

APPENDIX A - OPERATING HYDROELECTRIC PLANTS IN NORTH CAROLINA BUILT PRIOR TO 1955

CAROLINA POWER & LIGHT COMPANY

Blewitt Falls Power Plant

The Blewitt Falls Power Plant is located on the Pee Dee River in Anson County, North Carolina. By the nineteenth century, the area around Rockingham, nine miles to the north of the falls, was home to several textile mills. Hugh McRae, of Wilmington, perceived these mills to be a “ready-made market” for the power that could be generated by the falls. On February 20, 1905, the North Carolina legislature chartered the Great Pee Dee Electric & Power Company and authorized its officials to build and operate mills, power companies, transmission lines, and other properties. McRae, along with three others were the incorporators. The following year the company’s name was changed to Rockingham Power Company (Riley 1958: 131-132).

Work on the plant began that same year and as many as 1,200 men worked on its construction in the isolated and rugged terrain. The construction camp included shanties scattered over the hillside, the homes of the head engineer and the purchasing agent on the bluff overlooking the river, and a tent where religious services took place. In the camp lived the wives and children of the workers, preachers, and teachers (Riley 1958: 133-134).

The building of the plant was rough work:

Two 100-foot towers were erected on opposite sides of the river. Between them, two cableways were stretched. Men and materials were shunted from the shores to be suspended above and lowered to work areas in the river. Often working in sub-freezing weather and shrouded in fog, the men ran physical risks that would make today’s safety director cringe! There is no record of how many men lost their lives on the job, but their number is substantial (Riley 1958: 133-134).

Due to financial problems of the Knickerbocker Trust Company (who financed the Blewitt project), the project suspended work in October 1907. Work resumed in April of 1908 but disaster struck that summer when the cofferdam was washed out on August 7th. This event proved fatal for Rockingham Power and the company went into receivership in May of 1909. Suit was also brought against Hugh McRae & Company to convey a parcel of land necessary for the completion of the plant (Riley 1958: 135-137, 139). Rockingham Power was sold in July of 1909 and in early 1911 the new owners organized the Yadkin River Power Company, whose objective was to complete and operate the plant. Yadkin River Power was a subsidiary of Electric Bond and Share Company and had the same officers as Carolina Power and Light (Riley 1958: 144-145).

Work resumed on the dam, with shifts working around the clock, seven days a week. Blewitt Dam reached completion in December 1911 and went into operation the following June (Riley 1958: 145-146). In the next fourteen years, Yadkin Power increased its customer base from 1,000 to 13,800 customers, providing retail service to 25 communities and wholesale service to four. In 1926, the company merged with CP&L (Riley 1958:150).

Marshall Hydroelectric Plant

The Marshall Plant is located on the French Broad River in Madison County, North Carolina. It was completed in 1908 by the W.T. Weaver Power Company and supplied all of Asheville Electric's power needs. W.T. Weaver had previously built a hydro plant on Ivy Creek in 1891 that had been leased from the North Carolina Electrical Power Company and is now abandoned. In 1903, Weaver built the Weaver plant on the French Broad River. That same year, all the electric services in Asheville were consolidated into the Asheville Electric Company (Riley 1958: 104).

Tillery (Norwood) Hydroelectric Plant

In 1926, CP&L began building a hydroelectric plant at the Norwood site, on the Pee Dee River, around 25 miles above Blewitt Falls (Riley 1958: 205). A.C. Clogher, an engineer for Electric Bond and Share, designed the plant, and when completed in 1928, the station contained one 18,000 KW unit and two 22,000 KW units. At the time, the plant was the latest and largest of its kind designed for use of an outdoor crane. Its design included:

...[a] concrete substructure...[carried] up to the floor over the steel penstocks and scroll cases and a few steps above the turbine decks. One leg of the crane runs on this floor, the other on top of the forebay wall. The generators are supported on concrete cylinders extending approximately 16 ft. above the substructure... (Riley 1958: 209).

The plant generated 62,000 kilowatts and also served to regulate stream flow resulting in more efficient use of the water power at Blewitt Falls. In 1933, Norwood Hydroelectric Plants was renamed Tillery in honor of Paul Allen Tillery, general manager of CP&L from 1918 through 1932 (Riley 1958: 189-190, 209-210).

