

February 27, 2003

Hon. Magalie Salas, Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

Re: **Yadkin Hydroelectric Project**  
**FERC Project Number 2197-056**

Subject: **FERC December 20, 2002 Letter to Alcoa**  
**and**  
**Alcoa February 14, 2003 Response to FERC**

Dear Secretary Salas,

The High Rock Lake Association Inc.(HRLA), representing the interests of property owners around High Rock Lake and many other users, is requesting immediate action from the Federal Energy Regulatory Commission (FERC) to implement strict oversight and immediate oversight over the operation of High Rock Lake. We believe Federal intervention is necessary to protect High Rock Lake from a repeat of last summers devastating mismanagement of the lake. FERC must act to prevent further devastation, to protect the environment, fish and wildlife, protect recreational opportunities upon our lake, and protect stream flow conditions in the Yadkin-Pee Dee River.

The HRLA filed a comment with the Commission (FERC) on February 10, 2003 indicating our concerns with a "draft" Operation Plan for High Rock Lake prepared by Alcoa. We are especially disturbed that Alcoa ("the Licensee") submitted its official "Plan" to FERC on February 14, 2003 in a form essentially unchanged from its draft form, and non-responsive to most input from the North Carolina Department of Environmental and Natural Resources ("NCDENR") and others. We ask that you consider our comments and specific information on the following issues:

1. **FERC's December 20, 2002 contained specific demands to Alcoa Power Generating Inc. ("Alcoa")**
2. **Alcoa's submission on February 14 is NON-RESPONSIVE to FERC's demands.**
3. **An Operation Plan for High Rock Lake is Necessary**
4. **Drought definition and recognition should not be the primary factor controlling lake operation.**
5. **Alcoa's Claimed "Financial Sacrifices"**
6. **HRLA Request For Action By The Federal Energy Regulatory Commission**

In the following pages we expand on the above issues, and make specific recommendations to FERC for the operation of High Rock Lake during 2003 and subsequent years pending establishment of new license terms in 2008.

### **1. FERC'S DECEMBER 20, 2002 CONTAINED SPECIFIC DEMANDS TO ALCOA POWER GENERATING INC. ("ALCOA")**

Mr. Joseph D. Morgan's letter of December 20, 2002 to Alcoa directed Alcoa to submit a plan of operation for the year 2003 that would ensure the elevation of High Rock Lake is maintained within five (5) feet of full pond. FERC's December 20, 2003 Letter contained the following dictates and requirements:

1. Proceedings under Docket # P-2197-056 are concluded; and any temporary modified operating Protocols are to be similarly concluded.
2. All requests for future deviation from reservoir operating requirements are denied.
3. Project P-2197 is to resume operation in accordance with its License terms
4. Develop a Contingency Drought Operating Plan. The Plan was to include at least the following points:
  - Means of achieving a principle goal of **ensuring the elevation of High Rock Lake is maintained within five feet of full pool**.
  - Alternate Management Practices
  - Early Reduction in Discharges
  - An Implementation Schedule
5. File the Contingency Drought Operating Plan by February 15, 2003
6. Provide data that would show if there was any salt water intrusion at the Grand Strand during periods of

target flow of 900 cfs at the Rockingham stream flow gage.

7. Provide data to indicate what minimum flow is needed from Project P-2197 to prevent salt water intrusion at Grand Strand.

## **2. ALCOA'S SUBMISSION ON FEBRUARY 14 IS NON-RESPONSIVE TO FERC'S DECEMBER 20, 2003 LETTER.**

The HRLA is extremely concerned that the "plan" submitted February 14, 2003 completely ignores the principle goal defined by Mr. Morgan's letter; i.e., **ensure the elevation of High Rock Lake is maintained within five feet of full pond.**

Specifically, a review of Alcoa's Drought Contingency Plan with respect to the points required by FERC in Section 1 show the following:

- 1.a) Alcoa does not acknowledge the Temporary Protocol 2002 is canceled
- 1.b) Alcoa does not acknowledge requests for future deviation from reservoir operating requirements are denied
- 1.c) Alcoa does not confirm Project P-2197 is to resume operation in accordance with its License terms.
- 1.d) Alcoa's plan is totally devoid of the specific points required by FERC
- 1.e) Alcoa has failed to file a "Contingency Drought Operating Plan" by February 15, 2003; in that the document it submitted is absent the operating parameters required by FERC.
- 1.f) Alcoa did not provide any data that supports allegations of saltwater intrusion at Grand Strand.
- 1.g) Alcoa did not provide any studies that support any specific discharge from P-2197 to prevent salt water intrusion at Grand Strand.

