

DAN H. MCCRARY
t: (205) 226-3409
f: (205) 488-5886
e: dmccrary@balch.com

October 28, 2021

Alabama Public Service Commission
RSA Union Building
100 North Union Street, Suite 950
Montgomery, Alabama 36104

Attention: Mr. Walter L. Thomas, Jr.
Secretary



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

Dear Secretary Thomas,

On behalf of Alabama Power Company, we are submitting for filing the enclosed petition for a certificate of convenience and necessity, along with supporting testimony and exhibits. As one of the exhibits includes information that is confidential and proprietary to the Company and to third parties, we are providing a public version for inclusion in the docket, along with a non-public confidential version to be retained under seal by the Commission. Also enclosed is a Confidentiality Agreement for interested non-state agency parties that are permitted to intervene in the proceeding and who desire access to the non-public confidential materials under the terms and conditions set forth in said agreement. Lastly, the Company is providing a proposed form of notice.

If you have questions concerning any aspect of the Company's filing, please contact the undersigned.

Sincerely,

Dan H. McCrary

DHM:ke

ALABAMA POWER COMPANY,
Petitioner

PETITION: For a certificate of convenience and necessity for the acquisition of existing combustion turbine generating capacity in Calhoun County, Alabama, together with all transmission arrangements, structures, substations, and facilities, environmental control measures, facilities or arrangements for the handling, treatment, transportation, delivery, storage 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. _____

TO THE ALABAMA PUBLIC SERVICE COMMISSION:

Alabama Power Company (“Petitioner” or “Company”) hereby requests, pursuant to Alabama Code § 37-4-28 and Part A of Rate CNP–Adjustment for Commercial Operation of Certificated New Plant, that the Commission issue an order in this proceeding granting a certificate of convenience and necessity (“Certificate”). By the Certificate, as described in this Petition and in the testimony and exhibits filed in support thereof, the Commission would authorize the Company to acquire the generating plant and all related facilities currently owned by Calhoun Power Company, LLC, said plant and facilities being located near Eastaboga, Calhoun County, Alabama (“Calhoun Power Facility”).

In support of its Petition, the Company states as follows:

1. Petitioner is a corporation organized and existing under the laws of the State of Alabama that owns and operates electric generating plants and has other sources of supply of electric power, all of which are connected by or delivered to transmission lines and facilities forming the Company’s interconnected electrical system. Petitioner is engaged as a public utility

in the distribution and sale to the public of the electricity so produced and acquired by it, and such utility service is furnished by Petitioner to the public in a large section of the State of Alabama.

2. In order to meet the demand for electricity in the territory served by the Company and to render adequate and reliable service to the public, as contemplated under Title 37 of the Code of Alabama, Petitioner proposes to acquire the Calhoun Power Facility located in Calhoun County, Alabama. The Calhoun Power Facility comprises four (4) simple cycle combustion turbine units that can operate on either natural gas or oil, having on-site oil storage as a back-up fuel source. Constructed in 2003-04, the units have a combined winter capacity rating of 743 MW and a combined summer capacity rating of 637 MW, with an estimated remaining life (post-closing) of approximately 20 years.

3. The Calhoun Power Facility is owned by Calhoun Power Company, LLC (a Delaware limited liability company), which in turn is owned by Calhoun Power Company Holdings, LLC (also a Delaware limited liability company). Upon the closing of a Purchase and Sale Agreement with Calhoun Power Company Holdings, LLC, the Company will hold a 100 percent interest in Calhoun Power Company, LLC, after which all rights, title and interest in its assets (the Calhoun Power Facility, along with related assets and properties) will be transferred into Petitioner.

4. Petitioner states that the described Calhoun Power Facility, together with all transmission arrangements, structures, substations, and facilities, environmental control measures, facilities or arrangements for the handling, treatment, transportation, delivery, storage and processing of fuel, and any and all other appliances, appurtenances, facilities, rights, equipment, acquisitions, commitments and accounting authorizations necessary for or incident thereto, is necessary, advantageous, efficient and appropriate for the purposes aforesaid and its acquisition is in the public interest.

5. Petitioner states that the costs associated with the acquisition described in this Petition will be recovered through cost recovery mechanisms established by the Commission (specifically, Rate CNP–Adjustment for Commercial Operation of Certificated New Plant, Rate ECR–Energy Cost Recovery Rate, and Rate RSE–Rate Stabilization and Equalization Factor), together with such accounting authorizations, directions and clarifications from the Commission as needed in the circumstances.

6. Consistent with the FERC Uniform System of Accounts, Petitioner intends to record the difference between the original cost, less accumulated depreciation, of the Calhoun Power Facility and the acquisition cost as an electric acquisition adjustment in FERC Account 114. Petitioner requests that the Commission authorize it to depreciate or amortize, as appropriate, the total cost associated with the acquisition (including amounts recorded in FERC Account 114 to FERC Account 406), as of the closing, over the remaining life of the facility. Such accounting authorizations are necessary and appropriate to align the entire cost of the acquisition with the benefits customers will realize over the complete period of the Calhoun Power Facility’s service to customers.

WHEREFORE, Petitioner requests that this Commission, after a public hearing of all parties interested at a time and place fixed by the Commission, grant to the Company a certificate of convenience and necessity pursuant to the provisions of Alabama Code § 37-4-28 (1975) and Parts A of Rate CNP–Adjustment for Commercial Operation of Certificated New Plant, approving and authorizing acquisition of the Calhoun Power Facility described in this Petition, together with all transmission arrangements, structures, substations, and facilities, environmental control measures, facilities or arrangements for the handling, treatment, transportation, delivery, storage

and processing of fuel, and any and all other appliances, appurtenances, facilities, rights, equipment, acquisitions, commitments and accounting authorizations necessary for or incident, and that the Commission make and enter such further orders as may be necessary or appropriate.

This 27th day of October, 2021.

ALABAMA POWER COMPANY

By: 

Executive Vice President,
Chief Financial Officer and Treasurer

BALCH & BINGHAM LLP

Dan H. McCrary

Scott B. Grover

1710 North Sixth Avenue

Birmingham, AL 35203

(205) 251-8100

Attorneys for Petitioner

**BEFORE THE
ALABAMA PUBLIC SERVICE COMMISSION**

ALABAMA POWER COMPANY,

Docket No. _____

Petitioner.

**DIRECT TESTIMONY OF JOHN B. KELLEY
ON BEHALF OF ALABAMA POWER COMPANY**

1 **Q. STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is John B. Kelley and my business address is 600 North 18th Street, Birmingham,
3 Alabama.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Alabama Power Company (“Alabama Power” or “Company”) as
6 Director of Forecasting and Resource Planning.

7 **Q. DESCRIBE THE PRINCIPAL BUSINESS ACTIVITY OF ALABAMA POWER.**

8 A. Alabama Power is a public utility company, organized and existing under the laws of the
9 State of Alabama. Alabama Power operates an integrated electric utility system across a
10 large portion of the state. To this end, the Company’s primary business activities are the
11 generation, transmission and distribution of electricity to the public.

12 **Q. BRIEFLY SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND
13 PROFESSIONAL EXPERIENCE.**

14 A. I graduated from the University of Illinois in 1983 with a Bachelor of Science in Electrical
15 Engineering degree. In 1987, I received a Master of Business Administration degree from
16 the University of Alabama at Birmingham. I began my career with Southern Company in
17 1983 as an engineer in the transmission planning department of Southern Company

18 Services, Inc. (“SCS”). My responsibilities increased in the generation planning and
19 integrated resource planning departments, including a two-year consulting project for the
20 former Southern Electric International. In 1990, I began working for Alabama Power in
21 the marketing department, where I maintained supervisory responsibilities over project
22 analysis. I later served as the Manager of Marketing Services within the Alabama Power
23 retail marketing organization, with responsibilities that included the development of retail
24 market plans, economic evaluations, and mass marketing programs. I was named Director
25 of Forecasting and Resource Planning in 2008.

26 **Q. WHAT ARE YOUR JOB DUTIES AND RESPONSIBILITIES?**

27 A. As Director of Forecasting and Resource Planning (“Resource Planning”), I am responsible
28 for the Company’s Integrated Resource Plan (“IRP”), which includes the identification of
29 timely and cost-effective additions, expansions and modifications to Alabama Power’s
30 portfolio of resources. I also have responsibility over forecasting, which includes the
31 development of Alabama Power’s demand, energy and customer forecasts.

32 **Q. ARE YOU FAMILIAR WITH THE COMPANY’S PLANS FOR THE RESOURCE**
33 **ADDITION DESCRIBED IN THE PETITION FOR A CERTIFICATE OF**
34 **CONVENIENCE AND NECESSITY?**

35 A. Yes.

36 **Q. HAVE YOU READ THE PETITION FILED BY THE COMPANY IN THIS**
37 **PROCEEDING?**

38 A. Yes.

39 **Q. SUMMARIZE THE AUTHORIZATION REQUESTED IN THE PETITION.**

40 A. The Petition seeks authorization (and related approvals) from the Alabama Public Service
41 Commission (“Commission” or “APSC”) for the Company to acquire the generating plant
42 and related facilities currently owned by Calhoun Power Company, LLC, located near
43 Eastaboga, Calhoun County, Alabama (“Calhoun”). The Petition also describes existing
44 rate mechanisms that would provide for cost recovery, along with certain accounting
45 treatments and authorizations that are necessary and appropriate to align the entire cost of
46 the acquisition with the benefits customers will realize over the complete period of
47 Calhoun’s service to customers.