Walters (Waterville) Hydroelectric Plant

In anticipation of developing hydroelectric sites in western North Carolina, CP&L began in 1925 leasing property at Waterville, North Carolina. This site is located high in the Great Smoky Mountains near the Tennessee state line. The company purchased the land the Great Smoky Mountain Power Company four years later and began planning the construction of a dam on the Pigeon River. CP&L began construction of the plant in 1927, completing the work in 1930. The Waters plant, named for Charlie Walters, Vice-President and member of the CP&L Board of Directors, provided power to several communities and industries throughout the region. It consists of an arch-shaped dam that spanned the river and included a 14-foot tunnel that had been blasted through 6.2 miles of solid rock to Waterville Lake, twelve miles upriver. Its 863-foot head was, until World War II, the highest of its time east of the Rockies (Bishir 1999: 352-353; Riley 1958: 210).

The building of a hydroelectric plant such a remote location and the challenging terrain that it was built on focused national attention on its construction techniques. Due to the elevation of the site and lack of rail access, it was extremely difficult getting materials and equipment to the work site. A narrow gauge logging line was leased by the contractors but it took a year to extend the line five miles to the dam site. Instead of one central work camp, separate camps for crews working on the dam, tunnel, and powerhouse were set up (Bishir 1999: 353).

The concrete arch dam is 180 feet high and around 900 feet long. The spillway is located at the center of the arch while southwest of the dam is the reinforced concrete intake gate to the tunnel. Workers blasted a 6.2-mile tunnel through the mountain to carry water down slope where it divides into three penstocks before arriving at the powerhouse. The powerhouse is a brick building with tall windows alternating with pilasters above a base of concrete. As of 1999, the plant has changed little from the 1930s, with the original turbines and generators still operating (Bishir 1999: 353).

CP&L built Waterville Village as the site to house workers and their families. It has built as a model community with family houses, a boardinghouse, a school, a post office, and a clubhouse amid landscaped and terraced grounds. Of these, a few individual dwellings, the two-story clubhouse (now the plant manager's residence), and the small, frame schoolhouse still stand (Bishir 1999: 353). In 1980, the Walters Hydroelectric Plant was designated as North Carolina's first Civil Engineering Landmark by the North Carolina Chapter of the American Society of Civil Engineers (Bishir 1999: 353).

Buckhorn Hydroelectric Plant

The Cape Fear Power Company was developed by W.M. Morgan and Captain R. Percy Gray in 1899. The purpose of the company was to develop power on the Cape Fear and Deep Rivers. Interest in the development of both these rivers began with the discovery of iron at Buckhorn on the Cape Fear and coal on the Deep River in the nineteenth century. The land and rights at Buckhorn had been acquired by Morgan's power company as well as the Deep River Manufacturing Company in Wilmington and the Cape Fear Iron and Steel Company and probably included all the lands, easements, and other rights on both sides of the Cape Fear River above and below Battle's Dam in Harnett County and Buckhorn Shoals, up to Lockville (Riley 1958: 37-38).

In late 1905, after six years of construction, workers had completed the dam. Unfortunately, Cape Fear Power Company never operated. In a struggle to repair damage to the dam from floods and freshnet resulted in continued financial problems for Cape Fear Power and by 1906, the company went into receivership. That same year, the property was purchased by Electric Bond and Share. Phoenix Construction Company redesigned the project and resumed construction (Riley 1958: 38-40).

Problems continued to plague the project. Four construction workers died when they lost control of their boat near the dam. In 1907, seven construction workers were killed when lightning struck the powerhouse. Despite problems with the labor force and equipment, the plant began operation on January 1, 1908. In February, Central Carolina Power Company took over the Cape Fear properties. The plant proved successful, providing power to several mills in the area and to the cities of Raleigh, Fayetteville and Sanford. The Buckhorn Plant eventually became the property of CP&L (Riley 1958:40, 42, 44-47).

