Town of Olive

Jim Sofranko, Supervisor

PO Box 180

West Shokan, NY 12494

<u>845-657-8118 x 4</u>

olivesupervisor@gmail.com

April 8, 2021

Ms. Kimberly Bose, Secretary Federal Energy Regulatory Commission 888 First Street NE Washington DC 20426

Dear Secretary Bose:

On February 18, 2021 the Town of Olive was made aware of a Preliminary Permit application submitted to the Federal Energy Regulatory Commission (FERC) entitled the Ashokan Pumped Storage Project (P-15056). The official notification of this application was forwarded to the town as a courtesy by the Town of Ulster Supervisor, Jim Quigley. The Town of Olive is located at the center of this proposal including the proposed Wittenberg Dam, both Powerhouses, the Ashokan Reservoir, the Ashokan Switchyard, and high voltage transmission lines. The town received official notification of the January 29, 2021 application by FERC weeks later in March. The notification took the town by surprise.

The Town of Olive strongly objects to the Ashokan Pumped Storage Project application before FERC by Premium Energy Holdings, LLC (p-15056). Our reasoning for this objection relies mostly on the deficiencies in the application itself. The application is filled with misinformation and contradiction. It displays a complete lack of understanding of the conditions that exist in the Ashokan Watershed; the legal and environmental protections in place for the land, water, and tributaries of the Ashokan Reservoir; and the constitutional legal protections of the NYS lands in the Catskill Forest Preserve. There must be a minimum standard by which FERC holds applicants accountable for the information they provide in their applications. It is our contention a minimum standard has not been met with this application and, thus, the applicant has not fulfilled the necessary due diligence in bringing a credible application before FERC.

The amount of time and resources expended by FERC, our residents, local governments, and civic organizations to respond to such a deficient application must be recognized early on. This enormous burden cannot be allowed to further continue with the issuance of a Preliminary Permit. The numerous deficiencies and misunderstandings in the application that will inevitably lead to lengthy, legal challenges.

It is important to understand the Town of Olive's unique position in opposing this proposal. Thousands of our residents were displaced over 118 years ago with the taking of their land for the building of the Ashokan Reservoir. Hundreds of families were financially and emotionally devastated, losing their homes and their livelihoods, when their hamlets were razed and flooded to provide safe drinking water for the City of New York. Animosities toward the city continue today due to the ongoing land acquisitions and land-use restrictions placed upon landowners within the Ashokan Watershed. The people of the Town of Olive have shouldered the ongoing burden of providing clean water for NYC for over one hundred and eighteen years.

The Catskills have long been identified as an area with a greater need for environmental protection by the NYC Department of Environmental Protection, NYS Department of Environmental Conservation and numerous environmental groups including National Audubon Society, The Nature Conservancy, the Open Space Institute, and the New York Natural Heritage Program. These lands simply cannot sustain a project of this enormous scale and scope and the applicant will face significant and varied opposition to this project.

Below are our objections to the application itself followed by the impacts it presents to our small rural community. We hope FERC will know the Town of Olive supports finding viable solutions for stored energy to offset renewable green energy initiatives. We simply feel the Catskills are not an environmentally sound location for such a utility-scale pumped storage project.

Objections to the Ashokan Pumped Storage Project Application

Misinformation Submitted in the Application for Preliminary Permit P-15056

- Initial Statement 1. Location of the proposed project (page 5)
 - o Township or nearby town: Shokan City, West Hurley City
 - Neither Shokan City or West Hurley City are Townships or towns nearby (they don't exist)
- Additional Information Required by 18 C.F.R § 4.32(a) (page 7)
 - 2.ii (A) Every city, town or similar political subdivision: (A) in which any part of the project, and any Federal facilities that would be used by the project, would be located: West Shokan Town, 45 Watson Hollow Rd, West Shokan, NY 12494 (8450 657-8118
 - There is no town with the name West Shokan Town (this does not exist)
- Additional Information Required by 18 C.F.R § 4.32(a) (page 7)
 - 2.ii (B) That has a population of 5,000 or more people and is located within 15 miles of the project dam:
 - Shokan City, 50 Bostock Rd, Shokan, NY 12481 (845) 657-8912

- This location is not a town or political subdivision with a population of more than 5,000 This location is the address of the Town Court/Meeting Hall and there is no town or political subdivision known as Shokan City
- Olivebridge Town, Beaverkill Rd, Olivebridge, NY 12461 (845) 657-8177
 - This location is not a town or political subdivision with a population of more than 5,000 and there is no town or political subdivision known as Olivebridge Town The listed phone number is for the Town of Olive Transfer Station, a solid waste facility.
- 2.iv Every other political subdivision in the general area of the project that there is reason to believe would be likely interested in, or affected by, the application, and interest
 - Ridgeline Forest Services, 402 Krumville Rd, Olivebridge, NY 12461 (856) 657-7125 – This is a private business, not a political subdivision.

