Let It Go, LLC

Jefferson Mill Hydroelectric Project

Table of Contents

List of Appendices

Appendices C to I are submitted separately as supplemental documents to the application.

PROJECT PROPOSAL

A. Introduction

The proposed Jefferson Mill Hydroelectric Project is a 20 kW repowering of a historic mill on the Hardware River in Scottsville, VA. The original structure was built in 1800 as a flour mill. The proposed project will be constructed by Natel Energy, Inc., on behalf of the property owners.

B. Existing facilities

The Jefferson Mill building was built around 1800 and is a brick structure supported by wooden beams. The mill was a working mill until 1945. The original water wheel was set in a chamber adjacent to the mill. It was later replaced by three small vertical turbines. Those turbines were later removed.

Fig. 1: The historic mill building with the dam on the bottom right corner.

The existing dam is a 140 ft long and 9 ft high masonry structure, with a crest width between 4 and 5 feet. The powerhouse consists of a single, narrow chamber, built against the outer wall of the Mill building. The millrace has been filled in and is no longer in use.

Based on survey data, the dam controls a 0.7 mile long section of the Hardware River, the primary source of water for the project. The impoundment has a surface area of 4.53 acres, storage capacity of 16.3 acre-feet and a normal water surface elevation of 320 feet above mean sea level (MSL).

All entrance conductors serving the buildings on the property are underground. The project will electrically connect to the existing 120/240VAC load centers at the mill building. There is an existing Appalachian Power Company pad-mounted service transformer on the site. The only electrical modification planned for the interconnection of this project is a new utility metering pedestal with meter and 120/240VAC circuit breaker, which will be located next to the service transformer. The access to the electrical system is exterior to the physical structures on the property.

C. Proposed facilities

The proposed project will operate strictly in "run-of-the-river" mode on the Hardware River. The hydraulic head needed for power generation is provided by the existing dam. No additional water impoundment is proposed. The new turbine will be located in the water room, a sunken chamber attached to the river side of the mill.

A single D062 Restoration Hydro Turbine, engineered by Natel Energy, is proposed for installation with a capacity of 20 kW. The proposed turbine is a fish-friendly propeller turbine ,with 8.5 feet of design head. The estimated average annual generation of the proposed project is 111,000 kWh.

Please see Appendix C, submitted with the application, which illustrates the Conceptual Plan with detailed drawings and maps of the project structure and related components.

Intake

The project proposes to construct a reinforced concrete intake structure, upstream of the dam, on the west side of the river. The structure will be approximately 14' long x 12' wide x 10' tall. Most of the intake will be below grade, with only the top couple of feet extending above the existing ground surface. Water will be diverted through a debris rack and into a penstock. The penstock will be 3 feet in diameter and 70 feet long . Median headwater elevation is 320 feet. The top of the penstock will be 317.5 feet. The 2.5 feet of submergence will provide sufficient depth to prevent vortex formation.

A 12.5-foot wide by 4-foot tall rack, angled at approximately 70 degrees from horizontal, will prevent river debris from entering the intake. There will be a 0.75-inch wide clear gap between the vertical bars. The approach velocity will be less than 1 fps (ft per second) across the face of the rack. Debris will be manually cleared from the intake rack as needed.

Flow into the penstock will be controlled by a slide gate equipped with an electric actuator. Conduits carrying power and control circuits will run back to the powerhouse alongside the penstock. The penstock will enter the powerhouse through the same opening used by the old mill race.

Penstock

A 3-foot diameter penstock will run from the intake to the water room. The pipe will extend away from the river for 50 feet, then turn 90 degrees and run another 20 feet to the headwall of the water room. The elevation of the pipe centerline, at the intake, will be 315.5 feet. It will slope down at 1%, ending at elevation 315.0 feet. The trench for the penstock will vary from 8 to 10 feet deep. The trench will be excavated in ground that has been disturbed multiple times. It was used as a staging area when the water wheel was removed and the first generation of turbines were installed. Later the original mill race channel was filled in with soil and a raised path built to access the house deck.

Water Room

The original milling operation was driven by an overshot water wheel. The wheel was mounted in the water room. A mill race channel led from the pond, above the dam, to the top of the wheel. After spinning the wheel, the water exited through a slot at the far end of the room. The chamber is 33’ long x 8.5’ wide. The outer masonry wall varies from 2.5’ to 5’ thick and is 15’ tall. The overshot wheel was replaced with a set of three vertical turbines. The turbines were later removed and the mill race opening filled with cinder blocks. The chamber currently sits empty.

The project proposes to construct a concrete box inside the water room, with the goal of providing a clean, dry and protected location for the new turbine. The new 6 inches thick walls will provide additional support to the older masonry walls. Vertical and thrust forces, generated by the turbine, will be transmitted through the reinforced concrete to the bedrock floor.

