

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Name of Property

County and State

Section number _____ Page _____

Name of multiple property listing (if applicable)

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 100001459


Date Listed: 10/26/2017

Property Name: Apalachia Hydroelectric project (TVA Hydroelectric System MPS)

County: Murphy and Reliance

State: NC and TN

This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.



Signature of the Keeper

10-26-2017
Date of Action

Amended Items in Nomination:

Section 3: Level of Significance

This SLR is meant to clarify the level of significance for the property. The North Carolina SHPO certified the property at the National, State, and Local levels of significance and the Tennessee SHPO certified it at the Local level of significance.

The property has been accepted at the State and Local levels of significance for both jurisdictions, based on the overall effect of the power generating facility in the region covering both states.

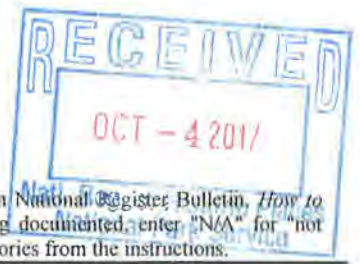
The North Carolina and Tennessee SHPOs, and the TVA FPO have been notified of this amendment.

DISTRIBUTION:

National Register property file

Nominating Authority (without nomination attachment)

National Register of Historic Places Registration Form



This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of Property

Historic name Apalachia Hydroelectric Project
Other names/site number Apalachia Dam
Name of related multiple property listing Historic Resources of the Tennessee Valley Authority Hydroelectric Project, 1933-1979

2. Location

Street & Number: Apalachia Dam Road
City or town: Murphy and Reliance State: North Carolina and Tennessee County: Cherokee and Polk
Not For Publication: N/A Vicinity: X Zip: 28906 and 37369

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,
I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property meets does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

national statewide local

Applicable National Register Criteria: A B C D

Fabian Bernard Egnell, Sr. Proj. Mgr. & Federal Preservation Officer, TVA
Signature of certifying official/Title: _____ Date 10/2/17

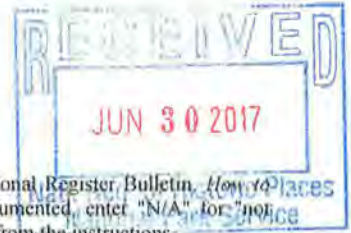
Deputy State Historic Preservation Officer, Tennessee Historical Commission

State or Federal agency/bureau or Tribal Government

In my opinion, the property meets does not meet the National Register criteria.

Charlotte Spruill
Signature of Commenting Official: _____ Date 9/15/17

Title: DSHPD State of Federal agency/bureau or Tribal Government



National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of Property

Historic name Apalachia Hydroelectric Project
Other names/site number Apalachia Dam
Name of related multiple property listing Historic Resources of the Tennessee Valley Authority Hydroelectric Project, 1933-1979

2. Location

Street & Number: Apalachia Dam Road
City or town: Murphy State: North Carolina County: Cherokee
Not For Publication: N/A Vicinity: N/A Zip: 28906

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,
I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property meets does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

national statewide local

Applicable National Register Criteria: A B C D

Patricia B. Egge U/Sr. Prog. Mgr. - FPO 6-19-17
Signature of certifying official/Title: Date
Tennessee Valley Authority
State or Federal agency/bureau or Tribal Government

In my opinion, the property meets does not meet the National Register criteria.
Hein Cherry 4/13/2016
Signature of Commenting Official: Date
State Historic Preservation Officer, N.C. Dept. of Natural and Cultural Resources
Title: State of Federal agency/bureau or Tribal Government

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4. National Park Service Certification

I hereby certify that this property is:

- entered in the National Register
- determined eligible for the National Register
- determined not eligible for the National Register
- removed from the National Register

other (explain):

[Handwritten Signature]
 Signature of the Keeper

10-26-2017
 Date of Action

5. Classification

Ownership of Property

(Check as many boxes as apply.)

- Private
- Public – Local
- Public – State
- Public – Federal

Category of Property

(Check only one box.)

- Building(s)
- District
- Site
- Structure
- Object

Number of Resources within Property

(Do not include previously listed resources in the count)

Contributing	Noncontributing	
3	1	buildings
0	0	sites
4	1	structures
0	0	objects
7	2	Total

Number of contributing resources previously listed in the National Register 1 in Tennessee

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6. Function or Use

Historic Functions

(Enter categories from instructions)

INDUSTRY/PROCESSING/EXTRACTION/
Energy Facility

TRANSPORTATION/Rail-Related

Current Functions

(Enter categories from instructions)

INDUSTRY/PROCESSING/EXTRACTION/
Energy Facility

TRANSPORTATION/Rail-Related

7. Description

Architectural Classification

(Enter categories from instructions.)

MODERN MOVEMENT: Streamlined Moderne

OTHER: Hydroelectric Dam

Materials: (enter categories from instructions.)

Principal exterior materials of the property:

CONCRETE; STEEL; GLASS; ROCK; EARTH;
PORCELAIN

Narrative Description

The Apalachia Hydroelectric Project was constructed from 1941-1943 by the Tennessee Valley Authority (TVA). It is located at mile sixty-six on the Hiwassee River, 9.8 miles downstream from the Hiwassee Hydroelectric Project. The Apalachia Dam is located in Cherokee County, North Carolina, fifteen miles northwest of Murphy (population 1,627 in 2010). The 8.3-mile pipeline from the dam connects with the powerhouse located at mile fifty-three on the Hiwassee River, in Polk County, Tennessee, near the town of Reliance. The Apalachia project impounds the Apalachia Reservoir (also called Apalachia Lake) in North Carolina, which extends from the head of the Apalachia pool to the tail of Hiwassee Dam and has a drainage area of 1,018 square miles. The reservoir has a flood-storage capacity of 35,730 acre-feet. The Apalachia Reservoir has thirty-one miles of shoreline and 1,070 acres of water surface in Cherokee County. The primary purpose for construction of the dam was to improve flood storage and power development in

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anticipation of World War II.¹ The project takes its name from the crossroads community of Old Apalachia, located near the dam site in North Carolina and an L&N railroad stop of the same name, located across the state line in Tennessee.

INVENTORY

The Apalachia Hydroelectric Project originally consisted of the concrete dam across the Hiwassee River at mile sixty-six and a powerhouse, pipeline, surge tank, valve house, penstock, and switchyard at mile fifty-three. Due to the remote location of the project, the TVA did not build a visitor building or public recreational facilities. The 529-acre nominated area includes all the above structures and buildings, a portion of the Apalachia Reservoir, and roads that access both the dam and the powerhouse. Apalachia Dam is accessed by Apalachia Dam Road, which enters the property from the south. (Between the dam and the powerhouse is Forest Service Road 23, approximately fifteen miles long, though this stretch is not included in the nominated boundary.) The Apalachia Powerhouse is accessed by Powerhouse Road, entering the property from the west. Vehicles must park on the west side of the river from the powerhouse, which is then accessed by foot via a pedestrian bridge over the river.

NORTH CAROLINA

1. Apalachia Dam, 1943 (Contributing Structure)

The Apalachia Dam (*see Photos 1-3*) is a concrete gravity, non-overflow dam and spillway measuring 1,308 feet in total length.² The concrete gravity crest measures 809 feet in length. Its maximum height is 150 feet. Its top level is at elevation 1,282 feet above sea level and designed to divert water efficiently to the power conduit, or pipeline. The dam length provides for ten radial gates measuring twenty-three feet high and thirty-two feet wide, divided by piers six feet thick. The spillway has an ogee-type overfall section. The piers dividing the gates rise twenty-eight feet above the crest to an operating deck which is twenty-one feet in width. There are four, thirty inch wide-flange beam stringers for sliding the steel gates.³

The overflow spillway of the dam is located in the natural river channel with non-overflow sections extending from the spillway to the abutments at each side. The spillway is designed to discharge 150,000 cubic feet per second. Attached to the spillway is a conduit, or pipeline, which carries diverted water 12.2 miles above- and below-ground to the surge tank, penstocks and powerhouse. There is a bucket type apron immediately at the downstream end of the spillway.⁴

¹ Apalachia Reservoir, at webpage <http://www.tva.gov/sites/apalachia.htm> accessed August 13, 2015.

² Commonly, dam design includes a section that permits the overflow of water from the reservoir (the spillway) and other sections that do not allow the passage of water (non-overflow). Together, these sections contribute to the total length of the dam structure that impounds the reservoir. A gravity type dam is one constructed of concrete or stone and uses the sheer weight of the structure to resist the horizontal pressure of the water pushing against it. Gravity dams are designed in sections that are independently stable.

³ Tennessee Valley Authority, *The Hiwassee Valley Projects, The Apalachia, Ocoee No. 3, Nottely, and Chatuge Projects: A Comprehensive Report on the Planning, Design, Construction, and Initial Operations of the Four Projects, in the Hiwassee Basin, Constructed on an Emergency Basis during World War II, Technical Report No. 5 Volume 2*, (Washington, D.C.: U.S. Government Printing Office, 1948), 68-77.

⁴ Tennessee Valley Authority, *The Hiwassee Valley Projects*, (Knoxville: Tennessee Valley Authority, 1948), 73-74.

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The intake is located between block twenty-six and block twenty-seven of the non-overflow dam left abutment. The intake is controlled by a wheel-type gate operated by a fixed hoist. The intake has two gate guided piers which project eight feet from the upstream face of the dam. Projecting from these piers is a semicircular form of reinforced concrete beams supporting the trashracks protecting the intake. The trashrack gate is located immediately upstream from the intake gate and contains four gate openings, eight-feet wide and forty-seven feet high.

TENNESSEE

2. Pipeline, Tunnel, Surge Tank, Valve House, and Penstocks, 1943 (Contributing Structure)

The pipeline, tunnel, surge tank, valve house and penstocks are interconnected and convey the water from the dam to the powerhouse (*see Photo 4-8*). Dictated by topography, the conduit, or pipeline, travels 42,706 feet along the left bank of the river. The average flow through the pipeline is 2,600 cubic-feet per second. Extending a length of 900 feet from the dam, the pipeline is a steel penstock eighteen feet in diameter. After 900 feet, the pipeline goes below ground and becomes a tunnel as it extends through the earth to reach the surge tank. The sixteen-foot diameter tunnel is concrete lined to withstand the hydraulic pressure.⁵ Construction of the tunnel used 210,543 cubic-yards of concrete and the steel pipeline was manufactured by the Chicago Bridge and Iron Company.⁶

The pipeline extends to the surge tank located on the top of the ridge east of the powerhouse. The surge tank is designed to carry the full rejection load of either both tunnels at one time, or one at a time. The surge tank is a below-ground, differential type tank, concrete lined and sixty-six feet in diameter with a steel riser on center sixteen feet in diameter. The riser is supported by eight brackets spaced uniformly around the pipe. The bottom of the tank is concrete lined two inches thick.⁷ Located between the surge tank and the penstocks, is a valve house. The valve house is a concrete structure containing two, twelve-foot diameter butterfly valves, which control the water flow to the lower penstocks at the powerhouse. Each butterfly valve, one situated at each penstock, is located approximately 300 feet above the powerhouse. Each valve is powered by a twenty-horsepower, 250-volt direct current motor. Inside dimensions of the valve house are seventy-four feet in length, twenty feet in width and twenty-three feet in height. The structure is accessed by a concrete and steel staircase down the hill and a steel footbridge connected to the powerhouse.⁸

Connecting the valve house with the powerhouse are the two steel penstocks. These welded steel plate construction penstocks have an internal diameter of eleven feet sloping down thirty-one feet to the valve house. The penstocks then turn downstream fifty-five feet to the powerhouse with the use of steel elbow brackets connecting the sloping section of the continuing penstocks, now at nine-feet in diameter. The elbow brackets are anchored into concrete anchor blocks, while the steel pipes are anchored by steel ring supports. Once reaching the ground elevation of the powerhouse, the penstocks continue underground beneath the railroad and into the powerhouse substructure to the turbines.⁹

⁵ Ibid., 79.

⁶ Ibid., 362, 379.

⁷ Ibid., 89.

⁸ Ibid., 96.

⁹ Ibid., 91.

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3. Powerhouse, 1943 (Contributing Building)

The powerhouse (*see Photo 9-21*) is a two-story building of steel and poured concrete construction. The building houses the main powerhouse control rooms and generator room. The building consists of the main generator room block and a two-story office wing on the south elevation. All exterior walls are of concrete finished with rough-sawed Indiana limestone.¹⁰ The main (south) elevation has a large service bay door of solid metal with four folding panels, three panels high measuring a total of eighteen feet wide by twenty-four feet high. A pedestrian door panel is located within this service bay door. On the second floor of this elevation is a pair of original steel windows of two fixed light and lower hopper panel design. Above the service bay door are aluminum letters that spell "APALACHIA". The roof is precast concrete slabs supported on steel purlins.

