

MONTGOMERY . OPELIKA / AUBURN

C. Richard Hill, Jr.

334-241-8043 Direct 334-241-8243 Fax rick.hill@chlaw.com

May 1, 2020

Via E-Filing & Hand-Delivery

Walter L. Thomas, Jr. Secretary Alabama Public Service Commission RSA Union Building 100 N. Union Street Montgomery, Alabama 36104

Re: Docket No. 32953 Petition for a Certificate of Convenience and Necessity

Dear Secretary Thomas:

In accordance with the instructions provided at the March 9-11, 2020 hearing and Judge Garner's April 14, 2020 Procedural Ruling in the above-referenced proceeding, Alabama Industrial Energy Consumers submits for filing the attached AIEC's Post-Hearing Brief in the form of a proposed order. The Post-Hearing Brief has been filed with Commission electronically via the Commission's e-filing system. A hard-copy is also being hand-delivered to the Commission. As noted on the attached Certificate of Service, service being made upon Petitioner, Alabama Power Company, and the other intervenors in this proceeding.

If you have any questions concerning this filing or further briefing is required, please let us know.

Sincerely, Chi try

C. Richard Hill, Jr.

CRH/nl

Enclosures

cc: Alabama Public Service Commission Twinkle Andress Cavanaugh, President Jeremy H. Oden, Commissioner Chip Beeker, Commissioner Chief Administrative Law Judge Mr. John A. Garner

BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION

ALABAMA POWER COMPANY,)	PETITION: For a certificate of convenience
ALABAMA POWER COMPANY, Petitioner.		rEntricold. For a certificate of convenience and necessity for: (i) the construction and installation of combined cycle generating capacity at the site of Petitioner's Barry Steam Plant located in Mobile County, Alabama; (ii) the acquisition of existing combined cycle generating capacity in Autauga County, Alabama; (iii) the acquisition of rights and the assumption of payment obligations under a power purchase agreement for the output of combined cycle generating capacity operated in Mobile County, Alabama; and (iv) the acquisition of rights and the assumption of payment obligations under power purchase agreements for the output from five solar photovoltaic and battery energy storage systems, located in Calhoun, Chambers, Dallas, Houston and Talladega Counties; together with all transmission arrangements, structures, substations, and facilities, environmental control measures, facilities or arrangements for the handling, treatment, transportation, delivery and processing of fuel, and any and all other appliances, appurtenances, facilities, rights, equipment, acquisitions, commitments and accounting authorizations necessary for or incident
)	thereto.
)	
)	Docket No. 32953

BRIEF OF ALABAMA INDUSTRIAL ENERGY CONSUMERS IN THE FORM OF A PROPOSED ORDER

Of Counsel:

Capell & Howard, P.C. C. Richard Hill, Jr. W. Jackson Britton 150 South Perry Street Montgomery, AL 36104 (334) 241-8000

May 1, 2020

BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION

ALABAMA POWER COMPANY,)	PETITION: For a certificate of convenience
ALABAMA POWER COMPANY, Petitioner.		and necessity for: (i) the construction and installation of combined cycle generating capacity at the site of Petitioner's Barry Steam Plant located in Mobile County, Alabama; (ii) the acquisition of existing combined cycle generating capacity in Autauga County, Alabama; (iii) the acquisition of rights and the assumption of payment obligations under a power purchase agreement for the output of combined cycle generating capacity operated in Mobile County, Alabama; and (iv) the acquisition of rights and the assumption of payment obligations under power purchase agreements for the output from five solar photovoltaic and battery energy storage systems, located in Calhoun, Chambers, Dallas, Houston and Talladega Counties; together with all transmission arrangements, structures, substations, and facilities, environmental control measures, facilities or arrangements for the handling, treatment, transportation, delivery and processing of fuel, and any and all other appliances,
)	appurtenances, facilities, rights, equipment, acquisitions, commitments and accounting
)	authorizations necessary for or incident
)	thereto.
)	Docket No. 32953

BRIEF IN THE FORM OF A PROPOSED ORDER

BY THE COMMISSION:

Alabama Power Company ("APC"), acting in accordance with the provisions of section 37-4-28, *Code of Alabama* (1975), and Parts A and B of Rate Certified New Plant ("CNP")— Adjustment for Commercial Operation of Certificated New Plant, has filed with the Commission a petition for a certificate of convenience and necessity ("Certificate"), by which the Commission would authorize APC to add over 2,500 megawatts ("MW") of capacity through generation capacity resources, power purchase agreements, and various demand-side management and distributed energy resource programs ("Petition"). The Petition has been properly noticed, and an evidentiary hearing held, at which APC and various intervenors presented evidence in support of their respective positions. On the basis of the record and information collected by the Staff, the Commission concludes that APC's Petition should be granted in part, denied in part, and subject to the conditions set forth below.

