

UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION

Alcoa Power Generating, Inc.

Project No. 2197-073  
Yadkin Hydroelectric Project

**COMMENTS OF STANLY COUNTY ON  
DRAFT ENVIRONMENTAL IMPACT STATEMENT  
FOR THE YADKIN HYDROELECTRIC PROJECT  
RELICENSING**

Pursuant to the Commission's Notices dated September 28, 2007,<sup>1</sup> and October 23, 2007,<sup>2</sup> and the Commission's October 9, 2007 Federal Register Notice, 72 Fed.Reg. 57,320, Stanly County submits its Comments to the Draft Environmental Impact Statement ("DEIS") prepared by the Commission Staff pursuant to the National Environmental Policy Act of 1969 ("NEPA"), 42 U.S.C. § 4321 *et seq.*, for the relicensing of the Yadkin Hydroelectric Project, which is currently licensed to Alcoa Power Generating, Inc. ("APGI," "Licensee," or "Alcoa"). Stanly County recommends a Supplemental DEIS be prepared or a trial-type hearing to address issues that are inadequately covered in the DEIS and necessary to create the record required for the Commission to satisfy its obligations under NEPA and the Federal Power Act ("FPA"). In addition, Stanly County notes that several studies or reports are in the process of being completed, as discussed herein, and any final EIS should reflect the information and Staff evaluation of these new reports.

The DEIS presented by the Staff falls short of NEPA requirements and is inadequate to assist the Commission in the important task of relicensing one of the major

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<sup>1</sup> Notice of Availability of Draft Environmental Impact Statement for the Yadkin Project and the Yadkin-Pee Dee River Project, *available at* eLibrary accession no. 20070928-3045.

<sup>2</sup> Notice of Public Meetings on Environmental Assessment, *available at* eLibrary accession

rivers in North Carolina. These comments document the substantial shortcomings of the DEIS and its failure to address issues raised throughout the relicensing process. The Yadkin River is not any old river; it is a major waterway of commercial and environmental importance; and hydroelectricity worth billions of dollars—and how the costs and benefits associated with that hydroelectricity will be distributed—are at stake. Equally important, the river is a source of recreation, public water supply, and aesthetic enjoyment for the thousands of citizens who live in the Project region and for the additional thousands who visit the area. It is also a waterway in need of mitigation measures to realize its full capability to benefit the public and the communities and people that live along the Project’s 38-mile length, especially in light of its history.

The DEIS recommends that of the three alternatives considered, the relicensing of the project along with Staff’s preferred environmental measures (DEIS at 261-263) would meet the following goals:

- (1) ... allow Alcoa Generating and Progress Energy to continue operating the Projects as beneficial, dependable sources of electric energy;
- (2) ... eliminate the need for an equivalent amount of fossil fuel-produced energy, which helps conserve these non-renewable resources and limits atmospheric pollution;
- (3) ... protect water quality and quantity, enhance fish and wildlife resources, protect cultural resources; and improve public use of the Projects’ recreational facilities and resources; and
- (4) ... exceed [the public benefit] of the No-action Alternatives.

DEIS 261. These are minimum criteria; they are not recommended actions intended to produce a Project that meets the required high standard set out in the Commission’s own statute, including the relicensing provisions.

The Commission's relicensing decision will determine the fate of the waterway for the next 30 to 50 years and will measurably affect the ability of this waterway to meet the public's needs and to make the lives of thousands of people in the Project area better. That is what Stanly County sought to underscore to the Commission by its participation in the relicensing proceedings to date. Because the current DEIS fails to address key issues and impacts raised by Stanly County in the relicensing proceeding and required to be considered in any Commission licensing decision for the Yadkin Project, the Commission Staff should be directed to prepare and issue a new DEIS or a Supplemental DEIS that properly covers those issues. As an alternative, Stanly County will seek a trial-type hearing to provide the Commission with the adequate record it needs, but does not yet have, to craft a new license in the public interest.

## **COMMENTS ON DRAFT ENVIRONMENTAL IMPACT STATEMENT**

### **I. PURPOSE**

According to the FERC Staff, the purpose of the DEIS is not only to document the views of all parties and participants in the relicensing process, but also to announce Staff's evaluations of the APGI proposal and the alternatives for relicensing the Yadkin Project.<sup>3</sup> The FERC Transmittal Letter for the DEIS (at 1) also notes that the "EIS will be part of the record from which the Commission will make its decision. The final EIS is expected to be issued in February 2008."

### **II. STANLY COUNTY ISSUES**

The DEIS does not reflect Stanly County's concerns, despite the County's participation from the outset of this proceeding, including in the early pre-filing

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<sup>3</sup> DEIS Transmittal Letter at 1 (Sep. 28, 2007), *available at* eLibrary accession no. 20070928-4001.

consultation process, the Commission’s Scoping process for the license application, and other public hearings and proceedings that led to the production of the DEIS. These concerns include:

1. Disclosure by Alcoa and APGI of all information it has or has knowledge of, regarding environmental contamination at the Badin Smelting Works and known waste disposal sites, including potential health hazards posed by such contamination;<sup>4</sup>
2. Comprehensive screening and, where appropriate, in-depth site characterization, of Alcoa-owned property in Stanly County outside the Badin Smelting Works, where informal, off-site hazardous smelting waste disposal may have occurred during the past 100 years;<sup>5</sup>
3. Disclosure by Alcoa/APGI of past Alcoa arsenic emissions and their impact on the land and water resources of the Project area, as well as interconnected land and water resources that could affect the Project features, including Badin Lake;<sup>6</sup>
4. Disclosure by Alcoa/APGI of all information it has or has knowledge of, regarding environmental contamination of Badin Lake;<sup>7</sup>
5. Detailed studies of environmental contamination of Badin Lake and other reservoirs supplying water, including testing for contaminants, including arsenic;<sup>8</sup>
6. Analysis of the socioeconomic impacts of Alcoa/APGI’s decision to discontinue the use of low-cost Yadkin Project power for manufacturing activities in Badin, North Carolina;<sup>9</sup>
7. Assurance of an adequate future water supply for the County;<sup>10</sup>
8. Mitigation of the County’s infrastructure costs, which will include mitigating the detrimental impacts on residents who were encouraged to

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<sup>4</sup> Stanly County Comments on Scoping Document 1 (“Stanly County Scoping Comments”) at 8, *available at* eLibrary accession no. 20070305-0171; and Intervention of Stanly County at 5.

<sup>5</sup> Stanly County Scoping Comments at 8 and Intervention of Stanly County at 5.

<sup>6</sup> Stanly County Scoping Comments at 8.

<sup>7</sup> Stanly County Scoping Comments at 8 and Intervention of Stanly County at 5.

<sup>8</sup> Stanly County Scoping Comments at 8 and Intervention of Stanly County at 5.

<sup>9</sup> Stanly County Scoping Comments at 8 and Intervention of Stanly County at 5.

<sup>10</sup> Stanly County Scoping Comments at 8 and Intervention of Stanly County at 5.

come to the area and lay down their roots because of Alcoa's need for workers;<sup>11</sup> and

9. Consideration of mitigation measures to: (a) monitor the changing environmental situation; (b) clean up contaminated sites and fund technically feasible methodologies to avoid penalizing Stanly County and its residents for hosting Alcoa's operations and to safeguard the County's right to a decent future; and (c) identify all contamination resulting from the Licensee's historical smelting operations to allow proper public notice and opportunities for mitigation.<sup>12</sup>

The above issues and their importance to the community are demonstrated by the extent of the public's participation in the relicensing public meetings that have been held. Many individuals have stood up publicly to inform the FERC Staff of their concerns, their knowledge, or belief that Alcoa or APGI had studies that were pertinent, and that FERC Staff should seek out the information. Stanly County officials and numerous citizens participated and raised environmental contamination and socioeconomic issues in the public Scoping Meetings for the Project held in Albemarle, North Carolina, on January 24, 2007.<sup>13</sup> They also participated in the public meeting for the DEIS held on November 14, 2007, in Salisbury, North Carolina.<sup>14</sup> In addition, Stanly County timely sought intervention in this proceeding by filing dated September 18, 2006;<sup>15</sup> and it

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<sup>11</sup> Stanly County Scoping Comments at 8.

<sup>12</sup> Stanly County Scoping Comments at 9 and Intervention of Stanly County at 5.

<sup>13</sup> See, e.g., Agency Scoping Meeting for Alcoa Power Generating Inc., Project No. 2197, Jan. 24, 2007, Stanly County Agri-Civic Center ("Agency Meeting"), available at eLibrary accession no. 20070124-4036, Tr. at 25-27 (David Ezzell, Stanly County Department of Health); Public Scoping Meeting for Alcoa Power Generating Inc., Project No. 2197, Jan. 24, 2007, 7 pm, Stanly County Agri-Civic Center ("Public Meeting"), available at eLibrary accession no. 20070124-4035, Tr. at 14-17 (Tony Dennis, Stanly County Board of Commissioners, Chairman), 17-20 (Roger Dick), 20-23 (Chris Bramlett), 23-25 (David Ezzell), 25-28 (Donna Davis), 29-32 (Robert Van Geons), 35-36 (Nancy Bryant), 36-37 (Ron Bryant), 38 (Andrew Schwaba); 58-60 (Dale Ward).

<sup>14</sup> DEIS Public Meeting, Tr. at 17-20 (Robert Van Geons), 20-24 (Lindsey Dunevant), 29-36 (Michael Taylor), 44-45 (Bramlett), 46-47 (Dick) (Nov. 14, 2007), available at eLibrary accession no. 20071114-4021.

<sup>15</sup> Motion to Intervene of Stanly County and Comments on Agreement in Principal (Sep. 18, 2006),

submitted extensive written comments in response to both Scoping Document 1 (“Stanly County Scoping Comments”) and Scoping Document 2.<sup>16</sup> A public meeting was also held by the County to which a representative of Alcoa/APGI was invited to respond to questions from the County’s Department of Health and the public, in connection with the relicensing. The Commission was provided with a videotape of this meeting at which serious public health issues were discussed. *See infra* n.25.

The bottom line is that the DEIS ignores major issues relating to public health, environmental conditions and impacts, and community and economic impacts resulting from the Project owner’s actions and its proposed use of the Yadkin Project during the new license term. The complete omission of these issues from the DEIS—despite their being raised in public meetings and public filings with the Commission—makes the DEIS incomplete for NEPA purposes. And the DEIS fails to provide the evidentiary record and analysis required by the Commission to meet its FPA obligations, including information on issues important to the local residents and the Project community, the benefit of Staff’s analysis of those issues, and the Licensee’s responses and proposed actions to address them over the next 50 years.

**A. *The DEIS Is Incomplete And Fails To Address Evidence Of Environmental Contamination By Alcoa***

**1. Hazardous Waste Disposal Sites For Alcoa’s Badin Smelting Works**

Staff barely acknowledges the concerns about environmental contamination from Alcoa’s Badin Works raised by Stanly County and numerous other participants. Stanly

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*available at* eLibrary accession no. 20060918-5075.

<sup>16</sup> Comments of Stanly County on Scoping Document 1 (“Stanly County Scoping Comments”) (Feb. 26, 2007), *available at* eLibrary accession no. 20070305-0171; Comments of Stanly County in Response to

County can only assume that Staff is still relying on its previous claims that Alcoa's behavior on the far side of the project boundary is irrelevant to the relicensing, because the Commission's authority is limited to "the license applicant and the hydroelectric project" and "Alcoa Inc., which owns the Badin Works, is a distinct company [from APGI] and its facilities are not part of the hydroelectric project or this proceeding."<sup>17</sup>

Neither NEPA nor the FPA supports this narrow interpretation. If the Yadkin Project were licensed today to power the Badin Works, the by-products of the smelting process would—like the accumulation of sediments—be considered a foreseeable impact of issuing the license and would have to be considered under both the FPA and NEPA.<sup>18</sup> Indeed, if—as Alcoa/APGI claims<sup>19</sup> and the DEIS (at 3) states—the Yadkin Project energy is to be used during the new license term to "offset the cost of electricity purchases required for Alcoa's other domestic operations," then the resulting increase in Alcoa's aluminum manufacturing operations in other domestic locations is a foreseeable impact of granting a new license to APGI and must be fully examined in the Commission's environmental documentation before any new license is issued.

