

**QUEENS CREEK PROJECT SETTLEMENT AGREEMENT**

STATE OF NORTH CAROLINA  
COUNTY OF MECKLENBURG

IN THE OFFICE OF  
ADMINISTRATIVE HEARINGS  
00 EHR 0043

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DUKE ENERGY CORPORATION	)
Petitioner,	)
	)
	)
v.	)
	)
	)
NORTH CAROLINA ENVIRONMENTAL	)
MANAGEMENT COMMISSION, and its Delegate	)
The DIVISION OF WATER QUALITY OF THE	)
DEPARTMENT OF ENVIRONMENT AND	)
NATURAL RESOURCES,	)
Respondent	)

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**SETTLEMENT AGREEMENT**

THIS SETTLEMENT AGREEMENT ("Agreement"), made and entered into as of the 25th day of October, 2000, by and between DUKE ENERGY CORPORATION, a corporation organized and existing pursuant to the laws of the State of North Carolina, with a place of business in Mecklenburg County, North Carolina ("Duke"), on behalf of NANTAHALA POWER & LIGHT ("NP&L"), a division of Duke, the NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES ("DENR"), and the NORTH CAROLINA WILDLIFE RESOURCES COMMISSION ("WRC") (collectively "State Agencies"), (all referenced agencies and Duke collectively "Parties"), provides as follows:

WITNESSETH

WHEREAS, NP&L operates a hydroelectric power project on Queens Creek in Macon County, NC known as the Queens Creek Project (the "Project") pursuant to a license issued by the Federal Energy Regulatory Commission ("FERC") (FERC Project No. 2694) and consisting primarily of:

- a) A 37-acre reservoir (the "Reservoir") located approximately 1.5 miles upstream of Queens Creek's confluence with the Nantahala River; and
- b) An earth and rock fill dam (the "Dam") impounding the water in Queens Creek and including a spill valve; and

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- c) A powerhouse (the "Station") located approximately 3 miles upstream from Queens Creek's confluence with the Nantahala River and being supplied with water from the Reservoir by a steel penstock extending from the Dam;

WHEREAS, construction of the Dam and creation of the Reservoir have created reduced stream flow in the approximately 1.5 - mile long section of Queens Creek between the Dam and Queens Creek's confluence with the Nantahala River (the "Bypass");

WHEREAS, on September 27, 1999, NP&L filed an application with FERC for renewal of its license for the Project (the "New License");

WHEREAS, on October 1, 1999, NP&L filed an application with the DENR for Water Quality Certification pertaining to the New License pursuant to §401 of the Clean Water Act, as amended;

WHEREAS, on November 16, 1999, the DENR issued Water Quality Certification Number 3244 (the "401 Certification") for continued operation of the Project under the New License;

WHEREAS, the 401 Certification contains conditions and limitations on the operation of the Project that the DENR had determined necessary pursuant to its statutory responsibilities to support the protection and maintenance of water quality;

WHEREAS, issuance or waiver of 401 Certification is a prerequisite to the issuance of the New License;

WHEREAS, NP&L's application for the New License includes proposed facilities to enhance day-use recreational opportunities at the Project's reservoir, including (a) picnic tables, (b) a fishing pier for disabled users, and (c) a "tote and float" launch area;

WHEREAS, the Parties agree that generating power at the Station, as well as providing for minimum stream flows in the Bypass and managing the Reservoir's levels for fish habitat enhancements are all important uses of the limited waters of Queens Creek. Under low inflow conditions to the Reservoir above the Station, the Modified 401 Certification as identified within this Agreement provides for expansion of targeted Reservoir level bands, reductions in generation volumes and reductions in minimum flow releases at the Dam into the Bypass;

WHEREAS, on January 13, 2000, Duke, on behalf of NP&L, filed with the Office of Administrative Hearings ("OAH") a Petition For A Contested Case Hearing challenging the limitations and conditions contained in the 401 Certification, with said case assigned OAH Case Number 00 FHR 0043;

WHEREAS, the State Agencies are interested in environmental impacts by operation of

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the Project under the New License:

WHEREAS, the Parties have participated in informal discussions to explore potential settlement of all matters at issue in the 401 Certification and the New License;

WHEREAS, the Parties have now reached full agreement on the resolution of all of the resource matters at issue in the 401 Certification and the New License, specifically including reservoir level limitations, public recreational facilities, minimum flow requirements, and reporting requirements;

WHEREAS, the United States Fish and Wildlife Service of the U.S. Department of the Interior (the "USFWS") and the United States Forest Service of the U.S. Department of Agriculture (the "USFS") fully participated in the informal discussions leading to this Agreement, but the two federal agencies opted not to sign the Agreement. The USFS and USFWS therefore are not Parties to this Agreement.

