

July 12, 2021

VIA ELECTRONIC FILING

Project No. 2628-065
R.L. Harris Hydroelectric Project
Response to Updated Study Report (USR) Meeting Summary Disagreements and Study Dispute

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

Dear Secretary Bose,

Alabama Power Company (Alabama Power) is the Federal Energy Regulatory Commission (FERC) licensee for the R.L. Harris Hydroelectric Project (Harris Project) (FERC No. 2628). On April 12, 2021, Alabama Power filed the Updated Study Report (USR) along with three Draft Study Reports, four Final Study Reports, and a botanical inventory report. Comments on the three Draft Study Reports were due on May 26, 2021. Alabama Power held the USR Meeting with stakeholders and FERC on April 27, 2021. On May 12, 2021, Alabama Power filed the USR Meeting Summary. Comments on the USR Meeting Summary were due on June 11, 2021.

The Alabama Department of Conservation and Natural Resources (ADCNR), Federal Energy Regulatory Commission (FERC), and Alabama Rivers Alliance (ARA) submitted disagreements on the USR presentation and/or the USR meeting summary. Attachment A of this filing includes Alabama Power's responses to those disagreements and comments. In addition, ARA submitted a Dispute of Study for the Battery Energy Storage System (BESS) study. Alabama Power's response to the study dispute is provided in Attachment B.

Alabama Power is reviewing FERC and stakeholder comments on the USR and Draft Study Reports, as well as a small number of comments that were submitted on Final Study Reports. Alabama Power will address these comments, as applicable, and file all Final Study Reports with the Final License Application (FLA) in November 2021. The Final Study Reports will contain comment matrices listing the comment and how Alabama Power addressed the comments.

If there are any questions concerning this filing, please contact me at arsegars@southernco.com or 205-257-2251.

Sincerely,



Angie Anderegg
Harris Relicensing Project Manager

Attachment A: Alabama Power's Response to Disagreements on the Updated Study Report Meeting Summary for the R.L. Harris Hydroelectric Project

Attachment B: Alabama Power's Response to Alabama Rivers Alliance Study Dispute for the R.L. Harris Hydroelectric Project

cc: Harris Stakeholder List

ATTACHMENT A

Alabama Power's Response to Stakeholder Disagreements on the Updated Study Report Meeting
Summary for the R.L. Harris Hydroelectric Project

Pursuant to the Federal Energy Regulatory Commission's (FERC) Integrated Licensing Process (ILP) and 18 CFR § 5.15(f), Alabama Power Company (Alabama Power) filed the R.L. Harris Project Updated Study Report (USR) on April 12, 2021¹. The USR described Alabama Power's overall progress in implementing the study plans, and summarized the data collected and any variances from the study plan and schedule.

The Alabama Department of Conservation and Natural Resources (ADCNR), FERC, and Alabama Rivers Alliance (ARA) submitted comments disagreeing with certain aspects of the USR Meeting Summary for the R.L. Harris Project². The comments provided below state the disagreement on the USR Meeting and Meeting Summary, followed by Alabama Power's response. The comments have been truncated to present only that portion that contains the disagreement specific to the USR Meeting Summary or USR Meeting presentation.

Comments are presented in italic text and Alabama Power's response follows.

ADCNR Comments submitted May 27, 2021

ADCNR Comment:

On page 30 of the PowerPoint presentation from the USR meeting on April 27, 2021, the licensee presented variances from the Final Aquatic Resources Study Plan. ADCNR noted that methodology modifications were made to the Final Aquatic Resources Study Plan without ADCNR and other stakeholder consultation or guidance...

It should be noted that the reason for not using the 30+2 method, Auburn and the licensee stated in the PowerPoint presentation during the USR meeting, that it was determined in the field to not be feasible/effective for sampling the sites. If this is true the licensee should explain the statement in PAD, Volume 1, Appendix E, page 7, which states, Alabama Power sampled fish communities in 2017 using standardize methods developed by the Geological Survey of Alabama (GSA) and ADCNR (O'Neil 2006). This sampling method is commonly referred to as the "30+2" method. Samples were collected at the Malone and Wadley sites along the Middle Tallapoosa in the spring and fall and the Upper Tallapoosa sites in July and October." In addition, ADEM was able to successfully complete a 30+2 sampling method at Wadley in 2018....

