United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
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November 26, 2008

In Reply Refer To:
ER 08/1006

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

Re: **COMMENTS AND FINAL RECOMMENDATIONS, ENVIRONMENTAL ASSESSMENT: FERC No. P-4306-017, Mississippi Lock and Dam No. 2 Hydroelectric Project, Dakota County, Minnesota**

Dear Ms. Bose:

This letter is submitted in response to the Federal Energy Regulatory Commission's (FERC) Notice of Availability of Environmental Assessment (EA) for a license amendment of the Mississippi Lock and Dam No. 2 Hydroelectric Project (Project). A response to FERC's request for determination of the Project's consistency with the Comprehensive Management Plan (CMP) for the Mississippi National River and Recreation Area (MISS) is forthcoming. The proposed hydropower facilities are entirely within the boundary of the MISS, a unit of the national park system. This letter represents the comments of the Department of Interior (Department) and includes the comments of the National Park Service (NPS) and U.S. Fish and Wildlife Service (FWS).

The enabling legislation at sixteen U.S.C. § 460zz-3(b) (1) requires the NPS to review and ensure the project's compatibility with the Comprehensive Management Plan (CMP) for the Mississippi National River and Recreation Area (MISS). Compatibility with the MISS CMP helps ensure local land use decisions are based on a balance between resource protection, visitor use, and development needs in the corridor, with resource protection and sustainability as the primary determining factor in the case of conflict. In addition, the NPS has statutory responsibilities through the United States Department of the Interior that represent the national public interest that would be directly affected by the project. General laws pertinent to the Department's responsibilities and requiring the Department to review applications and other documents related to hydropower development are provided in the Department's Motion to Intervene, which was filed with the FERC on June 25, 2008. The following comments and recommendations are also in accordance with Section 10 (a) of the Federal Power Act.

A determination of compatibility is problematic given that the impacts to park values and resources are unknown. In order for NPS to determine these facilities appropriate, the hydrokinetic turbine array (HKTA) will need to be carefully tested, its impacts better understood and additional adaptive measures developed. As specified in our June 2008 comments, the Department considers a 3-5 year pilot project license a more appropriate means to permit this project. It is our understanding that FERC can provide this option to construct and test these new technologies, while minimizing risk of adverse environmental impacts under a pilot project license. The Department considers this approach far more appropriate for this location than the current license amendment, which gives the applicant the ability to install and operate this new technology for a period of up to 25 years.

The City of Hastings (Applicant) and Hydro Green Energy are proposing to install a new HKTA within the tailrace of the existing hydropower project to provide for additional generating capacity at Lock and Dam No. 2. The HKTA is the first commercially-operated, hydrokinetic facility to be licensed in the United States and within a national park. Many similar projects are proposed on other river systems that have received preliminary permits that do not authorize new construction. FERC provides an option to construct and test these new technologies under a 3 – 5 pilot hydrokinetic project license. For the Hastings Hydrokinetic Project, FERC is considering granting a license amendment that will extend for 25 years, through 2033, without having adequately studied the environmental, financial, and regulatory issues and effects of this new technology, and its cumulative impacts. FERC acknowledges the HKTA technology is unproven and that there is very limited knowledge of its environmental effects. These findings are bolstered by the draft report: "The Potential Environmental Impacts of Marine and Hydrokinetic Renewable Energy Technologies: A Report to Congress Pursuant to Section 633(b) of the Energy Independence and Security Act of 2007 (P.L. 110-140)," prepared by the Wind and Hydropower Technologies Program, U.S. Department of Energy, in conjunction with the Secretary of the Interior (October 2008). The report indicates this technology is not yet in general use, and the environmental impacts associated with the technology are largely unknown. The EA also acknowledges this uncertainty by referencing various studies that identify a range of potential effects that will vary a great deal, depending on turbine design, physical and biological conditions at each site, and other factors that might interact with the turbines to produce inter-related outcomes.

