



Via Electronic Filing

July 1, 2022

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

**Subject:       Niagara Hydroelectric Project (FERC No. 2466-037)**  
**Response to Final License Application Additional Information Requests**

Dear Secretary Bose:

Appalachian Power Company (Appalachian or Licensee), a unit of American Electric Power (AEP), is the Licensee, owner, and operator of the run-of-river, 2.4-megawatt Niagara Hydroelectric Project (Project) (Project No. 2466), located on the Roanoke River in Roanoke County, Virginia.

The Project is currently licensed by the Federal Energy Regulatory Commission (FERC or Commission). The Project underwent relicensing in the early 1990s, and the current operating license for the Project expires on February 29, 2024. Accordingly, Appalachian is pursuing a new license for the Project pursuant to the Commission's Integrated Licensing Process (ILP), as described at 18 Code of Federal Regulations (CFR) Part 5. In accordance with 18 CFR § 5.17(a), Appalachian filed the Final License Application (FLA) for the Project on February 28, 2022. On May 4, 2022, FERC issued a letter requesting additional information (within 60 days) related to Recreation Resources described within Exhibit E of the FLA. Appalachian is hereby providing the additional information requested by FERC. FERC's requests are repeated below for reference.

- 1. Page E-135 in section E.11.2.1 states that the portage put-in location at the end of the Canoe Portage Trail, a project recreation facility, is a "non-project facility consisting of a rock outcrop at the put-in, which is located on lands outside of the Project Boundary and owned by the NPS [National Park Service (Park Service)]." Although the portage put-in provides access to the river around the project dam for non-motorized boat users and terminates at the end of the Canoe Portage Trail, Appalachian maintains that the portage put-in is not a project recreation facility. Please provide justification as to why the portage put-in is not considered a project recreation facility.*

*Page E-150 in section E.11.3.2 states that the land used for the portage put-in is "passively provided" by the Park Service. Please explain how this term is defined and describe what type of agreement exists between Appalachian and the Park Service for use of this land. Please also state the amount of Park Service land that is used for the portage trail and put-in.*

### **Appalachian's Response:**

The history of the existing Canoe Portage Trail, inclusive of agency consultation and stakeholder recommendations and consensus during the previous relicensing, is described in an Additional Information Request (AIR) Response Appalachian filed with the Commission on November 19, 1992. A copy of a relevant excerpt from that document is provided in Attachment 1.

As summarized in Appalachian's November 19, 1992 filing, following the filing of the previous license application in 1991, FERC requested that Appalachian consult with the National Park Service (NPS) on the use of the "pedestrian trail" leading to an area near the south tailrace of the Project, and with the NPS, Virginia Department of Conservation and Recreation (VDCR), and Roanoke County on portage around the dam. During this consultation, Appalachian learned that the foot trail leading from the Blue Ridge Parkway pull-off located just south of the Roanoke River to the riverbank area just downstream of the Niagara Project was maintained by NPS as a designated public recreation site. NPS confirmed in a letter dated November 5, 1992 that the trail is the responsibility of the NPS Blue Ridge Parkway to maintain, and that they would continue to maintain it as conditions warrant (Attachment 1).

The excerpted AIR response in Attachment 1 also describes how alternative construction of a put-in within the Niagara Project boundary would require canoeists to re-enter the river within 200 feet (ft) of the powerhouse discharge and would require extensive grading. At that time, Appalachian and stakeholders agreed that the preferred put-in location is on NPS land beneath the Blue Ridge Parkway bridge, where rock formations appear to provide suitable access to the river, precluding the need for a gravel put-in pad.

Use of the existing private access road for purposes of connecting the then-proposed portage take-out and put-in locations is also discussed in the excerpted AIR response. Appalachian noted that development of the canoe portage would require a written agreement with Norfolk Southern Railway (previously Norfolk and Western Railway Company) to utilize a portion of the railroad's right-of-way. A copy of the agreement executed between the railroad company and Appalachian in 1994 is provided in Attachment 2. The area of leased land covered by this agreement is shown on the last page and encompasses the portage trail, to the extent of the downstream limit of Appalachian's property.

The final Portage Trail proposed by Appalachian in 1992 consisted of "a take-out point just upstream of the boat barrier; a portage path which would utilize the existing private access road, and downstream of the Niagara powerhouse, NPS land; and a put-in point beneath the Blue Ridge Parkway bridge." Documentation of construction of the approved Portage Trail was subsequently filed by Appalachian with FERC in 1996; this documentation is also included in Attachment 1.<sup>1</sup>

In the current FLA, Appalachian did not propose Project boundary revisions to encompass the Portage Trail or Put-In, nor were these areas required by FERC to be included in the Project boundary during the existing license term. Appalachian believes that the Portage Put-In is appropriately characterized as a non-project facility, because it is controlled and maintained by NPS, and its existence and maintenance are independent of Appalachian and the Niagara Project.

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<sup>1</sup> On March 28, 1996, FERC confirmed Appalachian's requirement of Article 411, which included implementation of the canoe portage plan and documentation of completion of the plan within two years.

Lands associated with the Put-In are not necessary for operation and maintenance of the Project or for other Project purposes. This area has been continuously available to the public since its development and is expected to remain so through the term of the new license. Ownership and control of this area by NPS is consistent with Commission policy on recreational development at licensed projects, which states at 18 CFR §2.7(e) that the Commission expects the licensee to, among other responsibilities, encourage and cooperate with appropriate local, state, and federal government agencies in planning, providing, operating, and maintaining facilities for recreational use of public lands administered by those agencies adjacent to the project area. In the event a suitable downstream portage put-in location was no longer provided to the public by NPS, Appalachian would seek an amendment to the future Recreation Management Plan to develop a portage put-in on Appalachian's property.

Appalachian recognizes the complex history and nature of land ownership and agreements in the vicinity of the Niagara Project. To provide Commission staff with additional information to inform their understanding of the Project and Appalachian's licensing proposal, Appalachian has also included in this response a copy of a 1957 Deed of Lands Near and Downstream of the Niagara Project to the Commonwealth of Virginia (Appalachian's original disposition of non-Project lands) (Attachment 2).

Attachment 3 provides an overview of the Niagara Canoe Portage Trail, as presently proposed by Appalachian for continued operation in the new license term with minor improvements, and includes the FERC Project boundary, parcels, and land ownership. The Niagara Canoe Portage Trail crosses NPS land<sup>2</sup> for approximately 269 ft or 4,400 square ft (assuming a 10-ft buffer around the trail and put-in). The majority of the trail is on other lands outside of the Project boundary (i.e., lease of railroad right-of-way), covering another 946 ft or 9,250 square ft, compared to 298 ft or 3,240 square ft within the Project boundary.

2. *Page E-142 in section E.11.2.1 summarizes the findings of the Recreational Flow Release Desktop Review. Details of the study results are contained in various documents (e.g., draft license application, initial and updated study reports). Additionally, the findings are described in a way that is difficult for a layperson to understand. Please provide a simple summary of the study's findings that includes at least the following: the range of flows that would provide recreational benefits, the seasons in which they could be offered, and any operational costs associated with providing each flow scenario.*

### **Appalachian's Response:**

The Recreation Flow Release Desktop Review was developed to evaluate the potential for controlled flow releases from the Project to support short-term enhancement of flow conditions for recreational boating (i.e., primarily canoeing, kayaking, and other paddling activities) downstream of the Project.

The Niagara powerhouse contains two generating units: Unit 1 has a maximum hydraulic capacity of 379 cubic feet per second (cfs) and Unit 2 has a maximum hydraulic capacity of 305 cfs (for a combined total station hydraulic capacity of 684 cfs). The generation units are operated locally or

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<sup>2</sup> The National Park Service land is shown as Department of Interior land on the Roanoke County GIS data.

from Appalachian's Columbus Operations Center through a programmable logic controller and float controller. The Project operates in a run-of-river mode under all flow conditions, with outflows from the Project approximating inflows to the Project. This is achieved by adjusting the water flow to the turbines to match available river flow. There is no appreciable reservoir storage available, and inflows are either used for generation or spilled into the bypass reach,<sup>3</sup> depending on the amount of flow coming into the Niagara reservoir. As presently licensed, the Project is operated to maintain the reservoir at or near elevation (EL.) 884.4 ft, which is 0.6 ft below the crest of the spillway. During extreme flow conditions, such as rapidly changing inflows, Appalachian is authorized to operate the Project with a minimum reservoir EL. of 883.4 ft. Run-of-river operation may also be temporarily modified, if required, by operating emergencies beyond the control of Appalachian and for short periods upon mutual agreement among Appalachian, U.S. Fish and Wildlife Service (USFWS), and Virginia Department of Wildlife Resources (VDWR). Appalachian proposes to continue to operate the Project in this mode during the new license term.

A hypothetical recreation flow release downstream of the Project would depend on the amount of flow coming into the Niagara reservoir, the magnitude of the flow release (given the unit hydraulic capacities described above), and the authorized reservoir operating band. Figure 1 provides a matrix of the length of time (in hours) a hypothetical downstream recreation flow release could be made based on Project inflows given the unit operating constraints and assuming temporary variance from run-of-river operations to utilize the full 1-ft reservoir level operating band. For example, a 300-cfs recreation flow release could be sustained for approximately 4 hours if the Project inflow was 150 cfs, or for approximately 8 hours if the Project inflow was 225 cfs. This matrix assumes the reservoir is at the top of the reservoir operating band (i.e., EL. 884.4 ft) at the start of the recreation flow release and the release would continue until the reservoir elevation decreased to EL. 883.5 ft; which provides a 0.1-foot buffer above the minimum authorized reservoir elevation, for compliance with other license requirements.

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<sup>3</sup> Flow releases to the bypass reach are made either through the trash sluice gate (typically) and/or over the Project spillway.



Recreation Release Duration (Hours)																										
		Niagara Project Inflow (cfs)																								
		25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	
Recreation Flow Release (cfs)	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	50	24.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	75	12.4	24.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	100	8.3	12.4	24.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	125	6.2	8.3	12.4	24.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	150	5.0	6.2	8.3	12.4	24.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	175	4.1	5.0	6.2	8.3	12.4	24.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	200	3.6	4.1	5.0	6.2	8.3	12.4	24.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	225	3.1	3.6	4.1	5.0	6.2	8.3	12.4	24.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	250	2.8	3.1	3.6	4.1	5.0	6.2	8.3	12.4	24.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	275	2.5	2.8	3.1	3.6	4.1	5.0	6.2	8.3	12.4	24.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	300	2.3	2.5	2.8	3.1	3.6	4.1	5.0	6.2	8.3	12.4	24.9	-	-	-	-	-	-	-	-	-	-	-	-	-	
	325	2.1	2.3	2.5	2.8	3.1	3.6	4.1	5.0	6.2	8.3	12.4	24.9	-	-	-	-	-	-	-	-	-	-	-	-	
	350	1.9	2.1	2.3	2.5	2.8	3.1	3.6	4.1	5.0	6.2	8.3	12.4	24.9	-	-	-	-	-	-	-	-	-	-	-	
	375	1.8	1.9	2.1	2.3	2.5	2.8	3.1	3.6	4.1	5.0	6.2	8.3	12.4	24.9	-	-	-	-	-	-	-	-	-	-	
	400	1.7	1.8	1.9	2.1	2.3	2.5	2.8	3.1	3.6	4.1	5.0	6.2	8.3	12.4	24.9	-	-	-	-	-	-	-	-	-	
	425	1.6	1.7	1.8	1.9	2.1	2.3	2.5	2.8	3.1	3.6	4.1	5.0	6.2	8.3	12.4	24.9	-	-	-	-	-	-	-	-	
	450	1.5	1.6	1.7	1.8	1.9	2.1	2.3	2.5	2.8	3.1	3.6	4.1	5.0	6.2	8.3	12.4	24.9	-	-	-	-	-	-	-	
	475	1.4	1.5	1.6	1.7	1.8	1.9	2.1	2.3	2.5	2.8	3.1	3.6	4.1	5.0	6.2	8.3	12.4	24.9	-	-	-	-	-	-	
	500	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.1	2.3	2.5	2.8	3.1	3.6	4.1	5.0	6.2	8.3	12.4	24.9	-	-	-	-	-	
	525	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.1	2.3	2.5	2.8	3.1	3.6	4.1	5.0	6.2	8.3	12.4	24.9	-	-	-	-	
	550	1.2	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.1	2.3	2.5	2.8	3.1	3.6	4.1	5.0	6.2	8.3	12.4	24.9	-	-	-	
	575	1.1	1.2	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.1	2.3	2.5	2.8	3.1	3.6	4.1	5.0	6.2	8.3	12.4	24.9	-	-	
	600	1.1	1.1	1.2	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.1	2.3	2.5	2.8	3.1	3.6	4.1	5.0	6.2	8.3	12.4	24.9	-	

Note: Duration of recreation releases controlled by pond level. This table assumes full pond level (884.4 ft) at onset of release. Releases end when pond has been drawn down to elevation 883.5 ft.

**Figure 1. Hypothetical Recreation Flow Release Duration Matrix**

Project flow releases, either via the bypass reach and/or powerhouse generation affect river depths and flow travel time downstream of the Project. River stage is recorded at the U.S. Geological Survey (USGS) 02056000 (Roanoke River at Niagara, Virginia) flow gaging station, which is located immediately downstream of the Project tailwater and bypass reach confluence.

The monthly average and monthly minimum discharge recorded at the USGS 02056000 flow gaging station from 1926 through 2020 (i.e., a 95-year period of record) is provided in Table 1. On a monthly average basis, there appears to be enough Project inflow to support operation of at least one unit year-round. However, during drier/drought years, there are periods when Project inflows are lower than the design hydraulic capacity of a single generating unit.<sup>4</sup> During these periods, Project flow releases would be made from either a single unit at reduced generation, or via the trash sluice gate into the bypass reach.

The potential for the short-term enhancement of downstream flow conditions to support recreation activities would be most advantageous to boaters during the typically lower flow late-summer/early-fall months (i.e., July through October).

