

March 23, 2022

**VIA ELECTRONIC FILING**

Project No. 2628-066  
R.L. Harris Hydroelectric Project  
Response to License Application Deficiencies

Ms. Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street NE  
Washington, DC 20426

Dear Secretary Bose,

Alabama Power Company (Alabama Power) is the Federal Energy Regulatory Commission (FERC or Commission) licensee for the R.L. Harris Hydroelectric Project (Harris Project) (FERC No. 2628-066). Alabama Power filed the Final License Application (FLA) for the Harris Project on November 23, 2021. On December 23, 2021, FERC issued a License Application Deficiencies and Additional Information Request (AIR #1) letter to Alabama Power requesting that Alabama Power correct the deficiencies in the application and provide responses to the additional information request within 90 days (i.e., March 23, 2022)<sup>1</sup>.

On February 15, 2022<sup>2</sup>, FERC issued a second AIR (AIR #2) with a response due within 60 days. On March 1, 2022<sup>3</sup>, Alabama Power requested an extension of time to June 15, 2022, to respond to AIR #1 and AIR #2 concurrently. On March 3, 2022<sup>4</sup>, FERC granted Alabama Power's request for an extension of time on the AIRs.

Alabama Power is filing the response to the deficiencies identified in the December 23, 2021 letter, pursuant to 18 C.F.R. section 16.9(b)(2), by the original due date of March 23, 2022 (Attachment A). FERC noted in their December 23, 2021 letter that if the correction of any deficiency or requested information caused another part of the application to be inaccurate, that part of the application must be revised and refiled by the due date. Therefore, Alabama Power is filing a revised Exhibit D (Attachment B) and a revised Exhibit G. The most recent versions of the Exhibits will also be available on the Harris Relicensing website at [www.harrisrelicensing.com](http://www.harrisrelicensing.com).

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<sup>1</sup> Accession # 20211223-3032

<sup>2</sup> Accession # 20220215-3039

<sup>3</sup> Accession # 20220301-5206

<sup>4</sup> Accession # 20220303-3044

If there are any questions concerning this filing, please contact me at [arsegars@southernco.com](mailto:arsegars@southernco.com) or 205-257-2251.

Sincerely,



Angie Anderegg  
Harris Relicensing Project Manager

Attachment A – Response to Harris Project License Application Deficiencies  
Attachment B – Revised Harris Project Exhibit D

cc: Harris Stakeholder List

Attachment A

Response to Harris Project License Application Deficiencies

## **DEFICIENCIES**

### **Initial Statement**

1. *Section 5.18(a)(2)(v) of the Commission's regulations requires that the license application identify all Indian tribes that may be affected by the project. Section (2)(v) of the Initial Statement provides a list of tribes that were contacted and invited to participate, including the Alabama-Coushatta Tribe of Texas, Alabama-Quassarte Tribal Town, Cherokee Nation, Jena Band of Choctaw Indians, Kialegee Tribal Town, Mississippi Band of Choctaw Indians, Chickasaw Nation, Choctaw Nation of Oklahoma, Coushatta Tribe of Louisiana, Muscogee (Creek) Nation of Oklahoma, Poarch Band of Creek Indians, Seminole Nation of Oklahoma, Seminole Tribe of Florida, United Keetowah Band of Cherokee Indians, and Thlopthlocco Tribal Town. While the list does not include any representatives from the Eastern Band of Cherokee Indians, whose ancestral lands include Jackson County, several representatives from this tribe are included in Alabama Power's mailing list in the license application. Please confirm whether the Eastern Band of Cherokee Indians was contacted and invited to participate in the relicensing process.*

### **Alabama Power Response:**

Regarding the Initial Statement, FERC requested clarification on whether the Eastern Band of Cherokee Indians was contacted and invited to participate in the Harris relicensing process. As FERC notes in their comments, several representatives of the Eastern Band of Cherokee Indians were included in Alabama Power's mailing list in the license application. In addition, Alabama Power included the Eastern Band of Cherokee Indians in the Harris Action Team (HAT) 6 correspondence, including the development of the Historic Properties Management Plan (HPMP). The inadvertent omission of the Eastern Band of Cherokee Indians from the list of tribes in the Initial Statement does not reflect this tribe's lack of inclusion in the Harris relicensing process.