Alabama Power Response:

Previous comments provided by ADCNR regarding the use of the 30+2 method were addressed in the Final Aquatic Resources Report filed with FERC on April 12, 2021³ and Alabama Power's response provided to ADCNR on June 4, 2021, and filed with FERC on June 15, 2021⁴.

¹ Accession No 20210412-5737

² Accession Nos. 20210527-5024, 20210609-3045, and 20210611-5070

³ Accession No. 20210412-5745

⁴ Accession No. 20210615-5110

ADCNR Comment:

ADCNR disagrees with the summary statement by the licensee on page 30 of the PowerPoint presentation from the USR meeting on April 27, 2021, that boat sampling methodologies are effective at sampling shallow areas within study sites. Both boat and barge electrofishing equipment may collect shallow water fish species specialists but do not provide an equivalent result of a targeted shallow fish population survey comparison that shallow water pre-positioned area electrofishing grids (PAE) or 30+2 sampling method would provide. Similarly, a shallow water electrofishing grid or 30+2 sampling method can collect deep-water fish species specialists but does not effectively sample deep water to provide reliable deep-water fish population results...”

Alabama Power Response:

Previous comments provided by ADCNR regarding the use of the 30+2 method were addressed in the Final Aquatic Resources Report filed with FERC on April 12, 2021, and Alabama Power's response provided to ADCNR on June 4, 2021, and filed with FERC on June 15, 2021.

ADCNR Comment:

On page 28 of the PowerPoint presentation from the USR meeting on April 27, 2021, it states, "Diversity was lower than Travnichuk and Maceina (1994), but overall trends in diversity upstream and downstream were similar." This statement fails to specify that this result from Travnichuk and Maceina (1994) and the Auburn Report was for the deep-water fish populations only. It should be included that Travnichuk and Maceina (1994) results suggested that the effect of flow regulation on species richness and diversity of fishes in deep water habitats was negligible in the Tallapoosa River system downstream of hydroelectric facilities, but that flow regulation appeared to alter shallow water fish assemblages with species richness progressively increasing with distance from Harris Dam. ... When discussing the Auburn Report's deep water fish population collections in the discussion and in overall USR meeting summaries include that reporting of the shallow water fish community monitoring between 2006 and 2016 indicates that fish densities in the regulated river downstream of Harris Dam were depressed when compared to unregulated sites (Irwin et al. 2019).

Alabama Power Response:

This comment was addressed in Alabama Power's response provided to ADCNR on June 4, 2021 and filed with FERC on June 15, 2021.

ADCNR Comment:

On page 48 of the Auburn report and on page 28 of the PowerPoint presentation from the USR meeting on April 27, 2021, it states, "Relative contribution of centrarchids lower than 1996 rotenone sample; combined contribution of cyprinids and catostomids similar to 1951 rotenone sample." Although proportionally this statement may be accurate, it is a deceiving conclusion to make regarding the overall density comparisons of cyprinids among studies..."

Alabama Power Response:

This comment was addressed in Alabama Power's response provided to ADCNR on June 4, 2021 and filed with FERC on June 15, 2021.

ADCNR Comment:

...Presenting only the Auburn Report deep water fish population results without including and discussing shallow water fish survey results presented in the PAD, Volume 1, Appendix E (plus additional supplementary material) in the Final Aquatic Resources Study Report and USR meeting conclusion statements is misleading to stakeholders in regard to the condition of overall fish population trends.

Alabama Power Response:

This comment was addressed in Alabama Power's response provided to ADCNR on June 4, 2021 and filed with FERC on June 15, 2021.

ADCNR Comment:

