

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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| Alcoa Power Generating, Inc. |) | |
| |) | NORTH CAROLINA DEPARTMENT |
| Docket No. P-2197-056 |) | OF ENVIRONMENT AND NATURAL |
| |) | RESOURCES MOTION TO |
| Request for Temporary Variance to |) | INTERVENE WITH COMMENT |
| Deviate from Drawdown Schedule and |) | |
| Refill Obligation |) | |

NOW COMES the Department of Environment and Natural Resources of the State of North Carolina (“NC DENR”), through the undersigned counsel, and, as set forth below, moves the Commission, pursuant to Rule 214, 18 C.F.R. § 385.214, to allow NC DENR to intervene. In addition, NC DENR sets forth below and hereby files its Comment.

MOTION TO INTERVENE

In support of the aforementioned Motion to Intervene, NC DENR shows the following:

I. FACTUAL AND PROCEDURAL BACKGROUND

In prior proceedings on this matter, the Commission has approved reducing the required minimum flow from High Rock Lake from 1,400 cubic feet per second (“cfs”) to 1,200 cfs and then from 1,200 cfs to 900 cfs for the period ending September 15, 2002 (the latter variance hereinafter referred to as “Second Proceeding”). Relevant facts up to the Second Proceeding are summarized in “North Carolina Department of Environment and Natural Resources Motion to Intervene Out of Time,” Docket No. 2191-054 (Sept. 23, 2002). Those facts are incorporated herein by this reference.

Between September 15 and March 6, the Commission does not require the Licensee to maintain any minimum release from High Rock Lake. Lack of downstream flow may adversely affect parties downstream of the project. In addition, NC DENR recognizes the benefit in drawing down the reservoirs proportionately. Finally, the lack of inflow and the provision of flow downstream may hinder the Licensee's ability to provide appropriate lake levels beginning in March.

Therefore, since the Commission granted the variance in the Second Proceeding, the stakeholders have continued to work together to manage the river flows and lake levels to make best use of the resource during the ongoing drought. In order to address the above and other concerns the stakeholders drafted the *Yadkin Pee-Dee River Basin Emergency Drought Management Protocol for Post-September 15 Operations* ("*Emergency Protocol*"). The *Emergency Protocol* is discussed in more detail in the Comment set forth below. Because full implementation of the *Emergency Protocol* requires relief from some operational restrictions, the Licensee submitted the *Emergency Protocol* to the Commission and requested that the Commission order such relief. That request is the basis for this proceeding.

II. NC DENR HAS AN INTEREST IN THE YADKIN-PEE DEE RIVER BASIN THAT IS NOT ADEQUATELY REPRESENTED

NC DENR is a statutory department of the State of North Carolina. N.C.G.S. § 143B-279.1.

It is the intent of the General Assembly, through the duties and power defined herein, to confer such authority upon the Department of Environment and

Natural Resources as shall be necessary to administer a complete program of water ... conservation [and] pollution abatement and control Standards of water ... purity shall be designed to protect human health, to prevent injury to plant and animal life, to prevent damage to public and private property, to insure the continued enjoyment of the natural attractions of the State, to encourage the expansion of employment opportunities, to provide a permanent foundation for health industrial development and to secure for the people of North Carolina, now and in the future, the beneficial uses of these great natural resources.

Id. In furtherance of these policies, the General Assembly conferred on NC DENR the authority to:¹

1. Implement the federal Clean Water Act, including developing and enforcing water quality standards, issuing National Pollutant Discharge Elimination System Permits, and certifying compliance of federally licensed activities with State law. *See* N.C.G.S. §§ 143-214.1, -215.1, 143B-282, 33 U.S.C. §§ 1313, 1341 & 1342.
2. Assure a dependable supply of safe drinking water and exercise emergency powers to alleviate imminent threats to the drinking water supply. N.C.G.S. §§ 130A-311 *et seq.*, 143-354.
3. Investigating fish kills. N.C.G.S. §§ 143B-279.7, 143-215.3.