## Exhibit D

2. Section 4.51(e)(2) of the Commission's regulations requires that Exhibit D include an estimate of the amount which would be payable if the project were to be taken over pursuant to section 14 of the Federal Power Act upon expiration of the license in effect [see 16 U.S.C. 807], including: (i) fair value; (ii) net investment; and (iii) severance damages. Exhibit D of the license application provides an amount for the net investment but does not include amounts for the fair value or severance damages. As noted on pages D-3 through D-5 in Exhibit D of the license application, it is understood that those amounts could change based on many factors and would need to be recalculated if project takeover is proposed in the future. However, estimates for the fair value and severance damages are required to be filed with the license application. To address this deficiency, file an estimate for the fair value and severance damages.

### Alabama Power Response:

#### **18 CFR § 4.51(e)(2)(i) Fair Value:**

The most likely method of replacing the energy and capacity of the R.L. Harris Dam Hydroelectric Project (Harris Dam Project, Harris Dam or Project), if it were not available, is with a new Combustion Turbine (CT) plant.

- The investment cost for producing an equivalent amount of energy and capacity at Harris Dam under the no action alternative is **\$1,289,748,000** for the next 30 years in **2021** dollars. If Alabama Power did not have Harris Dam, the additional cost incurred in producing an equivalent amount of energy and capacity would be **\$1,289,748,000 + \$134,046,000** (the estimated book value of Harris Dam at the end of **2021**) = **\$1,423,794,000** for a 30-year term. This represents the additional amount Alabama Power would have to spend to replace the lost energy and capacity of Harris Dam under the no action alternative, and is the Fair Value.
- The investment cost for producing an equivalent amount of energy and capacity at Harris Dam under Alabama Power's proposal is **\$1,272,962,000** for the next 30 years in **2021** dollars. If Alabama Power did not have Harris Dam, the additional cost incurred in producing an equivalent amount of energy and capacity would be **\$1,272,962,000 + \$134,046,000** (the estimated book value of Harris Dam at the end of **2021**) = **\$1,407,008,000** for a 30-year term. This represents the additional amount Alabama Power would have to spend to replace the lost energy and capacity of Harris Dam under its proposal, and is the Fair Value.

#### **18 CFR § 4.51(e)(2)(ii) Net Investment:**

Alabama Power's net investment in the Harris Dam Project is approximately **\$134,046,000** as of 12/31/2021. The figure is in year **2021** dollars.

#### **18 CFR § 4.51(e)(2)(iii) Severance Damages:**

Alabama Power estimates that the severance damages for the Harris Dam Project are approximately \$0.

3. Section 4.51(e)(8) of the Commission’s regulations requires the on-peak and offpeak values of project power, and the basis for estimating the values, for projects that are proposed to operate in a mode other than run-of-river. Page D-15 in Exhibit D of the license application states that “For Alabama Power, hydropower is sold under retail rates set by the [Alabama Public Service Commission].” This appears to be the basis for estimating the on-peak and off-peak values of project power, but the current values were not provided. To address this deficiency, file the on-peak and off-peak values of project power.

**Alabama Power Response:**

The following table presents the requested information. These values are based on Alabama Power’s avoided costs. The peak period below represents June through September.

Year	Peak Season Peak Hours (\$/MWhr)	Peak Season Off-Peak Hours (\$/MWhr)	Annual All Hours (\$/MWhr)
2021	32.33	24.59	25.34

4. Section 4.51(e)(9) of the Commission’s regulations requires that Exhibit D include the estimated average annual increase or decrease in project generation, and the estimated average annual increase or decrease of the value of project power, due to a change in project operations (i.e., minimum bypass flows; limits on reservoir fluctuations). Page D-16 in Exhibit D of the license application provides an estimated average annual decrease in the value of project power. Exhibit D does not include an estimated average annual increase or decrease in project generation with the proposed minimum flow unit. To address this deficiency, file the estimated average annual increase or decrease in project generation with the minimum flow unit.