48 **Q. ARE THE STATEMENTS CONTAINED IN THE PETITION TRUE AND**
49 **CORRECT TO THE BEST OF YOUR KNOWLEDGE, INFORMATION AND**
50 **BELIEF?**

51 A. Yes.

52 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

53 A. The purpose of my testimony is to explain Alabama Power’s need for the capacity to be
54 provided by the proposed acquisition of Calhoun. I will then provide additional details
55 regarding Calhoun and demonstrate how it represents a unique and cost-effective
56 opportunity that, if approved, will provide significant benefits to the Company’s customers.

57 **I. Need for Additional Capacity**

58 **Q. HOW DID THE COMPANY DETERMINE THERE IS A RELIABILITY-BASED**
59 **NEED FOR THE ADDITIONAL CAPACITY THIS ACQUISITION WOULD**
60 **PROVIDE?**

61 A. The starting point for this determination of need is the Company’s most recent IRP, which
62 is the output of an annual process that was last completed for the budget year 2021. The

63 IRP process is an analytical tool designed to identify the timing, amount and types of
64 resources necessary to serve the long-term expected energy and demand requirements of
65 Alabama Power’s customers. It involves choosing from a broad range of resource options
66 to produce an indicative benchmark plan of resource additions that is reasonably expected
67 to meet anticipated load obligations (including an appropriate reserve margin) at the lowest
68 practicable cost over the long run. These results help guide the Company as it undertakes
69 to develop and implement a supply-side and demand-side resource strategy that will enable
70 it to continue to provide service that is reliable and cost effective for customers.

71 **Q. HAS THE COMPANY’S IRP PROCESS BEEN ENDORSED BY THIS**
72 **COMMISSION?**

73 A. Yes. The Company’s IRP process has been reviewed and endorsed by the APSC on a
74 number of occasions, and most recently in the proceeding in Docket No. 32953. This is
75 confirmed by the following excerpts from the Commission’s Order issued in that docket
76 on August 14, 2020:

77 As a threshold matter, we would observe that the Company’s IRP process—
78 of which the reserve margin is a key component—has long served as the
79 basis for petitions to this Commission for certification of new resources
80 required for reliability. Accordingly, we are familiar with that process and
81 the manner in which it is conducted, having reviewed and endorsed its use
82 for this purpose on a number of occasions.

83 ***
84

85
86 As we stated earlier, Alabama Power has long utilized the IRP to inform
87 decisions regarding future resource additions. The IRP facilitates the
88 Company’s ability to identify resource additions that are expected to
89 provide reliable service at the lowest practicable total cost, considering both
90 capacity and energy, over the long run. It is a proven, sound process for
91 guiding these determinations, and we have frequently endorsed its use by
92 the Company. In this proceeding, Alabama Power has adhered to that IRP
93 process as part of its identification of resources to meet the long-term energy
94 and demand requirements of its customers

95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114

In conclusion, we endorse the Company’s IRP process as the appropriate vehicle to inform decisions regarding future resource additions. The use of that process, as summarized in the 2019 Summary Report and discussed in the Company’s testimony, continues to benefit customers, leading to the selection of reliable and cost-effective resources to satisfy their electricity needs.¹

Q. WAS THAT SAME COMMISSION-ENDORSED IRP PROCESS USED TO PRODUCE THE 2021 IRP RESULTS?

A. Yes. The 2021 results were derived using the same IRP process that the Commission most recently endorsed in Docket No. 32953, including seasonal planning and the target reserve margins for the winter and summer periods that were approved by the Commission.

Q. WHAT DID THE 2021 RESULTS SHOW REGARDING THE ADEQUACY OF THE COMPANY’S RESOURCES OVER THE NEXT TEN YEARS?

A. As shown in Table 1 below, the Company has a reliability-driven need for additional resources in the winter from 2022 through 2025 and from 2028 forward.

¹ August 14, 2020 Order, Docket No. 32953, pp. 19, 27, 31 (footnotes omitted).

115

Table 1: APC 2021 IRP Results -- Winter Season

| Year | Peak Demand (MW) | Resources (MW) | Reserve Margin | Target Reserve Margin | (Surplus) / Deficit Reserves (MW) |
|------|------------------|----------------|----------------|-----------------------|-----------------------------------|
| 2022 | 12,088 | 13,436 | 11.15% | 24.76% | 1,644 |
| 2023 | 12,017 | 12,872 | 7.12% | 24.76% | 2,119 |
| 2024 | 11,974 | 14,717 | 22.91% | 25.25% | 280 |
| 2025 | 11,965 | 14,854 | 24.14% | 25.25% | 133 |
| 2026 | 11,225 | 14,420 | 28.46% | 25.25% | (360) |
| 2027 | 11,236 | 14,265 | 26.96% | 25.25% | (191) |
| 2028 | 11,274 | 13,410 | 18.95% | 25.25% | 711 |
| 2029 | 11,302 | 13,410 | 18.65% | 25.25% | 746 |
| 2030 | 11,335 | 13,411 | 18.32% | 25.25% | 786 |
| 2031 | 11,367 | 13,401 | 17.90% | 25.25% | 836 |

116

117 **Q. WHY DOES THE WINTER CAPACITY SHORTFALL DECLINE**
 118 **SIGNIFICANTLY FROM 2023 TO 2024?**

119 A. This reduction is primarily due to the IRP’s recognition of the resource additions
 120 certificated by the Commission in Docket No. 32953, most notably the acquisition of the
 121 Central Alabama combined cycle facility (under contract to Shell North America Energy,
 122 U.S. LP until May 2023) and the expected commercial operation of Barry Unit 8 (currently
 123 under construction) in the late fall of 2023. Together, these resources will add
 124 approximately 1,650 MW of additional winter capacity to the Alabama Power system.

125 **Q. CONVERSELY, WHY DOES THE CAPACITY DEFICIT TEMPORARILY GO**
 126 **AWAY IN 2026-2027 AND THEN RETURN IN 2028?**

127 A. This transient capacity surplus reflects the effects of certain planning inputs to the 2021
 128 IRP; specifically, the expiration of a large sales contract, followed by an offsetting loss of
 129 capacity due to the expiration of an existing power purchase contract.

130 **Q. ARE BOTH OF THESE PLANNING ASSUMPTIONS CERTAIN TO OCCUR?**

131 A. No. The referenced events are consistent with the respective contractual terms, but changes
132 in the relevant circumstances remain a possibility. Nevertheless, these are the appropriate
133 and conservative IRP inputs at this time.

134 **Q. HAVE THERE BEEN ANY PARTICULARLY IMPACTFUL CHANGES IN THE**
135 **UNDERLYING RESOURCE ASSUMPTIONS OF THE 2021 IRP SINCE ITS**
136 **COMPLETION?**

137 A. Yes. Shortly after the 2021 IRP was finalized, the U.S. Environmental Protection Agency
138 (“EPA”) issued an updated order relating to its effluent limitation guidelines (“ELG”) rule.
139 That order required affected companies, including Alabama Power, to submit a notice by
140 mid-October 2021 as to how they intended to comply with the ELG requirements. On
141 October 13, 2021, Alabama Power filed its required notice with the Alabama Department
142 of Environmental Management (“ADEM”). The document, called a Notice of Planned
143 Participation (“NOPP”), represented Alabama Power’s intent to comply with EPA’s rule
144 by, among other things, permanently ceasing coal combustion at Plant Barry Units 4 and 5
145 (“Plant Barry NOPP”). A copy of the Plant Barry NOPP is appended to my testimony as
146 Exhibit JBK-1. As the document explains, rather than investing in additional
147 environmental controls, Alabama Power plans to change the operation of the remaining
148 coal units at Plant Barry by retiring Unit 5 and converting Unit 4 to natural gas.

149 **Q. WHEN ARE THE OPERATIONAL CHANGES REPORTED IN THE PLANT**
150 **BARRY NOPP SCHEDULED TO OCCUR?**

151 A. The specified date for cessation of coal operation at each unit is no later than December
152 31, 2028. In both instances, however, the Company apprised ADEM that it would

153 implement these decisions in a more expedited manner to the extent it is reasonably able
154 to do so, consistent with proper planning and system reliability.

155 **Q. HOW DO THESE PLANS FOR PLANT BARRY IMPACT THE RESOURCE**
156 **PLANNING PROCESS AND THE RESULTING 2021 IRP?**

157 A. The 2021 IRP reflects the operation of Barry Unit 5 on coal through the end of its
158 depreciable life in 2036, as well as the operation at Barry Unit 4 on coal through 2027 (with
159 assumed unavailability of the unit thereafter). The conversion of Barry Unit 4 to natural
160 gas operation will enable the Company to continue to rely on that capacity beyond 2027,
161 thus improving reliability in the longer term. Conversely, the indicated retirement of Barry
162 Unit 5 means that the capacity associated with that unit will be unavailable beyond 2028,
163 if not sooner.

164 **Q. HAS RESOURCE PLANNING EVALUATED THE FEASIBILITY OF AN**
165 **EARLIER RETIREMENT OF BARRY UNIT 5?**

166 A. Yes. As the economics of ELG compliance alternatives were being evaluated, Alabama
167 Power began to investigate the possibility of securing replacement capacity at a total cost
168 that would be less than the cost of continued operation of Barry Unit 5. As it did so,
169 Calhoun emerged as a potential candidate for achieving this goal. For its entire service life
170 (now approaching 20 years), Calhoun has been under contract to the Company pursuant to
171 a Power Purchase Agreement (“PPA”) that is scheduled to terminate at the end of 2022.
172 The plant owner had no interest in extending the contract, but instead expressed a desire to
173 sell the facility. These discussions ultimately resulted in a Purchase and Sale Agreement
174 (“PSA”) whereby Alabama Power would acquire ownership of Calhoun as of October 1,
175 2022, at a cost of approximately \$180 million. The PSA, which is subject to a number of

176 conditions (specifically including receipt of requisite regulatory approvals), is appended to
177 my testimony as Exhibit JBK-2. As shown later in my testimony, the economics of this
178 acquisition are considerably better than the continued operation of Barry Unit 5. If
179 approved, it would inure to the benefit of retail customers by enabling the Company to
180 retire Barry Unit 5 at the end of 2023—several years earlier than the deadline set forth in
181 the Barry NOPP.