Requesting the technology be tested and impacts more fully understood are measures that are in accordance with FERC's strategic plan (FERC, 2006), its guidance for Licensing Hydrokinetic Pilot Projects (April 14, 2008) under Part 1 of the Federal Powers Act and with FERC's Policy Statement on Conditioned Licenses for Hydrokinetic Projects (November 30, 2007). The Policy Statement provides guidance on the testing of this technology, helps determine appropriate sites for projects and enables developers to realize a revenue stream while testing this new technology for a short term. FERC guidance includes an emphasis on post-license monitoring and requirements to address monitoring results that reveal unacceptable levels of risk to the public or environmental harm.

As indicated, the Department considers a 3-5-year pilot project license as proposed by FERC for small, new hydropower technologies, more appropriate for this project than an

amendment of the current license through 2033. This would enable the City to conduct necessary studies and identify any impacts that may result from the operation of this new technology while allowing the Applicant to generate power and monitor the project during the pilot license period. At the conclusion of this 3-5 year period, the City of Hastings could apply for a license amendment for the term of the license, if no unacceptable impacts are identified during this period. If it is determined that the project is having unacceptable environmental consequences of any kind, consultation should immediately occur with resource management agencies to determine appropriate protection, mitigation, or enhancement measures to respond to impacts being caused by the facility or to restore the site to previous operating conditions if and when serious circumstances arise.

General comments on the EA

FERC staff recommendations for water quality monitoring, evaluation of fish entrainment and survival, protecting native freshwater mussels, controlling zebra mussels and development of a bird monitoring plan are broader than those proposed by the City of Hastings. However, the EA does not clearly define acceptable thresholds, performance standards or mitigation that will occur if adverse impacts are identified. These thresholds are important for determining if monitoring should be adjusted and, if impacts are identified, what mitigation should occur including the possible shutdown, removal and/or restoration of the site to previous conditions. The project's development should not move forward without more appropriate adaptive management strategies, resource protection objectives, and long-term monitoring protocols. Strategies for responding to unexpected or unacceptable impacts should be developed prior to issuance of the project's license amendment.

Water Quality Monitoring:

We support the development of a dissolved oxygen and turbidity monitoring plan, as well as the use of Best Management Practices and a Spill Control, Prevention, and Countermeasures Plan, prior to installation of the facility. FERC notes that the effects of hydrokinetic developments on water quality are largely untested and anticipates dissolved oxygen and turbidity are the water quality parameters most likely to be affected by the project operation. In addition, the EA recognizes that impacts from construction, high flow, or a catastrophic event may occur. The EA also predicts a 10 percent increase in water velocity above the current exit flow from the draft tubes but does not address potential sedimentation which could result at a later date from an increase of turbidity.

The proposed three month water quality monitoring period is not adequate. We support the Minnesota Pollution Control Agency's (MPCA) Amendment of the Clean Water Act Section 401 Water Quality Certification that includes conditions for meeting state water quality standards for Class 2B waters (aquatic life and recreation). These conditions include, but are not limited to, meeting these standards during a three year period of monitoring through procedures that include collection of turbidity, dissolved oxygen, and water temperature data and for operating the facility in low flow conditions, provided they are conducted in compliance with MPCA's conditions. Water quality monitoring should be conducted

throughout an entire season of flow changes, over a number of years, to address potential changes under various conditions.

If water quality standards are not met the EA indicates the City will meet with MPCA to discuss alternative monitoring and adjustments to project operations. These discussions need to include the identification of mitigation strategies, if water quality is adversely impacted, and review by the NPS, FWS, Minnesota Department of Natural Resources (MNDNR), and other appropriate resource protection agencies of the adequacy of proposed adjustments to project operations. Additional project monitoring (up to the life of the project) may be necessary to ensure water quality standards are being met and impacts to aquatic resources are addressed.

