

# Alaska's Energy Future

Are we competitive?

Reflections on reviewing the BC  
Hydro Energy Vision

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# Overview

- ◆ MAFA Background, Disclaimer
- ◆ BC Hydro Story
- ◆ BC Hydro Vision as *competitive marker* for Alaska
- ◆ Where do we go from here

# MAFA Background

- ◆ mafa@alaska.net
- ◆ Born & Raised in Fairbanks
- ◆ Stanford University (CE, Sr. Report – Economics of Susitna Hydroelectric Project)
- ◆ Fairbanks (1980s): Estimator, Project Superintendent, Construction Contractor
- ◆ FMUS Power Plant, GVEA Merger Studies
- ◆ APUC Commissioner(1990-1993): Railbelt, PCE Program, Healy Clean Coal Project
- ◆ Utility Consultant (1994-current)
  - Utility Generation & Transmission Studies, Energy Supply Studies
  - FMUS Privatization including GVEA Acquisition of FMUS
  - Independent Power Producer Market Analysis, Avoided Cost (Private Sector, Agrium, KAPP)
  - Sustainable Rural Utilities (UAA ISER, USDA Rural Utility Service)
  - Rural Energy Plan (AEA: co-author with Northern Economics, 2001-2004)
  - Denali Commission (Utility cost studies, service delivery models, policy analysis)
  - Board of Directors, Alaska Power & Telephone (2003-current)
  - Renewable & Energy Efficiency Potential in the Railbelt (ACF, NWF)
  - Ultra-low sulfur diesel study (ADEC: sub to Northern Economics)
  - Natural Gas Market Review (ANGDA)

# Disclaimer

◆ Opinions expressed herein are independent of any client, public or private affiliation, any resemblance is purely coincidental

# BC Hydro History I

- ◆ 1945 – 1961 BC Power Commission Market Consolidation
  - ◆ By 1961, served over 200 communities, many with small diesel generating units
- ◆ 1961 – To enable development of Peace & Columbia River Projects, Provincial government bought BC Electric
- ◆ 1962 – New crown corporation, BC Hydro & Power Authority (amalgamation)
- ◆ 1960s & 1970s – ambitious hydro construction

# BC Hydro II

- ◆ 1980 BC Utilities Commission formed
- ◆ 1990 Efficient clean energy policy
- ◆ 1995 BC Utilities Commission Market Structure Review
  - Increased wholesale competition, real-time pricing
- ◆ 1996 BC Hydro exempt from BC Util Comm, rate freeze, project review by provincial and federal gov't enviro process used to review major energy projects, local gov't planning & zoning
- ◆ 1997 BC Task Force, unable to agree on key issues re:
  - Independent grid operator, industrial customer retail access, portfolio standard
- ◆ 2001-2002 Task Force on Energy Policy
  - Public ownership of hydro assets = low rates
  - Secure, reliable supply; information economy => higher reliability, diversify markets, increase competition & private sector opportunities, conservation/efficiency, alternative energy

# BC Hydro III

- ◆ 2002 Return to BC Util Comm rate regulation, with legislative emphasis on performance based regulation, filed resource acquisition plans
- ◆ 2003
  - BC Hydro submits revenue req'mts in Dec 03 (first independent review in ten years)
  - BC Hydro outsources administrative functions to Accenture
  - BC Hydro restructured along separate lines of business (G, T, D)
- ◆ 2004
  - Rev req'mts investigation and hearings
  - IRP for Generation, Capital Plan for Transmission Corp
  - Open access transmission tariff
  - 11% of BC Hydro gigawatt hours from IPPs

# 2006-2007 BC Energy Plan – A Vision for Clean Energy Leadership

## ◆ Electricity, Energy conservation & Efficiency

- All new electric generating facilities will be required to achieve zero net greenhouse gas emissions
- By 2016, existing thermal generating power plants will achieve zero net greenhouse gas emissions
- Standing offer for clean, high efficiency electric cogen projects
- Continue to support trading opportunities (export to U.S.)
- Ambitious targets on conservation, pursue all cost-effective demand side management programs

## ◆ Alternative Energy Fund

## ◆ Skills, Training & Labor

- Attract, develop and retain workers by ensuring workplaces are safe, fair and healthy

## ◆ Oil & Gas

# Considerations for Alaska

- ◆ Have we created an efficient effective service delivery model in PCE communities, the Railbelt, the Four-Dam Pool?
- ◆ Are we striving for efficient scale?
- ◆ Are we leveraging our collective talent?
- ◆ Are we actively developing new talent?
- ◆ Have we structured markets and regulation to enable the development of our most attractive opportunities?

# Where do we go from here?

- ◆ Commit to excellence
- ◆ Aggressively explore regional cooperation, consolidation
- ◆ Encourage healthy competition
- ◆ Acknowledge regional and statewide challenges
- ◆ Build a comprehensive statewide energy vision for all Alaska