There have been two other notable variances from the Aquatic Resources Study Plan that should have been included in the USR summary presentation. The first variance involves the adequate selection of an upstream control site. In NOI, PAD, Scoping Document and Study Plans, ADCNR comments from October 1, 2018 (See ADCNR, P-2628-005 FERC ¶ 20181002-5006) "that selected sampling sites closely mirror those of samples collected historically and with the ADEM water quality and fish survey sites. This will allow for an ease of comparison over time and among various data sets." ADCNR had agreed with the Draft Aquatic Resources assessment that an alternative site was necessary for the current upstream control site due to its closely linked dam operation characteristics. ADCNR had requested input on site selection alternatives (See Attachment 2, page 18, ADCNR, P-2628-005 FERC ¶ 20210412-5745). Please include in the report why this was determined unnecessary and provide any comparison limitations the original upstream control site might contribute. The Auburn Report states on page 6, "There is little habitat heterogeneity at this site which is dominated by sluggish, turbid water" and page 47, "Higher catch rates of clupeids above the reservoir were likely due to the high connectivity between the reservoir and the Lee's Bridge site" indicating remaining researcher doubts about Lee's Bridge as an adequate control site. In addition, on page 22 of the Auburn Report, it states that Lee's Bridge was not accessible by boat during the winter due to reservoir drawdown. Using the Foster's Bridge access area, ADCNR frequently collects brood stock from the shoals above Lee's Bridge during early spring when Harris is still at winter pool and accessibility issues have not been problematic during low water. Overall, ADCNR remains concerned that the lack of an adequate control site could limit any strong conclusions when comparing data throughout the report.

Alabama Power Response:

This comment was addressed in Alabama Power's response provided to ADCNR on June 4, 2021 and filed with FERC on June 15, 2021.

ADCNR Comment:

The second variance involves the change from original electromyogram (EMG) telemetry tags to acoustic/radio (CART tags)... . The licensee should include in the discussion why the original electromyogram (EMG) telemetry data methodologies which included “tail-beat frequency” were modified and what key data gaps this change might have created. EMG tags could have provided data on how fish respond to increased flows and detected how tail-beat frequency corresponded to various flow conditions. The EMG tag variance was presented to stakeholders on page 23 of Initial Study Report (See P-2628-005 FERC ¶ 20200410-5084) but should still be included as an overall variance from the Study Plan in Aquatic Resources Final Report. It should be acknowledged that the change was a significant and critical loss to understanding in-situ target fish species movement in the tailrace. CART tag receivers were set to detect longitudinal stream distance movements and will not capture lateral movements or movements utilized between receivers to seek shelter due to flow changes.

Alabama Power Response:

Alabama Power noted the potential use of acoustic/radio (CART) tags and associated reasoning in the Initial Study Report⁵ (ISR) filed April 10, 2020, and this variance was not repeated in the USR. The USR described overall progress in implementing the study plans, and summarized the data collected and any variances from the study plan and schedule with a focus on those variances that occurred after filing the ISR. Previous comments provided by ADCNR regarding CART tags were addressed in the Final Aquatic Resources Report filed with FERC on April 12, 2021, and Alabama Power’s response provided to ADCNR on June 4, 2021, and filed with FERC on June 15, 2021.

⁵ Accession No. 20200410-5084

ADCNR Comment:

On page 5 of the USR meeting summary, Jason Moak with Kleinschmidt noted that Alabama Power is reviewing information that was submitted regarding temperature modifications at other hydropower projects. Jason M. added that the temperature regime of the Tallapoosa River has been well studied during the relicensing process and noted temperatures below Harris Dam are well within the required temperature range of target species presented in Auburn's report. Jason M. stated that the data shows the temperature regime of the river below Harris Dam is not much different from a warm-water fishery, as it averages over 20 degrees Celsius (°C) and closer to 25 °C at several locations downstream during the summer. Jason M. added that only a 2-3 °C difference exists in portions of the year when compared to unregulated sites like Heflin or Newell; therefore, there does not appear to be a strong case for making a temperature modification. These statements summarize the licensee's interpretation only, with many points that are in sharp contrast to the temperature analyses presented in the Water Quality Report, Aquatic Resources Report and synopses presented in pages 26-45 of the Final Aquatic Resources Study, several of which indicate temperature effects on aquatic resources below Harris Dam...

Alabama Power Response:

Alabama Power's analysis of the long-term record of water temperatures below Harris, comparisons with recent water temperature records from unregulated sites upstream of Harris, and the results of Auburn's review of fish temperature requirements contained in the *Aquatic Resources Study Report* support the referenced statements by Jason Moak. Alabama Power agrees that previous studies indicated some effects on aquatic resources from water temperature and/or flow, though many of those studies show both negative and positive effects depending on the species and life stage. Alabama Power notes that the intent of the Aquatic Resources Study was to supplement the research conducted prior to relicensing, specifically those studies conducted by U.S. Geological Survey (USGS) and summarized in the 2019 USGS report⁶, and to fill information gaps identified by Alabama Power, ADCNR, and other stakeholders during the 2018-2019 development of study plans. Results of the Downstream Aquatic Habitat Study and Phase 2 Downstream Release Alternatives Study indicate that flow modifications – specifically a continuous minimum flow – would have beneficial effects on aquatic resources by providing a reduction in daily and sub-daily water temperature fluctuations.