The original opening in the headwall has been filled in with a combination of cinder blocks and concrete . This material will be removed to accommodate the 3 foot diameter

penstock. A new concrete headwall will be built, with a web of reinforcing bar surrounding the penstock opening.

Draft Tube

Water will exit the turbine through a draft tube. The tube has an expansion section and an elbow section. The elbow is pointed downward into a water filled trough. The end of the draft tube will be below the water surface. The entire length of the draft tube will be located in the water room. The 4 ft deep trough will be excavated down into the bedrock. The trough exits out beneath the water room wall and then turns downstream. The floor of the trough will slope upwards at a 6:1 H:V ratio to match the natural river bed. The trough and enlarged opening will be below water level, so the outward appearance of the structure will remain mostly unaltered.

Upstream Fish Passage - Eel & Sea Lamprey Ramp

Upstream passage for eels and sea lamprey will be improved by a new ramp, located on the left bank of the river. It will be a "Laterally Sloped Eel Ramp" as described by the U.S. Fish and Wildlife Service (USFWS) in their 2019 Fish Passage Engineering Design Criteria in section 132.1.4. The ramp will be approximately 2 feet wide x 25 feet long. The ramp will start at an existing notch in the dam and run parallel to the river, following the natural dip slope of the sedimentary rocks. At its base, the ramp will angle back to the river, extending below the water's surface to elevation 309.5'. The ramp will be a concrete structure with an exposed aggregate finish. Natural rock will be used to disguise the concrete where possible. The notch will be given a rectangular cross section, with provision for stop logs to regulate flow. The substrate will be designed to accommodate eels between 0.5 to 3.0 feet in length. The design is passive, requiring no active pumping.

Impact on the dam will be minimal. The existing notch will be modified for stop logs and the upper end of the ramp will be attached to the dam face. Neither of these activities will impact the dam's structural integrity. The ramp will have a minimum visual impact, as seen from the deck of the Mill Building. The area is currently exposed bedrock.

Downstream Fish Passage - Plunge Pool

The project has been designed to ensure that 100% of river flows are ***not*** diverted to the turbine and that there will always be flow available for downstream fish passage. The downstream fish passage will be located at the existing notch toward the west end of the spillway and falls into a naturally-occurring 4-foot deep plunge pool located at the base of the dam. Design will be in accordance with USFWS 2019 Fish Passage Engineering Design Criteria - Section 9, and in consultation with USFWS and VA DWR.

Table 1: Features of the proposed project

Proposed Turbine Type	D062 Restoration Hydro Turbine
Number of Turbines Proposed	1
Proposed Generator Type	Synchronous PMG with Variable-Frequency AC Drive
Estimated Total Installed Capacity (kW)	20
Estimated Average Annual Generation (kWh)	111,000
Gross Head (ft)	9
Design Head (ft)	8.5
Minimum Hydraulic Capacity (cfs)	20
Maximum Hydraulic Capacity (cfs)	45
Water Source	Hardware River