**Alabama Power Response:**

Under the No Action Alternative, estimated annual energy production is 177,487 MWh. Under Alabama Power’s proposal with the minimum flow unit, expected annual energy production is 175,177 MWh. This results in an annual energy loss of 2,310 MWh due to operation of the minimum flow unit.

## **Exhibit G**

5. *Section 4.41(h) of the Commission's regulations requires an Exhibit G map that identifies, by legal subdivision, lands owned in fee by the applicant, lands that the applicant plans to acquire in fee, and lands over which the applicant has acquired or plans to acquire rights by other than fee title, including rights acquired or to be acquired by easement or lease. The Exhibit G maps indicate that the licensee has acquired all land rights necessary to operate the project; however, the maps do not identify lands within the project boundary by legal subdivision. To address this deficiency, file revised Exhibit G maps that identify land within the project boundary by legal subdivision.*

*In addition, in updating the Exhibit G maps please use shading to distinguish lands owned by Alabama Power and, grouped by ownership category, lands owned by local municipalities, the State of Alabama, the federal government, and private interests. Please also provide a table on a revised Exhibit G Map 1 listing the existing and proposed acreages of any lands owned by Alabama Power, local municipalities, and private interests by group, as well as, that of lands of the State of Alabama and the federal government by managing agency. (The table of federal lands on Exhibit G Map 9 is sufficient.)*

### **Alabama Power Response:**

Included with this response to deficiencies, Alabama Power is filing revised Exhibit G maps that utilize the United States Geological Survey (USGS) Topographic Maps as background. The State of Alabama uses the Public Land Survey System (PLSS) to identify legal subdivisions of property. The USGS maps incorporated as the background in the revised Exhibit G maps illustrate these legal subdivisions (i.e., section, township, range).

Additionally, Alabama Power revised the Exhibit G maps to symbolize project lands owned in fee, project lands held in easement, and project lands owned by the federal government. A table has been added to Exhibit G Sheet 1, which provides the total acreage of each of these categories for both the existing project boundary and the proposed project boundary. Please note that, as required by the Commission's regulations, the Exhibit G drawings illustrate the proposed project boundary. When preparing the table for inclusion on Sheet 1, Alabama Power discovered a small piece of land that was included in error as project lands in the proposed Project Boundary. Therefore, the proposed Project Boundary as illustrated on the revised Exhibit G maps has been corrected, as well as the acreage totals provided in the table. Alabama Power is continuing to review whether this correction affects other Exhibits or reports. If any additional Exhibits or reports require revision due to this correction, Alabama Power will file these as part of its AIR response on or before June 15, 2022.

Lastly, please note that all lands up to the 795-foot mean sea level (msl) contour are project lands held in fee and all lands proposed to be added to the Harris Project Boundary are already owned in fee by Alabama Power. Due to the scale of the Exhibit G drawings, the fee-owned strips of Project lands located between the 793-foot msl and the 795-foot msl contours may not be visible due to the symbol of adjacent scenic easement strips. The scenic easement strips include lands held in easement and are located between the 795-foot msl and the 800-foot msl contours (or 50 horizontal feet, whichever is less, but never less than 795-foot msl).

6. *Section 4.41(h)(1) requires that Exhibit G maps show the location of the project as a whole with reference to the affected stream or other body of water and, if possible, to a nearby town or any other permanent monuments or objects, such as roads, transmission lines or other structures, that can be noted on the map and recognized in the field. The map must also show the relative locations and physical interrelationships of the principal project works and other features described under paragraph (b) of this section (Exhibit A).*

*The Exhibit G maps filed with the license application show the project boundary and the extent of Harris Lake at full pool (i.e., 793 feet mean seal level (msl)). However, the Exhibit G maps do not identify the affected streams, water bodies, transmission lines, or any other principal project works and features. Please identify and label the affected streams, Harris Lake, Harris Dam, the project transmission lines, and the other existing principal project works and features that can be labeled at the current map scale.*

**Alabama Power Response:**

The revised Exhibit G maps utilize the United States Geological Survey (USGS) Topographic Maps as background, which depict and label nearby roads, streams, and towns that can be identified in the field. Additionally, Alabama Power added labels to the Exhibit G maps that identify principal project works, including Harris Dam, project transmission lines, and project recreation sites.