In addition, the fact that we are now faced with a situation in which pollutants from Alcoa's operations in Stanly County were placed in or on the ground and began leaking in the past does not bar the Commission from considering them in the DEIS or the alternatives analysis. With respect to fishery resources, the Staff is well aware that

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Issuance of Scoping Document No. 2 (Jun. 4, 2007), *available at* eLibrary accession no. 20070604-5070.

<sup>17</sup> Scoping Document 2 at 14 (May 4, 2007), *available at* eLibrary accession no. 20070504-3006.

<sup>18</sup> *See, e.g., Mid States Coalition for Progress v. Surface Transportation Board*, 345 F.3d 520, 548-49 (8th Cir. 2003) (adverse environmental impact of burning coal was a foreseeable secondary impact of the Board's grant of a rail license that would increase the availability of cheap coal).

<sup>19</sup> APGI License Application at H-2 (Apr. 25, 2006), *available at* eLibrary accession no. 20060425-0280

relicensing is the time to require the Licensee to restore some of the fishery resources, so that the fish can prosper under the extended license. There should be no lesser standard for human beings in a NEPA analysis or under the FPA. Indeed, Staff proposes to require Alcoa to protect the City of Salisbury's water intake from the sedimentation caused in the past by the Project (DEIS at 232); it should similarly require Alcoa to protect the water supply and environment of the residents of Stanly County from the pollutants that resulted from the very industrial processes that the original (and current) Yadkin Project license made (and was intended to make) possible.

As Stanly County has previously explained, Alcoa's industrial practices may have resulted in: (a) significant contamination of Badin Lake, the Yadkin River and other Project features; (b) soil or groundwater contamination that could leach into the Project; and (c) contamination of other land and waters within Stanly County—possibly including land that Alcoa now proposes to donate to the State of North Carolina as part of a comprehensive Yadkin Relicensing Settlement Agreement (“RSA”).<sup>20</sup> Any contamination within or adjacent to the Project is directly relevant to Project operations, and directly affects the communities to be served. The limited inquiry in the DEIS is an inadequate record for the Commission to make a decision. Because the DEIS does not address the issues raised by Stanly County in its comments on Scoping Documents 1 and 2, Stanly County reiterates those concerns here.

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(“License Application”).

<sup>20</sup> As part of its Relicensing Settlement Agreement (“RSA”) with certain groups interested in the Yadkin relicensing, Alcoa would agree to donate several large tracts of land to the state of North Carolina. To the extent those lands are not currently owned by the Alcoa subsidiary that holds the Yadkin license, Alcoa has arranged for title to the land to be transferred to that Alcoa subsidiary.

The fact that APGI has been incorporated separately likewise does not justify limiting the scope of the Commission’s Project assessment. There is clear evidence in this record and in the Commission’s public files demonstrating that Alcoa Inc.—the initial Project licensee and the sole owner of both APGI *and* the adjacent Badin Aluminum Smelting Works—for all practical purposes controls and operates the Yadkin Project.<sup>21</sup> APGI is simply a subsidiary part of Alcoa, and the Yadkin Project was always part of Alcoa’s integrated industrial operations in Stanly County—a fact that the Commission itself recognized when it decided to issue the current license to Alcoa in 1958.<sup>22</sup> APGI does not even handle its own money:

APGI does not maintain cash and cash equivalents. APGI has an arrangement with Alcoa in which Alcoa collects all receivables due from customers and pays all liabilities on behalf of APGI.

APGI Resubmitted 2006 FERC Form 1 at 123.1 (Oct. 30, 2007). Furthermore, when convenient in making representations to the public, APGI points to the credentials of its parent, Alcoa Inc., to support its claim that it is concerned about the public, and it refers to the Project as “Alcoa’s Yadkin Hydroelectric Project.”<sup>23</sup> If Alcoa/APGI views itself as a single entity, the Commission should not be so limited in its evaluation of the

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<sup>21</sup> See, e.g., Comments, Recommendations, and Proposed License Terms and Conditions of Stanly County, at 6-7 (May 14, 2007), *available at* eLibrary accession no. 20070514-5153.

<sup>22</sup> *Carolina Aluminum Co.*, 19 F.P.C. 704, 716, 719, 722 (1958). The Yadkin License was issued to Carolina Aluminum Company, a subsidiary of Alcoa Inc., in 1958. *Carolina Aluminum Co.*, 19 F.P.C. 704 (1958). Alcoa apparently changed the name of Carolina Aluminum Company to Yadkin, Inc. (*Yadkin Inc.*, 22 F.P.C. 492, 492 (1959)); and although the FERC record is unclear, at some point the aluminum manufacturing activities at the Badin Works appear to have been transferred to a different part of the Alcoa corporate structure, and Yadkin Inc. became a “power subsidiary[y]” of Alcoa (*Alcoa Inc.*, 88 F.E.R.C. ¶ 62,173, at 65,346 (1999)). The Yadkin license was transferred to APGI in 2000 (*Yadkin Inc.*, 92 F.E.R.C. ¶ 62,029 (2000)), after the Commission approved Alcoa Inc.’s application to consolidate its power subsidiaries’ business activities into a single Alcoa Inc., subsidiary (*Alcoa Inc.*, 88 F.E.R.C. ¶ 62,173 (1999)).

<sup>23</sup> See, e.g., Gene Ellis (licensing and property manager, Alcoa Power Generating Inc.), *Inaccurate picture*

Licensee's performance, responsibilities, and capability to fully perform its new license duties. Because the license applicant, APGI, is simply a subsidiary part of Alcoa Inc., the Commission's evaluation of APGI's application and APGI's fitness as a licensee must also consider the related aluminum smelting operations and whether *Alcoa* has demonstrated that it will be a good steward of the waters of the Yadkin River.

The DEIS ignores an overwhelming reality: For almost a hundred years, Alcoa has conducted industrial process operations on lands it owns within Stanly County. Alcoa's operations at the Badin Smelting Works—which occupies 126 acres adjacent to Badin Lake (*i.e.*, the Narrows reservoir) in the center of Badin, North Carolina—produced huge amounts of hazardous waste. For example, the facility produced 4,800 tons per year of spent pot-linings, a hazardous waste containing cyanide complexes.<sup>24</sup> Some of that hazardous material was discharged into the air and water of Stanly County. The spent pot-linings and other tangible refuse from the aluminum smelting operations were stored on or buried in the land. Environmental contamination of the Badin Smelting Works site and the official disposal sites used by Alcoa in Stanly County—all of which are located on or near the shore of Badin Lake—has been publicly documented by Alcoa's own consultants.<sup>25</sup>

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*of Alcoa*, Charlotte Observer, May 31, 2007, Stanly County Scoping Comments, Attach. C.

<sup>24</sup> *North Carolina Department of Environment, Health, and Natural Resources Screening Site Investigation, Alcoa Badin Landfill*, at 1.3 (March 1991).

<sup>25</sup> *See, e.g.*, MFG, Inc., *RCRA Facility Investigation Report* (March 2001). *See also* Stanly County Scoping Comments, Attach. B (Videofile, Stanly County Board of Commissioners, Public meeting (Feb. 5, 2007), which provides an overview of: (1) the contamination that Alcoa acknowledges at the Badin Smelting Works and official dumping locations; and (2) the steps the company has taken, to date, to address the contamination. The meeting was held at the request of the Stanly County Board of Commissioners. Alcoa provided an expert from its environmental remediation staff based in Alcoa's Pittsburgh headquarters. A partial transcript of the videofile was filed with the Commission on February 27, 2007, *available at* eLibrary accession no. 20070301-0093.

For example, Alcoa's March 2001 *RCRA Facility Investigation Report* ("RFI")—a document prepared by Alcoa's consultant MFG, Inc., and submitted to the North Carolina Department of Environment, Health, and Natural Resources ("NCDENR") to satisfy Alcoa's RCRA permit to store hazardous spent potlining waste at the Badin Works—concludes that the groundwater under the plant is contaminated by cyanide, fluoride, arsenic, trichloroethane, and trichloromethane (chloroform). RFI at 123.<sup>26</sup> The same document also states:

Groundwater beneath the plant area flows toward and discharges to Badin Lake.

*Id.* As Michael J. Burns, P.G., a professional geologist retained by Stanly County, explained: "Based on [measurements of groundwater flow velocity] and the fact that the facility operated for about 90 years, there is a potential that significant contaminant discharge has occurred and is occurring to Badin Lake and Little Mountain Creek." Letter from Michael J. Burns, P.G., to Dennis R. Joyner, December 10, 2007 ("Burns Letter") (Exhibit A hereto), at 4.

The groundwater not only flows into Badin Lake, but also was seeping into underground pipes that conveyed non-contact cooling water and stormwater directly into Badin Lake. The groundwater seepage into the underground pipes was so extensive that the discharge from the underground pipes into Badin Lake exceeded Alcoa's NPDES permit limits for this outfall. RFI at 62. Although Alcoa replaced the leaking underground pipe in 1991, the groundwater seepage may have occurred over many

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<sup>26</sup> The RFI was submitted separately by Stanly County to the Commission for informational purposes on December 10, 2007. The entire text of the RFI should be available on FERC's eLibrary.

years. The RFI also reports that contaminated groundwater beneath the Alcoa Badin Landfill had discharged to surface water in Little Mountain Creek. *Id.* 106.

Alcoa's own RFI shows that contaminants in the groundwater are migrating continuously into Badin Lake. Alcoa concludes that these contaminants do not pose a risk to humans because they are diluted by Badin Lake, but the basis for its conclusion is questionable. Alcoa has apparently studied hazardous waste on only a few sites in Stanly County, and at those sites it has identified high levels of soil contamination, groundwater contamination caused by the contaminated soils, and constant migration of contaminated groundwater into Badin Lake. Furthermore, Alcoa's RFI does not contain any analysis of the impact of water and sediment contamination on the fish in Badin Lake.<sup>27</sup> Moreover, "the sample locations and subsequently calculated background data may not represent naturally occurring or anthropogenic concentrations and may represent impact from historic site activities" because of the proximity of the sample locations to disposal sites. Exhibit A at 3.

Alcoa's 2001 conclusions about the sediments in Badin Lake are also troubling. Alcoa detected PAHs (polyaromatic hydrocarbons), Aroclors 1242 and 1260, benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and arsenic at levels that exceeded screening values. RFI at 100-101. Alcoa concludes that the sediment contamination does not pose a risk to humans because "incidental contact" (*id.*) would result in little exposure. However, the flaws in Alcoa's methodology raise serious questions about its conclusions with respect to the

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<sup>27</sup> See, e.g., Stanly County Scoping Comments, Attach. G, North Carolina Division of Public Health, "What Fish Are Safe to Eat?", which refers to high mercury levels in fish "caught south and east of Interstate 85"—an area that includes Badin Lake.

sediments. First, Alcoa performs no analysis of the potential impact of sediment contamination on fish populations. Second, Alcoa uses screening levels intended for soils at industrial facilities—not for sediments beneath a public swimming area, which is what is at issue here. Screening levels for industrial property allow for higher concentrations of pollutants and are inappropriate for swimming areas. Finally, Alcoa admits that it was required to disregard a sample collected from the swimming area “because of laboratory QA/QC issues.” *Id.* 100. Given the contamination in Badin Lake, the continuous migration of groundwater from the Alcoa plant into Badin Lake, and the irregularities in Alcoa’s methodology, Stanly County remains very concerned about Badin Lake and its impact on the ability of the Yadkin River to support multiple uses in the future. But the DEIS does not address Stanly County’s concerns on any of these issues.