Lakeview Light and Power Company Plant No. 2

Plant No. 2 is an early twentieth-century hydroelectric plant located on and south of the Lower Little River in Hoke County, North Carolina. This plant, called Lobelia consisted of a hydroelectric dam, associated concrete and earthen works, and a power plant. It was built in 1911 near the mouth of Crane Creek. A 1918 Camp Bragg map identifies these structures as the Lakeview Light and Power Company Plant No. 2. The plant was the business venture of John R. McQueen of Carthage and Major John Burns Eastwood, a Moore County peach grower and supplied power to Raeford, Vass and Lakeview. CP&L acquired the plant in 1927 (Idol and Becker 2001:199).

The dam is constructed of poured concrete and steel supports. The area in the vicinity of the plant has been the site of flooding and the dam is no longer in operation, as it has been breached and the

powerhouse and turbines have been removed. The plant had been constructed to supply local communities with power for domestic and industrial purposes. It is unknown when use of this plant was discontinued, though this may have been associated with the establishment of Camp Bragg (Idol and Becker 2001: 199-100).

McQueen and businessman Imlah Fogle Chandler pooled their electric holdings in 1911. By 1921 their operation became known as Sandhill Power Company. That same year they built a hydro plant at Carbondon on the Deep River. This plant was interconnected with the Little River plant and provided electric power to the towns of Liberty, Cumnock, and Siler City (Riley 1958: 123-124).

Leatherwood Shoals Hydroelectric Plant

The Haywood Electric Power Company was the venture of businessman Benjamin J. Sloan, who owned the White Sulphur Springs Hotel in Waynesville. His hotel's electricity was provided by steam and waterpower at the Killian Woolen Mills. This plant was providing power to Waynesville and when the Killian plant became overloaded, Sloan took over his contract to provide power to the town. Sloan then built a steam plant to supplement the waterpower and when this source became overloaded, he began to look for bigger power sources (Riley 1958: 118-119).

Sloan along with Dr. Thomas Stringfield and Sam Welch organized the Haywood Electric Power Company (HEPCO). Included in the properties bought by the company was Leatherwood Shoals in White Oak Township. The plant went into production in July of 1905. Among its first customers was Champion Paper Company, who was building a plant at Canton. After Ben Sloan died in 1922 the Hepco plant fell into disrepair and the reservoir silted in. In 1929, Sloan's son and his partners sold the property to CP&L, and the following year, the plant washed out during a flood on the Pigeon River (Riley 1958: 121-122).

CASCADE POWER COMPANY

Brevard Hydropower Plant

The Cascade Power Company is located in Brevard, North Carolina. The Brevard Dam and powerhouse were built in 1908 when R.J. Pickleshimer and his sons organized the Cascade Power Company to produce electric power for his family's Brevard Cotton Mill. The plant produced enough excess power to establish the Brevard Light and Power Company to serve the town of Brevard. The original dam and wooden powerhouse were replaced in the 1920s with a small masonry dam and brick powerhouse. This plant produced less than 1 megawatt of power and provided power to the Duke Power Company. The plant is no longer functioning (Bishir 1999: 335; Cascade Power personal communication 2001).

DUKE POWER COMPANY

Bridgewater Hydroelectric Plant

In August of 1916, construction began on the Bridgewater Plant, located on the Catawba River near Morganton. Bridgewater began operation on May 4, 1919 and received its name from the Southern Railway Bridgewater Station Depot in Burke County, North Carolina. Lake James, named after James (Buck) Duke, is located upstream from the dam and was formed by the damming of the Catawba River, Paddy Creek, and the Linville River (Anonymous_a n.d.: 10; Duke Power n.d. _a: 5).

Lookout Shoals Hydroelectric Plant

The Lookout Shoals plant is located on the east side of the Catawba River near Barium Springs in Iredell County, North Carolina. It was the first Southern Power Company hydroelectric project in North Carolina and was completed in 1915. Lookout Shoals was also the first Duke Power plant to use vertical-shaft turbines. During the Great Flood of 1916, the dam and powerhouse were completely covered by water. (Anonymous_a n.d.: 10; Duke Power n.d_a: 5).

Mountain Island Hydroelectric Plant

The Catawba Manufacturing & Electric Company built the Mountain Island Hydro Station on the Catawba River in Mount Holly, North Carolina in 1922-23. This dam was built due to the demand of homeowners for electricity; previous to this time, power plants had been constructed to provide industrial power (Anonymous_a n.d.: 10; Duke Power n.d_a: 6).