These authorities are merely representative. *See also, e.g.*, N.C.G.S. §§ 143-215.11 *et seq.* (authorizing NC DENR to implement localized permitting of water uses), 143-215.22H (requiring registration of water withdrawals) and 143-215.74F *et seq.* (authorizing NC DENR to establish program to assist local stewardship of water resources). In essence, NC DENR, in coordination with the Environmental Management Commission and the Wildlife Resources Commission, retains broad authority and responsibility regarding water quality and water supply. “It is the public policy of the State to maintain, protect, and

¹ The duties are by express legislative mandate, by delegation from the North Carolina Environmental Management Commission (“EMC”), and as staff to the EMC. N.C.G.S. § 143-215.3.

enhance water quality within North Carolina.” N.C.G.S. § 143-211. These mandates uniquely position NC DENR to oversee and manage water quality and quantity issues throughout the North Carolina portion of the Yadkin River and watershed.

NC DENR has a legal interest in, for example, ensuring that lake levels remain at sufficient levels to allow municipal intakes to function properly, protecting water quality in the reservoirs and the river, and averting fish kills. NC DENR’s ability to execute these legal mandates may be directly impacted by this proceeding.

As a governmental agency with broad jurisdiction over public waters, NC DENR is in a unique position to balance the interests of various users of this vital resource. The experienced and technically expert staff of NC DENR regularly reviews the impacts of the drought on dissolved oxygen levels and other indicators of water quality, aquatic life propagation, municipal water supplies, and other uses of the Yadkin River. And NC DENR’s mandate requires it to coordinate all of this information in order to render advice, provide assistance, and make determinations regarding the best overall use of this limited resource. Therefore, the participation by NC DENR in this proceeding is in the public interest.

III. NC DENR GENERALLY SUPPORTS THE LICENSEE’S REQUEST AND THE COMMISSION’S ACTION

The *Emergency Protocol* represents a balanced and fair framework to address various issues that have arisen as a result of the drought. As discussed in more detailed in the Comment, below, NC DENR generally supports the *Emergency Protocol*.

IV. CONCLUSION

For all of the foregoing reasons, NC DENR respectfully requests that the Commission grant this Motion to Intervene.

COMMENT

NC DENR supports the Licensee's request for the necessary approvals to implement the *Emergency Protocol*. As the Commission has been made aware, the Yadkin-Pee Dee Basin is at the center of a prolonged and severe drought. Since early summer, stakeholders in the basin have been engaged in ongoing discussions and negotiations in order to best manage and conserve the valuable waters of the Yadkin-Pee Dee system.

Throughout this process, the stakeholders have repeatedly indicated that a drought of this magnitude is unprecedented. No party can predict with certainty the effects of these low flows on, for example, water quality, fish propagation, water supply intakes, *etc.* The stakeholders have remained in close contact and have sought to share relevant data in order to enable them to react quickly and appropriately to developing problems. This has resulted in the reduction of minimum flows over the summer from 1,400 cfs to 1,200 cfs, and then from 1,200 cfs to 900 cfs.

Between September 15 and March 6, the Licensee is not required to maintain any minimum release from High Rock Lake. The downstream interests indicated that releases from the reservoirs were needed during this period to supplement projected inadequate natural flows. NC DENR, pursuant to its mandate to protect, regulate and provide assistance regarding water quality and water supply, supports fairly retaining water in the upstream

reservoirs in order to protect water quality, assure viability of public drinking water systems, and sustain fisheries. Three fish kills in the past several days in arms of High Rock Lake affirm the gravity of the impacts of reduced flows and water levels in the project.² These conflicting needs are equitably addressed in the *Emergency Protocol*.

