



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

Re: Project No. 13840-000  
ECOspensible, Inc.

Dear Ms. Bose:

Please accept the following letter as a request to grant Buffalo Niagara RIVERKEEPER intervening party status in the above referenced preliminary permit application. As a 501c3 not-for-profit organization, Buffalo Niagara RIVERKEEPER's mission is to protect and restore water quality and quantity and to connect people with water. As sitting members of the Niagara River Remedial Action Committee (RAC) and official Chair of the Niagara Relicensing Environmental Coalition (NREC), RIVERKEEPER is further charged with a community leadership role, ensuring that the region's environmental resources are protected for the public trust and in regard to human and ecological function.

The proposed preliminary permit application to study the feasibility of the Niagara River Community Hydro Project, located in the Niagara River within New York State, has potential impacts on the quality, quantity and accessibility of the region's water resources. For this reason, we believe it is in the public interest that RIVERKEEPER be permitted to intervene in this process and to participate fully as a party therein.

In addition to our request for intervener status, Buffalo Niagara RIVERKEEPER submits the following comments, questions, and concerns for inclusion into the record. The comments are based on our preliminary understanding of project descriptions and application materials detailed within the Federal Energy Regulatory Commission's (FERC) online information center and e-filing system to date.

*Location for Project # 13840-000*

A stretch of the lower Niagara River bound by the area known as "The Whirlpool" in the Town of Niagara to the south and the area north of the Lewiston-Queenston Bridge in Lewiston to the north.

*Description*

Along this river stretch, the applicant proposes to place an array of (5) five hydro-kinetic turbine structures, each with (4) four 250 kw turbine arrays. There are (3) three study

areas included within this application. Estimated annual power generation is 550,000 megawatt-hours. Each section of river selected requires placement of submerged and/or overhead transmission lines, in addition to the associated land-based activities of a transmissions yard, operations and maintenance building to house the command center of the project's supervisory control and data acquisition system, a storage yard, and appurtenant facilities.

*Comment, Questions and Concerns*

Based on the project materials submitted to date, we have the following questions and concerns related to project number 13840:

Ecological

- Have the individual and cumulative effects of placing permanent ballast-filled tanks on the river bottom been evaluated in regard to benthic habitat disturbance? If so, please provide references for appropriate studies.
- What is the potential for fish kills or impingement related to the in-channel turbines? Has this potential risk been studied in similar river conditions and/or in similar projects? If so, please provide documentation of studies.
- Has the array of turbine structures, ballast-filled tanks, submerged and/or overhead transmission lines been evaluated as to effect on migratory fish, the movement of aquatic species, and/or the movement of migratory birds?
- What effect do the turbines have on the sediment regime of the river? Specifically, is there potential for increases in turbidity, or in the movement of either suspended sediments or river bottom sediments?
- How do the turbines alter the natural hydrology of the river? If the natural velocity of water is altered as it moves through the turbines, what effect (such as increases in temperature) does this have on the water and subsequently, on the various habitats in the river? Has this been studied?
- Are there electromagnetic fields generated by the turbines or their components? If so, what effect does this have on riverine habitats and species?
- What impact will the project have on existing submerged and emergent aquatic vegetation within the River and its nearshore wetlands?
- Please describe the need for paints, cleaners, hydraulic fluids and chemicals needed to maintain and operate the proposed turbines and structures. Please provide any scientific information related to the effects of these chemicals on riverine habitats and species.

General

- Will public access to the water be restricted in areas where the turbines are located both on the shore and in the water?
- While the proposal indicates that the project area is limited to the US side of the river, the in-channel habitat and hydrologic effects appear inevitably international

- in nature. Has there been consultation with Canadian officials and consultation with existing international agreements to ensure consistency?
- Are the proposed land-based activities consistent with local zoning ordinances in each of the affected municipalities? Has this been considered to date? Are local permits necessary for the proposed project in addition to State and Federal permits?
  - How will the applicants secure the safety of the public in relation to the structures located within the river as well as the security of the proposed project components from the boating public who actively use the river for recreation? Will there be fencing in the river to keep the public away from the structures? Will recreational access in the river be restricted? Please clarify.
  - What are the local benefits intended from the creation of hydro-power from the Niagara River? Will the electricity be provided to local homes and businesses or sent elsewhere for consumption?
  - Will the proposed project create local job opportunities? If so, approximately how many and of what nature?
  - Could the land-based activities be sited on existing brownfield sites so as to avoid further impacts to undeveloped land along the river? Has this been evaluated and if not, why?
  - Will a submerged transmission cable pose any navigational hazards to the boating public?
  - Has ECOspossible, Inc. conducted any analysis of how this project fits within the greater energy profile of NY State? Specifically, is there a long-term energy policy and plan for the State and where does this type of proposal fit within that plan? If not the responsibility of ECOspossible, Inc. to conduct this analysis, who will? FERC? NY State? Please clarify how this analysis is conducted and who is responsible for coordinating proposed energy projects such as this.

#### Structural

- What is the approximate footprint(s) of the onshore collection substation, interconnection switchyard, operations and maintenance building, and storage yard?
- The use of the term “appurtenant facilities” is unclear. Please specify what these facilities entail and disclose the approximate size of the anticipated footprints.
- In the site studies for potential locations, details are not provided regarding the amount of proposed onshore clearing, grading, and impervious cover necessary to accommodate the proposed land-based facilities. While we recognize the preliminary nature of this permit request, please detail whether preliminary analysis of anticipated impacts has been conducted and provide approximate footprints where possible.
- In placement of the submerged transmission cable, will directional drilling be required to place the cable under the river bed, or will the cable lie on the river bottom?

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- It is not clear whether overhead transmission lines and supporting structures will be required in addition to the submerged transmission lines. Please clarify.
- What is the approximate footprint of the tanks that will hold the turbine structures in place and how many tanks will lie on the river bottom?
- Will some structural component be required to create a head of water to turn the proposed turbine structures? Currently, this detail is not included in the project description.
- A numerical description of anticipated temporary versus permanent impacts should be provided.

Thank you for the opportunity to request official intervenor status in this matter and provide comments on this application for a preliminary permit for the Niagara River Community Hydro Project. While these comments address the information currently available to the public, RIVERKEEPER anticipates providing additional comments as the project progresses and reserves the right to identify additional concerns and questions at a later date. We look forward to receiving clarification and additional information on our current questions, concerns and comments.

Sincerely,

Kerrie Gallo  
Environmental Planner

Cc: Allyson Conner, FERC  
Dennis Ryan, ECOsponsible, Inc.