⁶ Available at: <https://pubs.usgs.gov/of/2019/1026/ofr20191026.pdf>.

ADCNR Comment:

On April 2, 2021, ADCNR provided the licensee with comments regarding the Auburn Report. We are currently awaiting a response to these comments and are concerned with temperature and aquatic resource information details that may be input into the model from reports prior to our comments being fully addressed. Allan Creamer with FERC at HAT 3 meeting notes from March 31, “expressed concern about models that do not have good data going into them.” ADCNR agrees that accurate and reliable data modeling requires inputs to be accurate and reliable. Below sub bulleted are comments regarding temperature overview statements provided by the licensee on page 27 of the PowerPoint presentation from the USR meeting on April 27, 2021. These comments concern the licensee’s USR meeting summary statement that, “there does not appear to be a strong case for making a temperature modification,” and issues to address when inputting temperature data into the Downstream Release alternative models...

Alabama Power Response:

Alabama Power sent a response to ADCNR’s April 2, 2021 comments on June 4, 2021 and filed this response with FERC on June 15, 2021.

See response to ADCNR Comment on page 8. Alabama Power notes there are several sub-bulleted comments included with this comment that are related to study reports and not the USR. Alabama Power will address these comments, where applicable, in the *Final Downstream Release Alternatives Report* and the *Final Aquatic Resources Report* to be filed with the Final License Application in November 2021.

In the March 31, 2021, Harris Action Team (HAT) 3 meeting, Sarah Salazar (FERC) inquired if it was possible to compare the bioenergetics results obtained by Auburn University to those of similar rivers. After discussion on the limitations of comparing different river systems, Allan Creamer (FERC) noted that if data does not exist for a certain time, qualitative conclusions would need to be drawn and noted his concern regarding modeling with anecdotal data (versus qualitative conclusions). For context, the dialogue from the meeting is presented in quotes, below:

“Sarah asked if it was possible to compare the bioenergetics results to those of similar rivers. Ehlana said different rivers could possibly be compared if there are a lot of similarities between the two systems. Dr. Devries said that studies used in the literature review of temperature requirements of the target species came from many different systems and regions (e.g., from ponds versus rivers or northern versus southern regions). Comparisons cannot be reliably made between systems or regions. A bioenergetics model from the northern United States could not be used in the southern United States. Only growth rates can be reliably compared using von Bertalanffy growth curves. Having growth records below Harris Dam would have been very helpful. Allan stated that the outcomes of the five inter-related studies being conducted for relicensing will need to be integrated to draw conclusions about different operating scenarios for Harris Dam. Allan noted the importance of understanding that only data and information from the record can be used for relicensing. If data does not exist for a certain time period, the best that can be done is to qualitatively describe what things may have been like at that time and try to draw some conclusions. Allan expressed concern about models that do not have good data going into them. He acknowledged that anecdotal

information could contain inherent biases, and it is not necessarily information that should be used in a model. Angie stated that the pieces are starting to come together and that the purpose of the meeting today was only to present results of the Auburn University study.”

FERC Comments submitted June 9, 2021

FERC Comment:

The USR states that cultural resource assessments for Lake Harris and Skyline are complete; however, the USR does not include the results of those assessments. The cultural resource assessments should be fully documented and provided with the PLP. Alabama Power also intends to file a draft Historic Properties Management Plan (HPMP) with the PLP and proposes to allow stakeholders 60 days to comment. However, under section 5.16(e) of the Commission's regulations, stakeholders have a 90-day comment period for filing comments on the PLP, which would include the cultural resources assessment results and draft HPMP.

