STATE OF ALABAMA
PUBLIC SERVICE COMMISSION
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JEREMY H. ODEN, ASSOCIATE COMMISSIONER

CHRIS "CHIP" BEEKER, JR., ASSOCIATE COMMISSIONER

JOHN A. GARNER, EXECUTIVE DIRECTOR

James H. Bankston, et al.,
Petitioners/Complainants,

v.

Alabama Power Company,

and

Alabama Power Company,
Petitioner

In re: Rate Rider RGB (Supplementary, Back-up, or Maintenance Power).

Docket No. 32767

Docket No. U-4226

ORDER

BY THE COMMISSION:

These matters come before the Commission by virtue of a complaint filed by James Bankston, Ralph Pfeiffer and Gasp, Inc. against Alabama Power Company under Section 37-1-83, *Code of Alabama*, and rate modifications filed by Alabama Power under Section 37-1-81, *Code of Alabama*. The proceedings share a common subject, Alabama Power's Rate Rider RGB (Supplementary, Back-up, or Maintenance Power) and the charges for firm back-up power service ("back-up power" or "back-up power service") set forth in Part I.B. of the rate rider. As explained herein, and with the additional directions noted, we accept the company's proposed modifications to the back-up power service charges in Rate Rider RGB Part I.B. We also deny the complaint.

I. INTRODUCTION AND BACKGROUND

A. Procedural History

On April 26, 2018, Bankston, Pfeiffer and Gasp (collectively "Complainants") filed a complaint and petition for declaratory judgment against Alabama Power, which was assigned Docket No. 32767. The complaint alleged that Part I.B. of the company's Rate Rider RGB (Revision Fifth to the tariff) was unfair, unreasonable, unjust, discriminatory and contrary to the public interest and Section 37-1-80, *Code of Alabama*. In summary, the complaint alleged that Alabama Power (i) failed to provide sufficient justification and evidence to this Commission to support the charges for back-up power service in that part of the tariff (i.e., the Capacity Reservation Charge and the alternative Rate RTA Charge); (ii) establish that the two charges lacked any correlation to the cost to serve customers with on-site solar generation; and (iii) is unjustly profiting from the charges, which infringes on the rights of customers to invest in self-generation on their private property. The complaint additionally alleged that Rate Rider RGB should be understandable and not unnecessarily complex with the intention to confuse customers. Complainants requested the opportunity for evidentiary submissions, testimony from witnesses, a hearing and any other procedures due them, along with an order directing Alabama Power to cease collecting the two charges for back-up power service and withdraw Part I.B. from the tariff.

On June 15, 2018, Alabama Power moved to dismiss the complaint. In its motion, Alabama Power asserted that the complaint was a collateral attack on the Commission's 2013 order approving the Capacity Reservation Charge and the alternative Rate RTA Charge as part of Revision Fifth to the rider. Alabama Power also claimed that the complaint was moot given the company's contemporaneous filing of proposed modifications to Rate Rider RGB. By those revisions (i.e., Revision Sixth), which the company filed in Docket No. U-4226, Alabama Power sought to increase the Capacity Reservation Charge from $5.00/kW for secondary service and $4.46/kW for primary service to $5.42/kW and $4.88/kW, respectively.

Alabama Power also proposed to increase the alternative Rate RTA Charge from $0.70/kWh to $0.71/kWh. In support of the revisions, Alabama Power included testimony and exhibits sponsored by the company's Regulatory Pricing Manager, Ms. Natalie Dean, which is summarized in more detail below. Alabama Power requested the modifications become effective sixty (60) days following entry of a Commission order.

On July 3, 2018, Complainants petitioned to intervene in the proceeding in Docket No. U-4226 concerning Alabama Power's proposed modifications. In their petition, Complainants described the facts and circumstances supporting their standing to participate in the proceeding. The Complainants also requested the Commission suspend and investigate the company's modifications until a hearing had been held on the complaint in Docket No. 32767; hold a hearing on the modifications; and then enter an order denying the modifications as unfair, unreasonable and unjustly discriminatory. On July 6, 2018, Complainants amended their original Complaint, broadening the allegations and requested remedies to include Alabama Power's June 15 modifications to Rate Rider RGB. Also on July 6, Complainants filed an opposition brief to the company's motion to dismiss contending that the complaint was not a collateral attack on the Commission's prior order approving Revision Fifth to Part I.B. of Rate Rider RGB, but on the charges for back-up power service included therein. Complainants also argued that the company's mootness arguments were deficient, as a live and justiciable controversy remained regarding the fairness and lawfulness of the back-up power service charges in Part I.B. of the tariff, as then existing or as proposed to be modified by Alabama Power.

On July 11, 2018, the company responded to Complainants petition to intervene in Docket No. U-4226. Alabama Power stated that it did not oppose the petition, but urged the Commission to reject Complainants' request for a suspension and investigation of the filing. The company further stated that the Commission possessed the authority to approach the proceeding as it determined proper and within its

statutory authority, and could establish a comment cycle or provide for discovery and the submission of responsive testimony by Complainants, and reply testimony from the company, as to the proposed modifications. On July 11, the company also submitted a reply brief in further support of its motion to dismiss. The company reiterated its claims that any collateral attack on the 2013 order must be dismissed. The company also stated that any further consideration of Revision Fifth would only be necessary, if at all, following the Commission's review of the proposed modifications in Revision Sixth.