The "**Drought Contingency Plan**" that Alcoa has submitted is not a plan as was required by FERC; it is more of a discussion of issues raised during the past year. Incredulously, on a footnote on Page 5, Alcoa states it does not understand Mr. Morgan's letter. That footnote speaks volumes about Alcoa's attitude towards public concern over the way it has operated High Rock Lake in the past. *HRLA finds no difficulty understanding a clear instruction to **ensure the elevation of High Rock Lake is maintained within five feet of full pond.*** Further, if Alcoa did not understand the letter, why did it wait until February 14, 2003 to tell FERC, when Mr. Morgan's December 20 letter volunteered FERC staff to assist Alcoa with preparation of a Plan?

## **3. AN OPERATION PLAN FOR HIGH ROCK LAKE**

FERC has requested a Plan of Operation , and Alcoa should have been responsive to that plan.

Since Alcoa now says it does not understand the Directors instructions, we think FERC staff should prepare a plan for Alcoa for 2003 through the term of its license ending April 2008.

The High Rock Lake Association believes FERC should immediately mandate the operation of High Rock Lake to be changed to Run-of-River mode. Such a plan would allow:

- High Rock Lake to be maintained at a level no more than 12 inches below full at all times, and normally not less than 6 inches below full.
- Daily full power production limited to the number of hours that would allow complete refill of the reservoir within a 24 hr. power production/refill cycle.
- Such Operation would provide 100% turbine flow for approximately 4.35 hours when lake inflow is averaging 2,000 cfs, allow 19.65 hours for refill, and result in a maximum lake level draw-down of approximately .22 ft. ( less than 3").
- When total inflow to the lake drops to 500 cfs, this mode would allow only about one (1) hour of full power production in a 24 hour period.
- Inflows in excess of 11,000 cfs would allow continuous operation of the turbines at 100% power output; while maintaining a full pool.
- Maximum draw-downs of 4-5" would occur with inflows of about 5,500 – 6,000 cfs.

Operation in Run-of-River Mode would provide numerous benefits to those who rely upon the Yadkin River, High Rock Lake, and the Pee Dee River. Consider the following:

- Interests downstream of High Rock Lake would always enjoy water flow in natural quantities and according to historical seasonal flow rates.
- Elimination of the present practice of using High Rock Lake to entirely capture and very slowly release

storm surges would prevent artificial manipulation of downstream river levels.

- The lower Pee Dee basin could benefit from storm surges. Such surges could prove very beneficial in “flushing” the coastal estuarine system, and help retard possible salt water intrusion.
- Relatively constant water level in High Rock Lake would have a huge positive impact on ground water levels, water quality, environmental issues, fish and wildlife, recreation, and tax values.
- Drought recognition and related action requirements would be minimized.
- Drinking Water supplies in the Yadkin River Basin would be protected.
- Constant water level will mitigate bank erosion, and help minimize an already serious sedimentation problem.
- Constant water levels will protect adjacent wetlands, and the corresponding value of those wetlands.

HRLA is sure that Alcoa will vehemently object to being told to operate High Rock Lake in a Run-of-River mode, claiming the frequent “SPILLS” that would occur. FERC should consider the following when dealing with this argument:

- Since 1929, official flow recorded at the Yadkin College station on the Yadkin River, the major contributor to High Rock inflow, has averaged 2,947 cfs daily
- We believe total average inflow into High Rock Lake exceeds the Yadkin College measurement by about 30%. If that’s the case, total average inflow into High Rock exceeded 11,000 cfs on only two (2) days in 2002. That’s only 2 days out of 365 that water would have been “SPILLED”.
- Accordingly, the spillage would have only occurred on those two days would have caused Alcoa to have lost about 12 hours of maximum power production from the spilled water. 475 MWh (\$14,250 @ \$30.00/MWh) is a very small price to pay for keeping the lake essentially full all year long. It is an especially small price when you consider Alcoa collected approximately \$75,000.00 from property owners for pier permits for piers that rested on dry lake bottom all summer!
- Only one (1) such day occurred in 2001, on March 30, 2001.
- We have also looked at the approximate total average discharge from Falls Reservoir, the last of the Alcoa dams. We used Rockingham data, subtracted Rocky River data, discounted huge floods, and concluded discharge from P-2197 has averaged about 5,000 cfs mean daily since 1929. We find flow from P-2197 turbines has exceeded current turbine capacity only about 11% of the time since 1929.

We conclude there is no appreciable penalty to Alcoa for operating in a Run-of-River mode, certainly not enough to offset the immeasurable damage it causes by its current operational practices.

#### **4. DROUGHT DEFINITION AND RECOGNITION SHOULD NOT BE THE PRIMARY FACTOR CONTROLLING LAKE OPERATION.**

Within a month of receiving FERC’s December 20, 2003 letter, Alcoa had operated its hydro power facilities at High Rock dam at such a high level of power production that it had pulled High Rock Lake to approximately 11½ feet below full pond. That seems to be in direct disregard for the Commissions instructions, and is indicative of Alcoa’s pattern of violating terms of its FERC license.