NOW, THEREFORE, IN CONSIDERATION of all other actions and undertakings as set forth hereinbelow, the Parties contract, settle and agree as follows:

## Reservoir Level Limitations

1. The Parties agree to the following reservoir level limitations, written in the form of an **Article 401** that the FERC should place in the New License for the Project:

The Licensee shall maintain the elevation of the project reservoir within one foot above and two feet below the reservoir's normal full operating pool level of 2,895.0 feet Mean Sea Level (MSL) (i.e., in the range of 2,896.0 feet MSL and 2,893.0 feet MSL) for the period May 1 through October 31 and within one foot above and seven feet below the reservoir's normal full operating pool level (i.e., in the range of 2,896.0 feet MSL and 2,888.0 feet MSL) for the winter drawdown period of November 1 through April 30. In order to facilitate gradual raising and lowering of the reservoir during the winter drawdown period, the Licensee shall operate the project so as to attempt to have the reservoir elevation at 2,891.0 feet MSL on April 1 and December 1. The Licensee shall use the existing float-operated gage on the reservoir to determine reservoir elevation.

The reservoir elevation limits specified herein may be temporarily modified if required by operating emergencies beyond the control of the Licensee, during periods of excessive inflow, for planned drawdowns for maintenance or inspection purposes, for short periods upon mutual agreement of the Licensee, the North Carolina Department of Environment and Natural Resources (DENR) and the North Carolina Wildlife Resources Commission (WRC), and during low inflow periods as specified in License Article 402 hereof [Paragraph 5 of this Agreement].

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The Licensee shall notify the DENR and the WRC at least 15 days prior to commencing planned drawdowns for maintenance or inspection purposes that will require a temporary modification of the reservoir elevation limits. The Licensee shall notify the DENR and the WRC of any temporary modification of the reservoir elevation limits required by an operating emergency beyond the control of the Licensee as soon as practical, either before, during, or immediately following such emergency, but no later than ten days after each such incident.

2. The Parties agree that the foregoing agreements on reservoir level limitations ("**Reservoir Level Agreements**") will be incorporated into the amendment of application for the New License that NP&I will file with the FERC as provided in Paragraph 10 hereof, and that the Reservoir Level Agreements shall be incorporated in the terms of the Modified 401 Certification.

### Public Recreation Facility Improvements

3. The Parties agree that the day-use recreational facilities proposed by NP&I in its September 27, 1999 application for the New License will be consolidated at a single location within the existing FERC project boundary and thereafter maintained by the WRC. The construction of the consolidated facilities will be completed in 2001 or as soon as practically achievable following receipt of any necessary approvals by the FERC under the procedures of the existing license. The recreational facilities in the FERC application include (a) picnic tables, (b) disabled-persons fishing pier, and (c) "tote and float" launch area.

4. The Parties agree that the foregoing agreements on Public Recreation Facility Improvements ("**Recreation Facility Agreements**") will be incorporated into the amendment of application for the New License that NP&I will file with the FERC as provided in Paragraph 10 hereof, and that the Recreation Facility Agreements shall not be incorporated in the terms of the Modified 401 Certification.

### Minimum Flow in Queens Creek Bypass

5. The Parties agree to the following minimum flow requirements, written in the form of an **Article 402** that the FERC should place in the New License for the Project:

The Licensee, except during low inflow periods as defined herein, shall release from a minimum flow release valve required to be installed at the base of the project's dam, as calibrated and metered at the valve, a continuous minimum flow of 2.0 cubic-feet-per-second (cfs) during the period December 1 through May 31 and 1.0 cfs during the period June 1 through November 30 for the protection of fishery and other aquatic resources in the reach of Queens Creek bypassed by the project.

