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VIA E-FILING

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

RE: Whitewater Flow Study Report and Response to Comments of City of Auburn, Maine and
American Whitewater
Lower Barker Hydroelectric (FERC No. 2808)

Dear Secretary Bose:

KEI (USA) Power Management Inc. (KEI (USA)) on behalf of KEI (Maine) Power Management (III) LLC (licensee) is submitting this letter to the Federal Energy Regulatory Commission (FERC or Commission) to provide the whitewater flow study final report and response to comments on the report provided by the City of Auburn on August 2, 2017, and by American Whitewater on August 8, 2017 for the Lower Barker Hydroelectric Project (FERC No. 2808) (Project).

As indicated in prior correspondence and process documents, the Project is operated in a run-of-river mode (outflow equals inflow with pond level fluctuation limitations) and any flow releases will need to be provided to the bypass reach by throttling or shutting off the unit when there is sufficient inflow to the impoundment to achieve target downstream flows. In order to avoid adverse impacts to the project reservoir and resources, the headpond cannot be drawn down except for emergency or maintenance purposes. Due to the uncertainty of the availability of flows on any particular given date, advanced scheduling of flow releases to the bypass reach is difficult to achieve.

The City and other stakeholders have identified several issues and concerns in recent comments on the Commission's Scoping Document 1. KEI (USA) intends to file a separate response to those comments. For the purposes of this submittal, KEI (USA) only responds to the specific measures recommended by the City and American Whitewater in comments on the whitewater flow study report.

The City and American Whitewater recommend measures of scheduled boating flow releases, a mechanism for real-time flow gaging, and funding for recreational access.

Whitewater Releases

The City recommends provision of at least five scheduled flow releases on weekend days of 600-800 cfs for up to five hours. American Whitewater states that KEI (Maine) "should spill all flows from 300 to 1170 cfs during weekends and holidays during boating months."

KEI (USA) understands the City's interest in enhancing recreational boating opportunities in the reach downstream of the Lower Barker dam and is willing to develop an agreement with the City to provide coordinated recreational boating release events. KEI (USA) is willing to provide up to five releases through turbine shutdowns on an annual basis, provided inflow to the Project is sufficient to do so. However, given the demonstrated difficulty (which even AW acknowledge in comments as being "especially difficult") to schedule specific river flows due to variability in inflow to the Project, limitations of run-of-river operations, and inability to utilize headpond fluctuations to supplement downstream flows, it is impractical to stipulate a specific flow on a specific date. Further, KEI (USA) does not believe it is reasonable or appropriate to specify the duration of such releases. A target duration would be reasonable (such as up to five hours), but as demonstrated by the difficulty scheduling the boating study, the quantity of inflow to the project can change quickly and the level of inflow can significantly drop over the course of several hours, putting KEI (USA) at risk of not being able to comply with operating constraints (i.e., fluctuation of headpond levels) under the FERC license and state water quality certification.

With a minimum unit flow aligned with the proposed minimum bypass flow of 113 cfs¹ and a maximum unit flow of 500 cfs, KEI (USA) estimates that five, five-hour releases of 500 cfs would result in generation loss of approximately 40 MWH per year. Calculations for releases in increments over 500 cfs were not developed because flows in excess of 613 cfs would be beyond the operational capability of the unit and would be spilled regardless.

American Whitewater states: "While not part of this study, it would have been useful to evaluate some higher flows in the range of 600-1000 cfs, a flow range that the study identifies as optimal, although there is insufficient data that supports that conclusion since those flows were not evaluated. Without providing study participants with an opportunity to evaluate these higher flows, it is difficult to identify the upper limit of the optimal boating range for each category of boaters." KEI (USA) notes that this was not a case of participants not being afforded an opportunity to evaluate a higher flow range. The study plan, which stakeholders reviewed and commented on, specified evaluating flows of 300, 500, and 660 cfs. The study plan did not include a higher flow increment and streamflow conditions were insufficient to achieve even 660 cfs for a scheduled study that was difficult to coordinate such that sufficient inflow would be available.

American Whitewater's recommended flow increments and timeframes are not reasonable or appropriate for the limited portion of the bypass that can be suitable for whitewater boating under infrequently occurring river flow conditions. Spilling essentially all inflow on weekends and holidays during boating months would eliminate a significant portion of what little generating opportunity currently exists, for a short section of river (e.g., rated by boaters as being below average to average as compared to other reaches within a two hour drive (see Section 3.4 of the study report). Further, as explained in Section 3.5, flows at the higher level of the range recommended by American Whitewater will result in water depth and velocities that become unsafe for angler wading.

Flow Gaging

The City and American Whitewater recommend establishment of a gage to estimate and publish real-time river flow at the project. In previous comments, the City cited the complexity of prorating upstream gage data to estimate site conditions. KEI (USA) maintains that the prorating method utilized throughout the

¹ As noted in KEI (Maine)'s June 16, 2017 filing with the Commission, vendor specifications include a minimum hydraulic capacity of 150 cfs, however, KEI (Maine) proposes a minimum bypass flow of 113 cfs.

relicensing process is an appropriate, industry accepted engineering practice. The calculation factor of multiplying the South Paris gage data by 4.9, which has been thoroughly explained in the relicensing documents, provides a reasonable method of estimating inflow to the project. KEI (USA) is willing to work with the City to automate this calculation from existing upstream gage data for publication to a website.

Funding for Recreational Access

The City recommends that KEI (USA) provide funding for “high quality and safe” recreational access upstream and downstream of Lower Barker dam. The City also recommends an annual payment to the city of Auburn or Androscoggin Land Trust to assist in maintenance of the Barker Mill Trail to serve as a portage trail between upstream and downstream access points.

KEI (USA) proposed in the license application to provide adequate signage, parking, and foot access provisions to the tailrace/bypass reach area and to improve the existing hand-carry boat launch at the impoundment, including appropriate signage and parking. KEI (USA) committed to consulting with the Maine Department of Inland Fisheries and Wildlife in designing these improvements. These access points and parking will be the only FERC designated Project recreation facilities at Lower Barker. A portion of the Barker Mill Trail will serve as a portage route between the impoundment and bypass reach, and KEI (USA) is committed to assist in maintaining, within reason, that portion of the Barker Mill Trail. The remainder of the trail is not associated with the hydro facility or its operations and is not considered a “project” recreation facility. Therefore, KEI (USA) questions whether FERC can consider such funding for maintenance of the remainder of the Barker Mill Trail as an enforceable measure under the FERC license, and hence, does not propose such funding. Further, KEI (USA) notes that the project currently contributes an average of \$34,825 to the City tax base, not including taxes for the upstream Upper Barker Project.

If there are any questions or comments related to any of the other information presented above, please contact me at (207) 203-3025 or by email at Lewis.Loan@kruger.com.

Sincerely,



Lewis C. Loon, General Manager
Operations and Maintenance–USA/QC

LCL:TMJ

cc: Andy Qua, Kleinschmidt Associates