• Verification Statement (page 10)

• The above inaccuracies question the credibility of the applicant in performing his due diligence to verify the contents of the application are true and accurate.

• Exhibit 1 – Description of the Proposed Project

• 1. General Configuration

"The proposed Ashokan Pumped storage Project would operate in a **closed loop**. Aside from evaporation and percolation losses, the project's water would stay within the system. Therefore, the existing Ashokan Reservoir's remaining water storage would not be used for the project" (Page 11 - 2nd paragraph)

- This statement is either misleading or not comprehending the operation and management of the NYC water supply in the Ashokan Reservoir. **This is clearly not a closed loop system**. Water from the Esopus Creek, Bushkill Creek and numerous smaller tributaries enters the upper (western) basin of the Ashokan Reservoir. Water exits the Ashokan Reservoir in the lower (eastern) basin either through a portal to NYC for drinking water or back into the lower Esopus Creek and onward to the Hudson River.
- Furthermore, the application contradicts itself by describing the open loop design of the Ashokan Reservoir system: "The Ashokan Reservoir is comprised of two watersheds, the west basin receives water from the Esopus Creek, and then the flow continues into the east basin through a concrete spillway, to supply water to NYC." This is an add-on system not a closed loop system. (page 11- 3rd paragraph)

- Notwithstanding the above accurate description of the open loop of the Ashokan Reservoir in the application, it is a nonetheless an inaccurate description of where the water enters the portal to NYC.
- The application states the existing water of the Ashokan Reservoir or Esopus Creek would be used for the project. The "filling of these reservoirs would be done through the Esopus Creek or Ashokan Reservoir" (page 6 -Initial Statement 7 - Existing Dams or Other Project Facilities)
- The application further states "The new upper reservoir alternatives site would naturally discharge runoff water through its own concrete spillways to the existing streams which would be impounded." This contradicts the above statement that the reservoirs would be filled with the waters of either the Ashokan or Esopus Creek.
- The waters of the Ashokan, the Esopus Creek and all its tributaries have numerous legal environmental protections as the water supply for NYC.
- **2.A Reservoirs** Lower Reservoir Configuration
 - "The reservoir's water surface covers 8,300 acres, with around 382,358 acre-ft of storage capacity...The existing Ashokan Reservoir would experience a maximum surface level variation of 2 ft. during operation of the Project, and approximately 15,800 acre-ft would be used for pumping or generating power." (page 13-paragraphs 2-5)
 - The calculation in the application of the maximum surface level variation is inaccurate and misleading. The area calculated to derive a 2' rise as stated in the application is the entire area of both upper and lower basins of the Ashokan Reservoir (8,300 acres). However, the application proposes using **only** the upper basin in its pumped storage loop. The upper (western) basin is 3106 acres. There is a dam between the upper and lower basins of the reservoir thus preventing any use of the lower basin in the applicant's proposed system.
 - The calculation for the rise, in only the upper basin (3106 acres), would be vastly greater at 5.09 ft and that is presuming the basin is at 100% capacity. If filled to 100% capacity the excess water would spill over the dividing weir and be lost into the lower basin. If the upper basin is less than 100% capacity the rise and fall would be of even a greater change in surface elevation.
 - The (upper) western basin has a volume of 143,700 acre-ft at full capacity and the proposed pumped storage system will use 15,800 acre-ft of water. This represents 11% of the volume of water in the upper basin at full capacity. The upper reservoir is often not at full capacity so

the percentage of water drawn from the upper basin of the Ashokan Reservoir could increase dramatically under drought conditions.

- The water surface area in the upper and lower basins of the Ashokan Reservoir are carefully controlled during hot summer days to avoid excessive evaporation. The introduction of a pumped storage project into the operations of the Ashokan Reservoir would disrupt the ability of NYC DEP to manage an adequate and clean water supply for NYC.
- The upper basin of the Ashokan Reservoir is designed as a settling basin for turbidity and sediment transferred into the reservoir by its tributaries. All valley side slopes in the Upper Esopus Creek watershed are classified as "steep to extremely steep". This naturally leads to greatly increased sediment and turbidity in the Esopus and into the upper basin of the Ashokan during and after storm events.