During low inflow periods as defined herein, the Licensee shall follow in sequential fashion the protocol set forth below regarding adjustments to minimum flow releases, reservoir

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elevations, and generation levels and shall make the adjustments set forth below on a weekly basis so as to equitably allocate the impacts of reduced water availability:

- a) The Licensee shall reduce the normal minimum generation volume by 20% to 29.2 acre-feet per calendar week;
- b) Upon a determination by the Licensee that the reservoir elevation cannot be maintained within the limits specified for the relevant time period in Article 401 [Paragraph 1 of this Agreement] hereof even with implementation of the measure specified in a) hereof, the Licensee shall reduce the continuous minimum flow releases specified above for the relevant time period by 20% (i.e., down to 1.6 cfs for the period December 1 through May 31 and 0.8 cfs for the period June 1 through November 30);
- c) Upon a determination by the Licensee that the reservoir elevation cannot be maintained within the limits specified for the relevant time period in Article 401 [Paragraph 1 of this Agreement] hereof even with implementation of the measures specified in a) and b) hereof, the Licensee may reduce the reservoir's elevation one additional foot below the lower reservoir elevation limit specified for the relevant time period in Article 401 [Paragraph 1 of this Agreement] hereof for the duration of the low inflow period (hereinafter the "first modified reservoir level band");
- d) Upon a determination by the Licensee that the reservoir elevation cannot be maintained within the first modified reservoir level band, the Licensee shall reduce the minimum generation volume by an additional 15% (down to approximately 23.7 acre-feet per calendar week);
- e) Upon a determination by the Licensee that the reservoir elevation cannot be maintained within the first modified reservoir level band even with implementation of the measure specified in d) hereof, the Licensee shall reduce the continuous minimum flow release specified herein for the relevant time period by an additional 15% (i.e., down to 1.3 cfs for the period December 1 through May 31 and 0.65 cfs for the period June 1 through November 30);
- f) Upon a determination by the Licensee that the reservoir elevation cannot be maintained within the first modified reservoir level band even with implementation of the measures specified in d) and e) hereof, the Licensee may reduce the reservoir's elevation one additional foot below the lower limit of the first modified reservoir level band for the duration of the low inflow period (hereinafter the "second modified reservoir level band");
- g) Upon determination by the Licensee that the reservoir elevation cannot be maintained within the second modified reservoir level band, the protocol preceding establishment of the first and second modified reservoir level bands as specified above shall be repeated, with the Licensee first reducing minimum generation volumes in increments of 10% and subsequently reducing continuous minimum flow releases in increments of 10%.

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followed by one foot incremental reductions in the lower limit of the second modified reservoir level band, until inflow has increased to a point where the reservoir level has been restored to within the reservoir elevation limits for the relevant time period specified in Article 401 [Paragraph 1 of this Agreement] hereof.

For purposes of this Article: the term "normal minimum generation volume" means 36.5 acre-feet of water used per calendar week to generate electricity at the project; the term "low inflow period" means any period when weekly inflow to the reservoir cannot maintain the reservoir's elevation above elevation 2,893.0 feet MSL for the period May 1 through October 31 or elevation 2,888.0 feet MSL for the period November 1 through April 30 if the Licensee provides the continuous minimum flow release for the relevant time period specified herein and uses the normal minimum generation volume.

Whenever the Licensee at any time during the period May 1 through October 31 reduces the elevation of the reservoir to below elevation 2,888.0 feet MSL after following the above-specified protocol and not because of planned drawdowns for maintenance or inspection purposes or operating emergencies beyond the control of the Licensee, it shall notify the North Carolina Department of Environment and Natural Resources (DENR) and the North Carolina Wildlife Resources Commission (WRC) as soon as possible, but no later than ten days after each such incident, and shall attend any meeting convened thereafter to discuss reasonable and desirable options for addressing the low inflow conditions that caused the reservoir elevation to be reduced below elevation 2,888.0 feet MSL; provided, however, that no changes in the low inflow protocol provided for herein may be made without the prior approval of the Commission

### Reporting Requirements

6. The Parties agree to the following reporting requirements, written in the form of an **Article 403** that the FERC should place in the New License for the Project:

No later than March 31 of each calendar year beginning the first calendar year after the calendar year in which this license is issued, the Licensee shall provide to the North Carolina Department of Environment and Natural Resources and the North Carolina Wildlife Resources Commission and file with the Commission a report containing a table of the elevation of the reservoir on a daily basis during the previous calendar year, a certification by the Licensee that the minimum flow release requirements of Article 402 [Paragraph 5 of this Agreement] were met during the previous calendar year, and a discussion of each incident during the previous calendar year where the elevation of the reservoir was above or below the levels specified in Article 401 [Paragraph 1 of this Agreement], together with information sufficient to demonstrate that for each incident where the elevation of the reservoir was below the levels specified in Article 401 [Paragraph 1 of this Agreement] the requirements of the low inflow protocol of Article 402 [Paragraph 5 of this Agreement] were met.