Swimming and fishing are not the only uses of concern: the Stanly County public water supply draws on the surface waters of the Yadkin River, while approximately half of its citizens rely on private wells. Stanly County Scoping Comments, Attach. H (Myers) at 1. According to the RFI, contaminated groundwater beneath the Badin Smelting Works is “hydraulically isolated” from residential wells (according to the report, “nearly all residences are connected to the Stanly County potable supply”); and while contaminated groundwater beneath the Smelting Works discharges to Badin Lake, such discharges have generally not yet resulted in surface water contamination at tested locations above “human health surface water screening values.” RFI at 123. It is not in fact the case, however, that “nearly all residences are connected to the Stanly County potable supply”; a large number of residents in the County rely on wells for their drinking

water. Stanly County Scoping Comments, Attach. H (Myers), at 1. This is not surprising given the rural nature of the County. Stanly County has the highest percentage of wells with unacceptable arsenic levels in the entire State.<sup>28</sup>

Stanly County has taken its own readings of various “signals” commonly used by local governments to measure the well-being of their communities. These readings include measurements of water conditions, particularly at public sites and at sources of public drinking water. In addition, Stanly County is aware that the State and Alcoa have conducted monitoring and remediation measures at the Badin Works under various state and federal regulations to limit the public’s exposure to contaminated soil and hazardous substance pools that house chemicals and waste from Alcoa’s aluminum manufacturing operations. Despite the protective intent of these laws, any visit to the Project site and immediate surroundings makes it clear that everything is not as it should be. Earlier this year, for example, Stanly County—with the help of local residents who came forward voluntarily, but without the benefit of any systematic testing program—identified other previously undocumented potential waste disposal sites near Badin Lake. Alcoa has since provided no detailed information to Stanly County on those sites; but it has reported at least one of them to NCDENR. Now, Alcoa once again asserts that with the addition of that one site, all of its industrial waste disposal sites in the area have been examined and reported—*i.e.*, the same assurance that anecdotal information from a County resident has already demonstrated to lack foundation.

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<sup>28</sup> The dearth of information about the location and extent of surface water and groundwater contamination add significant uncertainty to the County’s efforts to make future water supply plans.

Although State regulators may also have responsibilities with respect to at least some of the environmental contamination at issue, the Commission has an independent responsibility to ensure that any new license issued is for the project that is “best adapted” for the river, and to take into account in making its decision the licensee’s effect on the community and all other considerations required by the FPA and NEPA.

## 2. Arsenic Contamination

One example of the information that is missing from the DEIS is any discussion of arsenic contamination. In recent years, Stanly County has sampled and studied local wells in connection with decisions on whether and how to extend the County’s public water system. The County discovered evidence indicating a very high occurrence of arsenic contamination in private wells throughout the County, and especially along the banks of the Yadkin River in Stanly County.<sup>29</sup> In trying to figure out why contamination levels in the County surpassed those of all other counties in the state, the County sought information from Alcoa. Alcoa has consistently denied a link between local arsenic levels and Alcoa’s operations.

Stanly County does not know the cause of the arsenic levels it is detecting in the area’s groundwater; but contamination levels appear to increase as one moves closer to the Yadkin River basin.<sup>30</sup> In addition, it is the County’s understanding that, as a general matter, arsenic emissions have been associated with aluminum smelting. In the Summary Reports on its air emissions, for example, Alcoa notes that:

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<sup>29</sup> Public Meeting, Tr. at 27-28 (Donna Davis); Stanly County Scoping Comments, Attach. L, Affidavit of April B. Underwood, which attaches the results of the well sampling in Stanly County.

<sup>30</sup> Public Meeting, Tr. at 27-28 (Donna Davis).

Possible [hazardous air pollutants] emitted from Secondary Aluminum production facilities include: antimony (Sb) & compounds, *arsenic (As) & compounds (inorganic)*, cadmium (Cd) & compounds, chromium (Cr) & compounds, dioxin/furans (D/F), hydrochloric acid (HCl), hydrogen fluoride (HF), lead (Pb) & compounds, manganese (Mn) & compounds, mercury (Hg) & compounds, and nickel (Ni) & compounds.

Z.T. (Tommy) Gibson, Jr., Summary Report – Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance, at 1 (Aug. 29, 2003) (emphasis added).

Because the County has access only to the most recent few years of Badin Smelting Works air emissions information—when the Works were virtually idled and Alcoa was presumably using the best available control technologies to reduce its emissions—we have no way of knowing whether and to what extent the Badin Works released arsenic into the air over the past 100 years. The County also has inadequate information on the extent to which arsenic may have been released in the Works’ water emissions or solid waste.

The hazardous waste analysis included in the *Yadkin Water Quality Final Study Report* that Alcoa attached to its license application does not address the issue. Alcoa’s relicensing study examined only five hazardous chemicals: cadmium, copper, cyanide, lead and mercury. No measurement or analysis of arsenic levels was performed, despite knowledge that arsenic may be a serious problem at the Project and in the area.

Based on documents obtained through litigation involving Alcoa, it is the County’s understanding that Alcoa knew for years that soil and groundwater near the Badin Smelting Works were contaminated with arsenic. In its March 2001 RFI, Alcoa also reported that it had sampled Badin Lake sediments from the “embayment area of

Badin Lake” near the Smelting Works, and that arsenic was detected “at concentrations that exceed the screening values.” RFI at 100.

Despite the fact that drinking water wells of nearby residents have high levels of arsenic, the Alcoa RFI did not test for arsenic in thirteen of the sixteen solid waste management units examined by the RFI; and in its relicensing studies it does not mention testing for arsenic contamination at all. As reported in the RFI, at the three locations where Alcoa tested for arsenic, it found arsenic. RFI Tables 4-31, 4-43, and 4-45. Stanly County presented all of this evidence to Staff in its Scoping Comments (at 19-21), but none of it is addressed in the DEIS.

### 3. Uncertainty And The Need For New Information

In addition to the socioeconomic effects discussed below in Part II.C, Stanly County is faced with the legacy of Alcoa’s industrial processes which spanned almost the entire Twentieth Century. Everyone acknowledges that the area around the Badin Smelting Works, adjacent to the Yadkin Project’s largest reservoir, is contaminated by hazardous waste. Efforts by Stanly County to ascertain the true nature of the dangers posed by the known disposal of industrial waste on the Badin Plant site have been rebuffed by Alcoa. Stanly County Comments on Scoping Document 2, Attachments B1-B3 (June 4, 2007). Stanly County has sought assistance from the State resource agencies and while promised, it has not yet materialized. Accordingly, and because Stanly County believes that the State resource agencies will come through, the County notifies the Commission Staff that the following studies and tasks are now in process.

The first study is a study of the fish in Badin Lake. It is the County’s understanding that planning is now underway to gather new, vital information about the Project’s fish populations. This information is forthcoming, but not yet available.

Approximately two years after the County raised environmental and health concerns about conditions in Project reservoirs to Alcoa, and after a recent meeting with NCDENR to require Alcoa to perform additional studies of the Lake impacts, Alcoa has apparently agreed to perform a “fish study” of the potential environmental impacts to Badin Lake.<sup>31</sup> Once the work plan is approved, Alcoa will presumably conduct the work outlined in the work plan and make this information available to the EPA, DENR, and other interested parties.

The “fish study” is vital to understanding the condition of fish in the Project reservoirs, and the potential impact of managing the Project reservoirs on species, including the bald eagle and other species that consume Project fish. It also goes without saying that the fish study, and information related to biological integrity in general, is critical to understanding potential impacts on the human population, both from fish consumption and from primary recreational activities involving human body contact with water on a frequent basis. The County submits that the Commission must consider the results of the new fish study in its NEPA environmental documentation for the Yadkin Project relicensing.

The County also has a sedimentation study underway and shortly expects the results. Lake sediment samples were recently collected from selected areas into which the County believes discharges from the adjacent Smelting Works were released while the Works were in operation.

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<sup>31</sup> It was the County’s understanding that the design and parameters for this “fish study” were to be available by November 16, 2007. It was recently informed, however, that the study plan was not provided on that date and is now expected later this week.

In addition, and as FERC Staff was advised during the public meetings held in connection with this relicensing, there was evidence that Stanly County residents experienced higher levels of certain kinds of illnesses, possibly associated with the nature of the smelting process.<sup>32</sup> Epidemiological studies are needed to follow up on this information.

During the Scoping process, testimony was submitted to the effect that not all the hazardous waste disposal sites associated with the Alcoa Badin Works (and potentially adjacent to the Project reservoirs) had been identified by Alcoa. Alcoa's public environmental reports focus on the Badin Smelting Works and two official Alcoa waste disposal locations (the Badin Landfill and the Old Brick Landfill).<sup>33</sup> Alcoa, however, owns thousands of additional acres in the surrounding area, including large sections of the Badin Lake shoreline.

The County is aware that Alcoa-owned lands in Stanly County other than the Smelting Works and the two official landfills were also used in the past as disposal sites for post-processing industrial waste from the Badin Smelting Works. The County has not attempted to conduct a comprehensive survey of past and current residents, but during the Scoping process provided three affidavits that identified specific potential disposal sites: (1) one from Mr. Tony Dennis, the current Chair of Stanly County's Board of Commissioners (Stanly County Scoping Comments, Attach. J); (2) one from Gary Lowder, the former Chair of Stanly County's Board of Commissioners (*id.*, Attach. I); and (3) one from Mary Elizabeth Chivington (Comments Of Stanly County in

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<sup>32</sup> Public Meeting, Tr. 40 (William Aldridge).

<sup>33</sup> RFI at 10.

Response to Licensee Filing of Relicensing Settlement Agreement,<sup>34</sup> App. A). The County does not know the extent and the exact location of each of the sites identified, which may be contaminated with hazardous waste, or the extent of seepage into groundwater, the Yadkin River, or its tributaries. However, accounts by local residents who worked at the Alcoa industrial operations indicate that it was not unusual in the past to dump the sludge and other remains from Alcoa's industrial operations on lands within the County.

Mr. Lowder describes events that occurred during the late 1950s when it was common knowledge that pipes located within the Badin Works were used to flush contaminants from the Plant into Badin Lake. Stanly County Scoping Comments, Attach. I. A review of Alcoa's 2001 RFI suggests that at least some of the areas identified by Mr. Lowder may have been examined as part of that study. RFI at 99-100. However, the meager sampling of these areas performed by Alcoa does not provide a full characterization of the pollutants in the sediment along the shore of Badin Lake. RFI at 100.

Mr. Dennis describes activities he observed while employed at his father's trucking business, which regularly dispatched a truck to the Alcoa Smelting Works in Badin to cart away materials. Although he does not know what was contained in the material those trucks transported, he was informed that it originated in the Badin Works "bag house" where air emissions from the plant were filtered before they were released into the environment. The materials were then trucked to and buried in trenches outside the Smelting Works. Stanly County Scoping Comments (Jun. 6, 2007), Attach. J. Stanly

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<sup>34</sup> Available at eLibrary accession no. 20070606-5050.

County has since been informed that the area was used for “lime disposal”—a statement consistent with Mr. Dennis’ affidavit, as lime was used in the emissions filtering process—but has not received any information from Alcoa as to what form of lime was disposed of, or what contaminants it contained. *Id.*, Attach. F at 4 (Alcoa Responses (Feb. 22, 2007)).

Ms. Chivington described large drums that she witnessed being buried on Alcoa-owned property during the late 1960s or early 1970s. Stanly County RSA Comments, App. A. Stanly County has brought the site to the attention of the State agency with regulatory authority, which made an initial site visit in November, and it is our understanding that the agency intends to follow up.

It is extremely troubling that a relatively small number of voluntary informants has been able to identify any, let alone multiple, potential hazardous waste disposal locations that have not previously been characterized or brought within the umbrella of the state’s hazardous waste programs. Although the County is of course relieved that Alcoa has belatedly decided to undertake characterization of the site identified by Mr. Dennis, the company’s response suggests that Alcoa may have *never* made an adequate survey of the land it owns in Stanly County to determine whether and where “informal” disposal of plant wastes occurred. In other words, although Alcoa monitors a handful of sites and has provided thick reports to state and federal environmental agencies on hazardous waste contamination located at the Badin Smelting Works, the Badin Landfill, and the Old Brick Landfill, its inclination and incentive not to “look for trouble” beyond those limited locations are obviously high.