A Procedural Ruling subsequently was entered on August 23, 2018. As directed by the ruling, Alabama Power's motion to dismiss the complaint was held in abeyance; Complainants were granted leave to intervene and participate in Docket No. U-4226; and an evidentiary cycle was established for that docket, by which Complainants could develop and present testimony and evidence responsive to Alabama Power's proposed modifications to Rate Rider RGB. Initial deadlines were established for the evidentiary submissions, and the parties were authorized to conduct discovery in accordance with Rule 16 of the Commission's Rules of Practice.

Thereafter, Complainants propounded interrogatories and requests for the production of documents on Alabama Power, and served notice of a Rule 30(b)(6) deposition of the company. To accommodate the scheduling of that deposition, the deadline for evidentiary submissions was extended, as reflected in the October 5, 2018 motion of the Complainants and the Procedural Ruling dated October 15, 2018. On November 14, 2018, Complainants submitted testimony sponsored by Mr. Karl R. Rábago. On December 13, 2018, Alabama Power submitted reply testimony from Ms. Dean. Each of these evidentiary submissions is summarized more fully below.

On December 18, 2018, a Procedural Ruling was entered advising the parties that the Commission was taking matters under advisement for a final determination based on the testimony and evidence submitted. On December 21, 2018, Complainants filed a motion for a hearing in both Docket No. 32767

and Docket No. U-4226. Complainants contended that an action by the Commission affecting the rates in Rate Rider RGB, without it first holding a hearing, would deprive them of due process. Complainants also stated that a hearing would allow them an opportunity to respond to the Company's reply testimony and to otherwise prove their case to the Commission. On January 11, 2019, Alabama Power responded to the Complainants' motion for hearing, contending that under the circumstances, a hearing was not automatically required by law and that the Complainants had been afforded more than ample process.

On February 22, 2019, Energy Alabama petitioned to intervene in the proceedings. Energy Alabama stated that it was a non-profit organization with a mission to accelerate the state's transition to sustainable energy. Energy Alabama also claimed that the Part I.B. charges in Rate Rider RGB directly impact its members' ability to access renewable energy. On May 21, 2019, Complainants filed a Notice of New Authority, directing the Commission's attention to a May 2019 order by the Michigan Public Service Commission that Complainants believed would inform this Commission's decision making. Alabama Power responded to the notice by filing dated May 31, 2019, stating that the non-jurisdictional order from Michigan was irrelevant to the Commission's consideration of the issues before it.

Thereafter, on June 25, 2019, a Procedural Ruling was entered, stating that the Commission and its Staff had determined that responses by Alabama Power to five supplemental data requests would be helpful in assessing the issues under consideration. Included therein was a request to the company to propose any modified language that might further clarify the intent of Part I.B. of the tariff. Alabama Power provided responses to the data requests as directed on July 23, 2019, and Complainants and Energy Alabama submitted replies to the company's responses on August 20, 2019 (Energy Alabama having been granted leave to intervene and the right to file a reply pursuant to a separate Procedural Ruling dated July 12, 2019).

On October 7, 2019, the Commission issued a Procedural Ruling setting for hearing the issues pending in Docket No. U-4226 and Docket No. 32767. The ruling provided that such hearing would be limited to the issues and evidence already compiled in the record and directed the parties to make their respective witnesses available for cross-examination. Alabama Power thereafter filed on October 18, 2019 a notice of deposition of Complainants' witness Mr. Rábago, to which Complainants filed an objection and responses on October 29, 2019.

On November 15, 2019, Alabama Power filed an errata to the testimonies of Ms. Dean. As explained in the company's transmittal, the need for the errata stemmed from a data sequencing error identified in one of the files underlying the company's calculations in support of its proposed modifications. Corrections to the error resulted in a one cent ($0.01) decrease in both the Capacity Reservation Charge and the alternative Rate RTA Charge. In the errata filing, the company also stated that a certain exhibit to Ms. Dean's reply testimony for which confidential treatment had been applied no longer required such treatment. Accordingly, the company filed a public version of the exhibit and the corresponding pages of Ms. Dean's reply testimony that initially had been redacted.

Also on November 15, Complainants filed a Request for Clarification of Hearing Procedures. By the filing, Complainants sought guidance from the Commission as to which party's witness would be examined first at the hearing. Complainants stated their belief that Alabama Power's witness should proceed first, as the company possessed the ultimate burden of proof as to the justness and reasonableness of its proposed modifications to the back-up power service charges in Part I.B. of Rate Rider RGB. On November 20, 2019, the Office of the Attorney General submitted a notice of intervention, and the hearing in these matters took place on November 21, 2019. At the conclusion of the hearing, the Chief Administrative Law Judge directed the parties to submit post-hearing briefs in the form of proposed orders, by December 20, 2019.