I. <u>PROCEDURAL HISTORY</u>

On September 6, 2019, APC filed its Petition with the Commission. In support of its Petition, APC filed with the Petition the direct testimony of John B. Kelley, Jeffrey B. Weathers, Michael A. Bush, M. Brandon Looney, and Christine M. Baker (collectively, "APC Witnesses"). APC filed a redacted, non-confidential version of the Petition and supporting testimony with the Commission which the Commission made available to the public through the Commission website. APC also filed a confidential version of the Petition and supporting testimony with the Commission under seal. The confidential version of the Petition was available only to those persons or parties executing a non-disclosure agreement with APC.

The Commission issued a Notice of Petition on September 6, 2019, advising interested parties that any petitions to intervene must be submitted no later than September 27, 2019, set forth the basis for the proposed intervention, and that a forthcoming procedural order will establish the date and procedures for a public hearing. The Commission's Chief Administrative Law Judge Honorable John Garner (also referred to as "the Commission") presided over the proceeding.

In response to the Commission's September 6th Notice, various interested parties filed timely petitions to intervene. These parties included: the Attorney General for the State of Alabama ("Attorney General"); Alabama Solar Industry Association, Inc. ("ALSIA"); Alabama Industrial Energy Consumers ("AIEC"); American Senior Alliance ("ASA"); Alabama Coal Association ("ACA"); Energyfairness.org ("Energy Fairness"); Southern Renewable Energy Association ("SREA"); Manufacture Alabama ("MANAL"); Sierra Club; and, jointly, Energy Alabama and Gasp ("Energy Alabama") (collectively, "Intervenors").

The Commission granted each intervenor's petition to intervene with the exception SREA. On October 2, 2019, APC filed an objection to SREA's petition to intervene challenging SREA's standing to participate in the above-styled proceeding. On October 9, the Commission entered an order granting the petitions to intervene of all Intervenors except SREA. After allowing SREA and APC to file responsive briefs, the Commission entered an order dated November 13, 2019, denying SREA intervenor status. On or about November 26, 2019, SREA filed a motion to reconsider the Commission's November 13th Order. In part, SREA's motion argued other intervening parties' petitions were deficient, yet the Commission had already granted them party status. In response, the Commission entered an order on December 18th requiring MANAL, ASA, and Energy Fairness to supplement their petitions to intervene by December 30th to further demonstrate standing in the proceeding. After all three intervenors supplemented their petitions, the Commission entered an order on February 3, 2020 reaffirming MANAL, ASA, and Energy Fairness's standing to intervene while denying SREA's motion to reconsider and status as an intervenor.

After granting the Intervenors party status, the Commission issued a series of procedural orders, including orders dated October 10, 2019, November 26, 2019, December 13, 2019,

December 18, 2019, and January 21, 2020, establishing the procedures for conducting discovery, taking witness depositions, and filing direct testimony of intervenor witnesses and rebuttal testimony of APC witnesses. Both APC and intervenors participated in written discovery. Intervenors also filed the following pre-filed direct testimony with the Commission: MANAL submitted the testimony of George Clarke, President of MANAL; Energy Alabama submitted the testimony of Karl R. Rabago and John Hawat; ALSIA submitted the testimony of Maggie Clark; AIEC submitted the testimony of Jeff Pollock; Sierra Club submitted the testimony of Mark Detsky and Rachel S. Wilson.¹ On January 27, 2020, APC filed the rebuttal testimony of John B. Kelley, Kevin D. Carden, Jeffrey B. Weathers, Maria J. Burke, Michael A. Bush, M. Brandon Looney, and Christine M. Baker. Subsequently, the Commission issued a procedural ruling on February 12, 2020, establishing procedures for and rescheduling the public hearing in this matter for March 9, 2020.