Aquatic Resources

FERC's Application for Amendment of License (April 2008) stated "It is the Applicant's belief that the design and operation of the turbines will have minimal effect on any aquatic resources that may pass downstream through the powerhouse." (Exhibit E, Pg E-4) FERC is relying on the City of Hastings' discussion of slow turbine rotation (21 rpm); three-bladed design; lack of intake structures, gates, vanes, tubes, etc.; and behavioral deterrent by fish species. Research, either in the field or in the lab, needs to be conducted to support this conclusion.

The results of entrainment and survival studies referenced in the EA were conducted at other U.S. projects and hypothesize that the new hydrokinetic turbine impacts to the local fish community would be minimal. For example, the 1991 Fish Entrainment Monitoring Study conducted by Barnes and Williams Environmental for the City of Hastings for the existing hydropower facility, identified 8 species with entrainment numbers well over 1000, including Freshwater Drum, the host fish for federally endangered Higgins eye pearly mussel. This study, and its assumptions, if valid and accurate, is not necessarily an indication of the entrainment that will occur with the hydrokinetic turbine units. The EA also indicates the City does not intend to conduct entrainment studies, but would develop direct estimates (through a desktop entrainment analysis) of fish survival rates for documenting hydrokinetic turbine impacts to aquatic communities at a population scale. The City needs to conduct both entrainment and survival studies to evaluate project effects on the aquatic community in the project location and to develop an adequate level of baseline data regarding fish entrainment and aquatic diversity. A new entrainment study, specific to this project, and for all species likely to be entrained needs to be conducted. It should not be assumed that entrainment rates can be estimated from existing data. Entrainment studies should be conducted several times to capture differences due to season, fish movement, species presence, etc.

The magnitude of adverse effects from the proposed hydrokinetic units to fish entrainment and resulting mortality is likely limited to the location of the hydrokinetic turbines immediately below the existing, conventional hydropower unit. It is also likely that the high percentage of fish entrained will already have passed through the existing hydropower turbine and will be either dead or damaged. However, the number of fish that reside below

the dam that will enter the area upstream of the turbine and be entrained is unknown. The EA should include entrainment rates under the range of operating conditions.

We agree with FERC that the thresholds for survival to determine if additional studies need to be conducted should be developed prior to study initiation in order to determine when turbine operations should be modified or shut down to protect fisheries resources. If the turbine survival study finds that mortality rates are substantially higher than expected, FERC recommends the City expand its analysis to include an assessment of potential long-term population-level consequences for important fish species. We recommend the City of Hastings determine what mitigation will occur for higher than expected mortality. "Acceptable" mortality rates should be determined by agency consensus, which may vary by species. Cumulative, long-term impacts of entrainment on local fish populations should also be evaluated.

The proposed HI-Z Turb' N Tag-recapture technique for estimating turbine survival and thresholds for mortality does not include sufficient information to evaluate whether the level of sampling effort is adequate (i.e. sample size, species that will be tested), what will be done if the technique is not effective, if injured fish will be recovered, how long the monitoring will continue, and what will be done if thresholds for mortality are exceeded. Mortality is a determination of the mortality rate of fish entering the turbine and the entrainment rate for live fish. Some estimate of the latter is important to assess the overall effect on the fish community in Pool 2. Also, the HI-Z Turb N' Tag methodology is proposed to be conducted on five fish species (gizzard shad, rosyface shiner, freshwater drum, white bass, and flathead catfish) to determine entrainment effects only after the project is installed. The EA does not present a discussion about what happens should these experimental fish show injury. Many common large river species (large-mouth bass, freshwater drum, sauger, small-mouth bass, etc.) serve as host species for threatened or endangered mussel species (e.g., monkeyface, washboard, Higgins eye, etc.) The behavioral effects of the HKTA units to host fish species should, therefore, also be studied. Because it is not known what impacts the hydrokinetic turbines will have on aquatic resources, this research needs to be conducted prior to FERC approving the license for operation of this project. The NPS, MNDNR and FWS have recommended a full flow tailrace netting study. If impacts to aquatic and other resources are identified, mitigation will be required.