B. Testimony of the Witnesses

1. Direct Testimony of Ms. Dean

As noted above, Alabama Power supported its proposed back-up power service charges in Part I.B. of Rate Rider RGB through testimony from its Regulatory Pricing Manager, Ms. Dean. In her Direct Testimony, Ms. Dean explained that the company's filing had been prompted by the complaint filed in Docket No. 32767, as the company anticipated that Complainants would assert that the basis for the Capacity Reservation Charge and Rate RTA Charge had become stale and unreliable. After completion of a new analysis, which included an update of the data supporting the charges, the company determined that the back-up power charges did in fact require adjustment. Ms. Dean then testified as to the scope of Rate Rider RGB and the provisions of the tariff concerning the supply of back-up power. She testified that the Public Utility Regulatory Policies Act of 1978 ("PURPA") and the implementing regulations of the Federal Energy Regulatory Commission ("FERC") obligate utilities such as Alabama Power to provide services like back-up power to qualifying small power production facilities and co-generation facilities. She also observed that Section 37-4-140(c)(1), *Code of Alabama*, authorizes the Commission to approve Alabama Power's rates, fees, and charges for back-up power services to on-site, interconnected generation.

Ms. Dean provided testimony regarding the applicability of Rate Rider RGB. Importantly, Ms. Dean noted that Rate Rider RGB applies to any customer that interconnects and operates a non-emergency generator in parallel with the company's electrical system. In contrast, if a customer's on-site generation is not interconnected to the company's system, the customer is not subject to the tariff. As an example, the company pointed to statements submitted as part of the complaint by one of Complainants' members who has a battery system along with his generation and maintains those facilities separately from Alabama Power's electrical grid. As stated above, the member's specific facilities not connected to the company's system are not subject to Rate Rider RGB. Customers that interconnect their generation to the company's

system, however, impose on the company the obligation to stand ready to provide back-up power service whenever the customer requires it. In addition, these customers are subject to the special rules that accompany the tariff, which are intended to protect the company's electrical system and its employees from potentially adverse impacts that could be caused by the operation of generation in parallel with the company's system without its knowledge.

Ms. Dean then testified as to the design of the tariff. As part of this, she emphasized that the Capacity Reservation Charge and the Rate RTA Charge are not discriminatory, as they provide a cost-based means for the company to recover the fixed (or demand) costs associated with the company standing ready to provide back-up power to partial requirements customers with interconnected on-site generation. To forego such charges, she observed, not only would result in the Part I.B. customers receiving back-up power service at the expense of other customers but doing so also would discriminate against customers receiving back-up power service under Part I.A. of Rate Rider RGB.

As Ms. Dean explained, the Part I.A. rates eligible for pairing with Rate Rider RGB are ratcheted-demand rates (and one real-time pricing rate). Under this design, a customer is billed for the higher of its monthly peak demand or a percentage of the peak demand in the prior eleven months. This design provides for the fixed cost recovery of the customer's peak capacity needs for the entire year and ensures that fixed cost recovery associated with peak capacity needs is being accomplished even in a partial requirements situation. This is important because such situations result in the company incurring costs associated with providing firm back-up power service. (Comparably, the real-time pricing rate provides for automatic adjustment during high cost periods, which affords the company sufficient assurance of cost recovery.) As a result, the cost of back-up power service is recovered from these customers through the eligible rate options set forth in Part I.A., without requiring a separate charge.

In contrast, the rates eligible under Part I.B. of Rate Rider RGB are either energy-only rates or rates without a ratcheted-demand design. These rates were designed based on the energy consumption profiles for full requirements customers. They do not include a separate ratcheted-demand component common among the Part I.A. options, and thus do not provide a means for the company to fully recover the fixed costs associated with providing back-up power service to partial requirements customers. Accordingly, a separate Capacity Reservation Charge is needed to provide for the recovery of these costs. As for the alternative Rate RTA Charge, Ms. Dean testified that the option was intended to provide flexibility to customers with interconnected on-site generation who believe they can manage their *usage* more precisely during peak periods. To send an appropriate price signal, while also providing for cost recovery, the super-peak charge for Rate RTA applies during the summer period (June – September), non-holiday weekday hours of 3 p.m. to 5 p.m.

Ms. Dean then testified as to the methodology used by the company to determine the Capacity Reservation Charge and the Rate RTA Charge. The underlying basis for these back-up power charges is the company's Jurisdictional Separation Study ("JSS"), which includes all of the Company's embedded costs of electric service, functionalized and classified for residential, non-residential and wholesale customers. The company then determined a representative cost of service for a sample group of the Rate FD customer population, stratified by four different energy usage patterns. Ms. Dean explained that the company used the Rate FD segment of customers due to the fact that Rate FD would yield a conservative indication of the cost of service for all customers served under Part I.B., and because the vast majority of customers receiving service under Part I.B. are Rate FD customers.

