

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

Alcoa Power Generating Inc.	)	Project No. P-2197
	)	
	)	Yadkin Project

**ALCOA POWER GENERATING INC.'S RESPONSE TO  
NORTH CAROLINA WILDLIFE RESOURCES COMMISSION**

On September 23, 2013, the North Carolina Wildlife Resources Commission (“WRC”) filed with the Federal Energy Regulatory Commission (the “Commission” or “FERC”) a letter addressed to Alcoa Power Generating Inc. (“APGI”), in which it purported to withdraw from the Relicensing Settlement Agreement (“RSA”) it entered into in 2007 in the above-captioned matter. As described in further detail below and in APGI’s attached response to WRC, not only does WRC’s letter generally lack substance with respect to the RSA at issue, but its statements are at odds with the facts. In any event, the WRC letter in no way affects the RSA’s status as a settlement proposal in this relicensing proceeding.

**I. Response**

The WRC’s letter and its assertions are irrelevant to the existing FERC proceeding and to the validity of the existing RSA as a binding agreement. In this case, the RSA filed under Rule 602 represents a negotiated compromise among multiple signatories, all of whom signed in an attempt to resolve outstanding issues in one proceeding.<sup>1</sup> The parties reached an agreed-upon position in order to avoid the costs and risks associated with litigation, to provide administrative efficiency, and to gain a degree of certainty as to the outcome of the relicensing process. The

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<sup>1</sup> 18 C.F.R. § 385.602.

Commission recognizes that such multi-party settlements serve important policy considerations and must be encouraged.<sup>2</sup>

Moreover, the Yadkin Project RSA, to which WRC became a signatory in 2007, only explicitly allows withdrawal under certain circumstances, all of which take place after the Commission issues a new license. The RSA does by its terms permit modifications upon the agreement of all parties, but WRC, notwithstanding the elapsed period of several years since it learned of the events it complains of in the letter filed on September 23, 2013, did not seek to proceed under the RSA. The Commission historically respects terms within a settlement agreement regarding withdrawal.<sup>3</sup> When settlement terms are silent on withdrawal, Commission precedent holds that when an agreement has been pending for a significant amount of time, the Commission will not allow parties – even states who are parties – to withdraw support or begin late opposition.<sup>4</sup> Thus, no party to the RSA has the right under the RSA to do what WRC is claiming to do.

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<sup>2</sup> See *Consolidated Gas Supply Corp.*, 22 FERC ¶ 61,120, at 61,179 (1983) (noting that “...settlements serve important policy considerations and must be encouraged”); see also *El Paso Natural Gas Co.*, 20 FERC ¶ 61,443 (1982) (noting that “the courts have characterized a settlement agreement variously as a ‘private contract’...the rules of construction applicable to contracts have been held to apply to settlement agreements”).

<sup>3</sup> See *Pacific Gas and Electric Co.*, 110 FERC ¶ 63,051 (2005) (approving settlement language providing the settlement becomes effective only when approved by the Commission by an order approving the settlement without condition or modification); see also *El Paso Natural Gas Co.*, 114 FERC ¶ 61,290 (2006) (referencing approved settlement agreement language that would allow parties to withdraw if Commission approval modified the settlement in a significant way).

<sup>4</sup> See *Northern Natural Gas Co., a Division of Enron Corp.*, 38 FERC ¶ 61,017 (1987), (denying withdrawal of Minnesota’s support for settlement, even prior to final action by the Commission, because it would disrupt the proceeding); see also *Columbia Gas Transportation Corp.*, 31 FERC ¶ 61,307, at 61,677 (1984) (holding that “it would be extremely disruptive to the settlement process – indeed to any decision-making process – if the parties were permitted to take one position and then, long after filings are completed, to simply change their minds and refile taking an opposite position”); see also *Texas Eastern Transmission Corp.*, 80 FERC ¶ 61,205 at 61,832 (1997) (explaining Commission policy of not allowing late filed objections to settlements whereas it will allow contesting parties to change to consenting parties).

The RSA represents a carefully negotiated compromise of the complex issues in this relicensing proceeding by a large majority of stakeholders. Although there were parties who did not join in the RSA initially, more have adopted the RSA as time has gone on, the most recent being Stanly County, North Carolina, formerly one of its most vocal opponents.<sup>5</sup> The RSA remains a settlement proposal supported by the record as well as the parties in this proceeding, regardless of any recent action by WRC. It thus remains a reasonable basis upon which the Commission should act in its issuance of a new permanent license for the Yadkin Project.

## **II. Conclusion**

Wherefore, APGI respectfully requests that the Commission regard WRC's September 23, 2013 letter as irrelevant to any issue in the current relicense proceeding.

Respectfully submitted,

/s/ David R. Poe  
David R. Poe

BRACEWELL & GIULIANI LLP  
2000 K Street NW  
Washington, D.C. 20006-1872  
(202) 828-5800

Counsel for Alcoa Power Generating Inc.

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<sup>5</sup> See *Certification of Stanly County Board of Commissioners*, filed on May 20, 2013 in Docket No. P-2197-073.



**Alcoa Power Generating Inc.**

Yadkin Division  
293 NC 740 Hwy  
PO Box 576  
Badin, NC 28009-0576 USA

October 3, 2013

Mr. Gordon Myers  
Executive Director  
North Carolina Wildlife Resources Commission  
1701 Mail Service Center  
Raleigh, North Carolina 27699-1701

**Subject: Yadkin Hydroelectric Project, FERC No. P-2197  
Relicensing Settlement Agreement**

Dear Mr. Myers:

It is unfortunate that the Wildlife Resources Commission has become party to the political efforts of the State of North Carolina to seize the Yadkin Hydroelectric Project owned and operated by Alcoa Power Generating, Inc., as reflected in your September 16, 2013 letter purporting to rescind the Commission's previous agreement to and signature of the Relicensing Settlement Agreement (RSA). The RSA represents a carefully negotiated compromise of the complex issues in the FERC relicensing proceeding by a large majority of stakeholders. Although there were parties who did not join in the RSA initially, more have adopted the RSA as time has gone on, presumably based on their assessment of the benefits that the RSA provides. Because no party to the RSA has the right under the FERC rules to do what the Commission's letter tries to do, we will not address here the lack of a legal or factual basis for the Commission's letter.

However, we do want to address the apparent motivation for the Commission's recent change in position, in order to try to rectify any confusion among the public (including other RSA signatories) or FERC as to the letter's purpose. The letter appears to be the most recent of the State's efforts to attempt to seize ownership of the Project. Those efforts began with its filing of a lawsuit against APGI on August 2<sup>nd</sup> claiming ownership in the Project's submerged lands and dams. That lawsuit led the Division of Water Resources (DWR) several hours later to deny APGI's application for a water quality certification under § 401 of the federal Clean Water Act. This sudden flurry of efforts by the State to try to strengthen its arguments before FERC are not well-founded, but are transparent as to their purpose.

The sudden change in the Commission's position as reflected in your letter also contrasts sharply with the Commission's reiteration earlier this year of its unqualified support for the RSA, as reflected in its comments on the recent APGI 401 application. That statement of support filed on January 18, 2013 by the Commission's Hydropower Licensing Coordinator described nine provisions that the Commission had negotiated for inclusion into the RSA and ultimately the FERC license. These benefits were the bases for the Commission's consistent support for the RSA, the 401 and FERC license. Indeed, the Commission's January 2013 comments concluded that the RSA:



**Alcoa Power Generating Inc.**

Yadkin Division  
293 NC 740 Hwy  
PO Box 576  
Badin, NC 28009-0576 USA

Mr. Gordon Myers, Executive Director  
North Carolina Wildlife Resources Commission  
October 3, 2013  
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provides a complete package of protection, enhancement and mitigation measures that promote a sustainable balance of water uses in both the reservoirs and riverine portions of the Yadkin River in North Carolina. These uses include the protection of fish and wildlife resources, and the recreational opportunities they provide.