Alabama Power Response:

The cultural resource assessments are fully documented and the reports for the assessments were provided as Appendix C and Appendix D in the Draft HPMP filed on June 29, 2021⁷. Per FERC's request, quantitative analysis regarding the impact of different flows to the 19 cultural resource sites downstream of Harris Dam were also filed in Appendix J of the PLP, which was filed as "privileged". Although the draft HPMP was filed concurrent with the PLP, the draft HPMP is a separate filing and not specified under section 5.16(e). Due to the sensitive nature of the material and in accordance with Section 304 of the NHPA, Alabama Power filed the HPMP, associated appendices, and consultation record as "privileged". A copy of the draft HPMP and consultation record was distributed to limited stakeholders, who may submit comments directly to harrisrelicensing@southernco.com within **60 days** of the filing (or August 30, 2021) as specified in the HPMP cover letter. Stakeholders may provide comments on the cultural resources evaluation contained in the PLP in accordance with Section 5.16(e) which provides a 90 day comment period on the PLP (or Monday, September 27, 2021).

⁷ Accession No. 20210629-5086

FERC Comment:

During the USR Meeting, Bryant Celestine of the Alabama-Coushatta Tribe of Texas requested that both the Alabama-Coushatta Tribe and the Coushatta Tribe of Louisiana be consulted about potential Traditional Cultural Properties (TCPs) within the project's area of potential effects. Please consult with these tribes regarding the need, timeline, and process for identifying TCPS and include any details about the TCP identification in the draft HPMP. In the draft HPMP include the full record of consultation with Tribes, including the Alabama-Coushatta Tribe of Texas and the Coushatta Tribe of Louisiana.

Alabama Response:

Following the USR meeting, Alabama Power contacted the Alabama-Coushatta Tribe of Texas, the Coushatta Tribe of Louisiana, and the Alabama-Quassarte Tribal Town regarding potential TCP consultation. The complete HAT 6 consultation record from April 2018 to June 2021 was filed with the draft HPMP⁸.

⁸ Accession No. 20210629-5086

ARA Comments submitted June 11, 2021

ARA Comment:

ARA disagrees with the statements of the Licensee's representatives contained in the Updated Study Report Meeting Summary that "the temperature regime of the river below Harris Dam is not much different from a warm-water fishery" and that "there does not appear to be a strong case for making a temperature modification". These comments represent Licensee's evaluation of the temperature data collected as part of the study prepared for this relicensing and not an overall scientific consensus. The Tallapoosa River below Harris has been rigorously studied over the past 25 years, and the Final Aquatic Resources Study, including Auburn University's bioenergetic modeling and temperature analysis, is only one of a number of studies.

Based on prior extensive studies surveying a wide variety of fishes and macroinvertebrates below Harris and based on the water temperature concerns put forth by resource agencies, enough evidence exists of the temperature impacts created by the hypolimnetic releases from Harris to justify discussion of the options available to remedy the current thermal regime. The following is a brief summarization of the considerable research pointing to ecological problems caused by low water temperatures below Harris:

- Nesting success for Redbreast Sunfish was negatively related to both peaking power generation and depressed water temperatures (Andress 2002).*
- Strongly fluctuating flows and decreased water temperatures negatively affect survival and early growth of age-0 Channel Catfish and Alabama Bass. Mortality was highest in treatments with decreased water temperatures, indicating that variation of the thermal regime could have significant impacts on survival of juvenile Channel Catfish and Alabama Bass. Daily growth rates were also lower in treatments with decreased water temperatures. Data also suggest that growth and survival may be impacted more by fluctuations in temperature versus flow variation (Goar 2013).*
- Improving flow and temperature criteria from Harris could enhance growth and hatch success of sport fishes (Irwin and Goar 2015).*
- Thermal spawning conditions for Channel Catfish occurred every year in unregulated reach but in only 7 out of 12 years in regulated river segment and occurred earlier in the year in regulated reaches (Lloyd et al. 2017)*
- Flow and temperature remain in a non-natural state in regulated reaches downstream of Harris, and the macroinvertebrate community in regulated reaches shows many dissimilarities to communities from unregulated river reaches (Irwin 2019).*

The detailed, long-term documented impacts on aquatic life due to excessively cold temperatures, temperature fluctuations, and flow fluctuations from the Harris project are at odds with the conclusions drawn by Licensee in the USR Meeting Summary and support the contention that temperature modifications are in fact needed.