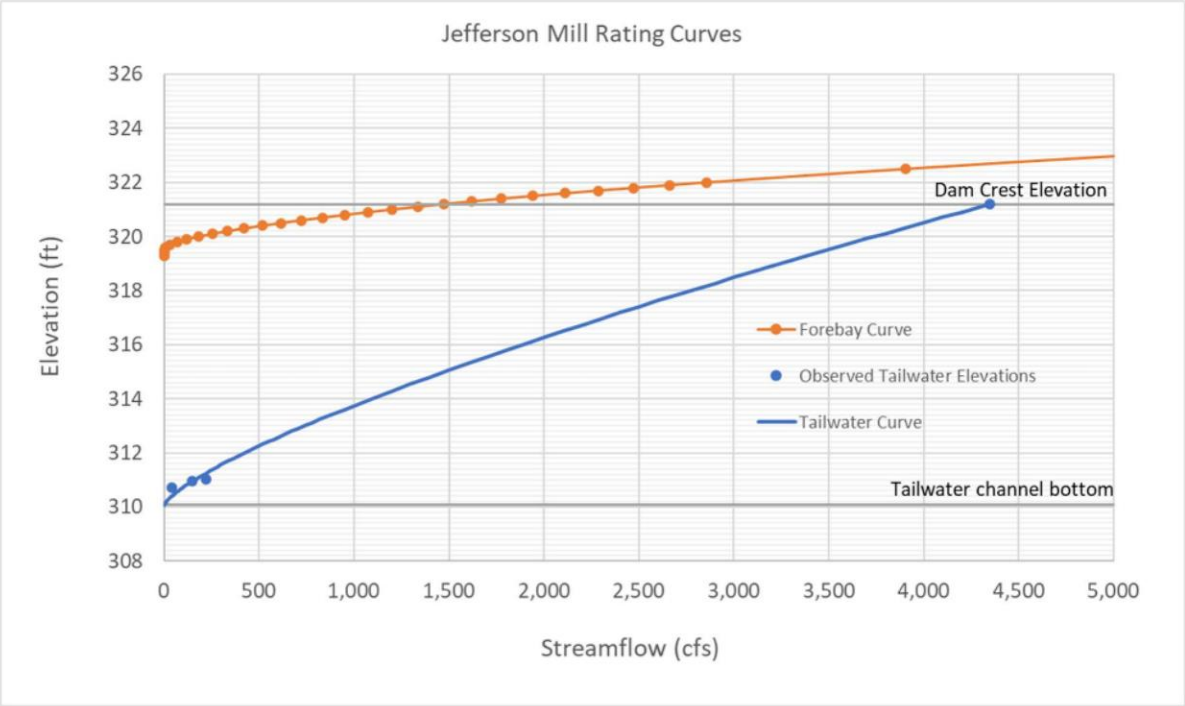
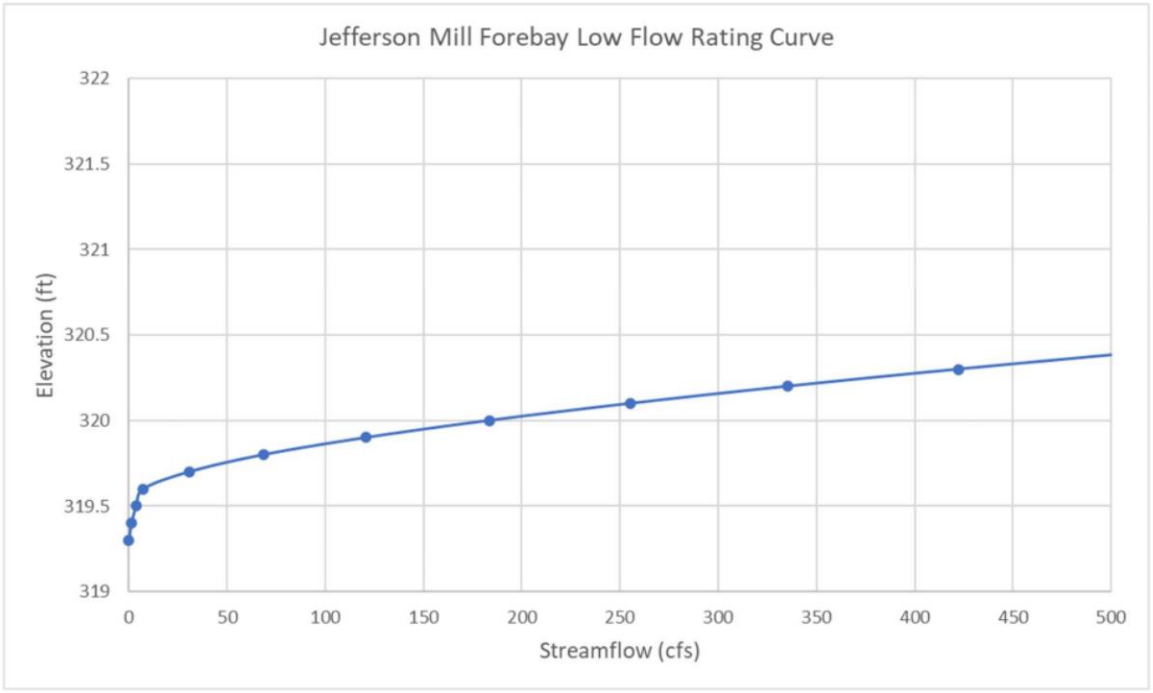


Fig. 2: Estimated tailwater rating curve based on scaling from representative photographs and video clips.