182 **Q. WHAT ARE THE RESOURCE ADEQUACY IMPLICATIONS OF ADJUSTING**
183 **THE 2021 IRP TO REFLECT THE DESCRIBED RETIREMENT OF BARRY**
184 **UNIT 5 AND THE REPOWERING OF BARRY UNIT 4, WITHOUT AND WITH**
185 **THE ACQUISITION OF CALHOUN?**

186 A. The reliability implications of these changes at Plant Barry (without and with the Calhoun
187 capacity) are quite significant. As shown on Table 2 below, the acquisition of Calhoun
188 would effectively fill the capacity need in 2024 resulting from the retirement of Barry Unit
189 5 at the end of 2023, maintaining the status quo from a capacity and reserve margin
190 standpoint. Without the proposed acquisition, system reliability would necessitate
191 continued operation of Barry Unit 5 until appropriate replacement capacity could be
192 secured (subject to the 2028 deadline specified in the Plant Barry NOPP). Table 2 further
193 shows that, based on the 2021 IRP, the continued operation of Barry Unit 4 (on natural gas)
194 beyond 2028 moves the Company closer to the target long term winter planning reserve
195 margin through the rest of the decade.

196
197

**Table 2: APC 2021 IRP Resource Balance
(with resource adjustments)**

| Year | Base Reserve Margin | Base Needs | Base Reserve Margin Adjusted w/o Calhoun ⁽¹⁾ | Base Needs Adjusted w/o Calhoun ⁽¹⁾ | Base Reserve Margin Adjusted w/ Calhoun ⁽²⁾ | Base Needs Adjusted w/ Calhoun ⁽²⁾ |
|------|---------------------|------------|---|--|--|---|
| 2022 | 11.15% | 1,644 | 11.15% | 1,644 | 11.15% | 1,644 |
| 2023 | 7.12% | 2,119 | 7.12% | 2,119 | 13.30% | 1,376 |
| 2024 | 22.91% | 280 | 16.59% | 1,037 | 22.84% | 289 |
| 2025 | 24.14% | 133 | 17.82% | 889 | 24.09% | 139 |
| 2026 | 28.46% | (360) | 21.72% | 396 | 28.40% | (354) |
| 2027 | 26.96% | (191) | 20.22% | 565 | 26.90% | (185) |
| 2028 | 18.95% | 711 | 15.45% | 1,105 | 22.10% | 355 |
| 2029 | 18.65% | 746 | 15.16% | 1,140 | 21.80% | 390 |
| 2030 | 18.32% | 786 | 14.84% | 1,180 | 21.45% | 430 |
| 2031 | 17.90% | 836 | 14.43% | 1,231 | 21.02% | 481 |

(1) Reflects Barry Unit 5 retired by the end 2023 and Barry Unit 4 operating through the end of 2034

(2) Reflects Barry Unit 5 retired by the end 2023, Barry Unit 4 operating through the end of 2034, and Calhoun operating through the end of 2042

198
199

200 **Q. IF CALHOUN IS MORE ECONOMICAL THAN CONTINUED OPERATION OF**
201 **BARRY UNIT 5, WHY ISN'T THE COMPANY SEEKING TO RETIRE THAT**
202 **UNIT SOONER THAN AT THE END OF 2023?**

203 **A.** There are two reasons. First, Barry Unit 5 needs to remain available through 2023 to
204 provide transmission support for the Mobile area. After Barry Unit 8 is placed in service
205 and is operating as expected, that unit will address these transmission-related
206 considerations and enable Barry Unit 5 to be retired. The second reason involves the
207 Company's need for capacity in the near term. As noted earlier, Alabama Power is
208 considerably deficient on capacity in the winter of 2023—a shortfall that would be
209 worsened by attempting an earlier retirement of Barry Unit 5. The proposed addition of

210 the Calhoun capacity, coupled with continued operation of Barry Unit 5, would serve to
211 reduce the deficit in that year.

212 **II. Reasonable Means to Satisfy the Identified Capacity Need**

213 **Q. PROVIDE AN OVERVIEW OF THE CALHOUN GENERATING STATION.**

214 A. Calhoun comprises four simple-cycle, dual fuel, 7F.03 General Electric (“GE”)
215 combustion turbines (“CTs”). The reference to “dual fuel” means that these units can
216 operate on either natural gas or oil, with on-site oil storage as a back-up fuel source.
217 Completed in 2003-04, the units have a combined winter capacity rating of 743 MW and a
218 combined summer capacity rating of 637 MW, with an estimated remaining life (post-
219 closing) of approximately 20 years.

220 **Q. WHAT MADE CALHOUN A POTENTIALLY ATTRACTIVE CANDIDATE TO**
221 **REPLACE BARRY UNIT 5?**

222 A. There are a number of factors and considerations that made Calhoun a prime candidate for
223 replacing the capacity lost through the retirement of Barry Unit 5. Foremost is the value
224 associated with Calhoun relative to comparable alternatives, as discussed in greater detail
225 below. Beyond its economic benefit, Calhoun is unique in a number of respects.

226 First, Calhoun has been serving Alabama Power’s customers for nearly two decades
227 as a resource interconnected to the Company’s transmission system and incorporated in the
228 economic dispatch of the Southern electric system. This longstanding familiarity with
229 Calhoun and its operational history provides an additional measure of assurance as to the
230 reliability of these units. Moreover, the units are equipped with Automatic Generation
231 Control (“AGC”), enhancing their ability to respond quickly to changing system demand
232 and provide operating reserves in support of system reliability.

233 Second, the upcoming expiration of the PPA with the Company, coupled with the
234 owner's desire to sell the facility, made it potentially available in a very timely manner.
235 As previously shown, Alabama Power has a capacity need in the very near term, especially
236 in 2023. Calhoun can help meet this need if the resource is acquired by the target date in
237 late 2022. In contrast, new facilities could not quickly provide this needed capacity
238 because of longer lead times associated with construction and improvement, which can be
239 driven by factors apart from the time to build the plant itself, such as land acquisition and
240 preparation, transmission interconnection and upgrades, and fuel storage and/or pipeline
241 arrangements.

242 Finally, given recently certified additions of baseload technology resources
243 (Central Alabama, Barry Unit 8 and the Hog Bayou PPA), Alabama Power's current
244 capacity needs are largely peaking in nature. Indeed, the actual operation of Barry Unit 5
245 (which Calhoun would serve to replace) reflects capacity factors more like those of peaking
246 resources and unlike those of traditional baseload technology facilities. Given Calhoun's
247 composition of four CTs, its acquisition will help diversify the Company's generation mix.

248 **Q. PUTTING ASIDE THESE UNIQUE ASPECTS, IS THE PROPOSED**
249 **ACQUISITION OF CALHOUN A COST-EFFECTIVE DECISION?**

250 A. Yes. The total cost of the acquisition is extremely favorable when compared not only to
251 the continued operation of Barry Unit 5, but also to potential alternatives.

252 **Q. HOW DID THE COMPANY DETERMINE THAT CALHOUN WOULD BE A**
253 **COST-EFFECTIVE REPLACEMENT FOR THE CAPACITY CURRENTLY**
254 **PROVIDED BY BARRY UNIT 5?**

255 A. To make this assessment, the Company compared the cost of acquiring and operating
256 Calhoun with the cost of bringing Barry Unit 5 into compliance with the ELG requirements
257 and continuing to operate the unit to the end of its depreciable life in 2036. This cost
258 comparison begins with the acquisition and extends for the balance of Calhoun's expected
259 life (approximately 2042). For Calhoun, the analysis captures all acquisition-related costs,
260 future capital expenditures, fixed O&M, the cost of firm gas transportation and any net
261 energy cost impacts. The economic carrying cost ("ECC") of generic CT capacity was
262 used to match the slightly larger capability of Barry Unit 5.

263 For Barry Unit 5, the cost categories are much the same, such as future capital
264 expenditures, fixed O&M and any net energy cost impacts. The Barry Unit 5 cost analysis
265 also includes the ECC of generic CT capacity to reconcile the effect of its shorter expected
266 life relative to that of Calhoun. A chart depicting the results of this cost comparison is
267 appended to my testimony as Exhibit JBK-3. As shown, replacing Barry Unit 5 with
268 Calhoun is expected to yield net savings of \$580 million to \$850 million (in 2021 dollars),
269 across a range of assumptions regarding natural gas and carbon costs.

270 **Q. WHAT DID THE COMPANY DO TO ASSESS THE POSSIBILITY THAT OTHER**
271 **RESOURCE OPTIONS MIGHT BE EVEN MORE ECONOMIC THAN**
272 **CALHOUN?**

273 A. Along with the described economic evaluation of the Calhoun opportunity relative to Barry
274 Unit 5, the Company considered a number of alternatives across the same range of fuel and
275 carbon scenarios, deriving an average net present value of their respective lifecycle costs
276 and benefits. Here, however, the comparison is not against Barry Unit 5, but against

277 Calhoun. For ease of comparison, these costs and benefits were normalized to the size of
278 Calhoun and expressed on a cost per kW basis.