Attachment B

Revised Harris Project Exhibit D

# EXHIBIT D

# STATEMENT OF COSTS AND

# FINANCING

R.L. Harris Hydroelectric Project

FERC No. 2628



Prepared by

**Alabama Power Company**

and

**Kleinschmidt Associates**

Revised March 2022



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## 1.0 INTRODUCTION

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Alabama Power Company (Alabama Power) operates the R.L. Harris Project (Harris Project) on the Tallapoosa River in Alabama under a license issued by the Federal Energy Regulatory Commission (FERC) (FERC No. 2628). The information in this Exhibit D of the Final License Application is required by FERC under the Code of Federal Regulations Part 18, § 4.51(e) and 16.10. This exhibit provides the statement of costs and financing for the Project and conforms to the requirements of Exhibit D.

## **2.0 ORIGINAL COSTS OF PREVIOUSLY CONSTRUCTED UNLICENSED FACILITIES**

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This section is not applicable to the Harris Project as Alabama Power is requesting a new license, not an initial license. Hereinafter in this exhibit, "Project" will apply to the Harris Project, a single development.

### **3.0 ESTIMATE OF THE AMOUNT PAYABLE IF THE PROJECT WERE TO BE TAKEN OVER PURSUANT TO SECTION 14 OF THE FEDERAL POWER ACT**

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To date, no agency or interested party has recommended a federal takeover of the Project pursuant to Section 14 of the Federal Power Act. If such a takeover were to occur, Alabama Power would have to be reimbursed for the net investment, not to exceed the fair value, of the property taken, plus severance damages (Section 14, Federal Power Act).

#### **3.1 FAIR VALUE**

The fair value of this Project is dependent on prevailing power values and license conditions, both of which are subject to change. The best approximation of fair value would likely be the cost to construct and operate a comparable power generating facility. Because of the high capital costs involved with constructing new facilities and the increase in fuel costs (assuming a fossil fueled replacement), the fair value would be considerably higher than the net investment. The most likely method of replacing the energy and capacity of the Project would be with a new Combustion Turbine Plant.

The investment cost for producing an equivalent amount of energy and capacity at Harris Dam under the no action alternative is \$1,289,748,000 for the next 30 years in 2021 dollars. If Alabama Power did not have Harris Dam, the additional cost incurred in producing an equivalent amount of energy and capacity would be \$1,289,748,000 + \$134,046,000 (the estimated book value of Harris Dam at the end of 2021) = \$1,423,794,000 for a 30-year term. This represents the additional amount Alabama Power would have to spend to replace the lost energy and capacity of Harris Dam under the no action alternative, and is the Fair Value.

The investment cost for producing an equivalent amount of energy and capacity at Harris Dam under Alabama Power's proposal is \$1,272,962,000 for the next 30 years in 2021 dollars. If Alabama Power did not have Harris Dam, the additional cost incurred in producing an equivalent amount of energy and capacity would be \$1,272,962,000 + \$134,046,000 (the estimated book value of Harris Dam at the end of 2021) = \$1,407,008,000 for a 30-year term. This represents the additional amount Alabama Power

would have to spend to replace the lost energy and capacity of Harris Dam under its proposal, and is the Fair Value.

### 3.2 NET INVESTMENT

In 2021, the net investment for the Project is forecasted to be approximately \$134,046,000. This amount includes the original costs, accumulated depreciation, capitalized capital work in progress, expenses prior to 2021, and net investment, according to the Commission's Uniform System of Accounts. Table 3-1 provides the Year 2020 Project costs.