Those conclusions remain correct, and the Commission's long-standing support of the 401 and FERC re-licensing and its January 2013 comments reiterating that support belie the true purposes of the letter, particularly given the several years that have elapsed since the assertions complained of in the Commission's letter. The Hearing Officer assigned to the hearing on the 401 application considered a variety of opponents' objections and assertions, including those claimed in the Commission's letter, but the Hearing Officer ultimately found none of them persuasive in light of the information provided by APGI in its application. DWR ultimately denied the 401, but did so based solely on the allegations in the State's submerged land lawsuit.

It is unfortunate that the Commission has been drawn into this political fray, particularly in light of the considerable benefits the public and the environment will receive under the RSA, which we finally note does not provide for signatories to withdraw. Thus, the Commission's letter is ineffective. Nevertheless, APGI intends to continue our support for the RSA and its public benefits, and also to continue our efforts to secure a FERC license that would secure those benefits.

Sincerely yours,

A handwritten signature in black ink that reads 'E. Ray Barham'.

Ray Barham  
Vice President  
Alcoa Power Generating Inc.

Enclosures:

- Commission's 2013 Support Letter
- DWR Hearing Officer's Report

**Higgins, Karen**

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**From:** Goudreau, Chris J.  
**Sent:** Friday, January 18, 2013 4:52 PM  
**To:** Higgins, Karen  
**Cc:** Tarver, Fred; Ray.Barham@alcoa.com; Deaton, Shannon L.  
**Subject:** Yadkin 401 certification  
**Attachments:** 2013-01-18 ncwrc comments re yadkin 401 application.pdf

Karen,

Attached are comments of the North Carolina Wildlife Resources Commission regarding the 401 certification application by APCI for the Yadkin hydroelectric project. Give me a call if you have any questions.

Chris

Chris Goudreau  
Special Projects Coordinator  
North Carolina Wildlife Resources Commission  
645 Fish Hatchery Road  
Marion, NC 28752  
828-652-4360 ext. 223

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## ☰ North Carolina Wildlife Resources Commission ☰

Gordon S. Myers, Executive Director

January 18, 2013

Via Email

karen.higgins@ncdwr.gov

Ms. Karen Higgins  
North Carolina Division of Water Quality  
1650 Mail Service Center  
Raleigh, NC 27699-1650

Subject: 401 Water Quality Certification Application  
Yadkin Hydroelectric Project FERC No. 2197  
Alcoa Power Generating, Inc.  
DWQ # 2012-0900  
Davie, Davidson, Rowan, Montgomery and Stanly Counties

Dear Ms. Higgins:

Submitted are comments in response to the November 28, 2012 public notice by the North Carolina Division of Water Quality requesting comments on the 401 water quality certification submitted by Alcoa Power Generating, Inc. (APGI) for the relicensing of the Yadkin Hydroelectric Project. The North Carolina Wildlife Resources Commission (NCWRC) provides these comments and recommendations in accordance with provisions of the Clean Water Act (33 U.S.C. 446 et seq.), the Federal Power Act (16 U.S.C. 791a et seq.), and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

The 2007 Yadkin Hydroelectric Project Relicensing Settlement Agreement (RSA) provides a complete package of protection, enhancement and mitigation measures that promote a sustainable balance of water uses in both the reservoirs and riverine portions of the Yadkin River in North Carolina. These uses include the protection of fish and wildlife resources, and the recreational opportunities they provide. The NCWRC is a signatory of the RSA.

We recommend the following provisions of the RSA be included as conditions of the 401 water quality certification:

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Mailing Address: 645 Fish Hatchery Road • Marion, NC 27652  
Telephone: (828) 652-4360 • Fax: (828) 652-3279

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1. Article PO-1 – Reservoir Operations – This article describes reservoir elevations to be maintained throughout the year for High Rock, Tuckertown, Narrows (Badin), and Falls reservoirs under normal operating (i.e., non-drought and non-emergency) conditions. It also includes a provision to stabilize reservoir levels during the spring fish spawning period.
2. Article PO-2 – Project Instream Flows – This article describes the minimum average daily flow releases from the Falls development. It also includes a provision to develop a process for providing spring spawning flows below the Blewett development of the Yadkin-Pee Dee project (P-2206).
3. Article PO-3 – Flow and Reservoir Elevation Monitoring – This article describes the process for developing a flow and reservoir elevation monitoring plan to ensure compliance with the FERC license and 401 certification.
4. Article PO-4 – Low Inflow Protocol – This extensive article describes project operations and consultation/notification requirements to be followed under drought and other low-inflow conditions.
5. Article PO-5 – Hydro Project Maintenance and Emergency Protocol – This extensive article describes project operations and consultation/notification requirements to be followed under maintenance and emergency conditions.
6. Article WQ-1 – Water Quality – This article describes a schedule for installing the equipment designed to meet state standards for dissolved oxygen of waters discharged from each of the four project developments. It also describes the monitoring/reporting schedule to be followed for each development. Finally, it includes a provision describing the operation of the project units to ensure that dissolved oxygen standards are met throughout the year.
7. Article WQ-2 – Dissolved Oxygen Monitoring – This article describes the process for developing a dissolved oxygen monitoring plan to ensure compliance with the FERC license and 401 certification.
8. Article WQ-3 – Additional Dissolved Oxygen Enhancement Actions – This article describes the measures to be undertaken if the project is unable to meet state standards for dissolved oxygen after implementing the provisions of Articles WQ-1 and WQ-2.
9. Article SMP-1 – Shoreline Management Plan – This article describes the process for developing and submitting a revised shoreline management plan to protect the water quality and habitat of project waters from various development activities within the project boundary.

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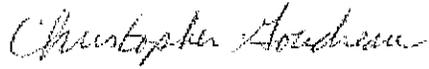
Yadkin 401 Certification  
DWQ #2012-0900

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January 18, 2013

If you have any questions concerning these comments, please call me at 828-652-4360 ext. 223.

Sincerely,



Christopher Goudreau  
Hydropower Licensing Coordinator

c: Fred Tarver, NCDWR  
Ray Barham, APGI

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Zoom:



North Carolina Department of Environment and Natural Resources

Division of Water Quality

Pat McCrory  
Governor

Thomas A. Reeder  
Acting Director

John E. Skvarla, III  
Secretary

July 29, 2013

**MEMORANDUM**

**To:** Thomas A. Reeder

**From:** Jim Gregson, Regional Supervisor *JHG*  
Surface Water Protection Section  
Wilmington Regional Office

**Subject:** Hearing Officer's Report and Recommendations  
Alcoa Power Generating, Inc. (APGI) Yadkin Project, FERC P-2197  
401 Certification Application Public Hearing (DWQ Project No. 12-0900)  
Davidson, Davie, Montgomery, Rowan and Stanly Counties

On May 14, 2013, I served as the Hearing Officer for the Subject Public Hearing held at the Stanly County Commissioners' Meeting Room, at the Stanly County Commons, in Albemarle, NC. The purpose of the public hearing was to allow the public to comment on the September 28, 2012, 401 Water Quality Certification Application from Alcoa Power Generating, Inc. (APGI) for the Yadkin Hydroelectric Project (FERC No. 2197).