The determination of an estimated 110,000 fish that could be entrained is based on entrainment values similar to those of the existing hydropower units and indicates a potential increase in prey availability in the tailrace area for gulls, terns, and bald eagles. The entrainment levels of the existing hydropower units may or may not be applicable. Mitigation should occur if increased foraging results in impacts to these and other species.

Hydro-acoustic monitoring, which assesses the interaction between aquatic species and hydropower technologies, should be considered if proposed monitoring techniques are not adequate.

Threatened and Endangered Species

We agree that a limited survey for the presence of the federally endangered Higgins' eye pearly mussel should be conducted prior to turbine installation, as recommended in the EA. If the survey detects the presence of Higgins' eye pearly mussel in the area of the proposed turbine/barge prior to its anchoring, consultation should occur with FWS, NPS, and MNDNR to evaluate project effects and reintroduce any mussels found. As indicated in the EA, and concurred by FWS, the tailrace of the existing dam is already modified with riprap and unlikely to support any mussels, but it is not clear how the turbines would affect current patterns, substrate conditions, and mussel habitat downstream of the armored area. The study of mussels should address the effects on mussel habitat and host fish downstream of the dam. These areas represent important mussel beds in some rivers, presumably due to favorable habitat and host fish congregation. For example, Table 4, page 28 of the EA identifies gizzard shad as making up a large proportion of fish entrained by the current dam. Gizzard shad are known host fish for a variety of Mississippi River mussels, as are catfish and freshwater drum which also are entrained in high numbers. The impacts of entraining these fish on downstream mussel habitat should be addressed as part of the fish entrainment study proposed for the project.

Zebra Mussel Control Plan - A plan for Zebra mussel control needs to be developed prior to turbine installation and in conjunction with the survey of Higgins' eye pearly mussels, and not within 6 months of issuance of the license amendment. Survey methods need to be developed and mitigation occur if zebra mussels are found.

Terrestrial Habitat

Potential impacts identified in the EA include temporary noise disturbance to wildlife species that use habitats near Lock and Dam No. 2. The City needs to monitor the project for noise disturbance to terrestrial species, including any reduction in bird species density and diversity, rather than make the assumption that noise level effects are the same as existing project conditions. The presence of noise from the existing hydropower facility does not mitigate the effects of noise from the HKTA. It is the policy of NPS to take action to prevent or minimize all noise that through frequency, magnitude, or duration adversely affects the natural soundscape or other park resources or values, or that exceeds levels that have been identified through monitoring as being acceptable to or appropriate for visitor uses at the sites being monitored. (NPS Management Policies 2006, Section 4.9). According to NPS guidance, the effects of each noise source should be evaluated against the ambient sound conditions that would exist in the absence of all noise intrusions. Each noise source is potentially subject to management and mitigation and is an appropriate framework for evaluating cumulative effects (draft Acoustics and Soundscape Studies in National Parks, 2005). The guidance specifies minimum data collection for acoustic studies and prescribes a reporting format. Acoustic studies in national park units should include collection of sound pressure level data, frequency data, audibility data, source identification data, meteorological data, and, whenever possible, biological data. These data are used to characterize the natural and existing ambient soundscapes, and include both natural and non-natural sounds.

Bird Monitoring Plan - We agree that more information is needed to evaluate the potential risk of turbine injury to diving birds and Bald Eagles and with the recommendation to design and implement a bird monitoring plan to describe bird use and risk of injury in the project area. This plan should be developed prior to project installation. If monitoring results indicate that diving birds forage in the tailrace, it is recommended that consultation with appropriate resource management agencies occur to determine if additional monitoring, beyond one year, is needed. We recommend that if impacts are identified, mitigation occur.

FERC indicates that no decibel information is available to quantify underwater turbine noise or ambient conditions. The assumption that birds are acclimated to loud ambient conditions is unfounded in any research. We recommend this issue be addressed in the bird monitoring plan and, if monitoring reveals that underwater noise or ambient conditions are affecting birds, noise reduction should be considered as a form of mitigation.

