U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Response and Restoration
Silver Spring, Maryland 20910

April 6, 2007

Magalie R. Salas, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E., Room 1A
Washington, DC 20426

Dear Secretary Salas:

I am writing to provide comments on FERC's January 2007 Scoping Document 1 for Massena Grasse River Hydroelectric Project New York Project No. 12607-001. The National Oceanic and Atmospheric Administration's Office of Response and Restoration (NOAA OR&R) carries out NOAA's role as a natural resource trustee for coastal resources by working to protect and restore coastal resources from threats related to releases of hazardous substances and oil spills.

As detailed below, construction of the proposed dam could significantly contribute to cumulative negative impacts to the Grasse River ecosystem and reduce our ability to undertake our trustee responsibility to enhance remedy selection, reduce residual ecological injury, and to identify and implement restoration opportunities on behalf of the public for the Grasse River. This office therefore, does not support the proposed project and recommends the Commission prepare an Environmental Impact Statement in lieu of an Environmental Assessment.

Background

The Town of Massena Electric Department's filed a Pre-Application Document (PAD) and Notice of Intent (NOI) to file an application for a license for a dam on the Grasse River. The proposed Massena-Grasse River Hydroelectric Project would consist of: (1) a new 26-foot-high by 540-foot-long dam equipped with eight 10-foot-wide, 16-foot-deep spillway gates; (2) two new 1,400-foot-long earthen concrete dikes that extend along the southern shore of the proposed reservoir; (3) a 300-acre reservoir with a normal water surface elevation of 178 feet (NAVD 1988); (4) a proposed powerhouse integral to the dam containing a single 2.5-MW turbine generator, to produce an estimated 10,000 MWH of electricity annually; (5) a proposed 0.25-mile-long, 23-kilovolt transmission line connecting the proposed powerhouse to an existing substation; and, (6) appurtenant facilities.

Comments

NOAA is one of several natural resource agencies designated under the National Contingency Plan who acts on behalf of the public to protect and restore natural resources. The Comprehensive Environmental Response, Compensation and Liabilities Act (CERLCA) and the Clean Water Act (CWA) require the U.S. Environmental Protection Agency (EPA) to coordinate with NOAA and other appropriate agencies and authorize the trustees to restore injured resources on behalf of the public. OR&R's Assessment and Restoration Division is actively working with EPA on Superfund and Superfund caliber sites (Alcoa, GM, and Reynolds) in the St. Lawrence watershed to cleanup and restore natural resources impacted by contaminants released from these facilities. PCBs are the primary contaminant of concern in the Grasse River due to releases from the Alcoa facility. Elevated PCB levels have been recorded in sediments, water, and biota and a "no eat" fish consumption advisory is in effect for the Grasse River for all fish species due to PCBs (NYSDEC 2006).

NOAA has been following the progress of Grasse River remedial investigations since the 1990's. In 2003, an ice-jam and scour event eroded portions of a 7-acre pilot cap and underlying contaminated sediments. EPA has been conducting studies that will assist them in further evaluating remedial options and in selecting a preferred remedy. NOAA supports a comprehensive dredging remedy that targets significant removal of PCB-contaminated sediments and has been working with EPA and state, federal and tribal resource agencies to achieve a remedy compatible with our mutual interests.

According to the NOI, the Massena Electric Department (MED) and Alcoa are working together to integrate an ice control structure into the dam as a means to mitigate ice scour and associated potential remobilization of sequestered PCBs. The text implies that this effort is compatible with and part of EPA's remedial process, but EPA's process to select a remedy is independent of the Town's effort to obtain a license for a dam in the Grasse River. It is also our understanding that the MED dam is only cost-effective and viable for the Town with Alcoa's participation. Still, we remain concerned that licensing and construction of the MED dam could ultimately lead to selection of a less permanent remedy whereby significant volumes of PCBs could be left in the Grasse River, thereby posing a continuing threat to the environment and negatively impacting NOAA's trust resources. NOAA is seeking a comprehensive permanent cleanup of the Grasse River that will serve to minimize the toxicity, bioavailability, volume and downstream transport of PCBs and other site-related contaminants. Construction of the Massena Hydroelectric Project could hamper our ability to get a remedy that is sufficiently protective of our resources.