**Table 1. Monthly Average and Minimum Discharge Recorded at USGS 02056000 (Period of Record: 1926 to 2020)**

Month	Average Discharge (cfs)	Minimum Discharge (cfs)	Month	Average Discharge (cfs)	Minimum Discharge (cfs)
January	623	110	July	315	109
February	774	117	August	327	92
March	876	210	September	339	84
April	830	158	October	359	86
May	619	193	November	382	101
June	457	135	December	503	115

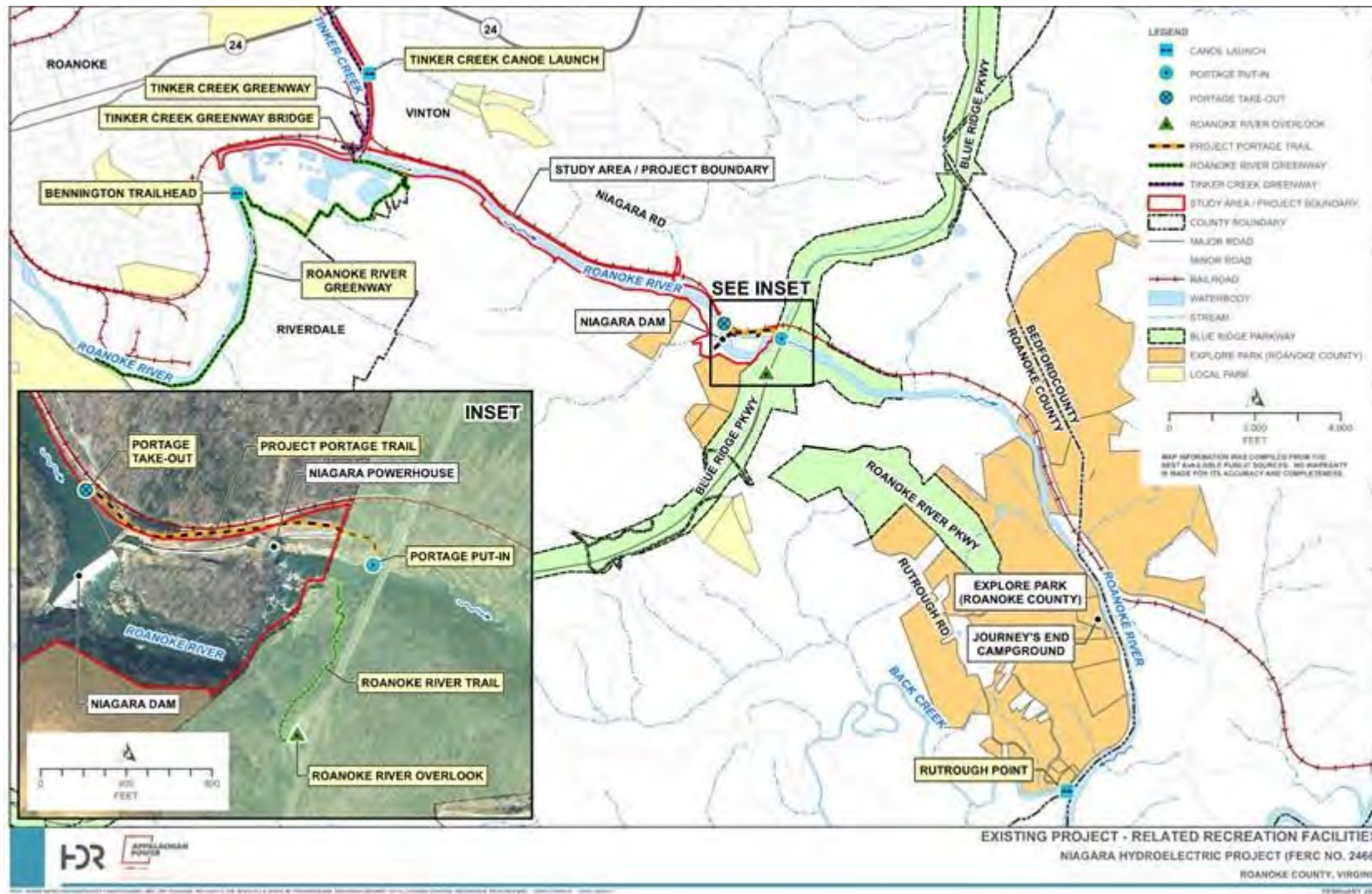
The distance between the Project's Portage Put-In and the downstream Explore Park/Rutrough Point canoe/kayak access area (shown on Figure 2) is approximately 3 river miles. Paddlers using this stretch of river would benefit the most from a potential short-term recreation flow release (or pulse). For example, a flow pulse of approximately 300 cfs (total downstream flow release) would increase the river stage at USGS 02056000 by approximately 1.5 ft<sup>5</sup> (over the Project's existing 50 cfs minimum downstream flow requirement) and could theoretically be sustained for approximately 3 hours based on a Project inflow of 75 – 100 cfs (see Figure 1). This run-time would likely allow paddlers enough time to navigate this stretch of river. Appalachian's evaluation has focused on the reach of the Roanoke River between the Project's Portage Put-In and the downstream Explore Park/Rutrough Point canoe/kayak access area, as this is the reach where effects of a pulsed flow release from the Project would be most evident. The effect of a pulsed flow release at the Niagara Project would be dampened downstream of the Explore Park/Rutrough Point access area, as the headwaters of Smith Mountain Lake extend up into this reach.

<sup>4</sup> The minimum generation flow from the powerhouse is approximately 100 cfs (either unit).

<sup>5</sup> River stage increases resulting from a short-term pulse of powerhouse generation flow will attenuate (i.e., flatten) as the flow pulse travels downstream. As a result, the stage increase recorded at the USGS 02056000 flow gaging station will diminish as the flow travels downstream.

For the following reasons, Appalachian is not proposing to schedule recreational pulsed flow releases below the Project as a Protection, Mitigation, and Enhancement Measure in the new operating license:

- (1) Operating during low flow summer months to provide a pulsed recreation flow release would require a variance from normal run-of-river operation at the Project (i.e., drawing down the reservoir 1 ft over less than 1 day, compared to normal Project operation where the Project is operated to maintain a relatively stable reservoir elevation at 884.4 ft). Appalachian has not specifically studied impacts of a periodic (e.g., weekly) drawdown of this magnitude during the period July-October on shoreline erosion, upstream recreation facilities, littoral or riparian habitat, or other natural resources.
- (2) The risk of extended reservoir refill time following a pulsed recreation flow release based on varying inflow conditions.
- (3) Additional capital and operations and maintenance costs that would be incurred by Appalachian to provide on-site personnel for powerhouse and gate operations over weekend periods and potential costs to upgrade reservoir level monitoring and control equipment (estimated capital cost \$100,000 and estimated annual operations and maintenance cost \$10,000).
- (4) The benefits would likely only be experienced during dry/drought years when Project inflows are relatively low and could only sustain a one-unit flow release for several hours before the Niagara reservoir level drops to the bottom of the authorized reservoir operating band. Based on the 95-year period of record at the USGS 02056000 flow gaging station immediately downstream from the powerhouse, monthly average Project inflows during normal (and wet) hydrologic years are typically enough to sustain downstream flows in excess of 300 cfs for long periods of time.



**Figure 2. Location of Downstream Access Area and Reach of River below Niagara Project that would Experience Recreational Pulsed Flow Release**

3. *Page E-149 in section E.11.3.1 provides an outline of a Recreation Management Plan (RMP) that Appalachian states would be developed following issuance of a new license; the outline includes a proposal to make several physical changes to the project recreation facilities including the Canoe Portage Trail and the take-out and put-in locations. So that Commission staff can properly assess the effects of the project proposal, additional details are needed, including, but not limited to, the types of modifications proposed to the Canoe Portage Trail and the take-out and put-in locations, and the number of signs to be modified or replaced. Additionally, table A.3-1, on page A-17, provides a cost estimate for the RMP, which includes all proposed changes to the project recreation facilities. So that Commission staff can develop an accurate cost-benefit analysis of the environmental measures, please provide separate cost estimates for each proposed action within the RMP.*

### **Appalachian's Response:**

Appalachian is working with its consultants to identify potential improvements and costs at the Niagara Canoe Portage Trail. Based on a revised expectation that NPS will continue to maintain the Portage Put-In in its current condition, at a high-level Appalachian now expects the proposed enhancements to include those provided in Table 1 below.

**Table 1. Niagara Canoe Portage Trail – Proposed Enhancements**

Enhancement (by Appalachian)	Schedule	Estimated Cost (Capital)
Improvements to take-out (timber steps, bank stabilization)	2026	\$6,000
Improvements to gravel trail (clearing, grading, crushed stone)	2026	\$8,000
Replace/refurbish existing FERC project and directional signage.	2025	\$12,000
Install additional sign(s) providing emergency contact information for AEP or county emergency management.	2025	\$2,000
Site Clean-Up and Landscaping	2025	\$4,000
Public Website	2025	\$20,000

As provided in the FLA, the Recreation Management Plan will also include description and location of Project Recreation Facilities, Map of Non-Project Recreation Facilities within or adjacent to the Project boundary, with identifying information about ownership and management for each facility, documentation of consultation, mechanisms for Appalachian's participation in and promotion of periodic upstream water- or land-based river cleanups led by other organizations, and Coordination and consultation measures for development of Non-Project Recreation Facilities (by Appalachian or others) within the Project boundary over the new license term.

If there are any questions regarding this submittal, please do not hesitate to contact me at (614) 716-2240 or [jmmagalski@aep.com](mailto:jmmagalski@aep.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Jonathan M. Magalski". The signature is written in a cursive, flowing style.

Jonathan M. Magalski  
Environmental Supervisor, Renewables  
American Electric Power Service Corporation, Environmental Services

cc: Elizabeth Parcell (AEP)

A decorative graphic on the left side of the page consists of four overlapping rectangles: a large red one in the middle, a grey one above it, a grey one below it, and a black one to the right of the bottom grey one.

# Attachment 1

Attachment 1 – Portage Trail  
Development Supporting  
Information

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**1992 License Application AIR  
Response, Including  
Documentation of Portage  
Consultation and Decisions**

**American Electric Power  
Service Corporation**  
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Columbus, OH 43215  
614 223 1000  
614 223 1687 (Telecopier)

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(614) 223-1638

November 18, 1992

Lois D. Cashell, Secretary  
Federal Energy Regulatory Commission  
825 North Capitol Street, NE  
Washington, D.C. 20426

Re: **Licensed Project No. 2466 - Virginia  
Appalachian Power Company**



ORIGINAL

A. Joseph Dowd  
Senior Vice President  
and General Counsel

John F. DiLorenzo, Jr.  
Vice President, Secretary  
and Associate General Counsel

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Attorneys

Dear Ms. Cashell:

Enclosed for filing on behalf of Appalachian Power Company is a response to the additional information request issued by the Commission May 22, 1992. By letter dated October 12, 1992, Appalachian Power Company requested an extension of time until October 31, 1993 to respond to Items 3 and 4 on the additional information request due to problems in scheduling field studies. That request indicated that responses to other items in the additional information request would be filed by November 22, 1992 but that information based on field studies might not be available until September of 1993 depending on flow and weather conditions.

The attached response and supporting documentation complete responses to Items 1, 2, 5 and 6 of the additional information request. The field studies have been completed for Items 3 and 4, the Minimum Flow Study and the Roanoke Loggerch Survey. Allowing adequate time for writeup, review, agency comments, and finalization of the reports, licensee plans to have this additional information completed and filed at the Commission by March 31, 1993.

Any questions regarding this filing can be addressed to me at the above.

Sincerely,

*Robert W. Harmon*

Robert W. Harmon  
Counsel for Appalachian Power Company

RWH/cgs  
Attachments  
c: See attached list.

FERC DOCKETED

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*JS*

APPALACHIAN POWER COMPANY  
NIAGARA HYDROELECTRIC PROJECT NO. 2466  
APPLICATION FOR LICENSE  
RESPONSE TO FERC  
ADDITIONAL INFORMATION REQUEST  
UNDER SCHEDULE A

1. Visual Resource Enhancement

Project impacts on visual resources of the surrounding area were addressed Section E 3.2, Exhibit E, of the Niagara license application. From a comparison of actual photographs and the photocopies included in the Niagara license application (Figures E-14 through E-19) it is apparent that the application photocopies present an exaggerated contrast of project facilities due to limitations in the copying procedure.

In accordance with the Commission's request, Appalachian Power Company (APCo) consulted with the Supervisory Park Ranger of the Roanoke Valley District of the National Park Service (NPS) to evaluate the potential to minimize the color contrast of the Niagara project facilities. The Supervisory Park Ranger acknowledged that many Blue Ridge Parkway visitors walk out onto the Parkway bridge to view the Niagara project and the Roanoke River gorge. He was also agreeable to a plan that would better blend the Niagara project facilities into the surrounding landscape.

Based on consultations with the NPS Supervisory Park Ranger, APCo proposed the following visual resource enhancement plan: 1) paint the 500 ft. long

corrugated metal penstock Federal Color No. 36415, a muddy brown color, which will blend with the surrounding rock formations; 2) either paint the powerhouse the same color as the penstock or strip off the existing coating to expose the concrete, depending on which option proves to be most cost effective and aesthetically pleasing; and 3) allow the reinforced concrete penstock flume structures to weather naturally to blend with the background. By letter dated October 7, 1992, the visual resource enhancement plan was submitted to the NPS for comment.

On October 16, 1992, representatives of NPS, APCo and American Electric Power Service Corporation (AEPSC) met at the Niagara site and briefly discussed APCo's resource enhancement plan. The representatives of NPS indicated that they agreed with APCo's proposed plan and that the NPS's preferred alternative for the powerhouse was to strip off the existing coating to expose the concrete. By letter dated November 5, 1992, NPS concurred with APCo's visual enhancement plans for the 500 ft. long penstock and associated flume structures, and recommended that the powerhouse be stripped of the existing coating.

To blend the Niagara project facilities into the surrounding landscape, APCo proposes to: 1) paint the 500 ft. long corrugated metal penstock a muddy brown color (Federal Color No. 36415 or equivalent); 2) strip the existing coating off the powerhouse to expose the concrete; and 3) allow the reinforced concrete penstock flume structures to weather naturally to blend with the background. Depending on directives received from the Commission, APCo would anticipate implementing the visual resource

enhancement plan within three years after the new license is issued. Estimated cost of the plan, in 1992 dollars, is \$47,000.

2. Wildlife Habitat Management Plan

Project-related impacts on wildlife resources were addressed in Section E 3.2, Exhibit E, of the Niagara license application. No wildlife species of concern in the project area were identified by responsible agencies during pre-filing consultations.

In Item 2 of Schedule A, the Commission states that the approximately 20 acres of riparian forest as identified in the Niagara license application "may provide excellent opportunities for enhancing wildlife populations in the area." AEPSC consulted by telephone the Virginia Department of Game and Inland Fisheries (VDGIF) on June 9 and June 12, 1992, and the U. S. Fish & Wildlife Service (U.S.F&W) on June 12, 1992, regarding target wildlife species for management and potential management plans for these species. Neither agency was aware of any species in need of management in the area of the Niagara project, and both recommended that the best management plan would be to leave the project lands in question undisturbed.

Subsequent to these telephone consultations, a draft "Management Plan for Wildlife Habitat" was developed and submitted by letter dated July 15, 1992, to U.S.F&W and VDGIF for their review. This management plan covers undeveloped lands within the Niagara Hydroelectric Project's boundary,

consisting of riparian forest and emergent wetland areas that are owned in fee by Appalachian Power Company.

The goal of the plan is to maintain the undisturbed balance of wildlife assemblages that currently use these areas by implementing the following management practices:

- A. Monitor the lands covered by the plan by conducting an annual visual inspection for evidence of increased human disturbance. In the event of such disturbance, APCo will consult with VDGIF.
- B. Consult with VDGIF regarding any planned activity that may affect these areas.
- C. Monitor the lands covered by the plan for evidence of increased bank erosion. In the event of increased erosion, APCo will consult with VDGIF.
- D. Notify the VDGIF in the event that unanticipated impacts are occurring to any of these areas.

In order to assess if the plan goals are being met and incorporate any necessary revisions, a periodic review of the management plan will be made. Every five years after initial implementation, APCo has proposed to consult with the VDGIF and U.S.F&W regarding the success of the plan and any needed revisions or modifications.

By letter dated August 17, 1992, VDGIF commented on the draft management plan. In concurrence with the basis of the draft plan, the VDGIF comments state, "It appears that efforts to maintain these sites in their natural state will be the best long-term management strategy. Active wildlife



habitat management is generally precluded by frequent inundation of the sites by flood waters." U.S.F&W did not comment on the draft plan.

A copy of the final "Management Plan for Wildlife Habitat" is included with this filing. The plan is based on agency recommendations to leave the project lands in question undisturbed. The plan can be implemented immediately upon issuance of a new license by the Commission. Costs associated with implementing the plan will primarily be the dollar value of man-hours required for monitoring and consultations, and are anticipated to be relatively low.