The company then weighted a Rate FD sample group based on the strata occupied by actual customers prior to the installation of interconnected generation. From this data, the Company was able to determine a representative load profile for the FD sample group prior to installation of on-site solar

generation. The company next developed a second load profile to represent the customer with interconnected solar generation. The company selected solar generation because it is the predominant form of generation installed by current customers subject to Part I.B. of Rate Rider RGB. Alabama Power employed the National Renewable Energy Laboratory (NREL) PVWATTS tool to model a solar production profile for each of the three weather zones representative of the company's service territory (Birmingham, Montgomery, and Mobile). That profile was weighted based on residential customer usage in the weather zones, to yield a single 1 kW solar production profile representative of weather across the Alabama Power service territory. This production profile was then applied to reduce the original FD representative load profile discussed above, resulting in an indicative load profile for the same representative customer with 1 kW of interconnected on-site solar generation.

With the load profiles established, the company then was able to develop the cost to serve the representative customer, with and without interconnected generation, and from there, calculate the cost of service differentials from a variable energy cost perspective and a fixed capacity or demand cost perspective. As Ms. Dean testified, these differentials were then used to determine the cost of back-up power service. The variable cost differential comprises costs actually avoided by the company, and are not included as recoverable costs in the calculation of either the Capacity Reservation Charge or the Rate RTA Charge. The fixed cost differential, however, remains a cost incurred by the company, as the company must continue to maintain and have available the same amount of capacity sufficient to back-up the customer's generation and serve the customer's full load when required. Ms. Dean then testified how the company, consistent with its understanding of the requirements of PUPRA, applied several factors in determining how customer generator diversity should be considered and credited against the fixed costs associated with providing back-up power. The company concluded that a credit of 35 percent was

reasonable, which yielded a threshold capacity reservation charge of $6.99 per kW of generation requiring back-up power service.

Ms. Dean then explained how the company performed additional calculations to determine how much of this cost of providing back-up power service would be recovered under the existing provisions of Rate FD for the supplementary service of a representative customer with on-site generation. Specifically, the company took its representative customer load profiles and calculated the expected annual cost recovery for each profile using the applicable charges under Rate FD. These calculations demonstrated that a measure of the back-up power service cost recovery is being accomplished through the supplementary service charges applied to the energy consumed, and that to recover the remaining costs, an appropriate Capacity Reservation Charge would be $5.42/kW for back-up power service at the secondary level, and $4.88/kW for service at the primary level. Ms. Dean then explained how comparable techniques were used to develop the Rate RTA Charge of $0.71/kWh, accounting for the charges specific to that rate (rather than Rate FD) and its period of applicability (i.e., summer period, non-holiday weekdays from 3 p.m. to 5 p.m.).

2. Direct Testimony of Mr. Rábago

Complainants responded to Ms. Dean's testimony with testimony from Mr. Rábago, who described himself as an expert witness with extensive experience in the field of distributed energy resources, among other topics. Mr. Rábago testified that in his opinion, Part I.B. of Rate Rider RGB is unjust and unreasonable and should be withdrawn.

Mr. Rábago provided lengthy testimony in support of his conclusions. He stated that he found the language in Part I.B. of the tariff to be unclear, in terms of which service rates would apply to customers subject to the rate. Mr. Rábago testified that the Capacity Reservation Charge would add 65 percent to the private investment cost of a solar system, rendering the investment less economic or totally

uneconomic for many customers. Mr. Rábago also testified that the company was using a definition of back-up power materially different from the federal regulatory definition for back-up service. According to Mr. Rábago, where the federal definition describes back-up service as service *supplied* to replace energy and capacity due to an unscheduled outage at the distributed generation facility, the company's tariff defines back-up service as service *available* to replace energy used at the customer's premises during such outages.

Mr. Rábago also criticized the company for not basing or calibrating the development of its charges on actual data relating to outages at distributed generation facilities, or taking into account actual consumption levels, system sizes or usage patterns of actual solar distributed generation customers. Without such data, Mr. Rábago continued, there is no way the company can construct a fair, non-discriminatory and cost-based rate for back-up power service. Rather, the company reverse-engineered an estimate of hypothetical lost revenues, which Mr. Rábago testified, appeared intended to create a charge that obviates the savings a customer would realize by installing solar generation.

Again pointing to the federal regulations applicable to services such as back-up power, Mr. Rábago emphasized that back-up power is power supplied in the event of an unscheduled outage of the generator. In contrast, the company's definition—which is energy or capacity available to replace energy used at the premises—encompasses the fixed costs associated with generation facilities, regardless of whether that generation is called upon, which Mr. Rábago claimed constituted a departure from principles of cost-causation in rate making. Mr. Rábago also testified that the company had not demonstrated any reasonable basis for charging for back-up power service in advance, whether through a threat to its financial integrity or as a result of an inequitable cost shift on an intra- or inter-class basis.

Mr. Rábago also challenged the company's assumptions as to the contribution to fixed cost recovery resulting from customer generator diversity. Mr. Rábago stated that the company's reduction to

65 percent relied only on qualitative judgment, and that a more realistic assumption of 5 percent would yield a credit (in lieu of a charge) of $1.02 per month. In support of this statement, Mr. Rábago testified that solar photovoltaic generation is available to generate electricity nearly 100 percent of the time. In observing this, Mr. Rábago distinguished availability from variability, the latter being captured in models such as the NREL PVWATTS tool and, when subtracted from consumption, yields a solar customer's demand for supplementary power service. Service *supplied*, Mr. Rábago stated, is the applicable metric for back-up power service and is what should be used in the company's methodology.