The second floor of the east elevation contains a bank of eight steel frame windows which are original two fixed light and lower hopper panel design. There is also a steel door located on the second floor which provides access to a steel footbridge connected to the staircase which parallels the penstocks. The west elevation has six one-over-one fixed porthole windows located below twenty-two sets of one-over-one awning style steel windows. These windows provide illumination into the generator room. The west elevation also has concrete stairs for access to the draft tube gates below. There is no fenestration on the north elevation.

Entering the interior from the south elevation is a mezzanine that overlooks the open-plan generator room. This level is the main deck of the powerhouse. This level has a storage bay, machine shop area, and employee facilities including a restroom with an original solid aluminum door with louvers, original marble stalls, glazed tile walls and terrazzo flooring. The floor of the main deck is original glazed ceramic tile, and the interior walls are exposed concrete. The powerhouse is equipped with an overhead 240-ton capacity bridge crane, supported by steel frames. In the office wing a staircase connects with the second floor which contains a battery room, motor generating room, vent fan room, communication room and offices. These spaces have plaster walls, concrete ceilings and terrazzo flooring, except for the office, which has plaster walls and ceilings with linoleum flooring.

The powerhouse has two Baldwin-Southward turbines manufactured from the Baldwin Locomotive Works in Eddystone, Pennsylvania, rated at 53,000HP at 360-foot net head and 225 revolutions per minute. Each of these turbines is connected to a vertical shaft generator with a normal rating of 40,000kva, 13.8 kilovolts, 3 phase, 60 cycles, 225 revolutions per minute and discharge about 2,200 cubic feet per second. Each generator is fully enclosed and air-cooled with water-cooled heat exchangers.¹¹ Access to the generators is via a concrete enclosed stairwell housing a steel staircase with terrazzo treads and landings. The generator room has poured concrete and glazed tile floors. The control room is located on this level and houses the actuator cabinets and main control unit boards. The first floor also contains the 440 volt switchboard room, air compressor room and water treatment room. These spaces display six-course common bond brick walls. The powerhouse's level below the generator room contains the oil-servicing equipment as well as is the location where the penstocks enter the powerhouse. This level is also constructed with concrete exterior walls and six-course brick interior walls, and concrete floor tiles.

¹⁰ Ibid., 96.

¹¹ Ibid., 105-106.

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4. Switchyard, Transformer Yard, and Transmission Lines, 1943 (Contributing Structure)

The Apalachia project is located within a transmission system connected to the hydroelectric projects at Ocoee No. 3, Hiwassee, and Chickamauga. The electrical structures at Apalachia consist of a transformer yard to the north of the powerhouse and a switchyard and transmission lines located at the top of the ridge above the powerhouse and adjacent to the surge tank (*see Photo 22-24*). The transformer yard north of the powerhouse rests on a concrete foundation and is enclosed behind a rectangular chain link fence. Each generator is connected through a three-phase transformer to the 154kw bus. Since there is no interior access to the powerhouse from the north elevation, an un-tanking hoist system was installed at the transformer yard for moving transformers into position. The transformer yard is rated at 13,800 volts, 36,000-48,000 kilovolt-amperes and self-cooled.¹²

Steel transmission lines convey the power from the transformer yard to the switchyard at the top of the ridge east of the powerhouse. The switchyard is located within a chain link fence enclosure and has a gravel surface. The switchyard measures 216 feet long by ninety-four feet wide and is built of three-foot square latticed columns and girders located thirty-six feet apart creating six bays.¹³ The switchyard structure is designed for 9,000 pounds per phase, 6,000 pounds per ground wire for the outgoing lines, 3,000 pounds per conductor and 2,500 pounds per ground wire for the transformer connections.

5-6. Switchyard Oil Purification and Fire Protection Buildings, 1956, 1941 (Contributing Building, Contributing Building)

Located at the north end of the switchyard are two concrete buildings (*see Photo 25 & 26*). The building located at the northeast corner of the switchyard is the Oil Purification building. This building is of poured concrete with paired steel access doors on the south elevation. A second building located at the northwest corner of the switchyard is the Fire Protection building. This building is of poured concrete with a single full-width steel access door on the north elevation.

7. Flammable Storage Shed, ca. 1970 (Non-Contributing Building)

To the south of the powerhouse is a ca. 1970 flammable storage building of steel construction. The building has steel walls and a flat steel roof. The south elevation has two steel access doors (*see Photo 27*).

8. Knoxville Southern Railroad, 1890 (Contributing Structure)

Within the boundary of the project is the right-of-way of the Knoxville Southern Railroad (now the Tennessee Valley Railroad). This railroad runs along the east side of the powerhouse and is a section of the Knoxville Southern Railroad Historic District listed in the National Register in February of 2007. The Knoxville Southern Railroad Historic District runs through the Hiwassee River gorge and extends from the railroad bridge at Reliance, Tennessee, to just south of Bald Mountain Switchback located to the south of the Hiwassee loop nineteen miles to the east. In addition to the main line east of the powerhouse, there is also a spur line built in 1943 that leads straight to the powerhouse. Portions of the Knoxville Southern Railroad were either rebuilt or sidings and materials were upgraded to accommodate the heavy equipment required to

¹² Ibid., 127.

¹³ Ibid., 128.

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build the facilities at Apalachia.¹⁴ The railroad right-of-way is located between the powerhouse and the penstocks (*See Photo 28*).

9. Pedestrian Bridge across the Hiwassee River, ca. 2000 (Non-Contributing Structure)

Crossing the Hiwassee River south of the powerhouse is a suspension pedestrian bridge. The bridge was constructed ca. 2000 and was refurbished with new wires and treated wood in 2014. The bridge is constructed with suspension cable wires and steel beams supporting wood planks and a wood railing. A suspension cable pier is located on the east and west river bank (*see Photo 29 & 30*).

¹⁴ National Register of Historic Places, Knoxville Southern Railroad Historic District, Reliance, Polk County, Tennessee, National Register #07000187.

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8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B Property is associated with the lives of persons significant in our past.
- C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations N/A

(Mark "x" in all the boxes that apply.)
 Property is:

- A Owned by a religious institution or used for religious purposes.
- B removed from its original location.
- C a birthplace or grave.
- D a cemetery.
- E a reconstructed building, object, or structure.
- F a commemorative property.
- G less than 50 years old or achieving significance within the past 50 years.

Areas of Significance

(Enter categories from instructions.)

ARCHITECTURE

ENGINEERING

Period of Significance

1941-1966

Significant Dates

1941-1943

Significant Person

(Complete only if Criterion B is marked above.)

N/A

Cultural Affiliation

N/A

Architect/Builder

Architect: Tennessee Valley Authority; U.S. Army Corps of Engineers; Wank, Roland; Mock, Rudolph; Bianculli, Mario

Builder: Tennessee Valley Authority

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Statement of Significance Summary Paragraph

The Apalachia Hydroelectric Project meets National Register criteria A and C for its historical and architectural significance as an integral part of the Tennessee Valley Authority Hydroelectric Project. The Apalachia Hydroelectric Project is significant in the expansion of energy, improvement of quality of life through transmission of electricity, and control of seasonal flooding. The Apalachia Hydroelectric Project was one of twenty-five (25) dam sites constructed by the Tennessee Valley Authority (TVA) for the purpose of generating electrical power from, improving navigation of, and controlling seasonal flooding of the river system of the region.

The Multiple Property Documentation Form "Historical Resources of the Tennessee Valley Authority Hydroelectric Project, 1933-1979" identifies the property types of powerhouses, dams, navigational locks and lock control buildings, visitor buildings, recreational buildings, maintenance buildings, and other buildings and structures specifically associated with TVA's missions of hydroelectric power, flood control, navigation, improvement of quality of life, and recreation. These common property types can be found at the majority of the TVA's hydroelectric facilities. This collection of identifiable and consistent property types essential to TVA's multi-faceted mission are associated with important developments in the areas of agriculture, architecture, conservation, engineering, industry, military, recreation, social history, and/or transportation. At Apalachia, the specific property types within the proposed boundary convey significance of the project specifically to architecture, engineering, industry, and military.

The main objective of the 1933 Tennessee Valley Authority Act was the creation of a continuously navigable nine-foot channel from the mouth of the Tennessee River to Knoxville, as well as flood control, power generation, and public benefits. The Apalachia Hydroelectric Project was part of a group of four dams built on the Hiwassee River and its tributaries as proposed by TVA in its 1936 report to Congress. It is significant at the national level. For architecture, it is significant for its Streamlined Moderne style, embodying the TVA's mission of progress in its economy of adornment, as well as the industry of the machine age. The project's significance in engineering is reflected in TVA's overall plan for an integrated system of river management through site-specific designs tested on scaled models. The Apalachia Hydroelectric Project meets the registration requirements set forth in the Multiple Property Documentation Form, "Historical Resources of the Tennessee Valley Authority Hydroelectric Project, 1933-1979." While the MPDF's period of significance spans to 1979, in order to include all of the TVA's hydroelectric and dam projects on the main river and its tributaries, the period of significance for the individual nomination of the Apalachia project stops at fifty years ago, to include the largest number of historic resources that have been added since 1943.

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Narrative Statement of Significance

The Tennessee Valley Authority (TVA) was created under President Roosevelt's New Deal program as part of his "First One Hundred Days." Roosevelt envisioned "a corporation clothed with the power of government but possessed of the flexibility and initiative of a private enterprise." To this end, Congress passed the TVA Act on May 18, 1933.¹⁵ The multi-purpose legislation sought to improve navigation and flood control of the Tennessee River, spur agricultural and industrial development in the Tennessee Valley, and provide for national defense via government facilities in the proximity of Muscle Shoals, Alabama (Sec. 1). The act authorized the TVA Corporation to acquire real estate for the construction of dams, reservoirs, power houses, transmission lines, or navigations projects at any point along the Tennessee River and its tributaries (Sec. 4i).¹⁶

The Apalachia Hydroelectric Project takes its name from a nearby crossroads community and flag stop on the Louisville & Nashville Railroad, Old Apalachia.¹⁷ Old Apalachia was originally known as "Apalachia," an industrial town on the north side of the Hiwassee River at the confluence of Shuler Creek. Apalachia was a thriving timber community, but was renamed as Old Apalachia once the timber boom came to an end in the 1920s. The town later became known as Apalachia Station on the Louisville & Nashville Railroad and is currently listed as a contributing site in the Knoxville Southern Railroad Historic District (National Register #07000187, March 21, 2007). The town site of Apalachia is located one and one-half miles west of the Apalachia dam and six and one-half miles from the Apalachia power facilities. The town site had been nearly abandoned with only a railroad stop extant at the time the Apalachia Hydroelectric Project was proposed in 1936. The TVA Board of Directors requested funding for the Hiwassee Valley Projects in fiscal year 1941. Initially, the bill recommended \$40,000,000 in funds be approved for the Hiwassee projects with \$1,000,000 available immediately. However, the entire \$40,000,000 was approved immediately due to the urgency of World War II. The final bill for the Hiwassee projects passed both Houses of Congress and was signed by the President on July 16, 1941. The TVA formally approved the project on July 17, 1941. The closure of the dam and filling of the reservoir began on February 14, 1943. Construction of the dam used 220,000 cubic yards of concrete. Of the two generating units placed in operation, Unit 2 was placed in service on September 22, 1943, followed by Unit 1 on November 17, 1943.¹⁸

Total land costs for the project amounted to \$467,984, which included acquisition by fee or condemnation proceedings, flowage easements, and highway relocation. Direct construction

¹⁵ "History of the Tennessee Valley Authority," at website http://www.policyalmanac.org/economic/archive/tva_history.shtml accessed April 16, 2015.

¹⁶ Ibid.

¹⁷ Tennessee Valley Authority, "The Hiwassee Valley Projects," (Knoxville: Tennessee Valley Authority, 1948), 8.

¹⁸ Tennessee Valley Authority, *The Design of TVA Projects, The Mechanical Design of Hydro Plants: Technical Report No. 24 Volume 3*, (Washington, D.C.: U.S. Government Printing Office, 1960), 143.

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costs, such as labor, materials, equipment, transportation, totaled \$19,556,972. Indirect construction costs, including accounting, timekeeping, office supplies, and police service, came to \$1,711,013. Design and engineering expenditures, which included salaries and expenses of executive engineers, technicians, and inspectors, amounted to \$811,508. These amounts plus other categorized costs brought the total project to \$23,762,118.¹⁹

Total payroll count peaked at approximately 3,600 workers at the beginning of 1942. Employment remained at that level through the summer months. Construction at the four Hiwassee projects (Apalachia, Ocoee, Chatuge, and Nottely) peaked at the same time at 8,700 total workers.²⁰

The project required the relocation of twenty-two families from the reservoir, all of which were permanent residents. The area of the project was primarily of timber with some agricultural areas; therefore, just five families were farm owners, ten were farm tenants, and the remaining seven were non-farming. Of the 12,370 acres acquired for the project, only 281 was cleared land. Due to the mountainous terrain of the Apalachia project reservoir, timber land was the only reservoir clearing necessary.²¹

The Apalachia project required the acquisition of 12,370 acres of land. The Union Power Company owned 2,342 acres and the Hiwassee-Nolichucky Power Company owned 8,100 acres. Of the total land acquired from the Union Power Company, fifty-seven percent was condemned due to defective titles and the remaining forty-three percent was purchased through voluntary sale. All 8,100 acres owned by the Hiwassee Nolichucky Power Company were condemned; however, prior to a hearing before the commission, a settlement was agreed upon without any contest. Of the remaining 1,928 acres, ninety-four percent was acquired through voluntary sale, and six percent was condemned.²² Reconnaissance surveys made by the TVA indicated that no cemeteries would be affected by the construction of the dam, tunnel, or reservoir of the Apalachia project.²³

The Apalachia project promoted stable shorelines, encouraging reservoir recreation. The TVA anticipated that since the Apalachia Reservoir lies within the boundaries of the Nantahala National Forest, the United States Forest Service would eventually set up the required public use facilities. Due to the isolated location of the Apalachia project and the limited access to the shoreline of the reservoir, the TVA anticipated very little need for public visitor facilities within

¹⁹ Tennessee Valley Authority, "The Hiwassee Valley Projects," (Knoxville: Tennessee Valley Authority, 1948), 579.