Most recently, the US Geological Survey's Open File Report from 2019 ("USGS Report") recaps the history of the biological studies and monitoring below Harris and firmly links water temperature to detrimental effects on fishes and macroinvertebrates below the Harris project. The USGS Report clearly points to an unnaturally cooler temperature regime as detrimental to aquatic species: "Our long-term

metapopulation data provide evidence that suggests broadscale negative influences of the dam on species persistence and colonization parameters. Specifically, generation frequency and cool thermal regimes negatively affected fish persistence and colonization, respectively.”

Having broadly studied 38 fish species from 25 sites over a 12-year period below Harris, the authors of the USGS Report write: “Although it has long been recognized that temperatures are altered below R.L. Harris Dam, specific inference regarding the influence on biotic processes has been lacking until this study, which clearly relates colonization rates (that is, recruitment of a species to a site) to increased thermal energy in the river. In addition, our data indicate that there is no downstream recovery for colonization processes such that colonization rates did not increase with distance from the dam.” Increasing thermal energy in the river, and thereby increasing colonization rates and recruitment, can only be achieved by adjusting the temperature of releases.

The Final Aquatic Resources Report sourced significant amounts of historic temperature data from regulated and unregulated river segments, but “unregulated and regulated river temperatures were not compared statistically due to limited data from the Heflin gage and a variety of other variables that could contribute to temperature differences between the regulated and unregulated river.” To enable a complete evaluation of thermal issues, all available water temperature data should be shared with stakeholders, including Licensee’s historic temperature data provided to Auburn University. ARA has requested Licensee’s 2000-2018 water temperature data referenced in Section 5.2.2 of the Final Aquatic Resources Report and used in Auburn’s water temperature assessment. Licensee responded that its 2000-2018 temperature data will be filed with the Final License Application in November 2021. We request that all temperature data be made available to stakeholders as soon as possible since temperature has been a long-time area of concern.

Alabama Power Response:

Alabama Power disagrees with ARA’s position that “enough evidence exists of the temperature impacts created by the hypolimnetic releases from Harris to justify discussion of the options available to remedy the current thermal regime”. Alabama Power’s review of the long-term record of water temperatures below Harris, comparisons with recent water temperature records from unregulated sites upstream of Harris, and the results of Auburn’s review of fish temperature requirements contained in the *Aquatic Resources Study Report* support the referenced statements by Jason Moak of Kleinschmidt Associates. Temperature data from 2000-2018 is being filed concurrent with this response. Alabama Power agrees that previous studies indicated some effects on aquatic resources from water temperature and/or flow, though many of those studies show both negative and positive effects depending on the species and life stage. In addition, to our knowledge, none of the previous studies included an analysis and/or comparison of the temperature regime in the Tallapoosa River below Harris to reference sites. Alabama Power notes that the intent of the Aquatic Resources Study was to supplement the research conducted prior to relicensing, specifically those studies conducted by U.S. Geological Survey (USGS) and summarized in the 2019 USGS report⁹, and to fill information gaps identified by Alabama Power, ADCNR, and other stakeholders during the 2018-2019 development of study plans.

⁹ Available at: <https://pubs.usgs.gov/of/2019/1026/ofr20191026.pdf>.

The aquatic resources and water temperature data provided on the record will facilitate FERC's ability to review and conduct their own independent analysis of the temperature effects in the Tallapoosa River below Harris Dam, given Alabama Power's proposed operations and PME measures. Results of the Downstream Aquatic Habitat Study and Phase 2 Downstream Release Alternatives Study indicate that flow modifications – a continuous minimum flow – would have beneficial effects on aquatic resources by providing a reduction in daily and sub-daily water temperature fluctuations.

ATTACHMENT B

Alabama Power's Response to Alabama Rivers Alliance Dispute on the Battery Energy Storage Study for
the R.L. Harris Hydroelectric Project

On April 12, 2021, Alabama Power Company (Alabama Power) filed its Updated Study Report for the R.L. Harris Hydroelectric Project (Harris Project) (FERC No. 2628-065) and draft and final study reports, including the *Battery Energy Storage System (BESS) Study Report*,¹⁰ which FERC recommended in its August 10, 2020 Determination on Study Modifications. On June 11, 2021, Alabama Rivers Alliance (ARA) filed a letter commenting on Alabama Power's Updated Study Report Meeting Summary that included a study dispute with respect to the *BESS Study Report*¹¹.