Mr. Rábago also opined on how back-up power charges should be developed. Consistent with his view of the federal definition of back-up power, Mr. Rábago stated that Alabama Power should base the charge on measured usage and data reflecting the length of an outage by the interconnected generator, the amount of energy supplied by it, and the amount of new capacity the company must procure in order to provide the back-up service. In addition, the charge should be levied after the service is provided. Variability should not be the predicate for a back-up power charge.

Mr. Rábago lastly provided general testimony on the company's supplementary service rate and his opinion that the company may not be capturing the value and benefits from customers' solar generation. He noted that the company's own analysis showed that customers with solar generation have a lower cost of service, and that such generation may present other benefits to the company's system. He also testified that the company could apply proven methods to assess the costs and benefits of solar generation, such as a costs and benefits framework used in Georgia or a net metering study in Mississippi. In closing, Mr. Rábago testified that Part I.B. of Rate Rider RGB failed to adhere to fundamental principles of rate making, and he recommended that the Commission (i) order the company to withdraw it and cease enforcement of any of its provisions relating to supplementary or back-up power, (ii) order the company to refile new Rate Rider RGB language with terms consistent with federal law, based on actual cost of service, and without

any confusing language as to applicability, and (iii) order the company to evaluate the benefits and reduced costs of serving distributed generation customers.

3. Reply Testimony of Ms. Dean

In her reply testimony, Ms. Dean stated that the testimony of Mr. Rábago did not provide any meaningful basis upon which the Commission should reject the company's proposed modifications to Part I.B. of Rate Rider RGB. This conclusion, she explained, stemmed from her view that the cost recovery design underlying the Capacity Reservation Charge and Rate RTA Charge fully comported with federal regulations. In addition, she disputed Mr. Rábago's claims that the company did not use actual cost or load data.

As to this first point, Ms. Dean testified that the FERC rulemaking which created the regulations applicable to back-up power service—Order No. 69—recognized the right of utilities to recover the costs of making capacity and energy available to customers that require back-up power service. She cited language from the rulemaking supporting this view, including one section in which FERC stated: "where the utility must reserve capacity to provide service to a qualifying facility, the costs associated with such reservation are properly recoverable from the qualifying facility, if the utility would similarly assess these costs to non-generating customers." Ms. Dean then testified that the back-up power charges adhere to the requirements of non-discrimination inherent in this statement, as Part I.B. of Rate Rider RGB provides for the recovery of fixed costs to meet the capacity needs imposed on it by partial requirements customers with interconnected generation, just as the company does through its electric service rates for full requirements customers. Ms. Dean also observed that the Part I.B. charges ensure that Alabama Power does not discriminate against the customers served under Part I.A. of the tariff, and who are served under rates that already provide a means (e.g., demand charge) for the recovery of back-up power costs from partial requirements customers.

Ms. Dean then reviewed the design methodology for the Part I.B. charges. As part of this review, Ms. Dean stressed that the only cost savings recognized by the company as a result of a customer installing solar generation and remaining interconnected to the company's system are those costs associated with variable energy (e.g., fuel cost savings). These savings, Ms. Dean stated, are passed through to the customer as part of the calculation of the back-up power charges. In contrast, there are no fixed capacity cost savings, as the company is required to maintain sufficient capacity to serve the peak demand requirements of the customer, including those associated with backing up the customer's generator.

Ms. Dean then addressed criticism from Mr. Rábago relating to the diversity considerations reflected in the back-up power charges and the manner by which the company arrived at 65 percent, as the amount of total fixed cost to be included in the back-up power charge. First, Ms. Dean explored Mr. Rábago's claim that solar generators have an availability factor of 95 percent, and reviewed additional literature that, in her opinion, refuted his claims and instead spoke to the reasonableness of the company's conclusions. Next Ms. Dean testified as to her disagreement with Mr. Rábago regarding the proper consideration of fluctuations in resource output due to factors affecting performance, like weather variability. Back-up power service, Ms. Dean stated, covers all reductions in on-site generation, including unscheduled outages associated with the absence of sunlight.

In support of this, Ms. Dean pointed back to the FERC rulemaking applicable to back-up power service, and its guidance that a utility could use data regarding the impacts of weather on the coincidence of demands imposed by solar generators to address assumptions regarding the demands of those generators. Ms. Dean also testified that the company had identified an analysis performed by the Electric Power Research Institute (EPRI) concerning distributed solar photovoltaic performance data in Alabama. Notable in the study, Ms. Dean stated, was its discussion of solar resource variability, and how spring and summer seasons experienced moderate or high solar resource variability during at least 65 percent of the

days within each quarter in all locations. Ms. Dean also pointed to the study's observations on the frequency and severity of solar irradiance fluctuations (and, in turn, generator output), and how irradiance fluctuations in different cities often demonstrated overlap, which would indicate a requirement on the part of the company to be prepared to provide back-up power service in multiple locations simultaneously. Ms. Dean stressed, however, that the study's data did not, in its own right, purport to calculate a 65 percent diversity requirement. Rather, the data in the study confirmed the company's view that solar resources in Alabama often are unavailable and can be expected to be unavailable in multiple regions simultaneously. This verified the company's confidence that 65 percent reasonably represented the diversity of the resources it is being asked to back up.