**TABLE 3-1 PROJECT COSTS**

<b>Uniform System of Accounts No.</b>	<b>Title</b>	<b>Original Cost (\$)</b>	<b>Accumulated Depreciation (\$)</b>	<b>Net Investment (\$)</b>
302*	Relicensing Cost	N/A	N/A	N/A
303	Misc Plant	\$ 254,706.50	\$ 7,635.24	\$ 247,071.26
330	Land and Land Rights	\$ 35,228,538.08	\$ 13,296,744.12	\$ 21,931,793.96
331	Structures & Improvements	\$ 45,244,550.69	\$ 20,451,378.00	\$ 24,793,172.69
332	Reservoirs, Dams, and Waterways	\$ 113,368,226.40	\$ 54,157,512.09	\$ 59,210,714.31
333	Waterwheels, Turbines and Generators	\$ 33,501,716.06	\$ 14,669,280.45	\$ 18,832,435.61
334	Accessory Electrical Equipment	\$ 6,099,637.28	\$ 2,667,472.42	\$ 3,432,164.86
335	Misc. Power Plant Equipment	\$ 3,749,933.67	\$ 1,051,918.30	\$ 2,698,015.37
336	Roads, Railroads, and Bridges	\$ 2,036,089.07	\$ 981,550.06	\$ 1,054,539.01
337	ARO	\$ 6,209.28	\$ 6,209.28	\$ -
352	Structures & Improvements	\$ 35,379.36	\$ 26,588.35	\$ 8,791.01
353	Station Equipment	\$ 1,860,153.71	\$ 1,114,429.49	\$ 745,724.22
397	Communications Equipment	\$ 113,611.49	\$ 61,514.72	\$ 52,096.77
	<b>Totals</b>	<b>\$ 241,498,751.59</b>	<b>\$ 108,492,232.52</b>	<b>\$ 133,006,519.07</b>

Note: These are values as of 12/31/2020.

\*There are no 302 relicensing costs associated with the Project because this is the first time it has been relicensed.

### **3.3 SEVERANCE DAMAGES**

The Project provides power to the Alabama Power transmission and distribution system for ultimate consumption by Alabama Power's customers. Severance damages are determined either by the cost of replacing (retiring) equipment that is "dependent for its usefulness upon the continuance of the License" (Section 14, Federal Power Act), or the cost of obtaining an amount of power equivalent to that generated by the Project from the least expensive alternative source, plus the capital cost of constructing any facilities that would be needed to transmit the power to Alabama Power's customers, minus the cost savings that would be realized from not operating the Project. Alabama Power estimates that the severance damages for the Harris Dam Project are approximately \$0.

## 4.0 ESTIMATED COST OF NEW DEVELOPMENT

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The primary costs associated with new development within Alabama Power's proposal include the installation of the new minimum flow unit and two new recreation sites. Section 5 provides the total capital and operation and maintenance costs and annual operation and maintenance costs associated with new development and other protection, mitigation, and enhancement (PME) measures.

## 5.0 COSTS OF PME MEASURES

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Table 5-1 provides a summary of estimated costs of Alabama Power's proposed PME measures, including estimated total capital costs, estimated total operation and maintenance costs, and annual operation and maintenance costs. PME measures proposed in this Final License Application will result in approximately \$43,375,000 in capital costs, approximately \$34,000,000 total operations and maintenance costs, and an annual operations and maintenance cost of \$1,133,333 at the Harris Project.

Costs for the minimum flow provided in Table 5-1 do not reflect energy gains or losses.

