

June 28, 2018

Kimberly D. Bose, Secretary
Nathaniel J. Davis, Sr., Deputy Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

RE: Brainerd Public Utilities - Brainerd Hydroelectric Relicensing Project,
Federal Energy and Regulatory Commission: Project Number: P-2533,
Review and Comment on Scoping Document 1 and Pre-Application Document, Requesting
Impoundment Bathymetric Study and Sediment Accumulation and Contaminant Study

Dear Kimberly D. Bose and Nathaniel J. Davis, Sr.:

In accordance with 18 Code of Federal Regulations (CFR) §5.9, the Minnesota Pollution Control Agency's (MPCA) Section 401 Water Quality Certification (401 Certification) Program hereby requests new studies in support of the relicensing of the Brainerd Hydroelectric Project (Project).

Specifically, the MPCA requests a new Impoundment Bathymetric Study and a new Sediment Accumulation and Contaminant Study to provide information necessary to support review of an expected request for 401 Certification for the relicensing Project. The 401 Certification is required by the MPCA under authority of Section 401 of the Clean Water Act (CWA) (33 USC § 1251 et seq.), Minn. Stat. chs. 115 and 116 and Minn. R. chs. 7001.1400-1470, 7050, 7052, and 7053.

As required by 18 CFR §5.9(b), any information or study request must contain the following:

1. Describe the goals and objectives of each study proposal and the information to be obtained;
2. If applicable, explain the relevant resource management goals of the agencies or tribes with jurisdiction over the resource to be studied;
3. If the requester is not a resource agency, explain any relevant public interest considerations in regard to the proposed study;
4. Describe existing information concerning the subject of the study proposal, and the need for additional information;
5. Explain any nexus between Project operation and effects (direct, indirect, and/or cumulative) on the resource to be studied, and how the study results would inform the development of license requirements;

6. Explain how any proposed study methodology (including any preferred data collection and analysis techniques, or objectively quantified information, and a schedule including appropriate field season(s) and the duration) is consistent with generally accepted practice in the scientific community or, as appropriate, considers relevant tribal values and knowledge; and
7. Describe considerations of level of effort and cost, as applicable, and why proposed alternative studies would not be sufficient to meet the stated information needs.

The MPCA offers the following support for its new study requests:

1. **Describe the goals and objectives of each study proposal and the information to be obtained.** There are no currently approved studies that target analysis of water quality as a goal or objective. There are two proposed studies identified in Scoping Document 1 (SD-1): the Recreation and Land Resources Study and the Cultural Resources Study. However, in order to ensure compliance with the Anti-degradation Rules finalized in November 2016, the MPCA seeks information to describe existing water quality and predict anticipated future water quality, particularly as it pertains to sedimentation and changes in bathymetry over time. The MPCA believes the requested studies, and the sampling associated with them, would provide this information in support of the request for 401 Certification. Within the Project area, both Rice Lake and the reach of the Mississippi River from the Pine River to the Crow Wing River are listed as impaired. Rice Lake is impaired for mercury in fish tissue (affected designated use is aquatic consumption). The Mississippi River reach is impaired for both mercury in fish tissue and total suspended solids (TSS) (affected designated uses are aquatic consumption and aquatic life). Additionally, the reach of the Mississippi River on which the Project is located is a restricted Outstanding Resource Value Waters (ORVW) (Minn R. 7050.0335, subp 1); Minn. R. 7050.0265 requires that 401 Certifications ensure that the exceptional characteristics for which a water body was designated as a restricted ORVW are protected.

The MPCA is requesting these additional studies to establish baseline data that will be used to compare possible future impacts that the additional turbine installation continued operation of existing facilities addressed by the relicensing may have on water quality. These studies will measure the increase or possible decrease in TSS and assist in determining what measures Brainerd Public Utilities must implement to reduce or eliminate TSS from entering the water column. The information from the requested studies will help to ensure that 401 Certification of the proposed relicensing would both prevent further impairments of affected waterways and also protect the exceptional characteristics of the Mississippi River over the 40-year relicensing life of the Brainerd Hydroelectric Dam facility.