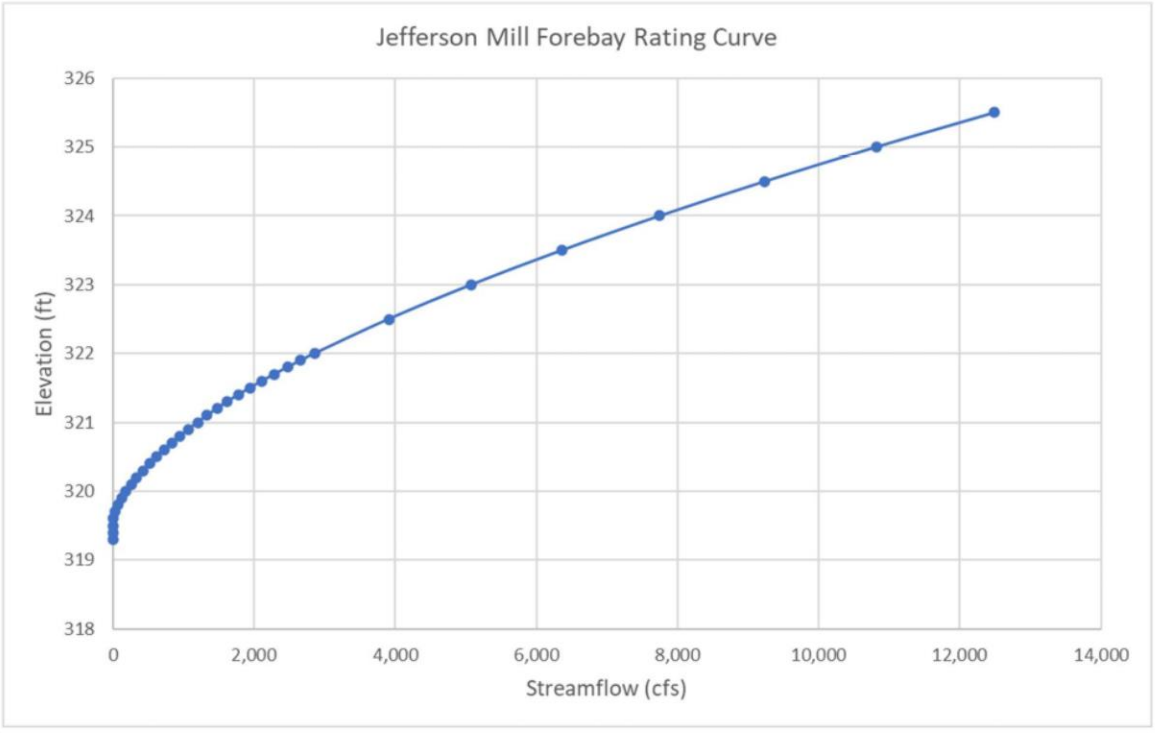


Fig. 3: Estimated forebay rating curve based on broad crested weir equation for flows less than 500 cfs (top curve) and flood flows upto 13,000 cfs (bottom curve).

D. Construction

Pending receipt of all permits, the project is planned to begin construction in August 2021 with a duration of four months. No in-stream construction will occur between Feb 15 and June 30 for protection of anadromous species and from May 15 through July 31 for protection of James Spinymussel per Virginia Department of Game and Inland Fisheries regulations.

Cofferdams

Temporary cofferdams will be constructed to isolate the intake and outlet areas from the river. Cofferdams are used to reduce construction-related water quality impacts, protect aquatic life, and to provide a safe construction area. The upstream cofferdam will extend from the riverbank to the spillway. This will block off a third of the spillway length, allowing the intake, wing walls, buoy line supports and downstream passage to be built in the dry. Water depths are expected to be from 5 to 6 ft. The dam will be 25-ft long x 9-ft tall.

It will be constructed with large bags packed with gravel, called Super Sacks. A 3-ft x 3-ft x 3.5-ft bag will hold 1 ton of gravel. The bags are made from woven polypropylene with reinforcing straps and hoisting loops. The cofferdam will be built up in a pyramid fashion. A 9-ft tall cofferdam would require three layers of sacks. It would have a 9 ft wide base and a 3 ft wide crest. Sacks can be placed with an excavator or crane. Gravel to fill the bags will be sourced locally and will be cleaned. When it comes time to remove the construction cofferdam, the sacks can be hoisted out of the water, leaving minimal trace.

The downstream cofferdam will extend from the base of the dam to a small island that forms a channel along the right side of the river. A second segment of dam will block off the lower end of the side channel. The upper segment will be 30-ft long x 9-ft tall. The lower segment will be 12-long x 6-ft tall. Water depths will vary from 2 to 5 ft.

Once the cofferdams are complete, the water behind the dams will be pumped out. Fisheries biologists experienced with isolation of ESA listed species in the construction area will provide industry approved direction on ways to safely manage the dewatering. All cofferdams will be removed using techniques to minimize turbidity releases. This includes allowing for the slow reintroduction of water into the work area and utilizing dirty water treatment systems for turbid water. If James spinymussel are identified in the construction area during the pre-construction survey, all mussels will be relocated per federal and state guidelines.

To avoid damaging any unidentified archeological deposits on the project area, the designated laydown areas will be covered with 6" of crushed rock over geotextile fabric. Silt fences will be installed around the downslope perimeters of the construction zone and the laydown areas to prevent soil erosion, as detailed in the State of Virginia handbook as best management practices. The bottom of the silt fence fabric will be buried in a shallow 6" wide x 6" deep trench. Fence, geotextile and crushed rock will be removed once the construction is complete. A monitor will be present to document archeological resources that may be exposed during excavation activities, including removal of the gravel and fabric.