²⁰ *Ibid.*, 332-33.

²¹ *Ibid.*, 530.

²² *Ibid.*, 517.

²³ *Ibid.*, 552.

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the reservation boundary. Therefore, there are no TVA recreational facilities located within the Apalachia Reservoir.²⁴

Since their construction, the dam, pipeline, surge tank, valve house, penstocks, powerhouse, and switchyard have not been significantly altered and retain much of their original exterior design and detailing. The interior of the powerhouse remains intact as well with minor renovations to office areas. All other interior walls, and floor and ceiling finishes remain original to the 1943 construction era.

SIGNIFICANCE IN ARCHITECTURE

TVA's hydroelectric projects were designed to embody its mission for social progress. The goals and achievements of these projects - power production, navigation, flood control, malaria prevention, reforestation, and erosion control - reached across the Valley region penetrating America's social and economic strata. Architect Roland Wank impressed upon a receptive board of directors that government projects were beholden to their real stockholders, the American taxpayers, and should be open for public viewing. Further, Wank stated that the design of powerhouses should both welcome the public and convey strength in purpose. Thus, TVA powerhouses were designed as massive monoliths with visitor reception areas.²⁵ A prominently displayed message in every TVA powerhouse would emphasize the project as "Built for the People of the United States of America."

The pre-World War II TVA projects exemplify the Streamline Moderne style, a late version of the Art Deco style popular during this period. Streamline Moderne was an expression of progress, a particularly important underpinning of the New Deal agenda. Stylistic elements that manifested this ideology include the use of geometric shapes, basic and pure in form, sleek and shiny materials evoking machinery and movement, and restrained décor suggesting an economical design ethic. Stream Moderne architecture often emphasized curved forms and horizontal lines, sometime including nautical motifs.

The design of the Apalachia dam and powerhouse reflects the "modernism" that the TVA architects and engineers strived for in the 1930s and early 1940s. The dam was built utilizing the most advanced methods of its time, and the powerhouse was built with Streamline Moderne characteristics on both its exterior and interior. The Apalachia powerhouse retains several elements expressing the style. The generating units themselves convey the Streamline Moderne style, with their smooth-finish metal housing and perfectly cylindrical form. The powerhouse

²⁴ Ibid., 571-572.

²⁵ North Callahan, *TVA & Bridge Over Troubled Waters: A History of the Tennessee Valley Authority*, (Cranbury, NJ: A. S. Barnes and Co., Inc., 1980), 33; and Erwin C. Hargrove, *Pioneers of Myth: The Leadership of the Tennessee Valley Authority, 1933-1990*, (Princeton, NJ: Princeton University Press, 1994), 30-33.

Apalachia Hydroelectric Project

Cherokee County, NC and
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interior retains its original interior aluminum doors, original light fixtures, interior wall and floor finishes, and original restroom fixtures and finishes. These elements express the polished minimalism of the Streamline Moderne architectural style.

On the exterior, the powerhouse's geometric block form is Streamline Moderne in style and expresses utilitarian simplicity. The powerhouse superstructure and generating room retain original architectural features including streamlined groupings of windows with decorative portholes below on the west elevation. The dam itself embodies progress, in its engineering and its design. Its massive scale represents the immensity of the project, spatially and philosophically. The architectural design of the dam employs smooth surfaces of concrete, and its steel elements such as spillway gates, emphasize geometric forms and horizontal lines. The support structure consists of embedded cantilevered concrete piers.

SIGNIFICANCE IN ENGINEERING

The Apalachia Hydroelectric Project is an integral part of the overall engineering design of the TVA system. The dam was built utilizing the most advanced methods of its time. The four Hiwassee Valley projects are located in the Hiwassee River Basin along the Hiwassee River and its tributaries. The Hiwassee Valley projects cover a six county region with a rugged mountainous terrain inundated with valleys where the Tennessee-North Carolina state line joins the Georgia state line. The rivers and streams follow the contours of the valleys. TVA developed its network of hydroelectric projects in the context of the natural conditions at each location. Site, plans, materials to be used, architectural designs, exact placement of a dam axis and its associated components, spillway type, and many other engineering nuances of each project took into account the natural topography, elevation changes, rock strata, foundation bedrock, annual rainfall, and watershed volume. The numerous laboratory models and studies performed on most other TVA projects seeking information on ideal combination of dam site, reservoir size, turbine count, and many other inter-related aspects engineering design were performed, however, streamlined for the Hiwassee Valley Projects due to the emergency nature of the projects under the necessity of war driven power generation.

In terms of site preparation, the Hiwassee projects required the usual amount of detailed engineering investigation and planning as all other TVA projects; however, due to the immediate need for construction, site preparation and analysis were completed as soon as the TVA board authorized the project in July of 1941. Surveying and mapping included basic control surveys, aerial photography of 424 square miles, land ownership reconnaissance surveys through planimetric-base plane table sheets and deed copying of 52,521 acres, marking and mapping contours of 615 miles, planning and mapping relocation of roads, rail lines, and utility lines,

Apalachia Hydroelectric Project

Cherokee County, NC and
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drainage surveys for malaria control, and numerous other adjustments and computations and the work progressed.²⁶

The TVA's hydroelectric projects were designed, in part, to manage the rise and fall of the annual cycles of the Tennessee River system. While the reservoirs on the Tennessee River are designed to provide proper water depth for navigation of barge traffic, reservoirs on the tributary rivers, such as the Hiwassee Valley Projects, serve to produce additional power to the TVA system as well as store water to manage water flow into the Tennessee River. Since the drainage of the Hiwassee River contributes to floods in Chattanooga, the necessary storage space was created by the four Hiwassee Valley projects to retain a large portion of the flood flow into the Tennessee River. The four Hiwassee Valley reservoirs, completed between 1941 and 1943, provide a substantial degree of flood control to the Tennessee River watershed, diminishing potentially damaging floods at Chattanooga.²⁷ The storage capacities of the Hiwassee reservoirs figure into the power potential downstream. Releases at Apalachia develop energy not only at that facility, but also at Chickamauga.²⁸

Summary

The Apalachia Hydroelectric Project is one of twenty-five (25) projects constructed by the Tennessee Valley Authority (TVA) for the purpose of generating electrical power from, improving navigation of, and controlling seasonal flooding of the river system of the region. The project brought construction jobs and later electricity to this rural area. During planning and construction, TVA provided technical assistance in municipal land use planning, road relocation and improvement, and shoreline development. The Apalachia project is an important component in the vast TVA system of flood control and power generating, as well as contributing to management of river navigation.

The Apalachia Hydroelectric Project retains much of its integrity from its original design of the early 1940s. The dam and powerhouse have not been significantly altered and display their original Streamline Moderne design in their exterior and interior detailing. The Apalachia Hydroelectric Project meets the registration requirements set forth in the Multiple Property Documentation Form, "Historical Resources of the Tennessee Valley Authority Hydroelectric Project, 1933-1979" and this MPDF contains additional contextual information concerning TVA and its hydroelectric system.

²⁶ Ibid, 506.

²⁷ Tennessee Valley Authority, "The Hiwassee Valley Projects," (Knoxville: Tennessee Valley Authority, 1948), 49.

²⁸ Ibid.

Apalachia Hydroelectric Project

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Name of Property

9. Major Bibliographic References

Bibliography

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Ezzell, Patricia Bernard. “Tennessee Valley Authority in Alabama (TVA),” At website <http://www.encyclopediaofalabama.org/article/h-2380>. Accessed August 18, 2015.

“History of the Tennessee Valley Authority.” At website http://www.policyalmanac.org/economic/archive/tva_history.shtml. Accessed August 13, 2015.

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“Tennessee Valley Authority Act (1933).” At website <http://www.ourdocuments.gov/doc.php?flash=true&doc=65>. Accessed August 19, 2015

“Tennessee Valley Authority Act of 1933.” At website http://www.policyalmanac.org/economic/archive/tva_history.shtml. Accessed August 18, 2015.

Tennessee Valley Authority. *Design of TVA Projects Technical Report No. 24, Vol. 3, Mechanical Design of Hydro Plants*. Washington, D.C.: U.S. Government Printing Office, 1960.

_____, *The Hiwassee Valley Projects: A Comprehensive Report on the Planning, Design, Construction, and Initial Operations of the Four Projects, in the Hiwassee Basin, Constructed on the Emergency Basis during World War II, Technical Report No. 5, Volume 2*. Washington, D.C.: U.S. Government Printing Office, 1948.

West, Carroll Van. *Tennessee’s New Deal Landscape*. Knoxville: University of Tennessee Press, 2001.

Wheeler, W. Bruce. “Tennessee Valley Authority.” At webpage Tennessee Encyclopedia of History and Culture. Accessed August 18, 2015.

Apalachia Hydroelectric Project

Cherokee County, NC and
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Previous documentation on file (NPS):		Primary location of additional data:	
<input type="checkbox"/>	preliminary determination of individual listing (36 CFR 67 has been requested)	<input type="checkbox"/>	State Historic Preservation Office
<input type="checkbox"/>	previously listed in the National Register	<input type="checkbox"/>	Other State agency
<input type="checkbox"/>	previously determined eligible by the National Register	<input checked="" type="checkbox"/>	Federal agency
<input type="checkbox"/>	designated a National Historic Landmark	<input type="checkbox"/>	Local government
<input type="checkbox"/>	recorded by Historic American Buildings Survey #	<input type="checkbox"/>	University
<input type="checkbox"/>	recorded by Historic American Engineering Record #	<input type="checkbox"/>	Other
<input type="checkbox"/>	recorded by Historic American Landscape Survey #	Name of repository: Tennessee Valley Authority Knoxville, TN	
Historic Resources Survey Number (if assigned): CE0232			

Apalachia Hydroelectric Project

Cherokee County, NC and
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Name of Property

10. Geographical Data

Acreege of Property 529 acres **USGS Quadrangle** Farner TN/ NC

Latitude/Longitude Coordinates

- | | |
|--------------|------------|
| 1. Latitude: | Longitude: |
| 2. Latitude: | Longitude: |
| 3. Latitude: | Longitude: |
| 4. Latitude: | Longitude: |

Or UTM References

Datum (indicated on USGS map):

NAD 1927 or NAD 1983

- | | | |
|-------------|-----------------|-------------------|
| 1. Zone: 16 | Easting: 746416 | Northing: 3894726 |
| 2. Zone: 16 | Easting: 746433 | Northing: 3895248 |
| 3. Zone: 16 | Easting: 732737 | Northing: 3895991 |
| 4. Zone: 16 | Easting: 733153 | Northing: 3896867 |

Verbal Boundary Description

The boundary for the Apalachia Hydroelectric Project is depicted as a dashed line on the accompanying Quad map and site plan map. The boundary includes property to encompass the adjacent recreational facilities as well as the immediate environs of the dam and powerhouse.

