



IN REPLY REFER TO:

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Custom House, Room 244
200 Chestnut Street
Philadelphia, Pennsylvania 19106-2904

January 9, 2020

9043.1
ER 19/0533

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
Mail Code: DLC, HL-11.2
888 First St., NE
Washington, DC 20426

RE: Ulysses Pumped Storage Hydropower Project (FERC #15012) Preliminary Permit Comments

Dear Secretary Bose:

The U.S. Department of the Interior (Department) has reviewed the November 14, 2019 “NOTICE OF PRELIMINARY PERMIT APPLICATION ACCEPTED FOR FILING AND SOLICITING COMMENTS, MOTIONS TO INTERVENE, AND COMPETING APPLICATIONS” regarding the application for preliminary permit filed by FreedomWorks, LLC proposing to study the feasibility of the Ulysses Pumped Storage Hydropower Project to be located near Bismarck in Grant County, West Virginia.

Fish and Wildlife Resources

The following comments and recommendations are submitted pursuant to the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*).

The proposed Ulysses Pumped Storage Hydropower Project (Project) could have an adverse impact on existing fish and wildlife resources and their habitats. The Department provides the following comments to assist with both construction and operation planning that can minimize potential adverse effects on fish and wildlife resources in the area including Mill Run (a tributary of the Stoney River), North Fork Patterson Creek (a tributary of Patterson Creek), and other downstream and surrounding areas within the Potomac River watershed. We recommend that the permittee coordinate with the U.S. Fish and Wildlife Service (Service) to consider development and operations that would be compatible with existing fish and wildlife resources.

Fisheries Resources:

The American eel (*Anguilla rostrata*), a migratory species of conservation concern, occurs in the Potomac River watershed. This species may occur in Mill Run and North Fork Patterson Creek, where the upper and lower reservoirs are proposed, respectively, and in downstream areas. If this Project moves forward, the applicant should investigate whether this area provides suitable habitat for the American eel, how the project can be designed/operated to minimize impacts to this species, and what measures can be developed to mitigate these impacts.

According to Section 1.1, the applicant anticipates that the upper reservoir will be filled from local inflows including initial charge from groundwater inputs and Stoney River. This section also states the applicant anticipates the lower reservoir will be filled from groundwater inputs and North Fork Patterson Creek. The source of make-up water during operations is not provided. The collection of groundwater and pumping from the Stoney River and North Fork Patterson Creek has the potential to impact the hydrology and water quality of downstream areas and to cause fish injury and/or mortality from pumping operations. The applicant will need to evaluate these impacts on fish and wildlife habitat within Stoney River and North Fork Patterson Creek and how these impacts can be minimized, and what measures can be developed to mitigate these impacts.

Construction of the upper reservoir will directly impact portions of Mill Run, a tributary of the Stoney River. Construction of the lower reservoir will directly impact portions of North Fork Patterson Creek, a tributary of Patterson Creek. These headwater streams likely support diverse cold-water fisheries including native wild brook trout (*Salvelinus fontinalis*) populations. Downstream populations could also be impacted from changes in hydrology, water quality (e.g., temperature), and nutrients in streams below the reservoirs. The applicant should coordinate with the West Virginia Division of Natural Resources to determine whether any of these headwater streams within the project area support wild brook trout populations and, if present, how the project could be designed to minimize these impacts, and what measures can be developed to mitigate these impacts.

Operations of the proposed pumped storage project have the potential to result in fish entrainment (drawing fish, eggs, or larvae into power plant systems), and impingement (trapping fish against screens) at the intakes in the proposed upper and lower reservoirs. The applicant should work with the Service and other resource agencies to develop measures to minimize these impacts and compensate for unavoidable impacts. The Service's Fish Passage Engineering Design Criteria (USFWS 2019) recommend a 0.75-inch clear spacing between intake trash rack bars where the American eel is present. If the American eel does not occur in the area, then the Service's Criteria call for 1-inch clear spacing between trash rack bars to be protective of native fish populations.