On a parallel track, NOAA and its co-trustees (the New York State Department of Environmental Protection, the U.S. Fish and Wildlife Service, and the St. Regis Mohawk Tribe) are in the process of assessing injury to natural resources that have resulted from releases of hazardous substances from the Aluminum Company of America (currently Alcoa West), General Motors Central Foundry Division (currently General Motors Powertrain) and Reynolds Metals Company (currently Alcoa East). The Trustees and Companies have been working together to quantify or qualify injury to ecological services (e.g., sediment, fish, birds, aquatic and terrestrial mammals, amphibians and reptiles), recreational fishing, and tribal culture. The Trustees and Companies initiated efforts in 2005 to identify candidate restoration projects. In 2006, we

solicited restoration ideas from the public and are continuing to evaluate potential restoration ideas for the St. Lawrence watershed including the Grasse River. Projects under consideration for the Grasse River include improved fish passage at Madrid (upstream of Massena), fish habitat enhancements, and fish stocking. Construction of the proposed dam in Massena could negate or significantly reduce potential benefits accrued from these candidate projects thus negating the projects with the most significant potential to restore injured natural resources on behalf of the public and shift our focus to other waterbodies.

It is well documented that dams can influence sediment transport and stream geomorphology, including in the downstream reach (Graf 2006, Williams and Wolman 1984). Detailed analyses should be carried out to evaluate any potential impacts of such changes to unremediated or capped PCB-contaminated sediments. Consequences of dam failure on unremediated or capped PCB-contaminated sediments should also be evaluated.

Concerns about impediments to fish passage are not limited to NYS-threatened lake sturgeon and the declining population of American eel. Dam construction will alter fish movements segregating populations into those upstream and downstream of the dam. Fish ladder construction is typically designed to provide passage for targeted species but numerous species are precluded from unrestricted access. Dam construction has the potential to interfere with fish life histories including modifications to home ranges, alterations in movements between summer and winter habitat; feeding, spawning, and refuge areas, etc. This will have an effect on distribution of native freshwater mussel beds since fish serve as hosts for the larval stage of mussels known as glochidia (Williams and Neves 2007). Changes in sediment accretion patterns and sediment grain-size distribution can impact the aquatic plant community and biota that utilize specialized habitats within the Grasse River ecosystem both upstream and downstream of the dam and the 300-acre reservoir. The creation of the reservoir behind the dam will reduce flows and increase sedimentation in a reach of river naturally characterized by a series of rapids and higher flows. This type of habitat is limited in this stretch of the river and habitat loss can adversely impact species dependent upon such conditions. Lake sturgeon, mooneye and eastern sand darters are state threatened species requiring swift water habitat for spawning. NYSDEC considers the decline in mooneye and eastern sand darter populations to be partly due to siltation of clear water habitat. Decline in lake sturgeon and eastern sand darters are also associated with dam construction cutting off access to habitat or reducing habitat quality (NYSDEC 2007a,b,c). Destruction of potential habitat can limit future restoration attempts. Impacts on overall river productivity should also be considered.

Approximately 26 miles of the Grasse River - from its mouth to the Madrid Dam - has been designated Significant Coastal Habitat by New York State Department of State. This stretch of river provides habitat for cold and warm water fish. It serves as spawning habitat for lake sturgeon and possibly for muskellunge and fish residing in the St. Lawrence. The weir at Massena was breached in 1997 and had an approximately 3 foot vertical rise. This weir appears to have allowed for fish passage under some flow conditions (NYSDOS 1994). The proposed MED dam, proposed downstream of the breached weir, is 26 feet high, creating a significantly greater impediment to fish movement even if passage is integrated into dam design and is not compatible with its Significant Coastal Habitat designation.

In summary, NOAA's Office of Response and Restoration appreciates the opportunity to comment on the Scoping Document 1 for the Massena Grasse River Hydroelectric Project. Construction of the proposed dam could significantly contribute to cumulative negative impacts to the Grasse River ecosystem and reduce our ability to undertake our trustee responsibility to enhance remedy selection, reduce residual ecological injury, and to identify and implement restoration opportunities on behalf of the public for the Grasse River.

If you wish to discuss these comments, I can be reached at 301-713-4248 x 186 or Lisa Rosman of my staff can be reached at 212-637-3259.

Sincerely,

for Tom Brosnan
Northeast and Great Lakes Branch Manager

References

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