FERC should incorporate the Standard Hydrokinetic Pilot Project License Articles at the project, as appropriate to an existing dam. In accordance with FERC's guidance on monitoring fish and wildlife, the City of Hastings is required to submit to FERC for approval its monitoring plans for aquatic and terrestrial species 90 days prior to starting on-site project construction or installation. These plans are intended to monitor behavior and interaction with the in-water project facilities, including associated anchoring systems throughout the license period. The monitoring plan, at a minimum, should include, 1) detailed descriptions of methods and equipment that would be used for monitoring organisms behavior and activity in the locale of the in-water facilities; 2) detailed description of how the monitoring data will be analyzed, with specific criteria by which to evaluate the adverse effects; 3) detailed implementation schedule, including frequency and timing of data recovery and maintenance of the monitoring equipment, and 4) provisions for identifying, in consultation with the Department, the MN DNR, and other interested agencies and tribes, remedial measures if monitoring identifies any adverse changes in behavior or use of riverine habitats.

FERC also requires an annual report to be filed each year describing the monitoring results and any recommendations for modifying the project facilities or commencing the approved project removal plan if necessary to minimize adverse effects on environmental resources in the proposed project area. Along with the annual report shall be included comments from agencies and tribes and responses to any comments.

The monitoring plan shall be prepared after agency consultation and shall include documentation of consultation, recommendations, and descriptions of how the comments are accommodated by the monitoring plan. A minimum of 30 days shall be allowed for agency comment and recommendations before filing the monitoring plan with FERC. If a recommendation is not adopted, the filing shall include the reason, based on project-specific information. After FERC approval, the monitoring plan shall be implemented, including any changes required by FERC.

Cumulative Impacts

Evaluation of the cumulative impacts associated with this specific project needs to be conducted, in consultation with the NPS and other resource management agencies, prior to project installation. Emphasis should be given to an analysis of impacts to downstream resources. Impacts to the 11 miles of MISS, which includes the project area, and is listed on the Nationwide Rivers Inventory, a Comprehensive Plan on file with the FERC, should also be addressed. There are a number of additional projects and plans to restore Mississippi River aquatic resources that may be adversely affected:

- River resource managers have developed "pool plans" and recommended restoration actions for Mississippi River Pools 1-10 (River Resources Forum 2004), which includes the entire HKTA project area. The feasibility of several recommended actions of these plans may be affected by the City of Hastings' proposal and should be addressed under cumulative impacts. Considerations include:

- Pool 2 drawdowns: Similar to successful drawdowns in Pools 5 and 8, a drawdown in Pool 2 has been recommended to help regenerate aquatic vegetation and restore habitat. The EA needs to address if an increase in power generation at Lock and Dam 2 would compromise this proposal.

- Fish passage: Within MISS, major barriers to fish passage exist at the Coon Rapids Dam and at Lock and Dam 2, where the gates blocking fish movement are rarely raised. Alternatives for improving fish passage between Pools 2 and 3 are under investigation, including construction of a connecting channel on the northeast side of Lock and Dam 2 and removal of a closing dam at the inlet to the Vermillion River Bottoms. The EA needs to determine if the proposed project would conflict with these restoration objectives.

- Proposed river restoration activities: The 2007 MISS Water Resources Information and Issues Overview report (Lafrancois et al. 2007) recommended several actions for NPS to take, based on discussions from an interagency workshop in 2005. One of five primary recommendations was that MISS "serves as a convener for Upper Mississippi River restoration issues". Amending the license for 25 years before understanding its effects on biology, habitat, and future restoration objectives runs counter to this recommendation.