An increase in water disturbance as proposed in the hydro project will unsettle over 118 years of sediment in the bottom of the upper basin of the Ashokan. The regular intake and outtake of large volumes of water for over 12 hours into the upper basin, with a minimum 5' rise and fall in surface level, will dramatically increase turbidity and sediment in the water. This will negatively affect water quality for NYC which faces ongoing turbidity challenges in the Ashokan Reservoir today under current conditions.

- The Ashokan Reservoir supplies 40% of the drinking water for NYC. This water is considered by many to be the cleanest unfiltered municipal water system in the world. The purity of the water has been maintained through the vigorous and ongoing practices and programs established in the 1997 Memorandum of Agreement following decades of litigation and negotiation between NYC and the Coalition of Watershed Towns. Hundreds of millions of dollars have been spent since then on programs and land acquisitions to ensure the purity of the NYC water supply.
- Fish populations in the Ashokan, which means "place to fish", include Brown, Rainbow, and Lake trout as well as Walleye, Largemouth Bass, Yellow Perch, Rock Bass, Black Crappie, Bluegill, Redbreast Sunfish, Brown Bullhead, Yellow Bullhead, Common Carp, White Sucker and Alewife. Many of these species, especially trout, are sight feeders that are particularly susceptible to even moderate levels of turbidity. Chapter 724 of the Laws of 1905, aka the McClellen Act, gave the public perpetual fishing rights on the Ashokan Reservoir. The fish population of the reservoir and their spawning waters in the Esopus Creek and its

tributaries will be detrimentally impacted by any proposal for a hydro plant utilizing the Ashokan Reservoir. Public fishing rights will be severely compromised. Any It also should be noted that the Esopus and surrounding Catskills were the birthplace of American dry fly fishing.

• The proposed 5' rise and fall of the surface area of the upper basin will detrimentally affect all ecosystems in the waters and shoreline of the Ashokan Reservoir. This will negatively disturb fish populations and have negative effects on all other dependent wildlife due to issues of turbidity and variable water temperature. The areas residents won hard-fought battles for fishing rights on the Ashokan Reservoir over 118 years ago. These legal rights will be compromised by this proposal.

• **2.B Reservoirs** – Upper Reservoir Configuration

- "...existing streams which would be impounded" (Page 14-paragraph 2)
 - The Wittenberg site would dam the Maltby Hollow Creek and Wittenberg Brook both of which are trout waters and trout spawning waters including native brook trout. Brook trout are sight feeders that are particularly susceptible to even moderate turbidity levels that would occur with the proposed damming of the Maltby Hollow Creek. Trout are also adversely affected by small water temperature changes that would likely occur in the stream during the construction and operation of the project. Valuable trout breeding habitat would be lost.
- "The new reservoirs will have intake-outlet structures with a submerged intake elevation at an adequate height to enable pumped storage operation." (page 14-paragraph 1)
 - The elevation proposed in the application for an upper reservoir will require all of the alternative sites including Wittenberg to be located on NYS Catskill Forest Preserve. Under Article XIV of the NYS Constitution, the land "shall be forever kept as wild forest lands. They shall not be leased, sold, or exchanged, or be taken by any corporation, public or private."
 - The Catskill Forest Preserve is an increasingly fragmented environment and ranks among the top 1% of forest habitats region-wide according to the NYS Forest Condition Index. This is an extremely protected state preserve.
 - The Catskill are considered Status 1 land under the USGS "Gap Analysis Program". The US Department of Energy's "Hydropower Vision" states "areas with formal protections

designated as Status 1 or 2 under the USGS Gap Analysis Program are avoided for development."

 All upper reservoirs in the application fall within the Audubon's Catskill Peaks Important Bird Area. Bird habitat will be compromised by the project.

• 3. Transmission Lines

- "The Project's powerhouse would be connected to the proposed Ashokan Switchyard, from where the Project would connect to the existing Hurley Avenue Substation". (Page 14-paragraph 3)
 - The location of the proposed Ashokan Switchyard is vague yet the proposal describes the specific mileage to the Hurley Avenue substation in other areas of the proposal.
 - There is no description of the size of the above-ground Ashokan Switchyard facility.

o 5. Federal Lands

- "The lands enclosed within the proposed boundary are New York State Lands." (page 15-Paragraph 1)
 - Various areas of the application precisely describe project locations on private land with GPS data.
- "The pressure tunnels or penstocks would go through part of the New York's Lands and New York's City Lands." (page 15-paragraph 2)
 - The tunnels and penstocks would extend through private lands
- "The proposed transmission corridor for these lines would extend through New York's State Lands." (page 15-paragraph 3)
 - There is no contiguous New York State Land between proposed Ashokan Switchyard and the Hurley Avenue Switchyard and the proposed transmission lines would extend through private lands.