3. Minimum Flows

By letter dated October 12, 1992, APCo filed with the Commission a request for extension of time to submit a response to this item. Unfavorable flow conditions on the Roanoke River have prevented APCo and the resource agencies from conducting the required field work in a timely manner.

U.S.F&W and VDGIF were consulted by telephone prior to APCo filing the request for extension and do not oppose it. Copies of correspondence pertinent to the low flow evaluations and APCo's request for extension are included with this transmittal.

Representatives of VDGIF, APCo and AEPSC were able to complete the minimum flow field work on October 23, 1992. U.S.F&W was unable to send a representative to the site due to scheduling conflicts. Results of the low flow evaluations are currently being summarized and will be submitted

to the responsible resource agencies for comments. APCo anticipates transmitting a complete response to this item to the Commission by March 31, 1992.

4. Roanoke Logperch Survey

By letter dated October 12, 1992, APCo filed with the Commission a request for extension of time to submit a response to this item. Unfavorable flow conditions on the Roanoke River have prevented APCo and the resource agencies from conducting the required field work in a timely manner.

U.S.F&W and VDGIF were consulted by telephone prior to APCo filing the request for extension and do not oppose it. Copies of correspondence pertinent to the logperch survey and APCo's request for extension are included with this transmittal.

Representatives of VDGIF, APCo and AEPSC were able to complete the Roanoke logperch field work on October 22, 1992. U.S.F&W was unable to send a representative to the site due to scheduling conflicts. The report on the Roanoke logperch survey is currently being prepared and will be submitted to the responsible resource agencies for comment. APCo anticipates transmitting a complete response to this item to the Commission by March 31, 1993.

5. North Side Canoe Portage and National Park Service Trail

The Commission requested that APCo consult with the NPS on the use of the pedestrian trail leading to an area near the south tailrace of the Niagara



project and with the NPS, the Virginia Department of Conservation and Recreation (VDCR), and the Roanoke County Administrator on portage around the Niagara dam, and to file an amendment to the proposed recreation plan if necessary. Based on consultations with the above-referenced resource agencies, as described below, an amendment to the proposed recreation plan is not required.

#### National Park Service Trail

On pages E-39 through E-40 of the Niagara license application, the foot trail leading from the Blue Ridge Parkway pull-off located just south of the Roanoke River to the riverbank area just downstream of the Niagara project was described as "undesignated." The public has used the south side trail access, which includes a bank fishing area, as a recreation site for many years. This access, which is on NPS property, extends down to the Roanoke River from a Blue Ridge Parkway pull-off and thus is integral to the Parkway system. APCo's position is that maintenance of the trail access, identification of any required improvements or expansion, and implementation of any modifications to the trail access are the responsibility of NPS.

In June 1992, APCo discussed public use of this trail access with the Supervisory Park Ranger of the NPS Roanoke Valley District and learned that the NPS does indeed maintain the trail as a designated public recreation site. The NPS has not identified any need to modify or expand the trail or the bank fishing area, and thus has no plans to do so.

By letter dated September 29, 1992, AEPSC summarized APCo's discussions with the NPS concerning the trail access, and asked for any additional comments on the trail from NPS, VDCR, and the Roanoke County Administrator. On October 16, 1992, representatives of NPS, APCo and AEPSC met at the Niagara site and briefly discussed the trail access. By letter dated October 20, 1992 VDGIF, intervenor in the proceedings, recommended "that APCo and NPS work together to extend the existing improved trail down to the river."

By letter dated November 5, 1992, NPS submitted written comments on the south side trail access. In its comments, NPS states that this trail is the responsibility of the NPS Blue Ridge Parkway to maintain. NPS has no plans to significantly modify the trail, but will continue to maintain it as conditions warrant.

#### North Side Canoe Portage

In Section E 5.4 of the Niagara license application, APCo proposed to construct a canoe portage around the north side of the Niagara impoundment structures, pending the development of a suitable written agreement with Norfolk Southern to utilize a portion of the railroad's right-of-way. APCo is currently reviewing a draft agreement received from Norfolk Southern regarding use of a portion of the railroad right-of-way. It appears that a mutually suitable agreement will be forthcoming.

An assessment of alternative means to portage around the Niagara dam was presented to the NPS, VDCR and the Roanoke County Administrator by letter



dated September 29, 1992, from AEPSC. As compared to a south side portage, the north side portage as proposed would have easier, more level access, would require considerably less land clearing and construction work, and would be of shorter portage distance.

The September 29, 1992, letter from AEPSC also requests that the NPS grant permission for the north side portage put-in to be constructed on NPS land approximately 400 feet downstream of the Niagara powerhouse (Sketch 1 included with the September 29 letter). Alternative construction of the put-in within the Niagara project boundary would require canoeists to re-enter the river within 200 feet of the powerhouse and spillway discharges, and would require more extensive grade work (Sketch 2 included with the September 29 letter). Comments regarding location of the proposed canoe portage and recommendations for take-out and put-in signage were requested from NPS, VDCR and the Roanoke County Administrator.

On October 16, 1992, representatives of NPS, APCo and AEPSC met at the Niagara site and discussed the proposed canoe portage. Attendees agreed that providing portage around the north side is significantly more feasible than doing so on the south side for reasons pointed out in AEPSC's September 29, 1992 letter to the agencies. After visually evaluating the two proposed north side put-in locations, the representatives of NPS agreed that the preferred location is on NPS land near the Blue Ridge Parkway bridge and proposed to draft a memorandum permitting APCo to construct and maintain the portage put-in on NPS

property. APCo agreed to provide NPS with property plats showing the location of the proposed put-in.

By letter dated October 19, 1992, VDCR commented that its preferred location for the proposed canoe portage put-in is the location on NPS property shown in Sketch 1 of the September 29 letter from AEPSC. By letter dated October 20, 1992, VDGIF, intervenors in the proceeding, concurred that the put-in shown on Sketch 1 may provide safer access, but deferred to the recommendations of APCo, NPS, VDCR and the Roanoke County Administrator.

By letter dated November 5, 1992, NPS submitted comments on the proposed north side canoe portage. NPS concurred with APCo's proposal to locate the portage put-in on NPS land, but recommended that the put-in point be located beneath the Blue Ridge Parkway Bridge, further downstream than originally proposed. At this location, rock formations appear to provide suitable access to the river, precluding the need for a gravel put-in pad.

APCo has taken into consideration all comments on the Niagara canoe portage received from the agencies. Concurrence has been reached that the most feasible location for the portage is on the north side. A mutually suitable agreement between APCo and Norfolk Southern for use of a portion of the railroad right-of-way for a portage path appears forthcoming. A copy of the agreement will be submitted to the Commission when consummated.



A revised proposed north side portage path is shown in Sketch 3, which is included with this transmittal. The proposed portage would include a take-out point just upstream of the boat barrier; a portage path which would utilize the existing private access road and, downstream of the Niagara powerhouse, NPS land; and a put-in point beneath the Blue Ridge Parkway Bridge. APCo proposes to assume the estimated \$10,800 capital construction cost and the \$3,026 levelized O&M costs of the portage for the term of the new license.

APCo anticipates that the proposed portage can be completed within two years of issuance of a new license by the Commission, assuming that a suitable agreement is reached with Norfolk Southern. In the license application, it was anticipated that the portage could be completed within one year of license issuance. However, considering time requirements for agreement negotiations, design and construction, two years is a more realistic time frame.

6. Consideration for the Disabled

The north side canoe portage proposed by APCo will utilize the existing private access road as the major portion of the portage path. In constructing the portage, APCo will attempt to minimize disturbance of the natural setting and minimize any adverse impacts to the aesthetic resources of the area. In developing the scope of the portage facilities, the size of the Niagara Hydroelectric Project, both in terms of annual energy production and reservoir surface area, and the relative level of

recreational usage of this stretch of the Roanoke River by canoeists must also be considered.

The existing private access road ranges from relatively flat in some areas to a grade approaching 1:7 along approximately 200 feet near the Niagara powerhouse. At the proposed take-out area, the grade is approximately 1:8. Thus, existing grades along several stretches of the proposed portage path barely meet or exceed the Challenge Level 2 accessibility limits for people with disabilities, as described by the "Design Guide for Accessible Recreation, Interim Draft for Review" by the U.S. Department of the Interior and the U. S. Department of Agriculture, September, 1990. Proximity of the portage to the railroad track and extensive, costly earthwork preclude lowering the accessibility limits of the portage. Given the small size of the Niagara project (both in terms of energy production and reservoir size) and the relatively light canoe use in this area (as discussed in the study titled "Recreation Needs Evaluation: Niagara Hydroelectric Project, No. 2466", prepared for the Niagara license application), the canoe portage facilities proposed by APCo are appropriate for the project.

MK/lsh

A:\RESPONSE

APPALACHIAN POWER COMPANY  
NIAGARA HYDROELECTRIC PROJECT NO. 2466  
APPLICATION FOR LICENSE  
RESPONSE TO FERC  
ADDITIONAL INFORMATION REQUEST  
UNDER SCHEDULE A

NORTH SIDE CANOE PORTAGE & NATIONAL PARK SERVICE TRAIL

1. CONSULTATION CORRESPONDENCE
2. SKETCH OF PROPOSED PORTAGE

APPALACHIAN POWER COMPANY  
NIAGARA HYDROELECTRIC PROJECT NO. 2466  
APPLICATION FOR LICENSE  
RESPONSE TO FERC  
ADDITIONAL INFORMATION REQUEST  
UNDER SCHEDULE A

NORTH SIDE CANOE PORTAGE & NATIONAL PARK SERVICE TRAIL

1. CONSULTATION CORRESPONDENCE



American Electric Power  
Service Corporation  
1 Riverside Plaza  
Columbus, OH 43215  
614 223 1000



Mr. Richard Morefield  
Supervisory Park Ranger  
Roanoke Valley District  
National Park Service  
2551 Mountain View Road  
Vinton, VA 24179

September 29, 1992

Dear Mr. Morefield:

Re: Appalachian Power Company  
Niagara Hydroelectric Project - No. 2466  
Roanoke, Virginia

In connection with the relicensing proceedings for the Niagara Hydroelectric Project, the Federal Energy Regulatory Commission has requested that Appalachian Power Company (APCo) consult with the National Park Service (NPS), the Virginia Department of Conservation and Recreation (VDCR), and the Roanoke County Administrator regarding public use of the trail that extends from the NPS Blue Ridge Parkway pull-off located just south of the Roanoke River to the riverbank area just downstream of the Niagara Project. A copy of the Commission's request is attached for your information.

The Niagara license application describes the trail in question as "undesignated" (Exhibit E, pp. E-39 thru E-40). In June 1992, C. M. (Mike) Thacker of APCo discussed public use of this trail with you and learned that the NPS does indeed maintain this trail as a designated public recreation site, and has done so since 1952.

Mr. Thacker also learned through your discussion that the NPS has no plans to modify the existing trail or to provide additional access to the Roanoke River for recreationalists in this area. However, the NPS would welcome an interpretive sign or exhibit describing the history and structures of the Niagara Project.

Your conversation with Mr. Thacker concerning additional development of the trail and river bank area is consistent with information presented in the Niagara license application. The trail and bank fishing area are on NPS property. Both areas receive regular use by the public and appear to provide sufficient

Mr. Richard Morefield  
September 29, 1992  
Page 2

access to the river. The NPS has not identified any need to expand the trail or bank fishing area.

APCo would welcome the opportunity to coordinate with the NPS in erecting an interpretive sign which provides information about the Niagara Hydroelectric Project. Mike Thacker will be consulting with you regarding the appropriate type, size and location of the sign. Please direct any correspondence or phone calls regarding the sign to him.

The Commission has also requested that APCo consult with the NPS, the VDCR and the Roanoke County Administrator concerning appropriate portage around the Niagara project structures for canoeists. In the Niagara license application, APCo has proposed to provide a canoe portage around the north (Norfolk Southern Railroad) side of the Niagara impoundment structure. The proposed portage path would utilize a portion of the Norfolk Southern Railroad right-of-way, and thus construction of the portage was conditioned on a suitable agreement between APCo and Norfolk Southern (Exhibit E, p. E-41). APCo is currently reviewing a lease proposed by Norfolk Southern for use of a portion of the right-of-way. The preferred location for a portage around the project structure is the north side. As compared to the south side, a north side portage would have easier, more level access, would require considerably less land clearing and construction work; and would be of shorter portage distance.

A portage in the north side of the project structures would utilize an existing graveled maintenance road for a pathway leading to the downstream put-in. Clearing of some existing vegetation, some minor grading and installation of gravel take-out and put-in pads would be required in the construction of the portage. APCo has proposed to assume the estimated \$10,800 capital construction cost and the \$3,026 levelized O&M costs of the portage for the term of the new license.

The portage path, as proposed within the Niagara license application, is shown in Sketch 1. In this proposal, the put-in point would be approximately 400 feet downstream of the Niagara powerhouse and on NPS property. A put-in at this location would allow canoeists to re-enter the river a sufficient distance downstream of project powerhouse discharges and spillway flows, and would require a minimal amount of grade work.

As a less desirable alternative, the put-in could be constructed within the limits of the Niagara project boundary, as shown in Sketch 2. However, canoeists would be required to re-enter the river within approximately 200 feet of the Niagara powerhouse, and

Mr. Richard Morefield

September 29, 1992

Page 3

thus would be considerably closer to turbulent turbine discharges and spillway flows. Construction of a put-in at this location would also require more extensive grading as compared to the put-in shown in Sketch 1 due to the relatively steep embankment in this area.

Given safety considerations associated with distance from the powerhouse and the reduced grading requirements, the preferred portage path is shown in Sketch 1. By this letter, APCo is asking that NPS grant permission for use of this land to construct and maintain a canoe portage path and put-in to be used by the public.

APCo believes that continued NPS maintenance of the trail extending from the Blue Ridge Parkway to the south bank of the Roanoke River coupled with construction of the north side canoe portage will provide adequate public access to the river in the vicinity of the project for the term of a new Niagara license. We are therefore asking that you and those copied below provide to the undersigned any comments you may have on the NPS trail and the proposed canoe portage. In particular, we are interested in comments on the preferred put-in location and recommendations on signage for the portage take-out and put-in. In order to comply with the Commission's schedule for response, we ask that all comments be received by the undersigned within 30 days of the date of this letter. If you should have any questions, please feel free to call (614) 223-2927.