Ms. Dean also responded to Mr. Rábago's claims that the language of the tariff was unclear, observing that the company had not seen widespread or systematic problems in its application. Finally, Ms. Dean noted a correction to the Rate RTA Charge, which when implemented caused the price to increase by $0.01/kWh.

C. The November 21, 2019 Hearing

As reflected in the procedural history, the Commission held a limited evidentiary hearing on November 21, 2019. Ms. Dean was called to testify first and briefly summarized her testimony. Ms. Dean then confirmed the ongoing truth and accuracy of her testimony, acknowledging the company's recent errata and the fact that both the Capacity Reservation Charge and Rate RTA Charge should be $0.01 lower than previously indicated. Ms. Dean then submitted to examination by Complainants, Energy Alabama and the Office of the Attorney General.

Much of Complainants' examination explored details regarding the company's design of its back-up power charges already contained in Ms. Dean's pre-filed testimony. Complainants also questioned how the charge for back-up service would negatively impact the payback on a customer's private

investment in on-site solar generation. In response, Ms. Dean elaborated on the company's methodology for calculating customers' pre- and post-solar installation consumption levels and why the use of net consumption was not practical. Ms. Dean also testified regarding the operation of the supplementary service rate, as compared to the charges for back-up power service. In this respect, she explained the purposes underlying the supplementary service rate and how the company took the measures that it did to protect against double-recovery of back-up power costs in the supplementary service rate. Much examination also was conducted as to the company's conclusions regarding diversity of generators and the appropriateness of the company's use of a 65 percent diversification measure.

Complainants and Energy Alabama also examined Ms. Dean regarding benefits associated with customer generation. Ms. Dean explained how the company factored in variable cost avoidance and the adjustment to fixed costs (i.e., 35 percent credit) associated with diversification, but testified that for other matters beyond those impacts and associated with the output of customer generation, Rate Rider RGB was not the appropriate tariff. Energy Alabama also examined Ms. Dean regarding the 65 percent diversification figure. During this portion of the hearing, Ms. Dean elaborated further on some of the considerations underlying the company's conclusions, including the coincidence of the company's residential class peak with the peak of the entire system. Ms. Dean explained that the residential class drives the company's overall peak on an order of magnitude well in excess of 65 percent.

Following Energy Alabama, the Office of the Attorney General examined Ms. Dean. As part of that questioning, Ms. Dean confirmed that the purpose of the Part I.B. charges was to ensure that customers as a whole are not subsidizing partial requirements customers who install on-site generation, including solar generation. Ms. Dean also confirmed that the company is required to charge cost-based rates, and that the cost-of-service is evaluated annually in accordance with Rate RSE.

Mr. Rábago then was made available for cross-examination. Mr. Rábago provided an errata to his testimony, explaining that since its submission, he had transitioned from New York to Colorado and had changed positions with the Pace Energy and Climate Center. Mr. Rábago also identified an error in his testimony relating to his characterization of the company's stratification method. Following the errata, Mr. Rábago provided a summary of his testimony. No questioning ensued and the hearing thereafter was completed.

II. FINDINGS AND CONCLUSIONS OF THE COMMISSION

The applicable evidentiary considerations for this proceeding are well-settled: whether there is legal evidence of a substantial weight and probative force supporting the request of Alabama Power to modify the charges for back-up power service in Part I.B. of Rate Rider RGB. *See Choctaw County v. Alabama Public Service Commission*, 368 So.2d 280, 283 (Ala. 1979). Alabama Power, as the proponent of a rate change, also bears the burden of proof, notwithstanding Complainants' original complaint regarding Revision Fifth to Rate Rider RGB having preceded the company's proposed modifications (a point on which both parties appear to agree, given the agreed ordering of witnesses at the November 21 hearing). With these parameters in mind, and based on our consideration of the record, we find the company's proposed modifications to be supported by evidence of a substantial weight and probative force and due to be approved, subject to certain modifications and corrections that we direct the company to include with conforming tariff sheets submitted in accordance with this Order.

The facts and legal points supporting this conclusion are comprehensive. Foremost, there is no dispute that back-up power is a service, that Alabama Power is required to provide that service in accordance with PURPA and federal regulations, and that Section 37-1-140, *Code of Alabama*, requires this Commission to establish appropriate rates, fees and charges for back-up power service. Likewise, no

one can dispute that there are costs associated with the provision of electric service, be it back-up power service or otherwise, and that Alabama Power is entitled by law to recover its cost of service.

