

**Susitna-Watana Hydroelectric Project  
(FERC No. 14241)**

**Transportation Resources Study  
Study Plan Section 15.7**

**Part D: Supplemental Information to  
June 2014 Initial Study Report**

Prepared for

Alaska Energy Authority



**SUSITNA-WATANA HYDRO**

*Clean, reliable energy for the next 100 years.*

Prepared by

DOWL

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## 1. INTRODUCTION

Section 1 (Part A) of the June 2014 ISR for this Transportation Resources Study (Study Plan 15.7) details the development of this study from the Revised Study Plan (RSP) in 2012, through the end of the 2013 study season. Section 7 of the ISR (Part C), filed in June 2014, sets forth AEA's plan and schedule, at that time, for completing this study and meeting the objectives of the RSP.

As detailed in Section 2.2 of the ISR Part D Overview, various circumstances have required AEA to extend the original timeframe for completing the Commission-approved Study Plan. However, AEA has made meaningful progress with Study 15.7 since the filing of the ISR in June 2014. As detailed below, AEA's recent activities for Study 15.7 have consisted of the following:

- On October 23, 2014 AEA held an ISR meeting to discuss the results and status of the Transportation Resources Study.
- The study team reviewed other project studies, including the Engineering Feasibility Study, for relevant information.
- The study team documented the transportation infrastructure proposed as part of the Project.
- The study team qualitatively evaluated the short-term (construction) and long-term (operational) impacts of the Project and compared the With-Project scenario to the Without-Project scenario.
- The study team completed the Study Implementation Report in October 2015.

The primary purpose of this Part D Supplemental Information to the ISR is to report on the implementation of the Study Plan from the filing of the ISR in June 2014, through the filing of this ISR Part D. In light of this additional implementation, this Part D also identifies AEA's plans for completing Study 15.7 in a manner that meets the objectives of the Commission-approved Study Plan.

## 2. BACKGROUND

### 2.1. Purpose of Study

The study goals and objectives are established in RSP Section 15.7.1.1 as follows.

The Transportation Resources Study will assess current transportation conditions in the Project area and evaluate potential Project demands relative to current capacity limits and safety requirements for road, railroad, aviation, port, and river traffic. The study will assess the short-term (construction) and long-term (operational) direct and indirect impacts of the Project, as well as of the cumulative impacts of the Project. The transportation effects of the Project (With-Project) will be compared to a Without-Project scenario.

The AEA Project team will use information from this study to identify and coordinate needed transportation infrastructure improvements with the Alaska Department of Transportation & Public Facilities, Alaska Railroad Corporation (ARRC), the Matanuska-Susitna Borough, the Denali Borough, and others. This report will also provide valuable information for the multidisciplinary analysis of the Project required under the National Environmental Policy Act.

## 2.2. Study Components

As outlined in the June 2014 ISR Part C, the components of Study 15.7 are as follows:

- Analysis of existing conditions for the transportation system, including road, aviation, rail, port, and river travel.
- Forecasting of future transportation system conditions without the construction of the Project.
- Evaluation of Project-related activities on the future transportation system.

## 3. STATUS, HIGHLIGHTED RESULTS, AND ACHIEVEMENTS

The following tasks were completed in 2013 and reported in Part A of the June 2014 ISR for Study 15.7:

- The study team collected and reviewed existing data and a complete bibliography of published reports was included in Appendix A of the June 2014 ISR.
- The study team completed an inventory of assets, which was included in Appendix B of the June 2014 ISR.
- Existing conditions for various transportation modes were documented and included in the June 2014 ISR.
- The study team documented forecasts for various transportation modes in the June 2014 ISR.

## 4. SUMMARY OF STUDY 15.7 DOCUMENTS

Since filing of the RSP in 2012, AEA and FERC have prepared several documents pertaining to this study. To aid review by FERC staff and licensing participants, each of these documents is listed below. Each of these documents is accessible on AEA's Project licensing website (<http://www.susitna-watanahydro.org/type/documents/>) by clicking on the entry in the "Link" column in the table. In addition, these documents are available on FERC's eLibrary system (<http://www.ferc.gov/docs-filing/elibrary.asp>), in Docket No. P-14241.

