BEFORE THE

ALABAMA PUBLIC SERVICE COMMISSION

MANUFACTURE ALABAMA

Intervenor

Docket No.: 32953



Q. State your name and title.

A. My name is George Clark. I serve as President and CEO of Manufacture Alabama, the only trade association in the state dedicated exclusively to the competitive, legislative, regulatory, and operational interests and needs of manufacturers and their partner industries and businesses. For more than twenty years, we have been the voice of manufacturing in Alabama with a strong interest in the supply of affordable and reliable power to our members.

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Q. Describe your organization's interest in this docket.

A. Manufacture Alabama's mission is to create a business and political climate that promotes a positive, competitive business environment and enhances the opportunity for growing manufacturing in Alabama. 16 The availability of affordable and reliable electrical service is critical to the success of Manufacture Alabama's 17 members, who are among the state's largest employers, energy consumers, and producers. These members employ 18 tens of thousands of Alabama families and rely intensely on electricity for their production processes. A large 19 number of these members are served by Alabama Power Company. 20

Q. Why does your organization support the petition by Alabama Power for a Certificate of **Convenience and Necessity?**

A. It is clear from the testimony filed by Alabama Power Company's experts that the landscape for power production is changing in terms of reserve margins and seasonal peaks. Key findings from the company's 2018 Reserve Margin Study are cause for concern for those, including our members, who maintain an eye on the long-term reliability of electricity in the state and region. As John Kelley's testimony explains, this study shows that while Alabama Power has typically been a summer peaking utility, in recent years the utility's winter peak demand has exceeded the summer peak demand. Mr. Kelley reports that the 2014 winter peak, which included the Polar

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Vortex, was 12,610 MW, which was higher than the prior all-time peak of 12,496 MW that occurred in the summer of 2007.

The filed testimony of Jeffrey Weathers reinforces this finding, explaining that the Polar Vortex served as an inflection point for the Southern Company system in terms of seasonal load expectations. According to Mr. Weathers, Alabama Power during and after the winter of 2014 began to experience weather normalized winter peak conditions that exceeded its summer peak conditions. In fact, Mr. Kelley's testimony shows that Alabama Power's winter peak has exceeded its summer peak since 2010.

The Polar Vortex of 2014 exposed challenges in the responsiveness of the system to cold weather and required thoughtful consideration of how the system would meet future challenges and a new paradigm that Alabama Power's load forecast should include winter, rather than summer, peaking. This new reality also affects reserve margins, a critical metric for our members who depend on high quantities of around-the-clock electricity.

Mr. Kelley's testimony is important in regard to reserve margin. He states that Alabama Power is 12 adding a long-term winter target reserve margin of 26 percent for the system, in comparison to a reserve margin of 13 16.25 percent for the summer peak planning season. Note that these numbers adjust to 25.25 percent and 14.89 14 percent, respectively, when other assets on the Southern Company system are taken into account. In light of this sea 15 change in load forecast and seasonal peaking, we agree with the company's assessment that new generation is 16 necessary. Alabama Power must do what is necessary to meet demand requirements, especially as that affects our 17 18 members.

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O. Does your organization have a particular interest in the portion of the petition that addresses Plant Barry?

A. Of particular interest to Manufacture Alabama is the certificate of convenience and necessity for new generation in Mobile County, the site of many vital manufacturing operations in the state. Under its proposal. Alabama Power would construct and install combined cycle generating capacity at the site of Petitioner's Barry Steam Plant, which would become "Barry Unit 8." This new combined cycle unit would provide approximately 726 MW of winter-rated capacity, increasing to approximately 743 MW after a subsequent uprate, with an expected useful life of 40 years, according to filed testimony by the company's experts. This generation would go into service in November of 2023.

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It is important to note that the CCGT technology being proposed at Plant Barry is time-tested and

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highly proven, offering the Commission and our members peace of mind that it will work when called upon. Existing CCGT technology at Plant Barry Units 6 and 7 has been in service for nearly twenty years. In other locations, this same technology has been relatively unchanged for decades. To date, according to filed testimony, the J-series design being proposed for Plant Barry Unit 8 has been deployed in 39 units worldwide with more than 800,000 operating hours logged. In short, there is no doubt that Plant Barry Unit 8 will work and work effectively.