Sincerely,

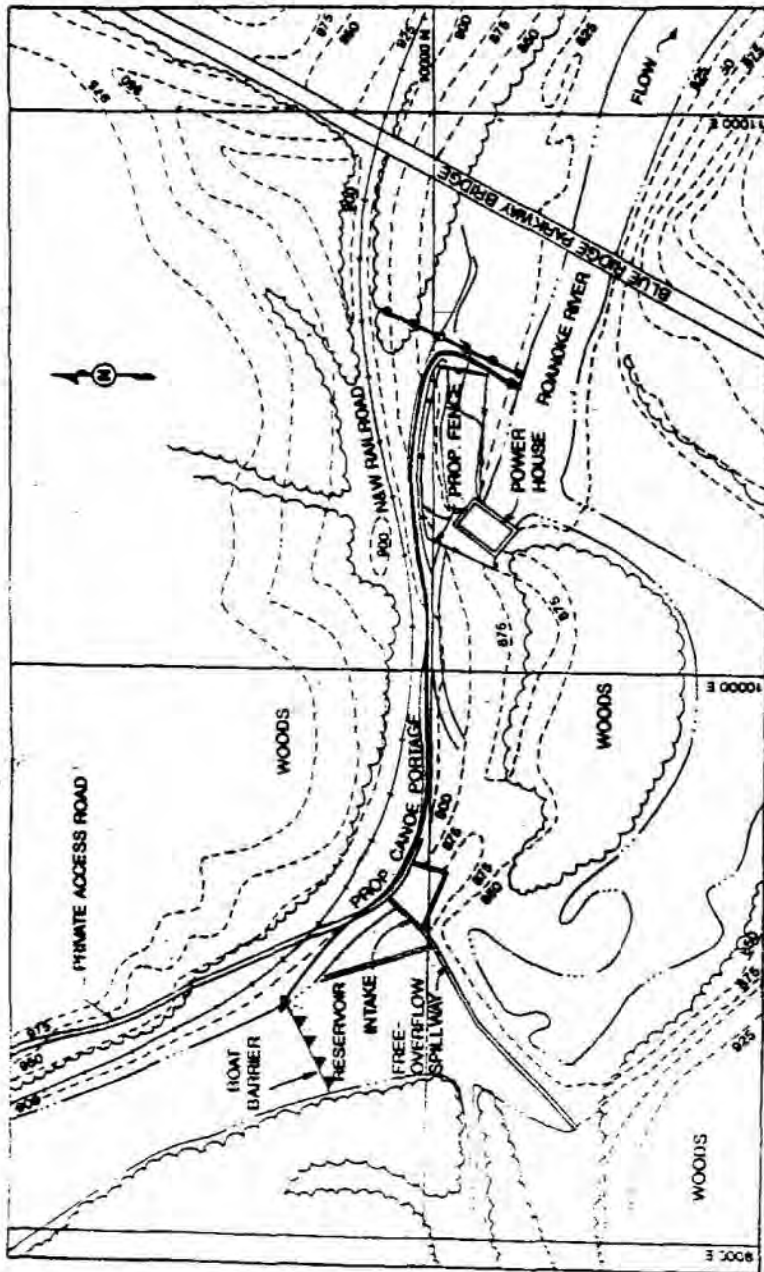
*Mario Karas*

M. Karas  
Civil Engineering

MK/adh  
Attachments

cc: Art Buehler - VDCR  
John Davy - VDCR  
Elmer Hodge - Roanoke County Administrator  
Anthony R. Conte - U.S. Dept. of the Interior  
John Wolflin - U.S. F&W  
Dennis H. Treacy - Commonwealth of Virginia  
Bud Bristow - VDGIF  
Bud LaRoche - VDGIF  
Neal R. Emerald - VWF  
Charles V. Ware - Coastal Canoeists





Approximate Extent Of  
Niagara Project Boundary

0 50 100 200 300 400  
SCALE IN FEET

APPALACHIAN POWER COMPANY  
NIAGARA  
HYDROELECTRIC PROJECT NO. 2406  
VIRGINIA  
PROP. RECREATIONAL FACILITY

Sketch 2





ADMINISTRATION  
NATURAL HERITAGE  
PLANNING AND RECREATION RESOURCES  
SOIL AND WATER CONSERVATION  
STATE PARKS

# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF CONSERVATION AND RECREATION

200 Governor Street

TDD (804) 786-2121

Richmond, Virginia 23219 (804) 786-2121

FAX: (804) 786-6141

October 19, 1992

Maria Karas  
American Electric Power Service Corporation  
1 Riverside Plaza  
Columbus, OH 43215

re: Appalachian Power Company  
Niagara Hydroelectric Project - No. 2466  
Roanoke, Virginia



Dear Ms. Karas:

The Department of Conservation and Recreation (DCR) has reviewed your letter regarding portage alternatives for the subject project. DCR concurs that, should a major portage be built, Sketch 1 is the preferred alternative.

Thank you for the opportunity to comment on this project.

Sincerely,

John R. Davy, Jr.  
Planning Bureau Manager

JRD:ikr

cc: Dick Gibbons



# COMMONWEALTH of VIRGINIA

*Department of Game and Inland Fisheries*

October 20, 1992

Ms. Maria Karas  
American Electric Power Service Corp.  
1 Riverside Plaza  
Columbus, Ohio 43215

Re: Niagara Hydro Project- No. 2466  
Roanoke, Virginia  
ESSLOG - #3121

Dear Ms. Karas:

In response to your request for comments regarding improvement of the existing trail on National Park Service (NPS) property which provides angler access to the Niagara tailrace on the south bank of the Roanoke River, and regarding the proposed canoe portage, we offer the following recommendations. The existing trail down to the tailrace is an unimproved, and potentially unsafe, trail created by recreational visitors which leads from an existing overlook down to the river. Although the trail is located on NPS property, we believe that Appalachian Power Company (APCo) shares responsibility for ensuring safe recreational access to this area. Therefore, we continue to recommend that APCo and NPS work together to extend the existing improved trail down to the river.

We defer to the recommendations of APCo, NPS, the Virginia Department of Conservation and Recreation, and the Roanoke County Administrator regarding the put-in point for the canoe portage. We do, however, concur with your assessment that the downstream site may provide safer access. Thank you for the opportunity to comment on these issues. Please call me if we may be of further assistance.

Sincerely,

Raymond T. Fernald, Manager  
Environmental Services Section

RTF/mbm





IN REPLY REFER TO:

## United States Department of the Interior

NATIONAL PARK SERVICE  
BLUE RIDGE PARKWAY  
ROANOKE RIVER PARKWAY PROJECT OFFICE  
P.O. Box 949 - 814 E. Washington Avenue  
Vinton, Virginia 24179-0949

L1425

November 5, 1992

Ms. Maria Karas  
American Electric Power Service Corp.  
1 Riverside Plaza  
Columbus, Ohio 43215



Dear Ms. Karas:

This is in response to your request for comments regarding proposals being made in connection with relicensing proceedings for Appalachian Power Company's Niagara Hydroelectric Project in Roanoke County, Virginia. We are pleased to offer the following comments:

1. Visual Resource Enhancement - We recommend that the power house building be stripped of old paint (or whitewash) to restore its original poured concrete appearance. The building then should be allowed to return naturally to a pleasing weathered grey color. We do not recommend painting the building since this seems to us would be out of character with its historic appearance.

We concur with your recommendation to paint the 500 foot long corrugated metal penstock with a muddy brown color to blend with the surrounding rock formations. We agree that it would not be appropriate to paint the concrete flume structures but to allow natural weathering process to continue to blend them with the background and older elements of project structures. The time-frame which you have proposed for completion of the visual resource enhancement plan is satisfactory with us.

2. Trail Access from Parkway Overlook to the Riverbank - The "fisherman's" trail leading from the Roanoke River Overlook on the Blue Ridge Parkway down the steep slope to the riverbank was repaired six or seven years ago. We recognize that this trail, located entirely on National Park Service property, is the responsibility of the Blue Ridge Parkway to maintain. We have no plans to significantly modify the trail but we will continue to maintain it as conditions warrant.



3. Interpretive Sign - We appreciate APCo's offer to cooperate with us in placing an informational sign at the overlook telling the story of the Niagara Hydroelectric Project. We will be pleased to continue to consult with Mr. Thacker regarding the sign.

4. Canoe Portage - We concur with the proposal to provide a canoe portage around the Niagara Project structures as was proposed in Niagara's license application shown on Sketch 1. The actual put-in point, however, should be moved a little further downstream to a location beneath the Parkway bridge. A gravel pad probably would not be necessary since existing rock formations appear to provide suitable access to the river. A few small directional signs would be appropriate to mark the portage route.

Since canoe use of the river is a recreation activity available to the general public, no formal agreement or permit is necessary. This letter will provide permission for APCo to construct and maintain a canoe portage path and put-in site for use by the general public on Parkway land.

District Ranger Richard Morefield will be our contact and he will be happy to continue to consult with Mr. Thacker toward accomplishing the objectives for this project.

Sincerely,

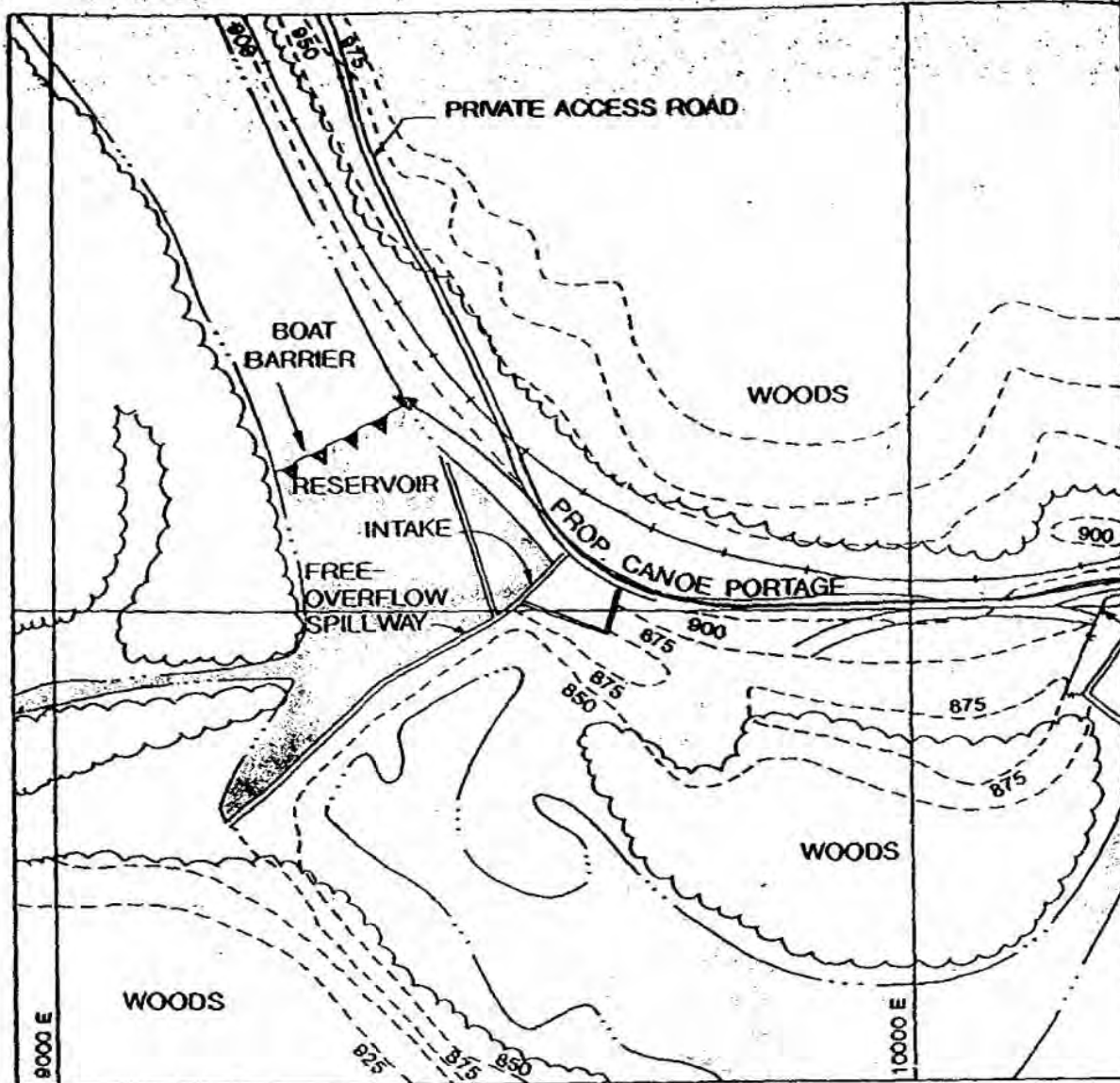


Gary Everhardt  
Superintendent

APPALACHIAN POWER COMPANY  
NIAGARA HYDROELECTRIC PROJECT NO. 2466  
APPLICATION FOR LICENSE  
RESPONSE TO FERC  
ADDITIONAL INFORMATION REQUEST  
UNDER SCHEDULE A

NORTH SIDE CANOE PORTAGE & NATIONAL PARK SERVICE TRAIL  
CONSULTATION CORRESPONDENCE

2. SKETCH OF PROPOSED PORTAGE



**1996 Portage Take-Out and Trail  
Development - FERC License  
Compliance Documentation**

MAR 28 1996

## FEDERAL ENERGY REGULATORY COMMISSION

WASHINGTON, D. C. 20426

Project No. 2466-014--Virginia  
Niagara Hydroelectric Project  
Appalachian Power Company

Mr. James Fariss  
Appalachian Power Company  
P.O. Box 2021  
Roanoke, VA 24022

Dear Mr. Fariss:

On March 11, 1996, you filed photographs of a completed canoe portage as required by article 411 of Order Issuing New License<sup>1</sup> for the Niagara Project, FERC No. 2466.

Article 411 requires you to: (1) implement the canoe portage plan filed on November 19, 1992, and (2) file within two years of the date of the license, documentation including original color photographs showing the plan has been implemented. In your filing you stated the facility has been completed and you filed colored photographs showing the completed path upstream and downstream of the dam along with the appropriate signage.

Your filing fulfills the requirement of article 411. If you have any questions, you may contact Jean Potvin at (202) 219-0022.

Sincerely,



J. Mark Robinson  
Director, Division of Project  
Compliance and Administration

cc: Ms. Maria Karas  
Civil Engineering Division  
American Electric Power  
1 Riverside Plaza  
Columbus, OH 43215-2373

<sup>1</sup> See Order Issuing New License (Major Project), 66 FERC, ¶ 62,185 (1994).

9604300127

FERC, DOCKETED

MAR 28 1996

American Electric Power  
1 Riverside Plaza  
Columbus, OH 43215 2373  
614 223 1000

ORIGINAL

MAR 11 PM 3:07  
FEDERAL ENERGY  
REGULATORY  
COMMISSION



Ms. Lois D. Cashell, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, DC 20426

March 8, 1996

Dear Ms. Cashell:

Re: Appalachian Power Company  
Project No. 2466 - Virginia  
License Article 411 - Canoe Portage Plan  
Documentation of Implementation

Enclosed on behalf of Appalachian Power Company (Appalachian) is an original and eight copies of documentation of implementation of the canoe portage plan required by Article 411 of the Niagara Hydroelectric Project (No. 2466) license. The Commission issued to Appalachian a new license for the Niagara project by order dated March 25, 1994. Article 411 of the Niagara license requires Appalachian to implement its canoe portage plan, filed November 19, 1992, within two years of the issue date of the license and to file with the Commission documentation, including color photographs, showing the plan has been implemented.

Construction of the Niagara canoe portage on the north side of the Roanoke River was completed on February 22, 1996. Enclosed are color photographs showing the recently constructed Niagara portage facilities.

The portage was constructed by the Virginia Department of Game and Inland Fisheries (VDGIF), as part of the Partners in River Access program, a cooperative effort among VDGIF, the Virginia Department of Conservation and Recreation, and Appalachian to develop various recreation sites on the Roanoke, New and James Rivers in the vicinity of several Appalachian hydroelectric projects. The Niagara portage construction consisted primarily of establishing a take-out point upstream of the boat barrier, constructing additional pathways in the areas of the take-out and put-in points, placing of base and crushed stone surface material along the pathways, and installation of portage signs. A suitable put-in point already existed near the Blue Ridge Parkway Bridge. An existing, private graveled maintenance road

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FERC DOCUMENTED  
MAR 11 1996

Ms. Lois D. Cashell, Secretary  
March 8, 1996  
Page 2

connects the take-out and put-in pathways. The take-out and put-in pathways are approximately 8 feet wide. The length of the pathway leading from the take-out to the maintenance road is approximately 175 feet. The length of the pathway connecting the maintenance road and the put-in is approximately 225 feet long. Total length of the portage is approximately 1,600 feet. Portage signs are located at the take-out and at the beginning of the pathway leading to the put-in.