A public hearing in the proceeding was held from March 9 through March 12, 2020. The parties offered opening statements at the outset of the hearing. Thereafter, APC called the witnesses who had submitted pre-filed direct and rebuttal testimony on behalf of APC. After brief opening remarks, each Intervenor had the opportunity to cross-examine the witness. The same process was used for the examination of the witnesses who submitted testimony on behalf of the respective intervenors. At the close of the hearing, Judge Garner notified the parties that the Commission would accept post-hearing briefs in the form of a proposed order. Due to unavoidable delays, the deadline for the parties to submit was extended to May 1, 2020.

¹ Sierra Club also submitted the direct testimony of six (6) other witnesses. Pursuant to a Stipulation with APC filed March 2, 2020, however, APC waived cross-examination of these witnesses and Sierra Club entered their testimony into the record for the sole purpose of establishing standing in the proceeding and any subsequent appellate review.

II. <u>LEGAL STANDARD</u>

Under the statutory scheme of utility regulation in Alabama, APC has a duty to serve its territorial customers in a reliable, efficient, and economical manner. Specifically, section 37-1-49, *Code of Alabama* (1975), obligates APC to render adequate service to the public, maintain proper reserves for reasonable contingencies, and make reasonable improvements to and enlargements of its system that are necessary to meet the growth and demand of the territory it holds a duty to serve. Prior to making additions to its system, APC must petition the Commission for a certificate of convenience and necessity. ALA. CODE § 37-4-28 (1975). To receive a certificate, APC has the burden of presenting substantial evidence that such additions are necessary for APC to fulfill its statutory obligation and a reasonable means to satisfy that need. See ALA. ADMIN. CODE r.770-X-4-.15(5); see also Ala. Power Co., 2015 WL 5474317 at *2 (Ala. P.S.C. Sept. 16, 2015). Accordingly, APC must prove to the Commission: (1) APC has a need for additional resources to fulfill their statutory obligation to provide adequate service and maintain proper reasonable contingencies and (2) the proposed resources satisfy APC's need in a cost-effective manner.

III. <u>THE PETITION</u>

In this Proceeding, APC seeks a certificate of convenience and necessity to add a portfolio of various resources that it has deemed necessary to reliably serve its customers in a cost-effective manner. APC asserts it has a reliability-based need for additional resources. In order to address this need, APC proposes to add different types of resources to its system through different means. Specifically, APC requests a certificate authorizing APC to:

(i) construct and install combined cycle generating capacity at the site of APC's Barry Steam Plant located in Mobile County, Alabama ("Barry Unit 8");

(ii) acquire the Central Alabama Generating Station, a combined cycle generating facility located in Autauga County, Alabama ("Central Alabama");

(iii) acquire rights and assume payment obligations under a power purchase agreement ("PPA") for the Hog Bayou Energy Center, a combined cycle generating facility located in Mobile County, Alabama ("Hog Bayou"); and

(iv) acquire rights and assume payment obligations under five PPAs pertaining to solar photovoltaic facilities that are paired with battery energy storage systems and located in Calhoun, Chambers, Dallas, Houston, and Talladega Counties ("solar/BESS").

APC also seeks authorization to pursue demand-side management and distributed energy resource programs. According to APC, the proposed portfolio of resources is cost-effective. Moreover, APC proposes that in addition to Parts A and B of Rate CNP, Rate ECR—Energy Cost Recovery Rate, and Rate RSE—Rate Stabilization and Equalization Factor, are appropriate to recover the costs of these resource additions from their customers.

Intervenors take a variety of positions on whether the Commission should approve the petition. ASA supports the adoption of the Petition in full. (Hearing Transcript, 27-28) (hereinafter, "TR."). Intervenors MANAL, Energy Fairness, and ACA support the adoption of the Petition in full as well, but suggest any partial adoption should reject the solar/BESS project PPAs. (Tr. at 21-24; 26-27; 28-31). Intervenor Sierra Club opposes the Petition in full. (Tr. 32-35). Energy Alabama opposes the denial of the Petition in full, but suggests any partial grant of the Petition should include only the solar/BESS PPAs. (Tr. 35-38). ALSIA argues only the solar/BESS PPAs should be approved to regardless of whether APC meets its burden of proof because the PPAs address a different reliability issue that is separate and apart from the reliability-based need APC identifies

as the reason for filing the Petition. (Tr. 39-42). Intervenor AIEC supports a partial grant of the Petition with conditions. (Tr. 24-26). To this end, AIEC proposes approving the construction of Barry Unit 8, denying the solar/BESS PPAs and the Hog Bayou PPA, while delaying a decision on the Central Alabama acquisition and the appropriate cost-recovery mechanisms. (Id.) The Attorney General has not expressed a position other than representing the interests of rate payers. (Tr. 42).