2. **If applicable, explain the relevant resource management goals of the agencies or tribes with jurisdiction over the resource to be studied.** The resource management goals of the MPCA's 401 Certification Program are to achieve and maintain the highest possible quality in surface waters of the state and ensure compliance with all state water quality standards. This includes protecting and maintaining existing uses and the level of water quality necessary to protect such uses; minimizing degradation of high water quality; preserving the exceptional characteristics of outstanding resource value waters; and ensuring that activities with the potential for water quality impairments associated with thermal discharges are consistent with the CWA 401 Certification Program.

3. **If the requester is not a resource agency, explain any relevant public interest considerations in regard to the proposed study.** The MPCA seeks to ensure that information necessary to assess the Project is made available in a timely fashion to assist both the agency and the public in reviewing the Project.
4. **Describe existing information concerning the subject of the study proposal, and the need for additional information.** As described above, there are known impairments for mercury in fish tissue and TSS in the waters of the Project area. Providing baseline data regarding sedimentation and bathymetry will help to assess whether ongoing operations may contribute to impairments and whether the expected 401 Certification might include conditions to help address existing impairments and ensure continued protection of the Mississippi River as a restricted ORVW.
5. **Explain any nexus between Project operation and effects (direct, indirect, and/or cumulative) on the resource to be studied, and how the study results would inform the development of license requirements.** Sedimentation may occur in the impoundments created behind the dam. These sediments can accumulate over time, resulting in changes to water depths, water velocities, water quality, and aquatic habitat. Bathymetric and sediment accumulation studies (including contaminant screening occurring as part of the sediment accumulation study) will help to determine the potential degradation that may result from continued operation of the relicensed Project. If there are prudent and feasible methods for avoiding, minimizing, or mitigating any adverse effects resulting from such degradation, these methods could potentially be incorporated as conditions of a future 401 Certification. If, alternatively, the studies were to show negligible projected degradation, the MPCA could potentially waive or certify the Project without additional conditions.
6. **Explain how any proposed study methodology (including any preferred data collection and analysis techniques, or objectively quantified information, and a schedule including appropriate filed season(s) and the duration) is consistent with generally accepted practice in the scientific community or, as appropriate, considers relevant tribal values and knowledge.** The bathymetry and sedimentation and contaminant surveys, if approved, would be conducted during the summer or fall of 2019 at times when the head pond elevation can be managed and held stable. The study area would begin just upstream of the Dam and continue to the upper extent of the Project boundary. The studies would be conducted in the Brainerd Dam Impoundment area. The MPCA is not proposing a specific methodology for the requested studies. However, these types of studies are a common component of water quality analyses, and can be designed using generally accepted scientific practices.
7. **Describe considerations of level of effort and cost, as applicable, and why proposed alternative studies would not be sufficient to meet the stated information needs.** The estimated costs for the bathymetric study are \$25,000. The estimated costs for the sediment accumulation and contaminant study are \$40,000. These costs are estimated based on previous studies conducted at similar type hydroelectric facilities. The MPCA believes these costs, and level of effort needed to conduct the studies, are reasonable given the length of license (40-years) under consideration and potential for impacts on water quality resulting from

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sedimentation. The MPCA is unaware of any alternative studies that would provide the necessary information regarding bathymetry and sedimentation to inform the 401 Certification review of existing and expected future water quality.

The MPCA appreciates the opportunity to review the April 2018, SD-1 Report and the February 2018, Pre-Application Document and provide this request for additional studies. If you have any questions concerning this request, please contact Bill Wilde of my staff at 651-757-2825 or at william.wilde@state.mn.us.

Thank you for your time and consideration in this matter.

Sincerely,



Melissa Kuskie, Supervisor
Certification, Environmental Review and Rules Section
Resource Management & Assistance Division

MK/BW:ds