If you should have any questions on this matter, please feel free to contact me at the number listed below.

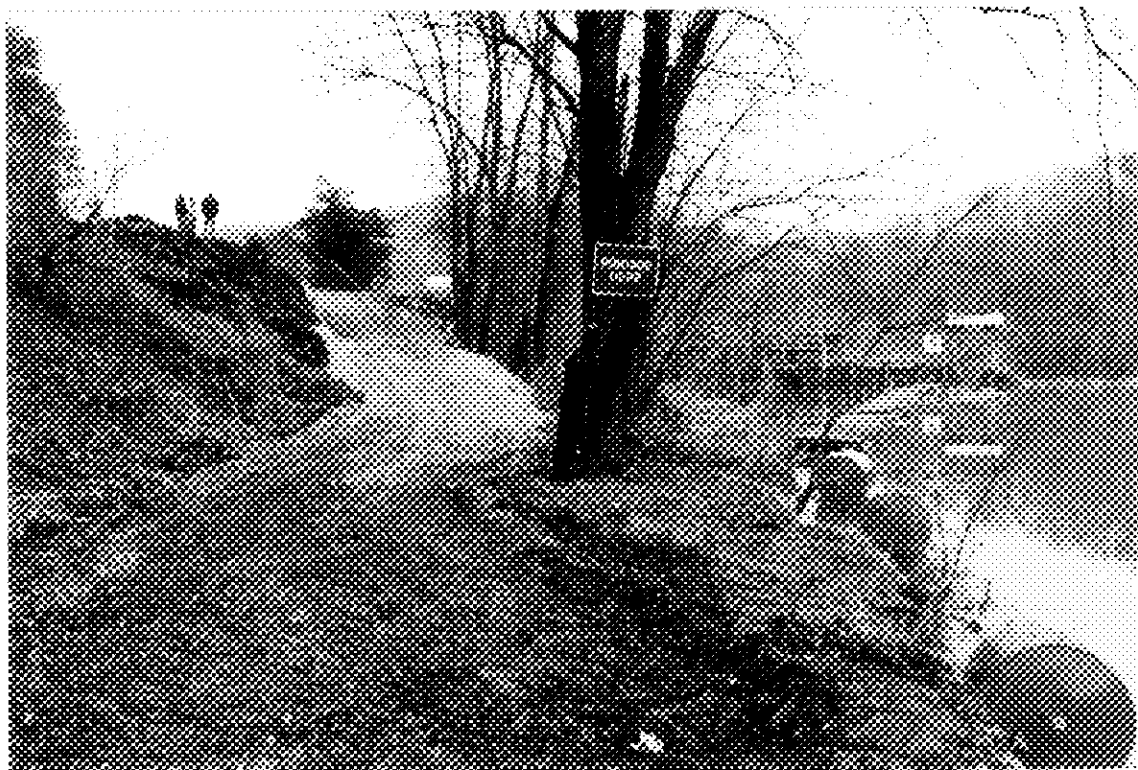
Sincerely,



Maria Karas  
Civil Engineering Division  
(614) 223-2927

cc: J.L. Fariss/C.M. Thacker - AEP  
R. Crisp - ARO  
J.R. Davy - VDCR  
P.D. Lownes- VDGIF  
G. Everhardt - NPS

Appalachian Power Company  
Niagara Hydroelectric Project No. 2466  
Canoe Portage  
Post-Construction Photos



Portage Take-Out Point, Directional Sign, Take-Out Path  
View From Take-Out Point



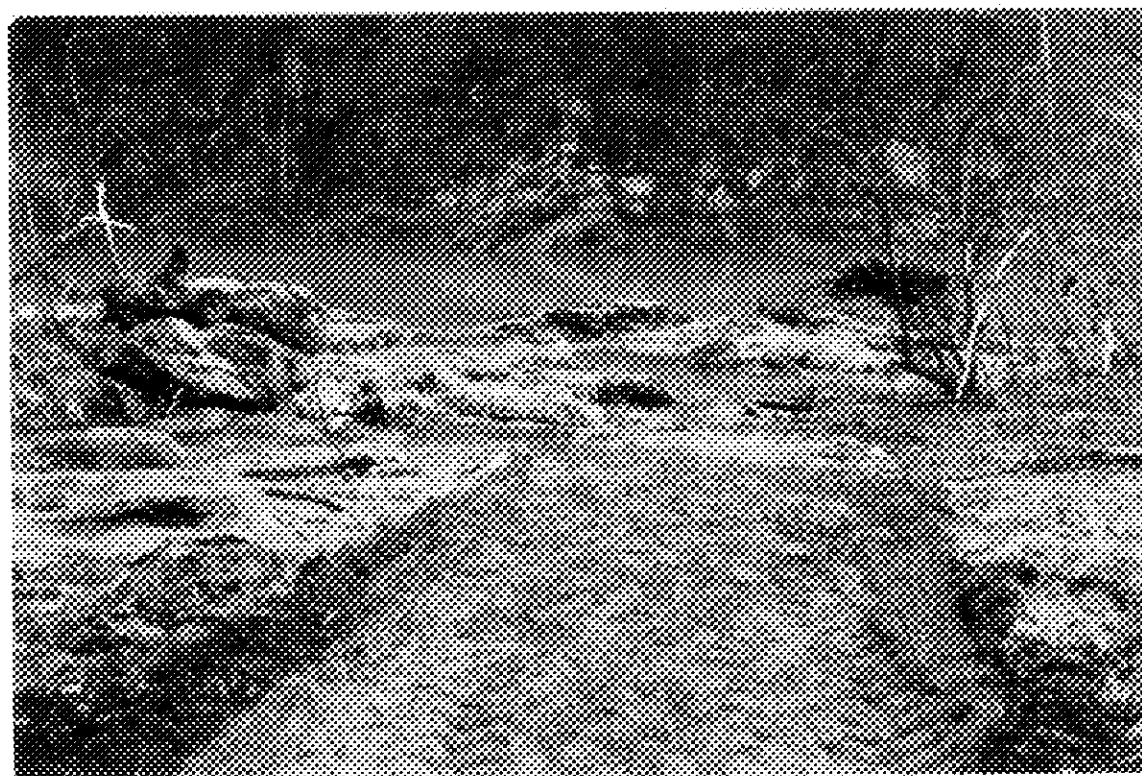
Portage Take-Out Path  
View From Maintenance Road



Appalachian Power company  
Niagara Hydroelectric Project No. 2466  
Canoe Portage  
Post-Construction Photos

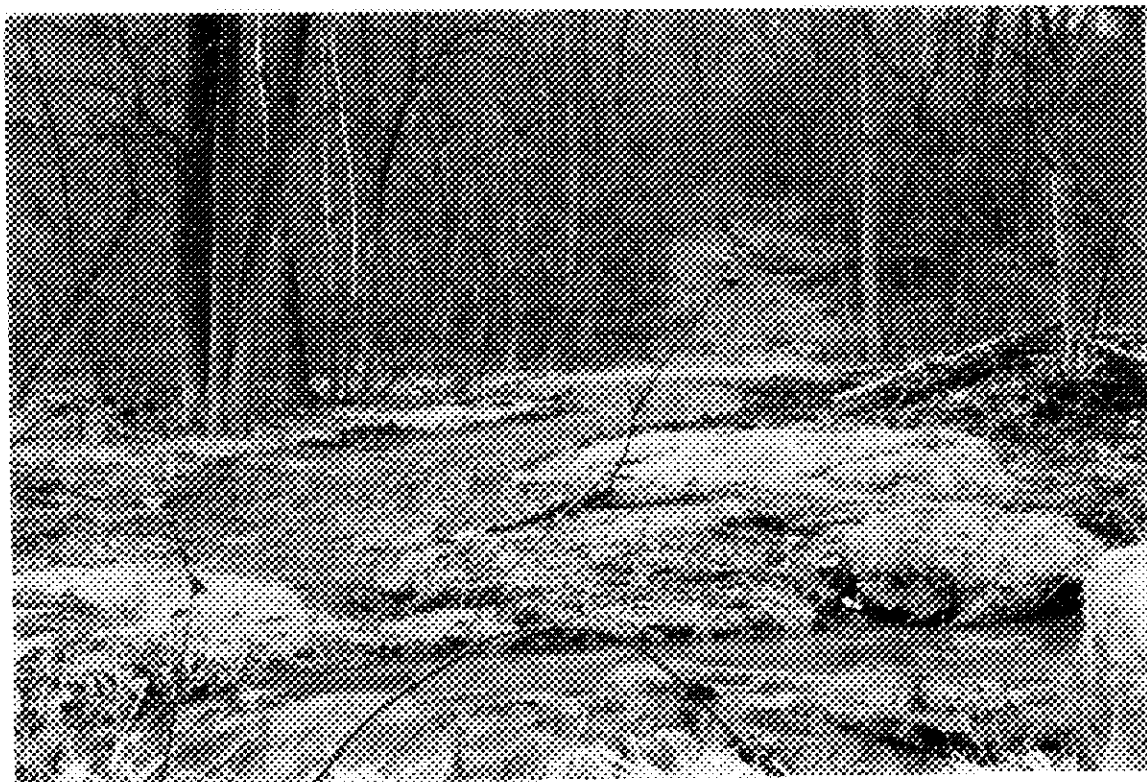


Portage Put-In Path, Directional Sign  
View From Maintenance Road



Portage Put-In Point  
View From Put-In Path

Appalachian Power Company  
Niagara Hydroelectric Project No. 2466  
Canoe Portage  
Post-Construction Photos



Portage Put-In Path  
View From Put-In Point

A decorative graphic on the left side of the page consists of four overlapping rectangles: a large red one in the middle, a grey one above it, a light grey one below it, and a black one to the right of the bottom grey one.

# Attachment 2

Attachment 2 – Land  
Agreements

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**1994 Agreement with Rail Co. for  
Development of Portage Take-Out  
and Use of Trail**



AUGUST, 1991, THIS AGREEMENT, made and entered into this 26<sup>th</sup> day of  
by and between

NORFOLK AND WESTERN RAILWAY COMPANY, a Virginia corporation,  
hereinafter styled Company; and

APPALACHIAN POWER COMPANY, a Virginia corporation, hereinafter  
styled Licensee;

W I T N E S S E T H:

THAT the PARTIES HERETO agree as follows:

ARTICLE 1. Company, insofar as its right, title, and interest enables it  
so to do, and without warranty, and in consideration of the covenants of  
Licensee, hereby grants unto Licensee the right to occupy and use for the  
purpose or purposes hereinafter mentioned:

One parcel of the right of way or property of  
Company at Niagara, Virginia, having an area of  
25,775 square feet, more or less, the location  
and dimensions of which are substantially as  
shown on print of Drawing No. TA-91-0297, dated  
October 14, 1991, hereunto attached and made a  
part hereof (hereinafter "Premises");

Company reserves unto itself, and its permittees, the permanent right to  
maintain, operate, renew, or reconstruct upon, under, or over said Premises,  
any existing pipe, electric transmission, telephone, telegraph, and signal  
lines, or any other facilities of like character. Licensee agrees that its  
occupation and use of the Premises is subject to any or all such rights and  
uses and to such rights as the owners or users thereof may have to use any  
road or highway, or portion thereof, which may be located upon or which may  
traverse said Premises.

ARTICLE 2. Licensee will use said Premises for the purpose of  
constructing, operating and maintaining a public canoe portage and for no  
other purpose without the written consent of Company. This license is a  
personal privilege to Licensee and shall not be assigned without the written  
consent of Company, nor shall Licensee, except with such written consent,  
permit said Premises to be used for any purpose by any other party, firm or  
corporation.

ARTICLE 3. Licensee will pay unto Company as rent the sum of ONE HUNDRED TWENTY AND NO/100 DOLLARS (\$120.00) per annum, payable annually in advance, beginning as of the 26<sup>th</sup> day of AUGUST, 1994, which is the effective date hereof. If Licensee shall default in the payment of rental hereunder for a period of 30 days after the same shall be due, a late payment charge in the amount of 1/2 of 1% of such rent for each month or portion thereof that the same shall remain unpaid shall be charged to Licensee. Licensee will pay such late payment charge together with rental due hereunder. If Company cancels or terminates this agreement for any reason except default of Licensee, Company shall refund to Licensee its pro rata portion of rent paid for the unexpired period, but if Company cancels or terminates because of default of Licensee, then Company may retain the rent paid for the unexpired period as liquidated damages.

ARTICLE 4. Licensee will pay to Company amounts sufficient to cover all taxes, license fees, or other charges assessed or levied upon or because of the property of or the business conducted by Licensee upon said Premises of Company. Licensee will also pay to Company amounts sufficient to cover all assessments or charges made against said Premises or against Company as owner of said Premises for street or sidewalk paving or other public improvements. At the option of Company, Licensee shall pay Company for such taxes, license fees, charges and assessments either in lump-sums or in annual installments.

ARTICLE 5. Licensee will not construct or install upon said Premises any buildings, structures, or improvements unless specifically permitted hereby or by written consent of Company. Any buildings, structures, or improvements erected by Licensee on said Premises, shall be substantially constructed or installed, maintained, and used in such manner as not to interfere with the business of Company, shall be kept in good repair and presentable condition, shall be located as described herein or otherwise approved in writing by Company, and shall not be relocated upon Company Premises except with the written consent of Company. Licensee will be responsible for all snow and ice removal and will keep said Premises in clean and sanitary condition, free of waste, trash, or unsanitary or flammable matter, and prevent the posting of advertising bills or signs upon said Premises, except the usual business sign of Licensee.

ARTICLE 6. Licensee shall obtain all permits, certificates, licenses, and authorizations required by any governmental authority for any improvements to or use of the Premises.

ARTICLE 7. Licensee shall pay, satisfy, and discharge all claims, judgments or liens for material and/or labor, used or employed by Licensee or its agents in the construction, repair, maintenance, or removal of any buildings or structures located upon the Premises, whether the buildings or structures shall, under the terms of this agreement, be the property of Company or Licensee, and Licensee shall indemnify and save harmless Company, its officers, agents and employees, from all such claims, judgments, liens, or

demands whatsoever.

ARTICLE 8. In its use and occupancy of the Premises, Licensee will comply with the requirements of all federal, state, and local safety, health, environmental, and sanitation laws, rules, regulations, and ordinances, and, will at its own expense make all corrections, repairs, or additions to said Premises or the facilities thereon which are necessary to ensure compliance with such laws, rules, regulations, and ordinances. If Licensee is required by any such laws, rules, regulations, and ordinances to obtain insurance or furnish other documentation of financial responsibility, Licensee shall provide evidence of such insurance or documentation to Company prior to occupancy. Any insurance obtained by Licensee pursuant to this agreement shall be maintained in force for the duration of the agreement and shall provide for notice to Company at least 30 days prior to cancellation or termination.

ARTICLE 9. Licensee shall not install any underground tanks or associated underground piping for the storage of any product on the Premises of Company without the express written consent of Company given prior to installation.

ARTICLE 10. Licensee shall not dispose of any wastes of any kind, whether hazardous or not, on said Premises and Licensee shall not conduct any activity on said Premises which may or does require a hazardous waste treatment, storage or disposal facility permit from either the federal or state agencies.

