. How much of that savings is actual as opposed to theoretical hinges on a valid assessment of customer diversity based on actual data derived from system operations. The Company has the responsibility and regulatory burden to perform that assessment before instituting any charge under a cost-of-service regulatory model, not after.

The Commission should direct the Company to include a comprehensive study of the impacts of weather variability for a statistically valid sample of distributed generators over a statistically

² 45 Fed. Reg. at 12,229.

³ See, e.g., Dean Initial Testimony at 17:3-5 (“The Company does not avoid the fixed capacity costs when a customer with on-site generation requires Firm Back-Up Service, because the Company must remain prepared to serve the customer's peak load at any time and under any condition.”); Dean Reply Testimony at 14:1-4 (“A customer with a 10 kW demand, but with 5 kW of on-site generation requiring back-up power serviced, translates to a requirement on the part of Alabama Power to be ready to serve the full requirements load of 10 kW at any time.”).

⁴ Dean Initial testimony at 21:11.

valid period of time as a part of the new study of impacts, costs, and benefits previously discussed.

Conclusion

In closing, Complainants would note this simple reality regarding the impact of the Rate Rider RGB charges on customers-generators: A solar customer with the exact same load profile (same total usage and same contribution to peak demand) as a non-solar customer will pay more for the same level of service simply because of their decision to invest in on-site solar. Moreover, the amount of the charge assessed against the solar customer is based on the size of their system despite the lack of any correlation between system size and the amount of the customer's usage during peak hours. Indeed, the Company admitted that it developed the charge without any assessment of actual customer-generator load profiles and their coincidence (or lack thereof) with peak demand.

PURPA's implementing regulations provide that rates for sales "shall not discriminate against any qualifying facility in comparison to rates for sales to other customers served by the electric utility." 18 C.F.R. § 292.305(a)(1)(ii). Further, rates for sales "which are based on accurate data and consistent system-wide costing principles shall not be considered to discriminate against any qualifying facility to the extent that such rates apply to the utility's other customers with similar load or other cost-related characteristics." Id. at § 292.305(a)(2). Under Rate Rider RGB, not only will the solar customer always pay more for than the non-solar customer for an identical level and timing of utility service, they pay more than low-use customers who have reduced their usage through other means (e.g. energy efficiency measures).

Unlike those other customers within the same class, the solar customer pays class demand costs twice: once through the capacity reservation charge (according to the solar system's size), and again through charges based on the customer's volumetric energy use. And all the while, the Company has failed to produce any data showing that solar customers have patterns of electric usage outside the range of other customers. The Company simply has not shown, and in all likelihood cannot show, that solar customers have a categorically different cost-of-service necessary to justify a different rate treatment that is non-discriminatory.


Accordingly, it is incumbent upon this Commission, as the authority charged with implementing protections under PURPA and Alabama law within Alabama Power's service territory, to order the Company to cease collecting the charges unless and until it can demonstrate a cost-of-service basis for them.

/s/ Clay Ragsdale

Clay Ragsdale (RAG001)
Allison Riley (RIL018)
RAGSDALE LLC.
517 Beacon Parkway W.
Birmingham, AL 35209

Tel: (888)727-1087
clay@ragsdalellc.com
allison@ragsdalellc.com

Attorneys for Complainants/Intervenors James Bankston and Ralph Pfeiffer


Christina Andreen (AND119)
Kurt Ebersbach (EBE007)
Keith Johnston (JOH230)
Southern Environmental Law Center
2829 2nd Avenue South, Suite 282
Birmingham, Alabama 35205
Tel: (205) 745-3060
Fax: (205) 745-3064
candreen@selcal.org
kebersbach@selcga.org
kjohnston@selcal.org

Attorneys for Complainant/Intervenor Gasp, Inc.

CERTIFICATE OF SERVICE

I certify that copies of the foregoing have been served upon the following by electronic transmission on this 20th day of August, 2019.

Dan H. McCrary
Scott B. Grover
Balch & Bingham LLP
P.O. Box 306
Birmingham, AL 35201
Tele. 205-251-8100
dmccrary@balch.com
sgrover@balch.com

Robin G. Laurie
Riley W. Roby
Balch and Bingham, LLP
105 Tallapoosa Street, Ste. 200
Montgomery, AL 36104
rlaurie@balch.com
rroby@balch.com

Daniel Tait
Chief Operating Officer
Energy Alabama
PO Box 1381
Huntsville, AL 35807
dtait@alcse.org


Attorney for Complainant/Intervenor Gasp, Inc.