

# Section 1

## Introduction

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### 1.1 Relicensing the Blewett Falls and Tillery Developments

Progress Energy Carolinas, Inc. (Progress Energy) also known as Carolina Power & Light (CP&L), a subsidiary of Progress Energy, owns and operates the Yadkin-Pee Dee River Project (Project), located on the Yadkin-Pee Dee River in North Carolina. The Project consists of the 84 megawatt<sup>1</sup> (MW) Tillery Development and the 24.6 MW<sup>1</sup> Blewett Falls Development. Each development consists of a dam, powerhouse, impoundment, primary transmission lines from the Project, structures used in connection with the Project, and water rights, rights-of-way (ROW), lands, and interest in lands necessary for the operation and maintenance of the Project. The Project produced an annual average of 335 million kWh of renewable energy over the 17-year period of 1984 to 2000.

The Blewett Falls and Tillery Developments were constructed in the early 1900s. Blewett Falls was placed in operation in 1912 and the Tillery Development began operating in 1928. In 1958, the Federal Power Commission, the predecessor to the Federal Energy Regulatory Commission (FERC), issued to CP&L a 50-year license for the Yadkin-Pee Dee River Project designated as FERC No. 2206. This license expires on April 30, 2008. The Project has provided valuable service as a peaking and load-following electrical generation resource throughout its entire history.

The Federal Power Act (FPA) authorizes FERC to license non-federal water power projects on navigable waters and federal lands. The FPA, National Environmental Policy Act (NEPA), the Fish and Wildlife Coordination Act (FWCA), and other federal statutes require FERC to consult with federal and state resource agencies, the public, and affected Native American tribes when considering applications for the licensing of hydroelectric projects within its jurisdiction.

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<sup>1</sup> FERC-authorized licensed capacity.

FERC has implemented regulations that require applicants for a new license<sup>2</sup> to undertake active consultation with the public, resource agencies, and affected Native American tribes prior to filing an application. Under FERC regulations, Progress Energy must initiate the process of relicensing no later than five years prior to license expiration, that is, by April 30, 2003. Progress Energy is required to file its application for a new license with FERC no later than two years prior to the expiration of the current license, or April 30, 2006. Progress Energy intends to comply with FERC's requirements for consultation by following FERC's traditional three-stage consultation process consisting of preparing and issuing an Initial Consultation Document (ICD), a draft license application for review, and then a final application filed with FERC. Progress Energy has for many years worked cooperatively and closely with local, state, and federal resource agencies as well as other parties with a direct interest in the Project. Progress Energy desires to and will continue this cooperation by expanding the three-stage consultation process beyond what is required under the traditional FERC process, as discussed in Section 1.3 below.

The issuance of the ICD is an early step in the relicensing process. This ICD presents a description of the Project design and operation as well as a characterization of the environmental setting of the Project. This document also presents an initial discussion of potential issues associated with relicensing of the Project and a suggested framework through which Progress Energy and stakeholders can come together to further identify and discuss issues, define needed studies, and share information.

## **1.2 Areas to be Addressed as Part of Relicensing**

There will be a number of operational and resource needs to be considered in relicensing. An overview of Project-related resources is provided below.

### **1.2.1 Water Quality**

FERC regulations require Progress Energy to consult with the "certifying agency" under Section 401 of the Federal Clean Water Act (CWA). The certifying agency for the Project is the North

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<sup>2</sup> The processing of obtaining a new license is referred to as "relicensing".

Carolina Department of Environment and Natural Resources – Division of Water Quality (NCDENR). Water quality is a major consideration in the relicensing of the Blewett Falls and Tillery Developments, and concerns related to water quality may affect both North Carolina and South Carolina.

### 1.2.2 Aquatic Resources

An abundance of native and non-native resident fish species, both game and non-game, inhabit waters of the Project area. A number of state- or federal-listed rare, threatened and endangered mussel and fish species also inhabit the waters of the Pee Dee River. Lake Tillery is well known for having a healthy warmwater fishery attracting recreational anglers. Blewett Falls Lake also provides good warmwater fishing opportunities. Relicensing provides the opportunity to address management objectives for these species and the potential needs of the respective populations.

There are seven species of migratory fish found in the lower Pee Dee River. These species include American eel, American shad, Atlantic sturgeon, shortnose sturgeon, hickory shad, herring, and striped bass. Located approximately 190 miles upstream of the river's mouth, Blewett Falls is the first hydroelectric development on the Pee Dee River. The relicensing process will provide an opportunity to review and discuss resource agency management objectives and priorities for these species, and the Project's ability to contribute to achieving these objectives.

### 1.2.3 Terrestrial Resources

There are a number of important natural areas within and adjacent to the Project boundary. While much of the Tillery shoreline has undergone some form of development, there are large areas of relatively undisturbed habitat downstream of the Tillery Development and throughout much of Blewett Falls Lake and downstream to the state line. Some of the natural communities are of statewide and regional significance and support a number of rare plant and wildlife species. In addition, the Pee Dee National Wildlife Refuge, Morrow Mountain State Park, and the Uwharrie National Forest are in close proximity to the Project. The protection of key

wildlife areas and finding the appropriate balance in the development of the land and water resources within the Project boundary will be an integral part of the relicensing process.