IV. <u>THE ISSUES</u>

APC monitors the sufficiency of its resources and periodically develops an Integrated Resource Plan ("IRP"). The IRP identifies the timing, amount, and types of resources necessary to serve the expected long-term requirements of its customers. The IRP process considers a number of factors, considerations, and inputs. APC then uses the results of the IRP process as a guide while developing and implementing a resource strategy.

To determine the existence, amount, and timing of resource need, the IRP process relies heavily upon APC's updated load forecast and target reserve margin ("TRM"). (Pre-filed Direct Testimony of John B. Kelley on Behalf of Alabama Power Company, Non-Public Version, Docket 32953 at 7(September 6, 2019)) (hereinafter, "Kelley Direct"). The load forecast allows APC to project future demand of its retail customers. APC develops the load forecast by updating its forecast of future energy and peak demand requirements for the next 20 years. Based on the updated load forecast, APC identifies a schedule of resources required to serve that load, which includes a reserve margin. A reserve margin is the margin of generating capacity above its anticipated peak load and is intended to address unpredictable events such as equipment failure or extreme weather. (Kelley Direct at 7-8). Accordingly, the load forecasts and reserve margins used

to develop the IRP are crucial to determining whether APC has a need for the additional resources proposed in the Petition.

Here, APC relies upon its 2019 Integrated Resource Plan ("2019 IRP") to develop the portfolio it proposes in the Petition. (Kelley Direct at 5-7; APC Exhibit 20). APC asserts that the results of the 2019 IRP demonstrate a need to use seasonal planning and a long-term reliability need. Specifically, the IRP results demonstrate a long-term winter reliability need that requires APC to add approximately 2400 MW of additional resources by the 2023-2024 timeframe. (Kelley Direct at 14).

Intervenors generally agree it is reasonable for APC to adopt seasonal planning. However, various Intervenors assert that APC overstates its need for additional resources. Intervenors argue that APC's demand and reliability needs are driven by factors other than an increase in long-term peak demand. They assert the true drivers of APC's need for additional resources are a substantial increase in the long-term winter TRM, actual and planned capacity retirements, and the expiration of existing wholesale sales contracts. (Pre-filed Direct Testimony of Jeff Pollock on Behalf of AIEC, Non-Public Version, Docket 32953 at 8-11 (Dec. 4, 2019)) (hereinafter, "Pollock Direct").

Intervenors argue that APC can rely on existing resources and the surplus capacity of the other operating companies within the Southern system. While APC operates on integrated electrical utility system within the state of Alabama, APC is also an operating company of its parent Southern Company ("Southern"). Southern operates as an integrated electric utility system, meaning Southern's operating companies (including APC) operate their systems on a coordinated basis. (Kelley Direct at 4-5). The Southern System companies operate their systems on a coordinated basis pursuant to the Southern Company System Intercompany Interchange Contract ("IIC"). (APC Exhibit 30, Southern Company System Intercompany Interchange Contract, Docket

No. ER18-1947, et al. (Jul. 24, 2018), Rate Schedule No. 138 (May 1, 2007)). According to Intervenors, APC can rely upon reserve equalization purchases under the IIC to cover any short-term needs that may arise. (Pollock Direct at 13; Kelley Direct at 12). Moreover, Intervenors argue these purchases are cost-effective, particularly when compared to the cost of the proposed Hog Bayou PPA. (Pollock Direct at 13).

Intervenors also raise concerns regarding the target reserve margins APC used in the 2019 IRP. As stated above, Intervenors argue that the primary driver of APC's need for resources is not long-term demand, but rather a substantial increase in APC's winter TRM. To determine the TRMs it used in its 2019 IRP, APC relied upon a 2018 Reserve Margin Study ("2018 RMS") conducted by Southern Company Services. (Kelley Direct at 8). According to the 2018 study, the Southern system must achieve a 26 percent long-term TRM for the winter peak and a 17 percent TRM for the summer peak to ensure that a supply outage will not occur more often than one day in ten years. (Kelley Direct at 9). APC adopted a company-specific "diversified" summer TRM of 14.89 percent and a "diversified" winter TRM of 25.25 percent. (Kelley Direct at 9). APC used these target reserve margins from the 2018 RMS in its 2019 IRP to calculate its need for additional resources. Accordingly, all parties agree the 2018 RMS is a critical aspect of whether APC has demonstrated that it has a need for additional resources.