Oxford Hydroelectric Plant

The Oxford Hydroelectric Plant is located on the south bank of the Catawba River near Conover, in Catawba County, North Carolina. It was built by Western Carolina Power Company, a subsidiary of Duke Power in 1927-28. Oxford is the first station on the Duke system to have floodgate and the dam impounds Lake Hickory (Duke Power n.d_a: 7).

Rhodhiss Hydroelectric Plant

The town of Rhodhiss is named after its founders, John Rhodes of Cherryville and George Hiss of Charlotte. The two were textile entrepreneurs who built the Rhodhiss dam in 1900 to power their mill. Rhode's and Hiss's mill, the Rhodhiss Manufacturing Company Mill on the Caldwell County side of the Catawba River. In 1914, the E.A. Smith Manufacturing Company Mill was built on the Burke County side of the river. The Southern Power Company bought both mills and the dam in 1919, rebuilt it and then in 1925, erected a power plant. This plant is a large masonry building consisting of a two story brick block set on top of a high, arcaded base (Bishir et al. 1999:147).

Tuxedo Hydroelectric Plant

The Tuxedo Hydroelectric Plant was placed in operation in 1920. It is located on the Green River in Henderson County, and was constructed by the Blue Ridge Power Company. The dam is of single arch concrete, and is 254' in length. The powerhouse has two Pelton Turbines producing 2,500 kw each. This property was conveyed to Duke Power in 1929.

SILER CITY MILLS INC.

Sharps Falls Hydroelectric Plant

The Sharp Falls Hydroelectric Plant was built in 1931, and is currently owned by the Siler City Mills, Inc. This is a small dam generating 175 kw.

TOWN OF LAKE LURE

Lake Lure Hydroelectric Plant

The Town of Lake Lure, in Rutherford County, North Carolina began as part of the 1920s land boom and was part of a development scheme cut short by the Great Depression. Dr. Lucius B. Morse, a physician from Illinois, came to Asheville, North Carolina for health reasons. He then began to envision a great mountain resort complete with villas and bungalows overlooking a large inland lake. By 1923 he had enlisted his brothers, mill owners and various investors to form Chimney Rock Mountains, Inc. In just three years the company had acquired 8,500 acres of land, constructed a three-mile toll road to Chimney Rock, and built a concrete dam to impound the 1,500 Lake Lure. Other additions included a hotel, bridges and additional roads. Before the resort could be completed, work had to be halted due to financial problems. Blue Ridge Power Company first operated the hydroelectric dam, which was later acquired by Duke Power (Bishir et al. 1999:181).

TAPOCO INC.

Cheoah Hydroelectric Plant

The Cheoah development was the first of the four Tapoco hydroelectric facilities to be constructed. Work began on the project in 1916 and was completed in 1919. The facility is located on the Little Tennessee River in Graham and Swain Counties, North Carolina, and includes a dam and powerhouse. At 225 feet in height, the Cheoah dam was the highest overfall dam in the world at the time of its construction. The dam impounds the Cheoah Reservoir, which has a full pool area of approximately 615 acres and a full pool elevation of 1276.8 feet.

The Cheoah powerhouse contains five vertical Francis turbines that are directly connected to generators. Units 1 through 4 are original to the powerhouse. Unit No. 5 was added as an independent mechanism in 1949. Units 1 through 4 withdraw water through an intake located at the left abutment of the dam. Unit No. 5's intake is situated in a converted spillway gate. The total capacity of the facility's five units is 110 MW and the total station hydraulic capacity is 8,095 cfs.

The Cheoah facility utilizes flow delivered by the Tennessee Valley Authority (TVA) from Fontana dam, which is located upstream of Cheoah. Cheoah operates as a daily-cycle, peaking facility. Its limited storage capacity result in minimal fluctuations in water levels. The reservoir generally fluctuates one to two feet daily.

Santeetlah Hydroelectric Plant

The second hydroelectric facility to be developed in the Tapoco Division is the Santeetlah dam and powerhouse. The Santeetlah facility is located in Graham and Swain Counties, North Carolina, on the Cheoah River. Construction began on the project in 1925 and was completed in 1928. The development serves as a water storage facility and operates in a store and release mode with seasonal reservoir levels. The powerhouse operates as a daily peaking facility.