#### 1.2.4 Recreation and Land Use

The Project is located within a two-hour drive from the large urban area extending from Charlotte to Raleigh/Durham, referred to as the “Piedmont Crescent”(ASU 1999). The Project location is convenient to these urban population centers for outdoor recreation and tourism. The Yadkin-Pee Dee Lakes Project, a non-profit organization, was formed in the early 1990s with an initial objective to highlight the region’s potential for sustainable tourism. From this effort, a planning concept was developed for the seven county region centered on the reservoirs along the Yadkin-Pee Dee River. This Yadkin-Pee Dee region is referred to as North Carolina’s “Central Park”; a region which serves as a rural hub for outdoor recreation and tourism.

Progress Energy has recently developed, with agency and public consultation, a Shoreline Management Plan (SMP) for the Tillery Development describing Progress Energy’s approach to managing shoreline activities at Lake Tillery. The SMP was filed with FERC on December 28, 2001, and is currently under review.

During relicensing, information on recreational uses will be used to describe the amount and type of recreation in the Project area and the adequacy of existing facilities. In addition, how the Project fits into the regional concept for the development of recreation, sustainable tourism, and land uses will be considered.

#### 1.2.5 Cultural Resources

The Project is located in an area of central North Carolina rich in cultural resources. Prior to the issuance of any license, Section 106 of the National Historic Preservation Act (NHPA) requires that FERC take into account the effect of its actions on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register. FERC requires Progress Energy to consult with the appropriate State Historic Preservation Officer (SHPO) and affected Native American tribes as a part of the relicensing process.

### 1.2.6 Power Generation and Project Economics

The primary purpose of the Project is to generate electricity and meet other ancillary electrical system needs for the benefit of Progress Energy's ratepayers. The Project is used for load-following and on-peak generation and its economic viability is dependent on serving these purposes. Both Tillery and Blewett Falls have the capability to "black start", meaning the ability to come on-line under system blackout conditions to support local loads and aid in overall system restart and recovery. FERC requires that Progress Energy demonstrate its ability to operate and maintain the Project in a manner which provides efficient and reliable service. A plan for the continued economic operation of the Project will be developed as part of relicensing.

### 1.2.7 Water Management

The waters of the entire Yadkin and Pee Dee Rivers have historically been managed for numerous municipal, agricultural, public, and industrial uses including domestic and industrial water supply, wastewater management, power generation, recreation, wildlife, and irrigation. Upstream of Progress Energy's Tillery Development is the Yadkin Project, FERC No. 2197, owned and operated by Alcoa Power Generating, Inc. (APGI). The current FERC license for the Blewett and Tillery Developments states that "it is desirable and in the public interest that the operation of Project Nos. 2197 and 2206 be coordinated to the greatest extent compatible with the several and distinct purposes for which the two projects are designed and operated." The Blewett and Tillery reservoirs have limited storage capacity. Currently, the primary storage reservoir in the Yadkin-Pee Dee River system is High Rock Lake, APGI's uppermost impoundment. High Rock functions as the primary seasonal storage and water regulation facility for the Yadkin-Pee Dee River, including Progress Energy's hydroelectric operations (APGI 2002). Water storage at Blewett and Tillery is adequate to provide important daily and weekly adjustments in flow, with seasonal storage provided at High Rock Lake.

Progress Energy has worked with both upstream and downstream users of the river's waters throughout the life of the Project. Most recently, due to unprecedented drought conditions in the basin, Progress Energy worked proactively with water resource authorities from the states of

North Carolina and South Carolina and APGI to reach a temporary protocol to provide water releases to satisfy the needs of downstream users. The long-term management of the water resources of the Yadkin-Pee Dee River under various flow conditions will likely be a major topic of discussion amongst stakeholders throughout the relicensing process.

### **1.3 Purpose of this Document**

Progress Energy has prepared this ICD consistent with FERC regulations to present an overview of the Project operations and a description of the existing resources associated with the Project. This document represents the initiation of the consultation process for the relicensing of the Project. The relicensing process will provide local, state, and federal authorities and other stakeholders with the opportunity to become actively involved with the relicensing of the Project. This ICD is the first step in this process.

Progress Energy has recently performed environmental surveys of existing water quality and aquatic and terrestrial resources in the vicinity of the Project. The survey data collected has been included in this document in Appendices E and F, and is thoroughly discussed in Sections 4.3 through 4.6. Progress Energy is providing this survey data to stakeholders as an introduction to these resources. As part of relicensing, Progress Energy is proposing to establish various work groups focused on specific resource areas to review the existing data, identify areas where additional information may be needed, and to jointly develop appropriate study plans for obtaining the needed information.

Following issuance of this ICD, Progress Energy will hold a Joint Meeting as required by FERC regulations. The purpose of the Joint Meeting is to explain the Project, review information provided in this ICD, provide opportunity for identification of concerns and issues related to Project operations and Project effects. Progress Energy plans to expand the purposes of the Joint Meeting by using it as an opportunity to invite resource agencies and other stakeholders to participate in one or more Resource Work Groups (RWG). The initial purpose of the RWGs would be to (1) review existing data, (2) identify resource issues and needs, (3) identify needed studies and their goals, and (4) review study plans.

It is Progress Energy's desire to conduct needed studies using study plans that have been cooperatively developed within the RWGs. Progress Energy is suggesting the following RWGs be formed:

- Water Resources Work Group;
- Terrestrial Resources Work Group;
- Recreation and Land Use Work Group; and
- Cultural Resources Work Group.

It is Progress Energy's intent that as relicensing proceeds, these RWGs will also review study results and develop effective solutions, as necessary, to address resource needs of the Project. A suggested schedule for the initial RWG meetings will be presented at the Joint Meeting.