In accordance with Federal regulations, should unexpected archaeological resources be encountered during project implementation, all work in the immediate area will cease and the Virginia Department of Historic Resources will be contacted to provide guidance on the treatment of the discovery. Natel Energy plans to contract with a local environmental firm to provide a qualified archeologist to monitor all construction activities that might impact historical artifacts.[1] The monitor will be empowered to stop work and preserve artifacts until they can be properly examined.

PUBLIC NEED OR BENEFIT OF THE PROJECT

The Jefferson Mill Hydroelectric Project is the vision of the owners to revitalize a historic use of their property, while contributing to the conservation of resources through clean energy. The proposed hydropower project does not alter the Hardware River flows or water quality.

The project will generate power year-round to produce 100% carbon-free electricity for the residents and any excess generation will be distributed on the grid to provide clean energy to the community.

OTHER ASPECTS OF THE SPECIAL USE

The Jefferson Mill Hydroelectric Project special use causes no detriment to adjacent lots, as it is located entirely within private property owned by the applicant. As stated in the no-rise certificate attached as Appendix G, the project will not result in an increase in flood elevations for any adjacent property owners along the Hardware River. As noted in Appendix A, neither noise nor vibrations from the project will be detectable on adjacent lots. There will be no visual impact to adjacent lots, as the project is in the center of a large

[1] Natel has received a proposal from Cox McLain Environmental Consulting Inc. for such monitoring services.

private parcel. The project is 380 feet from the closest adjacent lot and 580 feet from the closest public road. During construction there will be occasional trucks with concrete and equipment on local roads between 8 AM and 5 PM. The project will have a construction entrance so that vehicles do not track mud onto the public road. There will be no increase in dust during construction that will be detectable on neighboring parcels.

As noted in the section below, "Consistency with the Comprehensive Plan", the Jefferson Mill Hydroelectric project does not change the rural character of the zoning district; rather the special use enhances the historic nature of the zoning district and further protects natural resources. The project complies with the purpose and intent of the zoning ordinance and is permitted by right in Section 5.1.26 - Hydroelectric Power Generation. As noted elsewhere in this application, the special use will be in harmony with the public health, safety and general welfare.

CONSISTENCY WITH THE COMPREHENSIVE PLAN

The Comprehensive Plan emphasizes the importance of the intelligent use of local resources. This project supports using land to produce local, clean energy while reinvigorating a historical use of the mill and maintaining the rural landscape. As stated in Objective 1 of the Natural Resources section of the Comprehensive Plan, the project supports the conservation of clean water and safe waterways.

The mill is located on Rural Area private property and will contribute to the conservation of natural resources by producing 100% renewable energy and improving fish passage in the Hardware River. Natel Energy, the project developer, is working with Froehling & Roberts and R2 Resource Consultants (now part of Kleinschmidt Group) to improve fish passage along this stretch of the river. Froehling and Roberts, based in Roanoke, VA, is a civil and geotechnical engineering firm. R2 Resource Consultants is an environmental and engineering firm that specializes in fisheries biology, riparian ecology and hydrology.

The Jefferson Mill Hydroelectric Project helps fulfill Objective 4 of the Comprehensive Plan's Natural Resources section: Protect the biological diversity and ecological integrity of the County in both the Rural Area and Development Areas. As described in Section C - Proposed Facilities above, the Jefferson Mill Hydroelectric Project has been carefully designed to improve both upstream and downstream passage for eel and sea lamprey and other species at the project dam. At the entrance to the hydro penstock, an extra wide grate was designed to lower the intake velocity, making it easier for fish to swim past. The grate's bar spacing was narrowed to ¾ inch, to prevent ingress by most species of fish.

By providing clean, renewable energy to the electric grid in Albemarle County, the Project also helps fulfill Objective 8 of the Comprehensive Plan's Natural Resources section: Recognize changes occurring to the earth's climate to anticipate and mitigate impacts to the County.

IMPACTS ON PUBLIC FACILITIES & PUBLIC INFRASTRUCTURE

The project will be entirely located on private property. There will be no impact to public facilities or public infrastructure.

IMPACTS ON ENVIRONMENTAL FEATURES

The two structures associated with the project purchase their electric power thru the local grid. That power is produced from a combination of coal, natural gas, pumped storage, wind and hydro. Electricity generated by burning coal or gas makes up approximately 84 % of the total. Burning fossil fuels produces carbon dioxide, a greenhouse gas. Assuming that mix, 0.94 tons of CO_2 would be produced for every 1 MWh of generation. The Jefferson Mill Hydroelectric Project is designed to produce 111 MWh/year of carbon free electricity . This will offset production of 104.34 tons/year of CO_2.

The proposed turbine and generator use biodegradable lubricants and the mechanical parts of the project are enclosed in a casing that is separated from the water. The bearings are lubricated using non-toxic, biodegradable, food-grade grease and the bearings have three seals (an air gap separates two lip seals from the mechanical seal) to prevent grease from ever reaching the water.