Boundary Justification

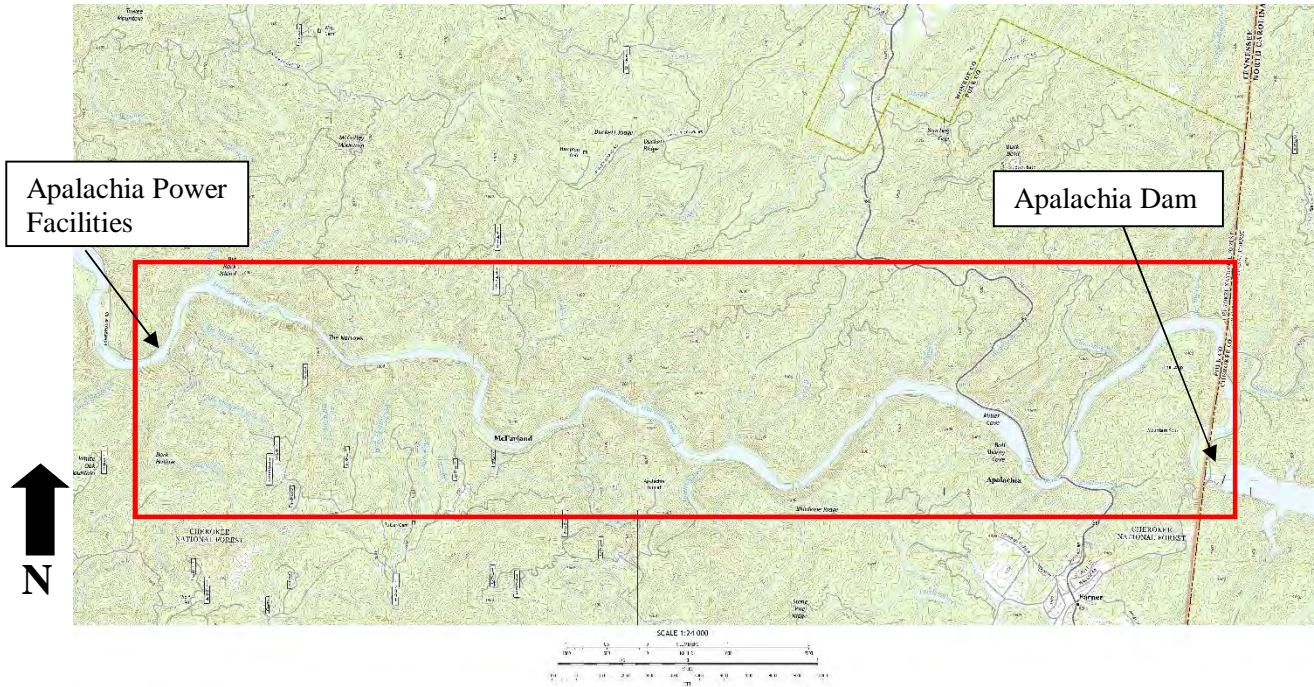
The boundary includes all facilities necessary for the operation of the hydroelectric project and/or associated with the mission of TVA, which includes power generation, navigation, and public recreation. The boundary omits other TVA lands not directly associated with hydroelectric production.

Apalachia Hydroelectric Project

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Combined and enlarged section depicting Apalachia Dam and Powerhouse from 2013 Farner, TN-NC and McFarland, TN Quad

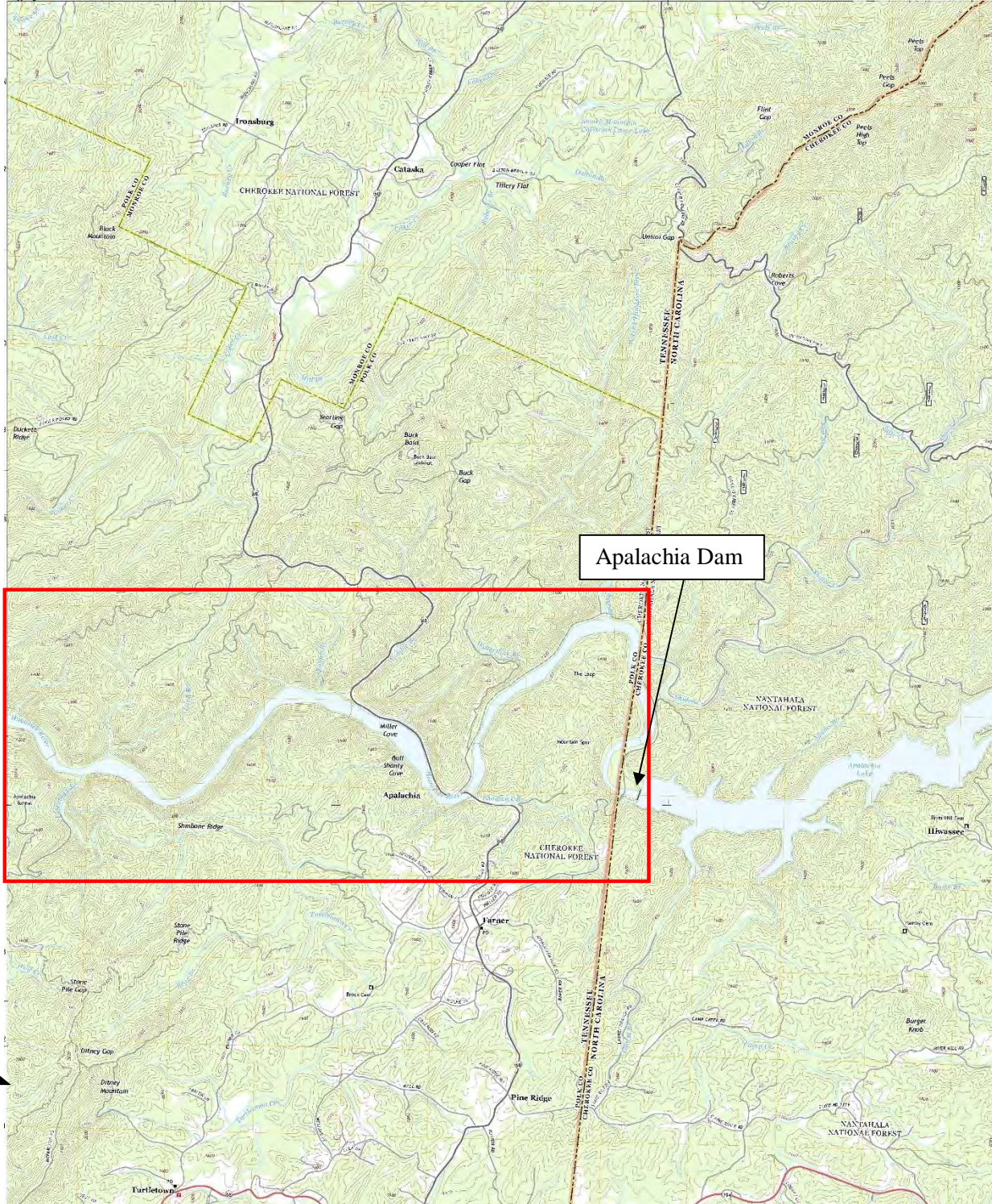


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Name of Property

Farner, TN-NC, UGSS Topo Revision 2013



Apalachia Hydroelectric Project

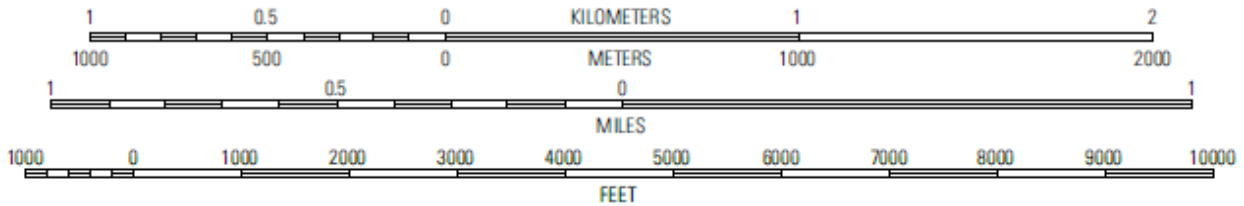
Cherokee County, NC and
Polk County, TN
County and State

Name of Property

NORTH CAROLINA - Farner Topo Quad, 2013 with NR boundary for Apalachia Dam



SCALE 1:24 000

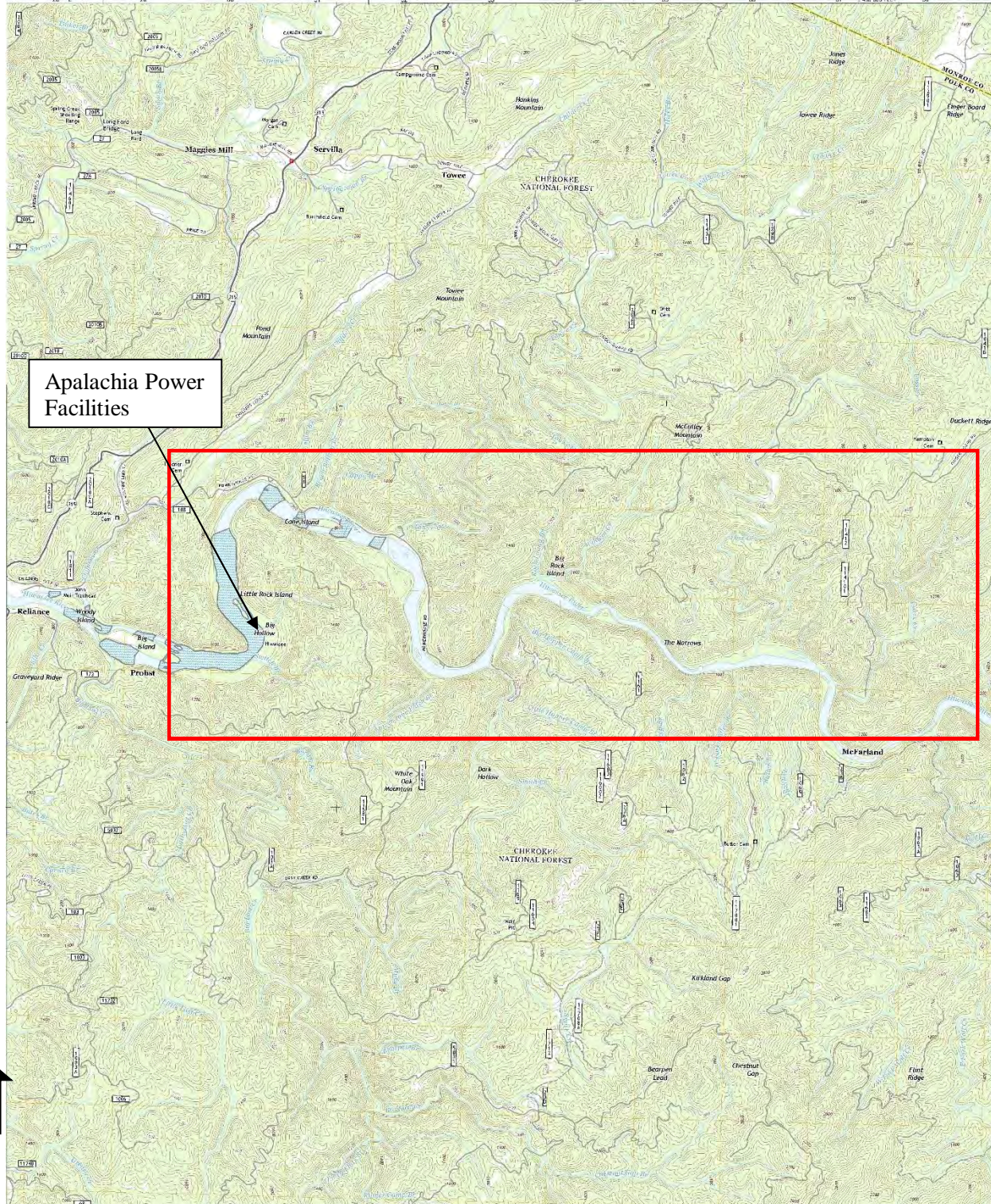


Apalachia Hydroelectric Project

Cherokee County, NC and
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Name of Property