- Exhibit 3 Ashokan Pumped Storage Project Map
 - Various Maps of the Proposed Project
 - Study Area Boundary and Reservoir Limits (pages 21-25)
 - All maps submitted in the proposal are vague and blurry
 - All maps submitted in the proposal appear to be in conflict with the GPS coordinates submitted on page 16 of the proposal.

Impacts of the Application on the Town of Olive

The Town of Olive is a rural community with a population of under 4500 that relies on tourism for much of our economic sustainability. We have an abundance of fishing, hunting, camping, and hiking opportunities throughout the town. People visit us to experience wildlife, forests, waterways, and mountainous scenery. Visitors and residents alike locate here primarily for their appreciation of the natural beauty the area affords us.

Tourism is a booming industry in the Catskills generating 17% of the employment with 20,000 jobs and sustaining \$1.6 billion of economic activity regionally. This industry includes lodging, short-term rentals, restaurants, museums, art galleries, music venues, retail stores, and support services for outdoor recreation. The application by Premium Energy before FERC directly threatens our tourism industry that relies so heavily on our local environment.

The application itself has already caused great stress and alarm in the community. The issuance of a permit will only compound that stress, adversely affect property values, disrupt the future plans of residents and businesses, cause economic hardship, and tax the limited resources of local towns, counties, and non-government agencies. The issuance of a Preliminary Permit will create economic uncertainty for future decisions made by anyone in the region for years to come.

The New York State and New York City lands for the upper and lower reservoirs in the proposal are environmentally protected lands. Precedented legal protections have long been established for the entire watershed of NYC and NYS "Forever Wild" forests. It is unfeasible to pursue a project of this size and scale in such an environmentally fragile and legally protected area that contributes so much to the economy of our region.

In addition, there are environmental legal barriers the applicant will likely face in developing lands where there exist rare and endangered species. There are likely legal barriers facing the applicant with the impoundment of streams containing trout habitats. The summary below describes in detail the documented natural resources of the area. The Town of Olive respectfully asks FERC to consider denying a Preliminary Permit based on the unlikelihood the applicant can surpass the many legal barriers this application will certainly face.

SUMMARY OF ENVIRONMENTAL IMPACTS

OF THE PROPOSED ASHOKAN PUMPED STORAGE PROJECT

This report, prepared for the Town of Olive Town Board by the Olive Conservation Advisory Council, summarizes the potential environmental impacts of the proposed pumped storage hydroelectric facility. The information in this report is derived from the Town of Olive Natural Resources Inventory. The Natural Resources Inventory (NRI) identifies and describes the naturally occurring resources located on and near the proposed site, including water resources, natural habitats, topography, geology and soils. The information in the NRI was obtained using data from federal, state, city, and county agencies and non-profit organizations including The Nature Conservancy. It incorporates descriptions from the Town's draft July 2011 Comprehensive Plan; Ashokan Watershed Stream Management Program stream management plans and inventories (*Bush Kill Stream Management Plan* and *Maltby Hollow Brook Stream Feature Inventory*) and culvert assessments; and *The Ashokan Catskills: A Natural History* and the Olive Natural Heritage Society.

The purpose of the NRI is to enable the Town and other government bodies to make wise and informed decisions about land-use planning, critical for balancing future growth and development with the protection of natural resources.

1. Impact on Rare and Endangered Species

The core interior forest area supports a unique array of plants and animals that are easily disturbed by human activity generally associated with more open habitats (e.g., roads and developed areas). The core forest is especially important for sensitive wildlife including many forest songbirds, which avoid nesting near areas with human disturbance.

Additionally, both sides of the upper Dry Brook are the premier locations, in all of NY State, for the Three Birds Orchid (Triphora trianthophora). This is very definitely a rare species. The end of the Maltby Hollow Creek is another location for the Three Birds Orchid. These sites are registered in the Biological and Conservation Database for North America, and in the database maintained by the New York Natural Heritage Program, jointly funded by The Nature Conservancy and NYDEC.

Regarding other threatened species, wildlife records reflect the abundance of high-quality forest interior habitat. The forest sites includes summer foraging habitat for the NY-Threatened northern long-eared bat and several other declining bat species. The 2000-2005 NYS Breeding Bird Atlas documented 24 forest bird species of conservation concern including many NY- Species of Greatest Conservation Need, such as black-throated blue warbler, scarlet tanager, and wood thrush. Three NY-Special Concern raptors were also documented in Olive: Cooper's hawk, red-shouldered hawk, and sharp-shinned hawk. The National Audubon Society has delineated the highest priority forest bird habitat in the Catskill Peaks Important Bird Area, shown in the Ecological Context Map. In addition to birds, forests in Olive support

rare snakes such as NY-Special Concern eastern hognose snake and NY-Threatened timber rattlesnake, which travels long distances from the den during the summer to forage in surrounding forests.

