

FISCAL NOTE

STATE OF ALASKA
2008 LEGISLATIVE SESSION

Fiscal Note Number: 1
 Bill Version: CSSB 246(RES)
 (S) Publish Date: 2/29/08

Identifier (file name): SB246-CED-AEA-02-11-08 Dept. Affected: _____
 Title: Susitna Hydro Working Group: Report RDU: AEA (453)
 Sponsor: Thomas Component: Statewide Project Development
 Requester: Senate Resources Component Number: 2888

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

	Appropriation Required	Information						
		FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
OPERATING EXPENDITURES								
Personal Services								
Travel								
Contractual								
Supplies								
Equipment								
Land & Structures								
Grants & Claims								
Miscellaneous								
TOTAL OPERATING		0.0	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES	2,800.0		1,500.0					
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CHANGE IN REVENUES ()								
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FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts								
1003 GF Match								
1004 GF	2,800.0		1,500.0					
1005 GF/Program Receipts								
1037 GF/Mental Health								
Other Interagency Receipts								
TOTAL	2,800.0	0.0	1,500.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2008) cost: _____

POSITIONS

Full-time								
Part-time								
Temporary								

ANALYSIS: (Attach a separate page if necessary)

This legislation requires the Governor to establish a working group to analyze the hydroelectric potential of the Susitna River. It is assumed that the Alaska Energy Authority will take the lead on this analysis and coordinate the working group and consult with railbelt utilities, native corporations, other landowners, and various regional economic development council.

This legislation requires the working group to prepare a report by January 1, 2009 to address a list of items; however, due to the complexity of the required report this fiscal note assumes that the work will continue through June 2010. The following pages detail the estimated cost of the report.

Prepared by: Sara Fisher-Goad, Acting Executive Director Phone 907.771.3012
 Division: Alaska Energy Authority Date/Time 2/11/08 1:49 PM
 Approved by: Emil R. Notti, Commissioner Date 2/11/2008
Commerce, Community, and Economic Development

ANALYSIS CONTINUATION

The work tasks and goals are envisioned to complete the objectives of this legislation; the timeline is provided for each task to illustrate work tasks that could be done in parallel rather than sequentially.

SB 246 objectives 2,3,5,9,13**Work Task 1: Feasibility Study and Estimate of Plant and of Generated Power Costs**

The 1984 estimates for construction of the Susitna Hydro project will be updated for current costs as well as current construction and design technology. Constructability and logistics will be key components of this update. Additionally a review of engineering and technical risks including seismic design will be identified. The design of this facility is such that there are minimal size reductions that can be done. While there may be a need for 700 MW of generating capacity the constraints of the Susitna site may allow for options of 300 MW, 1000 MW, and 1,620 MW only. The study therefore will examine the possible size options that are inherent in the 1984 estimate and provide capital, operating and maintenance costs and subsequent costs of power over the lifetime of the facility for those options. Additionally, modifications and estimates for upgrades of the Railbelt Electrical Grid to allow use of this new generation capacity will be developed. Timelines for design, permitting, and construction for each option will be developed.

Estimated Cost: \$1,500,000

Schedule: 30 June 2008 – 30 September 2009

SB 246 objectives 7,8,10,11**Work Task 2: Environmental/Socio-economic Impact Study**

Environmental permitting and the socio-economic impact on the affected area is a key component of this study and will have the most impact on the feasibility of this study. A review of necessary permits, licenses and an analysis of potential impacts to the area will be done. Economic impacts and opportunities, including construction and operation jobs, which will result from a project of this size and generating capacity will be determined.

Estimated Cost: \$500,000

Schedule: 30 January 2009 – 30 September 2009

SB 246 objective 4**Work Task 3: Cost of Power for Selected Alternatives**

An estimate of approximate costs of alternative power generation that would be accessible to the Railbelt will be made. Options will consider the appropriate use of coal, natural gas, wind, geothermal, tidal and an alternate source of hydro. These estimates will be used to compare the reasonability of power generation from Susitna as well as the displacement opportunity of other fuels this project will enable. An important outcome of this activity will be the determination of the costs/values of emissions each generating option will provide, this will include such things as carbon emissions/capture and mercury emissions.

Estimated Cost: \$800,000

Schedule: 30 March 2009 – 31 December 2009

SB 246 objective 6**Work Task 4: Financing Options**

The size of this single generation will be in excess of \$5 billion and while it may provide a competitive cost of power, the ability to finance the costs may be the limiting factor. An analysis of potential financing options will be developed.

Estimated Cost: \$200,000

Schedule: 30 January 2009 – 30 September 2009

ANALYSIS CONTINUATION

SB 246 objectives 1,2,3,12

Work Task 5: Integrated Systems Energy Plan for the Railbelt

A strategic energy plan for the Railbelt area will be developed. This will examine projected energy demands under a variety of different future scenarios that will examine growth in population, potential new industrial demands, changes in air and water regulations, fuel costs, development of new energy technologies, as well as risks of the variety of generating options. The objective of this plan is to provide balanced view of energy needs and opportunities to allow for informed decisions on energy projects.

Estimated Cost: \$1,000,000

Schedule: 30 June 2008 – 30 January 2010

SB 246, section 2(b)

Creation of a Project Advisory Group

An advisory group to provide feedback to the study team and provide insight and information from their perspective will be created. Led by the Alaska Energy Authority representatives from the Departments of Natural Resources; Environmental Conservation; Fish and Game; Labor and Workforce Development; and Commerce, Community and Economic Development will be empanelled to assist in the study effort.

Estimated Cost: \$50,000

Schedule: 30 September 2008 – 30 June 2010

SB 246 objectives 8,10,11

Field Work

Limited field work is envisioned; however there may be need for helicopter access to the location of the proposed dam sites as well as limited amount of field work including terrain, river conditions and potential construction camp sites and lay down areas.

Estimated Cost: \$250,000

Schedule: 30 June 2008 – 30 September 2009

Proposal Summary

Total Estimated Susitna Study Cost: \$3,300,000

Total Estimated Cost with Railbelt Energy Plan: \$4,300,000

FY 09 - \$2,800,000

FY 10 - \$1,500,000

It is anticipated that this work will take approximately two years, with the draft report available in January 2010 and a final report including a Railbelt energy plan available in June 2010. Over the course of the project interim reports will be issued and specific decision gates on proceeding with phases of the project will be developed. If at anytime the feasibility of the Susitna Dam project becomes non-viable the project will be curtailed.