TENNESSEE - McFarland, TN, UGSS Topo Revision 2013

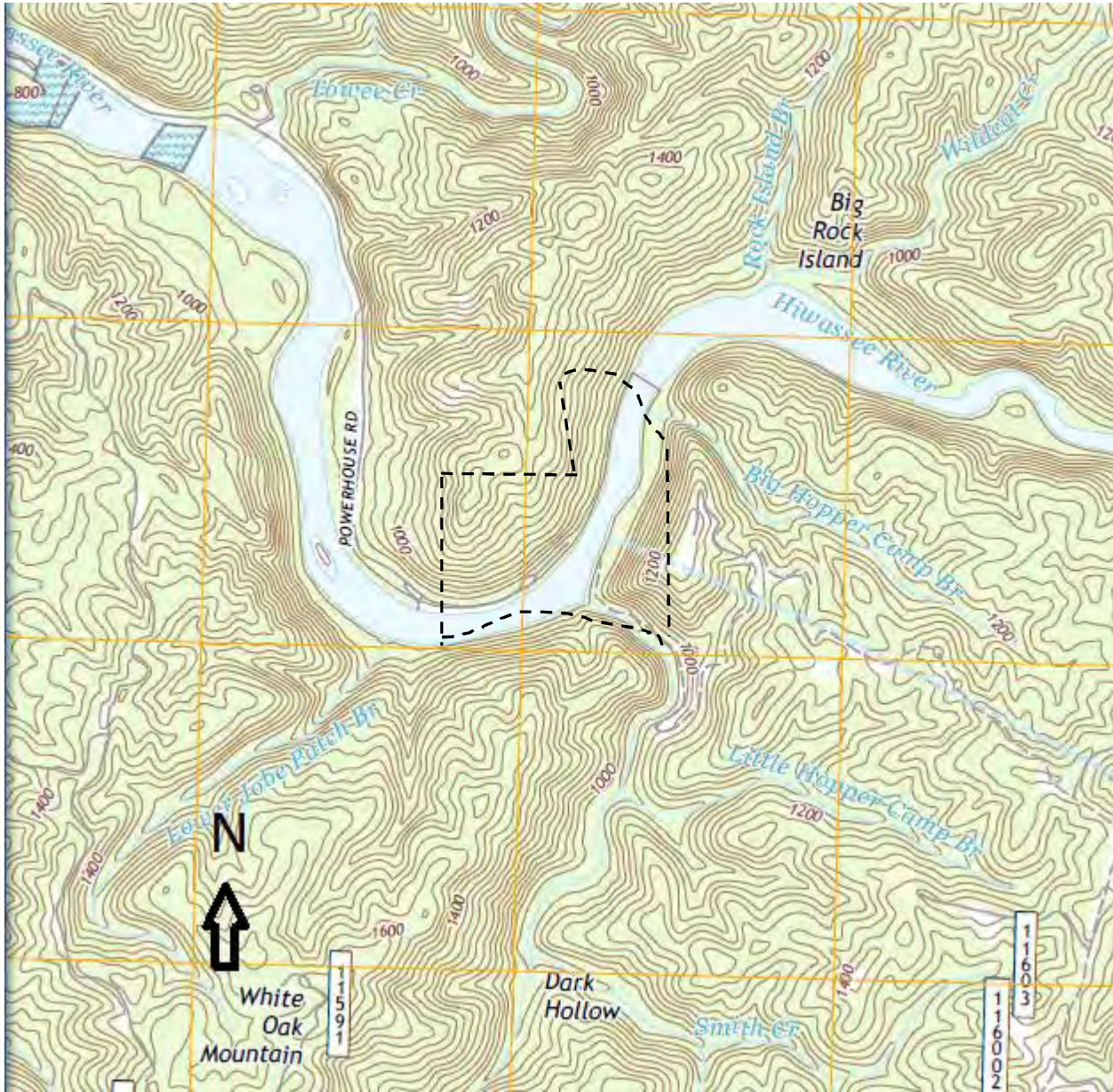


Apalachia Hydroelectric Project

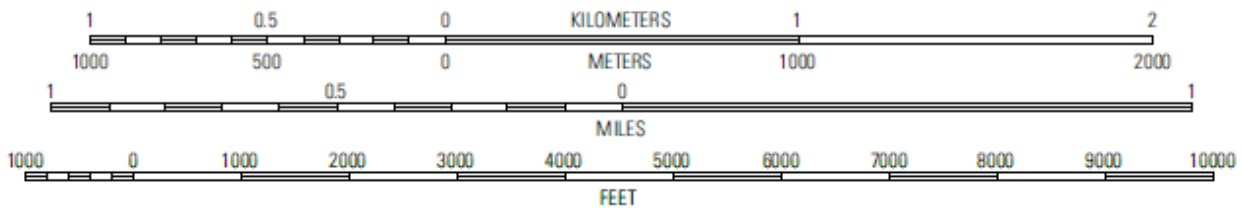
Cherokee County, NC and
Polk County, TN
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Name of Property

TENNESSEE - McFarland Topo Quad, 2013, with NR boundary for Apalachia power facilities.



SCALE 1:24 000

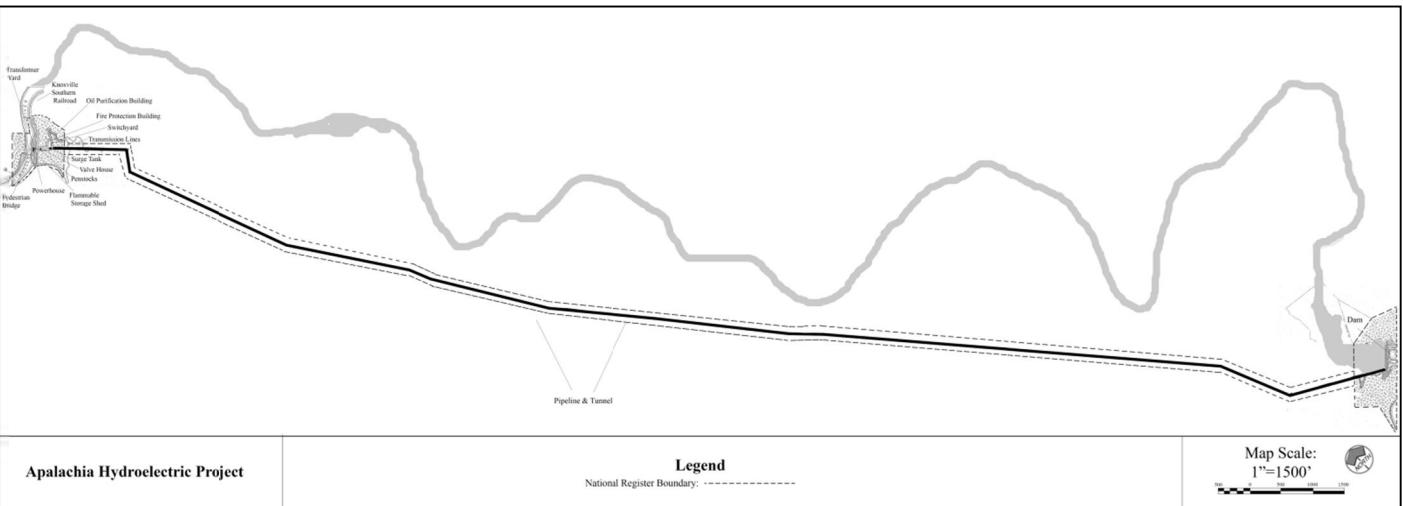


Apalachia Hydroelectric Project

Name of Property

Cherokee County, NC and
Polk County, TN
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Site Plan and National Register boundary for Apalachia Hydroelectric Project.

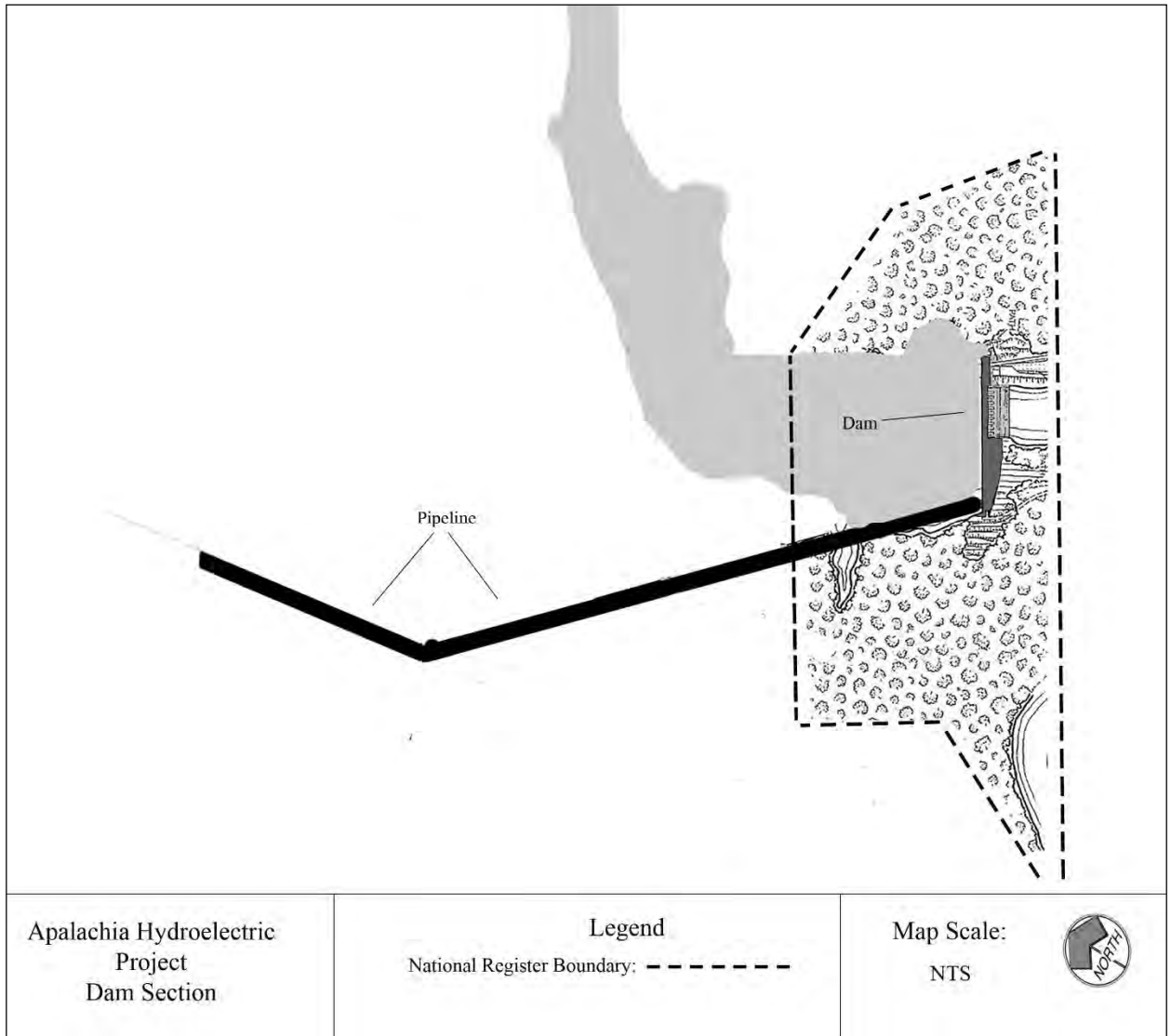


Apalachia Hydroelectric Project

Cherokee County, NC and
Polk County, TN
County and State

Name of Property

NORTH CAROLINA - East end of Apalachia site plan, enlarged.

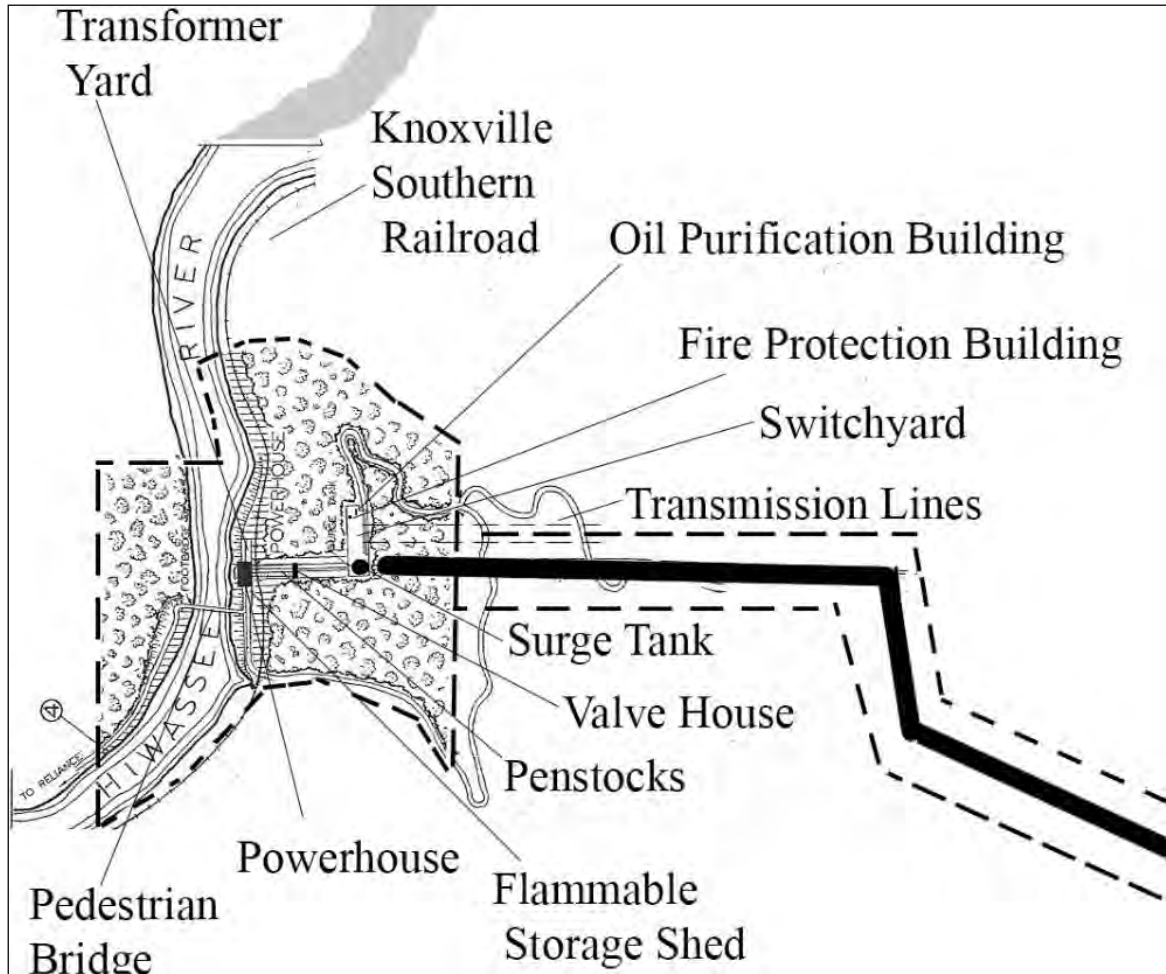


Apalachia Hydroelectric Project

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Name of Property

TENNESSEE - West end of Apalachia site plan, enlarged.