ARTICLE 11. Licensee shall furnish Company with a written report detailing all releases, as defined in 101(22) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (Superfund Act), P. L. 96-510, on or from the Premises whenever such releases are required to be reported to any Federal, State, or local authority in accordance with any Federal, State, or local laws, rules, regulations, and ordinances, and any regulations issued thereunder, including, but not limited to, those laws listed in Exhibit A attached hereto. Such written report shall identify the substance released, the amount released, and the measures undertaken to clean up and remove the released material and any contaminated soil or water, and shall further certify that no contamination remains or will remain after the cleanup measures have been completed. Such reports shall be supplemented by providing the Company with copies of any written reports required to be submitted by Licensee to any Governmental agency in accordance with any Federal, State, or local law, rule, regulation, or ordinance, or by the Council on Environmental Quality's National Oil and Hazardous Substances Pollution Contingency Plan as it now exists or as it may hereafter be amended. The foregoing reports to Company and copies of reports to Governmental agencies shall be sent to Company's Director of Environmental Protection and Emergency Response, c/o Norfolk Southern Corporation, 110 Franklin Road, S.E., Roanoke, Virginia 24042-0022, within fifteen days after notification, whether written or otherwise, is required to be given by Licensee to any such Governmental agency.

ARTICLE 12. (a) If Company detects any violation of Articles 8, 9, 10 and 11, including any contamination of the Premises, Company shall so notify Licensee of the violation and Licensee shall take immediate steps to eliminate such violation. Licensee hereby agrees to indemnify and hold harmless Company, its officers, agents and employees, from all liability resulting from violations of Articles 8, 9, 10 and 11 of this agreement and agrees to reimburse Company for all actual costs and expenses incurred by Company in eliminating such violations, including, but not limited to, all costs and expenses to decontaminate the Premises.

(b) Licensee agrees that it will reimburse Company for and hold harmless Company, its officers, agents and employees, from all fines or penalties made or levied against Company by any Governmental agency or authority as a result of or in connection with Licensee's use of the Premises or of the facilities thereon or as a result of any release of any nature onto the ground or into the water or air by the Licensee from or upon the Premises. Licensee also agrees that it will reimburse Company for and hold Company harmless from any and all costs, expenses, and attorneys' fees and from all penalties or civil judgments incurred, entered, assessed, or levied against Company as a result of Licensee's use of the Premises or as a result of any release of any nature onto the ground or into the water or air by the Licensee from or upon the Premises. Such reimbursement or indemnification shall include but not be limited to any and all judgments or penalties to recover the cost of cleanup of any such release by Licensee from or upon the Premises and all expense incurred by Company as a result of such civil action including but not limited to attorneys' fees.

(c) The provisions of this Article 12 shall apply regardless of acquiescence or negligence or allegations thereof on the part of either party.

(d) The foregoing provisions of this Article 12 shall apply notwithstanding any other provision of this agreement to the contrary.

ARTICLE 13. The liability of the parties to this agreement, as between themselves, for death, personal injury, and property loss and damage which occurs by reason of, or arises out of, or is incidental to, the use or occupancy by Licensee of the Premises covered by this agreement, shall be determined in accordance with the following provisions regardless of considerations of fault or negligence:

(a) Licensee shall be solely responsible for, and shall bear all cost, expense, and liability resulting from, loss of or damage to property by fire;

(b) Licensee shall be solely responsible for, and shall bear all cost, expense, and liability resulting from, death, personal injury, and loss and damage to property caused solely by the acts or omissions of Licensee, or of the agents or employees of Licensee, or by the violation by

Licensee or its agents or employees of any of the terms of this agreement, or by the acts or omissions of Licensee concurring with the negligence of a third party;

(c) Except as provided in subparagraph (a) above, Company shall be solely responsible for, and shall bear all cost, expense, and liability resulting from death, personal injury, and property loss and damage caused solely by the acts of omissions of Company, or of the agents or employees of Company, or by the acts of omissions of Company concurring with the negligence of a third party;

(d) Except as provided in subparagraphs (a) and (b) above, Company and Licensee shall be jointly responsible for and shall bear equally all cost, expense, and liability resulting from death, personal injury, and property loss and damage caused by their joint and concurring acts;

(e) Licensee hereby agrees to indemnify and save harmless Company, its officers, agents and employees, from all of the liabilities and expenses assumed and undertaken by Licensee in this Article 13. Likewise, Company hereby agrees to indemnify and save harmless Licensee, its officers, agents and employees, from all of the liabilities and expenses assumed and undertaken by Company in this Article 13;

(f) Knowledge on the part of Company of a continuing violation of the terms of this agreement by Licensee shall constitute neither an omission nor acquiescence on the part of Company, and shall in no event relieve Licensee of any of the responsibilities imposed upon Licensee hereunder.

ARTICLE 14. (a) In connection with the use of the Premises covered by this agreement, Licensee agrees to observe and be bound by the rules of the Company with respect to standard clearances for all railroad tracks located on or adjacent to the Premises covered by this agreement; that is to say, the Licensee agrees to maintain and preserve an overhead space of 23 feet measured perpendicularly from the top of the rail (except that overhead clearance where wire lines extend over said track shall be such as may be prescribed by the Company) and a space 18 feet in width, measured 9 feet on each side from the centerline of said track; provided, however, that the side clearance of 9 feet must be increased one and one-half (1-1/2) inches for every degree of curvature, which space shall be kept clear of any obstruction whatever, including but not limited to, all structures, facilities, or property of the Licensee which are or may be placed or erected above or parallel to said track.

(b) Notwithstanding anything contained in this agreement, and irrespective of any joint or concurring negligence of Company, Licensee shall assume sole responsibility for and shall indemnify, save harmless, and defend Company, its officers, agents and employees, from and against all claims,



actions, or legal proceedings arising, in whole or in part, from the failure of Licensee to comply with any clearance requirements set forth in this agreement. In this connection, it is specifically understood that knowledge on the part of Company of a violation of any such clearance requirements, whether such knowledge is actual or implied, shall not constitute a waiver and shall not relieve Licensee of its obligations to indemnify Company for losses and claims resulting from any such violation.

ARTICLE 15. In the event that the whole or any part of the Premises occupied by Licensee hereunder shall be taken for any purpose under the power of eminent domain, Licensee shall not be entitled to share in any award resulting from any such taking, nor shall Licensee have any claim against the Company for any expense which may be incurred by Licensee as a result of such taking or as a result of termination of this agreement by reason of such taking, as hereinafter provided. In the event that the taking shall be of the whole of the property herein occupied by Licensee or of such part as shall render said Premises untenable for the uses at such time made of the Premises by the Licensee, then this agreement and all rights and interests acquired hereunder shall terminate as of the date of the vesting of title to the property in the condemning authority, and in no event shall Licensee have any claim for the value of any unexpired period of this agreement.

ARTICLE 16. If Licensee violates any of its covenants in this Agreement contained, Railroad may terminate this Agreement by serving upon Licensee ten (10) days' written notice of its election so to do; provided, however, that unless this Agreement is terminated as a result of a violation of a covenant by Licensee, as aforesaid, this Agreement shall remain in full force and effect subject to termination by Railroad by serving upon Licensee sixty (60) days' written notice of Railroad's election so to do, only upon the occurrence of any one or more of the following events:

- (a) If Licensee discontinues its use of the <sup>Premises</sup> ~~Crossing~~; or
- (b) If the Railroad is required by any governmental authority having jurisdiction in the premises to remove, relocate, reconstruct, or discontinue operation of its railroad at the aforementioned location; or
- (c) If in the judgment of Railroad's Superintendent, the necessities of Railroad require a change in location or elevation of its railroad at the aforementioned location which might effectively prohibit the use of the ~~Crossing~~ <sup>Premises</sup>; or
- (d) If in the judgment of Railroad's Superintendent, the maintenance or use of the ~~Crossing~~ <sup>Premises</sup> unduly interferes with the operation or maintenance of Railroad's facilities, or with the present or future use of said right of way or property by Railroad, its lessees, affiliates, successors or assigns.

Licensee also has the right to terminate this Agreement at anytime hereafter by serving upon Railroad sixty (60) days' written notice of its election so to do. At or before the expiration of this Agreement, Licensee will discontinue use of the crossing and will restore said right of way or property to the condition existing prior to the construction of the crossing thereupon; or, in default thereof, in addition to any other legal remedy it may have, Railroad may close the crossing and restore the condition of said right of way or property at the sole cost and expense of Licensee.

ARTICLE 17. (a) Within sixty (60) days of giving or receiving notice of termination of this agreement, Licensee shall furnish Company with a written certification that the Premises have not been contaminated by Licensee's operations, or if a condition of contamination exists or is believed to exist on any part of the Premises, Licensee shall give written notice of that fact to Company, and Licensee shall promptly eliminate said condition.

(b) Upon the termination of this agreement, for whatever cause, Licensee will vacate the Premises immediately, remove all improvements owned by or placed thereon by Licensee, and leave the Premises, including the subsurface, in as good order and condition as said Premises may have been prior to the use and occupation thereof by Licensee and free from holes, obstructions, debris, wastes, or contamination of any kind.

(c) If Licensee fails to restore the Premises as provided herein prior to the date that Licensee is required to vacate such Premises, then Company may, at its option but at the sole cost and expense of Licensee, remove or arrange to remove all such property, improvements, obstructions, debris, waste, and contamination, and restore or arrange to restore both the surface and the subsurface of the Premises to as good order and condition as said Premises may have been prior to the use and occupation thereof by Licensee. Promptly upon bill rendered by Company, Licensee shall pay to Company the total cost of such removal and restoration, including, but not limited to, the cost of cleaning up and removing any contaminated soil or water.

ARTICLE 18. If Licensee fails to vacate the Premises prior to the date that Licensee is required to vacate such Premises, Company may, in addition to any other legal remedy it may have, re-enter and take possession of said Premises, oust Licensee and all persons holding under Licensee, and restore or arrange to restore the surface and subsurface of the Premises, as described in Article 17 above. Company may also, after reasonable notice to Licensee, take possession of any property and improvements, including structures, if any, left on said Premises by Licensee and dispose of the same by sale or otherwise for the purpose of applying the proceeds against unpaid rental or to other payments due under the terms of this agreement, or for other purposes as hereinafter mentioned. If, in Company's judgment, any property or improvements so left on said Premises by Licensee is contaminated, has no value, or cannot be conveniently sold, Company may dispose of the same without notice to Licensee in such manner as Company may determine to relieve itself

of the burden of caring for such property and improvements, without accountability to Licensee.

ARTICLE 19. In addition to any other rights of entry reserved herein, Company reserves unto itself and its permittees the right to enter upon said Premises at any time for operation, maintenance, reconstruction, repair, or relocation of any building, trackage, or other structures located on said Premises; for inspection of the Premises; for taking whatever corrective actions the Company deems necessary to eliminate any violation of Articles 8, 9, 10 and 11, if, in the Company's judgment, the steps taken by Licensee are inadequate or not timely; and for any other lawful purpose.

ARTICLE 20. It is agreed between the parties that the applicable statute of limitations shall be tolled and shall not begin to run against Company in connection with any controversy or dispute arising under the provisions of Articles 8, 9, 10, 11, 17 and 18 hereof until Company has received actual written notice of noncompliance with the aforementioned articles.

ARTICLE 21. No waiver by Company of any one breach of covenant or default by Licensee shall be construed as a waiver of any other or subsequent breach or default on the part of Licensee. Also, no declaration of termination of this agreement shall be construed to release Licensee from any covenant or obligation as to which Licensee may be in default at the date of such termination.

ARTICLE 22. Licensee agrees to pay all costs and expenses, including, but not limited to, reasonable attorneys' and consultants' fees, incurred by Company in connection with enforcing the performance of any of the provisions of this agreement.

ARTICLE 23. If any provision of this agreement, or the application thereof to any person or circumstances, shall, for any reason and to any extent, be invalid or unenforceable, the remainder of this agreement and the application of such provision to other persons or circumstances shall not be affected thereby but rather shall be enforceable to the fullest extent permitted by law.

ARTICLE 24. Licensee hereby agrees that the indemnities it undertakes in favor of Company, its officers, agents and employees, in this agreement will also apply in favor of the corporate affiliates of Company and to their respective officers, agents and employees as fully as if they were specified as indemnitees herein.

ARTICLE 25. Any notice required or permitted to be delivered hereunder shall be deemed to be delivered, when deposited in the United States Postal Service, postage prepaid, registered or certified mail, return receipt requested, addressed to Company or Licensee, as the case may be, at the address set forth below.

Company:

Director  
Real Estate and Contract Services  
Norfolk Southern Corporation  
185 Spring Street, S.W.  
Atlanta, Georgia 30303

Licensee:

R. W. Staton, Superintendent  
Real Estate and Right of Way  
Appalachian Power Company  
P. O. Box 2021  
Roanoke, Virginia 24022-2121

ARTICLE 26. Licensee shall under no circumstances block or barricade the public road shown on said Drawing No. TA-91-0297.


ARTICLE 27. The protection afforded Company under the provisions of Article 13 shall extend to include patrons and invitees of Licensee and Licensee agrees to protect and hold Company harmless from loss, injury or damage as set out in said Article 13 accruing from acts, negligence or default of such patrons and invitees or the presence of their property upon the Premises of Company including damage to such property from railroad operations.

IN WITNESS WHEREOF, the parties hereto have executed this agreement in duplicate, each part being an original, as of the date hereinabove first recited.