The project will not change the flow of water in the river. It will take water from just above the dam and discharge it just below the dam. No bypass reach will be created. Most of the year, the turbine flow will be minor compared to the overall river flow. In the late summer, when river flows are low, a minimum flow will be dedicated to the eel ramp and downstream passage. If sensors detect a drop in water level behind the dam , the turbine will be automatically throttled back or shut off completely.

To prevent erosion around the intake, the riverbank will be protected by a wing walls made from a combination of concrete and natural stone. The area disturbed by construction will be reseeded. Silt fences will remain in place until the new grasses have gotten established.

R2 Resource Consultants produced a report which expands on the environmental impact of the project. Please see appendix D to read the full assessment and recommended measures to minimize the impact of the project works.

In addition, the project owner's family members are stewards of the watershed and have sponsored educational programs for local farmers to understand fertilizer application and runoff impacts on the watershed. This project is funded on the understanding that daily actions lead to meeting environmental goals.

MEASURES/ CONDITIONS PROPOSED TO ADDRESS IMPACTS FROM THE PROPOSED PROJECT

None proposed.

CONCEPTUAL STORMWATER DETENTION FACILITY

There will be no stormwater detention facilities, as the project will only create a minor increase in impervious surface areas:

Impervious surfaces:			
Intake and wing walls	Concrete	152 sf	
Control room	Concrete	192 sf	
Gravel roads	no new roads		
Total		344 sf	(0.008ac)

Based on NOAA point precipitation frequency estimates, the 100-yr storm would drop 8.57 inches of rain over a 24 hr period on the project area. The Hardware River normally flows between 50 and 400 cfs. During the 100-yr storm event, its flows would increase to an estimated 31,530 cfs.

The Intake will be built on previously disturbed ground, immediately adjacent to the river. The top of the structure will be 2 feet above normal water level in the river. Currently rainfall is partially absorbed by the silty clay soil, while the remainder travels a few feet before entering the Hardware river. The 100-year storm would result in 109 cf of water flowing off the intake's impervious surface over a 24 hour period. However, flooding caused by the 100-year storm would raise the level of the river by a minimum of 5 feet,

completely inundating the intake. The rain would fall directly into the river, making the nature of the intake's surface composition moot.

The Control Room will be located 120 feet from the Hardware River and 20 feet from the intake to a drainage culvert. The control room floor will be located 10 feet higher than the dam crest, keeping the electronic equipment above the river's flood level. The 100-year storm would result in 137 cf of water flowing off the impervious roof over 24 hours, at an average flow rate of 0.002 cfs. This is a negligible amount. There is the potential for the culvert to get clogged by debris, causing local flooding. The berm around the culvert intake is 2 feet tall. If a blockage causes water to overflow the berm, it will flow downhill towards the river, away from the Control room. The Control room floor is 4 feet higher than the culvert intake.

CONCEPTUAL GRADING

The project will require 0.07 acres of excavation. To seal the work areas off from the river, a string of cofferdams will be set along the edge of the river. Once the temporary dams are in place, the areas behind them will be dewatered. The intake cut will be excavated into the riverbank. The soil is a silty clay with layers of sand. The cut will have a surface footprint of 700 sf (square feet), an average depth of 6.4 feet and a max depth of 10 feet.

The penstock cut will run from the intake to the turbine room. It will have a surface footprint of 1500 sf, an average depth of 6.4 feet and a max depth of 12 feet. At its west end, the cut will encounter bedrock 9 feet below the surface.

The outlet trench starts at the end of the turbine room, exits under the wall and then turns downstream (see Figure 4 below) . Most of the trench will be excavated into bedrock. It will be 5 feet wide x 4 feet deep x 37 feet long. The downstream portion will slope up to meet the natural riverbed at a 6:1 slope.

The 54' long cable trench will run around the southside of the Mill building and across the yard to the new Control Room building. Three sets of conduit will be placed in the trench. Per code for buried electrical lines, the trench will be 3' deep. It will be 2' wide to maintain a minimum of 12 inch horizontal separation between power and sensor cables. Care will be taken where the new trench crosses over the existing 15-inch diameter rigid concrete culvert.

The Control Room excavation will be just deep enough to pour a foundation slab. It will be 15' wide x 23' long x 2' deep.