Principally, various Intervenors raise concerns about the 2018 RMS's reliance on past historical data and key assumptions. The parties dispute whether the 2018 RMS's use of 54 years of weather data was appropriate. In this regard, APC argues that more weather data results in a more accurate projection and model. On the other hand, Intervenors argue that less is more in this context because more data does not improve the projections if the years included in the 2018 RMS are no longer representative of current weather conditions. (Pollock Direct at 19).

Intervenors also identify key assumptions in the 2018 RMS that should be refined. The 2018 RMS assumed a worst-case scenario price for scarcity premiums, i.e. the cost to purchase power during a period of very high capacity. (Pollock Direct at 21). The 2018 RMS also assumed power from merchant generators would not be available. (Pollock Direct at 22). Intervenors argue the 2018 RMS should include a more reasonable scarcity premium price and the availability of merchant generation. Moreover, Intervenors argue that the 2018 RMS should update the figures used to estimate customer outage costs and assumptions as to technological improvements impacting the amount of the reserve margin. (Pollock Direct at 18, 20, 22). Lastly, to put the proposed long-term winter TRM in perspective, Intervenor AIEC pointed to the TRMs of other investor owned utilities ("IOUs") located in the southeastern United States. This comparison shows APC's proposed winter TRM was much higher than any other comparable IOU and suggests it is higher than necessary. (Pollock Direct at 16-17; AIEC Exhibit 3; AIEC Exhibit 4).

In support of their arguments concerning the 2018 RMS data, Intervenors also point to Georgia Power Company's most recent IRP filing before the Georgia Public Service Commission. Like APC's 2019 IRP and Petition, the Georgia Power Company's IRP filing relied on the same 2018 RMS conducted by Southern Company Services to support Georgia Power's proposal to raise the system long-term TRM to 26 percent. (Pollock Direct at 23). However, in adopting the stipulations agreed to between staff and Georgia Power, the Georgia Commission deferred approving the proposed winter TRM and authorized further discussion to address this issue before Georgia Power's next filing in 2022. Many of the concerns Intervenors raise in this Proceeding are the same concerns that led the Georgia Commission to their decision. (Pollock Direct at 23).

V. <u>DISCUSSION</u>

As stated above, APC holds a statutory obligation to serve territorial retail customers in a reliable, efficient, and economical manner. In order to satisfy this obligation, APC must have sufficient resources available to meet the expected requirements of its retail customers, including adequate levels of reserves to meet reasonable contingencies. In order to add additional resources, APC must first demonstrate a need for the additional resources.

In view of the foregoing, APC's Petition is due to be granted in part and denied in part with conditions. At this time, APC has failed to demonstrate a need for the entire portfolio of proposed resources. With regard to the need that APC has demonstrated, the Commission finds that the proposed Barry Unit 8 addresses that need in a reliable, efficient, and economical manner. Moreover, the appropriate rate-making treatments and cost recovery mechanisms for the costs incurred pursuant to this order shall be determined in a separate proceeding prior to the in-service dates of any new resource.

APC has failed to demonstrate a need for the entire portfolio for two reasons. First, APC does not need the proposed resource additions because it may make reserve equalization purchases to address any needs in the near future. As various intervenors have argued, the Southern system does not exhibit a need for additional capacity in the short-term. APC does not dispute this point. Moreover, the Commission does not find APC's concerns with the availability of reserve equalization purchases compelling. Even if the Pool were to run short of capacity, the Pool will acquire resources as needed to meet the needs of all operating companies. The IIC expressly provides a mechanism to allocate the costs of purchased capacity to all pool members. Moreover, it would be a violation the FERC-approved IIC for a pool member to deny another member access

to available capacity. Thus, APC fails to demonstrate a need for the entirety of the proposed portfolio of additional resources.