Other aspects of the plan provide peace of mind, as well. According to filed testimony, Unit 8 will be constructed under a turnkey agreement with Mitsubishi Hitachi Power Systems Americas, Inc. and Black & Veatch Construction, Inc., companies with a long track record of quality. The project will also implement new infrastructure, including "a new tie line to the existing adjacent Ellicott 230 kV substation, a gas extension line from the existing Plant Barry gas yard to the location of the new unit, and new water lines and access roads."

Q. Why is the reliability of electrical service important to your members and how does this petition address that importance?

A. The importance of adequate reserve margins across the Alabama Power systems cannot be overstated, particularly when it comes to serving the Mobile area. Just consider a few of our members who call the Mobile community home: Olin, SSAB, Austal, Shell, BASF, ExxonMobil, and Occidental, among others. These are 15 large, energy-intensive production facilities that employ thousands and serve as a critical foundation of that 16 community's tax base and gross export. These members cannot afford significant interruption to power supply 17 brought on by inadequate reserve margin or seasonal peaks that have been allowed to go unmet. Alabama Power has 18 a duty to these members and all customers to meet these needs and the Commission has a duty to approve new assets 19 20 it deems prudent and necessary.

As Mr. Kelley explains in his filed testimony, the need for Plant Barry Unit 8 is clear, especially when one considers changes across the Southern Company system of which Alabama Power is a part. For example, Mr. Kelley reports that Georgia Power recently proposed the retirement of Plant Hammond Units 1-4 and Plant McIntosh Unit 1, which will represent a combined loss of approximately 980 MW for the system. There are also continued economic challenges for the operation of Plant Bowen Units 1-2, which is an additional 1,500 MW of generation capacity. These two changes on the system alone represent 2,480 MW of generation capacity that could disappear.

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With that in mind, Alabama Power's IRP shows a need for 2,400 MW of additional resources to be

added by the 2023-2024 timeframe. The plan the company has proposed, which includes Plant Barry Unit 8, would add an additional 2,236 MW to Alabama Power's winter capacity. This shortfall would be met by approximately 200 MW of new demand-side management programs and distributed energy resources, an initiative that we support.

In addition to the proposal to install CCGT technology at Plant Barry Unit 8, the petition before the Commission also includes the acquisition of existing combined cycle generating capacity in Autauga County, power purchase agreements for the output from five solar photovoltaic and battery energy storage systems, located in Calhoun, Chambers, Dallas, Houston and Talladega Counties, and a power purchase agreement pertaining to the Hog Bayou Energy Center, a combined cycle generating facility located in Mobile County, Alabama.

9 Under the company's proposal, the Central Alabama Generating Station in Autauga County, a
10 combined cycle facility constructed in 2003, would add 915 MW of winter capacity and 890 MW of summer
11 capacity. This facility has an estimated remaining life of approximately 23 years. The Hog Bayou Energy Center in
12 Mobile County is a combined cycle, natural-gas fired facility with a summer rating of 222 MW and a winter rating
13 of 238 MW. If approved, this PPA would begin with an early start period of 2020 through November 2023, followed
14 by a 15-year term beginning in December 2023.

The remainder of the generation being proposed by Alabama Power consists of five separate PPAs with solar projects in Calhoun, Chambers, Dallas, Houston and Talladega Counties. Each of these projects is a nominal 80 MW solar photovoltaic facility with a winter capacity equivalence of 68 MW per project.

Manufacture Alabama takes the issues of resource planning, reserve margins, and seasonal peaks very seriously, as they directly affect the future operations of our members. We believe that the filed testimony and the careful analysis of the company's experts through the IRP process and the Reserve Margin Study make it clear that new generation is necessary. For that reason, we support the petition for convenience and necessity filed by Alabama Power in this proceeding and urge the Commission to adopt its approval.

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