For example, the *Emergency Protocol* provides for two drawdown tiers for the reservoirs. If conditions require the stakeholders to consider drawing the reservoirs down below the first tier, the *Emergency Protocol* requires the stakeholders to first work together to identify further conservation measures. The parties are also required to scrutinize the Rockingham gage target flow of 900 cfs to determine whether that target can be reduced. Not until the parties are satisfied that the downstream interests will bear their proportionate share of the burden of the drought does the *Emergency Protocol* allow the reservoirs to be drawn down below the tier one elevations. Thus, the *Emergency Protocol* fairly apportions any hardship.

In order for any longer term solution to be effective and responsive, it must, within limits, permit the stakeholders the flexibility to react to current conditions. The *Emergency Protocol* appropriately balances flexibility with limitation in order to achieve the needs of the stakeholders. For instance, the *Emergency Protocol* recognizes the need to protect the water supply intakes for the Grand Strand Water and Sewer Plant which services Myrtle Beach and other South Carolina communities. To that end, the *Emergency Protocol*

² These events occurred in the Dutch Second Creek arm (about 1,000 fish); the Crane Creek arm (about 2,000 fish); and the Abbotts Creek arm (over 1,000 fish). Low dissolved oxygen levels, resulting at least in part from high amounts of algae and decaying vegetation, caused or contributed to these kills.

establishes an initial target flow of 900 cfs (daily average)³ at the Rockingham gage in North Carolina in order keep salt water from entering the Grand Strand intakes. The Grand Strand Plant does not appear to have experienced any salt water problems at this flow since the *Emergency Protocol* went into effect. But the *Emergency Protocol* also recognizes that the response of the salt wedge to various flow levels in the Pee Dee and Waccamaw Rivers is being monitored very closely. The significant body of data that is being developed may indicate that the parties can lower the 900 cfs target without adverse impacts to water supply in South Carolina. Of course, the data may show also that at times the target may need to be raised. Therefore, the *Emergency Protocol* recognizes that 900 cfs is a starting point only.

Two situations that may call upon the *Emergency Protocol*'s inherent flexibility have arisen already. First, the City of Albemarle maintains a municipal supply intake in Narrows Reservoir. Albemarle's system provides water to approximately 36,400 individuals by serving the towns of Albemarle and Oakboro and the Pfeiffer-North Stanly and Stanly County water systems. The intake was originally thought to be positioned at 30 feet below full pond, but recent inspections place it at about 25.5 feet. Even under good working conditions, it will likely begin experiencing problems at a drawdown of 20 feet. The tier one drawdown for Narrows is 22 feet; tier two is 25 feet.

³ Pursuant to section 401 of the Clean Water Act, 33 U.S.C. § 1341, the Commission cannot order any action that *may* result in a discharge into the Yadkin River absent a water quality certification from the State in which the discharge originates, which in this case would be North Carolina. For example, the Commission may not mandate a minimum flow nor even a target flow of 900 cfs out of High Rock Lake absent compliance with section 401. The license currently neither prohibits nor mandates a flow of 900 cfs during the period covered by the *Emergency Protocol*. The target in this case is established here by agreement of the parties and not by Commission order. Any other changes to the license that may cause an increase in downstream flow would require certification.

Moreover, as the levels in Narrows dropped recently to about 11 feet below full, the system lost suction, possibly indicating a breach in the pipes or a seal at that level. Although divers have inspected the equipment, they have not been able to determine the exact cause of the failure. Even if they are able to identify the cause, the City cannot be sure of the success of any repair until the waters drop again to 11 feet below full pond.

The City has taken the necessary steps to ensure an adequate water supply and has installed a backup diesel pump. Although the diesel pump can use only a fraction of the capacity of the system, it should provide sufficient flow to meet Albemarle's water supply needs in the event the level in Narrows falls below 11 feet again.⁴ Of course, the diesel pump is not a permanent solution and the system cannot be tested under significant drawdown conditions until such conditions arise. At that time, a failure would create an emergency situation. Therefore, NC DENR recommends that the stakeholders work to avoid unnecessarily drawing down Narrows Reservoir below 11 feet. In the event Narrows must be drawn down below that level, NC DENR recommends that the City be given notice as far in advance as possible, and that sufficient water be held upstream in High Rock Lake that can be released to raise Narrows temporarily in the event Albemarle's intake fails.