Second, APC has failed to demonstrate a need for the entirety of the proposed resource additions because of concerns with the 2018 RMS. The Commission believes the Intervenors raise legitimate concerns regarding the 2018 RMS use of historical weather data, scarcity premiums and the availability of merchant generation, customer outage costs, and technological improvements. APC has a duty to maintain reserves for reasonable contingencies. The 2018 RMS's use of 54 years of historical weather data does not improve its results if the years included no longer represent current conditions. Thus, the target reserve margins resulting from the 2018 RMS's quantity-over-quality approach does not address reasonable contingencies. Our conclusion is also reinforced by the Georgia Public Service Commission Order approving further review of the 2018 RMS. Accordingly, APC does not demonstrate a need for the entirety of the proposed portfolio at this time.

To the extent that APC does exhibit a need for resources, the addition of Barry Unit 8 is the only resource in the proposed portfolio that addresses the need in a reliable, efficient, and economical manner. Barry Unit 8 has vastly superior dispatchability when compared to that of the solar/BESS PPAs. This is particularly true because solar/BESS are the least effective during the winter peak demand hours and, therefore, offer little reliability to address APC's asserted winterbased reliability needs. In addition to its superior reliability, Barry Unit 8 will be one of the most efficient combined cycle natural gas unit in APC and Southern's entire portfolio. APC has also demonstrated that Barry Unit 8 is the most cost-effective option for territorial customers. Accordingly, with the addition of Barry Unit 8, coupled with previously approved capacity additions, and reserve equalization purchases under the IIC, APC will be able to provide safe and reliable electricity at the lowest reasonable cost.

Beyond the need demonstrated for Barry Unit 8, the Commission believes further review of the 2018 RMS is warranted. Refining the assumptions about customers' outage costs, future weather patterns, load forecast uncertainty, dispatchers peak load estimate error, and winter generating unit outage rates would provide a more realistic assessment of future conditions that also incorporate more robust improvements relative to historical experience. Further sensitivity analyses that better demonstrates potential outcomes related to demand forecasts, weather, etc., are also warranted before the Commission makes a decision on the proposed resource additions other than Barry Unit 8. Until this further assessment is made, however, the Commission cannot find a need for the other resources in APC's proposed portfolio based on the proposed long-term diversified winter TRM from the 2018 RMS.

If APC presents evidence showing that APC needs additional capacity in the near future, the Commission will approve certificates only for those capacity resources needed to replace the expiring Calhoun PPA until a specific winter TRM is approved. APC's proposal to acquire Central Alabama would more than satisfy this need. Alternatively, the Hog Bayou PPA and the solar/BESS projects, but not the Central Alabama acquisition, would also suffice. However, as discussed below, this alternative proposal should address the fact that solar/BESS projects are not considered reliable resources due to the limited dispatchability of these projects during the winter.

The Commission is not convinced the solar/BESS projects are a reliable, efficient, or economical means of addressing a winter reliability need. The battery portion of the solar/BESS is still new and experimental. Also, as discussed above, the solar/BESS projects are not reliable in meeting APC's asserted winter peak demand needs. APC does not need any capacity to meet the

projected summer peak needs. Due to the limitations of solar resources in the winter and the limited capabilities of the battery technology, it would be premature to allow APC to install five separate battery storage projects without establishing whether the technology is effective in meeting winter peak needs. The Commission notes, however, that APC has already received the Commission's approval to install up to 500 MW of solar projects under Docket 32382 and APC does not need an additional Certificate to experiment with solar/BESS systems.

The Commission does not believe that any of the asserted harms associated with delaying the adoption of the proposed winter TRM outweighs the harms of adopting the proposed TRM based on faulty data. As previously mentioned, it is undisputed that Southern does not exhibit a need for additional resources in the near future. Until then, APC can rely upon reserve equalization should a need arise. APC has not demonstrated a need will rearise that is outside the scope of reserve equalization purchases allowed by the IIC. Also, even if APC's winter TRM was adopted, APC cannot achieve its proposed winter TRM until 2025 at the earliest. Accordingly, there is no harm in delaying our decision and any resulting harm to APC is outweighed by the harm that would accrue to the public should the Commission approve the proposed long-term winter diversified TRM based on faulty data.