The Santeetlah Dam is 212 feet in height and confines the Santeetlah Reservoir, which has a full pool area of approximately 2,863 acres and an elevation of 1940.9 feet. The Santeetlah powerhouse sits on the left bank of the Little Tennessee River approximately five miles upstream from the Cheoah Dam. Water travels from the Santeetlah Reservoir through an intake in the dam and passes through a five-mile tunnel

and pipeline to the powerhouse. Within the powerhouse are two vertical Francis turbines and generators. The two units have a total capacity of 45 MW, and the total station hydraulic capacity is 898 cfs.

VIRGINIA ELECTRIC AND POWER COMPANY

Roanoke Rapids Hydroelectric Plant

The town of Roanoke Rapids, North Carolina is located in Halifax County on the Roanoke River. This historically riverside textile town developed in the early twentieth century into the largest town in the county and one of eastern North Carolina's leading manufacturing center. Early in the 1890s, Weldon merchant Thomas Emry persuaded out of state investors to finance the creation of the industrial city of "Great Falls," which would harness the waterpower of the Roanoke River. A dam and power station at this site was built in the early 1900s. This dam and powerhouse was replaced in 1955 with the existing structure. The Roanoke Rapids Dam is 3,050 feet long and forms an eight-mile long reservoir. The powerhouse has four turbines and four generators producing 26,000 kw each.

TENNESSEE VALLEY AUTHORITY

Chatuge Dam

In response to wartime needs, Congress authorized the Tennessee Valley Authority (TVA), to build a dam on the Hiwassee River in July of 1941. By the following February, the Chatuge Dam was in operation. This dam stands 144 feet high and 2,850 feet long and is the only entirely rolled earth structure built by TVA. At the east end of the dam is the spillway at the east end of the dam that is described as "...a concrete chute with curved weir and a 'ski-jump' end sill" (Bishir 1999: 402). The powerhouse contains a single turbine.

Fontana Dam

The Fontana Dam was completed in 1945 on the Little Tennessee River in Graham County. Fontana Dam is the highest dam east of the Rocky Mountains with a height of 480'. The dam is 2,365' in length, and its powerhouse contains three turbines generating 250,000 kw. The dam is a straight-crested, concrete gravity structure. Fontana Dam was built by, and continues to be operated by, the Tennessee Valley Authority.

Hiwassee Dam

The Hiwassee Dam was completed by the Tennessee Valley Authority in 1940 in Cherokee County. The dam impounds the Hiwassee River, and is 307' in height and 1,287' in length. The dam is of straight-crested concrete design, and is distinguished by its Art Moderne detailing. The Hiwassee's turbines generate over 110,000 kw.

YADKIN INC.

Narrows Hydroelectric Plant

The Narrows Dam is located on the Yadkin River near the town of Badin, North Carolina. This dam was the largest hydroelectric facility built in North Carolina and contained the highest concrete dam at the time it was built in 1917. The town of Badin, whose chief economic activity was the production of aluminum ingots, was a town started by a French company and completed by Alcoa (Dept. of Cultural Resources 1974a: 1).

Around twenty-five miles south of Salisbury, North Carolina, the Yadkin River narrows to around eighty to one hundred feet. For two miles, the river is very narrow and rapid, making it the perfect site for a hydroelectric plant. Egbert Barry Cornwall Hambley, an English mining expert, first proposed the idea of harnessing the hydro power in the Narrows in 1898. The region in which the Narrows is located needed new sources of power for the growing industrial activity in the area. Hambley was successful in organizing a group of Northern capitalists to develop power at Yadkin Falls (Dept. of Cultural Resources 1974c: 4).

The geography of the Narrows presented a problem for potential development. It was possible to build a dam above the Narrows but there was no room to locate a mill or manufacturing facility along the banks of the river. With the development of long distance transmission lines, the problem of isolation was solved. Potential investors were also interested in the falls as the source of hydroelectric generation, a technology that had recently been introduced to the region. North Carolina state geologist Joseph A. Holmes speculated that a dam at the lower end of the Narrows would flood only a small area of cultivatable land but could produce power that could be transmitted to manufacturers and communities nearby (Dept. of Cultural Resources 1974c.: 4-6).