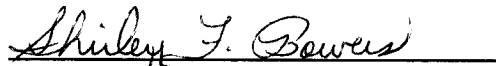
In presence of:

  
As to Company

NORFOLK AND WESTERN RAILWAY COMPANY,

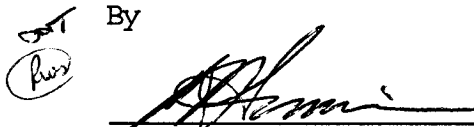
By   
Real Estate Manager

In presence of:

  
As to Licensee

APPALACHIAN POWER COMPANY,

By

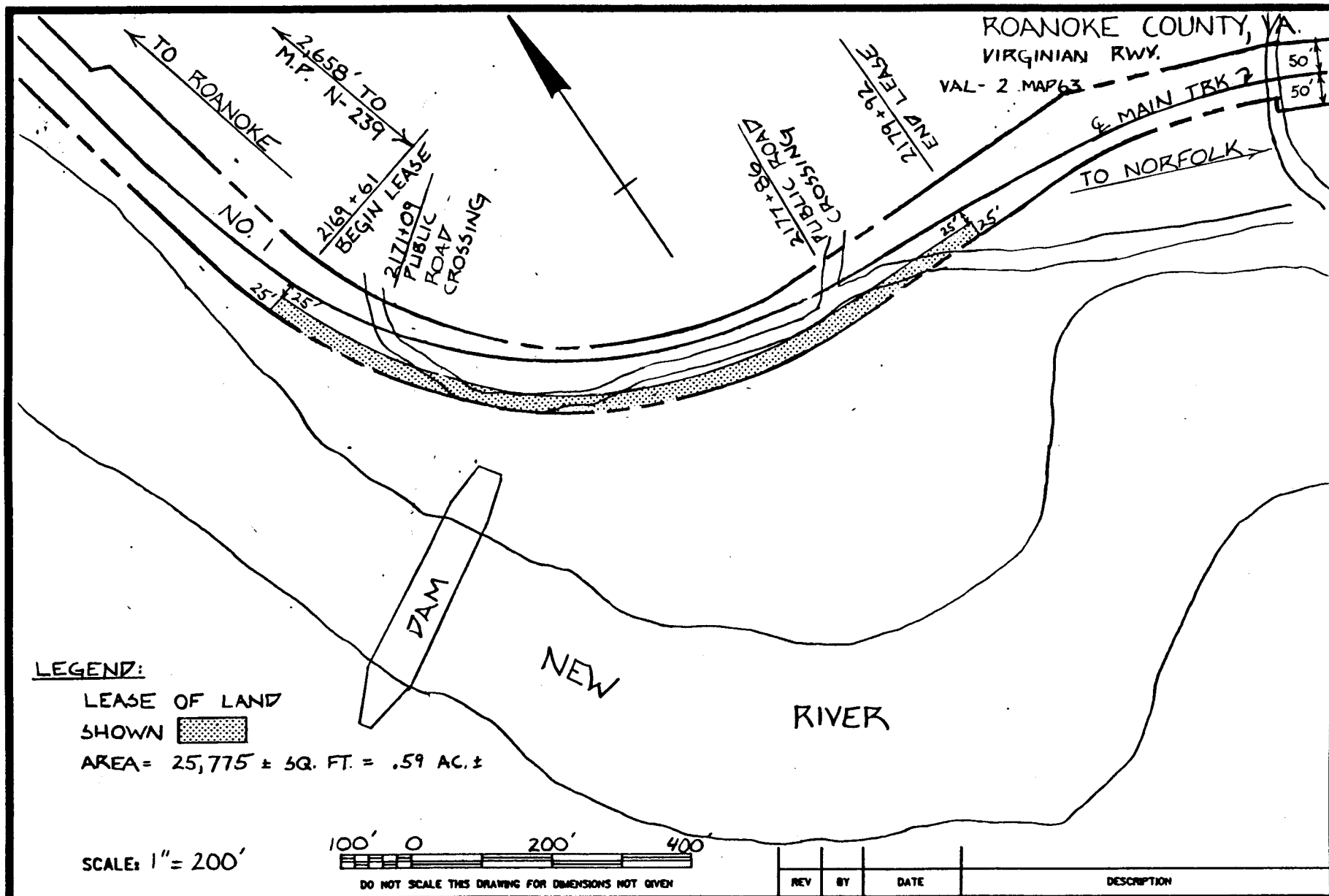
  
Vice President

KMC:fcw  
2-17-94  
84748a.STL

EXHIBIT A

1. Federal Water Pollution Control Act (Clean Water Act), 33 U.S.C. 125 et seq.
2. Air Pollution Prevention and Control Act (Clean Air Act), 42 U.S.C. 7401 et seq.
3. Resource Conservation and Recovery Act of 1976, 42 U.S.C. 6901 et seq.
4. Comprehensive Environmental Response, Compensation and Liability Act of 1980 (Superfund Act) PL 96-510.
5. The Rivers and Harbors Act of 1899 (The Refuse Act), 33 U.S.C. 401-413.
6. Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. 136 et seq.
7. Toxic Substances Control Act, 15 U.S.C. 2601 et seq.
8. Hazardous and Solid Waste Amendments of 1984, P.L. 98-616, including but not limited to Title VI (relating to underground storage tanks); codified as Subtitle I of the Resource Conservation and Recovery Act.
9. Superfund Amendments and Reauthorization Act of 1986, P.L. No. 99-499.
10. Emergency Planning and Community Right-to-Know Act of 1986, P.L. No. 99-499.

This is not intended to be a comprehensive list of federal statutes but is illustrative only.



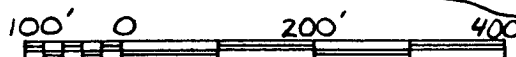
**LEGEND:**

LEASE OF LAND

SHOWN 

AREA = 25,775 ± SQ. FT. = .59 AC. ±

SCALE: 1" = 200'



DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN



NORFOLK AND WESTERN R.WY.

OWNING COMPANY

VIRGINIA DIVISION

OFFICE OF CHIEF ENGINEER - DESIGN & CONSTRUCTION ATLANTA, GA.

REV	BY	DATE	DESCRIPTION
LOCATION NIAGRA, VA.			
TITLE LEASE OF LAND TO APPALACHIAN POWER CO.			
DGN	VAL SEC 2	MAP 63	MILE POST V-238.5
OWN MDS	FILE 109-9277	DRAWING NUMBER	
CHK ALC	DATE 10/14/91	TA-91-0297	

CADD FILE

FIELD BOOK

SHEET 1 OF 1



**1957 Deed of Downstream Parcel to  
Commonwealth of Virginia**

2482  
THIS DEED made and entered into this the 9<sup>th</sup> day of July, 1957,

by and between APPALACHIAN ELECTRIC POWER COMPANY, a Virginia corporation, party of the first part, and COMMONWEALTH OF VIRGINIA, acting pursuant to Chapter 163 of the Acts of the General Assembly of 1936, as amended by Chapter 389 of the Acts of the General Assembly of 1938, party of the second part,

W-I-T-N-E-S-S-E-T-H :

That for and in consideration of the sum of TEN (\$10.00) DOLLARS cash in hand paid by the party of the second part unto the party of the first part, and other good and valuable considerations, the receipt of all of which is hereby acknowledged, the said party of the first part doth hereby grant and convey unto the party of the second part, with Special Warranty of Title, all those three (3) certain parcels of land, situate in Big Lick Magisterial District, Roanoke County, Virginia, together with all rights and easements of access incident thereto, excepting, and not including, however, certain rights and privileges expressly reserved in, by and to Appalachian Electric Power Company, its successors or assigns, as set forth hereinafter in paragraphs numbered 1, 2, 3 and 4, which parcels of land are more particularly described as follows:

PARCEL 1 - Map on Sheet 18

Beginning at the corner common to the lands of Appalachian Electric Power Company, the lands of Muse estate and the lands acquired by the Commonwealth of Virginia from the said Muse estate for the Blue Ridge Parkway, which corner is marked by a concrete monument located S. 80 deg. 14 min. 00 sec. E. (Parkway bearing) = S. 77 deg. 25 min. 00 sec. E., 1065.4 feet (Appalachian Electric Power Company bearing and distance) along the boundary line between the said lands of Appalachian Electric Power Company and the said lands of Muse estate from another property corner marked by a concrete monument; thence with the said lands acquired by the Commonwealth of Virginia and the said lands of Appalachian Electric Power Company S. 80 deg. 14 min. 00 sec. E., 166.61 feet to a corner in the lands also acquired by the Commonwealth of Virginia from Craig for said Parkway; thence with the last named lands and the lands of Appalachian Electric Power Company: (1) S. 7 deg. 13 min. 00 sec. E., 80.0 feet; (2) S. 51 deg. 32 min. 00 sec. W., 129.3 feet; (3) S. 6 deg. 03 min. 00 sec. W., 164.3 feet, and (4) S. 40 deg. 58 min. 15 sec. W., 69.63 feet to a corner in the North right of way line of Virginian Railway Company, which corner is marked by a concrete monument; thence with said right of way line S. 86 deg. 24 min. 00 sec. W., 156.17 feet to a point marked by an iron pin in the West boundary of said Parkway; thence with said West boundary, which is a new line through the said lands of Appalachian Electric Power Company, N. 19 deg. 24 min. 45 sec. E., 438.4 feet to the place of BEGINNING; and containing 1.55 acres, more or less.

mailed to  
Maine Co. Sec.  
and ally Gen.  
Richmond, VT  
8/19/57



PARCEL 2 - Maps or Sheets 18 and 19

Beginning at a point in the South right of way line of Virginian Railway Company, in the East boundary of the Blue Ridge Parkway, and common to a corner in Parcel 3 of the lands hereinafter described; thence with the said East boundary, which is a new line through the lands of Appalachian Electric Power Company, S. 20 deg. 55 min. 45 sec. W., 363.28 feet to a corner in the said lands of Appalachian Electric Power Company and the lands now or formerly owned by Thomas; also common to said Parcel 3, and in or near the center of Roanoke River; thence with the said lands of Appalachian Electric Power Company and the said lands now or formerly owned by Thomas S. 20 deg. 55 min. 45 sec. W., 213.62 feet to a corner in the lands acquired by the Commonwealth of Virginia from the said Thomas for the said Parkway; thence with the last named lands: (1) N. 51 deg. 04 min. 45 sec. W., 428.29 feet and (2) S. 25 deg. 24 min. 45 sec. E., 352.0 feet to a corner in the lands acquired by the Commonwealth of Virginia from Pentecost for said Parkway; thence with the last named lands and the said lands of Appalachian Electric Power Company: (1) N. 66 deg. 38 min. 45 sec. W., 124.5 feet; (2) N. 43 deg. 30 min. 45 sec. W., 482.6 feet; (3) N. 80 deg. 38 min. 15 sec. W., 116.0 feet; (4) S. 66 deg. 36 min. 45 sec. W., 304.0 feet, crossing Parkway centerline at 267.88 feet at Station 474+01.77; (5) S. 44 deg. 21 min. 45 sec. W., 342.0 feet; (6) S. 23 deg. 06 min. 45 sec. W., 535.29 feet; (7) N. 66 deg. 39 min. 15 sec. W., 50.0 feet, and (8) N. 10 deg. 40 min. 15 sec. W., 542.68 feet to a point in the West boundary of said Parkway, which point is located S. 10 deg. 40 min. 15 sec. E., 32.33 feet, along the boundary line between the said lands of Appalachian Electric Power Company and the lands now or formerly owned by the said Pentecost from a property corner marked by a concrete monument; thence with the said West boundary, which are new lines through the said lands of Appalachian Electric Power Company: (1) N. 47 deg. 24 min. 15 sec. E., 245.13 feet; (2) N. 20 deg. 39 min. 45 sec. E., 42.79 feet; (3) N. 29 deg. 50 min. 00 sec. E., 76.0 feet; (4) N. 44 deg. 40 min. 00 sec. E., 64.0 feet; (5) N. 59 deg. 10 min. 00 sec. E., 96.0 feet; (6) N. 43 deg. 30 min. 00 sec. E., 71.0 feet; (7) N. 19 deg. 45 min. 00 sec. E., 63.0 feet; (8) N. 8 deg. 13 min. 00 sec. E., 34.0 feet; (9) N. 37 deg. 15 min. 00 sec. E., 36.0 feet; (10) S. 89 deg. 50 min. 00 sec. E., 64.0 feet and (11) N. 19 deg. 24 min. 45 sec. E., crossing Roanoke River, 397.25 feet to a point in the said South right of way line; thence with the said South right of way line, having tangents and/or chords of the following bearings and lengths: (1) N. 88 deg. 27 min. 00 sec. E., 175.48 feet; (2) S. 4 deg. 59 min. 00 sec. W., 30.0 feet; (3) S. 78 deg. 20 min. 00 sec. E., 295.49 feet, crossing said centerline at 99.14 feet at Station 466+69.7; (4) S. 65 deg. 25 min. 00 sec. E., 239.03 feet, and (5) S. 62 deg. 26 min. 00 sec. E., 552.4 feet to the place of BEGINNING; and containing 23.59 acres, more or less, of which 0.44 acre, more or less, is between the said West boundary as revised and the original West boundary.

PARCEL 3 - Map or Sheet 18

Beginning at a point in the South right of way line of Virginian Railway Company, in the West Parkway boundary, and common to a corner in Parcel 2 of the lands previously described; thence with the lands of Appalachian Electric Power Company and the said South right of way line, having tangents and/or chords of the following bearings and lengths: (1) S. 62 deg. 21 min. 30 sec. E., 1070.16 feet; (2) S. 63 deg. 37 min. 30 sec. E., 203.27 feet; (3) S. 69 deg. 51 min. 30 sec. E., 206.22 feet; (4) S. 77 deg. 51 min. 30 sec. E., 206.95 feet, and (5) S. 85 deg. 45 min. 30 sec. E., 203.85 feet to a corner in the lands acquired by the Commonwealth of Virginia from Fluke for the said Parkway; thence with the last named lands and the said lands of Appalachian Electric Power Company S. 3 deg. 03 min. 00 sec. E., 434.84 feet to a corner in the lands now or formerly owned by Thomas, in or near the center of Roanoke River; thence with the said lands now or formerly owned by Thomas and the said lands of Appalachian Electric Power Company, and in or



near the center of Roanoke River: (1) N. 84 deg. 17 min. 00 sec. W., 174.73 feet; (2) S. 89 deg. 18 min. 00 sec. W., 249.86 feet; (3) N. 80 deg. 09 min. 00 sec. W., 289.51 feet; (4) N. 62 deg. 04 min. 30 sec. W., 240.28 feet; (5) N. 51 deg. 40 min. 00 sec. W., 378.92 feet; (6) N. 58 deg. 39 min. 00 sec. W., 298.83 feet; (7) N. 53 deg. 30 min. 00 sec. W., 187.37 feet, and (8) N. 62 deg. 37 min. 00 sec. W., 295.1 feet to a point in said West boundary, a corner common to said Parcel 2; thence with said West boundary, and common to said Parcel 2, N. 20 deg. 55 min. 45 sec. E., 363.28 feet to the place of BEGINNING; and containing 19.43 acres, more or less.

The above described Parcels 1, 2 and 3 contain 44.57 acres, more or less, and are shown on Maps or Sheets 18 and 19 of the land maps of that section of the Blue Ridge Parkway, identified as Route 48, Project 1093 M (1-M), on file in the Central Office of the Department of Highways, at Richmond, Virginia, copies of which are to be recorded by the party of the second part in the Clerk's Office of the Circuit Court of Roanoke County, Virginia, in the Blue Ridge Parkway Plat Book.

The following rights and privileges are hereby reserved in, by and to the party of the first part, its successors and assigns, and the same are expressly excepted from this conveyance, which rights and privileges are as follows, the specified elevations being in terms of U. S. Geological Survey datum:

1. All riparian rights in and to the Roanoke-Staunton River within the limits of the aforesaid lands being acquired from the Appalachian Electric Power Company by the Commonwealth of Virginia, including specifically the right to vary the flow in that river in accordance with the variations in operation of, and the outflow from, the Niagara hydro-electric power station of the Company, located immediately upstream from the said lands being acquired by the Commonwealth, whether as at present constructed and operated or in any modified form of such construction or operation.

2. The right to raise and maintain the level of the water in the Roanoke River so as to overflow part of the aforesaid lands being acquired by the Commonwealth, namely, by means of the construction of a dam located in and across Roanoke River at some point downstream from the said lands being acquired, the maximum height of such raised water level not to be in excess of 900.0 feet above mean sea level.

3. The alternative right to lower the tailwater of the Company's said Niagara power station by means of deepening, by excavation, the bed of the Roanoke River within the limits of the aforesaid lands being acquired by the Commonwealth, it being understood that, up to elevation 900.0 feet above mean sea level, no portion of any bridge or other structure, which the Commonwealth



or any successors may construct across, over or along the said lands being acquired, will be located within the limits of any land the surface of which is now below elevation 835.0 feet above mean sea level, provided that such deepening shall not be such as will lower the minimum operating tailwater at said station by more than 8 feet below elevation 823.0 feet, provided further that, whether or not the Company at any time avails itself of the right under this paragraph, it may at any time hereafter, at its sole discretion, avail itself of the right reserved under the preceding paragraph numbered 2 hereof.

4. Unlimited right of entry and access to, from and across such part of the aforesaid lands being acquired by the Commonwealth as is now below elevation 850.0 feet for the personnel and vehicles or other equipment of the Company and its agents for any purpose in connection with construction work, maintenance or operation relating to the Company's said Niagara power development; also the right to deposit on such part of the said lands being acquired any materials which the Company may excavate from the bed of the river pursuant to its right under the preceding paragraph numbered 3 hereof.