279 **Q. DESCRIBE THE ALTERNATIVES THAT WERE CONSIDERED FOR THIS**
280 **PURPOSE**

281 A. The various alternatives and the basis for each evaluation are summarized below.

- 282 • Representative PPA – Pricing from the best (unselected) viable PPA from the
283 Company’s recent capacity solicitation was used to develop appropriate capacity and
284 energy costs over its term. The ECC of generic CT capacity was used to reconcile the
285 term of the PPA to match the expected useful life of Calhoun. This PPA pricing
286 represents a reasonable approximation of the market for long-term capacity from
287 traditional sources of generation.
- 288 • New Generic CT – Recognizing that self-build is always an option, and given the
289 Company’s need for peaking capacity, Resource Planning used the Company’s current
290 Technology Application Standards to develop a representative cost (including
291 interconnection) for new CTs in an amount equal to that of Calhoun. To reflect the
292 time required for construction, this generic CT capacity is assumed to be available in
293 2027.
- 294 • BESS-Solar Portfolio – Using the best proposals for a Battery Energy Storage System
295 (“BESS”) paired with Solar Facilities (received in response to the Company’s recent
296 renewable solicitation pursuant to the Renewable Generation Certificate), a portfolio
297 of 17 projects was compiled to match the capacity afforded by Calhoun. The cost of
298 this portfolio included the PPA pricing for each project, which was used to develop
299 appropriate capacity and energy costs over its term. Expected transmission costs

300 necessary to interconnect each project and enable delivery of output from and receipt
301 of energy to the site were also included.

302 • BESS Standalone – Again looking to the best BESS-Solar proposals received in
303 response to the recent renewable solicitation, a portfolio of 17 projects was developed
304 on the basis of the capacity cost of the battery. I would observe that the inclusion of
305 solar generation presumably results in tax credits that would put downward pressure on
306 the cost of the combined proposals. The capacity component reflected in these
307 combined proposals thus likely understates the cost of standalone batteries, as
308 standalone BESS projects are not eligible for these tax credits under current tax law.
309 Finally, the same interconnection and transmission costs shown for the BESS-Solar
310 portfolio were applied to the BESS standalone portfolio.

311 **Q. ARE THERE ANY OTHER COSTS THAT MUST BE TAKEN INTO ACCOUNT**
312 **IN EVALUATING EACH OF THESE ALTERNATIVES, AS COMPARED TO**
313 **CALHOUN?**

314 A. Yes. As noted earlier, one of the unique aspects of the Calhoun opportunity is its ability to
315 facilitate the retirement of Barry Unit 5 by the end of 2023, resulting in cost savings. To
316 varying degrees, each of the other alternatives would impair the Company's ability to
317 realize those same cost savings. Accordingly, the operational costs of Barry Unit 5 that
318 could be avoided by Calhoun but not by another option are included as a cost of pursuing
319 such option.

320 **Q. PLEASE SUMMARIZE THE RESULTS OF THESE EVALUATIONS.**

321 A. As shown on Exhibit JBK-4, the lifecycle costs of the described alternatives, including the
322 cost of Calhoun, are as follows:

- 323 • Calhoun: \$497/kW
- 324 • Representative PPA: \$588/kW
- 325 • New CT capacity: \$843/kW
- 326 • BESS-Solar: \$1067/kW
- 327 • BESS Standalone: \$1641/kW

328 **Q. DOES THIS ECONOMIC EVALUATION OF POSSIBLE ALTERNATIVES**
329 **VALIDATE THE COMPANY’S DECISION TO PURSUE THE CALHOUN**
330 **ACQUISITION?**

331 A. Yes. As discussed earlier, replacing Barry Unit 5 with Calhoun is expected to yield net
332 savings ranging from \$580 million to \$850 million (in 2021 dollars), for an average across
333 the range of assumptions of approximately \$712 million. The comparison above shows
334 that Calhoun achieves these savings at a cost that is approximately \$70 million to \$860
335 million below these possible alternatives.

336 **Q. HAVE YOU MADE ANY OTHER COMPARISONS TO CONFIRM THE COST**
337 **EFFECTIVENESS OF THE CALHOUN ACQUISITION?**

338 A. Yes. As another check on the reasonableness of this acquisition, the Company surveyed
339 public information to determine the cost others were incurring for peaking capacity
340 additions. As shown on Exhibit JBK-5 and summarized below, the Calhoun acquisition
341 cost (not to be confused with lifecycle cost, as reflected on the prior page and in Exhibit
342 JBK-4) is \$242/kW, a figure that compares very favorably with the initial costs incurred
343 by others for similar capacity resources.

- 344 • Valmont Facility (CO): \$430/kW
- 345 • Gulf Clean Energy Center (FL): \$479/kW

- 346 • Washington Parrish EC (LA): \$630/kW
- 347 • AB Brown Generating Station (IN): \$702/kW
- 348 • Carlsbad Energy Center (CA): \$1873/kW

349 **Q. HOW WILL ALABAMA POWER RECOVER THE COSTS ASSOCIATED WITH**
350 **CALHOUN?**

351 A. Assuming the Commission grants the Petition and issues the requested Certificate, costs
352 associated with Calhoun will be recovered through cost recovery mechanisms established
353 by the Commission (specifically, Rate CNP–Adjustment for Commercial Operation of
354 Certificated New Plant, Rate ECR–Energy Cost Recovery Rate, and Rate RSE–Rate
355 Stabilization and Equalization Factor), together with such accounting authorizations,
356 directions and clarifications from the Commission as needed in the circumstances. The
357 initiation of cost recovery will result from the operation of Rate CNP, Part A. In that
358 regard, the Company is requesting that the Commission direct use of the Revenue
359 Allocation formula (as set forth as option (ii) of paragraph 8 of Part A) because the resource
360 is being acquired to meet a reliability-based need. The operation of Part A is expected to
361 result in an increase of approximately \$0.96 (96 cents) in the monthly bill for a residential
362 customer using 1000 kWh per month.

363 **Q. DO YOU HAVE ANY CONCLUDING REMARKS RELATED TO THE**
364 **COMPANY’S PETITION?**

365 A. As demonstrated in my testimony, the proposed acquisition of Calhoun represents a unique
366 and cost-effective opportunity for the Company and its customers. Benchmarked against
367 available information, the economics alone are quite favorable. Beyond that, the timing of
368 Calhoun’s availability would not only facilitate the retirement of Barry Unit 5 by the end

369 of 2023 (with attendant cost savings), but also mitigate a significant capacity deficit in
370 2023 and improve the Company's future generation mix. Finally, Calhoun is an existing
371 and proven capacity resource, already AGC capable and fully integrated from an
372 operational standpoint (both generation and transmission), that can provide seamless
373 support for system reliability.

374 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

375 A. Yes.

BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION

ALABAMA POWER COMPANY)
)
Petitioner)


DIRECT TESTIMONY OF JOHN B. KELLEY
ON BEHALF OF ALABAMA POWER COMPANY

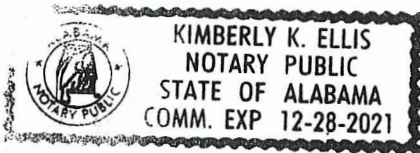
STATE OF ALABAMA)
COUNTY OF JEFFERSON)

John B. Kelley, being first duly sworn, deposes and says that he has read the foregoing prepared testimony and that the matters and things set forth therein are true and correct to the best of his knowledge, information and belief.


John Kelley

Subscribed and sworn to before me
this 27th day of October, 2021.


Notary Public



Direct Testimony of John B. Kelley
Exhibit JBK-1



600 North 18th Street
Post Office Box 2641
12N-0830
Birmingham, Alabama 35291

October 13, 2021

VIA E-MAIL

Mr. Scott Ramsey
Industrial Section Chief
Alabama Department of Environmental Management
Water Division
P.O. Box 301463
Montgomery, AL 36130-1463

Re: Notice of Planned Participation in the "Permanent Cessation of Coal Combustion" Compliance Subcategory for Units 4 and 5 of the James M. Barry Electric Generating Plant (NPDES Permit No. AL0002879)

Dear Mr. Ramsey:

In accordance with 40 C.F.R. § 423.19(f), please allow this to serve as Alabama Power Company's (Alabama Power) "Notice of Planned Participation" (NOPP) indicating its intent to comply with EPA's 2020 *Steam Electric Reconsideration Rule* by conforming with the Rule's provisions relating to "unit[s] that will achieve permanent cessation of coal combustion by December 31, 2028"¹ for Units 4 and 5 of the James M. Barry Electric Generating Plant ("Plant Barry").

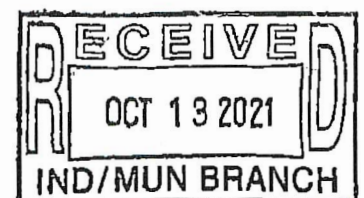
I. Regulatory Background

On October 13, 2020, EPA published a new rule in the Federal Register entitled the *Steam Electric Reconsideration Rule* (hereinafter the "2020 ELG Rule").² The 2020 ELG Rule established new best available technology economically achievable (BAT) effluent limitations and associated compliance timelines for flue gas desulfurization (FGD) wastewater and bottom ash transport water (BATW) generated at existing steam-electric power plants.³ Instead of imposing a single, one-size-fits-all BAT for FGD wastewater and/or BATW, the 2020 ELG Rule established several alternative compliance options that regulated entities may opt into and

¹ 40 C.F.R. § 423.19(f)(1).

² EPA, *Steam Electric Reconsideration Rule*, 85 Fed. Reg. 64,650 (Oct. 13, 2020) (codified at 40 C.F.R. Part 423).