In addition to listening to oral comments at the public hearing, I have reviewed all written comments received during and after the public comment period. I have also reviewed all comments received through the State Clearinghouse and Public Notice on the Final Environmental Impact Statement (FEIS) for the FERC License Renewal, as well as all comments received on the November 28, 2012, Notice of Application Public Notice for the project. In preparation of this report I have considered all of the public comments, the public record, and the site visit for the project.

The report has been prepared using the following outline:

- I. Site History / Background
- II. Relicensing Settlement Agreement (RSA)
- III. Site Visit
- IV. May 14, 2013, Public Hearing and Comments Summary
- V. APGI FERC FEIS Public Comment Summary
- VI. Notice of Application Comments Summary
- VII. 15A NCAC 02H.006 (b) Recommendations
- VIII. Summary
- IX. Attachments

Wilmington Regional Office  
127 Cardinal Drive Extension Wilmington, NC 28405  
Phone: 910-796-7215 / FAX: 910-350-2004  
Internet: [www.ncwaterquality.org](http://www.ncwaterquality.org)

One  
North Carolina  
*Naturally*

## **I. History / Background**

Alcoa Power Generating, Inc. (APGI), a subsidiary of Alcoa, Inc., manages a 38-mile section of the Yadkin River in the counties of Davie, Davidson, Rowan, Stanly and Montgomery. The APGI Yadkin Project includes four hydroelectric dams and powerhouses and four reservoirs. From north to south the dams are High Rock, Tuckertown, Narrows and Falls.

In 1915 the Aluminum Company of America purchased an unfinished aluminum smelting project from the French company L' Aluminum Francais. By 1917 the first dam was completed at Narrows creating the Narrows Reservoir, known locally as Badin Lake. The dam and associated hydroelectric facility provided power to the new aluminum plant in Badin known as Badin Works. As aluminum production at the Badin Works facility increased, the company added the Falls Dam in 1919 and the High Rock Dam in 1927 to generate additional hydroelectric power for the facility. The last of the four hydroelectric stations built to serve Badin Works was completed in 1962 and is known as Tuckertown, located between High Rock and Narrows. Aluminum production at Badin Works was curtailed by Alcoa in 2002 and the plant was shut down permanently in 2007. Although no longer used to support aluminum production, the four hydroelectric stations continue to generate an average of 814,306 megawatt-hours of electricity annually which is sold on demand to the wholesale market.

In 1958 Alcoa received a 50 year license from the Federal Power Commission to operate its four hydroelectric plants on the Yadkin River. APGI filed a new license application with the Federal Energy Regulatory Commission (FERC) in April 2006. As part of the relicensing process, the applicant is required to obtain a 401 Water Quality Certification from the State of North Carolina. Section 401 of the Federal Clean Water Act requires that a 401 Certification be obtained from the state for any project that requires a Federal permit or license that may result in a discharge into waters of the US. The issuance of a 401 Certification is a determination by the state that the project, as proposed, will not violate water quality standards. If approved, the 401 Certification becomes a condition of the Federal permit or license. APGI's original license expired on April 30, 2008. Since that time the Yadkin Project has been operating under a series of one-year licenses that are automatically renewed.

## **II. Relicensing Settlement Agreement (RSA)**

As part of the FERC relicensing process, APGI entered into a formal negotiation process with a variety of stakeholders in both North Carolina and South Carolina. In February 2007 a Relicensing Settlement Agreement (RSA) (Attachment II.) was signed by 23 stakeholders representing state and Federal agencies, local government, homeowners, recreational users and environmental groups. The RSA was submitted to FERC on May 7, 2007. The RSA was incorporated into the Final Environmental Impact Statement for the project in April 2008. The RSA serves as a mechanism to resolve issues raised by the stakeholders in connection with the

FERC relicensing of the APGI Yadkin Project. The agreement specifies APGI's obligations for the protection, mitigation, and enhancement of ecological, environmental, recreational and cultural resources affected by the project, as well as enforceable obligations of other signatories. Settlement provisions of the agreement include:

- Flow adjustment for enhancement of downstream spawning
- Low Inflow Protocol including continued funding of USGS gauges
- A tailwater dissolved oxygen enhancement schedule and operation plan
- Dissolved oxygen monitoring
- Recreation facility improvements
- Modifications to existing shoreline management plan
- Rare, threatened, endangered and invasive species monitoring
- Land donation
- Higher water levels and extended recreation season at High Rock Lake
- Increase water withdrawals for the City of Albemarle

Although the RSA and the commitments therein should be considered an integral part of APGI's application to be considered during the 401 Certification process, it should not be considered the final solution to all water quality related project impacts. Section 1.3.12 of the RSA states that execution of the Settlement Agreement by the State of North Carolina or any agency thereof expresses or implies no representation that the requirements of the Settlement Agreement ensure compliance with State water quality standards and other appropriate requirements of State Law.

### **III. Site Visit**

A site visit was conducted on January 22, 2013, with APGI staff, staff of the DWQ Wetlands, Buffers, Stormwater, Compliance and Permitting Unit, the Program Development Unit, and the Hearing Officer. During the site visit the four dams and powerhouses of the APGI Yadkin Project were toured. Discussions during the site visit focused on dissolved oxygen (DO) enhancement technology, DO monitoring, types of turbines being used, and general operation of the facilities.

### **IV. May 14, 2013, Public Hearing and Comments**

A Public Hearing was held on May 14, 2013, at 7:00 pm, in the Stanly County Commissioners' Meeting Room, at the Stanly County Commons, in Albemarle, NC. The purpose of the public hearing was to allow the public to comment on the September 28, 2012, 401 Certification Application from APGI for the Yadkin Hydroelectric Project (FERC No. 2197). Notice of the hearing (Attachment VI.) was published in the Dispatch, the Salisbury Post, the Winston-Salem Journal and the Charlotte Observer on April 6, 2013, in the Stanly News and Press on April 9,

2013, and sent by mail to the Water Quality Certification Mailing List on April 4, 2013. Additionally, publication of this notice was posted on the DWQ website. The 30 day public comment period ended on June 13, 2013.

Approximately 64 people attended the public hearing including six staff members of the Division of Water Quality and the Hearing Officer. A total of 57 individuals signed the attendance sign in sheets at the hearing (Attachment VII.). The Hearing Officer provided opening comments and Karen Higgins, the Wetlands, Buffers, Stormwater, Compliance and Permitting Unit Supervisor of the Division of Water Quality gave a brief overview of the project. Thirteen (13) individuals registered in advance of the hearing to make comments and three additional individuals made comments after the 13 that registered. Two individuals spoke a second time at the hearing. Speakers were given five minutes for initial presentations and additional time was provided after everyone that registered to speak was finished. The list of speakers is included as Attachment VIII. Of the 16 individuals that spoke at the public hearing nine were generally in favor of the issuance of the 401 Certification and five were generally opposed. Two speakers were neither in favor nor opposed to the project but encouraged DWQ to look strongly at the issues. The following is a summary by issue area of oral comments received at the public hearing:

- **Alcoa Environmental History and Jobs** – Several speakers acknowledged that Alcoa had past issues with contamination at Badin Works but recognized that they were actively trying to clean up the site and that addressing contamination at Badin Works will help bring jobs to the area. Several other speakers recommended denying APGI’s 401 Certification request based on their poor environmental history and the perception that they cannot be trusted.
- **Dissolved Oxygen** - Two speakers voiced concern over making sure that APGI is complying with dissolved oxygen (DO) standards. An APGI representative indicated that the 401 Certification process is only about one issue (the DO standard) and that application of the proposal submitted for DO improvement will meet the state standard. One speaker questioned how the APGI DO data compares with other hydropower facilities on the river and if their improvements going to be as strong as APGI’s.
- **PCB Contamination** - One speaker stated that the Badin Works plant should be considered part of the project for 401 Water Quality Certification review purposes, and that any contamination from the plant should be addressed in the 401 Certification. Two speakers indicated that PCB contamination needed to be addressed in the 401 Certification. One speaker questioned how the operation of the dams allows PCBs to move through the system. Two speakers described PCB contamination as a watershed issue and not isolated to the APGI sites. One speaker questioned why striped bass were not tested for PCBs in the most recent fish tissue study.