**TABLE 5-1 ESTIMATED COSTS OF PROPOSED HARRIS PROJECT PME MEASURES**

<b>PM&amp;E MEASURE</b>	<b>TOTAL CAPITAL</b>	<b>TOTAL O&amp;M OVER 30 YEARS</b>	<b>ANNUAL O&amp;M</b>
Continue operating in accordance with ADROP to address drought management.	\$ 0	\$ 0	\$ 0-
Install, operate and maintain a Francis-type minimum flow unit to provide a continuous minimum flow of approximately 300 cfs in the Tallapoosa River below Harris Dam and with a generating capacity of approximately 2.5 MW. Final best gate flow would be determined following unit installation and performance testing.	\$ 37,900,000	\$2,250,000	\$ 75,000
Develop drought operations procedures for the minimum flow.	\$ 25,000	\$ 0	\$ 0
Develop and implement a Project Operations and Flow Monitoring Plan to monitor compliance with 1) Project Operation and Water Level Management; 2) flood control operations 3) drought management; and 4) flow releases from the Harris Dam.	\$ 100,000	\$ 300,000	\$ 10,000
Develop and implement an Aquatic Resources Monitoring Plan.	\$ 20,000	\$ 390,000	\$ 13,000
Develop and implement a Water Quality Monitoring Plan consistent with the 401 Water Quality Certification.	\$ 20,000	\$ 2,250,000	\$ 75,000
Continue operating the existing aeration system.	\$ 0	\$ 0	\$ 0
Incorporate an aeration system in the design of the new continuous minimum flow unit.	\$ 0	\$ 0	\$ 0
Continue to maintain the skimmer weir at the highest setting.	\$ 0	\$ 0	\$ 0

<b>PM&amp;E MEASURE</b>	<b>TOTAL CAPITAL</b>	<b>TOTAL O&amp;M OVER 30 YEARS</b>	<b>ANNUAL O&amp;M</b>
When conditions exist, and upon request from ADCNR, hold Harris Reservoir water levels constant or slightly increasing for a 14-day period for spring spawning.	\$ 0	\$ 0	\$ 0
Provide fish habitat improvements by adding habitat enhancements to Harris Reservoir.	\$ 0	\$ 900,000	\$ 30,000
Finalize and implement a Nuisance Aquatic Vegetation and Vector Control Program.	\$ 0	\$ 1,200,000	\$ 40,000
Develop and implement an Erosion Monitoring Plan.	\$ 20,000	\$ 300,000	\$ 10,000
Finalize and implement a Wildlife Management Plan (WMP) for Lake Harris and Skyline.	\$ 1,800,000	\$ 11,295,000	\$ 376,500
Finalize and implement a Shoreline Management Plan (SMP) for Lake Harris.	\$ 0	\$ 5,355,000	\$ 178,500
Implement proposed land additions to the Project Boundary and incorporate into Exhibit G.	\$ 0	\$ 0	\$ 0
Implement proposed land removals from the Project Boundary and incorporate into the Exhibit G.	\$ 0	\$ 0	\$ 0
Finalize and implement a Recreation Plan.	\$ 3,490,000	\$ 8,370,000	\$ 279,000
Finalize and implement a Historic Properties Management Plan (HPMP).	\$ 0	\$ 1,390,000	\$ 46,333

## 6.0 ESTIMATED ANNUAL COST OF THE PROJECT

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The estimated average cost of the Project before the proposed operating enhancements and PME measures (No Action alternative) will be approximately \$23,171,000 per year, levelized on 2020 dollars, based on a 30 year period of analysis. This estimate includes annualized values for the cost of capital, taxes, depreciation, and operation and maintenance expenses.

With Alabama Power's proposal, total Project costs will be approximately \$24,675,000 per year, levelized on 2020 dollars, based on a 30 year period of analysis. This estimate includes annualized values for the cost of capital, taxes, depreciation, and operation and maintenance expenses. The annual cost estimates associated with Alabama Power's proposal may not include all final costs. Should cost estimates change, Alabama Power will supplement this Final License Application filing to include these final costs.

## 7.0 ESTIMATED VALUE OF PROJECT POWER

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Alabama Power estimates total annual energy production of the Project under the No Action alternative to be approximately 177,500 megawatt hours (MWh), while total annual energy production of the Project under Alabama Power's proposal will be approximately 175,200 MWh. Energy produced at the Project is sold at prevailing regulated rates as approved by the Alabama Public Service Commission (APSC).