As Stanly County discussed in its Scoping Comments (at 10-12), Alcoa has other information regarding the contamination, but it has not disclosed that information to the Commission or to the County. For example, Alcoa apparently produced information on sources of contamination at Badin in connection with a more-than-decade-long lawsuit initiated by Alcoa in Washington State in 1992 to obtain a declaratory judgment that its insurers would be required to cover contamination resulting from Alcoa's Badin operations during the period 1977-1984.<sup>35</sup> That information includes Alcoa's estimates of the costs for clean up (which in turn presumably would reflect the content and location of those contaminated sites and their possible cumulative impact).

As Mr. Burns stated in his review of the 2001 RFI, "there has been insufficient surface water and sediment sampling *in Badin Lake* adjacent to the Old Brick Landfill to adequately identify whether there is a contamination problem in this area." Burns Letter at 6 (emphasis added). Mr. Burns continued: "It is my opinion that the background samples collected as part of the RFI are suspect based on the proximity of the SWMUs given that these areas may have been influenced by the operations during the over 90 years of operation." *Id.* "We recommend that a study be performed to evaluate the impact of discharge of contaminants from the Alcoa Badin Works facility on the *biological integrity of Badin Lake and Little Mountain Creek.*" *Id.* 7 (emphasis added).

Another example is the recent Characterization of the Toxicity and Bioavailability of Polycyclic Aromatic Hydrocarbons in Aquatic Sediments from Badin Lake, prepared by Retec (February 2007), which assessed the bioavailability and toxicity of Polycyclic

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<sup>35</sup> See *Aluminum Co. of America v. Aetna Casualty & Surety Co.*, 998 P.2d 856 (2000); Attach. D, Alcoa's Second Amended Complaint for Declaratory Judgment, *Aluminum Co. of America v. Aetna Casualty & Surety Co.*, Case No. 92-2-28065-5 (April 8, 1994). The suit covered multiple Alcoa production sites,

Aromatic Hydrocarbons (“PAHs”) in the sediments of the Lake adjacent to the Plant. The report identified PAHs in sediment that ranged from 0.23 ppm to 1,690 ppm, and stated that the carbon identified in the samples was consistent with the emissions from a smelter and carbon plant, and the use of coal at the smelter. The report concluded that the samples collected did not exceed the concentrations at which benthic aquatic invertebrates would be expected to have reduced survival, and that the toxicity and bioavailability of PAHs in sediment did not represent a significant source of toxicity to benthic aquatic organisms. Stanly County is not aware of DENR’s reaction to this study, nor whether DWQ has considered its bases and agrees with its conclusions. The report did not include any sampling or analysis of the potential impacts to the fish population in the Lake and/or on individuals (including children) who frequently swim and conduct other water activities in the Lake.

Only after the Commission has had the opportunity to make its own evaluation based on full disclosure of the facts and information by Alcoa, including Alcoa’s internal reports, and analysis of those facts in the Supplemental DEIS and the FEIS, can the Commission make a determination of how the documented soil and water contamination from Alcoa’s industrial operations may affect the Yadkin Project and the Yadkin River and the Project reservoirs in the future and over the term of any new license. Furthermore, the effects of proposed changes in Project operations should be assessed not against the *status quo*, but rather against the likely deterioration of conditions in the Project area because of future events like the seepage of contaminants into the Project

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including Badin.

waters and River over time and the uncertain time period during which some “holding” materials may contain their pollutants: all events that have already occurred.

While the State of North Carolina regulates the hazardous wastes that were buried in various locations on the Badin Works site, the fact remains that Stanly County has no assurance when or even if these buried hazardous wastes will be cleaned up, or that they will not further escape and migrate into the County’s lands and waters. Moreover, there is no assurance that all of the hazardous waste contamination associated with the Badin Works has been disclosed to the State of North Carolina and brought within the state’s regulatory program.

Absent a comprehensive and disciplined survey, there is no way for the Commission and the public to know whether and to what extent Alcoa’s past environmental practices affected Badin Lake and other Project features. Without this basic information, there is simply no way to assess whether the current or proposed modes of Project operation will lead to other problems for the public health, or ongoing and other needed remediation and restoration measures of the land and water in the County and the Yadkin River.

Before preparing the Yadkin Project FEIS, Staff should direct Alcoa to disclose specific information on other disposal locations within Stanly County; and to the extent that it has not adequately surveyed its land holdings within Stanly County, Alcoa should be directed to screen them systematically and thoroughly for environmental contamination. Furthermore, to the extent that Alcoa has produced or been provided with reports and other information relating to the expense and time necessary to restore such contaminated lands and waters, whether at Badin or other comparable locations, it should

make this information available to the Commission and to the public. It is only in this way that the community and the Commission can begin to assess what the future cost of remediation and restoration will be. To the extent that further monitoring of Project property is necessary, Alcoa should be directed to maintain such monitoring as well, because the movement of such large amounts of contaminants may well change over time and require the County and other public officials to take measures in advance to assure acceptable levels of public health and safety.

Moreover, the Commission should obtain this information now, in the relicensing context, *before* any new license is issued. Alcoa/APGI can transfer its licenses with ease under present Commission policies, which might make it possible for Alcoa to avoid answering the Commission's questions during any new license term. Alcoa has the best information on the nature of hazardous waste contamination from aluminum smelting operations; where contamination may be located; and, once located, how to remediate and clean up such contamination. Unless that expertise is put to work now, in this relicensing, Alcoa/APGI can easily leave Stanly County; and the County and North Carolina will have no obvious means to tap this knowledge to begin to even *plan* for clean-up. Also, Alcoa has sought to include land it owns outside the Project boundary as part of the Yadkin settlement (including parcels owned by a corporate affiliate of the Licensee). Alcoa has voluntarily brought those properties within the scope of the relicensing proceeding.

To assure the completeness of the record in this proceeding as to issues that go directly to public health concerns, Stanly County requests that the Staff reconsider its omission of issues related to the hazardous waste contamination associated with the

Badin Works, including, for example: systematic testing of sediments and the river bottom of Badin Lake, particularly at public access and swimming locations; identification and testing of all sites where contaminants from the Alcoa Badin Works were deposited in Stanly County; identification of sources of pollution affecting wells in Stanly County near the Badin Works and other hazardous waste disposal locations; analyses of the geology of affected sites and identified hazardous waste dumps to determine the likely migration paths of such waste; and analysis of epidemiological data to identify correlations between incidence of disease and proximity to the Badin Works and the Yadkin Project. Stanly County also requests that Staff ask the Licensee to respond to questions that address the information gap in the relicensing record, and to share that information with parties like Stanly County that have not otherwise been able to obtain such information from Alcoa despite repeated meetings and letters.

The potential ongoing impact of Alcoa's past actions on the health of local residents and on the economic conditions in Stanly County is obviously great, and the effects should have been studied once they were identified to the Staff, and Staff should have analyzed the information and made recommendations to prevent or mitigate the worst results through this relicensing process and to better inform the Commission of the conditions resulting from the Project's operations in the past.

***B. The DEIS Is Incomplete Because It Fails To Include The Analysis Necessary To Evaluate The Licensee's Fitness***

In addition to the direct effects on Project features and lands included in any proposed Settlement Agreement, Alcoa's record of hazardous waste contamination (including possible dumping of industrial wastes into or near the river and hazardous air emissions that may have settled into the river)—and the Company's responses to known

and likely contamination—are directly relevant to the issue of whether Alcoa will be a fit environmental steward for the Yadkin Project for the renewal license term. The DEIS entirely fails to address this issue. But under the comprehensive development provision of the Federal Power Act, the Commission must consider an applicant’s fitness to own and operate a hydropower project.

Nothing in the Act explicitly requires a finding of fitness. Rather, the statute lays out general public interest criteria for licensing; the Commission, in its discretion, determines whether a project is:

. . . best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water-power development, and for beneficial public uses, including recreational purposes.

16 U.S.C. § 803(a). The Commission is charged with considering all of the relevant factors under this provision. The general fitness of the licensee-applicant is one of these factors.

*Cooley v. FERC*, 843 F.2d 1464, 1471 (D.C. Cir. 1988) (internal quotation marks and citations omitted).

The Commission recently provided an independent explanation for the necessity of considering an applicant’s fitness: “As the agency charged by Congress with regulating and safeguarding the nation’s hydropower resources, we cannot turn a blind eye to any applicant’s record in considering a new application.” *Appalachian Rivers Resource Enhancement, LLC*, 114 F.E.R.C. ¶ 61,145, P 17 (2006). Environmental impacts are one aspect of the record that the Commission considers. In distinguishing an earlier case in which it did not deny a license application, the Commission said that it had “found that no environmental impacts resulted from” the applicant’s violation, whereas

projects under the control of the applicant in the case at hand had “been assessed multiple civil penalties, including violations of environmental requirements, and some of which the Commission concluded were quite serious.” *Energie Group LLC*, 116 F.E.R.C. ¶ 61,220, P 18 (2006) (distinguishing *City of Hamilton, Ohio*, 62 F.E.R.C. ¶ 61,106 (1993)), *reh’g denied*, 117 F.E.R.C. ¶ 61,124 (2006).

There are “compelling reasons why the Commission needs to know enough about the fitness (ethical, moral, and financial) of... an owner-operator of a licensed project, to be assured that this person will comply with agency directives.” *H. Bruce Cox*, 90 F.E.R.C. ¶ 63,006, at 65,044 (2000).

Among the relevant public interest issues is the fitness of the license applicant to operate the hydroelectric project. A poor compliance record attributable to the persons that would control a project’s operations is relevant in determining the applicant’s fitness to receive a new project authorization, since it bears on the applicant’s ability to reliably carry out the requirements of the license and the FPA, requirements that might involve public safety and that typically concern protection of important natural resources.

*Turbine Industries, Inc.*, 68 F.E.R.C. ¶ 61,127, at 61,610-11 (1994), footnote omitted.

The applicant in *Turbine Industries* was controlled by an individual who controlled two other exemptees, both of which had “committed serious breaches of the Commission’s regulations and the requirements of the exemptions for” the projects. *Id.* 61,611. On that basis, the Commission ordered *Turbine Industries* “to show cause why its license application should not be denied on the ground that *Turbine* lacks the requisite fitness to be a licensee.” *Id.* 61,610. The Commission later terminated the order to show cause because the exemptees paid the requisite fines and fixed the problems consistent with a compliance program, and *Turbine Industries* agreed to implement the same compliance program if it received a license. *Cook Industries, Inc.*, 72 F.E.R.C. ¶ 61,115 (1995); *see*

also *Carl E. Hitchcock*, 69 F.E.R.C. ¶ 61,382 (1994). Unlike the applicant in *Turbine Industries*, Alcoa has not stopped the continuing harm caused by its operations.

Finally, Section 15(a)(2) of the Federal Power Act, 16 U.S.C. § 808(a)(2), directs FERC to consider a wide range of issues upon relicensing, including “the effect on communities served or to be served by the project,” and “[s]uch other factors as the Commission may deem relevant.”<sup>36</sup> Fitness to hold a license should not be judged only by the Licensee’s behavior within the strict metes and bounds of a geographic area (as suggested by Alcoa), especially where contamination is flowing unseen below the ground. Nor should “fitness” be defined simply as compliance with the Commission’s rules and the particular terms and conditions of the prior license. Alcoa/APGI is a large, sophisticated corporation that knows how to timely file reports and hire consultants. Nominal compliance is perhaps understandable during the license term but at relicensing the Commission should step back and evaluate the Applicant’s entire record. Section 15(a)(3) specifically requires the Commission, where an existing licensee is concerned, to evaluate “[t]he actions taken by the existing licensee related to the project which affect the public,” as well as compliance with the terms and conditions of the existing license. 16 U.S.C. § 808(a)(3).