FERC specifically instructed Alcoa that it “should ensure High Rock reservoir is within five feet of full by May 15, 2003 through September 15, 2003”. Alcoa has gambled upon ample rainfall to achieve compliance with its FERC License terms. Such a gamble seems to indicate Alcoa has little concern for the mandate from FERC; and such gambling clearly shows no concern for the environmental, recreational, economic, and social impacts that low water levels have upon the communities around High Rock Lake.

Without depending upon unknown rainfall events, the only way Alcoa can absolutely ensure compliance with FERC’s directive is to limit drawdown to 5 feet below full between September 15 and May 15, and maintain lake levels described by their FERC license during the May 15 – September 15 period. Please note, the license terms show a “curve” for summer lake operation, and in early July the lake should be no lower than 2½ feet below full pond. Alcoa could then use any rainfall event and high river inflows for additional generating capacity, while being certain it is able to guarantee its lake levels.

Alcoa has been consistent and steadfast in their claim that draining of High Rock Lake in June and July of 2002 was caused by a combination of the drought and the terms of Alcoa’s Federal License. If that is the case, **the license is flawed**, and there clearly must be action by both Alcoa and FERC to prevent a recurrence of the disastrous draining of High Rock Lake.

We must remember that 2002 is not the only year considered as a drought year. According to official USGS records for the Yadkin River at Yadkin College, average mean daily flow was actually higher in 2002 than flow in

2001. Although High Rock Lake experienced low lake levels in 2001 it was nothing approaching the draining of the lake in 2002.

We also note that the logistics of drought recognition and reaction, as evidenced in the summer of 2002; in conjunction with the relatively slow movement of state and federal agencies (who are bound by regulatory procedures) do not allow swift reactions to rapidly deteriorating lake conditions. We believe Mr. Morgan recognized this problem when he issued the December 20, 2002 letter.

#### **5. ALCOA'S CLAIMED "FINANCIAL SACRIFICES"**

Alcoa makes many claims of financial sacrifice when it is called upon to justify its operation of High Rock Lake. The High Rock Lake Association believes Alcoa should either make a public release of its operating revenues from High Rock Lake and detail information concerning its alleged sacrifices, or it should refrain from using such statements to sway public opinion. Consider the following excerpt from a recent Alcoa webpage:

During this recent precipitation, APCI generated power and released as much water as possible through its generators but High Rock Reservoir still rose from 8 feet below full pool at midnight on February 21, 2003 to its present level, as noted in the table, below. Flood gates at High Rock Dam were opened at about noon on February 24 to handle additional streamflow, resulting in lost power generation. APCI anticipates spilling through February 26.

In the above, and other similar statements, Alcoa portrays a "financial loss" because it has **SPILLED** river water. This statement indicates Alcoa believes it OWNS the water that flows in the Yadkin River, and unless every drop flows thru its generators it professes to have incurred a financial loss.

The High Rock Lake Association believes the water in the Yadkin River is for everyone, and is not owned by Alcoa. HRLA also believes Alcoa should show equal concern for every individual and business that suffers financially when Alcoa drops lake levels below the level required by its FERC License.

HRLA does not have the access to current Alcoa electrical production data, but from the 2001 FERC Form No. 1 we noted that Alcoa's electricity generating revenues were 127% of Year 2000 revenues. That level of power production was obtained with average river flow at 20% less than in 2000. We believe there is a direct correlation between increased revenues and decreased lake levels, indicating a Water Resource Management Issue, not a Drought Issue.

#### **6. REQUEST FOR ACTION BY THE FEDERAL ENERGY REGULATORY COMMISSION**

The High Rock Lake Association requests FERC reject Alcoa's submission of February 14, 2003. Alcoa should not expect to continue operation out of compliance with License terms, or even under terms that caused the 2002 Summer disaster.

FERC must recognize a fundamental difference exists in the operation of the Project. The hydropower facilities are no longer operated to provide beneficial employment to workers at Alcoa's Badin Works. Information from FERC sources indicate Alcoa is now selling all power produced to Aquilla Energy Management Co.(AEMC). We think is not just coincidence that drastically lower Project lake levels have accompanied the AEMC agreement.

High Rock Lake Association requests FERC to effectively deal with Alcoa's pattern of continued non-compliance, and move to direct operation of High Rock Lake in a fashion that will refill the lake and maintain a full lake. In view of Alcoa's failure to abide by approved operating guidelines, we ask that for the remaining period of the present License that FERC direct Alcoa to operate High Rock Lake as a Run-of-River facility, just like the other three (3) project lakes.

The Summer of 2002 was disastrous for High Rock Lake, and to all who depend upon the lake for many varied purposes. We know current law requires your Commission to consider issues other than simply power production; and we expect FERC actions to address lake operational problems immediately to avoid a repeat of last summer.

Remember, after receipt of FERC's December 20,2002 letter, Alcoa was quoted by local newspapers as saying "Its just business as usual". FERC must not allow or condone "Business as usual".

Respectfully Submitted,

Larry O. Jones  
President