2. Impact on Nearby Streams

A. Risk to the Trout Population

The Maltby Hollow Creek and Wittenberg Brook lie directly downhill from the proposed reservoir site. They are classified both as trout waters and trout spawning waters. Soil runoff from the reservoir construction and storm overflow will run directly into these two streams. This will both increase the turbidity of the streams and affect the water temperature, likely having a negative impact on trout spawning and survival.

B. Increased Turbidity of Streams into the Reservoir

Portions of the mountainside slopes leading down to the Maltby Hollow Creek are steep with unstable soils. Any construction on the mountainside will increase streambank erosion and even possible hillslope failure. This will result in an increase in the turbidity of the water in the Maltby Hollow Creek, and therefore into the Ashokan Reservoir. This turbidity could also reduce the fish population in the reservoir which would drive away the bald eagles who nest near the reservoir and feed there.

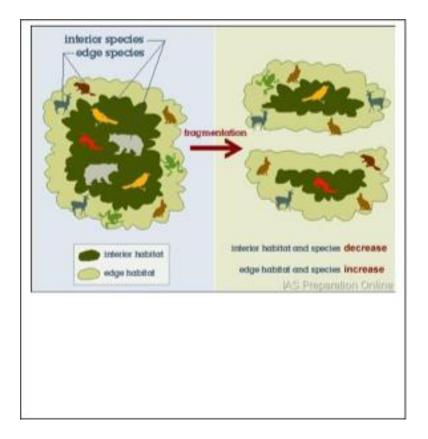
3. Forest Fragmentation

This large, mountainside forest provides numerous benefits including wildlife habitat, clean water, climate moderation, and forest products. This, and other large, forested areas are protected by New York State as part of the Catskill Forest Preserve and by New York City to protect drinking water supplies.

According to the NYS Forest Condition Index, the forest around the proposed reservoir site ranks among the top 1% region-wide, scoring exceptionally high, according to multiple criteria relating to size, connectivity, biodiversity and habitat value, and ecosystem values. A core forest, like the one at the proposed site, is well over 500 acres, and provides enough suitable habitat to support a diversity of interior forest species. The construction and presence of the man-made reservoir will fragment this forest and likely have a significant negative impact on wildlife.

Forest fragmentation is the process of breaking large patches of forest into smaller areas, often by clearing it for new roads or development. These impacts are greatest at forest edges but can extend for hundreds of feet into forest patches, often displacing sensitive species that depend on interior forest. After fragmentation occurs, interior habitat, sometimes referred to as core forest, is unable to support the same diversity of species. Fragmentation decreases forest habitat quality and health, disrupts wildlife movement, and facilitates the spread of invasive species, such as mice and ticks. (See illustration on the next page.) Other ecological benefits of forests are also impacted. To summarize, fragmenting

this forest will introduce forest pests and diseases, overabundant deer populations, and even accelerate climate change.



Citations

Bierhorst, J. The Ashokan Catskills: A Natural History. Purple Mountain Press, Fleischmanns, 1995, pg 52.

Conley, A. K., E. Cheadle, and T. G. Howard. *Updating Forest Patches and a Patch Assessment for the Hudson Valley.* New York Natural Heritage Program, State University of New York College of Environmental Science and Forestry, 2019, Albany, NY. <u>www.nynhp.org/forest-patches</u>

Kudish, M. *The Catskill Forest: A History*. Purple Mountain Press and ColorPage, Fleischmanns and Kingston, NY, 2000, pgs 47-48, 56, 57.

NYS DEC. New York State Forest Action Plan, 2020. https://www.dec.ny.gov/docs/lands_forests_pdf/nysfap.pd

Town of Olive Conservation Advisory Council, NYS DEC. Town of Olive Natural Resources Inventory. 2021

Summary

The Town of Olive respectfully urges FERC to reject the application for a Preliminary Permit by Premium Energy Holdings LLC (P-15056) for the Ashokan Pumped Storage Project. This application displays a complete lack of acknowledgement of the legally-protected environments that exists today in the Catskills today. The lands they propose to use are all protected by the New York State Constitution and the watershed regulations for New York City. In addition, any lands in the Catskill Forest Preserve with the geological features required for such a pumped storage facility are legally protected and environmentally unsuitable for a project of this size and scale.

Thank you for your time and consideration,

Jim Sofranko

Town of Olive - Supervisor