³ See generally *id.*



transfer among, subject to specified requirements. More specifically, the 2020 ELG Rule allows regulated entities to choose to comply either with default, generally applicable limitations,⁴ or with the conditions and limitations applicable to one of the following three compliance options (hereinafter collectively referred to as "subcategories" or individually as a "subcategory"):⁵

- (1) Low utilization electric generating units (LUEGU);⁶
- (2) The Voluntary Incentives Program (VIP);⁷ or
- (3) Permanent cessation of coal combustion.⁸

If a facility wishes to comply with the permit conditions and effluent limitations associated with one of these subcategories, it may do so by submitting a NOPP to its permitting authority by October 13, 2021.⁹ Additionally, the 2020 ELG Rule allows facilities to automatically transfer among various compliance options by filing subsequent NOPPs, subject to various other deadlines and requirements.¹⁰

On August 3, 2021, EPA published in the Federal Register a "Notice of Rulemaking Initiative" pertaining to the effluent limitation guidelines applicable to steam electric power generating facilities (including the 2020 ELG Rule).¹¹ In it, the agency announced its intent to evaluate whether limitations more stringent than those in the 2020 ELG Rule are required for BATW and/or FGD wastewater and whether changes should be made to any of the established subcategories with less stringent limitations.¹² EPA expects this rulemaking to take multiple

⁴ 40 C.F.R. §§ 423.13(g)(1)(i) (FGD wastewater), 423.13(k)(1)(i) (BATW).

⁵ Additional subcategories exist under the 2020 ELG Rule; however, these additional subcategories are inapplicable to Plant Barry and are therefore not discussed in this correspondence.

⁶ 40 C.F.R. §§ 423.13(g)(2)(iii) (FGD wastewater), 423.13(k)(2)(iii) (BATW).

⁷ *Id.* § 423.13(g)(3)(i) (FGD wastewater). The voluntary incentives program applies only to FGD wastewater, not BATW.

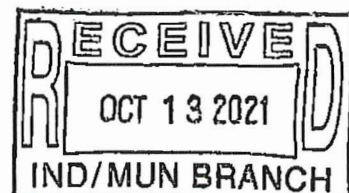
⁸ *Id.* §§ 423.13(g)(2)(i) (FGD wastewater), 423.13(k)(2)(ii) (BATW).

⁹ *See id.* §§ 423.19(e)(1), (f)(1), and (h)(1).

¹⁰ *See id.* §§ 423.13(o), 423.19(i).

¹¹ 86 Fed. Reg. 41,801 (Aug. 3, 2021).

¹² *Id.* at 41,802.



years to complete and explicitly provided that it "expects permitting authorities to continue to implement the current regulations while the Agency undertakes a new rulemaking."¹³

II. Factual History

Plant Barry is a coal and natural gas-fired facility located on the Mobile River in Bucks, Alabama, approximately 20 miles north of Mobile, Alabama. Plant Barry currently operates two gas-fired units (Units 1 and 2), two coal-fired units (Units 4 and 5), and two combined-cycle units (Units 6 and 7). Unit 3 was retired in 2015. Units 1 and 2 were previously coal-fired, but were converted to natural gas in late 2015 and early 2016, respectively. Unit 4 does not utilize a flue gas desulfurization (FGD) "scrubber," meaning FGD wastewater is not generated by operation of this unit. Unit 5 utilizes a FGD scrubber.

The Alabama Department of Environmental Management (ADEM) issued the final version of Plant Barry's current NPDES permit on December 9, 2020.¹⁴ However, EPA's 2020 ELG Rule did not become effective until December 14, 2020.¹⁵ Accordingly, Plant Barry's current NPDES Permit does not reflect conditions implementing the 2020 ELG Rule, which was not yet in effect at the time the Permit was issued. Instead, the Permit included Part I.E.2.d., which reads: "No later than January 11, 2021, the Permittee shall submit a permit modification request, which includes a justification letter, for the 2020 Steam Electric Reconsideration Rule."¹⁶

Pursuant to Part I.E.2.d. of the NPDES Permit, Alabama Power submitted a letter to ADEM on January 11, 2021, requesting that Plant Barry's Permit be modified to incorporate the 2020 ELG Rule.¹⁷ More specifically, the letter requested¹⁸ that the Permit be modified to include provisions corresponding to each of the following compliance options under the 2020 ELG Rule: the generally applicable effluent limitations with a compliance date of December 31,

¹³ *Id.*

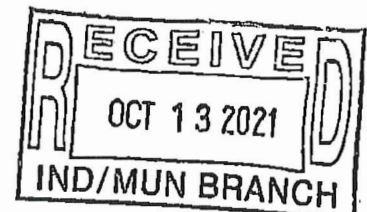
¹⁴ See generally NPDES Permit No. AL0002879, <http://lf.adem.alabama.gov/WebLink/DocView.aspx?id=104420958&dbid=0&cr=1>.

¹⁵ See 85 Fed. Reg. at 64,650 ("This final rule is effective on December 14, 2020.").

¹⁶ See NPDES Permit No. AL0002879 at Part I.E.2.d. (p. 28 of 48).

¹⁷ See Letter from Mike Godfrey, General Manager of Environmental Affairs, Alabama Power, to Scott Ramsey, Chief of Industrial Section, ADEM, *Request for NPDES Permit Modification for the James M. Barry Electric Generating Plant (NPDES Permit No. AL0002879) to Incorporate 2020 Steam Electric Reconsideration Rule* (Jan. 11, 2021) [hereinafter "Modification Request Letter"], <http://lf.adem.alabama.gov/WebLink/DocView.aspx?id=104455017&dbid=0>.

¹⁸ See *id.* at 5-7.



2025;¹⁹ the voluntary incentives program (VIP);²⁰ low utilization electric generating units;²¹ and permanent cessation of coal combustion.²² Alabama Power requested provisions corresponding to each of these compliance options to "preserve[] the Reconsideration Rule's flexibility while Alabama Power continues to analyze the best path forward for Plant Barry [and to allow] Alabama Power and Plant Barry to utilize the automatic transfer provisions included in the 2020 Reconsideration Rule, should the need arise."²³ In the January 11, 2021 letter, Alabama Power made clear that it was "not at this time selecting its compliance path for Plant Barry."²⁴ Rather, Alabama Power stated that it "intends to make that selection [by filing a NOPP] on or before October 13, 2021, in accordance with the construct of the 2020 Reconsideration Rule."²⁵ ADEM has not yet modified Plant Barry's Permit to include provisions implementing the 2020 ELG Rule.

In accordance with the foregoing procedural history, Alabama Power submits this NOPP, pursuant to 40 C.F.R. § 423.19(f), to notify ADEM that the subcategory for "permanent cessation of coal combustion by December 31, 2028" has been selected for Units 4 and 5 at

¹⁹ 40 C.F.R. §§ 423.13(g)(1)(i) (FGD wastewater), 423.13(k)(1)(i) (BATW). EPA stated in the 2020 ELG Rule that permit writers can properly consider filed NOPPs in the "other factors" of 40 C.F.R. § 423.11(t)(4). See 85 Fed. Reg. at 64,708. This NOPP therefore provides additional support for the requested December 31, 2025 date for compliance with the Rule's generally applicable effluent limitations, as well as a requested compliance date of December 31, 2023 for compliance with effluent limitations applicable to low utilization electric generating units. These compliance dates are also appropriate because they provide Alabama Power maximum flexibility to automatically transfer unencumbered to/from the various compliance options prior to the deadlines established in 40 C.F.R. § 423.13(o)(1).

EPA's August 3, 2021 Notice of Rulemaking Initiative is an additional "other factor" that supports the requested dates for compliance with the effluent limitations for the generally applicable and low utilization electric generating unit compliance options. See 86 Fed. Reg. at 41,801. Alabama Power should not be required to install (or take meaningful steps to install) costly treatment technologies until there is certainty for the industry regarding what technologies will ultimately be necessary to comply.

²⁰ 40 C.F.R. § 423.13(g)(3)(i) (FGD wastewater). The VIP applies only to FGD wastewater; not BATW.

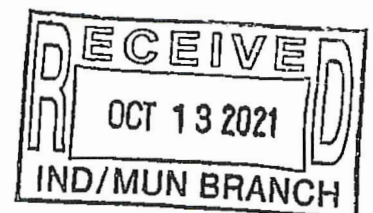
²¹ *Id.* §§ 423.13(g)(2)(iii) (FGD wastewater), 423.13(k)(2)(iii) (BATW).

²² *Id.* §§ 423.13(g)(2)(i) (FGD wastewater), 423.13(k)(2)(ii) (BATW).

²³ See Modification Request Letter at 6.

²⁴ *Id.*

²⁵ *Id.*



Plant Barry,²⁶ with respect to both FGD wastewater and BATW.²⁷ Although the purpose of this NOPP is to select "permanent cessation of coal combustion" as the compliance path for Units 4 and 5 at Plant Barry, Alabama Power respectfully requests that ADEM nonetheless modify the NPDES permit to also include conditions and limitations corresponding to each of the other compliance subcategories referenced in 40 C.F.R. § 423.13(o), as well as the generally applicable effluent limitations (with a compliance date of December 31, 2025), given that 40 C.F.R. § 423.13(o) allows Alabama Power to automatically transfer to and/or from various compliance options prior to established deadlines.²⁸ Alabama Power also respectfully requests the inclusion of permit provisions that afford Plant Barry the relevant protections set forth in 40 C.F.R. §§ 423.18, 423.19(g), and 423.19(j).

III. NOPP for the "Permanent Cessation of Coal Combustion by December 31, 2028" Subcategory for FGD Wastewater and BATW

The 2020 ELG Rule specifies that a NOPP for the subcategory of "permanent cessation of coal combustion by December 31, 2028" must be submitted to the relevant permitting authority by "no later than October 13, 2021"²⁹ and must:

- (1) "[I]dentify the electric generating units intended to achieve the permanent cessation of coal combustion";
- (2) "[I]nclude the expected date that each electric generating unit is projected to achieve permanent cessation of coal combustion";
- (3) State "whether each [permanent cessation] date represents a retirement or a fuel conversion";
- (4) State "whether each retirement or fuel conversion has been approved by a regulatory body, and what the relevant regulatory body is";

²⁶ See 40 C.F.R. § 423.19(f)(1) ("For sources seeking to qualify as an electric generating unit that will achieve permanent cessation of coal combustion by December 31, 2028, under this part, a Notice of Planned Participation shall be made to the permitting authority, or to the control authority in the case of an indirect discharger, no later than October 13, 2021.").

