



**Alcoa Power Generating Inc.**

Yadkin Division

PO Box 576

Badin, North Carolina 28009-0576

Tel: 1-888-886-1063

Fax: 1-704-422-5776

[www.alcoa.com/yadkin](http://www.alcoa.com/yadkin)

August 29, 2008

Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street NE  
Washington, D.C. 20426

Re: Yadkin Hydroelectric Project (FERC No. 2197)  
Request to Continue Operational Variances

Dear Secretary Bose:

By letter dated August 7, 2008, the Federal Energy Regulatory Commission (FERC) granted Alcoa Power Generating Inc.'s (APGI's) August 1, 2008 request to modify license variances at the Yadkin Project (Project). Specifically, FERC approved the reduction of minimum releases from the Project from 1,000 cfs weekly average to 900 cfs weekly average, and granted APGI the flexibility to continue to draw down Narrows Reservoir in proportion to High Rock Reservoir to help alleviate the consequences of the ongoing drought in the Yadkin Pee Dee River Basin. As a condition of granting the modified operational variances, FERC required APGI to file a report by the end of each month identifying the need to continue the license variances, modify the variances or return to license operating conditions.

Over the past thirty days, APGI has continued to meet, via conference calls, with the Drought Management Team (DMT) whose members represent the NC Department of Environment and Natural Resources, South Carolina Department of Natural Resources, South Carolina Department of Health and Environmental Control, US Fish and Wildlife Service, Progress Energy, Duke Power Company, and the High Rock Lake Association. Since APGI's August 1, 2008 filing, the DMT has met on August 14 and 28. The US Army Corps of Engineers, the NC Wildlife Resources Commission, the City of Winston-Salem, and the SC Pee Dee River Coalition have also participated in these meetings. Recently, APGI invited the Uwharrie Point Community Association (a homeowner's association on Narrows Reservoir (Badin Lake)) to participate on the calls. A summary of each call is attached for your information.

Over the course of the calls, the DMT has continued to monitor the ongoing drought in the Yadkin Pee Dee River Basin, giving consideration to actual and forecasted stream flows, precipitation, and ground water levels. As of August 26, 2008, the NC Drought Advisory Committee classified much of the Yadkin Pee Dee River basin as an 'extreme drought' area. The US Seasonal Drought Outlook, published by the National Oceanic and Atmospheric Administration (NOAA) on August 21, 2008, shows that the drought conditions in the upper Yadkin Pee Dee River Basin are likely to improve by at least one category in the Drought Monitor intensity scale. Fortunately, the upper portion of the Basin has seen considerable improvement as a result of the more than 5.0 inches of rain that fell (as measured at the USGS Yadkin College Gage No. 02116500) from the remnants of Tropical Storm Fay during the week of August 25, 2008.

At the Yadkin Project, as of August 29, 2008, the elevation of High Rock Reservoir is within 1.0-ft of the full pool reservoir elevation and Narrows Reservoir is within 2.3-ft of full pool. The elevation of both reservoirs is expected to rise. APGI continues to discharge a minimum of 900 cfs weekly average from the Project. However, as discussed during the August 28, 2008 DMT call, during the week of August 25, 2008, APGI may discharge 1,200 cfs weekly average. Discharge may increase during the week of September 1, 2008 to 2,000 cfs weekly average.

The DMT realizes that while the recent rain has improved conditions in the Basin, it is still very dry and the drought may persist; therefore the DMT agreed to continue to be cautious about flow releases and water conservation. The DMT will continue to meet bi-weekly.

At this time, APGI requests FERC's permission to continue to discharge a minimum of 900 cfs weekly average from the Yadkin Project. APGI also requests FERC's permission to continue to draw down Narrows Reservoir in proportion to High Rock Reservoir. APGI will file another letter report with FERC by September 30, 2008, which will identify the need to continue the license variances, modify the variances or return to license operating conditions.