It may be enlightening for the Commission Staff to consider the performance of Alcoa’s smelting operations in Australia, where that government has stressed what it calls the “triple bottom line—measuring performance in economic, environment and social terms...[which] is increasingly seen as the responsible business model.” Exhibit B

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<sup>36</sup> See also Section 15(a)(2)(D), 16 U.S.C. § 808(a)(2)(D) (“in the case of an applicant using power for the applicant’s own industrial facility and related operations, [the Commission must consider] the effect [of the grant of a new license] on the operation and efficiency of such facility or related operations, its workers,

(Keynote Speech of Minister John Bumbery at Alcoa's 40<sup>th</sup> Anniversary Celebratory Dinner, June 2, 2003). In that regard, Minister Bumbery complimented Alcoa's performance, noting that Alcoa had not only invested in the community but had also developed a new technology and operations that "converts smelter residue into a safe and useable construction material" (Exhibit B at 3), and also established a recycling plant to turn "the extensive residue, scraping and trimmings from the Plant operations into recycled aluminum and feedstock for cement and ceramics" (*id.* 4). In its 2003 and 2004 Environment Improvement Plan for 2003 and 2004 for its Portland, Australia Plant, Alcoa sets out its commitment to Sustainability Principles, which include the following Principle 4:

We will acknowledge and share our problems, targets and performance with our community and all shareholders; we will listen to and respect the views of our workforce and our community and safeguard their well-being.

Exhibit C at 23, an excerpt from the Environment Improvement Plan. Surely, an enlightened policy in Australia in 2003 and 2004 is a good place to start the inquiry for a new license for Alcoa/APGI in America in 2007. The guidelines and standard applied in Australia are instructive to this relicensing, and Alcoa in North Carolina should not be held to a lesser standard.

***C. The DEIS Is Incomplete And Fails To Adequately Address The Socioeconomic Impacts Of Granting A New License To APGI***

1. The Draft EIS Is Incomplete Because It Fails To Consider The Impacts Of Alcoa's Proposed Use Of The Yadkin Project Energy, Or Any Project Alternatives That Would Use Project Energy And Revenue To Support Local Job

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and the related community.”).

### Creation to Mitigate Alcoa's Shutdown of its Aluminum Operations

Although APGI's current license, issued in 1958, does not contain an express condition requiring the continued operation of the Badin Smelting Works, the Commission order issuing that license made it clear that the importance of the project to the smelting operation, and therefore to the local economy, was a significant consideration:

The operations of the Badin plant of Aluminum are a useful contribution to the industrial life of the Yadkin Valley and their continuation is greatly in the public interest. It is apparent that assurance of this continuation depends upon the ability of [the applicant] to obtain a fifty-year license for the entire Yadkin Project (Project No. 2197).

*Carolina Aluminum Co.*, 19 F.P.C. at 714, emphasis added. The Commission expressly found that the reconstruction of the Badin smelting works made possible by the new 1958 Project license would provide continued employment to more than 900 people in the Badin area:

The Applicant Carolina Aluminum Company proposes to reconstruct its smelting plant at Badin to increase both its maximum capacity and its firm or continuous smelting capacity in order to increase the usefulness and efficiency of the said smelting plant, and such proposed reconstruction is expected to afford *continued employment to more than 900 persons in the Badin area.*

*Id.* 722, emphasis added. The Commission expressly justified granting a new fifty-year license to the Project because otherwise, "continued operation of the Badin [smelting] works would be threatened, to the detriment of its 977 employees (as of 1957) and the surrounding region." *Id.* 705 n.1.

In the current relicensing proceeding, Alcoa has proposed a Project that is dramatically different from the Project Alcoa proposed in 1958. Instead of using

inexpensive, cost-based power from the Yadkin River to support the local economy and jobs, Alcoa now proposes to sell the electricity generated at the Project at market prices and to pocket the very considerable revenues for its shareholders—according to Alcoa’s License Application, approximately \$43.6 million annually.<sup>37</sup> Alcoa has withdrawn from the region almost all of the industrial jobs that the Yadkin Project previously supported; and earlier this year, Alcoa completely shut down the smelting operations at the Badin Smelting Works.<sup>38</sup> Based on the most recent information provided by Alcoa to the County, Alcoa currently employs fewer than 70 people in Stanly County.<sup>39</sup>

The effect on the local economy of losing virtually all of the Alcoa industrial jobs previously supported by the Yadkin Project can be seen in Badin’s struggling local businesses and in its vacant lots with remnants of foundations where homes and businesses once stood. The County has estimated that restoration of those Alcoa jobs, along with supporting jobs in other sectors, would raise total Stanly County employment opportunities by up to 8%.<sup>40</sup> The County and State have made substantial investments to attract businesses and mitigate the local job losses; but it still faces significant local underemployment as the result of the loss of Alcoa aluminum manufacturing jobs, as well as an increased number of residents who are required to commute long distances to find suitable employment. The local tax base for the County has also eroded and continues to

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<sup>37</sup> License Application at D-4.

<sup>38</sup> In contrast, Alcoa has recently built a controversial \$3 billion hydropower project in Iceland to power its new smelting operations there. “Smokestacks in a White Wilderness Divide Iceland,” *New York Times*, Feb. 4, 2007, *available at* [http://www.nytimes.com/2007/02/04/world/europe/04iceland.html?pagewanted=1&\\_r=2](http://www.nytimes.com/2007/02/04/world/europe/04iceland.html?pagewanted=1&_r=2); *see also* Alcoa: Iceland, *available at* <http://www.alcoa.com/iceland/en/home.asp>.

<sup>39</sup> Stanly County Scoping Comments, Attach. B, at time index 10:45.

<sup>40</sup> Stanly County Scoping Comments, Attach. N at 3.

erode as Alcoa dismantles its operations and removes machinery from the idled smelting works.<sup>41</sup> Even the RSA's proposed donation of Alcoa-owned lands in Stanly County will have a negative impact on the local tax base, as these lands are removed from the tax rolls and become non-taxable, government-held property. As noted in one public session, the Fire Department in Badin relies on tax revenues to support the Department, and the loss of these tax revenues will wreak havoc with the ability of the Department to adequately protect its citizens.<sup>42</sup>

The DEIS is also incomplete because it fails to consider any alternative to fill or mitigate the employment gap created by Alcoa's changed plans for use of the Yadkin Project. In its Recommended Terms and Conditions filed on May 14, 2007 ("Stanly County Recommended Terms and Conditions"),<sup>43</sup> Stanly County identified one clear alternative—*i.e.*, the use of cost-based electricity from the Yadkin Project to support local industrial job development during the new license term, or the creation of a fund from part of the Project revenues to support local job creation. The DEIS improperly fails to evaluate this proposal—or indeed any alternative that would use the output of the Yadkin Project to support local economic development.

Alcoa has the right to make private business decisions about its profit-making aluminum manufacturing operations. But under the Federal Power Act, the question of whether the federal government should give Alcoa—for free—a new, extremely valuable and exclusive right to use a public resource for the next fifty years must be based on a fair

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<sup>41</sup> *See id.* at 4.

<sup>42</sup> *See, e.g.*, Public Meeting, Tr. At 58-60 (Dale Ward), addressing the loss of funds to support the local fire department. Of course, the fire department has to protect the many forested areas, as well.

<sup>43</sup> *Available at* eLibrary accession no. 20070514-5153.

determination of the *public* interest.<sup>44</sup> Under both NEPA *and* the Federal Power Act, that analysis must include the issues of local job creation and investment, particularly where, as here, the applicant is receiving the benefit of the incumbent preference, based on an original license issued to support local industrial activity, economic development, and employment. Section 15(a)(2)(D) of the FPA, 16 U.S.C. § 808(a)(2)(D), specifically directs the Commission to consider “in the case of an applicant using power for the applicant’s own industrial facility and related operations, the effect [of the grant of a new license] on the operation and efficiency of such facility or related operations, its workers, and the related community.” Where, as here, the applicant proposes to change its planned use of the Project energy, diverting it from its local industrial facilities and related operations, that effect must be considered, too.

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<sup>44</sup> Stanly County notes that Alcoa receives significant benefits from other hydroelectric projects, which provide low-cost power to Alcoa on terms intended to support Alcoa’s ongoing industrial operations. Alcoa, for example, has a contract, through September 2011, with the Bonneville Power Administration that includes financial benefits to reduce the cost of power necessary to partially operate Alcoa’s Intalco Smelter in Washington State. It has also extended its 2003 purchased power contract with the New York Power Authority (“NYPA”), the FERC Licensee for both the Niagara and St. Lawrence Hydroelectric Projects, until 2013 upon NYPA having re-licensed its St. Lawrence Project (*see* Alcoa Inc., Annual Report (Form 10-K), at 9-10 (Dec. 31, 2006)); and according to NYPA, Alcoa seeks to extend this very favorable contract for low-priced hydropower through the end of the new St. Lawrence license term (Press Release, New York Power Authority, OP-ED for Consideration From: Timothy S. Carey, President and CEO, New York Power Authority (Mar. 23, 2006) *available at* <http://www.nypa.gov/press/Opeds/060323oped.htm>).

In its contract negotiations with NYPA, Alcoa has claimed that it should receive this preferential treatment because low-cost NYPA power is crucial to the continuation of Alcoa’s industrial production in the region. Alcoa has stated that “its business in Northern New York is threatened by global competition if a long-term deal for low-cost hydropower with the Power Authority isn’t reached well before the current contract expires in 2013 .... Without access to low-cost power, there is no way Alcoa can remain in Northern New York.” Shane M. Liebler, *Economic Development Power Program Hearings End*, Watertown Daily Times, Sept. 30, 2006. During the same proceedings, Alcoa has “stressed the economic impact the absence of Massena’s two plants and their \$91 million payroll would have on the community” and the 1000 employees if the plants were no longer able to function. Chris Garifo, *New Strategy Sought in Stalled Alcoa-NYPA Talks*, Knight Ridder Tribune Business News, Mar. 17, 2006. Alcoa is thus well-acquainted with the need for and contribution of low-cost hydroelectric power to support local economic development.

Alcoa itself recognized the critical nexus between local job creation and the public interest finding that the Commission must make before issuing a new Yadkin Project license to Alcoa. In a December 30, 1992, Richard Hunt Associates, a consultant apparently retained by Alcoa, stated that:

Major points that Yadkin should emphasize in the relicensing of the project are:

- (1) the need for power and value of power from the project as it relates to the viability of the Badin smelter;
- (2) the economic benefits of the smelter operations to the region;
- (3) the recreational and other public benefits of the project;
- (4) the environmental benefits of project operations; and
- (5) Yadkin's excellent compliance record.

Stanly County Scoping Comments, Attach. O at MW-CTP-P-0423662. Of these five “[m]ajor points” that Alcoa was advised to emphasize in its relicensing effort, the top two—which address socioeconomic issues—were completely missing from Alcoa’s April 2006 license application, as in the intervening years Alcoa had dramatically reduced operations at the Badin smelter.

The omission of this information from Alcoa’s application, however, does not relieve the Commission Staff of the obligation to consider these issues in its DEIS, or in deciding whether, and under what conditions, a new license should be issued to Alcoa. To the contrary, Alcoa’s plans for the use of the Yadkin Project power—and the foreseeable impact of those plans on the local community—are precisely the type of issue that the Commission is required to evaluate under NEPA, and that must be fully and carefully considered in any public interest licensing decision under the FPA.

The spotty summary statistics in the Yadkin DEIS fail to evaluate the effect on the local community of the loss of jobs and taxable property associated with Alcoa's changed plans for the use of the hydropower generated by the Yadkin Project. In its Socioeconomic Resource analysis, at DEIS § 3.3.9 at 216-23, Staff identifies the potentially affected area for the Yadkin Project as encompassing Davidson, Davie, Montgomery, Rowan, and Stanly Counties. DEIS at 216. Of those counties, Stanly County experienced the lowest percentage change in its population between 1990 and 2000. DEIS, Table 47 at 216. The DEIS includes county-level economic base data from selected counties. DEIS at 217-218. However, the DEIS does not even include such basic background data for Stanly County, where the bulk of the Yakin Project is located—let alone evaluate the effects of the job losses and dramatic change in industrial activity attributable to changes in the way that Alcoa/APGI proposes to use the Project energy.

