



ALBEMARLE COUNTY PLANNING
STAFF REPORT SUMMARY

Project Name: SP202100007 and SP202100008 Jefferson Mill Hydroelectric Project	Staff: William D. Fritz, AICP
Planning Commission Public Hearing: June 1, 2021	Board of Supervisors Hearing: TBD
Owner(s): Let it go LLC	Applicant(s): Natel Energy, Inc.
Acreage: 66.7 acres	By-right use: RA, Rural Areas - agricultural, forestal, and fishery uses; residential density (0.5 unit/acre in development lots)
TMP: 12300-00-00-017B0 and 12300-00-00-02600 Location: The proposed project is located at the site of Jefferson Mill dam on the Hardware River approximately 600 feet upstream of the Jefferson Mill Road bridge over the Hardware River.	Special Use Permit for: Hydroelectric power generation allowed by special use permit under section 10.2.2.39 and 30.3.11 of the Zoning Ordinance.
Magisterial District: Scottsville	Proffers/Conditions: Yes
Requested # of Dwelling Units/Lots: None	DA - RA - X
Proposal: Reuse of the existing dam and mill building for hydroelectric power.	Comp. Plan Designation: Rural Area – preserve and protect agricultural, forestal, open space, and natural, historic and scenic resources; residential (0.5 unit/ acre in development lots)
Character of Property: The property is primarily wooded. The Hardware River bisects the property. An existing dam is located in the river and the old mill building is located adjacent to the dam. The mill building is currently used as a dwelling.	Use of Surrounding Properties: Primarily forest, with some residential development.
Factors Favorable: Consistent with the criteria for a special use permit. Improves aquatic life in the river.	Factors Unfavorable: No unfavorable factors have been identified.
Recommendation: Staff recommends approval with conditions.	

STAFF CONTACT:
PLANNING COMMISSION:
BOARD OF SUPERVISORS:

William D. Fritz, AICP
June 1, 2021
TBD

PETITION:

SP202100007 and SP202100008 Jefferson Mill Hydroelectric Project

MAGISTERIAL DISTRICT: Scottsville

TAX MAP/PARCEL(S): 12300-00-00-017B0 and 12300-00-00-02600

LOCATION: The proposed project is located at the site of Jefferson Mill dam on the Hardware River approximately 600 feet upstream of the Jefferson Mill Road bridge over the Hardware River.

PROPOSAL: Hydroelectric power generation using the existing dam.

PETITION: Hydroelectric power generation allowed by special use permit under section 10.2.2.39 and 30.3.11 of the Zoning Ordinance. No new dwelling units proposed.

ZONING: RA, Rural Areas - agricultural, forestal, and fishery uses; residential density (0.5 unit/acre in development lots)

OVERLAY DISTRICT(S): Flood Hazard Overlay District - Overlay to provide safety and protection from flooding

COMPREHENSIVE PLAN: Rural Area – preserve and protect agricultural, forestal, open space, and natural, historic and scenic resources; residential (0.5 unit/ acre in development lots)

CHARACTER OF THE AREA: The area is primarily wooded with scattered dwellings. A dam is located in the Hardware River and the old mill building, currently used as a dwelling, is located adjacent to the dam.

PLANNING AND ZONING HISTORY: None. However, the existing dam and mill building (now dwelling) date back to approximately 1800.

DETAILS OF THE PROPOSAL: The applicant proposes to reuse the existing dam and associated mill building for a hydroelectric project of approximately 20Kw. The project will also include improvements to the dam to allow for the upstream and downstream transit of aquatic life. The applicant has provided a large volume of material describing the project, the history of the site and details of the proposal. That information may be found [HERE](#).

COMMUNITY MEETING:

Due to the limited impact of this project the requirement of a community meeting was waived. In lieu of a community meeting, upstream and downstream property owners were mailed information about the project and encouraged to contact the applicant or the County staff with questions or comments. One property owner contacted County staff. No objections were stated by the property owner.

ANALYSIS OF THE SPECIAL USE PERMIT REQUEST

This special use permit, and all special use permits, are evaluated for compliance with the provisions of Chapter 18, Section 33.40b of the Code of Albemarle. Each provision of that section is addressed below. The provisions of the ordinance are in bold font and underlined.

The comments below are based on staff's analysis of the application including information submitted by the applicant. The information submitted by the applicant contains detailed information. The application packet may be found [HERE](#). Staff will not restate all of the submitted information in this staff report and refers the reader to attachments for detailed information.

No substantial detriment. The proposed special use will not be a substantial detriment to adjacent lots.

No negative impact on adjacent lots is anticipated by this project. The project makes use of the existing dam. No increase in the dam height or the impoundment area are proposed. Improvements proposed to the dam for the upstream and downstream transit of aquatic life will result in improved stream flow by helping to maintain a minimum flow thru the dam during low water events. The modifications to the dam will not result in an increase flooding potential upstream or downstream of the dam.

Character of the nearby area is unchanged. Whether the character of the adjacent parcels and the nearby area will be changed by the proposed special use.