Please feel free to contact me at (704) 422-5622 or [marshall.olson@alcoa.com](mailto:marshall.olson@alcoa.com) if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Marshall L Olson".

Marshall L Olson  
Environmental and Natural Resources Manager

Attachments

CC: T.J. LoVullo, FERC (via E-mail)  
Vedula Sarma, FERC (via E-mail)  
Service List for P-2197

**Yadkin Project (FERC No. 2197)  
Drought Contingency Plan Conference Call  
August 14, 2008**

**Participants:** Alan Jones, Alcoa Power Generating Inc.  
Allen Piner, US Army Corps of Engineers  
Athena Strickland, Pee Dee River Coalition  
Dan Emerson, US Army Corps of Engineers  
Daniel Ngandu, NC Division of Water Resources  
Drew Elliot, Progress Energy  
Jeff Townsend, Progress Energy  
Jody Cason, Long View Associates  
Ken Hodges, NC Wildlife Resources Commission  
Larry Jones, High Rock Lake Association  
Larry Turner, SC Department of Health and Environmental Control  
Marshall Olson, Alcoa Power Generating Inc.  
Max Gardner, Progress Energy

Members of the Drought Management Team (DMT) and others met via conference call on August 14, 2008 to continue discussing the severity of the drought in the Yadkin Pee Dee River Basin (Basin).

Marshall Olson stated that on August 1, 2008 Alcoa Power Generating Inc. (APGI) asked for the Federal Energy Regulatory Commission's (FERC) approval of a modification to the previously approved operational variances. On August 7, 2008, FERC approved APGI's request and discharge from the Yadkin Project was reduced from 1,000 cfs weekly average to 900 cfs weekly average. Based on the Low Inflow Protocol (LIP) stage calculation (see below), the Basin is still in an LIP Stage 1.

**August 12, 2008 LIP Stage Calculation**

High Rock HWEL	=	649.7 YAD (NME minus 1.3)
Actual 3-mo (91 day) rolling ave inflows	=	1,142 cfs
Hist 3-mo rolling ave inflows	=	3600 cfs (Inflow Ratio = 0.32)
Drought Index Ratio = (2+2+2)/3	=	2.0

Stage 0: High Rock HWEL < NME minus 0.5 **YES**  
**OR** High Rock HWEL < NME minus 0 **AND** US Drought Monitor => 0 **YES**  
**OR** High Rock HWEL < NME minus 0 **AND** Average Inflow < 0.48 **YES**

Stage 1: High Rock HWEL < NME minus 1 **AND** US Drought Monitor => 1 **YES**  
**OR** High Rock HWEL < NME minus 1 **AND** Average Inflow < 0.41 **YES**

Marshall noted that he had a recent telephone conversation with FERC about the potential need to ask for further modifications to the operational variances. Marshall understands that any request to further reduce discharge from the Project will be given stricter scrutiny and may even require an environmental assessment.

Alan Jones reported on the current and forecasted reservoir levels at High Rock and Narrows. He said that he was trying to rebalance High Rock and Narrows after they had gotten out of balance over the last couple of weeks. Alan said that despite above normal precipitation being forecasted for the rest of the year, APGI is continuing to operate the Project conservatively.

Based on a conservative estimate of inflow over the next couple of weeks (250 cfs) and a discharge of 900 cfs through the system, Alan estimated that High Rock and Narrows reservoirs would be between 7.0-ft and 7.25-ft below full pool by the end of August.

Dan Emerson, USACE, reported the current elevation of W. Kerr Scott Reservoir to be 1027.27-ft and discharge from the dam to be 127 cfs. He said that the 7-day inflow was 56 cfs (13% period of record median) and month-to-date 61 cfs (14% period of record median). Rainfall month-to-date has been one-inch. The elevation at W. Kerr Scott Reservoir has dropped 1.3-ft in the last two weeks. Dan also reported flows at the Wilkesboro (159 cfs) and Enon gages (221 cfs; 300 cfs daily average). Dan said that since the City of Winston-Salem began advocating voluntary conservation measures, the City had witnessed a 20% reduction in water use. If the USACE were to continue releasing 125 cfs from the dam, 80% of the reservoir conservation pool would remain by the end of September; 75% in early October, and 60% by the end of October.