²⁷ See *id.* §§ 423.13(g)(2)(i) (FGD wastewater) (Unit 5 only), 423.13(k)(2)(ii) (BATW). Prior to its "permanent cessation of coal combustion[.]" Units 4 and 5 at Plant Barry will comply with the total suspended solids (TSS) and oil and grease effluent limitations contained in 40 C.F.R. §§ 423.12(b)(11) (FGD wastewater) (Unit 5 only) and 423.12(b)(4) (BATW).

²⁸ See *id.* §§ 423.13(o), 423.19(i).

²⁹ *Id.* § 423.19(f)(1).

- (5) Provide "a copy of the most recent integrated resource plan for which the applicable state agency approved the retirement or repowering of the unit subject to the ELGs, certification of electric generating unit cessation under 40 CFR 257.103(b), or other documentation supporting that the electric generating unit will permanently cease the combustion of coal by December 31, 2028"; and
- (6) "[I]nclude, for each such electric generating unit, a timeline to achieve the permanent cessation of coal combustion . . . [which] shall include interim milestones and the projected dates of completion."³⁰

Alabama Power provides information to address each of these requirements in the remaining subsections of this letter.

a. Identification of Units, Dates, and Whether each Unit will Retire or Convert its Fuel Source (Requirements (1) – (3))

| Unit | Retirement/Fuel Conversion | Projected Date of Permanent Cessation |
|--------------|----------------------------|---------------------------------------|
| Barry Unit 4 | Fuel Conversion | 12/31/2028 [†] |
| Barry Unit 5 | Retirement | 12/31/2028 [†] |

[†] These projected dates have been selected to maximize Alabama Power's ability to react and respond to inherent uncertainties and unexpected developments that can arise in the context of such decisions. To the extent Alabama Power is reasonably able (consistent with proper planning and system reliability) to implement these decisions in a more expedited manner, it will undertake to do so. Alabama Power will disclose any change in the projected date(s) by and through the Annual Progress Reports required by 40 C.F.R. § 423.19(f)(3) & (4).

b. Identification of Regulatory Body and whether Retirement or Fuel Conversion has been Approved (Requirement (4))

The retail electric utility operations of Alabama Power are regulated by the Alabama Public Service Commission (APSC) pursuant to Title 37 of the Alabama Code. Formal authorization by the APSC of the unit decisions described in part III.a. above is not required under Alabama law. Even so, the APSC is informed of such unit decisions, and the reasons for them, by virtue of its ongoing regulatory oversight and monitoring of Alabama Power's jurisdictional operations.

³⁰ *Id.* § 423.19(f)(2).

c. Additional Support that the Units will Permanently Cease Coal Combustion (Requirement (5))

Alabama Power updates its integrated resource plan (IRP) on an annual basis and typically submits a report to the APSC on a triennial basis³¹ that summarizes the results of its most recent IRP. The Company's 2021 IRP does not incorporate the unit decisions referenced in part III.a. because those decisions were finalized after that IRP was completed. The decisions reflected in this NOPP will be incorporated in the Company's 2022 IRP. When the next triennial report to the APSC becomes available, Alabama Power can provide it for ADEM's review.

Because Alabama Power initiated closure of Plant Barry's ash pond in April 2019, it was unnecessary for Alabama Power to submit to EPA a site-specific alternative closure request under 40 C.F.R. § 257.103(f)(2) (or self-certify pursuant to 40 C.F.R. § 257.103(b) (2015)) based on the permanent cessation of coal-fired boiler(s) by a date certain. The Company therefore cannot submit this documentation as additional support.

As for "other documentation supporting that the electric generating unit[s] will permanently cease the combustion of coal by December 31, 2028[,]" appropriate disclosures related to these decisions by Alabama Power will be made in upcoming public submittals pursuant to the Securities Exchange Act of 1934, which can also be provided for ADEM's review. Finally, this submittal concludes with the customary NPDES certification statement, signed by a responsible corporate official of Alabama Power. This statement provides further support by attesting to the Company's intention to permanently cease coal combustion at the above-referenced Barry units prior to December 31, 2028, as explained herein.

d. Unit-Specific Compliance Timelines with Interim Milestones (Requirement (6))

Set out below are the compliance timelines with interim milestones based on available information. Given the cessation of coal combustion at Units 4 and 5 is still several years away and Alabama Power only recently finalized its decision to select this 2020 ELG Rule compliance subcategory, Alabama Power reserves the right to update/supplement the timelines for each Barry unit, including by and through the Annual Progress Report requirement for the permanent cessation subcategory.³²

³¹ The last such submittal to the APSC was the summary report for the 2019 IRP.

³² See 40 C.F.R. § 423.19(f)(3)-(4).

i. Unit 4 Compliance Timeline with Interim Milestones

3rd/4th Quarter 2022: Submit the latest (2022) Integrated Resource Plan information to the APSC, typically as part of a triennial submission

December 31, 2028: Permanent cessation of coal combustion

ii. Unit 5 Compliance Timeline with Interim Milestones

3rd/4th Quarter 2022: Submit the latest (2022) Integrated Resource Plan information to the APSC, typically as part of a triennial submission

December 31, 2028: Permanent cessation of coal combustion

IV. Conclusion

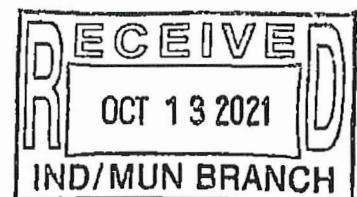
As set forth above, Alabama Power submits this NOPP to request that Plant Barry's NPDES permit be modified to include conditions and limitations corresponding to the 2020 ELG Rule's compliance subcategory for "permanent cessation of coal combustion by December 31, 2028" for both FGD wastewater and BATW.³³ Alabama Power requests ultimate compliance dates of December 31, 2028 for the affected units (Units 4 and 5), and will comply with the TSS and oil and grease limits contained in 40 C.F.R. §§ 423.12(b)(11) (FGD wastewater) (Unit 5 only) and 423.12(b)(4) (BATW) until such time as the units are either retired or repowered.

Alabama Power further requests that—despite the submission of today's NOPP—ADEM modify Plant Barry's NPDES permit to include conditions and limitations corresponding to each of the other compliance subcategories referenced in 40 C.F.R. § 423.13(o), as well as the generally applicable effluent limitations (with a compliance date of December 31, 2025), given 40 C.F.R. § 423.13(o) allows Alabama Power to automatically transfer to and/or from various compliance options prior to established deadlines.³⁴ Lastly, Alabama Power requests the inclusion of permit provisions that afford Plant Barry the related protections set forth in 40 C.F.R. §§ 423.18, 423.19(g), and 423.19(j).

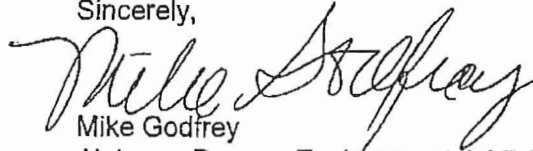
Alabama Power appreciates this opportunity to provide ADEM with information relevant to its modification of Plant Barry's NPDES permit. If ADEM requires any additional information, or if Alabama Power can assist in any other manner, please do not hesitate to contact us at your convenience.

³³ See *id.* §§ 423.11(w) (defining "permanent cessation of coal combustion"), 423.13(g)(2)(i) (limits applicable to FGD wastewater), 423.13(k)(2)(ii) (limits applicable to BATW), 423.19(f) (NOPP requirements).

³⁴ See *id.* §§ 423.13(o), 423.19(i).



Sincerely,



Mike Godfrey
Alabama Power - Environmental Affairs

I certify under penalty of law that this document and all enclosures were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Susan Comensky
Vice President of Environmental Affairs
Alabama Power Company