Apalachia Hydroelectric Project

Cherokee County, NC and
Polk County, TN
County and State

Name of Property

11. Form Prepared By

Name Rebecca Hightower/ Phil Thomason/Andra Kowalczyk Martens

Organization Thomason and Associates

Street & Number P.O. Box 121225 Date April 22, 2016

City or Town Nashville Telephone 615-385-4960

E-mail Thomason@bellsouth.net State TN Zip Code 37212

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to map.
- **Photographs** (refer to Tennessee Historical Commission National Register *Photo Policy* for submittal of digital images and prints)
- **Additional items:** (additional supporting documentation including historic photographs, historic maps, etc. should be included on a Continuation Sheet following the photographic log and sketch maps)

Apalachia Hydroelectric Project

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Name of Property

Photo Log

Name of Property: Apalachia Hydroelectric Project
City or Vicinity: Murphy, NC/Farner, TN
County: Cherokee/Polk State: North Carolina/Tennessee
Photographer: Philip Thomason
Date Photographed: June 25, 2015

- 1 of 30 - South side of Apalachia Dam looking west.
- 2 of 30 ó Spillway Gates looking northwest.
- 3 of 30 ó Pipeline and Intake at Dam looking southeast.
- 4 of 30 ó Apalachia Pipeline looking southwest.
- 5 of 30 ó Pipeline into concrete tunnel looking southwest.
- 6 of 30 ó Surge tank looking west.
- 7 of 30 ó Penstocks from surge tank to valve house looking east.
- 8 of 30 ó Penstocks from surge tank to valve house looking northeast.
- 9 of 30 ó Powerhouse exterior, west elevation, looking northeast.
- 10 of 30 ó Powerhouse exterior, south elevation, looking northeast.
- 11 of 30 ó Powerhouse exterior, north elevation looking south.
- 12 of 30 ó Powerhouse exterior, east elevation looking northwest.
- 13 of 30 ó Powerhouse interior, erection bay
- 14 of 30 ó Powerhouse interior, lobby signage.
- 15 of 30 ó Powerhouse interior, restroom.
- 16 of 30 ó Powerhouse interior, office corridor.
- 17 of 30 ó Powerhouse interior, assembly room.
- 18 of 30 ó Powerhouse interior, generator room ground floor.
- 19 of 30 ó Powerhouse interior, generator No. 1.
- 20 of 30 ó Powerhouse interior, generator No. 1 wheel pit access in basement.

Apalachia Hydroelectric Project

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Name of Property

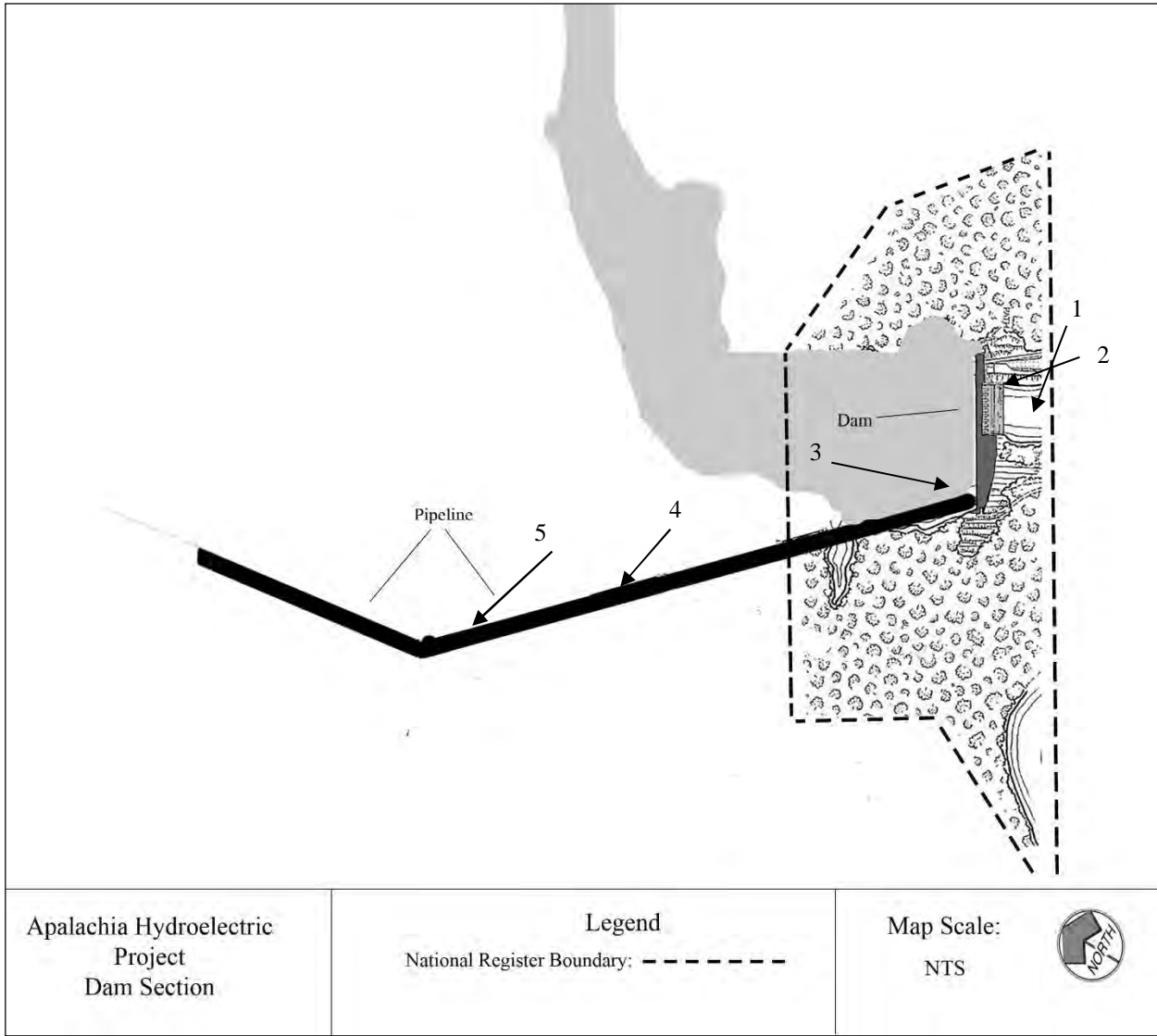
- 21 of 30 ó Powerhouse interior basement where penstocks enter.
- 22 of 30 ó Switchyard looking northwest.
- 23 of 30 ó Transformer Yard looking southwest.
- 24 of 30 ó Transmission Lines looking southwest.
- 25 of 30 ó Switchyard Oil Purification Building looking.
- 26 of 30 ó Switchyard Fire Protection Building, looking west.
- 27 of 30 ó Flammable Storage Shed, looking northeast.
- 28 of 30 ó Railroad Tracks of the Knoxville Southern Railroad, looking northeast.
- 29 of 30 ó Pedestrian Bridge over the Hiwassee River looking north.
- 30 of 30 ó Pedestrian Bridge east pier, looking south.

Apalachia Hydroelectric Project

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Name of Property

East end of photo log map key (not to scale)

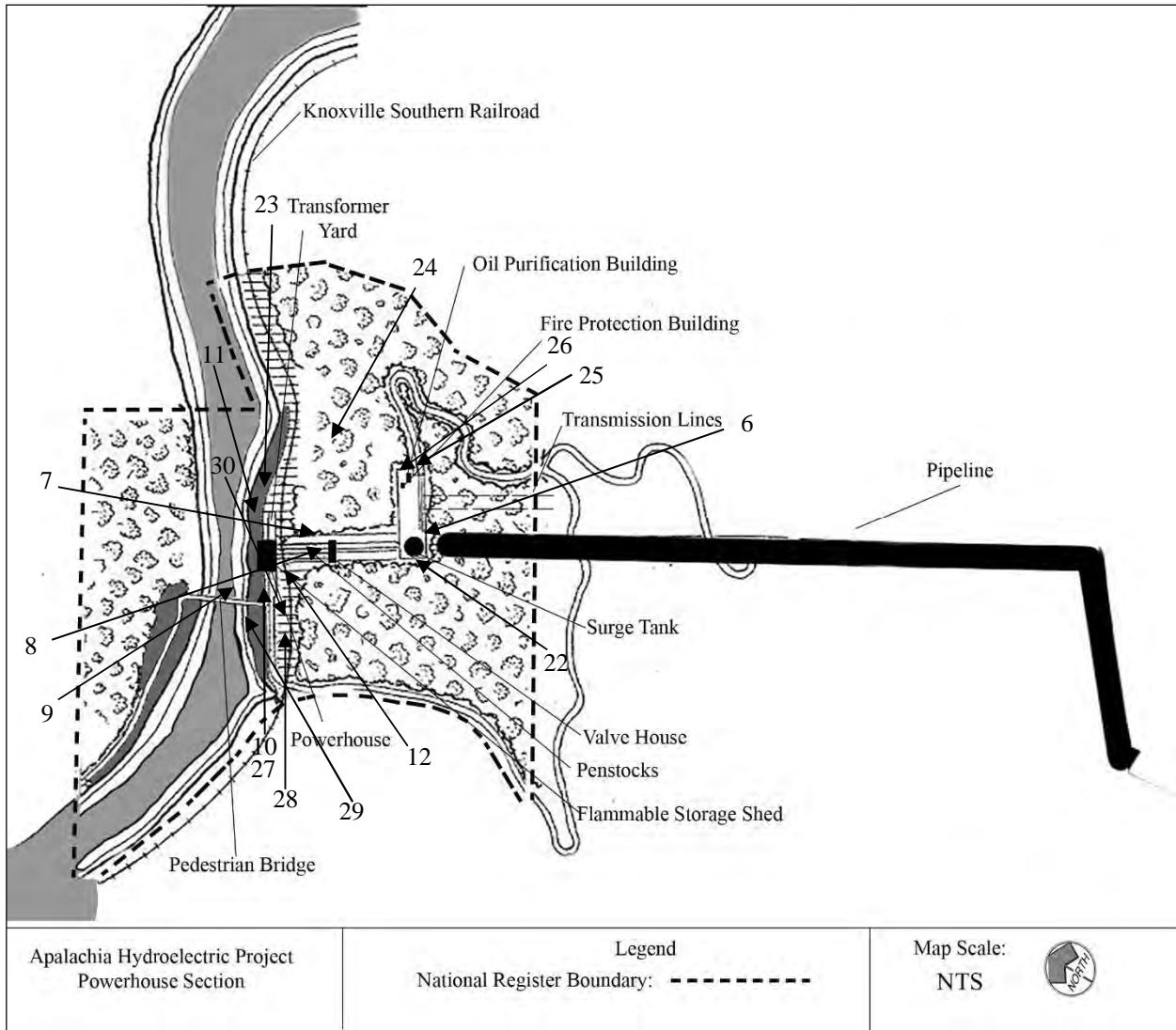


Apalachia Hydroelectric Project

Cherokee County, NC and
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Name of Property

West end of photo log map key (not to scale)



