

May 27, 2014

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

**Re: Susitna-Watana Hydroelectric Project, FERC Project No. 14241-000;  
Updated Technical Memoranda**

Dear Secretary Bose:

On December 14, 2012, Alaska Energy Authority (AEA) filed its Revised Study Plan (RSP) with the Federal Energy Regulatory Commission (FERC or Commission) for the Susitna-Watana Hydroelectric Project (FERC Project No. 14241), which included 58 individual study plans (AEA 2012). Included within the RSP were the Geomorphology Study, Study 6.5, and the Fluvial Geomorphology Modeling below Watana Dam Study, Study 6.6.

On February 1, 2013, FERC Staff issued its study determination for 44 of the 58 studies, approving 31 studies as filed and 13 with modifications. On April 1, 2013 FERC issued its study determination (April 1 SPD) for the remaining 14 studies; approving one study as filed and 13 with modifications. Studies 6.5 and 6.6 were two studies approved in FERC's April 1 SPD.

As part of AEA's continued implementation of Study 6.5 and Study 6.6, this filing provides two updated technical memoranda:

1. Geomorphic Reach Delineation and Characterization, Upper, Middle and Lower Susitna River Segments Updated Technical Memorandum; and
2. Updated Fluvial Geomorphology Modeling Approach Technical Memorandum.

AEA initially filed with the Commission the Geomorphic Reach Delineation and Characterization, Upper, Middle and Lower Susitna River Segments Technical Memorandum as an update to the Initial Geomorphic Reach Delineation and Characterization, Middle and Lower Susitna River Segments 2012 Study Technical Memorandum (Tetra Tech 2013a) on March 4, 2013. This updated technical memorandum adds geomorphic reach delineation and characterization for the Upper Susitna River Segment, as well as updated median bed-material sizes collected during the

2013 field season in Middle and Lower Susitna River geomorphic reaches as part of Study 6.6 (AEA 2012b).

AEA initially filed the Fluvial Geomorphology Modeling Approach Technical Memorandum on July 1, 2013. This revised technical memorandum provides updates to several topics including final 1-D and 2-D model selection (Sections 3.1.3.5, 3.1.4.2, and 3.2.4.2), treatment of selection of representative years including consideration of Pacific Decadal Oscillation (Sections 2.2 and 3.4.1.1), and tributary modeling (Sections 4.1.1 and 4.2). This revised technical memorandum also includes text, figures and tables that describe the Proof of Concept efforts for 2-D hydraulic modeling (Attachment A to this technical memorandum).

As always, AEA appreciates the participation and commitment to this licensing process demonstrated by Commission Staff, federal and state resource agencies, and other licensing participants. AEA looks forward to working with licensing participants and Commission Staff in implementing the approved studies, which AEA believes will comprehensively investigate and evaluate the full range of resource issues associated with the proposed Project and support AEA's license application, scheduled to be filed with the Commission in 2015.

If you have questions concerning this submission please contact me at [wdyok@aidea.org](mailto:wdyok@aidea.org) or (907) 771-3955.

Sincerely,

A handwritten signature in blue 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

Attachment

cc: Distribution List (w/o Attachment)