The undersigned officers of the Appalachian Electric Power Company have been duly authorized to execute this conveyance for and on behalf of said Corporation, by proper Resolution of the Board of Directors of the Appalachian Electric Power Company, passed on the 25<sup>th</sup> day of APRIL, 1957.

WITNESS the signature of the Appalachian Electric Power Company, a Virginia Corporation, by G. L. Furr, Vice President and General Manager, with its Corporate Seal duly attached and attested by W. F. Keehne, its Assistant Secretary.

APPALACHIAN ELECTRIC POWER COMPANY

By G. L. Furr  
Vice-President and General Manager

ATTEST:

W. F. Keehne  
Assistant Secretary





STATE OF VIRGINIA }  
CITY OF ROANOKE }

To-wit:

I, Elizabeth J. Brown, a Notary Public in and for the City of Roanoke, in the State of Virginia, do hereby certify that G. L. Furr, Vice President and General Manager, of Appalachian Electric Power Company, whose name, as such, is signed to the foregoing deed, bearing date on the 9<sup>th</sup> day of JULY, 1957, has personally appeared before me in my City and State and acknowledged the same; and I do further certify that W. F. Keehns, Assistant Secretary of Appalachian Electric Power Company, likewise acknowledged that he had attached and attested the Corporate Seal of said Company to said deed.

GIVEN under my hand and notarial seal  
this 9<sup>th</sup> day of July, 1957.  
My commission expires Feb. 22, 1960

Elizabeth J. Brown  
Notary Public

Plat \$ \_\_\_\_\_  
Tax \$ \_\_\_\_\_  
Fee \$ 5.50  
Transfer \$ \_\_\_\_\_  
Total \$ 5.50

In the Clerk's Office of the Circuit Court for the County of Roanoke, Va., this 10 day of July, 1957 this deed was presented, and with the Certificate of acknowledgment thereto annexed, admitted to record at 11:15 o'clock A. M. having attached thereto duly cancelled United States Internal Revenue Stamps of the value of \$2.50

Teste: Ray K. Brown Clerk

#2483

THIS DEED made and entered into this the 8th day of July, 1957, by and between EDGAR F. JAMISON and MATTIE J. JAMISON, his wife, and RAYMOND F. STANLEY, unmarried, parties of the first part, and THE PUBLIC, party of the second part.

## WITNESSETH:

That for and in consideration of the sum of Five (\$5.00) Dollars cash in hand paid to the parties of the first part, the receipt of which is hereby acknowledged, the parties of the first part do hereby GRANT, BARGAIN, SELL and CONVEY unto the party of the second part, its successors or assigns, with Covenants of Special Warranty of Title, all of their right, title and interest of every kind and nature in and to that certain roadway in the following described property, known and described as follows,  
to-wit:



Said property known and designated as Orchard Hill Road, situated in Lee Hi Park in Roanoke County, Virginia, and extending from Virginia Secondary Highway Route No. 683 in a southeasterly direction to the property of Lawrence F. Hubbard.

TO HAVE AND TO HOLD unto the party of the second part its successors or assigns.

WITNESS the following signatures and seals.

Edgar F. Jamison (SEAL)  
Edgar F. Jamison

Mattie J. Jamison (SEAL)  
Mattie J. Jamison

Raymond F. Stanley (SEAL)  
Raymond F. Stanley

STATE OF VIRGINIA *at Large*

CITY OF ROANOKE, to-wit:

I, James R. Merrill, a Notary Public in and for the City of Roanoke, State of Virginia, *at Large*, do hereby certify that Edgar F. Jamison and Mattie J. Jamison, and Raymond F. Stanley,

unmarried, whose names are signed to the foregoing deed bearing date of July 8, 1957, have this day personally appeared before me in my City and State aforesaid, and acknowledged the same.

Given under my hand this 9<sup>th</sup> day of July, 1957.

My commission expires 31 July 1960.

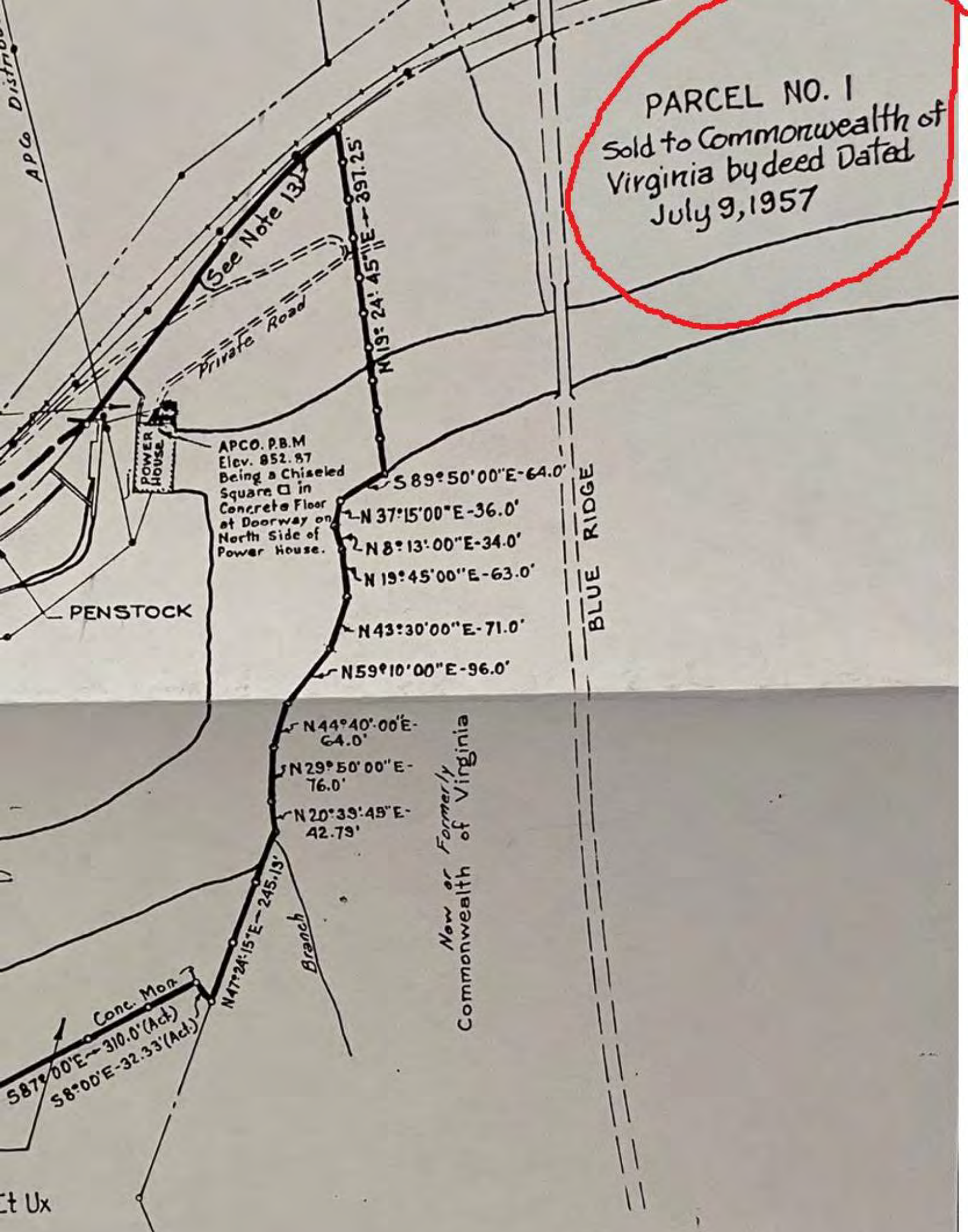
James R. Merrill  
Notary Public

Not \$ \_\_\_\_\_  
Tax \$ 1.15  
Fee \$ 3.00  
Transfer \$ \_\_\_\_\_  
Total \$ 3.15

In the Office of the Clerk of the Circuit Court for the County of Roanoke, Va, this 10 day of July, 1957, this deed was presented. And with the Certificate of acknowledgment thereto annexed, admitted to record at 11:30 o'clock A. M.

Wests: Ray K. Brown Clerk





THIS DRAWING, EXHIBIT G, IS PART OF THE APPLICATION FOR LICENSE MADE BY APPALACHIAN POWER COMPANY.

BY

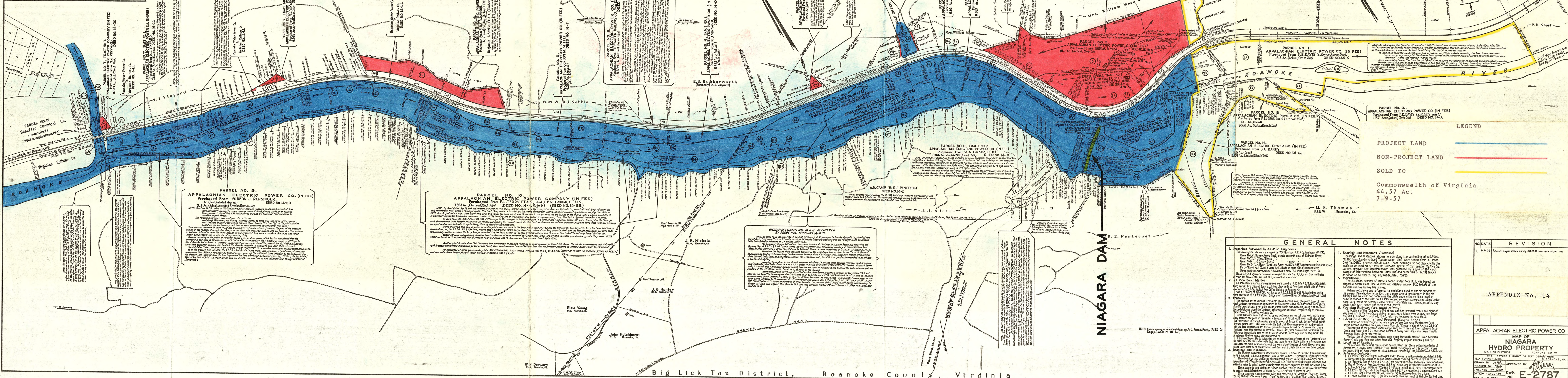
DATE

11/4/01



[illegible]

SUMMARY	
AREA OF LAND NOW OWNED BY A.E.P. CO., "IN FEE"	121.478 Ac.
AREA OF LAND NOW OWNED BY A.E.P. CO., "FLOW RTS."	0.894 Ac.
TOTAL AREA NOW BELOW WATER = 73.65 AC.	



NO. DATE		REVISION	
1	5-7-44	Revised as per check survey of 12-10-42 made in vicinity of dam	
APPENDIX No. 14			
APPALACHIAN ELECTRIC POWER CO.			
MAP OF			
NIAGARA			
HYDRO PROPERTY			
BIG LICK DISTRICT                      FURNACE CO. VA.			
REAL ESTATE & RIGHT OF WAY DEPARTMENT			
K. A. TURNER, MGR.                      K. A. TURNER, MGR.			
DRAWN BY <i>J. G. H.</i>			
TRACED BY <i>J. G. H.</i>			
CHECKED BY <i>J. G. H.</i>			
DATED - 12-20-39			
D.W.B.			
E-2787			

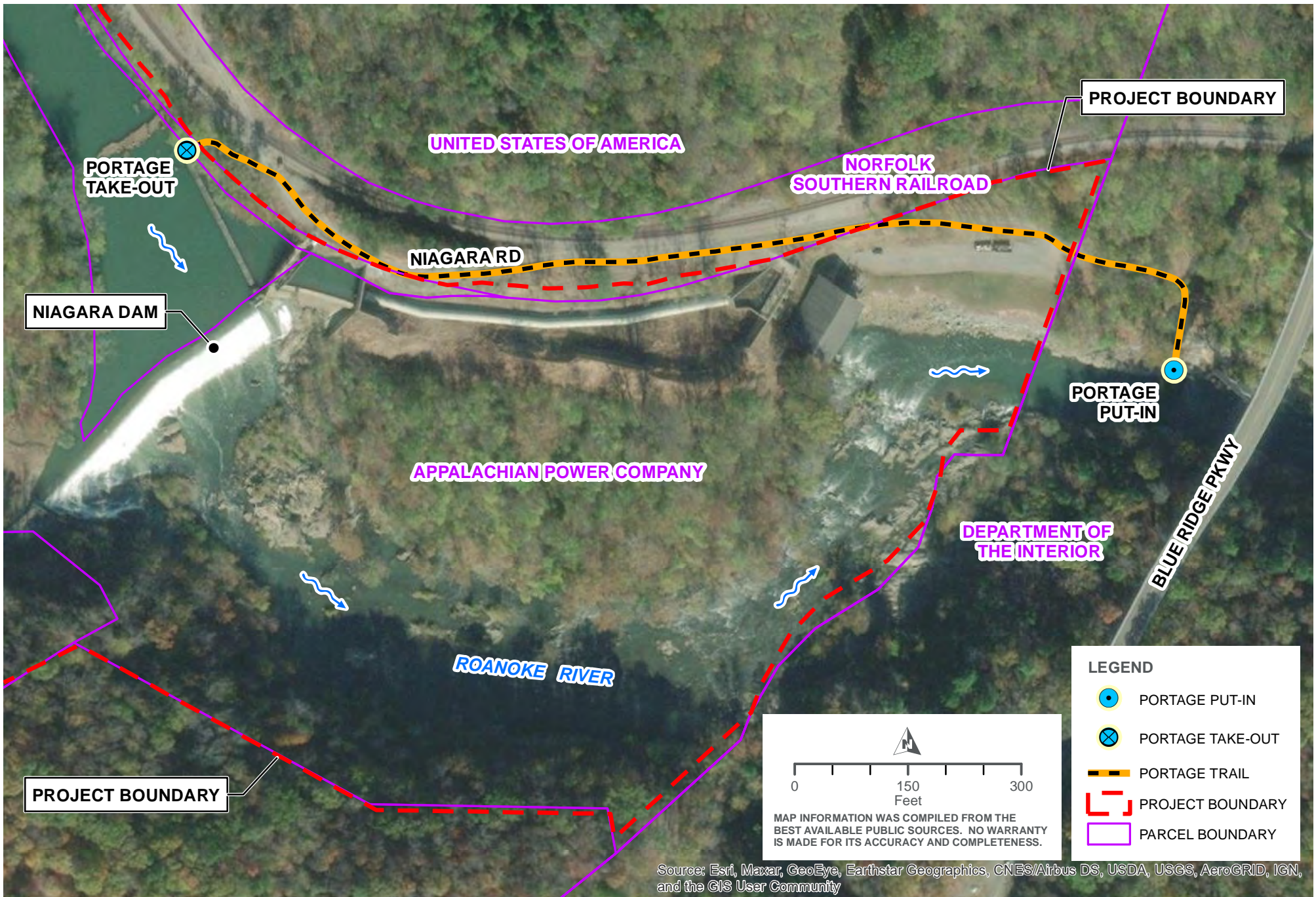


A decorative graphic consisting of several overlapping rectangles. A large red rectangle is on the left. A dark grey rectangle is at the top right. A light grey rectangle is at the bottom left. A black rectangle is at the bottom right. The text is positioned to the right of the red rectangle.

# Attachment 3

Attachment 3 – Niagara  
Portage Map

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## NIAGARA PORTAGE AND LAND OWNERSHIP

### NIAGARA HYDROELECTRIC PROJECT (FERC NO. 2466)

ROANOKE COUNTY, VIRGINIA