Testimony of John B. Kelley

Exhibit JBK-2

CONFIDENTIAL AND OMITTED

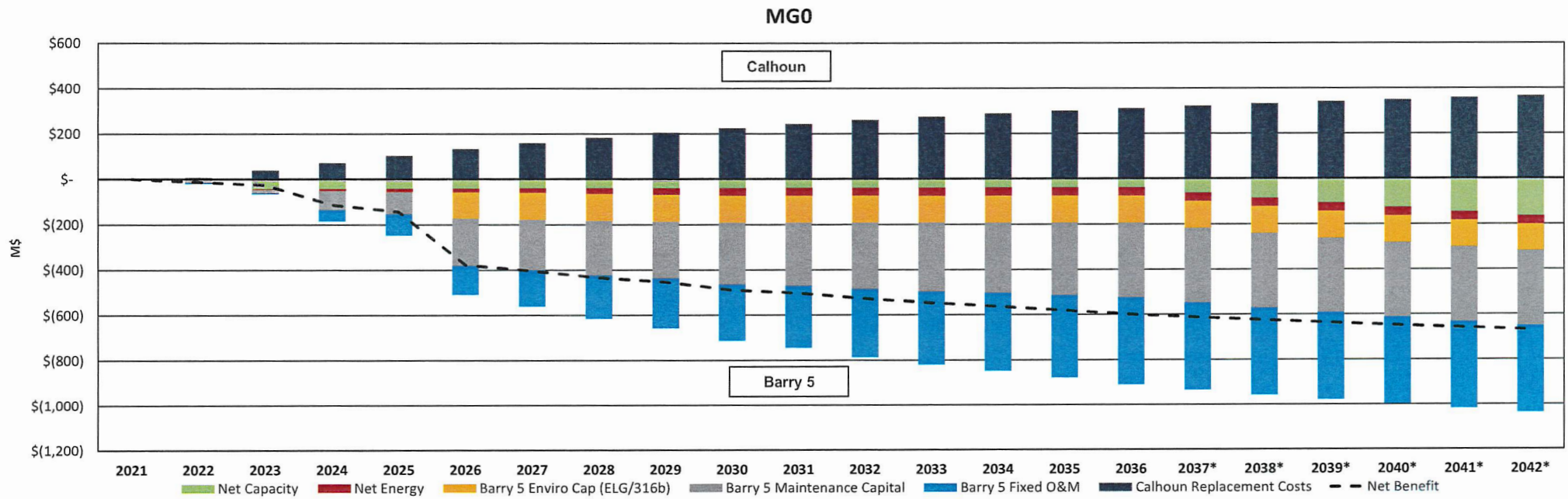
Direct Testimony of John B. Kelley

Exhibit JBK-3

Barry 5 Operation vs. Calhoun Acquisition



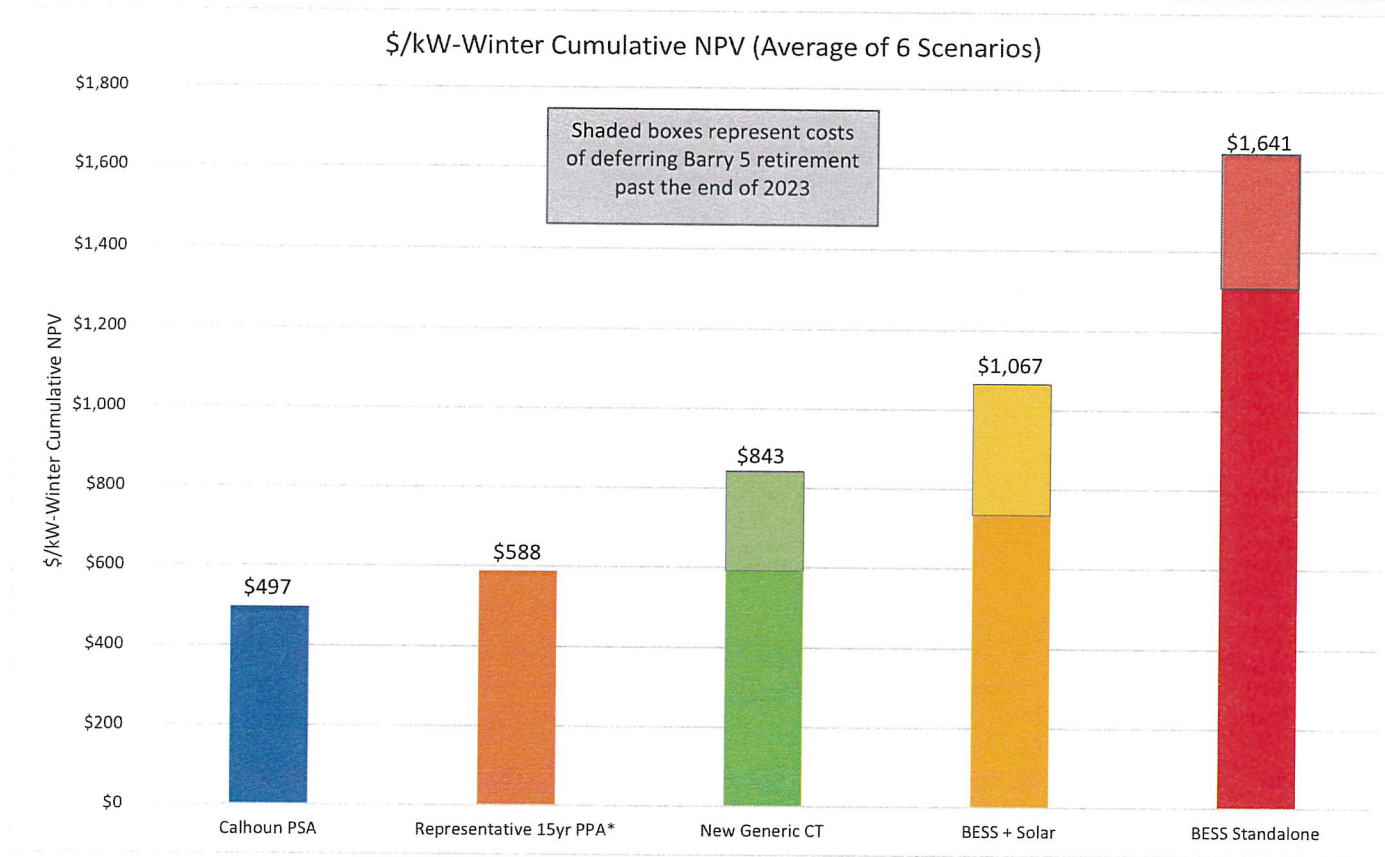
| 2021 NPV (M\$) | | |
|----------------|---------|---------|
| LG0 | MG0 | HG0 |
| (\$705) | (\$670) | (\$580) |
| LG20 | MG50 | HG20 |
| (\$770) | (\$850) | (\$700) |



*Generic CT replacement costs and capacity values (2037-2042) to equalize Barry 5 with the life of Calhoun are not depicted because these costs and benefits net to \$0

Direct Testimony of John B. Kelley
Exhibit JBK-4

Calhoun Acquisition vs. Alternatives



* PPA is based on the first available unselected project from the 2019 RFP solicitation. This resource option is no longer available and is included for indicative pricing purposes only.

Direct Testimony of John B. Kelley
Exhibit JBK-5

Market Comparison of Peaking Capacity



| Type | Plant | Date | M\$ | \$/kW | MW | COD | Config | Technology | Purchaser/Owner | Seller |
|------|--|----------------|-------|---------|-----|------|--------|--------------|------------------------------------|------------------------|
| CT | Calhoun (AL) | Oct 2022 | \$180 | \$242 | 743 | 2003 | 4 CT | GE 7 FA | APC | Harbert |
| CT | Valmont Facility (CO) | Jun 2020 | \$19 | \$430 | 43 | 1973 | 1 CT | No info | Public Service Company of Colorado | IIF US Holding GP, LLC |
| CT | Gulf Clean Energy Center (FL) ⁽¹⁾ | Projected 2022 | \$449 | \$479 | 938 | 2022 | 4 CT | GE 7 FA | Gulf Power/NextEra | Self-Build |
| CT | Washington Parrish EC (LA) | Nov 2020 | \$261 | \$630 | 414 | 2020 | 2 CT | GE 7 FA | Entergy | Calpine |
| CT | AB Brown Generating Station (IN) | Projected 2024 | \$323 | \$702 | 460 | 2024 | 2 CT | GE 7 FA | CenterPoint Energy, Inc. | Self-Build |
| CT | Carlsbad Energy Center (CA) | Feb 2019 | \$988 | \$1,873 | 528 | 2018 | 5 CT | GE LMS100-PA | Clearway Energy, Inc. | NRG Energy, Inc. |

Data is sourced from S&P Global Market Intelligence, unless otherwise noted

(1) Data is sourced from the Gulf/NextEra 10-year site plan

CONFIDENTIALITY AGREEMENT

THIS CONFIDENTIALITY AGREEMENT (“Agreement”), entered into and made effective as of the ___ day of _____, is by and between Alabama Power Company (“Company”), [_____] (“Intervenor”), and its Reviewing Representatives, as defined below.

W I T N E S S E T H:

WHEREAS, the Company has filed a petition for a certificate of convenience and necessity with the Alabama Public Service Commission in Docket No. _____ (the “Petition”); and

WHEREAS, the non-public version of the Petition includes information that is proprietary and confidential to the Company and one or more third parties, the public disclosure of which could materially and adversely affect the effective and successful conduct of the Company’s and/or the third parties’ businesses, result in competitive disadvantage and business injury to them, and/or cause harm to other customers of the Company; and

WHEREAS, Intervenor has sought leave to intervene in Docket No. _____ and has been granted party status, with all rights and privileges as directed by the Commission in accordance with applicable law; and

WHEREAS, in connection therewith, Intervenor desires access to the non-public version of the Petition and other Confidential Information, as defined below; and

WHEREAS, to avoid any harmful outcomes, the Company desires to put in place this Agreement in order to safeguard against the intentional or inadvertent disclosure of any and all Confidential Information to third parties; and

WHEREAS, as evidenced by their execution of this Agreement, Intervenor and its Reviewing Representatives are willing to accept and be legally bound by the terms and conditions set forth herein, as a precondition for the production of Confidential Information by the Company to them.

NOW, THEREFORE, in consideration of the mutual promises and covenants made herein, and with the intent to be legally bound hereby, the Company, Intervenor and Reviewing Representatives agree as follows:

1. As used in this Agreement, “Confidential Information” means: (i) any testimony and exhibits of the Company marked Confidential; and (ii) all information produced by the Company in response to discovery or at a hearing on the Petition that has been designated, orally or in writing, as Confidential Information. In the event the Company orally designates Confidential Information, the Company shall thereafter provide a copy of the Confidential Information marked accordingly and any unmarked copy previously supplied shall be returned to the Company. Confidential Information also includes “Attorneys’ Eyes Only” information, as designated by Company in accordance with Paragraph 7 below. The Company has the discretion to determine what Confidential Information it will make available under this Agreement; provided, however, Intervenor may timely object to any such determinations by the Company, first to the Company, and, if necessary, upon failure of the Company and Intervenor to timely resolve such

objection, to the Alabama Public Service Commission. In any case, the Company's determinations as to Confidential Information shall in no way diminish or restrict Intervenor's discovery rights as permitted by the Alabama Public Service Commission.

