Why Watana Hydro Makes Sense

Presented to:

Mayor Dan Sullivan

Mayor's Energy Task Force

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Alaska Ratepayers Strategy

- Alaska Ratepayers represent rate-payers.
- The way to get to the **lowest, predictable, long term** electric rate is through the **Watana Hydroelectric Project.**
- Dependence: **Uncertainty** from too much dependence on gas fired generation.
- Diversify: **State policy to generate 50% of our electricity from renewables by 2025.**
- **Large hydro**, Watana, is good policy.

Is our Electric Energy Sustainable?

- Cost of electric power rising

- In your business what does success look like? **affordable, stable, diversified**

Alaska Ratepayers Strategy

- Gas generation the right decision in the 1960s
  - Then: 10 cents/mcf
  - Now: $5 to $10/mcf What is our future?
- Mix in Watana
- Dividends to residents and businesses

Alaska Ratepayers' Goal

Who are Alaska Ratepayers?

- **Past decade: gas prices up and very volatile- got our attention**
- **2008 Alaska Ratepayers, Inc. formed: non-profit, bi-partisan, volunteer voice**
- **Goal: Lower, predictable electric rates for the ultimate ratepayers in the next 100 years**
- **Our testimony to legislators and the Governor has brought the issue to the table and tipped the balance to proceed**

Alaska Ratepayers Goal

- **No great civilization survives without secure electrical energy**

- **For price, 'old hydro' can't be beat**
  - **-- AEL&P dam wholesale $.003/kWh**
  - **-- BC Hydro average $.06/kWh to homes**

- **To enjoy old hydro tomorrow, you need to build new hydro today**

Watana (Susitna) Project

- **Capacity: 600 MW (2600 GWhrs annually) ~50% of current generation**
- **Cost: $3.9b to $4.5b**
- **Financing: 50% investment & 50% bonded (Bradley Lake model)**
- **Timeline: 10 years (2021)**
- **Jobs: 1000+ construction & 2000+ support**
- **Environ: Comprehensive studies ($140m) an asset; enhances L. Susitna salmon runs**
- **Location: Upper Susitna R, 60 mi east of Parks Hwy; 40 mi south of Denali Hwy**

Watana Timeline:

- **Licensing**
  - **3.5 years - Prepare and file Final Application for License**
  - **3 years – FERC Processing and follow-up**
- **Construction**
  - **4.5 years Construction**

11 years until startup

Is Hydro Feasible?

- **Alaska Ratepayers' stakeholder survey results:**
  - **Strong support for hydro power utilities, political leaders, business, general public**
- **Governor and Legislature are moving forward in response to broad support.**
- **Decision Document** (Nov., 2010)
  - see AEA website

Energy for Jobs-*Why*?

- **Electricity attracts industry**
  - **Cheap Cook Inlet gas spurred activity for 40 years**
  - **Bonneville rates attracted Google and Facebook**
- **Long term perspective for baseload power**
  - **Gas fired**
  - **Hydro**
  - **Diversified**

Hydro and Gas

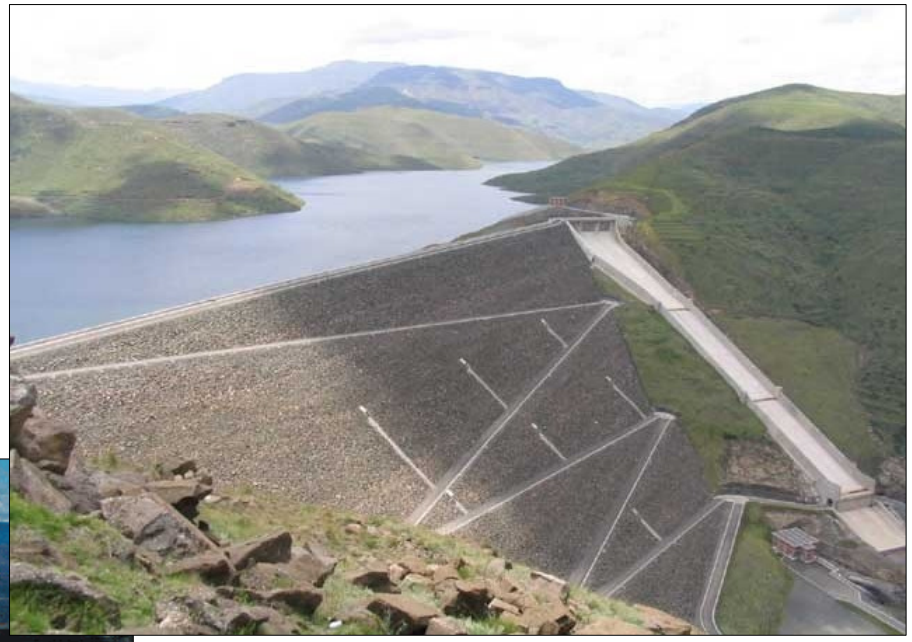
- **RIRP: To meet 50% renewable goal, must have significant hydro.**
- **Gas is essential for heating and industry.**
- **The economics of an in-state gas line does not depend on continued gas fired electric generation. A hydro project is not anti natural gas.**
- **Thankfully, the Railbelt is blessed with accessible hydro capacity.**

Watana Hydro- What Next?

- FERC licensing
- Independent Watana Hydroelectric Authority
- Reduce rates to less than 6 cents/kWh
  - Successful Bradley Lake Plan
  - Substantial State investment; 50% Bonded
  - After bonds are retired, stream of revenue continues

Rock-fill Embankment Dams

- Considerably more massive than arch or buttress dams but constructed with lower unit-cost materials
- Rely on weight of dam for stability and structural mass to impound water



Mohle Dam, Lesotho

Oroville Dam, California

Watana