Mission: Reduce the Cost of Energy in Alaska

- Investing in Alaska’s energy infrastructure
- Diversifying Alaska’s energy portfolio
- Energy Planning and Policy
- Training and Technical Assistance
Alaska’s Energy Challenges

• Varied energy costs and resources by region
• Declining oil production / highly volatile fossil fuel costs
• Aging facilities
• Dispersed communities, no central grid
• Short and long-term solutions necessary
2025 Renewable Energy Goal
Alaska: Electricity Sources

21% HYDRO

9% Coal

70% Oil & Gas

Wind, Solar, Biomass 0.1%
Renewable Electrical Power

Hydropower 90%
all others 10%
Susitna Hydro: History

- **1950s**: First studies conducted by U.S. Bureau of Reclamation.
- **1980s**: Alaska State studies project but oil prices cause state to postpone.
- **2011**: Alaska Legislature unanimously authorizes Alaska Energy Authority to pursue Susitna-Watana Hydro.
- **2010**: 50% Renewable Energy Goal by 2025
- **2012**: Studies begin on Susitna River and surrounding areas

Clean, reliable energy for the next 100 years.
Why Susitna-Watana Hydro

- Serves ~80% of state’s population
- 1,000 jobs during peak construction
- Stable electricity rates for 100+ years
- Long-term diversification
- Clean, reliable energy source
- Promotes integration of variable power sources
Project Highlights

- Susitna-River Mile 184
- 87 River Miles from Talkeetna
- 22-32 River Miles upstream from Devils Canyon
- ~50 percent of Railbelt’s Energy Demand
Project Timeline

TIMELINE

2013
WE ARE HERE

2024
START UP

Preliminary Planning
- 2011
  - Open Houses
  - Authorization
  - Study Gap Analyses
  - Preliminary Permit Application to FERC
- 2010
  - Preliminary Decision Document

Design and Licensing
- Field Studies
- Public Involvement
- Permit Applications
- Environmental Impact Statement Preparation
- Agency Approvals

Construction
(7 years)

Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 | Year 11 | Year 12

Clean, reliable energy for the next 100 years.
2012 Accomplishments

• Initiated early field work
  – Multi-year studies on Chinook salmon
  – Partnerships with Alaska Department of Fish & Game

• Information gathering
  – 1980s studies
  – ADF&G management data

• Engineering Progress
  – Refining design models
  – Board of Consultants
  – Geotechnical exploration

• Independent Cost Estimate
2013 Accomplishments & Goals

• FERC-approved Environmental Study Plan
  – 58 approved studies
  – Implementing studies
• Logistics and Health, Safety Environment Planning
  – Emphasis on culture of safety
• Financial Advising Firm
• Utility Coordination
• Stakeholder Outreach
Revised Study Plan

- Unprecedented effort
- Proactive approach
- 58 studies
- 186,000 acres
Alaska’s Energy Costs

Alaska Electricity Prices by Community

Heating Costs

- Nome
- Anchorage

SUSITNA-WATANA HYDRO
Clean, reliable energy for the next 100 years.
# Susitna-Watana Power Costs ($/kWh)

<table>
<thead>
<tr>
<th>Rate Description</th>
<th>Rate (2013 Real)</th>
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<tbody>
<tr>
<td>Year 1 Rate (2024)</td>
<td>$0.181</td>
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<tr>
<td>Year 1 Rate (2013 Real)</td>
<td>$0.138</td>
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<tr>
<td>10 Year Ave Rate (2013 Real)</td>
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<td>25 Year Ave Rate (2013 Real)</td>
<td>$0.106</td>
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<tr>
<td>50 Year Ave Rate (2013 Real)</td>
<td>$0.061</td>
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</tbody>
</table>

Real = Adjusted for Inflation

Assumes no Direct State Financing
Susitna-WatanaHydro.org

Susitna-Watana Hydro
Clean, reliable energy for the next 100 years.