2. Confidential Information shall not include information which:

- (i) is or becomes generally available to the public other than as a result of acts by Intervenor or a Reviewing Representative, anyone to whom either supplies the Confidential Information, or anyone whose possession of the Confidential Information also is governed by a confidentiality agreement;
- (ii) is disclosed to Intervenor or a Reviewing Representative by a third party which is not, to the knowledge of either, prohibited from disclosing such information by a contractual, legal or other duty to the Company; or
- (iii) is provided to Intervenor or a Reviewing Representative by the Company and is not designated or identified as "Confidential Information", at the time or subsequently, in accordance with this Agreement.

3. In the event Confidential Information is addressed in a deposition, the Company, within five (5) days of the receipt of the deposition transcript, shall provide written notice to Intervenor of the deposition pages that constitute Confidential Information hereunder.

4. In the event the Company determines that Confidential Information has been disclosed without having been so marked, the Company reserves the right to designate the Confidential Information by providing contemporaneous notice to Intervenor and, as necessary, providing a copy of the Confidential Information marked accordingly. Thereafter, such Confidential Information shall be subject to the terms and conditions of this Agreement.

5. As used in this Agreement, "Reviewing Representative" means a person who has signed the attached Appendix, or who has executed a separate copy of this Agreement, for purposes of reviewing or receiving Confidential Information, who is:

- (i) an employee of Intervenor who has been granted party status in Docket No. _____;
- (ii) an attorney representing Intervenor;
- (iii) attorneys, paralegals and other employees associated with an attorney described in Paragraph 5(ii) for purposes of Intervenor's participation in Docket No. _____; or
- (iv) an expert, consultant, or outside law firm (or an employee of such expert, consultant, or outside law firm) retained by Intervenor for purposes of Intervenor's participation in Docket No. _____.

Intervenor shall provide the Company with a list of all of its Reviewing Representatives and shall promptly update such list when new any Reviewing Representative is added.

6. Except as provided in Paragraph 7(ii), nothing in this Agreement shall be construed to impose liability on Intervenor for the mishandling of confidential information by a Reviewing Representative who falls into the category of persons set forth in Paragraph 5(iv) above; provided, however, that such Reviewing Representative has executed an agreement in form and substance comparable with this Agreement prior to receiving any Confidential Information from Intervenor and Intervenor is not otherwise in breach of this Agreement.

7. Attorneys' Eyes Only: For Confidential Information that is proprietary and confidential to third parties, the Company reserves the right to designate such information Attorneys' Eyes Only and limit production of such information only to the following:

- (i) an attorney, paralegal, or other employee associated with the representing Intervenor;
- (ii) upon representation of necessity by Intervenor's attorney, to the category of persons set forth in Paragraph 5(iv); provided, however, that in the event any such person breaches this Agreement with respect to Attorneys' Eyes Only information, Intervenor shall be jointly and severally liable for any resulting damages; or
- (iii) attorneys, paralegals, or other employees of the Alabama Public Service Commission or the Office of the Attorney General of the State of Alabama.

Any challenge to the Company's designation "Attorneys' Eyes Only" shall follow the process set forth in Paragraph 1 for objections to a Company determination that information is Confidential Information.

8. Intervenor and its Reviewing Representatives independently agree to protect and maintain the confidentiality of all Confidential Information and shall not, directly or indirectly, in whole or in part, or in any derivative form:

- (i) use such Confidential Information for any purpose other than in connection with Intervenor's direct participation in Docket No. _____; provided, however, that the use of Confidential Information in connection with the above shall include appropriate protections to maintain the confidential nature of the information including, without limitation, the employment of redactions, sealed pleadings, and other such measures; or
- (ii) disclose such Confidential Information to any person who is not a signatory to this Agreement, without regard to whether such person is an officer, employee or staff member of Intervenor; holds a membership interest in or affiliation with Intervenor; or is an officer, employee or staff member of an affiliate or subsidiary of Intervenor.

For the avoidance of doubt, nothing in this paragraph shall be deemed to restrict Intervenor from lawfully seeking through discovery in any other administrative or judicial proceeding information or materials produced in this proceeding in accordance with this Agreement.

9. In the event Intervenor or a Reviewing Representative becomes aware of an actual or potential breach of this Agreement including, without limitation, the actual or potential disclosure or review of Confidential Information by any person who has not executed this Agreement, or any actual or potential unauthorized use of Confidential Information, Intervenor or the Reviewing Representative shall, to the extent practicable, take steps to prevent such actual or potential breach and shall also promptly give written notice to the Company of such facts.

10. Intervenor and each Reviewing Representative expressly understands and agrees that in the event of any breach or threatened breach of this Agreement, the Company could be irreparably and immediately harmed and may not be made whole by monetary damages and may be entitled to, in addition to any other remedy to which it may be entitled at law or in equity, seek injunctive relief. In the event of a breach of this Agreement, the Company shall be entitled to all remedies available at law or in equity, including all costs and expenses (including reasonable attorneys' fees) incurred by the Company in connection with efforts to enforce the terms and conditions of this Agreement.

11. The Parties agree that this Agreement shall be construed in accordance with the laws of the State of Alabama, without reference to its conflict of laws principles. The Company, Intervenor and each Reviewing Representative further agree to submit to the jurisdiction of the state and federal courts situated in Jefferson County, Alabama, to enforce the terms and conditions of this Agreement. THE COMPANY, INTERVENOR AND EACH REVIEWING REPRESENTATIVE WAIVE, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT TO A TRIAL BY JURY IN RESPECT OF ANY PROCEEDINGS ARISING OUT OF RELATING TO THIS AGREEMENT. Any judgment awarded may be enforced by any court having competent jurisdiction thereof.

12. Intervenor and each Reviewing Representative expressly understand and agree that by gaining access to Confidential Information in accordance with this Agreement, they shall be deemed ineligible, for a period of three (3) years from the date of such access, from:

- (i) any involvement in the development of proposals to, or the negotiation and preparation of any contracts or other arrangements with, the Company or any of its affiliates within the Southern Company system related to the supply of capacity, energy, and/or renewable attributes associated with any generating facility; or
- (ii) any participation in a Request for Proposal ("RFP"), or any consultation with or representation of a participant in an RFP, that is extended by the Company or any of its affiliates within the Southern Company system and that solicits proposals for such supply of capacity, energy, and/or renewable attributes associated with any generating facility.

13. All Confidential Information in the possession of Intervenor or a Reviewing Representative at this conclusion of proceedings related to Docket No. _____ shall be returned or destroyed at the election of the Company, including all originals, copies, translations, notes, or any other form of said material, as well as any and all written, printed, or other material or other information derived from the Confidential Information. To the extent the Company directs the destruction of Confidential Information, Intervenor and each Reviewing Representative shall promptly provide written or electronic confirmation to the Company that the requirements of this

paragraph have been satisfied. If Intervenor or a Reviewing Representative determines it no longer has a need to retain the Confidential Information, it may elect to so notify the Company and wait ten (10) days for the Company to state a preference for its return or destruction. Absent an expression of preference by Company during that period, Intervenor or a Reviewing Representative may do either, and so notify the Company.

14. The obligations and commitments established by this Agreement, except where otherwise provided, shall remain in full force and effect for five (5) years following the effective date.

15. This Agreement may be executed in counterparts, each of which is deemed an original, but all of which together constitute one and the same instrument. Facsimile/electronic signatures hereto are deemed original signatures.

[SIGNATURE BLOCKS ON SUBSEQUENT PAGE]

IN WITNESS WHEREOF, the parties hereto have entered into this Agreement as of the day and year first herein above written.

Intervenor

Printed Name: _____

Signature: _____

Title: _____

Date: _____

Alabama Power Company

Printed Name: _____

Signature: _____

Title: _____

Date: _____

APPENDIX

List of Intervenor's Reviewing Representative signatories to the foregoing Confidentiality Agreement pertaining to Confidential Information provided or made available in connection with this Agreement. Signatories below each certify that they have read the foregoing Confidentiality Agreement, understand the obligations and commitments therein, and agree to be personally bound thereby.

By: _____

Name: _____

Title: _____

Date: _____

By: _____

Name: _____

Title: _____

Date: _____

By: _____

Name: _____

Title: _____

Date: _____

By: _____

Name: _____

Title: _____

Date: _____

By: _____

Name: _____

Title: _____

Date: _____

By: _____

Name: _____

Title: _____

Date: _____

By: _____

Name: _____

Title: _____

Date: _____

By: _____

Name: _____

Title: _____

Date: _____

November 1, 2021

NOTICE OF PENDING PETITION

Alabama Power Company

Petitioner

Docket _____

PETITION: For a certificate of convenience and necessity for the acquisition of existing combustion turbine generating capacity in Calhoun County, Alabama, together with all transmission arrangements, structures, substations, and facilities, environmental control measures, facilities or arrangements for the handling, treatment, transportation, delivery, storage and processing of fuel, and any and all other appliances, appurtenances, facilities, rights, equipment, acquisitions, commitments and accounting authorizations necessary for or incident thereto.

Interested parties are hereby advised that the above-captioned Petition by Alabama Power Company was filed with and received by the Commission on October 28, 2021. All petitions for leave to intervene in this matter must be filed by 5:00 PM (CDT) on November 15, 2021. Petitions shall set forth the basis for the proposed intervention, including the position and interest of the petitioner in the proceeding. The above-described deadline and requirements governing interventions by any interested parties will be strictly adhered to for purposes of this proceeding. A subsequent procedural order pertaining to the hearing on the Company's Petition, as well as any attendant matters, will be issued soon thereafter.

By the Commission:

Walter L. Thomas, Jr.
Secretary of the Commission