Powerhouse interiors, photos #13-21

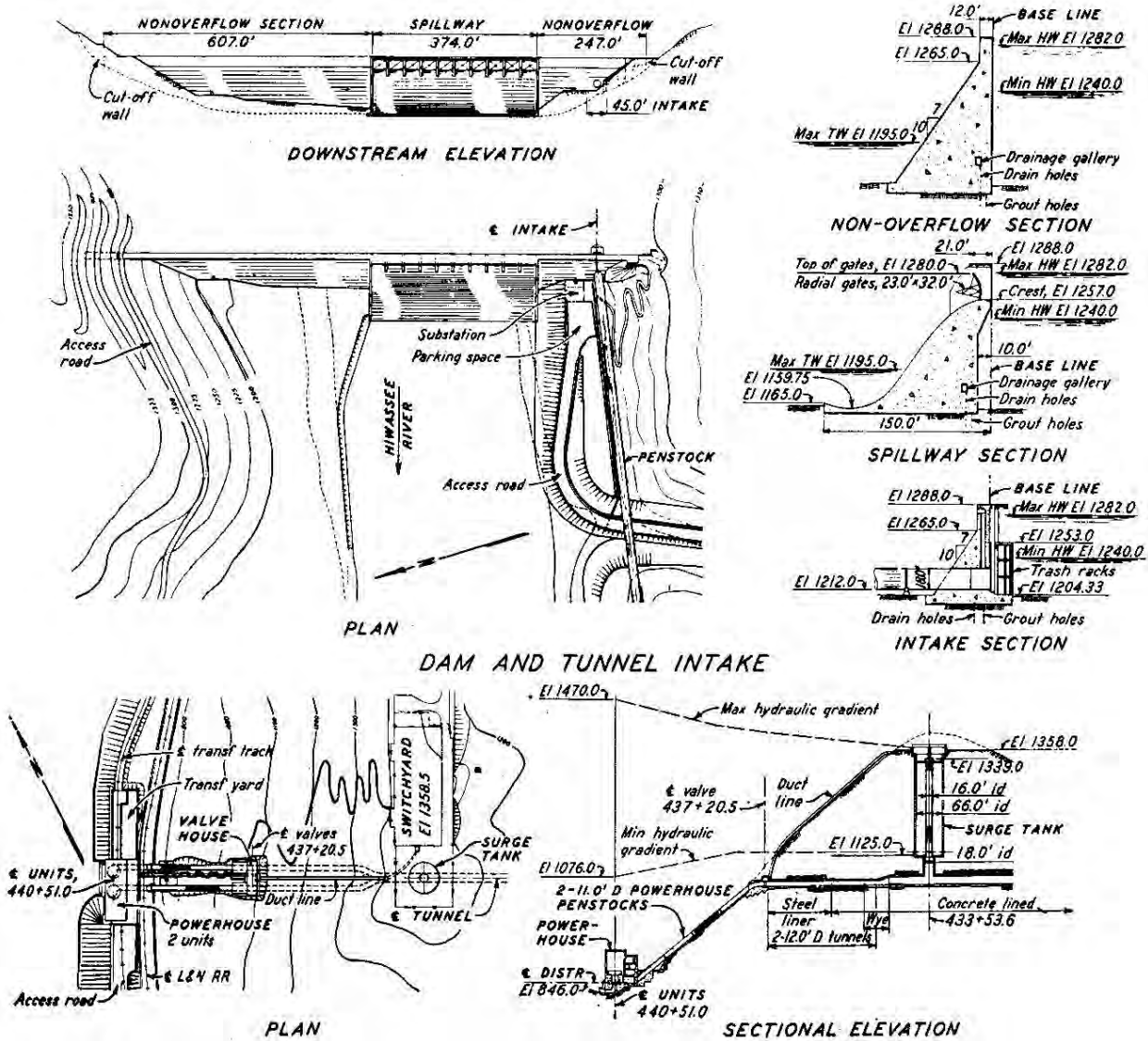
Apalachia Hydroelectric Project

Cherokee County, NC and
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Name of Property

Site Plans and Sections

Site plan of Apalachia Hydroelectric Project

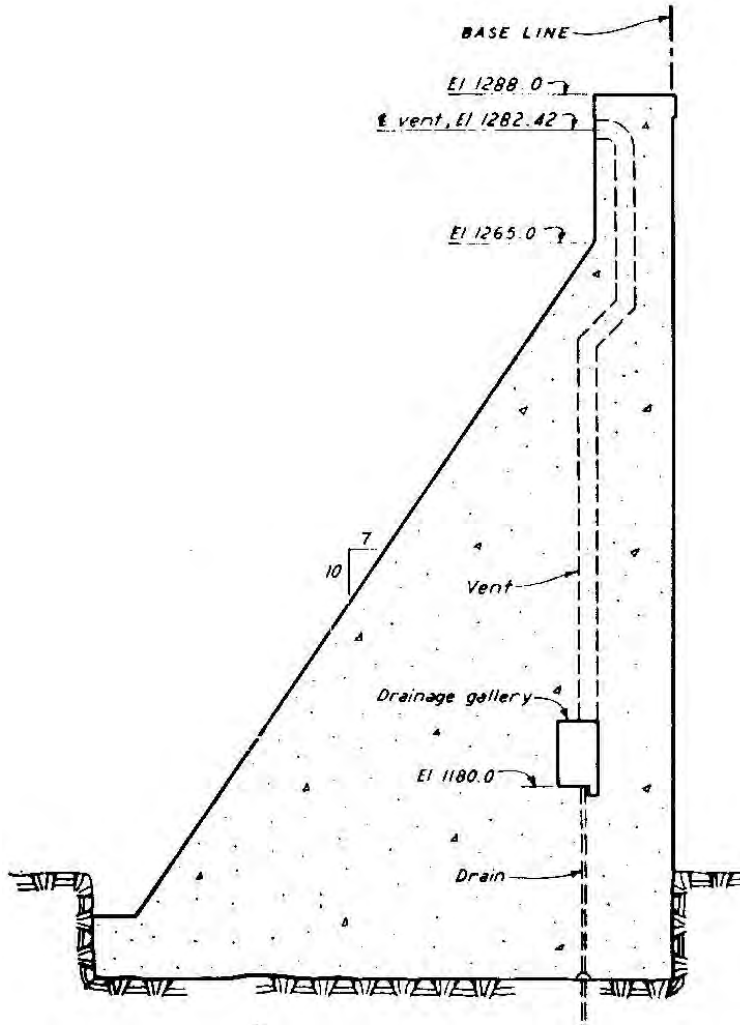


Apalachia Hydroelectric Project

Cherokee County, NC and
Polk County, TN
County and State

Name of Property

Section of the Apalachia Dam

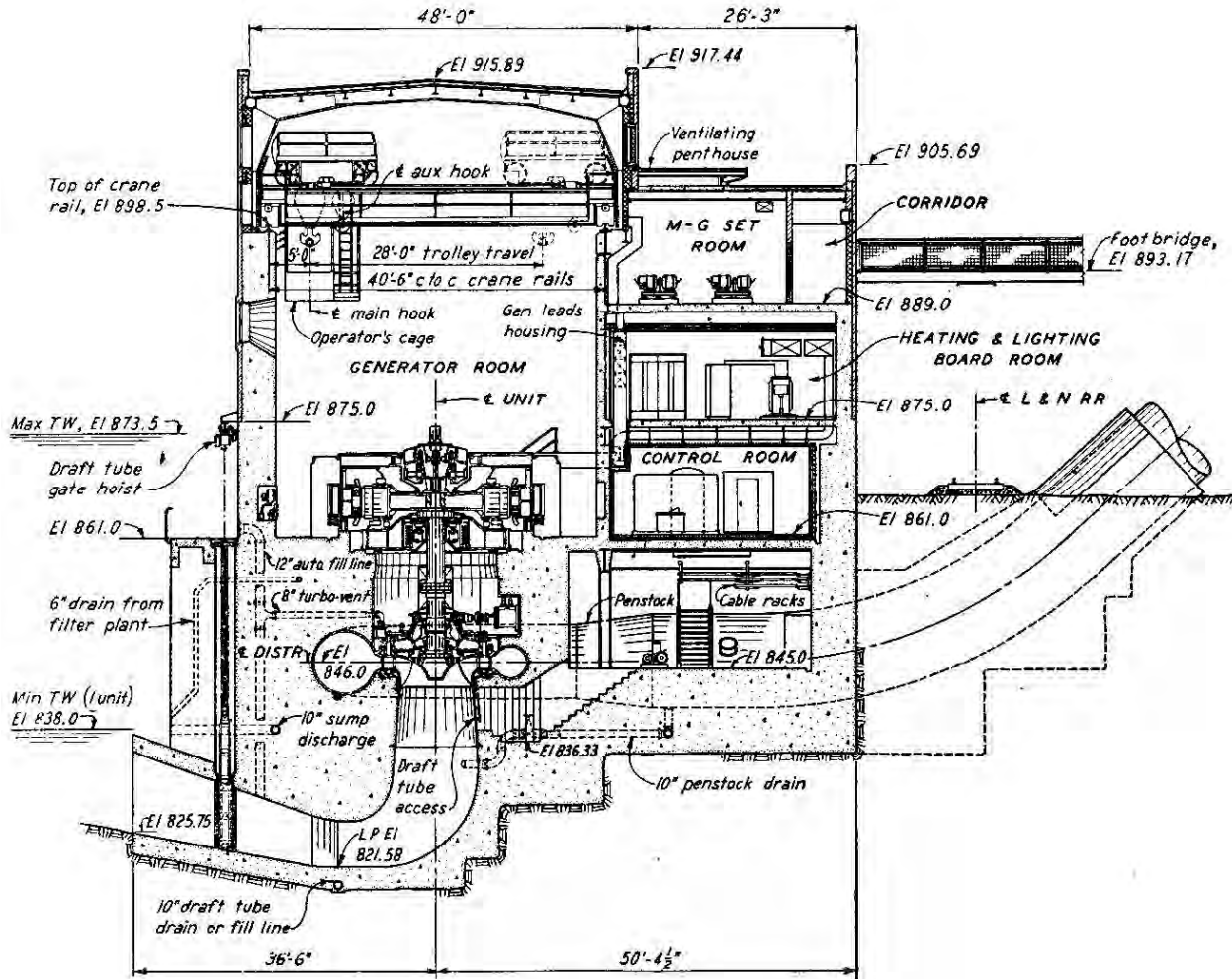


Apalachia Hydroelectric Project

Cherokee County, NC and
 Polk County, TN
 County and State

Name of Property

Section of Apalachia Powerhouse

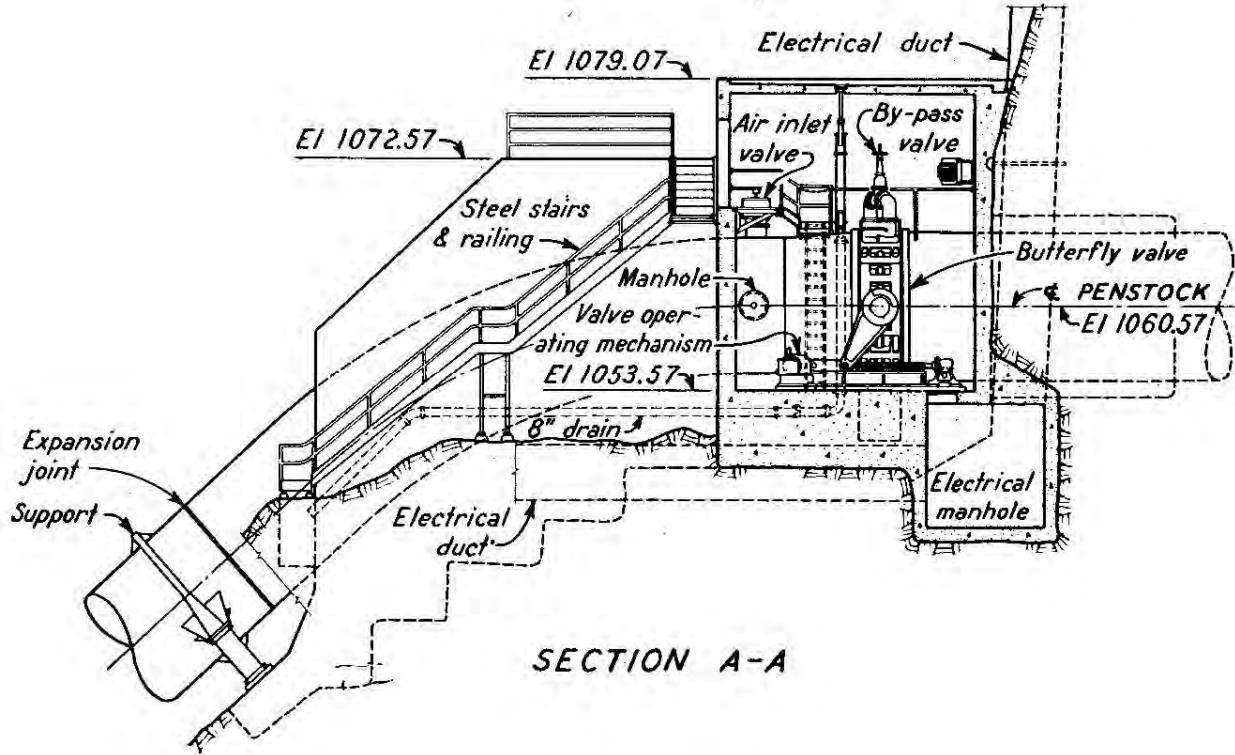


Apalachia Hydroelectric Project

Cherokee County, NC and
Polk County, TN
County and State

Name of Property

Section of Apalachia Valve House and Penstock



United States Department of the Interior
National Park Service / National Register of Historic Places Registration Form
NPS Form 10-900 OMB No. 1024-0018

Apalachia Hydroelectric Project

Cherokee County, NC and
Polk County, TN
County and State

Name of Property

Property Owner:

(This information will not be submitted to the National Park Service, but will remain on file at the Tennessee Historical Commission)

Name Tennessee Valley Authority ó Pat Ezzell

Street &

Number 400 West Summit Hill Drive 460WT7D-K Telephone 865-632-6461

City or Town Knoxville

State/Zip TN 37902

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 100 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management. U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.



















DANGER
FLASHING LIGHTS SOUNDING
OF SIREN MEANS RISING
AND DANGEROUS WATERS
KEEP AWAY

ATTENTION
KEEP AWAY FROM THE
DANGER ZONE

DANGEROUS WATERS
VIOLENT SURGES
OCCUR SUDDENLY
KEEP OUT

APALACHIA

EL-875









1941 - BUILT FOR THE PEOPLE

UNITED STATES OF AMERICA - 1943

EL-875





FLAMMA
KEEP FIRE

3M











DANGER
LIMITED SPACE
ENTER BY
RIGHT ONLY

DANGER
LIMITED SPACE
ENTER BY
RIGHT ONLY

USED
OIL

ELIMINATOR
SEPARATOR

DANGER
LIMITED SPACE
ENTER BY
RIGHT ONLY











FIRE
EXT.