We recognize that the United States Congress enacted PURPA in part to encourage cogeneration and small power production, and that prior to the law's enactment, such facilities faced obstacles, including discriminatorily high charges for back-up power. *See* Order No. 69, 45 Fed. Reg. 12214, 12215 (Feb. 25, 1980). Congress also made clear that utilities' purchases from and sales to such facilities should be reasonable to the electric consumers of the utilities and in the public interest. *See* 16 U.S.C. § 824a-3(b). Stated differently, Alabama Power's non-generating customers are not required to subsidize those customers who choose to install on-site generation and remain interconnected to the company's system, thus requiring the company to provide back-up power service.

Under Alabama law and as contemplated by PURPA, Alabama Power's charges for back-up power service should reflect those costs reasonably determined to be associated with such service. In this respect, the cost of service basis for the company's proposed back-up power charges is not disputed. Alabama Power relied on its most recent Jurisdictional Separation Study, which is the annual cost-of-service study the company is required to file with the Commission in accordance with Rate RSE (Rate Stabilization and Equalization). Complainants do not challenge the study or the data contained therein. Rather, Complainants object to the application of this cost-of-service data to a representative customer, both with and with-out on-site solar generation.

The Commission does not find the company's approach to be deficient. The evidence is clear that the company developed the representative customer using load profiles and cost-of-service data corresponding to actual residential customers taking service under Rate FD. The company supplemented this actual data with modeled solar production data from the NREL PVWATTS tool, a source that Complainants themselves recognize as highly reliable. The company also correctly limited its assessment

of costs to those it would incur or not incur in connection with the provision of back-up power service. [1] We also find appropriate the company's approach to evaluate the total revenues from both the supplemental rate and the associated back-up power charges to protect against the double-recovery of costs. In all, the Commission finds that the company did employ standard rate making techniques, and relied on both actual cost and load data, as well as reliable modeled solar production data, in its development of the Part I.B. back-up power rates.

Complainants criticize the company's informed judgment, knowledge and experience underlying its assessment of generator diversity, and its conclusion that only 65 percent of a generator's name plate rating should require back-up power. We find the company's conclusions here reasonable as well. The factors supporting this conclusion are several, and the company has elaborated on them over the course of this proceeding. For example, during the hearing Ms. Dean explained how the non-coincident peak of the company's residential class (the class whose cost-of-service data was used to develop the back-up power charges) drives the company's peak, at a coincidence factor well in excess of 65 percent. Ms. Dean also observed how the capacity factor of solar generators typically falls in the 15 to 20 percent range. Also before the Commission is the EPRI study, submitted by the company as part of Ms. Dean's reply testimony. The Complainants made no effort at hearing to discredit the empirical analysis explored in the study. The Complainants likewise failed to refute Ms. Dean's statements that the study validated the company's original conclusions, insofar as it showed a prevalence of variability in Alabama and the probability that such variability can and will occur simultaneously in multiple locations statewide.

Of relevance here is the position of Complainants that solar generation resource variability, as opposed to mechanical intermittence, is not an appropriate consideration for back-up power charge design.

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[1] For purposes of establishing the back-up power service charges, the company identified variable energy costs as a cost that it would not incur. In addition, the company determined that, due to the production diversity associated with solar facilities, the company may avoid up to 35 percent of the fixed cost associated with providing back-up power service to solar facilities.

The company disagrees with this view, and we do as well. When a customer elects to install on-site generation and remain interconnected to the company's system, the customer will require back-up power service. Alabama Power must be prepared to provide that power whenever the customer's generation does not produce—including when that drop in production is the result of unscheduled outages such as those related to weather conditions (e.g., cloud cover) or mechanical failure. The record before the Commission supports the company, and we find nothing in Order No. 69 or otherwise that would call for a contrary result. As Ms. Dean testified during the hearing, the back-up power charges recover the infrastructure costs the company incurs to hold capacity available and stand ready to serve customers with on-site interconnected generation, whenever they need it.

Although not referenced by Ms. Dean, the Commission would note here the obligation imposed on utilities in our General Rules that they operate and maintain their entire plant and system in such condition as will enable them to furnish safe, adequate, and continuous service at all times. Also, the claim that variability is not appropriately factored into back-up power charge design is undermined by FERC's Order No. 69. As Ms. Dean explained in her reply testimony, the company's review and eventual inclusion of the EPRI study as support for its diversity conclusions was prompted by the direction in Order No. 69 that utilities might look to weather data and performance data relating to the coincidence of demands imposed by solar facilities and their need for back-up power. We find it difficult to believe that FERC would have suggested this approach if generator variability was not an appropriate consideration in the development of charges for back-up power service.

We also reject the position of Complainants that Alabama Power should not have designed its back-up power charges based on its obligation to have capacity available and ready to meet the back-up power demands of its partial requirements customers. As recited earlier, Complainants' witness Mr. Rábago implied that the federal regulations promulgated as part of Order No. 69 contemplate back-up

power charges based on supply only, and not availability. While the regulation itself only uses the word supply, the underlying rulemaking takes a much broader view. *Compare* 18 C.F.R. § 292.101(b)(9) *with* Order No. 69, 45 Fed. Reg. at 12228 & 12229. Alabama Power correctly observes the relevant portions of the rulemaking, which clearly contemplate the recovery of costs by a utility associated with its holding capacity available for providing back-up power, if that utility would similarly assess these costs to non-generating customers. The evidence and information before this Commission confirms that Alabama Power similarly assesses such costs—not only to non-generating customers, but also to interconnected customers with installed generation who receive back-up power service under Part I.A. of Rate Rider RGB.