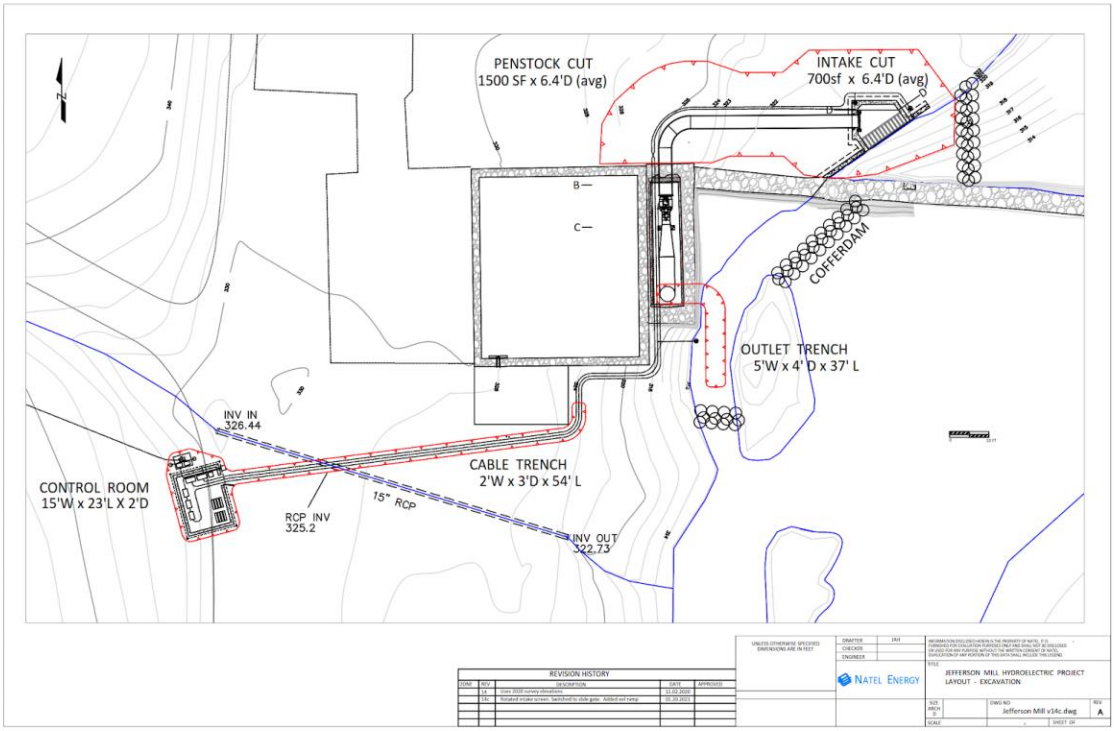


Fig. 4: Project Layout showing location of Control Room and conduit trench

Once the new structures, conduits and penstock are complete, the excavations will be filled in with either native soil or engineered fill. The native soil is currently being tested to see if its mechanical properties will qualify it as backfill. Fill will be compacted to 90% or better of its maximum density, as determined by modified Proctor tests. Fill areas will be graded to match surrounding terrain. Excavated ground that will remain exposed for more than two weeks, will be covered by straw or other erosion control measures. The outlet trench will remain open. It will flood once the cofferdams are removed.

After grading, the inlet and penstock areas will be seeded with species suitable for poorly drained soils. The conduit trench and control room areas will be seeded with traditional lawn grasses like Kentucky bluegrass, per Virginia DEQ guidelines below.

TABLE 3.32-D
SITE SPECIFIC SEEDING MIXTURES FOR PIEDMONT AREA

	Total Lbs. Per Acre
Minimum Care Lawn	
- Commercial or Residential	175-200 lbs.
- Kentucky 31 or Turf-Type Tall Fescue	95-100%
- Improved Perennial Ryegrass	0-5%
- Kentucky Bluegrass	0-5%
High-Maintenance Lawn	200-250 lbs.
- Kentucky 31 or Turf-Type Tall Fescue	100%
General Slope (3:1 or less)	
- Kentucky 31 Fescue	128 lbs.
- Red Top Grass	2 lbs.
- Seasonal Nurse Crop *	20 lbs.
	150 lbs.
Low-Maintenance Slope (Steeper than 3:1)	
- Kentucky 31 Fescue	108 lbs.
- Red Top Grass	2 lbs.
- Seasonal Nurse Crop *	20 lbs.
- Crownvetch **	20 lbs.
	150 lbs.

* Use seasonal nurse crop in accordance with seeding dates as stated below:
February 16th through April ..... Annual Rye
May 1st through August 15th ..... Foxtail Millet
August 16th through October ..... Annual Rye
November through February 15th ..... Winter Rye

** Substitute Sericea lespedeza for Crownvetch east of Farmville, Va. (May through September use hulled Sericea, all other periods, use unhulled Sericea). If Flatpea is used in lieu of Crownvetch, increase rate to 30 lbs./acre. All legume seed must be properly inoculated. Weeping Lovegrass may be added to any slope or low-maintenance mix during warmer seeding periods; add 10-20 lbs./acre in mixes.