Given the potential long-term effects of a proliferation of projects proposed on the Mississippi and other rivers, the study needs to address impacts from the full build-out of other turbines that may be installed at some future date, as the EA indicates is likely to happen. Cumulative effects should be analyzed for the key interactions among this and any other projects (or factors) not considered that could have a cumulative effect on hydrodynamics, sediments, water quality, wildlife, fisheries (including host species), aquatic species, and related water resource management issues in the area, as well as recreational,

scenic, economic and cultural resources. The study should identify how the actions of the proposed project are related to the ongoing or anticipated actions of other projects. The rate of installation of additional hydrokinetic units needs to be identified to allow for sufficient monitoring of environmental consequences if the project increases in size. The number of multiple units, and the thresholds and impacts for these units, needs to be determined.

Recreation

We disagree with FERC's determination, on page 48 of the EA, that there are no recreational activities that could be affected by installation of the hydrokinetic turbines and that the project would have no affect on recreational resources. Recreational use and connecting people to the Mississippi River are important visions of the MISS CMP. The MISS CMP supports commercial use of the Mississippi River (including conventional hydropower energy production) while recognizing the need to balance these uses with the needs of recreational use of the river. To balance recreational needs with that of private energy production and minimize conflicts in the project area, recreational uses and impacts both in and near the project area, need to be evaluated. A recreation plan is needed that specifically addresses the project's location and new technology. The plan should be developed in consultation with NPS.

As indicated in the EA, the City of Hastings has made great strides in developing unfettered recreational and visitor access to the Mississippi River. Many of these opportunities have occurred in partnership, and with assistance, from the NPS. The EA identifies more than 12,000 recreational boaters and 11,000 barges lock through and pass directly adjacent to the project location on a regular basis during boating season. Public access is available just downstream at a developed boat launch and new public dock. We are concerned with potential conflicts between these uses and with the public's safety, especially if curious recreational boaters want to get a closer look at the facility. Changes in recreation use around the facility need to be monitored and provisions to protect public safety may be needed.

Recreational studies were not required for the original license and are not included as a staff recommended condition of the proposed license amendment. Given the issues identified above and FERC regulations on recreational development at licensed projects " … to evaluate recreational resources of all projects and seek…the ultimate development of these resources, consistent with the needs of the area to the extent that such development is not inconsistent with the primary purpose of the project…" (18 CFR 2.7), more attention to recreation issues is warranted. We, therefore, continue to disagree with FERC's exemption from requiring the licensee from filing Form 80 – Licensed Hydropower Development Recreation Report.

Potential measures that could benefit recreational users and protect public safety near the project area include (1) installation of interpretive materials and programs that educate the public about this new technology; (2) posting of safety precautions to warn the curious

recreational observer; (3) contribution to the development of a water user recreation guide that is currently underway with recreation enhancement funds from the Ford Hydropower Project (FERC Project No. 362) and/or (4) an annual contribution to a recreational enhancement fund for the remainder of the license period.

Land Use and Aesthetics

The concerns identified in our June 24, 2008, comment letter are not adequately addressed in the project EA. These concerns include (1) the potential for adverse effects on the national park system or other sensitive lands in the event of HKTA dislodgement and subsequent retrieval; (2) effects on navigation: (3) noise and (4) aesthetic impacts. Specific recommendations for each of these concerns are outlined below.

Dislodging: We agree with the City of Hastings that the "routine" operation of the HKTA would not pose a risk to downstream resources during flood events, changing weather and flow conditions. However, these do not represent all catastrophic conditions under which the turbine/barge could break free of its moorings. We recommend the City of Hastings analyze potential effects to cultural, natural and recreational resources within downstream sensitive areas in the event of a catastrophic event (including sensitive habitat, recreational, and economic uses), and revise its Operating Plan to identify plans for how the HKTA units will be retrieved, in additional to being shut down or removed, if a dislodging event occurs in this area. FERC's standard Hydrokinetic Pilot Project license articles for a project safety plan should be incorporated.

Noise: Acoustic studies need to be conducted that include collection of sound pressure level data, frequency data, audibility data, source identification data, meteorological data, and, whenever possible, biological data. The NPS can provide guidance on such studies.

