



September 30, 2014

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

Re: Susitna-Watana Hydroelectric Project, Project No. 14241-000

Third Set of 2014 Technical Memoranda for Initial Study Plan Meetings

Dear Secretary Bose:

As the Alaska Energy Authority (AEA) explained in its September 17, 2014 filing with the Federal Energy Regulatory Commission (Commission or FERC) for the proposed Susitna-Watana Hydroelectric Project, FERC Project No. 14241 (Project), the June 3, 2014 Initial Study Report (ISR) provided for AEA to prepare certain technical memoranda and other information based on 2014 work. In accordance with Commission Staff direction, on September 17 and September 26, AEA filed and distributed the first and second sets of technical memoranda and other information generated during the 2014 study season.

With this letter, AEA is filing and distributing the third set of technical memoranda generated during the 2014 study season, as described below.

This third set of technical memoranda includes:

- Attachment A: *Baseline Water Quality Study (Study 5.5) and Water Quality Modeling Study (Study 5.6), Water Quality and Lower River Modeling Technical Memorandum*. This technical memorandum evaluates water quality data collected during 2013 and 2014 for adequacy in representation of current riverine conditions. This Technical Memorandum further includes an assessment of whether to extend the Water Quality Modeling Study's riverine model below PRM 29.9.
- Attachment B: *Mercury Assessment and Potential for Bioaccumulation Study (Study 5.7), Evaluation of Continued Mercury Monitoring Beyond 2014 Technical Memorandum*. This technical memorandum evaluates the need for continued monitoring of mercury data beyond 2014 and whether the existing data collection efforts are sufficient to satisfy objectives for characterizing baseline mercury conditions in the Susitna River and tributaries (Revised Study Plan (RSP) Section 5.7.1).

- Attachment C: *Groundwater Study (Study 7.5), Preliminary Groundwater and Surface-Water Relationships in Lateral Aquatic Habitats within Focus Areas FA-128 (Slough 8A) and FA-138 (Gold Creek) in the Middle Susitna River Technical Memorandum*. This technical memorandum provides an overview of the types of data and information that are being collected to support the Task 6 activities of the Groundwater Study, and describes the methods and techniques that are being applied in analyzing the data leading to development of response functions to be used for evaluating Project operational effects. The TM centers on the analysis for FA-128 (Slough 8A) and to a lesser extent FA-138 (Gold Creek) and represents an expansion of the presentation materials provided during the Proof of Concept meetings held on April 15-17, 2014.
- Attachment D: *Groundwater Study (Study 7.5), Groundwater and Surface-Water Relationships in Support of Riparian Vegetation Modeling Technical Memorandum*. This technical memorandum provides an overview of the types of data and information that are being collected to support the Task 5 activities within the Groundwater Study, and describes the methods and techniques that are being applied in analyzing the data leading to development of response functions for evaluating Project operational effects. The TM provides analysis objectives for FA-115 (Slough 6A) as a primary example of upland versus riverine dominated groundwater conditions. Additional examples are shown for FA-128 (Slough 8A) and FA-138 (Gold Creek).
- Attachment E: *Salmon Escapement Study (Study 9.7), 2014 Implementation and Preliminary Results Technical Memorandum*. This technical memorandum describes 2014 implementation (including methods and variances) of and preliminary results from the Salmon Escapement Study.
- Attachment F: *Cook Inlet Beluga Whale Study Plan (Study 9.17), 2015 Implementation Plan Technical Memorandum*. This implementation plan describes the methods for study activities proposed for 2015 that would implement the Cook Inlet Beluga Whale Study (instead of those described in RSP Section 9.17.1).

AEA appreciates the opportunity to provide this additional information to the Commission and licensing participants, which it believes will be helpful in determining the appropriate development of the 2015 study plan as set forth in the ISR. If you have questions concerning this submission please contact me at wdyok@aidea.org or (907) 771-3955.

Sincerely,

A handwritten signature in black ink that reads "Wayne M. Dyok". The signature is written in a cursive style with a horizontal line underneath the name.

Wayne Dyok
Project Manager
Alaska Energy Authority

Attachments

cc: Distribution List (w/o Attachments)