- **RSA** – Four speakers voiced support for the RSA and the benefits that it would provide to the region. One speaker expressed concern over the integration of the RSA and 401 processes.

The Public Hearing Transcript including oral comments is included as Attachment IX.

In addition to the public hearing, DWQ received one voice mail and 154 written comments during the public comment period and 89 written comments post public comment period as of July 8, 2013. One hundred ninety-six (196) of the written comments were received using the following form letter email recommending denial of the 401 Certification:

*This letter is in response to Alcoa's 401 Water Quality Application. I respectfully request that NC Division of Water Quality (DWQ) deny Alcoa's request for a Water Quality Certification to operate the hydroelectric dams at High Rock, Tuckertown, Narrows, and Falls Reservoirs on the Yadkin River for the following reasons:*

*On December 1, 2010, the NC DWQ, citing "intentionally withheld information" in relation to the State's water quality assessment (regarding dissolved oxygen compliance) issued a Notice of Revocation. Alcoa has had more than six years to upgrade its dam operations to comply with water quality standards since they first applied May 10, 2007, but much of the project is still failing to meet dissolved oxygen standards, crucial to the health of the river.*

*The Final Evaluation Impact Statements from the Federal Energy Regulatory Commission contains data from more than six years ago. These studies did not evaluate the disproportionate impact of past plant operations on the community of west Badin, where 46 of Alcoa's hazardous waste sites are located. They did not evaluate the impact or movement of PCBs throughout the Yadkin River ecosystem.*

*Recent state testing by the NC Department of Health and Human Services (DHHS) shows dangerously high levels of PCBs in fish throughout the Yadkin Project, spanning 50 river miles. Fish - tissue sampling revealed PCB levels 100 percent above the state health standards for safe fish consumption. Both EPA and NC DENR are aware the contamination, the danger it causes for local citizens as well as Alcoa's disposal of PCBs in Badin Lake and Falls Reservoir "resulting in PCB contamination."*

*Not one of the agencies reviewing PCB contamination in the Yadkin project—NC DWQ, NC DHHS or EPA — support Alcoa's claims that the PCBs the company discharged into Badin Lake and Falls Reservoir have not contributed to biological impairment of fish in the Yadkin River system.*

*PCB fish testing in Tuckertown Reservoir was never completed, but PCBs were discovered in fish sampled upstream in High Rock Lake. Since fish pass through the dams, the movement of PCBs through entrainment of contaminated fish should be studied. Additional testing needs to be done.*

*On September 28, 2012, ALCOA applied for a new 401 certification as it continues in its attempts to gain another 50- year license from FERC for its Yadkin Project. In this most recent application, Alcoa asserted 'no public lands' are involved in its hydroelectric project, and therefore does not require State Environmental Policy Act (SEPA) review. Yet, according to the NC Department of Administration, "all lands beneath navigable rivers are sovereign lands of the State. "*

*Based on the additional testing that still needs to be conducted, Alcoa's poor stewardship of the Yadkin River, and Alcoa's conflicting and misleading statements to state and federal agencies, Alcoa should not be rewarded with 401 Water Quality Certification. The public, which rightfully owns the Yadkin River, should not have to wait another fifty years to revisit these important issues. Please deny Alcoa's 401 application request.*

Other written and voice mail comments by issue area received during and after the public comment period include the following:

- **401 Certification Process** - Written comments were received from Duke Law Environmental Law and Policy Clinic (ELPC) at the Public Hearing concerning a 2001 meeting between Duke Power, Progress Energy and NCDENR covering relicensing activities and the 401 Water Quality Certification process for hydropower projects in North Carolina. The information included recommended options from Duke Power and Progress Energy on improving the 401 Certification process.
- **Land Conservation** – One comment was received supporting land conservation of as much of Alcoa's riparian land as possible.
- **Alcoa Environmental History** - In addition to the form letter emails four additional comments were received recommending denial of the 401 Certification citing withholding information and past environmental history. One voice mail comment was received during the public comment period concerning Alcoa's past environmental history and PCB contamination in fish in High Rock Lake.
- **Environmental Justice** - Comments were received from Southern Environmental Law Center (SELC) on behalf of the North Carolina Environmental Justice Network. SELC urges DWQ to include conditions in the 401 Certification that require a community and state agreed upon remediation plan for Alcoa's clean-up of the existing contamination on and around the site of the retired aluminum facility near Badin Lake. The letter also indicated that the Alcoa's corrective measures study is inadequate because their remediation plan lacks a process with objectives, steps and deliverables that illustrate

the action Alcoa will take to effectively remediate the contamination sites. Additionally, the community affected by the contamination has not been involved in the remediation decision process.

Clean Water for North Carolina also submitted comments stating that documented hazardous waste disposal and subsequent contamination in the west Badin area, coupled with selective location of low income and people of color in the area, have created a disproportionate risk of exposure to toxic smelting - related wastes, through groundwater and other exposure routes. In addition, low income populations living close to bodies of water are known to consume local fish more frequently than higher income or recreational visitors, and the elevated PCB levels in lake fish have almost certainly further increased health risks to these residents over decades.

- **Management of High Rock Lake** - One comment was received in support of approval of the 401 Certification so that there will be a business oriented verses political management of High Rock Lake.
- **Property Ownership** – In addition to the property ownership issues discussed in the form letter email, several other comments were received concerning ownership of the submerged lands of the Yadkin Project. Comments were also received from Duke Law ELPC on behalf of the Yadkin Riverkeeper concerning ownership of the riverbed in the Yadkin Project. The Yadkin Riverkeeper is requesting denial of the 401 Certification unless and until the applicant obtains an easement from the NC Department of Administration for its use of state-owned public trust lands. The comments state that APGI's application for certification does not meet the requirements of DWQ's rules because it has not obtained permission to use the property from its owner, the State of North Carolina.
- **NEPA Process** – In addition to the NEPA issues discussed in the form letter email, Comments were also received from Duke Law ELPC on behalf of the Yadkin Riverkeeper requesting denial of the 401 Certification on the basis that the FEIS is inadequate and outdated for failure to study the impact of the Yadkin Project on transport of hazardous substances such as PCBs with an ecological risk assessment.
- **The City of Salisbury** – The City of Salisbury requested that the 401 Certification include the following two conditions:
  - Condition 1: Immediately implement sedimentation and flood protection measures that will protect the City of Salisbury's water supply intakes and pump station from service interruption by sedimentation and by the FEMA base flood elevation.

Condition 2: Immediately implement flood protection measures that will protect the City of Salisbury's wastewater treatment plant from service interruption by the FEMA base flood elevation.

- **Division of Water Resources** – The Division of Water Resources stated that they had no additional comments regarding the most recent application assuming the Relicensing Settlement Agreement from February 2007 remains in force and unaltered.