At best, the Socioeconomic Resources section could be described as a “light” swing through easily available data, with no analysis of what the data show or mean for purposes of relicensing the Project. Viewed in that light, the data fall far short of the “hard look” that Stanly County urged as necessary, because of the long-term impact of the Commission's decision upon the economic and environmental conditions in the County as a direct result of the Commission's action in relicensing the Yadkin project. *See, e.g., Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989).

In evaluating the economic effects under this category, Staff concludes that “[t]he primary contribution that the project makes to the local economy is related to recreational use and the value of lakeshore and near-lakeshore properties, particularly at High Rock

reservoir.” DEIS at 218. Accordingly, Staff focuses its analysis on an Alcoa-produced study that studies the economic effects of three different reservoir levels on seasonal/tourism related values, which addresses the use of the water by residents and visitors for recreational values. DEIS at 219. But Alcoa’s study of the economic and employment effects of recreational spending at the Yadkin Project—which the DEIS (at 220-21) discusses in detail—overlooks the far more significant socioeconomic impacts of Alcoa’s decision to discontinue the use of Project energy to support local industry and jobs. In contrast to the light and inconsistent touch accorded to the economic base data for the counties, the DEIS addresses squarely the recreational and cultural issues presented by the relicensing.

Part of the problem may be whether the Staff has adequately defined the affected area for purposes of the socioeconomic analysis portion of its DEIS. For example, when it comes to the definition for Cultural Resources, the relevant area was defined as “all the lands affected by project operations including lands inundated by the projects’ reservoirs, the shoreline of the reservoirs, access areas required by the licensee, the land surrounding the project structures, such as the powerhouse(s) and dam(s) and other lands within the project boundary.” DEIS at 158. In addition, after consultation with the North Carolina State Historic Preservation Office, Staff expanded the area to include “areas within 100 feet of the normal full-pool elevation of each of the project reservoirs.” *Id.* 159. For Project recreation facilities, the DEIS sensibly takes into consideration the “41 dispersed recreation sites (where recreation occurs outside the boundaries of established public recreation area)” that were identified by Alcoa as germane as well as a host of privately and publicly maintained sites and facilities. DEIS at 167-177 (quotation at 167),

including Figure 16 (2 pages). Although Staff notes that the Licensee intends to coordinate its future recreation plans with other resource agencies, it concludes that “the proposed plan does not include provisions for reviewing and updating the plan over the license term,” noting that recreation use in the project area is expected to increase “by more than 40 percent by 2030.” DEIS at 191. To remedy this, Staff recommends provisions for “periodic monitoring, review, and consultation” to assure that future recreation needs are met over the term of the new license, and suggests a Recreation Management Committee. DEIS at 192.

In contrast, the DEIS simply ignores the far more significant—albeit less tractable—socioeconomic impacts of Alcoa’s decision to change the use of the Project energy, diverting cost-based energy from local industrial activity. That these socioeconomic problems are more difficult to mitigate or solve, however, does not justify ignoring them—under either NEPA or the FPA. Staff should be directed to examine these issues and to issue a Supplemental DEIS for additional public review and comment.

2. The DEIS Is Incomplete Because It Failed To Consider Impacts Of The Reduction In Stanly County Tax Revenue Associated With the RSA

Both Alcoa’s Proposed Alternative and the Staff-Recommended Alternative endorse the RSA, which provides for the transfer of taxable land in Stanly County currently owned by Alcoa to the State of North Carolina. These alternatives, therefore, have the effect of significantly reducing the tax revenues of Stanly County and other local taxing jurisdictions. *See, e.g.*, Public Scoping Meeting, Jan. 24, 2007, 7 pm, Tr. at 58-60 (Ward), addressing the loss of funds to support the local fire department. Stanly County’s proposal for *in lieu* payments for lost taxes was rejected by the DEIS (at 237, Table 52) without explanation or discussion. At minimum, the socioeconomic impacts of

the reduction in taxable property and tax revenue, and resulting infrastructure and social services reductions—foreseeable impacts of the RSA, which will go into effect only if a new license is issued to APGI by FERC—should have been included in the DEIS.

3. The DEIS Is Incomplete Because It Failed To Consider Impacts On Future Development And Potential Mitigation Measures

Although the County believes that hydropower from the Yadkin River should be used to attract jobs to the region and to support the local economy, it does not expect the Commission to order Alcoa to restart the Badin Smelting Works. Any transition from the County's historical reliance on the aluminum manufacturing jobs supported by the Yadkin Project, however, faces serious obstacles because of Alcoa's past activities and current practices. Specifically, large tracts of land adjacent to Badin Lake are owned by Alcoa, including the huge and shut-down Badin Smelting Works; and because of the history of environmental contamination and Alcoa's apparent decision to leave contamination in place rather than attempt clean-up, much of that property cannot be developed for new uses.

Alcoa has stated that it will not sell contaminated property;<sup>45</sup> and in light of current environmental laws governing liability for hazardous waste contamination, it is the County's understanding that it would be very difficult to find a buyer willing to purchase property that is, or may be, contaminated by hazardous waste. Limitations on future land use are also apparently an integral part of Alcoa's strategy for reducing human exposure to known hazardous waste contamination. Rather than remove known

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<sup>45</sup> Stanly County Scoping Comments, Attach. F, Attach. B at time index 7:55; Attach. P (Alcoa PowerPoint presentation from Feb. 5, 2007 meeting at the Stanly County Commissioners Office) at 29.

hazardous waste and restore contaminated properties, Alcoa's strategy apparently envisions that the company will continue to control the property (after removing the valuable equipment) and will restrict future human access and use through its ownership and/or deed restrictions on any new development. *See, e.g.*, RFI at 7-8, 35, 123.

Therefore, under the circumstances of this case, granting APCI a new license to use the waters of the Yadkin River to generate electricity—with no expectation that APCI will use that electricity to support local industrial activity—has the foreseeable effect of indefinitely mothballing large tracts of land in Stanly County. This result severely restricts the opportunities for future development that would allow Badin and Stanly County to develop a viable post-aluminum manufacturing economic base. The community impacts of allowing the existing industrial sites associated with the Yadkin Project to become inactive, with no requirement that they be restored to a condition that makes them suitable for new, alternative development, should have been evaluated in the DEIS, and they must be considered as part of the Commission's Federal Power Act review of APCI's license application.

The DEIS is also inadequate because it fails to consider alternatives that would mitigate this situation. In its Scoping Comments and Recommended Terms and Conditions, Stanly County specifically suggested that Alcoa be required to establish a Mitigation Trust Fund, to be funded from the revenues it receives from its power sales. Stanly County Scoping Comments at 33-34; *see also* Stanly County Recommended Terms and Conditions A through C, which provide details on how proposed mitigation and clean-up funds would be implemented and describes one mechanism for ensuring that a share cost-based Project power is used to foster local community and economic

development. Stanly County also proposed the establishment of monitoring stations to keep a constant eye on the environmental situation. Stanly County Scoping Comments at 34; *see also* Stanly County Recommended Terms and Conditions E. Third, to the extent that problems arise that can be traced to the identified contamination sites, Stanly County recommended that the Mitigation Trust Fund be available to provide acceptable substitute drinking water to individuals and businesses directly impacted. *Id.* Fourth, Stanly County recommended that any Alcoa lands that are donated or sold to non-taxable entities should be sold only on the condition that the non-taxable entity make *in lieu* of tax payments to the locality affected. *Id.*; *see also* Stanly County Recommended Terms and Conditions F. It is unconscionable that one of the poorest counties of the State should be required to subsidize the donation of its lands for the benefit of others through loss of its taxing capability, while the mothballing of industrial land on the shores of the Project reservoirs—land potentially contaminated by the industrial activity made possible by the Commission’s last license to Alcoa—prevents Stanly County from adjusting its economy in response to the loss of jobs from the Alcoa Smelting Works.

Of these recommended terms and conditions, the DEIS mentions only one—*in lieu* payments for lost taxes—which the Staff rejects without explanation in a table. DEIS at 237, Table 52. Without a full analysis of these alternatives, the DEIS is incomplete and does not satisfy NEPA’s project assessment and public disclosure obligation. In addition, the record necessary for the Commission to meet its Federal Power Act obligation to license only the “best adapted” project in the public interest, after considering its impact upon the welfare of the community, has not been created.

***D. The Developmental Analysis Of The DEIS Is Flawed And Inadequate***

In its Developmental Analysis (DEIS at 225-239), the Staff “estimate[s] the economic benefits of the projects and estimate[s] the cost of various environmental measures and the effects of these measures on projects operations.” *Id.* 225. That analysis needs significant additional work to be accurate and perform its intended function. To meet the Commission’s NEPA and FPA obligations, the Developmental Analysis must be correct and based on documented information. For the reasons explained below, the DEIS fails to meet this criterion. In addition, for the analysis to properly inform the Commission’s evaluation of the reasonable costs to be borne by the Licensee—in exchange for receiving an exclusive license to produce electricity for private gain worth in excess of \$40 million in annual revenues over the next 50 years from a public resource—the Commission should be aware of the full range of benefits and costs associated with the Project’s operations. Once it has this information, it can then consider the steps that should be taken to mitigate impacts on the community due to the loss of jobs from the Licensee’s closing of its aluminum operations and to the detrimental health conditions resulting from almost a hundred years of industrial operations by the Licensee.

One critical question that needs to be answered is the level of profits that Alcoa makes from its ownership of the Project license. The license conditions ordered should not destroy the economic viability of the Project. If, as Staff suggests, the Project earns Alcoa less than a million dollars a year (or \$774,570, to be more precise (DEIS, Table 53, at 239)), the available benefits that can be approved must be something in that order of magnitude. However, if the Project is capable of earning far more—for example, the at

least \$10.5 million per year that APGI's own License Application estimates—then the benefits available to mitigate the environmental contamination and socioeconomic impacts of the Project are of another magnitude. *Id.* As explained below, the Developmental Analysis of the DEIS is flawed and does not provide an adequate basis to calculate these critical numbers.

1. The DEIS Understates The Value Of Project Power

To calculate the value of the power generated by the Yadkin Project, Staff, in Table 51 (DEIS at 225-26), uses 4.839 cents/kWh for the on-peak rate and 2.962 cents/kWh for the off-peak power. According to the DEIS, this results in a power value of approximately \$35.3 million/year, or \$40.3 million/year assuming that Alcoa-proposed major maintenance and unit upgrades are performed.<sup>46</sup> DEIS at 226 and 238. That estimate, however, should be contrasted to the Applicant's own estimate of the value of the power generated from the Project, or \$43.6 million per year (assuming proposed major maintenance and upgrades). License Application at D-4, Sec. D.5. This estimate was confirmed by an Alcoa representative in a public meeting held on the Project relicensing.<sup>47</sup>

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<sup>46</sup> Despite the more sensitive environmental conditions likely to be mandated under the renewal license, several factors are expected to enable Alcoa to generate more, rather than fewer, kWhs after this relicensing. These factors include: (1) upgrading of certain existing units that will be completed by the time the new license is issued; and (2) upgrading of existing units that will be completed and phased in over a 12-year period of time. According to the DEIS (at 227-37, Table 52, Item 1), the upgrading of units at High Rock, Tuckertown, Narrows, and Falls will result in energy gains worth over \$5 million/year, even assuming Staff's likely understated energy prices. Now, one might ask why these upgrades were not done earlier in the 50-year term of the existing license, but that is not the purpose of this part of the analysis of the DEIS. It should raise questions, however, about the diligence and stewardship of the existing Licensee.

<sup>47</sup> Statement of Gene Ellis at January 25, 2007 County Forum/Public Information Session, Stanly County Commons Meeting Room, Albemarle, North Carolina.

