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

**Transportation Resources Study
Study Plan Section 15.7**

**Initial Study Report
Part C: Executive Summary and Section 7**

Prepared for

Alaska Energy Authority



SUSITNA-WATANA HYDRO

Clean, reliable energy for the next 100 years.

Prepared by

DOWL-HKM

June 2014

TABLE OF CONTENTS

Executive Summary	ii
7. Completing the Study	1
7.1. Proposed Methodologies and Modifications	1
7.1.1. Decision Points from Study Plan	1
7.1.2. Modifications to the Study Plan.....	1
7.2. Schedule.....	1
7.3. Conclusion	2

EXECUTIVE SUMMARY

Transportation Resources Study 15.7	
Purpose	The objective of the transportation study is to document existing transportation facilities, including their condition and level of use, and to identify potential Project-related impacts on the transportation system.
Status	Two of the three major study components identified below are complete. Existing conditions have been documented; an asset inventory is complete. Future conditions have been forecasted for each mode, without the effects of Project-related impacts. Evaluating Project-related impacts to the transportation system will be completed during the next study season.
Study Components	The study is comprised of three major components. The first component is an analysis of existing conditions for the transportation system, including road, aviation, rail, port, and river travel. The second component is the forecasting of future transportation system conditions without the construction of the Project. The third component is an evaluation of Project-related activities on the future transportation system.
2013 Variances	The ports of Seward and Whittier were added to the study area, as were the associated rail lines. This is a variance from RSP Section 15.7.3. 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. This is a variance from RSP Section 15.7.4.2. River travel data was not captured through agency and individual interviews in 2013, but will be completed during the next season. This is a variance from the schedule in RSP Table 15.7-6. Forecasts were documented for existing transportation facilities but not for proposed Project facilities. 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. This is a variance from RSP Section 15.7.4.4. Potential effects on transportation systems and river use from implementation of the Project will be evaluated during the next study season. This is a variance from the schedule in RSP Table 15.7-6.
Steps to Complete the Study	AEA will continue to implement this study in 2014 and 2015, with no modifications to the FERC-approved Study Plan except for the continuation of the variances implemented beginning in 2013. In 2014, existing conditions data for river transportation will be collected and documented using existing published data and interviews with various agencies and user groups to

Transportation Resources Study 15.7	
	determine frequency and type of non-recreational river travel. Future river use levels will be discussed based on data collected and consultation with knowledgeable individuals. Project-related transportation facilities, such as proposed corridors and modal connections, and uses will be documented in 2014. In 2015, AEA plans to complete all remaining data collection and analysis for this study. In addition, Project effects on all modes will be qualitatively evaluated based on project information available, professional judgment and interviews with knowledgeable individuals. This is a modification from RSP Section 15.7.4.5, which implied that effects on highway and rail modes would be evaluated quantitatively.
Highlighted Results and Achievements	• The asset inventory was completed. • Existing conditions for transportation resources were documented. • Future conditions without the Project were documented based on existing available information.

7. COMPLETING THE STUDY

7.1. Proposed Methodologies and Modifications

To complete this study, AEA will implement the methods in the Study Plan except as described in Section 7.1.2. These activities include:

- Collect and review data (RSP Section 15.7.4.1);
- Inventory assets and conduct interviews (RSP 15.7.4.2);
- Documenting existing transportation conditions (RSP Section 15.7.4.3);
- Forecasting future transportation conditions (RSP Section 15.7.4.4); and
- Evaluating effects on transportation resources (RSP Section 15.7.4.5).

7.1.1. Decision Points from Study Plan

There were no decision points in the FERC-approved Study Plan to be evaluated for this study following the completion of 2013 work.

7.1.2. Modifications to the Study Plan

AEA will implement the following modifications to the FERC-approved Study Plan in 2015, which were implemented as variances beginning in 2013:

- (1) The ports of Seward and Whittier have been added to the study area, as were the associated rail lines. These ports will be evaluated as to the effects of the Project on them.
- (2) Bridge data integration will be 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 will be evaluated.
- (3) Forecasts for existing highway facilities will be documented from existing traffic demand models or developed using historic growth rates. Aviation forecasts will be 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.
- (4) 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. Schedule

In general, the schedule for completing the FERC-approved Study Plan is dependent upon several factors, including Project funding levels authorized by the Alaska State Legislature, availability of required data inputs from one individual study to another, unexpected weather delays, the short duration of the summer field season in Alaska, and other events outside the

reasonable control of AEA. For these reasons, the Study Plan implementation schedule is subject to change, although at this time AEA expects to complete the FERC-approved Study Plan through the filing of the Updated Study Report by February 1, 2016, in accordance with the ILP schedule issued by FERC on January 28, 2014.

With regard to this specific study, AEA expects to complete data collection in both the 2014 and 2015 study seasons, which will be reported in the USR. In 2014, existing conditions data for river transportation will be collected and documented using existing published data and interviews with various agencies and user groups to determine frequency and type of non-recreational river travel. Future river use levels will be discussed based on data collected and consultation with knowledgeable individuals.

Project-related transportation facilities, such as proposed corridors and modal connections, and uses will be documented in 2014.

Preparation of mode forecasts related to Project construction and maintenance will begin in 2014 but may not be completed until 2015. Forecasting requires information from engineering studies, such as Project work force and material transportation assumptions.

In 2015, AEA plans to complete all remaining data collection and analysis for this study.

7.3. Conclusion

Implementation of the Transportation Resources Study is planned for 2014 and 2015, with modifications related to adding the Ports of Seward and Whittier and data collection methods related to bridges, transportation forecasts and effects analysis techniques. The documentation of existing conditions and forecasted future conditions was completed for all modes but river transportation in 2013, with some variance: the addition of Seward and Whittier port and rail, a refinement of the bridge data integration, postponed river travel-related interviews, and a more general evaluation of Project effects on the transportation system.

River data collection completion, documentation of Project-related transportation facilities, and refinement of the evaluation of Project-related effects on the transportation system in 2014 and 2015 will complete the Transportation Resources Study and will meet the study's goals and objectives by identifying necessary operational and infrastructure improvements to accommodate Project-related demands.

This study is interrelated with the River Recreation Flow and Access and Subsistence Study (Studies 12.7 and 14.5). AEA expects the approved Study Plan objectives for this study will be fully achieved with the modifications outlined above, in combination with the 2013 efforts. The results of this study will be reported in the USR.