This project does not change the character of the area. The project will not be visible from any adjacent parcels. As stated above, the project does not change the character of the river or the river flow in any negative way. The applicant is proposing a portage around the dam. No portage currently exists. This will improve the safety and access of those using the river. (The applicant is not proposing public access to the river at this site. The portage would only be for the use of those using the river from up or downstream access points.)

Harmony. Whether the proposed special use will be in harmony with the purpose and intent of this chapter.

Staff has reviewed the purposes of the Zoning Ordinance (Chapter 18, Section 1.4) and the intent of the Rural Area District (Chapter 18, Section 10.1). The review criteria for a special use permit is designed to address the purpose and intent of the ordinance as stated in these sections. In part, the intent of the Rural Areas District is "Conservation of natural, scenic, and historic resources." This project will make use of an existing historic resource and as part of the project help to reinforce and restore the existing dam and mill building. This project requires review and approval from the Virginia Department of Environmental Quality. Part of this approval includes review by the Virginia Department of Historic Resources. The applicant is working with and addressing the concerns of DHR. Some of the issues identified by the various agencies and addressed by the applicant include:

1. Structural improvements adhere to DHR standards.
2. Installation of improvements for upstream and downstream transit of aquatic life.
3. Use of fish safe technology for the turbines.
4. Preservation of recreational opportunities in the stream.
5. Maintenance of adequate stream flow during low water events.
6. No impacts on wetlands.

Staff opinion is that this project is in harmony with the purpose and intent of the Zoning Ordinance.

...with the uses permitted by right in the district

The proposed use will not impact or limit by right uses on this property or any other property.

...with the regulations provided in section 5 as applicable.

Section 5.1.26 (Attachment C) contains supplemental regulations for hydroelectric power generation. In part these regulations state:

These provisions are intended to encourage the use of water power as a natural and replenishable resource for the generation of electrical power. While serving energy

conservation and natural resource goals, these provisions are also intended to limit such use so as: not to be objectionable in the area in which it is located; not to unreasonably interfere with the passage of boats, canoes, fish and other aquatic life; not to unreasonably degrade the riverine and aquatic habitat or water quality, in general

The ordinance also contains other regulations addressing the information that must be submitted. The applicant has submitted a complete application addressing not only the minimum requirements but providing additional details. The applicant has been working with the County, State and Federal agencies prior to submitting a special use permit application with the County. County staff attended a meeting with the applicant and multiple State agencies involved at the State permitting level. During this meeting issues were identified by the various agencies and addressed by the applicant. No objections to the project were identified that have not been, or will be addressed by the applicant during future submissions.

This project meets the regulations contained in Section 5.

...and with the public health, safety and general welfare.

This project will have no adverse impact on public health, safety or general welfare. As stated previously the project makes use of existing structures. The permitting associated with the construction of the improvements, County Building permit and State approvals, will insure that the improvements are installed in a responsible manner protecting the public health, safety or general welfare.

Consistency with the Comprehensive Plan. The use will be consistent with the Comprehensive Plan.

Chapter 4 of the Comprehensive Plan states in part, "Recognize changes occurring to the earth's climate to anticipate and mitigate impacts to the County". This project will install renewable energy making use of an existing dam. In staff opinion this is a desirable project as there will be no negative construction impacts required to make use of renewable energy.

Chapter 5 of the Comprehensive Plan states in part, "Continue to find ways for preservation of historic structures and sites to be financially viable for property owners." The dam and mill building date to the 1800s. The installation of hydroelectric power will be done consistent with DHR recommendations for reuse of historic structures. Approval of this project provides allows for power to be generated and used onsite instead of being purchased from a power supplier.

Staff opinion is that approval of this request will be consistent with the Comprehensive Plan.

SUMMARY:

Factors favorable to this request include:

1. The proposal makes use of an existing historic resource while maintaining the integrity of the resource.
2. The proposal provides a source of renewable energy consistent with the Comprehensive Plan and the supplemental regulations for hydroelectric power generation.
3. The proposal includes modifications to the existing dam to allow for upstream and downstream transit of aquatic life. The existing dam prevents this transit currently.

Factors unfavorable to this request include:

1. No unfavorable factors have been identified.

RECOMMENDED ACTION:

Based on the findings contained in this staff report, and with the conditions proposed below staff recommends

1. Development and operation shall be in general accord with the information included in the applicant's special use permit application.
2. Development and operation shall comply with all State and Federal requirements.

Motions:**Special Use Permit**

- A. Should the Planning Commission **choose to recommend approval** of this special use permit:

I move to recommend approval of SP202100007 and SP202100008 Jefferson Mill Hydroelectric Project with the conditions outlined in the staff report.

- B. Should the Planning Commission **choose to recommend denial** of this special use permit:

I move to recommend denial of SP202100007 and SP202100008 Jefferson Mill Hydroelectric Project. *Should a commissioner motion to recommend denial, he or she should state the reason(s) for recommending denial.*

ATTACHMENTS

Attachment A – Conceptual Plan
Attachment B - Application narrative
Attachment C - Section 5.1.26