The potential effect that these back-up power service charges may have on the relative economics of a customer's private investment decision to install and interconnect on-site generation does not obviate the customer's obligation to pay for this service. Furthermore, the record is clear that customers are not required to take back-up power service from the company. Customers have the option to provide their own back-up through battery storage or by isolating the generator and the load it serves. It is only when a customer chooses to install on-site generation and remain interconnected to the company's system that the company becomes obligated to provide safe and reliable back-up power service. Moreover, a customer that chooses to install and interconnect on-site generation has multiple options within the context of Rate Rider RGB for back-up power service.

As it relates to the company's methodology to develop the RGB Part I.B. back-up charges, the law is settled that the Commission need not adhere to a singular approach to rate design. "'Under the statutory standard of 'just and reasonable' it is the result reached not the method employed which is controlling.... It is not theory but the impact of the rate order which counts. If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry under the Act is at an end.'" *Ala. Metallurgical Corp.,*

supra, at 572 (quoting *Federal Power Comm'n v. Hope Natural Gas Co.,* 320 U.S. 591, 602 (1944) (ellipsis in original)); *see also Alabama Gas Corp. v. APSC,* 425 So.2d 430, 439 (Ala. 1982). Given the evidence in the record and the testimony of the witnesses on behalf of both Alabama Power and Complainants, and in light of this and other guiding principles of rate making, we find the company's proposed modifications to the back-up power charges in Part I.B. of Rate Rider RGB to be a just, reasonable and non-discriminatory means for the recovery of costs associated with providing back-up power service to customers who choose to install and interconnect all types of generation, including but not limited to solar generation, at their premises.

Based on the company's July 23 responses to the Commission's supplemental data requests, along with the errata submittals filed, we direct Alabama Power to submit compliance tariff sheets within ten (10) days of the entry of this Order. The compliance tariff sheets should include the clarifications to Part I.B. of Rate Rider RGB, along with the corresponding clarifications the company set forth in the Supplementary Power section of the tariff. Although not necessary to render the rate just, reasonable and non-discriminatory, we believe the clarifications do enhance the readability of the tariff and Capacity Reservation Charge. We also direct the company to file a demand rate option for all residential customers within twelve (12) months of the entry of this Order. Contemporaneously with such action, Alabama Power is to file modifications to Rate Rider RGB Part I.B. so that any residential customer subject to its provisions can elect to receive back-up power service under the newly established rate option, in lieu of the other options provided in Part I.B., while remaining subject to the remaining provisions of Rate Rider RGB and the Special Rules for Rate Rider RGB. Finally, we direct the company to revise the charges set forth in Part I.B. so that they conform with the errata filing (i.e., the Capacity Reservation Charge is $5.41/kW at secondary service; $4.87/kW at primary service; and the Rate RTA Charge is $0.71).

Given our conclusions here regarding Part I.B. of Rate Rider RGB and our acceptance of Alabama Power's proposed modifications to the rate rider in Docket No. U-4226, we deny Complainants' complaint, as filed on April 26, 2018 and amended July 6, 2018, in Docket No. 32767.

IT IS, THEREFORE, ORDERED BY THE COMMISSION that consistent with the discussion provided herein, Alabama Power's proposed modifications to Part I.B. of Rate Rider RGB, as set forth and documented more fully in Docket No. U-4226, are just and reasonable and in the public interest, and are due to be and hereby approved.

IT IS FURTHER ORDERED BY THE COMMISSION that Alabama Power shall file conforming tariff sheets, within ten (10) days of the date of this Order, and consistent with the discussions set forth in the body of this Order.

IT IS FURTHER ORDERED BY THE COMMISSION that the changes to Rate Rider RGB, as authorized herein, shall be effective sixty (60) days from the date of this Order.

IT IS FURTHER ORDERED BY THE COMMISSION that within twelve (12) months of the entry of this Order, Alabama Power shall file a demand rate option for all residential customers, along with corresponding modifications to Rate Rider RGB Part I.B., as discussed in the body of this Order.

IT IS FURTHER ORDERED BY THE COMMISSION that complaint in Docket No. 32767 filed by Complainants on April 26, 2018 and amended July 6, 2018, is denied.

IT IS FURTHER ORDERED BY THE COMMISSION that jurisdiction in this cause is, hereby, retained for any further order or orders that this Commission may find just and reasonable under the circumstances.

IT IS FURTHER ORDERED BY THE COMMISSION that this Order shall be effective as of the date hereof.

DONE at Montgomery, Alabama, this the 16th day of October 2020.

ALABAMA PUBLIC SERVICE COMMISSION

Twinkle Andress Cavanaugh, President

Jeremy H. Oden, Commissioner

Chris "Chip" Beeker, Jr., Commissioner

ATTEST: A True Copy

Walter L. Thomas, Jr., Secretary