In a June 11, 2020 letter filed with FERC, ARA proposed that Alabama Power conduct a BESS study for the Harris Project. In a July 10, 2020 response to that study request, Alabama Power declined to conduct the BESS study, explaining that the integration of a BESS at Harris Dam is not economically feasible and providing information demonstrating significant technical and other challenges associated with installing a BESS at Harris Dam. However, in its August 10, 2020 Determination on Study Modifications, FERC staff recommended that Alabama Power conduct a BESS study for Harris. Specifically, FERC staff recommended that Alabama Power:

1. Evaluate two release alternatives: (a) a 50 percent reduction in peak releases associated with installing one 60 MW battery unit, and (b) a proportionately smaller reduction in peak releases associated with installing a smaller MW battery unit (i.e., 5, 10 or 20 MW battery);
2. Include in its cost estimates for installing a BESS any specific structural changes, any changes in turbine-generator units, and costs needed to implement each battery storage type; and
3. Evaluate how each of the release alternatives would affect recreation and aquatic resources in the project reservoir and downstream.

Though Alabama Power's July 10, 2020 letter to FERC had provided sufficient information demonstrating that a BESS could not be economically integrated at Harris Dam, Alabama Power agreed to conduct the limited study as recommended by FERC in order to complete the Harris Project relicensing record with respect to a BESS and provide FERC "information that does not already exists and is needed for our analysis". To that end, Alabama Power's BESS study report submitted to FERC on April 12, 2021 evaluated each criterion recommended for study by FERC. The study report demonstrates that because integrating a BESS at the Harris Project in order to mitigate the effects of peaking would require significant redesign and redevelopment of the project, a BESS is not a reasonable alternative that necessitates further consideration¹². Despite the fact that Alabama Power performed the BESS study consistent with the FERC-recommended criteria, ARA's June 11, 2021 comment letter disputes whether Alabama Power conducted the study in accordance with FERC's August 10, 2020 Determination on Study Modifications.

On June 9, 2021, FERC staff sent Alabama Power a detailed letter commenting on the Harris USR and the associated draft and final study reports. Alabama Power notes that FERC staff did not provide any

¹⁰ Accession No. 20210412-5747

¹¹ Alabama Power also notes that ARA provided comments on May 26, 2021 on the draft *BESS Report*. Alabama Power will address these comments in the final *BESS Report* to be filed with the FLA.

¹² In the context of downstream release alternatives, FERC stated in the August 10, 2020 Determination on Study Modifications that "... run-of-river mode would likely require significant redesign and redevelopment of the project (e.g. structural modifications, intake design, turbine retrofits, etc.) ... run-of-river operation is not feasible at the Harris Project without a major redesign and redevelopment of the project, we do not consider it to be a reasonable alternative for further consideration" (See p. B-4).

comments in their June 9, 2021 letter regarding insufficient information or inadequate analyses in the BESS Study Report. There is no suggestion in the comment letter that FERC staff believes the BESS study was not conducted as it was recommended to Alabama Power.

From a close reading of ARA's June 11, 2021 letter, it does not appear that ARA is attempting to make the case that Alabama Power's study report fails to meet the criteria of the recommended study. Instead, ARA identifies new or expanded topics for further study. For example, ARA's June 11, 2021 comment letter asks that FERC require Alabama Power to: 1) evaluate an independent purchase power agreement financing alternative; 2) to explore the possibility of siting a BESS somewhere on Alabama Power's transmission system other than at Harris Dam; 3) to evaluate potential incentives that could reduce costs of a BESS; 4) to engage in a full determination of the costs of modifying or replacing one of the turbines to enable installation of a BESS; and 5) to evaluate the potential benefits that adding a BESS could provide to Alabama Power's distribution system, etc. These topics go far beyond the limited scope of the study recommended by FERC and can more accurately be viewed as a request for additional studies. However, ARA fails to meet the requirements in 18 CFR § 5.15(e) for requesting new studies at this late stage of the Harris relicensing proceeding and fails to show good cause for why these additional studies are justified by one of the criteria in §5.15(e).

Because Alabama Power's *BESS Study Report* makes clear that a BESS is not economically feasible or a reasonable alternative at the Harris Project, and for the other reasons cited above, ARA's dispute with respect to Alabama Power's *BESS Study Report* and its attempt to expand the scope of that study should be rejected.