Assessment of Risks to Migratory Birds:

Based on the depiction of the proposed upper (1,042 acres) and lower reservoirs (1,139 acres), pump house, and penstocks as depicted in the SK-1 Plan View, it appears the project will require a large amount of tree clearing. If trees are cleared as part of the project, the potential exists for

avian mortality from habitat destruction and alteration within the project boundaries. Site-specific factors that should be considered in project siting to avoid and minimize the risk to birds include avian abundance; the quality, quantity and type of habitat; geographic location; type and extent of bird use (*e.g.* breeding, foraging, migrating, etc.); and landscape features. We recommend minimization of land and vegetation disturbance during project design and construction. New activities should be constrained to previously disturbed areas wherever possible (*e.g.*, road and utility line rights-of-way, agricultural fields, previously mined areas, etc.).

We offer the following recommendations to avoid and minimize impacts to migratory birds within and around the project area:

1. Due to the difficulty in assessing the entire project site for all bird nests, we recommend that the clearing of natural or semi-natural habitats (*e.g.*, forests, woodlots, reverting fields, fencerows, shrubby areas) be carried out between September 1 and March 31, which is outside the nesting season for most native bird species. Without undertaking specific analysis of breeding species and their respective nesting seasons on the project site, the avoidance of habitat impacts during the aforementioned time frame will avoid impacts to most breeding birds, their nests, and their young (*i.e.*, eggs, hatchlings).
2. Avoid permanent habitat alterations in areas where birds are highly concentrated. Examples of high concentration areas for birds are wetlands, State or Federal refuges, Audubon Important Bird Areas, private duck clubs, staging areas, rookeries, leks, roosts, and riparian areas. Avoid establishing sizable structures along known bird migration pathways or known daily movement flyways (*e.g.*, between roosting and feeding areas).
3. To conserve area-sensitive species, avoid fragmenting large, contiguous tracts of wildlife habitat, especially if habitat cannot be fully restored after construction. Maintain contiguous habitat corridors to facilitate wildlife dispersal. Where practicable, concentrate construction activities, infrastructure, and man-made structures (*e.g.*, buildings, cell towers, roads, parking lots) on lands already altered or cultivated, and away from areas of intact and healthy native habitats. If not feasible, select fragmented or degraded habitats over relatively intact areas.
4. To reduce habitat fragmentation, co-locate roads, fences, lay down areas, staging areas, and other infrastructure in or immediately adjacent to already-disturbed areas (*e.g.*, existing roads, pipelines, agricultural fields). Where this is not possible, minimize roads, fences, and other infrastructure. To minimize habitat loss and fragmentation, cluster development features (*e.g.*, houses, commercial buildings, roads) rather than distributing them throughout land parcels.
5. Develop a habitat restoration plan for the proposed site that avoids or minimizes negative impacts on vulnerable wildlife. We recommend the use of plant species that are native to the local area for revegetation of the project area.

Please be aware that since these are general guidelines, some of them may not be applicable to the current project design.

Bald Eagle:

The bald eagle (*Haliaeetus leucocephalus*) was removed from the Federal Endangered Species List on August 8, 2007, and is no longer protected under Section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.; ESA); however, bald eagles are still protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d). Bald eagles are known to be present, year-round, in the vicinity of the proposed project. If bald eagles are present in the project area, the applicant should follow the Bald Eagle Management Guidelines found on the Service's website¹ prior to commencement of work.

Threatened and Endangered Species

The following comments are provided as technical assistance pursuant to the ESA.

As you are aware, Federal agencies, including the Federal Energy Regulatory Commission (FERC), have responsibilities under Section 7(a)(2) of the ESA to consult with the Service regarding projects that may adversely affect federally-listed species or designated critical habitat, and confer with the Service regarding projects that may affect federally-proposed species or proposed critical habitat. Pursuant to 50 CFR§402.08, Federal agencies have the option to designate a non-Federal representative for the purposes of conducting informal consultation or preparation of a Biological Assessment. Should the FERC choose to designate FreedomWorks, LLC as a non-Federal representative, the FERC should send the Service that designation in writing. Directions for completing consultation can be found on the Service's website.²

Northern Long-eared Bat, Indiana Bat and Virginia Big-eared Bat:

The proposed project is located within the ranges of the federally threatened northern long-eared bat (*Myotis septentrionalis*), the federally endangered Virginia big-eared bat (*Corynorhinus townsendii virginianus*), and the federally endangered Indiana bat (*Myotis sodalis*). A portion of this project is located within 10 miles of a hibernaculum for the northern long-eared bat and Virginia big-eared bat, and within the foraging area for the Virginia big-eared bat.