Larry Jones noted that the LIP does not say that the elevations at High Rock and Narrows reservoirs be 'equalized'. Rather the LIP requires, beginning with an LIP Stage 1, that APGI first supplement Project inflows by drawing first from Narrows Reservoir until the Narrows drawdown below its NME (normal minimum elevation) matches the High Rock Reservoir drawdown below its NME. APGI will then supplement Project inflows by drawing from High Rock and Narrows approximately equally on a foot-per-foot basis below the NME. Alan Jones said he would review the requirements of the LIP.

Larry acknowledged that Progress Energy is also following the LIP, but noted that folks around High Rock and Narrows are having a tough time watching storage leave their reservoirs to keep Tillery full. He suggested that Progress Energy do some public relations work.

Larry also expressed his concern for the potential for FERC to take longer to process any subsequent requests for further operational variances and suggested to APGI that it ask FERC for approval of the entire LIP so that APGI does not have to seek FERC's approval every time there is an LIP stage change.

Ken Hodges commented that he would ask the NC Division of Water Quality to conduct continuous dissolved (DO) oxygen monitoring at two locations within the Basin where there has been a pretty steady DO sag.

Jeff Townsend said that Progress Energy will maintain its current operations, with no exceptions (1,000 cfs daily average).

Athena Strickland reported that conditions in the lower Basin had improved and river flows are normal.

Marshall Olson scheduled the next DMT conference call for Thursday, August 28, 2008 at 1:00 p.m.

**Yadkin Project (FERC No. 2197)  
Drought Contingency Plan Conference Call  
August 28, 2008**

**Participants:** Alan Jones, Alcoa Power Generating Inc.\*  
Athena Strickland, Pee Dee River Coalition  
Daniel Ngandu, NC Division of Water Resources\*  
Deb Owen, NC Division of Water Quality\*  
Eric Watts, Progress Energy\*  
Hope Mizzell, SC Department of Natural Resources Office of Climatology\*  
Jody Cason, Long View Associates  
Kirsten Lackstrom, University of South Carolina  
Kreig Leuschner, Duke Energy\*  
Larry Jones, High Rock Lake Association\*  
Lawrence Dorsey, NC Wildlife Resources Commission  
Mark Cantrell, US Fish and Wildlife Service\*  
Marshall Olson, Alcoa Power Generating Inc.\*  
Max Gardner, Progress Energy\*  
Robert Brown, APGI Communications  
Todd Ewing, NC Wildlife Resources Commission

Members of the Drought Management Team (DMT)<sup>1</sup> and others met via conference call on August 28, 2008 to continue discussing the severity of the drought in the Yadkin Pee Dee River Basin (Basin).

Marshall Olson noted that conditions at the Yadkin Project had improved considerably as a result of the recent, fairly large rain event. Marshall said that as of August 1, 2008, the Basin was in a Low Inflow Protocol (LIP) Stage 1 and that with the recent rain this position had been solidified (rather than moving into an LIP Stage 2 as was anticipated). As of August 28, 2008, the following conditions were observed:

1. High Rock water elevation was at 651.5-ft (NME plus 0.5-ft)
2. US Drought Monitor = 1.67
3. Actual/Historic Average Inflow = 0.33

Marshall reminded the DMT that under the LIP, recovery can be triggered by any of the following three conditions:

Condition 1: All three triggers associated with a lower numbered LIP stage are met.  
Condition 2: High Rock Reservoir water elevations return to at or above the NME (normal minimum elevation) PLUS 2.5-ft (elevation = 653.5-ft)  
Condition 3: High Rock Reservoir water elevations return to at or above the NME for two consecutive weeks.