Title	Date	Description	Link
15.7. Transportation Resources Study (Revised Study Plan)	12/14/2012	This document presents the plan for this study, including goals, objectives, the study area, and proposed study methods for the transportation resources study.	<a href="#">RSP for Study 15.7</a>
FERC Study Plan Determination for Study 15.7	2/1/2013	This document presents FERC approval of Study 15.7, which approved AEA's Revised Study Plan with no recommended adjustments.	<a href="#">FERC SPD for Study 15.7</a>
Draft Initial Study Report for Study 15.7	2/3/2014	This draft of the ISR summarized the study methods and variances during the 2013 study season, and presented preliminary data collected for Study 15.7. This draft ISR was later republished as Part A of the final ISR.	<a href="#">Draft ISR for Study 15.7</a>
Initial Study Report for Study 15.7	6/3/2014	This document is the Initial Study Report (Parts A, B and C) for Study 15.7. Part A republishes the Draft ISR. Part B identifies supplemental information and errata in Part A. Part C presents study modifications and plans for completing the study.	<a href="#">ISR Part A for Study 15.7</a> <a href="#">ISR Part B for Study 15.7</a> <a href="#">ISR Part C for Study 15.7</a>
Initial Study Report Meetings, October 23, 2014 (Parts A and B)	11/15/2014	Transcripts and AEA's agenda and PowerPoint presentations for the ISR meeting concerning the Project transportation study	<a href="#">Transcripts from ISR Meeting</a> <a href="#">Materials from ISR Meeting</a>
Transportation Resources Study (15.7) – Study Implementation Report	11/6/2015	Study Implementation Report: a summary of study results in 2013-2014	<a href="#">2014 SIR for Study 15.7</a>

## 5. NEW STUDY DOCUMENTATION SUPPLEMENTING THE ISR

The following table identifies and describes additional reports or other documents that update, refine, or otherwise supplement certain sections of the ISR pertaining to this Study 15.7, during AEA's continued implementation of the Study Plan since the ISR was filed in June 2014.

ISR Reference	Description
Part A, Section 4	This Section is updated and supplemented with the Study Implementation Report, Section 4, describing 2013-2014 study plan implementation.
Part A, Section 5	This Section is updated and supplemented with the Study Implementation Report, Section 5, describing the results of 2013-2014 study plan implementation.
Part A, Figures	This section is supplemented with the Study Implementation Report.

## 6. VARIANCES

### 6.1. 2013 Study Season

The following variances are reported in the June 2014 ISR.

- The ports of Seward and Whittier were added to the study area, as were the associated rail lines. These ports were evaluated as to the effects of the Project on them.
- Bridge data integration was limited to bridges whose current structural or functional condition is determined to have a potential adverse impact on Project-related travel. Effects on these bridges were evaluated.
- River travel data was not captured through agency and individual interviews in 2013.
- Forecasts for existing highway facilities were documented from existing traffic demand models or developed using historic growth rates. Aviation forecasts were documented using published aviation data.
- Project effects on all transportation modes will be qualitatively evaluated based on the level of Project information available, professional judgment, and interviews with knowledgeable individuals. This differs from RSP Section 15.7.4.5, which implied that effects would be quantified for highway and rail modes.

### 6.2. 2014 Study Season

As noted in Section 4 of the 2014 Study Implementation Report, other than the variances listed in Section 6.1, AEA encountered no additional variances when implementing this study in 2014.

## 7. STUDY PLAN MODIFICATIONS

### 7.1. Modifications Identified in ISR

Section 7 of the ISR (Part C) details modifications for this study following the 2013 study season. These modifications are generally summarized as follows:

- The ports of Seward and Whittier were added to the study area, as were the associated rail lines. These ports were evaluated as to the effects of the Project on them.
- Bridge data integration was limited to bridges whose current structural or functional condition is determined to have a potential adverse impact on Project-related travel. Effects on these bridges were evaluated.
- Forecasts for existing highway facilities were documented from existing traffic demand models or developed using historic growth rates. Aviation forecasts were documented using published aviation data. Forecasts for various modes may be updated if new data is available. River use forecasts will be qualitatively evaluated based on data obtained through interviews with knowledgeable persons.

- Project effects on all transportation modes will be qualitatively evaluated based on the level of Project information available, professional judgment, and interviews with knowledgeable individuals. This differs from RSP Section 15.7.4.5, which implied that effects would be quantified for highway and rail modes.

## **7.2. Modifications Identified since the June 2014 ISR**

As detailed in the 2014 Study Implementation Report for this study, AEA plans no modifications of the methods for this study.

## **8. STEPS TO COMPLETE THE STUDY**

In light of the variances and modifications described above, the steps necessary for AEA to complete this study are summarized below. These steps have been updated from those appearing in Section 7 of the ISR (Part C).

- Interviews with knowledgeable individuals are needed to gather information on current and future river and trail transportation use.
- The Project effects discussion should be supplemented with additional information on the potential effects of the Project on river and trail transportation uses.