Northern long-eared bats hibernate in caves and abandoned mines during the winter months (November through March), and use a variety of upland, wetland and riparian habitats during the spring, summer and fall. These bats usually roost in dead or living trees with exfoliating bark, crevices or cavities. Female northern long-eared bats form nursery colonies under the exfoliating bark of dead or living trees, such as shagbark hickory, black birch, red oak, white oak, and sugar maple, in upland or riparian areas.

¹ <http://www.fws.gov/northeast/EcologicalServices/eagle.html>

² <http://www.fws.gov/northeast/pafo/pdf/HOW%20AND%20WHY%20DO%20I%20CONSULT.pdf>

Indiana bats hibernate during winter months (November through March) in caves or, occasionally, in abandoned mines. After hibernation, Indiana bats migrate to their summer habitat in wooded areas where they usually roost under loose tree bark on dead or dying trees. During summer, males roost alone or in small groups, while females roost in larger groups of up to 100 bats or more. Indiana bats also forage in or along the edges of forested areas.

Virginia big-eared bats hibernate during the winter months (November through March) singly or in small groups in caves. Females gather from diverse hibernacula during April and May to form maternity colonies in warm caves. This is not a migratory bat, although if disturbed, the entire colony may move to an alternate site. These bats roost year round in caves and feed in the area surrounding the cave during the spring/summer months.

Land-clearing, especially of forested areas, may adversely affect these bat species by killing, injuring or disturbing roosting bats, and by removing or reducing the quality of foraging and roosting habitat. In addition, if any natural caves or abandoned mines occur within the project area, it is possible that bats may be using them during hibernation or potentially as summer roost sites. Entrances to these potential hibernacula could be intentionally or inadvertently closed or destroyed during activities such as land clearing, grading, fill disposal, mining, road construction or building construction. If bats are present within a cave or abandoned mine when this occurs, they may become trapped inside and perish. Even if bats are not present during the closure, they may be adversely affected when they return to their hibernaculum in the fall and find it closed. This will force them to expend energy looking for another suitable hibernaculum during a time when it is crucial that they store up sufficient fat reserves for hibernation. Bats are at an increased risk of mortality when they enter hibernation with insufficient fat reserves, or are unable to locate a cave/mine with the suite of conditions (*e.g.*, temperature, humidity, air flow) necessary for successful hibernation.

Due to the potential presence of the northern long-eared bat, Indiana bat, and Virginia big-eared bat in the project area, further consultation with the Service is recommended [50 CFR § 402.03]. To facilitate our review, we recommend submitting detailed project plans, and an analysis of alternatives to avoid and minimize adverse effects. Hydrological and geological surveys would be needed to assess the impacts of the construction and/or operation on nearby caves. This information along with bat surveys would help evaluate potential impacts to bats from this project.

Although not required, we recommend that the following be stipulated in any preliminary permit issued by the Commission regarding FERC No. 15012:

“The permittee shall design and conduct, at the permittee’s expense, as soon as practicable after issuance of the project’s preliminary permit, preparatory studies in cooperation with the West Virginia Division of Natural Resources, West Virginia Department of Environmental Protection, U.S. Fish and Wildlife Service, National Park Service, and the Bureau of Indian Affairs or affected Tribes if applicable. These studies shall address, but not be limited to, the effects of project construction and operations on the reproduction and survival of aquatic or semi-aquatic fish and wildlife resources, recreational fishing, wetland and riparian

wildlife, forest-dependent wildlife, rare plant species, and historical and archaeological resources. The studies shall also identify and evaluate general measures to avoid, offset, and/or reduce adverse project-caused impacts on fish and wildlife resources.”

The Department appreciates the opportunity to provide these comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Lindy Nelson', with a long horizontal flourish extending to the right.

Lindy Nelson
Regional Environmental Officer

cc: FERC Service List

References:

USFWS (U.S. Fish and Wildlife Service). 2019. Fish Passage Engineering Design Criteria. USFWS, Northeast Region R5, Hadley, Massachusetts.

Document Content(s)

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