## V. APGI FERC FEIS Public Comment Summary

A total of 54 comments were received through the State Clearinghouse and Public Notice on the FEIS for the FERC License Renewal for the APGI Yadkin Project. Fifty-three (53) comments were received during the comment period and one was received after the comment period ended. Most comments were directly related to the perceived failure of the NEPA process to adequately address certain issues or to follow proper procedures. Several comments were not directly related to the FEIS but were more specific to the operation of the dams and the Badin Works site. The following is a summary by issue area of the comments received:

- **Environmental Justice** - Two comments were received that directly addressed the issue of environmental justice. One comment was received from SELC on behalf of the North Carolina Environmental Justice Network. The other comment was received from Duke Law ELPC on behalf of the Yadkin Riverkeeper. Several other comments were received that briefly mentioned social and economic impact of the proposed action that the FEIS failed to address.

**(SELC Comments)** - FEIS fails to include information relating to environmental justice and water quality in Badin Lake. DWQ should request additional study of PCB contamination on communities of color near Badin Lake. FEIS does not consider cumulative human health impacts.

**(ELPC Comments)** - FEIS made no assessments of the impact of the project on environmental justice hot spots. No one is warning the people who live around these lakes or fish there that they may be eating fish with PCBs above the levels that triggered the fish consumption advisories in Badin Lake. Many of those people eating these fish are from communities of color. On behalf of the Yadkin Riverkeeper, we comment that the FEIS is inadequate in its analysis of the impact of the operation of the project on PCBs in the system.

- **Dissolved Oxygen** – 40 comments were received (32 using a form letter email) related to Water Quality DO standards and the operation of the dams to “maximize” water

quality. Other comments relating to dissolved oxygen were very similar and included statements such as “the FEIS does not consider the scope of the environmental impacts from the operation of the dams and should explain that the water is too oxygen deprived for fish to adequately live”.

**(Form Letter Comments)** - The FEIS did not look at operating the dams to maximize water quality, rather it analyzed how to maximize Alcoa's profits by generating electricity to meet peak power demands. The water below the dams and the waters of High Rock Lake does not meet state water quality standards for dissolved oxygen at all times. The latest proposal from Alcoa in January of this year, proposes to allow continued water quality standard violations for years to come.

- **PCB Contamination** – 44 comments were received (32 using a form letter email) related to PCB contamination in Badin Lake and at the Badin Works site.

**(Form Letter Comments)** - The FEIS did not examine the contamination by PCBs and hazardous wastes at the Badin Works, the town of Badin and the riverbed itself. For more than 50 years the smelter was the Project, its impacts cannot be ignored. New testing reported to NC DENR about this PCB contamination last year, but NC DENR has taken no enforcement response. The FEIS pretends this documented contamination does not exist. The FEIS makes no review of fish sampling and PCB testing done by the State of North Carolina and EPA. The fish were contaminated enough that the State issued a fish consumption advisory, but this information is not examined in the FEIS.

- **Public Ownership and Job Creation** - 37 comments were received (32 using form letter email) related to public versus private ownership of the dams and the impact on job creation.

**(Form Letter Comments)** - The FEIS does not look at all the alternatives. It looks at how the dams were allowed to be run before and how they will be allowed to be run in the future with Alcoa in charge as the sole alternative. The FEIS never looked at the benefits to the public of public ownership or a public /private partnership running the dams. Recent studies reported to the Uwharrie Regional Resources Commission show that jobs could be created by an alternative licensing arrangement, yet none was considered by the FEIS. Job creation is a key socioeconomic impact and must be considered in an FEIS.

- **Alcoa / APCI Environmental History** – Several comments received protested the relicensing to Alcoa based on its “past history of non-compliance”. Several commenters stated that Alcoa had not been a good steward of the river and its environment. One commenter questioned how the state could have a FEIS without considering the damage Alcoa has already done in the river. One commenter

recommended that the 401 Certification be approved because Alcoa has done everything asked of them.

- **Clearinghouse Comments** – Agency specific comments were received from the NC Division of Water Resources (DWR), NC Department of Transportation (DOT), and the NC Department of Public Safety (DPS). A summary of those comments is below.

**DWR** - To address the concerns about potential disruption of the municipal water supply and the potential flooding of municipal water supply facilities, we recommend that Alcoa Generating develop a sedimentation and flood protection plan for the Salisbury pump station. The plan would include (a) specific measures to ensure dredging of sufficient volume and frequency such that the city of Salisbury's water intake remains clear of sediments, (b) physical modifications to the facilities such as a protective dike for the pump station, improved access to the pump station with the road consistent with the city of Salisbury's design specifications, or other feasible options for achieving the same benefits (e.g. relocating the pump station or providing an alternative emergency water supply), (c) planning level capital and operation and maintenance cost estimates for all alternatives, and (d) a recommendation as to which alternative to implement. This plan is to be developed in consultation with the city of Salisbury, Rowan County, and North Carolina DWQ and filed with the Commission within 6 months of license issuance. The plan as described above should also include consultation with the NCDENR - Division of Water Resources — Public Water Supply Section — Mooresville Regional Office. The applicant should be advised that plans and specifications for all water system improvements must be approved by the Division of Water Resources / Public Water Supply Section prior to the award of a contract or the initiation of construction (as required by 15A NCAC 18C .0300et. seq.). Of course, this requirement will depend upon which alternative is selected.

**DOT** - The Transportation Planning Branch would like to make the North Carolina Department of Environment and Natural Resource aware of some project developments; that are listed in the Davidson County CTP, which may impact the study area: Minor Widening Project: • NC 8 -- It is recommended that NC 8 be widened from 2 to 3 -lanes from SR 1 115 (Wrenn Rd) to SR 2412 (Rotbrock Rd). This recommendation includes Transportation Improvement Program (TIP) Project R -2300 BA (SR It 15 to NC 49).

**DPS** - The North Carolina Floodplain Mapping Program (NCFMP) does not model the Alcoa Power Generating Hydroelectric Dams as providing base flood flow attenuation. If any of these lakes are to be operated for flood control, please coordinate with the NCFMP to assure the revised hydrology is appropriately modeled and mapped on future Flood Information Studies.

- **FEIS / NEPA Process** – Comments were received from Duke Law ELPC on behalf of the Yadkin Riverkeeper concerning perceived failures of the FEIS / NEPA process. Those comments are summarized below.
  - FEIS fails to meet criteria of NEPA.
  - NEPA relies on RSA. Federal agencies did not sign RSA.
  - FEIS did not take “hard look” required by NEPA.
  - The scoping document (SD) process was inadequate.
  - SD2 excludes from FEIS any mention of contamination at Badin Works.
  - FEIS fails to address social and economic impacts of the proposed action and any alternatives.
  - FEIS did not consider reasonable alternatives to the proposed action.
  - FERC staff discouraged public participation in the process forming the FEIS.

## **VI. Notice of Application Comments**

A total of 79 comments were received in response to the public notice of application by Alcoa Power Generating, Inc. (APGI) for a 401 Water Quality Certification for the Yadkin Hydroelectric Project on November 28, 2012. This is in addition to 20 comments received prior to the public notice. Most of the comments were to request a public hearing and extension of the public comment period. The following is a summary by issue area of the comments received.

**Extension of the public comment period** – 64 comments were received requesting that the public comment period be extended. There was considerable confusion by the public after the notice was posted when later a request for additional information was sent to the applicant. Many believed that the public comment period was placed on hold while the application was on hold and therefore requested an extension of the public comment period. SELC/NCEJN requested an extension of the public comment period to comply with Title VI of the Civil Rights Act of 1964, (federal) Executive Order 12898 on Environmental Justice and the state of North Carolina’s Environmental Equity Initiative.

**Public hearing** – 59 comments were received requesting that the Division of Water Quality hold a public hearing on the application.