The estimated average annual Project cost under Alabama Power's proposal will be approximately \$140.9 per MWh. The summary of annual benefits and costs is provided in Table 7-1.

Were the Project not to be retained, additional combustion turbine generating capacity would be required to replace lost hydroelectric capacity. A simple cycle combustion turbine (CT) represents the lowest cost of capital to replace the capacity at Harris Dam. Cost estimates for capital and operation and maintenance for the CT option are developed internally based on proprietary sources of information and recent market information. However, the cost estimates developed fall within the ranges of technology cost estimates that have been produced recently from a variety of sources. Alternative capacity and energy equivalent to project capacity and energy is expected to cost approximately \$242.2 per MWh of average levelized annual cost over the same 30-year period of life expected for the Project. The natural gas prices used are based on the EIA Annual Energy Outlook for 2020.

Accordingly, the estimated annual value of the Project defined as the difference between the cost to operate the Project and the cost to replace the generation associated with said Project (*i.e.*, avoided cost) for Alabama Power's proposal is approximately \$101.4 per MWh (\$242.2 per MWh minus \$140.9 per MWh) or a total of \$17.8 million per year over the 30 year period.

**TABLE 7-1 SUMMARY OF ANNUAL BENEFITS AND COSTS**

	<b>No Action Alternative (Baseline)</b>	<b>Alabama Power's Proposal</b>
Annual Generation (MWh)	177,487	175,177
Average Annual Project Cost (\$)*	23,170,524	24,675,223
Average Annual Project Cost (\$/MWh)	130.55	140.86
Annual Replacement Cost (\$)	42,991,600	42,432,063
Annual Replacement Cost (\$/MWh)	242.22	242.22
Estimated Annual Project Value (Avoided Cost in \$)	19,821,076	17,756,840
Estimated Annual Project Value (Avoided Cost in \$/MWh)	111.68	101.37

\*Costs levelized over 30 years in 2020 dollars

## **8.0 SOURCES AND EXTENT OF FINANCING AND ANNUAL REVENUES**

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Alabama Power obtains its annual revenues generally from the sale of electricity under retail rates established by the APSC and under wholesale rate contracts approved by the Federal Energy Regulatory Commission.

Alabama Power has sufficient resources to finance the operational changes and PME measures in Alabama Power's proposal, as described in this Final License Application. If additional financing is necessary, Alabama Power will use its traditional sources of debt and equity financing.

A more detailed description of Alabama Power's financial information is provided in its most recent FERC Form 1.

## 9.0 COST TO DEVELOP THE LICENSE APPLICATION

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Alabama Power developed its application to relicense the Project which will be filed no later than November 30, 2021. Alabama Power estimates that the Project relicensing process costs are approximately \$10.2 million.

## 10.0 VALUE OF PROJECT POWER

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The on-peak and off-peak values of project power are presented in Table 10-1 below. These values are based on Alabama Power's avoided costs. The peak period represents the June through September months.

**Table 10-1 On-peak and Off-peak project power values**

<b>Year</b>	<b>Peak Season Peak Hours (\$/MWhr)</b>	<b>Peak Season Off-Peak Hours (\$/MWhr)</b>	<b>Annual All Hours (\$/MWhr)</b>
2021	32.33	24.59	25.34

## 11.0 THE EFFECT OF PROPOSED CHANGES IN PROJECT OPERATION

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Alabama Power estimates that the average annual decrease in the value of Project power (the difference between the avoided cost for the No Action Alternative and Alabama Power's Proposal) levelized on 2020 dollars over the same 30 year period of life expected for the Project will be approximately \$2,064,236 per year, based on the impact of the aforementioned change.

Under the No Action Alternative, estimated annual energy production is 177,487 mwh. Under Alabama Power's proposal with the minimum flow unit, expected annual energy production is 175,177 mwh. This results in an annual energy loss of 2,310 mwh due to operation of the minimum flow unit.