Lastly, it is within the Commission's discretion to determine rate-making treatments of the proposed resource additions in this proceeding. However, in light of the discussion above, any decision regarding the appropriate cost-recovery mechanisms to recover the costs associated with this petition would be premature. While APC and various Intervenors have submitted testimony concerning this issue, this proceeding has focused primarily on whether the facilities are necessary and cost-effective. Thus, the Commission believes the public will be better served if the rate-

making treatments and appropriate cost-recovery mechanisms to recover the costs associated with this Petition are addressed in a separate rate review proceeding.

VI. FINDING & CONCLUSIONS

In view of the foregoing and after full consideration of the information before it, the Commission FINDS that it is in the interest of the public served by APC that the proposed certificate of convenience and necessity should be granted in part and denied in part, subject to certain conditions. Specifically, the Commission FINDS and conditions the grant of the certificate as follows:

1. The use of seasonal planning is in the public interest as it provides greater visibility into both summer and winter capacity needs and, therefore, is approved.

2. It is in the interest of the public served by APC that the proposed certificate of convenience and necessity be issued for the proposed construction of Barry Unit 8 and that, with respect this Certificate, APC, as Petitioner, has complied with all applicable laws over which this Commission is charged with administering. The Commission, however, finds that it is in the public interest that any decision on the appropriate rate-making treatment or cost-recovery mechanism be decided in a separate proceeding at a later date.

3. It is in the public interest to review and refine the 2018 Reserve Margin Study to incorporate alternative assumptions representing reasonable contingencies, including but not limited to: (a) the use of not more than twenty historical weather years; (b) scarcity premiums consistent with recent actual experience; (c) alternative estimates of customer outage costs assuming one hour notification and no inflation; (d) further improvements in unit cold weather performance, load forecast error, and day-ahead dispatchers' peak load estimate error; and (e) availability of merchant generation during scarcity periods.

4. Until the completion of the revised reserve margin study ordered above, it is in the public interest to defer a decision on the proper reserve margin for the winter peak period.

5. It is not in the public interest to approve a certificate of convenience and necessity for APC to acquire the Central Alabama Generating Station until and unless APC provides sufficient evidence that the expiration of the Calhoun PPA will result in a need for additional resources.

6. It is not in the public interest to approve a certificate of convenience and necessity for APC to acquire the rights and assume the payment obligations under a PPA for the output of combined cycle generating capacity of the Hog Bayou Energy Center.

7. It is not in the public interest to approve a certificate of convenience and necessity for APC to acquire the rights and assume the payment obligations under PPA for five solar photovoltaic and battery energy storage systems. However, APC may seek to include such projects under the authority granted in Docket No. 32382.

8. It is not in the public interest to determine the appropriate rate-making treatments and cost recovery mechanisms for the costs incurred pursuant to this Order in this proceeding. It is in the public interest, however, to determine the appropriate rate-making treatments and cost recovery mechanisms for the costs incurred pursuant to this Order in a separate proceeding prior to the in-service date of any new resource.

IT IS, THEREFORE, ORDERED BY THE COMMISSION that the September 6, 2019, Petition of Petitioner Alabama Power Company be and hereby is granted in part, as described in the body of this Order.

IT IS FURTHER ORDERED BY THE COMMISSION that with the issuance of this certificate and necessity to Alabama Power Company pertaining to the construction and

installation of Barry Unit 8, the Commission does hereby grant and convey upon Petitioner, Alabama Power Company, its successors and assigns, all of the rights, power and authority, which, under the laws of the State of Alabama, the Commission is authorized to confer for the purpose of constructing and installing combined cycle generating capacity at the site of the Petitioner's Barry Steam Plant located in Mobile County, Alabama, together with all transmission facilities, fuel supply, and transportation arrangements, or other appliances, appurtenances, and commitments necessary for or incident thereto.

IT IS FURTHER ORDERED BY THE COMMISSION that Alabama Power Company shall work with the staff of the Alabama Public Service Commission and interested parties to review, revise, and amend the 2018 Reserve Margin Study to incorporate alternative assumptions representing reasonable contingencies, including but not limited to: (a) the use of not more than twenty historical weather years; (b) scarcity premiums consistent with recent actual experience; (c) alternative estimates of customer outage costs assuming one hour notification and no inflation; (d) further improvements in unit cold weather performance, load forecast error, and day-ahead dispatchers' peak load estimate error; and (e) availability of merchant generation during scarcity periods.