**Land preservation** – 20 comments were received (16 using a form postcard) requesting that NC DENR negotiate for more land to be preserved by the state of North Carolina.

**Water quality and public welfare** – 6 comments were received related to the quality of the Yadkin River and the health of the communities. Commenters asked that the long-term and far-reaching impact this action will have to be considered.

**Favoritism for APGI** – 8 comments were received related to the state showing favoritism for APGI. Because of the confusion about the initial public comment period, commenters felt the state was showing favoritism towards APGI and excluding the public from effectively participating in the comment process.

**Distrust of Alcoa/APGI** – 6 comments were received related to a general distrust towards Alcoa. (see FEIS comments for further discussion)

**No delay** – 2 comments were received related to no longer delaying the process for APGI to receive a 401 water quality certification and FERC license.

**Wildlife Resources Commission** – requested that certain provisions from the 2007 Relicensing Settlement Agreement (RSA) be included as conditions of the 401:

- Article PO-1 – Reservoir Operations
- Article PO-2 – Project Instream Flows
- Article PO-3 – Flow and Reservoir Elevation Monitoring
- Article PO-4 – Low Inflow Protocol
- Article PO-5 – Hydro Project Maintenance and Emergency Protocol
- Article WQ-1 – Water Quality
- Article WQ-2 – Dissolved Oxygen Monitoring
- Article WQ-3 – Additional Dissolved Oxygen Enhancement Actions
- Article SMP-1 – Shoreline Management Plan

**City of Salisbury** – requested that the 401 be conditioned on the prompt implementation of the sedimentation and flood protection plans recommended as Environmental Measure 17 in the FEIS.

**Duke Law ELPC** submitted comments on behalf of the Yadkin Riverkeeper. Those comments are summarized below.

- The proposal continues to allow the operation of the project in violation of state water quality standards. The process for bringing a facility into compliance is a Special Order by Consent.
- While working on behalf of a regulated utility, the current Division Director advocated for changes to the hydropower relicensing and certification process that benefited the industry. This participation should preclude the Director from being in the decision-making chain as a conflict of interest.
- The 401 comment process is being rushed ahead of the SEPA comment process.
- The issues of fish consumption have not yet been studied or addressed. The environmental justice impacts of this decision on the community of West Badin have not been accorded due respect by DENR in any of its decisions to date.

**SELC and the North Carolina Environmental Justice Network** submitted a copy of the comments that were submitted to the Division of Waste Management in regards to the PCB capping project:

- The comment period should be extended to comply with Title VI of the Civil Rights Act of 1964.
- The comment period should be extended to comply with (federal) Executive Order 12898 on Environmental Justice.
- The comment period should be extended to observe the state of North Carolina's Environmental Equity Initiative.

## VII. 15A NCAC 02H.0506 (b) 1-6 Recommendations

Based on the review of public comments, the 401 Certification Application, and the North Carolina General Statutes and Administrative Code, I offer the following comments and recommendations on the criteria for issuance of a 401 Certification pursuant to 15A NCAC 02H.0506.

### **(1) Has no practical alternative under the criteria outlined in Paragraph (f) of this Rule.**

**Paragraph (f) reads as follows: A lack of practical alternatives may be shown by demonstrating that, considering the potential for a reduction in size, configuration or density of the proposed activity and all alternative designs the basic project purpose cannot be practically accomplished in a manner which would avoid or result in less adverse impact to surface waters or wetlands.)**

Alcoa acquired the Yadkin Project in 1915, constructed the first dam in 1917, the second dam in 1919, the third dam in 1927 and the fourth dam in 1962. Alcoa received its original 50 year FERC license in 1958.

The RSA contains specific commitments by APGI for the installation of measures designed to enhance the Yadkin Project tailwater dissolved oxygen (DO) conditions. These improvements include: the addition of two aeration valves on each of the Narrows Units 1, 2, and 3; installation of a through the blade aerating turbine at High Rock Unit 1; installation of aeration valves or other appropriate technology, if needed, at Falls Units 1, 2, and 3 in accordance with the Falls Action Plan; and installation of aeration technology, if needed at Tuckertown, in accordance with the Tuckertown Action Plan.

In addition to the RSA commitments, APGI has also suggested several new or additional provisions regarding DO improvements for inclusion into a new 401 Certification. Included in Attachment B in APGI's April 1, 2013, response to DWQ's third Additional

Information Request (AIR) are suggested 401 Certification conditions relative to additional DO enhancement technology at all four powerhouses. These conditions include: through the turbine DO enhancement for all three units at High Rock; installation of draft tube aeration enhancement at Narrows Unit 3 (draft tube installation has already been completed at Narrows Units 1, 2, and 4); installation of a fixed cone (Howell-Bunger) valve at Tuckertown; installation of fixed cone valves on two of the three drain valves at High Rock; potential installation of a third fixed cone valve at High Rock; potential installation of a fixed cone valve or other technology at Narrows; potential installation of additional DO enhancements at Tuckertown and Falls if the Tuckertown and Falls Action Plans indicate that the instantaneous or average DO levels do not meet or exceed the applicable water quality standards.

**RECOMMENDATION:**

Due to the fact that all four facilities exist and are currently operating, it would not be practical or cost effective to reduce the size of the four facilities. Narrows has been in operation for 96 years, Falls for 94 years, High Rock for 84 years and Tuckertown for 51 years. APGI has and is continuing to make improvements to the design of the units to reduce the overall impact of the facilities on surface waters. The incorporation of RSA commitments and APGI's proposed conditions into the 401 Certification relative to DO enhancement technologies along with a reopener clause and the requirement for a surety bond to insure that necessary improvement to tailwater DO are implemented should be sufficient to insure water quality standards are met.

- (2) Will minimize adverse impacts to the surface waters based on consideration of existing topography, vegetation, fish and wildlife resources, and hydrological conditions under the criteria outlined in Paragraph (g) of this Rule.**

**Paragraph (g) reads as follows: Minimization of impacts may be demonstrated by showing that the surface waters or wetlands are able to continue to support the existing uses after project completion, or that the impacts are required due to:**

- (1) The spatial and dimensional requirements of the project; or**
- (2) The location of any existing structural or natural features that may dictate the placement or configuration of the proposed project; or**
- (3) The purpose of the project and how the purpose relates to placement, configuration or density.**

The project is completed and portions of the project have been in operation for 96 years. APGI's 2012 Yadkin Project Tailwaters Dissolved Oxygen Report (March 2013) indicates tailwater DO during May through November 2012 met the instantaneous minimum standard of 4mg/l 97.0% of the time at Falls, 99.9% at Narrows, 51.6% at Tuckertown and 60.0 % at High Rock. The daily average minimum standard was met

88.8 % of the time at Falls, 99.5% at Narrows, 33.7% at Tuckertown and 40.7 % at High Rock.

In order to minimize the impacts associated with low tailwater DO, APGI has initiated installation of additional DO enhancement technology at Narrows. Beginning in 2001, three of the four turbines (Turbines 1, 2 and 4) at Narrows have been fitted with draft tube air valves in addition to the existing vacuum breaker air valves. APGI has also proposed to begin the process for federal approval of the installation of draft tube air valves at Narrows Unit 3 within 30 days of receiving the final FERC License for the Yadkin Project. Additional DO enhancement upgrades proposed by APGI and the proposed timelines for these upgrades are listed in the following table provided by APGI. This table also includes estimated costs of the upgrades and DO monitoring that were provided as suggestions by APGI for surety bond amounts.