By 1899, Hambly had organized the North Carolina Power Company. That same year, the controlling interest in this company was purchased by Pittsburgh financier George I. Whitney, who then formed the Whitney Development Company. Hambly served as the general manager for the company's North Carolina operations. Whitney Development secured right-of-ways for power lines as far away as Knoxville, Tennessee, and planned to sell electricity to those companies they did not own. With this development in mind, Whitney Company planned to make hydroelectric power from a dam on the Yadkin as the central element in its development plans (Dept. of Cultural Resources 1974c.: 6-7).

Despite the capital it possessed, the Whitney Company floundered. The first setback came in 1904, due to an accident at its Barringer mine that resulted in its closure. This was followed by mine closures at two other Whitney mines. In 1906, at the Narrows construction site, a typhoid outbreak reduced the labor force and even resulted in the death of Hambly. Bad breaks continued to follow and in 1908 Andrew Mellon forced George Whitney to sell his major coal stocks. This move proved to be the death knell for the Whitney Company and it went into bankruptcy in 1910 (Dept. of Cultural Resources 1974c.: 9).

The Southern Aluminum Company, a subsidiary of the French company, L'Aluminum Francaise, purchased the Whitney Yadkin River property in 1912. Southern Aluminum abandoned the original Whitney dam site, choosing a site two miles downstream at the Narrows. The proposed dam would provide power to a reduction plant near the dam, on the Stanly County side of the Yadkin River. Construction began in 1913 and by the summer of 1914, two by-pass tunnels and some buildings had been completed. The outbreak of World War I stopped work on the project when many of the company's engineers and technicians left for military duty. When the company's line of credit in Europe had been redirected to the war effort, Southern Aluminum was forced to sell out to Alcoa in 1915 at a loss of one million dollars. The following year, the Tallassee Power Company, an Alcoa subsidiary, began work on completing the Narrows project (Dept. of Cultural Resources 1974c: 10-11).

Alcoa had an impressive array at its disposal. The large work force, fifty percent of which were convicts, lived at the job site. Materials from Virginia, Wisconsin, Minnesota, and Illinois were available from Alcoa's national network of suppliers. A Greensboro newspaper article report that the project was the

"largest of its kind ever attempted in North Carolina. It is said to be one of the finest pieces of construction work in the United States, and so tremendous in its appearance that one is reminded that it has the appearance of being the handiwork of the Supreme Architect of the Universe that that of human hand" (Dept. of Cultural Resources 1974c: 112-12).

The final closure on the dam was made in June 1917 and the plant began generating power a month later when Lake Badin reached sufficient level. The project included generators running at nearly 125,000 horsepower, and a plant that included machine shops, a carbon plant and a village for workers and their families. The Badin Works employed one thousand people, mostly veterans of previous Whitney mining and construction projects (Dept. of Cultural Resources 1974c: 12).

The Narrows Dam was designed by James W. Rickey, Alcoa's chief hydrologic engineer. The concrete structure is 216 feet high and 1,654 feet long. The head is 177 feet and the reservoir is over 5,300 acres with a shoreline of 115 miles. The Narrows Powerplant is a one-story, nine bays wide building 160 feet long and 60 feet wide. The building was designed with Spanish Revival influences with brick walls, a terra cotta tile roof, and large arched windows (Dept. of Cultural Resources 1974b: 8).

When Alcoa acquired the property, the previous owner had begun work on the company town of Badin. It contained a main office, a garage, laboratory, the plant manager's residence, and a club for single male employees. Several family residences had been completed and work had started on approximately 150 apartments within the original townsite. Alcoa resumed work on the town in 1916 when they completed work on the apartments and built more residences. Alcoa also built a hospital, school, and theater (Dept. of Cultural Resources 1974c: 13-14).

The Narrows Dam and Power Plant Complex were listed on the National Register of Historic Places in 1983 as part of the Badin Multiple Resource Area nomination.