IT IS FURTHER ORDERED BY THE COMMISSION that in accordance with the process described above, APC will file a revised Reserve Margin Study no later than six months after the effective date of this Order.

IT IS FURTHER ORDERED BY THE COMMISSION that the Commission will defer a decision on the proper long-term target reserve margin for the winter peak period until the completion of the revised Reserve Margin Study ordered above.

IT IS FURTHER ORDERED BY THE COMMISSION that the acquisition of the Central Alabama Generating Station, a combined cycle generating facility located in Autauga County, Alabama, shall not be approved at this time.

IT IS FURTHER ORDERED BY THE COMMISSION that the acquisition of rights and assumption of payment obligations under power purchase agreement for the output of Hog Bayou Energy Center, a combined cycle generating facility in Mobile County, Alabama, shall not be approved at this time.

IT IS FURTHER ORDERED BY THE COMMISSION that the acquisition of rights and assumption of payment obligations under five power purchase agreements pertaining to solar photovoltaic facilities paired with battery energy storage systems, located in Calhoun, Chambers, Dallas, Houston, and Talladega Counties, shall not be approved at this time.

IT IS FURTHER ORDERED BY THE COMMISSION that the appropriate ratemaking treatments and cost recovery mechanisms for the costs incurred pursuant to this Order shall be determined in a separate proceeding prior to the in-service dates of any resource.

IT IS FURTHER ORDERED BY THE COMMISSION that jurisdiction is retained over this matter to make such further orders related to the revision of the 2018 Reserve Margin Study and resulting Revised Reserve Margin Study as deemed necessary or appropriate 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 _____ day of May 2020.

ALABAMA PUBLIC SERVICE COMMISSION

Twinkle Andress Cavanaugh, President

Jeremy H. Oden, Commissioner

Chip Beeker, Commissioner

ATTEST: A True Copy

Walter L. Thomas, Jr., Secretary

CERTIFICATE OF SERVICE

I certify that copies of the foregoing have been served upon the following, either by hand-delivery, electronic transmission, or by depositing a copy of the same in the United States Mail, properly addressed and postage prepaid, this 1st day of May 2020:

Keith Johnston Christina Tidwell Southern Environmental Law Center 2829 2nd Avenue South, Suite 282 Birmingham, AL 35201 <u>candreen@selcal.org</u> kjohnston@selcal.org

Kurt Ebersbach Southern Environmental Law Center Ten 10th Street NW, Suite 1050 Atlanta, GA 30309 <u>kebersbach@selcga.org</u>

Dan H. McCrary Scott B. Grover Balch & Bingham, LLP P.O. Box 306 Birmingham, AL 35201-0306 <u>dmccrary@balch.com</u> <u>sgrover@balch.com</u>

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

Jennifer L. Howard Rimon, P.C. 2000 Southbridge Pkwy. Suite 205 Birmingham, AL 35209 jen.howard@rimonlaw.com George N. Clark, President Manufacture Alabama 401 Adams Avenue, Suite 710 Montgomery, AL 36104 george@manufacturealabama.org

Diana Csank Julie Kaplan Sierra Club 50 F Street NW, 8th Floor Washington, DC 20001 <u>diana.csank@sierraclub.org</u> julie.kaplan@sierraclub.org

Joel E. Dillard Dillard, McKnight, James & McElroy 2700 Highway 280 Suite 110 East Birmingham, Alabama 35233 jdillard@baxleydillard.com

Paul Griffin Executive Director Energy Fairness P.O. Box 70072 Montgomery, AL 36107 paul@energyfairness.org

Olivia Martin Tina Hammonds Zack Wilson Assistant Attorney General Office of The Attorney General 501 Washington Avenue Montgomery, AL 36130 <u>omartin@ago.state.al.us</u> <u>thammonds@ago.state.al.us</u> <u>zwilson@ago.state.al.us</u> Simon Mahan, Executive Director Southern Renewable Energy Association P.O. Box 14858 Haltom City, TX 76117 <u>simon@southernwind.org</u>

Conwell Hooper, Executive Director American Senior Alliance 225 Peachtree Street, NE Suite 1430 South Tower Atlanta, GA 30303 conwellhooper@gmail.com

Patrick V. Cagle, President Alabama Coal Association 2 Office Park Circle Suite 200 Birmingham, AL 35223 patrick@alcoal.com

C.K. This

C. Richard Hill, Jr. Of Counsel