Assumes FERC license 1/1/2014 - cost in \$ millions

DO Action - Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
DO Monitoring and Annual Report Generation	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Narrows Unit 3 - Draft Tubes	2.50									
High Rock 1 - Aerating Turbine		26.80								
High Rock 2&3 - Aerating Turbines				13.40						
High Rock Cone Valves (CV)*	1.00									
DO Monitor HR	0.04									
Tuckertown CV*			0.75							
DO Monitor TT					0.04					
DO Monitor Falls				0.04						
Yearly Total	3.84	27.10	1.05	13.74	0.34	0.30	0.30	0.30	0.30	0.30

-  -Equipment that should result in compliance and subject to bonding
-  -Monitoring cost subject to bonding
- \* -Two CV's for immediate improvement until turbines installed

Total Possible Cost = \$47.57  
 Equipment Bond = \$44.57  
 Monitoring Bond = \$3.00  
 Total Bond = \$47.57

**RECOMMENDATION:**

Currently the project is not meeting the instantaneous or average minimum DO standards during all times of the year or during all periods of operation. APGI has already implemented DO enhancement upgrades at Narrows which has shown to provide significant increases in tailwater DO of the upgraded units and significant increases overall for Narrows. Additional DO enhancement equipment is currently proposed at Narrows Unit 3. Upgrades are proposed for all three turbines at High Rock as well as installation of two cone valves. A third cone valve will be installed at High Rock if needed. Installation of one cone valve is proposed for Tuckertown, with additional measures to be taken if needed. The need for equipment to enhance DO at

Falls will be evaluated based on monitoring results following scheduled upgrades at the three upstream dams. APGI has upgraded the DO monitor at Narrows and is proposing to upgrade the existing monitors at High Rock, Tukertown and Falls to the same “real-time” technology. Data from these monitors will be used to better coordinate and optimize DO technologies to meet Water Quality Standards in the future.

It is recommended that APGI continue to demonstrate, through monitoring, the status of tailwater DO in the Yadkin Project and to continue the DO enhancement upgrade process following FERC approval. Should monitoring indicate that installed DO technology upgrades are not sufficient to meet DO standards at all times of the year and under all operating conditions, APGI must continue to make improvements to the units until DO standards are met. The 401 Certification for the project should include conditions for the requirement of a surety bond or other similar instrument to insure the timely completion of proposed upgrades and continuation of monitoring should APGI’s financial position affect their ability to complete the improvements. The 401 Certification should also contain a continuing compliance condition, similar to Condition #4 in the May 7, 2009 Certification, to guarantee that the state has the ability to modify the Certification when necessary to assure compliance with the standards.

**(3) Does not result in the degradation of groundwaters or surface waters.**

Surface Waters - Currently the project is not meeting the instantaneous or average minimum DO standards during all times of the year or during all periods of operation. APGI has already implemented DO enhancement upgrades at Narrows which has been shown to provide significant increase in tailwater DO of the upgraded units and significant increases overall for Narrows. Additional DO enhancement is currently proposed at High Rock, Narrows Unit 3, as well as Tuckertown and Falls if needed.

Groundwaters - The current project, as defined by FERC, is the relicensing of the four hydroelectric developments in the APGI Yadkin Project. Contamination associated with the Badin Works site should only be considered as it relates to the operation of the dams and associated powerhouses. However, NC DWM is continuing to work with Alcoa to evaluate site contamination at Badin Works and to implement corrective action measures. In January 2013, Alcoa submitted Phase 4 (Corrective Measures Alternatives) and Phase 5 (Justification and Recommendation of the Selected Corrective Measures Alternative) in accordance with their RCRA Part B Permit, dated March 4, 2006. It is important to note that PCBs were not identified as a contaminant of concern in the 2012 Phase 3 Engineering Data Collection for the Corrective Measures Study. For addressing groundwater at the Alcoa/Badin Landfill and the Old Brick Landfill, Alcoa has proposed to implement monitoring with institutional controls as the selected corrective measure. For groundwater at the main plant, risk-based assessment was selected as the preferred alternative.

**RECOMMENDATION:**

None.

Continued operation of the Yadkin Project is not expected to result in degradation of surface or groundwaters. DO upgrades at Narrows have shown a significant increase in tailwater DO and it is expected, as other upgrades are installed at the four powerhouses that continued improvement in tailwater DO will be realized. Corrective measures for groundwater contamination at the Badin Works site are being addressed in the RCRA Permit. Because the Badin Works site is not within the scope of the Project, as defined by FERC, Alcoa's past history and contamination associated with the Badin Works site should only be considered as it relates to the operation of the dams and associated powerhouses.

**(4) Does not result in cumulative impacts, based upon past or reasonably anticipated future impacts, that cause or will cause a violation of downstream water quality standards.**

The only impacts associated with continued operation of the Yadkin Project identified thus far are low DO levels in the tailwaters of the four power plants. There is no evidence that suggests that past impacts from PCBs and other contamination associated with Badin Works or that existing PCB contamination in fish tissue is being increased or further transported by operation of the dams and associated powerhouses.

**RECOMMENDATION:**

The 401 Certification should be conditioned to require yearly monitoring of the discharges from the four lakes for priority pollutants and yearly monitoring of lake sediment in transects from the Badin Works site to the discharge at Narrows Dam for heavy metals, PCBs and PAHs that are present in the cove adjacent to the Badin Works site. If movement of the pollutants is detected or if pollutants of concern are detected in the lake discharges, APGI should submit a plan for DWQ approval to stop the movement of pollutants and/or eliminate the discharge of pollutants from the lakes.

**(5) Provides protection for downstream water quality standards through the use of on-site stormwater control measures.**

Existing impervious areas associated with the Yadkin Project include portions of the dams, powerhouses and parking areas. There is currently no proposal from APGI to expand to these areas.

**RECOMMENDATION:**

None.

Due to the fact that that all impervious areas of the project are existing, and considering the Yadkin Project has a 4,400 square mile watershed and a 23,000 acre lake area, impacts from stormwater runoff from the existing facilities are minimal. Should APGI propose to increase the size of impervious surfaces in the future, provisions for management of additional stormwater runoff could be included in the revised Shoreline Management Plan or in the NPDES Permits for each powerhouse. Falls and High Rock NPDES Permits currently have conditions and limits for stormwater discharges associated with secondary containment area for transformers.

**(6) Provides for replacement of existing uses through mitigation.**

The RSA specifies APGI's obligations to various stakeholders for the protection, mitigation, and enhancement of ecological, environmental, recreational and cultural resources affected by the project. These obligations include:

- Flow adjustment for enhancement of downstream spawning
- Low Inflow Protocol including continued funding of USGS gauges
- A tailwater dissolved oxygen enhancement schedule and operation plan
- Dissolved oxygen monitoring
- Recreation facility improvements
- Modifications to existing shoreline management plan
- Rare, threatened, endangered and invasive species monitoring
- Land donation
- Higher water levels and extended recreation season at High Rock Lake
- Increase water withdrawals for the City of Albemarle

**RECOMMENDATION:**

The 401 Certification process is only to certify compliance with state water quality standards. Many of the mitigative and conservation measures outlined in the RSA, such as land donation, are not related to water quality standard impacts and therefore should not be considered in the 401 Certification decision making process. Some mitigative measures such as shoreline management, water level control and low inflow protocol do have indirect relationships to best usage of the surface waters. Obligations in the RSA related to DO enhancement and DO monitoring are directly related to water quality standards and best usage and should therefore be considered in the 401 Certification process. Because the RSA is a comprehensive document incorporating many different types of mitigative measures, it seems prudent to incorporate the entire

RSA and the commitments contained therein into the 401 Certification where not in conflict with other conditions of the Certification.