The \$3 million/year decrease in the DEIS' estimated value of the Project power is inconsistent with the higher power values generally experienced between 2004—the year upon which Alcoa's on-peak and off-peak rates and FERC's Developmental Analysis appear to be based (License Application at D-5)—and November 2007, when the DEIS was produced. An inspection of the PJM website for November 15-16, 2007, shows peak prices in the real-time LMP market at 5.3 cents/kWh at 5 p.m.; 10.4 cents/kWh at 6 p.m.; and 9.7 cents/kWh at 7 p.m.<sup>48</sup> Exhibit D. For off-peak power at the same location, the price ranged considerably as well, dipping to 1.59 cents/kWh at 5 a.m. and rising to 11.8 cents/kWh at midnight. Exhibit D. These numbers are spot prices and reflect only energy. They do not reflect the value of capacity, Black Start and other services the regional pools now need (and for which hydro power is especially valuable, as recognized by FERC), and environmental attributes that may lead to carbon credits and other financial benefits to the Licensee. In other words, FERC Staff's analysis most likely significantly underestimates the value of the benefit of the Project to Alcoa. It should be further noted that even small differences in unit prices for energy can have a substantial effect on gross revenue, even when using Alcoa's conservative Annual Generation estimates (as Staff's DEIS does). DEIS at 238-39, Table 53. A one cent/kWh difference in price would produce a difference of approximately \$9.5 million/year.<sup>49</sup>

In addition to the market value of the Project energy, there are other valuable attributes of the Project; and it is very possible that some of these attributes will shortly

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<sup>48</sup> The PJM site was used because it provides readily-available price information and because PJM is a potential market for Yakin Project sales.

<sup>49</sup> Using APGI's 947,100 MWh projected annual generation assumption (DEIS at 238) and multiplying by 1 cent/kWh yields approximately \$9.5 million/year. The Staff-Recommended Alternative would reduce the projected generation to 940,000 MWh and would slightly reduce this effect.

have significant financial value. Carbon credit and carbon allowance programs are currently under consideration for the United States.<sup>50</sup> It is not unlikely that a carbon program will be adopted in the near future (and quite likely during the term of any new Yadkin Project license). If such a program is structured like existing state Renewable Energy Credit programs, the Yadkin Project would probably receive an allocation of credits for zero-carbon electric generation. Alcoa could then sell those credits for private profit.<sup>51</sup> In the alternative, the program could be designed around carbon allowances; and even if no such allowances were automatically allocated for free to APGI for the Yadkin Project (since it does not currently generate carbon to produce electricity), the value of Yadkin Project energy could be very significantly increased because no such credits would be required for the Yadkin output.

The bottom line is that the environmental attributes of the Yadkin Project will likely have much increased monetary value in the relatively near future. It seems highly desirable and in the public interest that the Licensee be required to reflect the value generated by this aspect of Project at the source of its generation, namely, in the Project community. Nevertheless, unless that is a specific requirement of the License, it would

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<sup>50</sup> See, e.g., the Regional Greenhouse Gas Initiative (<http://www.rggi.org/>), a cooperative effort by Northeastern and Mid-Atlantic states to reduce carbon dioxide emissions; the California Global Warming Solutions Act of 2006, AB 32; S.2191, America's Climate Security Act of 2007, a bill that would create a carbon allowance "cap and trade" system.

<sup>51</sup> The FERC Form 1 for APGI illustrates how this would work. In its 2006 FERC Form 1, APGI reported that it transferred sulfur dioxide and nitrogen allowances it received for one of its generation units to its affiliate, Alcoa Allowance Management, Inc. APGI Form 1 for year ending 2006, at 123.2, FERC Form No. 1 (ED 12-88). APGI received these allowances from the U.S. Environmental Protection Agency at zero cost, so the transaction was recorded on that basis on its books. Prior to the transfer of its excess emissions credits to its affiliate, APGI sold any allowances it could not use on the open market. Doing so allowed APGI to record gains from the sales of these allowances in 2005 for \$26.3 million and for 2006 (a partial year due to the transfer to its affiliate in October 2006) a gain of \$13.2 million. That is a tidy profit.

appear that the Licensee could quite simply transfer these aspects and attributes to its parent for significant private financial gain, with nothing remaining in the community.

Given the large agenda of environmental clean-up, mitigation of potential health impacts, infrastructure restoration, and economic development that the Project has left the Stanly County community, it is manifestly in the public interest to provide a realistic valuation of the Project's value when considering to what uses the Project should be put. Should the environmental attributes of the Project become a viable and valuable additional source of income to the Licensee, Stanly County believes that the Licensee should be required to promptly seek such allowances or credits; to manage them so they retain their highest value, and to share the resulting financial gain with the Project community. As a beginning, however, that value should be reflected in the Economic Benefits section of the DEIS' Developmental Analysis.

2. The DEIS' Estimate Of Project Costs Appears Inflated
  - a) The DEIS' Estimate of Project Costs Is Dramatically Different From Reported Production Expenses

Another problem standing in the way of a realistic analysis is Staff's approach to measuring the Company's "costs." In this regard, Staff included all capital costs of improvements as costs to be included in the DEIS' Developmental Analysis for the next license term. The Staff analysis of the Licensee's costs are summarized at DEIS at 238-239. The DEIS concludes that Project costs range from \$24.8 million/year, based on the No-Action Alternative (*i.e.*, with no changes to the current Project) to \$39 million/year, based on the Staff-Recommended Alternative. This leaves a "positive annual net benefit" (or profit) of \$10.5 million/year for the No-Action Alternative, and \$774,570/year for the Staff-Recommended Alternative. DEIS at 238-239, Table 53.

There is something amiss about this analysis. The APGI FERC Form 1 for 2006 reports Total Production Expenses for the existing Project at \$2,510,787. 2006 FERC Form 1 at 407 and 407.1. If the reported Total Production Expenses are divided by the actual net generation, the Yadkin Project cost/kWh currently averages 0.567¢/kWh—about half of one cent. If current Project revenues are close to \$40 million/year, then it is difficult to see how the No-Action Alternative represents only \$10 million/year in profits, even if one considers that the parent allocates charges to its APGI subsidiaries. 2006 FERC Form 1 at 123.4, Sec. D.

There are some obvious differences between the reported Total Production Expenses and FERC's estimate of APGI's costs in the DEIS—including the addition to the FERC estimate of capital not yet spent, and measures not yet taken and priced out due to changes in the existing License. However, the DEIS' cost estimates—which are more than ten-times the amount of Total Production Expenses most recently reported by APGI—and the disparity between the DEIS' estimated profit of \$774,000/year and the real numbers reported by APGI in its FERC Form 1 for 2006 seem too great not to warrant some further examination. Particularly because the Developmental Analysis drives the Staff's acceptance or rejection of proposed mitigation measures and license terms and conditions, additional scrutiny and explanation are necessary.

Indeed, if the DEIS' Developmental Analysis accurately reflects the benefits and costs of the Yadkin Project, it is frankly unclear why APGI would be seeking a new license at all. According to the DEIS (at 238), even under Alcoa's own proposal, its annual "profit" from the project would be about \$2.8 million; and Alcoa must certainly have expected that additional conditions would be required by any new license and

somewhat decrease that figure. It hardly seems worthwhile for a private company like Alcoa to invest \$130 million in new capital, give land to the State of North Carolina, spend many millions of dollars on the relicensing process, and take on the burdens of operating a hydroelectric project where it no longer has any industrial operations for profits of that magnitude.

Moreover, if APGI's economic benefit from the Staff-Recommended Alternative is really only \$774,570/year, as Staff concludes, then the mitigation sought by Stanly County in the form of up to 25% of the Project power, at cost, is indeed a minor matter and should have been both analyzed and recommended by the DEIS. Under Staff's Developmental Analysis, such a condition would require APGI to give up, in total, only 25% of \$775,000/year—less than \$200,000 annually. This is truly a modest contribution to the community, particularly in light of the local impacts of Alcoa's actions.

b) Net Investment and Depreciation

In Table 51 of the DEIS, Staff assumes a net investment in the Yadkin Project of \$58,543,010, stating that this is the "Base value from license application, exhibit D, table D.3-1 (includes relicensing cost and cost of Narrows Unit 2 upgrade)." DEIS at 226. Reference to Table D.2-2 in the APGI License Application (at D-4) discloses a Total Net Investment in the Yadkin Project (as of 2005) at \$24,158,903. Accordingly, an updated number (to 2007) should reflect further accumulated depreciation and thus be less than \$24 million. The discrepancy—more than a doubling of the 2005 net investment—is apparently attributable to Alcoa's relicensing costs and to the planned refurbishment of Unit 2 of the Narrows development, which is expected to be completed prior to the expiration of the existing license. DEIS at 226, Table 51; License Application at H-19.

The DEIS, however, does not provide a calculation showing how the increase was calculated. There is no detailed discussion of the Unit 2 Narrows upgrade costs, or the Yadkin relicensing process in the DEIS; and it is not clear what numbers the Staff accepted and added to the reported net investment in order to come up with a new figure of \$58.5 million. At minimum, the Staff should have provided the source of its information and some breakdown of those costs. On a more substantive level, the Staff should not have included the costs of the FERC relicensing as part of the net investment, since the expenditure of those costs would assure the Licensee the right and opportunity to earn \$40,000,000/year in revenues. License Application at D-4, Sec. D.5.

Furthermore, the Depreciation and debt service components of Project Costs have been increased by Staff to encompass presumably all the proposed capital costs proposed by the Applicant over the life of the new license, thereby encompassing an additional \$110 million in *new* and not yet approved costs (*i.e.*, on top of the Unit 2 Narrow costs). The Applicant, however, once its license is renewed, will *not* be required to fund those capital costs immediately, but over a 12-year period after the license is issued and extending through 2020.<sup>52</sup> DEIS at 227, Table 52; APCI License Application at D-4, Sec. D.6.

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<sup>52</sup> There are several mis-matches here. First, none of the \$110 million in improvements has been authorized. Second, even if they were authorized, they will be subject to an internal analysis against market rates for power (in other words, will the Licensee find it worth spending money on?). If not economic, the improvements won't be done, but the license would have been issued based on a Developmental Analysis that assumed they were both authorized and constructed. Third, the amount of mitigation recommended by Staff assumes all the added investment as a foregone conclusion without considering trade-offs that might be preferable. So, it's putting the proverbial cart before the horse. This is not how an EIS is supposed to be conducted. *See, e.g., Sierra Club v. Bosworth*, 2007 U.S. App. LEXIS 28013, No. 05-16989, slip op. at 27 (9<sup>th</sup> Cir. Apr. 16, 2007) ("Post-hoc examination of data to support a pre-determined conclusion is not permissible" and would frustrate the basic purpose of NEPA).

### 3. The DEIS' Developmental Analysis Is Flawed and Incomplete

As explained above, a core purpose of the DEIS' Developmental Analysis is to support the Commission's decisions on recommended terms and conditions and to help the Commission evaluate whether certain mitigation measures would make the Project uneconomic. If Alcoa is making real profits from the Yadkin Project of \$40 million/year, instead of \$1 million/year, that difference is relevant to the balancing that the Commission must ultimately make on whether to issue a license to APGI and on what terms and conditions.

To put these numbers into context, let us consider the impact of Staff's benefit/cost analysis on the City of Salisbury's requests to assure the continued use of its water intake. (DEIS at 232, Items 17 and 18). Item 17 would cost somewhere between \$1 million and \$2.5 million in capital costs, with a \$700,000-\$1.8 million annual cost. Item 18 would cost \$37-88 million in capital costs or an annual cost of \$1.5-\$3.5 million. *Id.* Obviously, if the Company earns only \$774,000 annually, Item 18 is not possible. However, if the Company actually earns \$10 million, as Alcoa and Staff estimate it does under the No-Action Alternative, and might well earn much more under more realistic numbers, then the consideration of Item 18 takes on a new light.

Even if the projected costs of a recommended mitigation are relatively large compared to the calculated annual profit, that does not mean the mitigation is unjustified, or that the Licensee cannot afford it. The methodology of the Developmental Analysis, while simple, is also inadequate because it improperly considers only one facet of the potential financial impacts. The DEIS, for example, considers only one of the terms and conditions recommended by Stanly County—payments *in lieu* of taxes—and rejects it.

DEIS at 237, Table 52, Item 42. In rejecting that condition—which has zero capital costs but would, according to the DEIS, involve compensating the County for the loss of potentially \$3.4 million/year in tax revenues otherwise associated with the Alcoa land being dedicated to the State or other governmental entities—Staff could certainly “justify” that amount as costing “too much,” since Alcoa would “only” be making \$774,000/year in profits after the other Commission-recommended conditions are taken into account.