Appendix B**Operating Hydroelectric Plants in North Carolina
Built before 1940**

<u>Owner/Operator</u>	<u>Plant Name</u>	<u>River</u>	<u>Location</u>	<u>County</u>	<u>CapacityKW/Date</u>	
Carolina Power & Light	Blewett Falls	Pee Dee	Lilesville	Anson	24600	1912
Carolina Power & Light	Marshall	French Broad	Marshall	Madison	3000	1911
Carolina Power & Light	Tillery (Norwood)	Yadkin	Hydro	Montgomery	65850	1928
Carolina Power & Light	Walters (Waterville)	Pigeon	Waterville	Haywood	108000	1930
Cascade Power	Brevard	Little		Transylvania	1000	1924
Duke Power	Bridgewater	Catawba	Bridgewater	Burke	20000	1920
Duke Power	Idols (Fries)	Yadkin	Idols	Forsyth	1411	1898
Duke Power	Lookout Shoals	Catawba	near Barium Springs	Irdell	18720	1915
Duke Power	Mountain Island	Catawba	Mt. Holly	Gaston	60000	1923
Duke Power	Oxford	Catawba	near Conover	Catawba	36000	1928
Duke Power	Rhodhiss	Catawba	Rhodhiss	Caldwell	25500	1925
Duke Power	Spencer Mountain	South Fork/Catawba	Spencer Mountain	Gaston	640	1905
Duke Power	Stice Shoals	French Broad		Cleveland	600	1933
Duke Power	Turner Shoals	Green		Polk	5500	1925
Duke Power	Tuxedo	Green	Tuxedo	Henderson	5000	1920
Lake Lure, Town of	Lake Lure	Rocky Broad	Lake Lure	Rutherford	3600	1925
Nantahala Power & Light	Bryson City	Oconaluftee	Bryson City	Swain	980	1925
Nantahala Power & Light	Dillsboro	Tuckaseegee	Dillsboro	Jackson	225	1913
Nantahala Power & Light	Franklin	Little Tennessee	Franklin	Macon	1040	1925
Nantahala Power & Light	Mission	Hiwassee	near Murphy	Clay	1800	1924
Tapoco Inc.	Cheoah	Little Tennessee	Tapoco	Graham	110000	1919
Tapoco Inc.	Santeetlah	Cheoah	near Tapoco	Graham	45000	1928
Virginia Electric & Power	Roanoke Rapids	Roanoke	Roanoke Rapids	Halifax	100080	1955
Yadkin Inc.	Falls	Yadkin	Badin	Stanly	21485	1919
Yadkin Inc.	High Rock	Yadkin	High Rock	Davidson	33000	1927
Yadkin Inc.	Narrows	Yadkin	Badin	Stanly	96500	1917

Appendix C Retired Hydroelectric Plants in North Carolina Built Before 1940

<u>Last Owner of Record</u>	<u>Plant Name</u>	<u>River</u>
Carolina Power & Light	Blowing Rock	Watauga
Carolina Power & Light	Buckhorn	Cape Fear
Carolina Power & Light	Carbonton	Deep
Carolina Power & Light	Eury	Little
Carolina Power & Light	Lockville	Deep
Carolina Power & Light	Lower Plant	Little
Carolina Power & Light	Weaver	French Broad
Duke Power	Carters Falls	Elkin
Duke Power	Chatham	Elkin Creek
Duke Power	Gunpowder No. 1	Gunpowder Creek
Duke Power	Gunpowder No. 2	Gunpowder Creek
Duke Power	Little River	Little River
Duke Power	Mount Airy No. 1	Ararat
Duke Power	Mount Airy No. 2	Ararat
Duke Power	Old Fort	Catawba
Duke Power	Pilot Mountain	Ararat
Duke Power	Taylorsville	Lower Little
Duke Power	Walnut Cove	Dan
Durham, City of	Lake Michie	Flat
East Tennessee Light & Power	Elk Park	Elk
Highlands, Town of	Highlands	Cullasaja Creek
Nantahala Power & Light	Andrews	Hiwassee
New River Light & Power	Middle Fork	Middle Fork
Northwest Carolina Utilities	Burnsville	Cane
Rocky River Power & Light	Sanford	Rocky
Southern States Power	Murphy	Nottely
Wilson, City of	Municipal Plant	Cotentnea Creek