---

<sup>1</sup> Membership of the DMT includes representatives from the NC Department of Environment and Natural Resources, South Carolina Department of Health and Environmental Control, South Carolina Department of Natural Resources, US Fish and Wildlife Service, Progress Energy, Duke Power Company, and the High Rock Lake Association. DMT members who participated on the call are indicated by an asterisk (\*) in the above participants list.

Marshall said that APGI will continue to run a minimum of 900 cfs weekly average from the Project.

Alan Jones reported that High Rock and Narrows reservoirs had gained 4.38-ft and 2.72-ft in elevation respectively since yesterday morning. He said that by tomorrow High Rock will be less than one-foot below full pool reservoir elevation and Narrows would be about 2.2-ft below full pool and increasing. Alan described the challenge of managing the large inflows into the Project reservoirs. He said that almost 16,000 cfs instantaneous inflow came into Tuckertown. A similar situation occurred at High Rock where 95% of the inflow was off the banks (quickly picked up 20,000 cfs in a very short amount of time). APGI is currently generating 100% at both High Rock (3 units) and Tuckertown (2 units). Alan noted that he would probably have to pass 1,200 cfs at Narrows for the weekly average. Based on an average inflow in High Rock of 1,800 cfs Alan anticipated stabilizing High Rock and Narrows at about 1-ft below full pool by September 5 and discharging an average of 2,000 cfs from Narrows over the same period.

Larry Jones asked Alan why he was planning to increase the discharge from Narrows. Alan responded that he did not want to fill Narrows full because of the tropical storm (Gustav) in the Gulf. He said that he needs some time to react to large inflows. Larry did not object to APGI's proposed operations, but he noted that river flows are falling off quickly and encouraged APGI to continue to operate conservatively. Larry also asked that the DMT call summaries and other official correspondence specifically identify the DMT members.

Kreig Leuschner said that Duke's Buck Steam Station is in good shape and that he hopes that the improved conditions continue.

Deb Owen said that the Division of Water Quality had recently, before the rain event, put out several Hydrolab Multiprobes to measure water quality. She said DWQ will redeploy the probes if dry conditions return.

Todd Ewing offered an update on the US Army Corps of Engineers' operations at W. Kerr Scott (based on an August 28, 2008 email from Ashley Hatchell). As of August 28, the USACE increased releases from W. Kerr Scott Dam from 127 cfs to about 650 cfs. The releases will increase to about 1,200 cfs by noon on August 28. The USACE expects to increase releases again, up to about 2,000 cfs, which it will then hold for a couple of days. W. Kerr Scott is expected to peak near 1,035-ft today and be near 1,031-ft at the end of the long, holiday weekend. Todd Ewing noted that Lawrence Dorsey will be representing the NC Wildlife Resources Commission on future calls.

Mark Cantrell cautioned that the benefits of the rain could last only a few days. He reminded the group that we remain in a long-term drought and encouraged everyone to still be cautious about flow releases and water conservation.

Progress Energy reported status quo. Eric Watts did note that a second tropical storm, Hannah, may impact North Carolina.

Hope Mizzell said that overall, the Pee Dee portion of the Basin did not receive a lot of the recent rain, but it had received rain within the last 30 days. She noted that South Carolina's next Drought Response Committee meeting will be held in mid-September.

Marshall Olson scheduled the next DMT conference call for Thursday, September 11, 2008 at 1:00 p.m.

Certificate of Service

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list in this proceeding in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure.

Dated at Badin, North Carolina this 29th day of August 2008.

A handwritten signature in cursive script that reads "Marshall L. Olson".

Marshall Olson  
APGI Environmental and Natural Resources Manager  
APGI Yadkin Division  
P.O. Box 576  
Badin, NC 28009  
704-422-5622