To be complete, however, the DEIS and Developmental Analysis must *also* consider the impact on the community—which is not well-off now—of losing property tax revenues that it would otherwise receive from Alcoa annually if the license were not issued. It should also consider the impact on Alcoa’s bottom line of not having to pay that amount of property taxes, to say nothing of the savings in maintenance costs for these extensive properties, forever. Consider that Alcoa will also undoubtedly enjoy a one-time tax benefit for its gift to the State, which will assist its bottom line. None of these highly likely financial benefits to Alcoa are considered in Staff’s calculations. A similar analysis might be pursued for the capital costs and the blanket assumptions made as to who will, in fact, pay for the costs of maintenance, including insurance, local taxes, and the like. DEIS at 225.

The DEIS should also explain the calculation of its estimated \$3.4 million/year cost for this condition, which the DEIS attributes to Stanly County (*id.* 237), but which we have been unable to reconcile with Stanly County’s filings in this proceeding.

The cost-side of the DEIS’ Developmental Analysis is also apparently driven by the projected costs of major maintenance and upgrades that the Licensee proposes to

finance during the new license term. It would be equally valid to exclude those costs as costs that should have been incurred in the past, and therefore should not be considered for purposes of assessing the proper terms and conditions for the next license term. That is, if Alcoa deferred major maintenance and milked the Project for cash profits during the prior license term, and is playing “catch-up” now, the costs of the proposed capital investments should not be used to penalize the public or omit benefits that would otherwise be legitimate for fish and people at relicensing. The methodology used by Staff in the Developmental Analysis improperly rewards Licensees for neglecting major maintenance and capital improvements during the term of their licenses, so that those costs can be loaded into their license applications.

The above focus on just a few items in the Developmental Analysis should demonstrate that it is not, in its present condition, a good indicator of what the economics of this Project are. The bottom line is: how much can this Company afford: (1) to make this Project fit to meet 21<sup>st</sup> century environmental expectations for the natural resources of the river; (2) to mitigate and enhance the community and River it has largely neglected; and (3) to provide to the public, in return for receiving a private business opportunity to produce over \$40 million in annual revenues? The numbers make a difference.

Absent a better, accurate, and germane analysis of the value of the power over the next 30-50 years, the Staff cannot evaluate the mitigation measures that are appropriate in the balancing process the Commission must make. Without such an evaluation, the Commission lacks the basic information it needs to make the essential trade-offs between what the final Project license is worth to a Licensee—essentially an absentee Landlord in

Stanly County—that makes no bones about the fact that its primary use of the Project will be to generate revenues to assist its for-profit operations in other locations. At a minimum, if there ever was a time and opportunity for the federal government to factor how the costs of globalization affect the local economy and to make the adjustments that strike the right balance, this is it even if the Commission were not by law required to do just that (which it is). Regrettably, the evaluation in the DEIS does not provide the necessary information as to the value of the power and the Yadkin License to Alcoa or the full economic impacts of the analyzed alternatives, and the consequences for the vital decision-making process are significant.

### **III. THE DEIS IS INCOMPLETE BECAUSE IT FAILS TO ADDRESS FEDERAL TAKEOVER**

The DEIS addresses only three alternatives. The first is the Applicant's Settlement Agreement; the second is the Settlement Agreement with Staff-Recommended Measures; and the third is the No-action Alternative, which is to do nothing differently from what the existing License requires. DEIS at 23, Sec. 2.4.1. As discussed above, the DEIS is incomplete, because it improperly fails to address the bulk of the additional and alternative license terms and conditions urged by Stanly County to address environmental contamination and socioeconomic issues.

The DEIS also improperly fails to consider federal takeover of the Project. The DEIS (at 34) states that federal takeover was not considered as an alternative because “there is currently no evidence showing that a federal takeover should be recommended to Congress ....” This conclusion, however, is premised on the flawed analysis of the DEIS, which systematically excludes information on Alcoa's record as an environmental steward, evidence of environmental contamination by Alcoa's industrial activities

adjacent to the Project, and the local economic and community impacts of Alcoa's changed proposal for the use of Project energy.

The purpose of the EIS is to develop evidence, so that the Commission can decide which alternative is best. Stanly County contends that a properly prepared EIS, and the complete record necessary to satisfy the Commission's FPA obligations with respect to the Project, would amply support a recommendation of federal takeover to Congress. To date, the applicant has refused to provide the County with information in its possession on environmental contamination at the Badin Works, which are adjacent to the Yadkin Project's largest reservoir. Alcoa has not committed to promptly clean up contaminated sites adjacent to the Project, so that they can be used for new development; and it has refused to commit Project revenue to mitigate the crushing economic effects of its withdrawal of almost 1,000 industrial jobs from Stanly County. If Alcoa is unwilling to accept a license conditioned to address these issues, it hardly seems appropriate to reward Alcoa with a new federal license to use the public's waters—for free—for up to fifty years. In the alternative, if, as the DEIS apparently concludes, the Staff-Recommended Alternative—which fails to address or mitigate many of the significant impacts of the Project—is only marginally profitable to Alcoa, then federal takeover to either shut the Project down or to continue the Project with *all* of the appropriate mitigations is warranted.

Among the benefits that would accrue from federal takeover of the Project, not least would be the operation of the Project by an entity with no profit motive, thus potentially making low-cost power available for local economic redevelopment and to finance environmental remediation.

#### IV. APPLICABLE STANDARDS

NEPA directs that all federal agencies must include in all “major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on ... the environmental impact of the proposed action ....” 42 U.S.C. § 4332(C)(i). NEPA requires federal agencies to take a “hard look” at the impacts of their decisions (*Sierra Club v. U.S. Army Corps of Eng’rs*, 446 F.3d 808, 815 (8th Cir. 2006)); and it is well settled that the socioeconomic effects of a federal action must be considered where that action’s primary impact is on the natural or physical environment (*NEPA Law and Litigation*,<sup>53</sup> § 8:42, 8-116 (1992)). NEPA must be construed to include protection of the quality of life for local residents. *Hanly v. Mitchell*, 460 F.2d 640, 647 (2d Cir. 1972). The Commission has affirmed that NEPA requires it to consider the socioeconomic impact of a federal action on local communities. *Elkem Metals Co.*, 52 F.E.R.C. ¶ 61,073, 61,289 (1990) (“NEPA’s aims include protection of the quality of life for residents in the area of the project. Agencies administering that act accordingly should consider the full range of the project’s effects on the affected community.” (footnotes omitted)). As part of its environmental assessment, NEPA requires the Commission to consider alternatives before reaching a decision. Section 102(2)(E) of NEPA mandates that a federal agency shall “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.” 42 U.S.C. § 4332(2)(E).

The Federal Power Act imposes separate obligations on the Commission, and imposes substantive standards on Commission decisions, in addition to the procedural

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<sup>53</sup> Daniel R. Mandelker, *NEPA Law and Litigation* (2d ed. 1996).

requirements of NEPA. FPA § 15(a)(2) provides that any new license “shall be issued to the applicant having the final proposal which the Commission determines is best adapted to serve the public interest.” 16 U.S.C. § 808(a)(2). In making this public interest determination, the Commission is to consider a number of factors, including “the effect on communities served or to be served by the project,” as well as a host of other factors. FPA § 15(a)(2)(D), 16 U.S.C. § 808(a)(2)(D). FPA Section 15(a)(3) specifically requires that in the case of an application by an existing licensee, such as APGI, the Commission *shall* take into consideration “the actions taken by the existing licensee related to the project which affect the public”<sup>54</sup> (16 U.S.C. § 808(a)(3) (emphasis added)).

Only by identifying all of the relevant issues, considering the appropriate range of alternatives, and seeking information it needs to make a thoughtful analysis can FERC Staff make an adequate and complete record that would address whether the Licensee should receive another 50-year new license as it requested and if so, what conditions should be attached to such a license to assure the public interest.<sup>55</sup> *Scenic Hudson Preservation Conference v. FPC* (“*Scenic Hudson*”), 354 F.2d 608 (2d Cir. 1965), makes clear that the Commission cannot simply rely on the record the parties to a licensing proceeding may create, because the public interest is involved, not merely the private interest of the parties to the proceeding. Rather, the Commission has the affirmative responsibility of ensuring that the record is complete and supports its determination:

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<sup>54</sup> See FPA Sec. 15(a)(2)(D), especially, that requires the Commission to consider and explain in writing its consideration of the need of the applicant for the electricity generated by the Project, and to take into consideration the effect of the applicant’s operation on the communities served or to be served by the projects, its factory operations (where applicable), and its workers. 16 U.S.C. § 808(2)(D).

<sup>55</sup> 16 U.S.C. §§ 797(e), 799, 801.

In this case, as in many others, the Commission has claimed to be the representative of the public interest. This role does not permit it to act as an umpire blandly calling balls and strikes for adversaries appearing before it; the right of the public must receive active and affirmative protection at the hands of the Commission.

... [W]e must decide whether the Commission has correctly discharged its duties, including the proper fulfillment of its planning function in deciding that the “licensing of the project would be in the overall public interest.” The Commission must see to it that the record is complete. The Commission has an affirmative duty to inquire into and consider all relevant facts.<sup>56</sup>

The Commission Staff is obliged to discharge its independent obligation to assure the Commission that the record on environmental contamination and community impact issues in this proceeding is adequate to allow the Commission to make informed decisions. *See, e.g., Sierra Club v. Froehlke*, 486 F.2d 946, 950 (7th Cir. 1973).

Under Section 10(a)(1) of the Federal Power Act, 16 U.S.C. § 803(a)(1):

All licenses issued ... shall be such as in the judgment of the Commission will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water-power development, for the adequate protection, mitigation and enhancement of fish and wildlife (including related spawning grounds and habitat), and for other beneficial public uses, including irrigation, flood control, water supply, and recreational and other purposes referred to in section 4(e) if necessary in order to secure such plan the Commission shall have authority to require the modification of any project and of the plans and specifications of the project works before approval.

In addition, Section 4(e) of the Federal Power Act, 16 U.S.C. § 797(e), refers to a required determination by the Commission of the public interest, and further requires the

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<sup>56</sup> 354 F.2d at 620, citing *Michigan Consol. Gas Co. v. FPC*, 283 F.2d 204, 224 (D.C. Cir. 1960) and other

Commission, “in addition to the power and development purposes for which licenses are issued [to] give equal consideration to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of, fish and wildlife (including related spawning grounds and habitat), the protection of recreational opportunities, and the preservation of other aspects of environmental quality.”

Any new license for the Yadkin Project must satisfy these statutory criteria. They are high standards, and they should be, as the use of a major river or waterway affects so many local and important considerations. In a recent Policy Statement on settlement agreements in hydroelectric licensing proceedings, the Commission described its task as looking “not only [at] the wishes of the settling parties, but also at the greater public interest, and whether settlement proposals meet the comprehensive development/equal consideration standard.” 116 F.E.R.C. ¶ 61,270 at P 4. In addition, the Commission noted that it must “ensure” that its decisions are “supported by substantial evidence.” *Id.* P 5. More specifically, the Commission said the test required the “settling parties [to] provide the Commission with record support showing a nexus between the proposal and the impacts of the project, as well as to project purposes, and also explain how the proposal will accomplish its stated purpose.” *Id.*

### CONCLUSION

As discussed above, the Commission should direct its Staff to issue, for public comment, a supplemental DEIS remedying the deficiencies in the present DEIS to support any Commission decision in this relicensing proceeding, the Staff must prepare an adequate record and make recommendations, based on an analysis of that record and

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decisions.

all relevant alternatives. Moreover, the Commission should establish a trial-type proceeding to elicit the necessary information to complete the record in this significant relicensing proceeding if it is unable to elicit adequate information. In addition, the DEIS should not be considered complete until the pending studies noted herein have been submitted to FERC and evaluated by Staff. The Commission's self-imposed deadline of February 2008 to complete the EIS cannot take precedence over this obligation to compile an accurate and adequate record.

Respectfully submitted,

*/s/ Frances E. Francis*

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