Aesthetics: The visual simulation conducted by the City for the proposed turbine/barge indicates the view of the HKTA would be compatible with existing hydroelectric facilities at Lock and Dam No. 2. Analysis of visual impacts of the complete land and water installations from various viewpoints and visitor perspectives should be conducted.

The following, additional land use issues also need to be addressed in the EA:

Consistency of project with state Mississippi Critical Area Program (MRCCA) /Executive Order 79-19: The requirements of the MRCCA are the basis for conformance with the MISS CMP, which incorporates the state MRCCA by reference. Determination of the consistency of the HKTA's installation with the MRCCA (Urban Diversified District) should be made by the MNDNR, in consultation with the NPS not by FERC.

Safety: Measures to protect public safety and the environment in the case of a catastrophic event are not addressed in the EA. We recommend the project's Operating Plan clearly define safety parameters and procedures for when these parameters are exceeded or in the event of a mechanical failure, in addition to flooding and other extreme weather conditions.

The plan should include not only recovery, but also a determination of damage (i.e. scouring the river bottom, etc.) along the path between the turbine and its resting/recovery location.

Measures to protect public safety if the project becomes an attractant to boaters should also be addressed and mitigation measures identified, as discussed in our comments about recreation.

Economic Resources: The EA states the net annual benefit as a $56,000 loss for the City of Hastings' proposal and a $61,700 loss for the proposal with additional staff recommendations. The expected loss suggests future development will be needed to achieve profitability for the developer (Hydro Green). The EA needs to evaluate the cumulative impacts of the likely future hydrokinetic developments and address impacts from the full build-out of other turbines that may be installed at some future date, as the EA indicates is likely to happen. The rate of installation of additional hydrokinetic units needs to be identified to allow for sufficient monitoring of environmental consequences if the project increases in size.

Modifications to Project: On September 25, 2008, the Applicant submitted to FERC additional information that modifies the construction and installation process for the proposed hydrokinetic units. We are concerned that FERC may have not had time to adequately address the visual and other impacts of these modifications in the EA, which more than double the size of the floating platform. These modifications need to be addressed for the installation of the initial turbine, as well as for the addition of the second turbine.

Conclusion

Without adequate knowledge of the environmental impacts of this new technology, and for reasons noted in our comments above, and all previous correspondence, the HKTA will need to be carefully tested, its impacts better understood and additional adaptive management measures developed, for the life of the project. These measures include our recommendations for additional studies or monitoring of project impacts to aquatic, terrestrial and endangered species, modifications to the project's operating plan to protect public safety and the environment in the case of a catastrophic event, identification of impacts to visual and auditory resources, addressing cumulative impacts, development of a recreation management plan, eliminate the Form 80 exemption, and more adequate attention to land use issues.

The Department does not agree with FERC's determination of a Finding of No Significant Impact (FONSI). This determination is premature until additional information, conditions, and monitoring-based measures are addressed and included in the EA/project license. As previously stated in these and other comments it is difficult to ensure the preservation and protection of the environmental values of the MISS consistent with the MISS CMP under the high level of uncertainty with regard to environmental effects for this new and uncertain technology. It is more prudent in this case to license the project for a 3-5 year period with periodic milestones and thresholds. A process to identify appropriate mitigation measures, if

and when adverse impacts are identified, needs to be developed, in consultation with NPS, to ensure the project is compatible with the MISS CMP for the life of the project and the site is restored to previous operating conditions if and when serious circumstances arise.

Thank you for this opportunity to comment. If you have any further questions, please contact Paul Labovitz of the National Park Service at 651-290-3030, ext. 222 (NPS) or Tony Sullins of the Fish and Wildlife Service at 612-725-3548. The National Park Service is willing to host a technical conference of interested parties to address and resolve all comments received.

Sincerely,

Willie R. Taylor

Willie Taylor
Director, Office of Environmental
Policy and Compliance

cc:
Service List *P-4306-017*