APALACHIA

EL-875





ALACHIA





UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

Requested Action:

Property Name:

Multiple Name:

State & County:

Date Received: 10/4/2017 Date of Pending List: 7/27/2017 Date of 16th Day: 8/11/2017 Date of 45th Day: 11/20/2017 Date of Weekly List:

Reference number:

Nominator:

Reason For Review:

- | | | |
|--|--|---|
| <input type="checkbox"/> Appeal | <input type="checkbox"/> PDIL | <input type="checkbox"/> Text/Data Issue |
| <input type="checkbox"/> SHPO Request | <input type="checkbox"/> Landscape | <input type="checkbox"/> Photo |
| <input type="checkbox"/> Waiver | <input type="checkbox"/> National | <input type="checkbox"/> Map/Boundary |
| <input checked="" type="checkbox"/> Resubmission | <input type="checkbox"/> Mobile Resource | <input type="checkbox"/> Period |
| <input type="checkbox"/> Other | <input type="checkbox"/> TCP | <input type="checkbox"/> Less than 50 years |
| | <input type="checkbox"/> CLG | |

Accept Return Reject 10/26/2017 Date

Abstract/Summary Comments:

Recommendation/ Criteria:

Reviewer Jim Gabbert Discipline Historian

Telephone (202)354-2275 Date _____

DOCUMENTATION: see attached comments : No see attached SLR : **Yes**

If a nomination is returned to the nomination authority, the nomination is no longer under consideration by the National Park Service.



June 21, 2017

Paul Loether
National Register of Historic Places, Keeper
Mail Stop 7228
1849 C Street NW
Washington, D. C. 20240

Dear Mr. Loether,

The Tennessee Valley Authority (TVA) contracted with Thomason and Associates, Preservation Planners to complete nominations to the National Register of Historic Places (NRHP) for twenty-five of its hydroelectric projects. Three nominations - for the Norris, Guntersville, and Wheeler Hydroelectric Projects - were previously submitted, resulting in listing in the NRHP in 2016. The TVA proposes the nomination of the remaining twenty-two hydroelectric projects. The enclosed disks contain the true and correct copies of the nominations of:

Georgia: the Nottely Hydroelectric Project;
Kentucky: the Kentucky Hydroelectric Project;
North Carolina: the Apalachia, Chatuge, Fontana, and Hiwassee Hydroelectric Projects; and
Tennessee: the Boone, Cherokee, Chickamauga, Douglas, Fort Loudoun, Fort Patrick Henry, Melton Hill, Nickajack, Normandy, Ocoee No. 3, Pickwick Landing, South Holston, Tellico, Tims Ford, Watts Bar, and Watauga Hydroelectric Projects.

The overall context for these nominations, the MPDF "Historic Resources of the Tennessee Valley Authority Hydroelectric System, 1933-1979" was approved by your office on March 12, 2016. The enclosed nominations have been reviewed by TVA as well as the respective State Review Boards and enclosed are the twenty-two physical signed copies of the signature pages of each nomination. All local governments have been notified of the intent to list these hydroelectric projects in the National Register.

We are pleased to submit these nominations to you which recognize the diverse history and contributions made by the Tennessee Valley Authority to our nation.

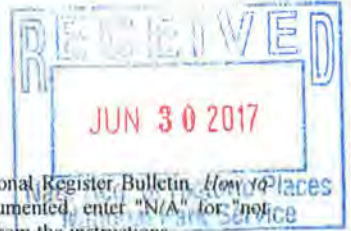
Please contact me if any additional information is needed.

Sincerely,

Philip Thomason
Principal

cc. Pat Ezell, Senior Program Manager, TVA

Enc/



National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of Property

Historic name Apalachia Hydroelectric Project
Other names/site number Apalachia Dam
Name of related multiple property listing Historic Resources of the Tennessee Valley Authority Hydroelectric Project, 1933-1979

2. Location

Street & Number: Apalachia Dam Road
City or town: Murphy State: North Carolina County: Cherokee
Not For Publication: N/A Vicinity: N/A Zip: 28906

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,
I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property meets does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

national statewide local

Applicable National Register Criteria: A B C D

Patricia B. Eggell / Sr. Proj. Mgr. FPO 6-19-17
Signature of certifying official/Title: Date
Tennessee Valley Authority
State or Federal agency/bureau or Tribal Government

In my opinion, the property meets does not meet the National Register criteria.

Hein Cherry 4/13/2016
Signature of Commenting Official: Date
State Historic Preservation Officer, N.C. Dept. of Natural and Cultural Resources
Title: State of Federal agency/bureau or Tribal Government

Returned

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

Requested Action:

Property Name:

Multiple Name:

State & County:

Date Received: 6/30/2017 Date of Pending List: 7/27/2017 Date of 16th Day: 8/11/2017 Date of 45th Day: 8/14/2017 Date of Weekly List:

Reference number:

Nominator:

Reason For Review:

- | | | |
|---------------------------------------|--|---|
| <input type="checkbox"/> Appeal | <input type="checkbox"/> PDIL | <input type="checkbox"/> Text/Data Issue |
| <input type="checkbox"/> SHPO Request | <input type="checkbox"/> Landscape | <input type="checkbox"/> Photo |
| <input type="checkbox"/> Waiver | <input checked="" type="checkbox"/> National | <input type="checkbox"/> Map/Boundary |
| <input type="checkbox"/> Resubmission | <input type="checkbox"/> Mobile Resource | <input type="checkbox"/> Period |
| <input type="checkbox"/> Other | <input type="checkbox"/> TCP | <input type="checkbox"/> Less than 50 years |
| | <input type="checkbox"/> CLG | |

Accept Return Reject 8/11/2017 Date

Abstract/Summary Comments:

Recommendation/ Criteria:

Reviewer Jim Gabbert  Discipline Historian

Telephone (202)354-2275 Date 8-11-2017

DOCUMENTATION: see attached comments : **Yes** see attached SLR : No

If a nomination is returned to the nomination authority, the nomination is no longer under consideration by the National Park Service.



United States Department of the Interior

NATIONAL PARK SERVICE

1849 C Street, N.W.
Washington, DC 20240

IN REPLY REFER TO:

The United States Department of the Interior National Park Service

National Register of Historic Places Evaluation Sheet

Property Name: Apalachia Hydroelectric Project, Polk County, TN and
Cherokee County, NC
(TVA Hydroelectric System MPS)

Reference Number: 100001459

Comment

The nomination for the Apalachia Hydroelectric Project is being returned for technical revision and to correct a procedural flaw.

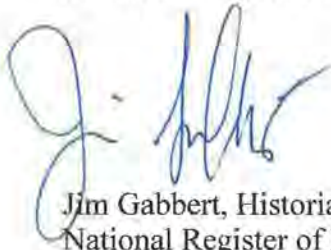
The primary reason for returning this nomination is that there is no accompanying signature by the Tennessee SHPO. The property associated with this hydroelectric project is located in two states, but only a signature by the North Carolina SHPO was included. The nomination must be submitted to the Tennessee SHPO for review and comment.

In addition to this procedural flaw, these are other technical issues with the nomination. The nomination was submitted at three levels of significance, meeting two Criteria, and with two areas of significance (architecture and engineering). The nomination does not justify the national or state level of significance, relying, apparently, on the fact that the TVA system as a whole being of national importance as justification for the highest level. Collectively, the TVA is considered a nationally important endeavor, but not all component parts are considered of national importance. If you wish to claim national significance for this particular property, you would need to demonstrate within a national context either the architectural significance of the facility as a Streamline Moderne building (not likely) or its national significance as an engineering resource (possible when considering the 8 mile separation from the dam to the generating facility). There would need to be an appropriate national context for power generating facilities. However, the claim for engineering in the nomination makes broadly general statements for its being "an integral part of the overall engineering design of the TVA system." In this case, it can only be assumed that this is the basis of the significance claim under Criterion A. This is, of course, not a valid interpretation of the area of significance or its

application to a specific component of a broad system. Engineering falls under Criterion C. We would expect to see a discussion of the particular engineering importance of this facility, a task that should not be too difficult to do considering the unique design solution evidenced by the overall design. Overall, this nomination, with engineering and architecture as potential areas of significance, would fall under Criterion C.

Another issue is with the maps and lat/long coordinates. Using only 4 points provides a much distorted view of what is being nominated. While it is not necessary to use points to specifically define boundaries, in a case like this where there are two nodes connected by a line (the pipeline), it might be best if two separate polygons are used to define the disparate nodes. And, please mark the points on the accompanying map. Also, as a head's up, locational maps used to define boundaries should be at a scale no larger than 1-200. For this, and all other submissions, I've overlooked this requirement.

Rather than return all of the North Carolina project nominations, I issued Supplementary Listing Records to lower the level of significance from national, and in other cases to remove areas of significance that are not supported for the specific property nominated. The common problem with many of the nominations is associating the greater themes of the MPS cover to specific projects without providing the necessary context (comparative or associative) for each specific project.



Jim Gabbert, Historian
National Register of Historic Places
8-14-2017



Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, TN 37902

August 9, 2017

Mr. Paul Loether
National Register of Historic Places, Keeper
Mail Stop 7228
1849 C Street NW
Washington, D. C. 20240

Dear Mr. Loether,

The Tennessee Valley Authority (TVA) contracted with Thomason and Associates, Preservation Planners to complete nominations to the National Register of Historic Places (NRHP) for twenty-five of its hydroelectric projects. Three nominations for the Norris, Guntersville, and Wheeler Hydroelectric Projects were previously submitted resulting in listing in the NRHP in 2016. The TVA proposes the nomination of the remaining twenty-two hydroelectric projects. The enclosed disks contain the true and correct copies of the nominations of:

- Georgia: the Nottely Hydroelectric Project;
- Kentucky: the Kentucky Hydroelectric Project;
- North Carolina: the Apalachia, Chatuge, Fontana, and Hiwassee Hydroelectric Projects; and
- Tennessee: the Boone, Cherokee, Chickamauga, Douglas, Fort Loudoun, Fort Patrick Henry, Melton Hill, Nickajack, Normandy, Ocoee No. 3, Pickwick Landing, South Holston, Tellico, Tims Ford, Watts Bar, and Watauga Hydroelectric Projects.

The overall context for these nominations, the MPDF "Historic Resources of the Tennessee Valley Authority Hydroelectric System, 1933-1979" was approved by your office on March 12, 2016. The enclosed nominations have been reviewed by TVA as well as the respective State Review Boards and enclosed are the twenty-two physical signed copies of the signature pages of each nomination. All local governments have been notified of the intent to list these hydroelectric projects in the National Register.

We are pleased to submit these nominations to you which recognize the diverse history and contributions made by the Tennessee Valley Authority to our nation.

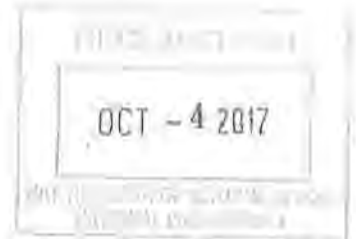
Please contact me if any additional information is needed.

Sincerely,

A handwritten signature in black ink that reads "Pat Bernard Ezzell". The signature is written in a cursive, flowing style.

Patricia Bernard Ezzell
Federal Preservation Officer
Communications

Enclosures



Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, TN 37902

October 3, 2017

Mr. Paul Loether
Keeper
National Register of Historic Places
Mail Stop 7228
1849 C Street NW
Washington, DC 20240

Dear Mr. Loether:

TENNESSEE VALLEY AUTHORITY, RESUBMITTAL OF NATIONAL REGISTER NOMINATION FORMS, BOONE, FORT PATRICK HENRY, AND APALACHIA HYDROELECTRIC PROJECTS, MULTI-COUNTIES AND STATES

The Tennessee Valley Authority (TVA) is resubmitting three nominations per comments received on August 15, 2017.

Per reference number 100001459 regarding the Apalachia Hydroelectric Project, Polk County, Tennessee, and Cherokee County, North Carolina, please find enclosed, the signature page from the Tennessee State Historic Preservation Office which was missing from our original submission.

Per reference number 100001476 regarding the Boone Hydroelectric Project, Sullivan and Washington Counties, Tennessee, please find enclosed, the revised nomination form which depicts the lat/long coordinates and the boundary of the property.

Per reference number 100001477 regarding the Fort Patrick Henry Hydroelectric Project, Sullivan County, Tennessee, please find enclosed, the revised nomination form with clarification of the bridges. We did notify the state and the local governments regarding the nominations of all of the TVA projects.

I trust these resubmissions will allow these three properties to be listed in the National Register of Historic Places. Please contact me by phone, 865-632-6461 or by email, pbezzell@tva.gov should you have any questions.

Sincerely,

Patricia Bernard Ezzell
Senior Program Manager and Federal Preservation Officer
Communications

Enclosures