7. The Parties agree that the above-described low inflow protocol and reporting requirements shall be implemented during the Spring of 2001, but not later than May 31, 2001. NP&L will install a minimum flow release valve and associated flow meter required to provide

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and measure the minimum flow as soon as practically achievable following receipt of any necessary approvals by the FERC under the procedures of the existing license. The minimum flow release valve will be calibrated to provide the range of minimum flows under the range of reservoir levels identified in this Agreement. Since NP&I cannot begin construction until any necessary approvals for installation of the minimum flow release valve and flow meter are received from the FERC, the Parties agree that failure to implement the subject minimum flows by May 31, 2001 due to delays in receiving any required FERC approvals does not constitute a default under this Agreement.

8. After five years of operations under the provisions of this Agreement, NP&I will confer with the Parties to consider holding an informational meeting to review the operational history of the Agreement to determine if any operational changes are needed and agreeable to all the Parties. Any such meeting shall be scheduled and held no later than September 30 of the appropriate year.

9. The Parties agree that the foregoing provisions pertaining to minimum flow releases, normal minimum generation volume, low inflow protocol and reporting requirements will be incorporated into the amendment of application for the New License that NP&I will file with FERC as provided in Paragraph 10 hereof, and shall be incorporated in the terms of the Modified 401 Certification.

### **Amendment to FERC Application**

10. NP&I shall file with the FERC an amendment to its September 27, 1999 application for the New License for the Project incorporating the agreements described in Paragraphs 1, 3, 5, and 6 no later than 60 days following issuance by DENR of the final Modified 401 Certification.

### **Miscellaneous**

11. Within 30 days following the date of the last signature affixed to this Agreement, DENR will issue a draft Modified 401 Certification with terms as required by the terms of this Agreement, to be followed by a final Modified 401 Certification within the timelines specified by the DENR for such issuance.

12. Duke shall file a notice of withdrawal, with prejudice, of its contested case petition with OAH Case No. 00 EHR 0043. The notice of withdrawal shall be filed in OAH within 5 days of receipt by NP&I of the final Modified 401 Certification as specified in Paragraph 11 of this Agreement. Each Party shall bear its own costs and, contingent upon execution of all the terms of this Agreement, each Party expressly waives any right to collect attorney fees from any other Party to this Agreement.

13. The State Agencies agree that the terms of this Agreement resolve their concerns regarding continued operation of the Project under the New License and therefore that they (a) will support issuance of the New License that is consistent with the terms of this Agreement and

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(b) will not during the current license renewal proceedings communicate to the FERC or to any other federal or state resource agency any comments, conditions, recommendations or prescriptions that are inconsistent with the terms of this Agreement or that if followed or adopted by the FERC as part of the New License would reduce the economic value of the Project to NP&L.

14. In the event that the New License does not incorporate, approve, or allow implementation of the provisions referenced in Paragraphs 1, 3, 5 and 6 hereof, the Parties agree to promptly confer to determine what, if any, modifications to this Agreement should be made to address the failure of the New License to incorporate or approve such agreements.

15. This Agreement is a compromise of disputed claims. The actions taken hereunder are not to be construed as any admission of liability on the part of any settling party, including its agents, representatives, attorneys or employees, as to all of whom liability is expressly denied.

16. This Agreement contains the entire agreement between the Parties. The terms of this Agreement are contractual and not mere recitals.

17. This Agreement shall not be modified or amended except by an instrument in writing signed by all of the Parties or their successors in interest.

18. This Agreement may be executed in separate counterparts, with each counterpart deemed to be an original having the full force and effect thereof.

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NANTAHALA POWER & LIGHT, a  
Division of DUKE ENERGY  
CORPORATION

By: *N. E. Tucker, Jr.*  
N.E. Tucker, Jr.  
President

Date: 10/26/00

N.C. DEPARTMENT OF  
ENVIRONMENT AND NATURAL  
RESOURCES

By: *William E. Holman*  
William E. Holman  
Secretary

Date: 10/25/00

N.C. WILDLIFE RESOURCES  
COMMISSION

By: *Charles R. Fullwood*  
Charles R. Fullwood  
Executive Director

Date: 10.25.00