Table 2: Virginia DEQ Permanent Seeding Guidelines
https://www.deq.virginia.gov/home/showpublisheddocument?id=2436

Appendix A: Confirmation of Performance Standards of the Proposed Equipment

March 10, 2021

Frank Pohl
County Engineer
Albemarle County, VA
401 McIntire Road
Charlottesville, VA 22902

Re: Confirmation of performance standards of the proposed equipment for Jefferson Mill Dam Hydroelectric Project.

Dear Mr. Pohl,

Let It Go, LLC is applying for a Special Use Permit for Hydroelectric Power Generation under Albemarle County Code of Ordinance Chapter 18. This letter is produced in lieu of a certified engineer's report to address the concerns stated under Chapter 18 Section 5.1.26 of the Albemarle County Code of Ordinance.

Noise

Section 4.18.04 sets the maximum sound levels in Rural Areas and Residential at 60 dBA during the daytime and 55 dBA during nighttime. The project will have two devices that produce sound: the turbine / generator and the variable frequency drive (VFD). The turbine / generator will produce approximately 55 dBA, equivalent to a dishwasher. It will run both night and day. The turbine / generator will be fully encapsulated in a concrete room. The concrete will be surrounded by masonry walls up to 3 feet thick. The double walls should attenuate the turbine noise. The turbine room is immediately adjacent to the dam, where the Hardware River pours over the spillway. The ambient noise level can be fairly high.

The VFD uses fans for cooling, which can produce up to 62 dB. The VFD and other electronic equipment will be located in a control room, a separate structure located approximately 40 feet away from the closest residence. Sound levels outside the control room will be below the County's nighttime maximum.

Electrical Disturbance

The electrical equipment will connect to the existing Appalachian Power Co. service. The installation will comply with all applicable Appalachian Power, federal, state and local standards and regulations. This compliance will ensure no adverse impacts to other Appalachian Power customers.

Vibration

The turbine generates a vibration with a peak velocity < 2mm/s (0.079 in/s), as measured at the surface of the equipment. To calculate the attenuation with distance, the U.S. Federal Transit Administration's Noise and Vibration Manual uses the formula:

P(lot line) = P(equip) x (25/D)^1.5

P = peak vibration in inches/s.

D = distance in feet

The County code lists the maximum allowable peak velocity for continuous operation as 0.015 in/s at the closest lot boundary. The closest lot boundary is the NW corner of Lot 123-19B. The distance from the turbine is 377 ft. The turbine vibration would be attenuated to 0.0013 in/s. This is an order of magnitude lower than the County standard. Jefferson Mill Road is 579 feet from the turbine. Vibration there would be 0.0007 in/s.

Glare and heat

All project equipment will be completely enclosed within buildings and will neither create glare that would adversely affect the navigation or control of aircraft, nor cause public nuisance or hazard to abutting parcels. The heat produced by the turbine and generator should be contained within the concrete room.

From the description stated above, Let It Go, LLC believes that the proposed equipment complies with the performance standards outlined by the county ordinance and will be of low impact.

If you have any questions regarding this submission, please do not hesitate to contact Tatiana Marzan, JeffersonMill@natelenergy.com.

Sincerely,

Aaron Van Duyen
Let It Go, LLC
% Van Duyne, Bruno & Co, P.A.
18 Hook Mountain Road, Suite 202
P.O. Box 896
Pine Brook, NJ 07058

Appendix B: List of other permits

Along with the Special Use Permit application for hydroelectric power generation under Albemarle County Code of Ordinance Chapter 18 Section 10.2.2 and Section 30.3.11, below is the list of permits the project has applied for and is required to apply for:

Table B-1: List of permits required for Jefferson Mill Hydroelectric Project

Permit	Authorizing Agencies	Submission Date	Completion Date	Comments
FERC 10MW Exemption	FERC	10/20/2020	8/30/2021	The Initial Consultation Document (ICD) was submitted to FERC under Docket #P-15038. Agency comments were received on the ICD by 1/25/2021; draft study plans were submitted in response on 03/01/2021. Please see Appendix E for the study plan. The applicant anticipates filing the final exemption application with FERC by April 23, 2021, with FERC issuing the exemption in August 2021. FERC requires issuance of the Joint Permit under Sections 401 and 404 of the Clean Water Act before it can issue the exemption.
Section 106 (National Historic Preservation Act)	VADHR	2/26/2021	5/10/2021	Application submitted for review, awaiting comments within 30 days of submission. Please see Appendix H for the Section 106 application.
Joint Permit Section 401 and 404 (Clean Water Act)	USACE, VMRC, VADEQ	4/14/2021	7/16/2021	Awaiting proof of compliance with Section 106 of the National Historic Preservation Act and Section 7 of the Endangered Species Act, and other study results required by the Agencies
County Building Permit	Albemarle County, VA	7/1/2021	7/30/2021	Receipt of the building permit is conditioned upon receipt of the County Special Use Permit. Application for the building permit will be submitted upon completion of the construction drawing set.