In order to protect the City of Salisbury's raw water intake from siltation and/or flooding, it is recommended that the Division of Water Resources' comments on the FERC FEIS be incorporated into the 401 Certification as a mitigative measure to protect the use of these waters as a water supply.

## VIII. Summary

Public comments concerning the 401 Certification Application and the FERC FEIS Public Notice focused on several major issue areas including dissolved oxygen, PCB contamination, Alcoa's environmental history, property ownership, environmental justice, the NEPA process, and protection of the public water supply and wastewater facilities for the Town of Salisbury. Due to the number of public comments and the fact that most comments were received as a form letter email, I have not addressed each comment individually. Comments that have direct relevance on the 401 Certification decision making process have been addressed in the recommendations in Section VII. Other comments by issue area are discussed briefly below.

Alcoa's environmental history, primarily as it relates to past activities at the Badin Works site, has been suggested as a reason to deny the 401 Certification. The 401 Certification process should be limited to an assessment of the impacts that the proposed project will have on water quality. The current project, as proposed, is the relicensing of the four hydroelectric developments in the APGI Yadkin Project. Alcoa's past history and contamination associated with the Badin Works site should only be considered as it relates to the operation of the dams and associated powerhouses. After reviewing available data, the North Carolina Division of Public Health has stated that there is not enough evidence to directly link PCBs found in fish of Badin Lake or in blood samples of persons eating fish from Badin Lake, to identify Alcoa as the only possible source of PCBs. PCBs associated with Badin Works are the same as those generally found throughout the US. *[DPH Opinion Paper, 7/2010, rev 6/2012]*. A sediment capping project was completed in "the Cove" of Badin Lake in January of 2013. This was part of an administrative agreement with Alcoa and DENR. DWM approved the remediation project in Sept of 2012 as part of ongoing efforts to stabilize PCB contaminated sediments in the area and to keep aquatic life from continuing to come into contact with the areas of known contamination. DWM believes that PCBs entered the lake via two stormwater outfalls that drained areas that were historically used for equipment storage that leaked and spilled over the years. Areas on the site that were likely sources of PCB contamination have been remediated. The 401 Certification process is limited in scope to evaluating whether operation of the dams will result in compliance with NC water quality standards. The purpose of the Certification is not to determine the source of existing PCBs in the Yadkin River System, or to implement additional cleanup of the Badin Works site, which is currently being overseen by the NC Division of Waste Management.

Comments received stated that APGI's application for certification does not meet the requirements of DWQ's rules because APGI has not obtained permission to use the property from its owner, the State of North Carolina. The comments are premised on the contention that DWQ is required to resolve submerged land issues before it can consider the application complete. Submerged land issues are outside the scope of the 401 Certification process, and a resolution of those issues is not required for the application to be considered sufficient under DWQ rules. 15A NCAC 02H.0502(f) states: "The application shall be considered a 'valid application' only if the application bears the signature of a responsible officer of the company, municipal official, partner or owner. The signature certifies that the applicant has title to the property, has been authorized by the owner to apply for certification or is a public entity and has the power of eminent domain." Consistent with its review of other applications for 401 Certification in connection with the licensing of FERC projects, DWQ deemed APGI's application sufficient for purposes of Rule .0502(f) based on APGI's representation that it owns the powerhouses and dams. APGI reiterated its claim of ownership in a letter, dated July 3, 2013, stating that "APGI owns the facilities from which the discharges originate, which are the Yadkin Project's four hydroelectric dams." As stated previously, DWQ's 401 certification process focuses on the project's impact on water quality. DWQ is making no determination of the ownership of submerged lands.

Comments were received from SELC on behalf of the North Carolina Environmental Justice Network, as well as from Clean Water for North Carolina concerning the contamination at the Badin Works site, the Corrective Measures Study for the site, and contamination in fish tissue in the waters near the West Badin area and the disproportionate risk of exposure to low income populations and people of color in the area. While DWQ is very concerned about any project that has a disproportionate impact on lower income communities and/or communities of color, the issues discussed in the comments do not appear to have a direct relationship to the continued operation of the dams and associated powerhouses, which is the limit of the proposed project being reviewed under the 401 Certification. As previously stated, I found no evidence in the record to indicate that the operation of the dams is contributing to downstream migration of contaminated sediments from the Badin Works site. I also found no evidence in the record that the operation of the dams is contributing to contamination in fish tissue.

Many comments were received on the inadequacy of the FEIS to meet the criteria of NEPA and to address the contamination from the Badin Works site. The FEIS for the Yadkin Project and the Yadkin-Pee Dee River Project was prepared by staff of the Federal Energy Regulatory Commission (FERC). Questions concerning the adequacy of the environmental document should be addressed to the agency that prepared the document (FERC) or the federal agency that oversees the NEPA process (The Council on Environmental Quality). While DWQ uses the FEIS and the comments received through the State Clearinghouse and Public Notice as an information source in the 401 Certification review process, it is not relied upon as the only source to determine potential environmental impacts of the project. Numerous studies have been conducted by multiple agencies to assess the presence of pollutants at the Badin Works site (which is not within the scope of this review) and the movement of those pollutants into

the Yadkin River. DWQ will consider the entire record for the project, including all available studies, in making the decision on the 401 Certification.

Several comments expressed concern about the fact that no PCB advisory has been issued as a result of the 2012 studies. In September 2012, NC DENR staff collected sediment samples from 10 locations in Falls Reservoir that were likely to have human contact such as fishing areas and boat ramps. None of the samples detected PCBs. DPH concluded that no adverse health effects were likely from direct contact or incidental ingestion of Falls Reservoir sediments. *[DPH Report, Falls Fish Tissue, May 2013]*. Fish tissue samples were also collected along the full reach of Falls Reservoir, between Narrows Dam (upstream) and Falls Dam (downstream). Three samples (all bottom feeders/catfish) had PCBs above DPH's action level. DPH recommends that for catfish >18" in length, consumption should be limited to one meal per week. Since the existing statewide mercury advisory is more restrictive for catfish than the Falls Reservoir recommendation, DPH has elected not to issue a separate fish consumption advisory for PCBs in Falls Reservoir. *[DPH Report, Falls Fish Tissue, May 2013]*.

**Based on the comments received at the public hearing, the comments received during the three comment periods, the review of the record for the project, the site visit, and discussions with other DWQ staff, I recommend that the 401 Certification be issued and subject to the conditions included in my recommendations in Section VII. It is also recommended that the Division include any additional conditions necessary to insure that the project will meet water quality standards.**

## **IX. Attachments**

- I. September 28, 2012 401 Water Quality Certification Application
- II. APGI Relicensing Settlement Agreement and Stanly County Settlement Agreement
- III. Notice of Application on November 28, 2012
- IV. Written comments received during notice of application (on CD)
- V. Written comments received through the State Clearinghouse on the FEIS (on CD)
- VI. Notice of Public Hearing, April 4, 2013
- VII. Non-speaker sign-in sheets
- VIII. Speaker sign-in sheets
- IX. Public Hearing transcript, including oral comments
- X. Documentation received during public hearing (on CD)
- XI. Written comments received post hearing till close of record (on CD)
- XII. Written comment received after the close of record (on CD)

**CERTIFICATE OF SERVICE**

Pursuant to Rule 2010 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.2010, I hereby certify that I have this day served a copy of the foregoing on all persons designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C. this 8th day of October, 2013.

/s/ Elisabeth M. Drabkin

Elisabeth M. Drabkin

Document Content(s)

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