Second, as levels in Narrows Reservoir fell over the summer, water quality suffered greatly. Dissolved oxygen ("DO") levels sagged to levels unable to sustain some species in

⁴ Albemarle's intake in Narrows normally can provide 8 million gallons per day ("mgd"). Albemarle maintains a second intake in Tuckertown Reservoir, which can provide 6 mgd. Albemarle's total demand is about 8 mgd. The diesel pump can only make use of 2 mgd of Albemarle's normal capacity in Narrows. Albemarle's reliance on the diesel pump leaves little room for error, and provides no reserve capacity to assist surrounding communities.

certain areas and strata of the reservoir. The combination of low water volume and low DO levels compressed fish populations into useable areas far smaller than normal for this time of year.

The lake is currently stratified, and so fish habitat is extremely limited. The North Carolina Division of Water Quality (“NC DWQ”) anticipates that the reservoir will destratify by the end of October. This will better distribute available DO and thereby significantly increase available aquatic habitat. Until that time, a rapid or severe drawdown of Narrows Reservoir has a great potential to cause fish kills. Therefore, NC DENR recommends that the rate of drawdown of Narrows Reservoir be limited to 1.3 feet per week and the total drawdown be limited to 18 feet below full pond (unless a lesser drawdown is necessary to accommodate the City of Albemarle), at least until the lake destratifies. The Licensee should continue to consult and share information with NC DWQ in order to assess regularly water quality status of Narrows Reservoir and operate the project accordingly.

The *Emergency Protocol* also recognizes the value of developing and sharing current, relevant information. “[T]he target reservoir drawdowns and releases are based on the best available information on current conditions.” *Emergency Protocol*, at 5. Of course, management decisions can only be as good as the information on which they are based. The stakeholders must develop and share in a timely manner accurate data regarding the critical stretches of Yadkin-Pee Dee system. These data include DO levels in the reservoirs, and the location and movement of the salt wedge in South Carolina and how the salt wedge reacts to various flow levels. Only through collection of such data will the stakeholders be able to best implement the *Emergency Protocol* and minimize adverse economic and environmental

impacts. NC DENR strongly urges all stakeholders to produce and share in a timely fashion all available data.⁵

Therefore, NC DENR respectfully requests that the Commission approve the requested license variances in order to allow the stakeholders to implement fully the *Emergency Protocol*. In addition, NC DENR further requests that, during the period in which the *Emergency Protocol* is in effect, the Licensee respect the operational limitations recommended above regarding the water supply and water quality issues affecting Narrows Reservoir.

Respectfully submitted, this the 7th day of October, 2002.

ROY COOPER
ATTORNEY GENERAL

By: /s/ Marc Bernstein
Marc Bernstein
Assistant Attorney General
N.C. Department of Justice
Post Office Box 629
Raleigh, NC 27602-0629
Telephone: (919) 716-6600
Facsimile: (919) 716-6767
E mail: mbern@mail.jus.state.nc.us
Attorney for NC DENR

⁵ The two situations involving Narrows Reservoir discussed above were made public by NC DENR as soon as information became available. Unfortunately, these facts only manifested themselves recently, prohibiting NC DENR from bringing these issues to the attention of the stakeholders during the negotiation of the *Emergency Protocol*.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing documents upon each person designated on the official service list compiled by the Secretary in this proceeding.

This the 7th day of October, 2002.

/s/ Marc Bernstein
Marc Bernstein
Assistant Attorney General
N.C. Department of Justice
Post Office Box 629
Raleigh, NC 27602-0629
Telephone: (919) 716-6600