

# Regulatory Challenges for Alaska's Electric Industry

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## Federal Overreach Summit

August 13, 2013  
Anchorage, Alaska

# Alaska Power Association

- Established 1952
- 25 Active Members – nonprofit electric utilities
- 13 Associate Members – telcos, IOUs, AEA
- 50 Supporting Members – vendors, consultants, etc.

## ARECA Insurance Exchange

- Business insurance for 17 utilities



# Geography makes us Unique

- 20% of the US land mass
- .2% of US electricity sales
- 50% of sales in Sacramento, CA
- 200+ power plants
- Very few roads
- Very little transmission
- 90% public power (25% in the Lower-48)

20% of the US Land Mass





# Alaska Village Electric Cooperative

A non-profit member-owned electric cooperative  
Electric service to 55 villages

Population of 22,800 – 4<sup>th</sup> largest community in Alaska  
44% of Alaska's village population

Shageluk – smallest – 69  
Hooper Bay – largest – 1,114  
Average 415  
Anchorage – 298,610



# System Information

- 73 Anchorage-based employees
- 8,000 services
- 48 power plants
- 165+ diesel generators
- 95 village technicians
- 500+ fuel tanks
- 5.5 million gallons of diesel
- 34 wind turbines serving 14 villages
- Own two tug/barge sets





# What Does Our Electricity Cost?



Anchorage 0.14 (AVEC = x 4.5)  
Fairbanks 0.185 (AVEC = x 2.5)

# The Perverse Effect

Well-intended regulations that backfire



# Ultra Low Sulfur Diesel

- Intent: Reduce emissions
- Reduces sulfur level from <500 ppm to 15 ppm
- Significant capital cost at the refinery
- Additional cost for transportation and storage
- Reduced heat (BTU) content of fuel
- Utility cost increases from
  - Higher cost fuel
  - More fuel needed due to lower heat content
- Net result: Higher cost, higher emissions

# Title V Air Quality Regulations

- One size fits all 850 kW – 2,000+ mW
- Very complex permitting process
- Airshed modeling
- Generation reporting
- Engine retrofits for emission controls
- Stack heights for greater dispersion
- Annual costs increase cost of power significantly



# Compounding Regulatory Requirements

- Occupational Safety and Health Administration
- USEPA – Air Quality and Water Quality
- FAA
- USDOT
- Hazardous Materials
- Labor Laws
- FERC
- Homeland Security
- USCG
- Affordable Care Act.....

# Growing Complexity of Changes

Small utilities with modest staffing don't have expertise  
– the result is growth in the consultant industry.

More complexity = more specialized = more expensive

Solution: Increase threshold at which laws apply, eg:

- Employees >100
- kWh sales >4 million mWh
- Population served >25,000



# Contradictory Agency Needs

- Tank farm replacement in W. Alaska
  - Curtail fuel barge operations during bird migration
  - Miss open water season
  - Need to fly in fuel instead
  - = increased cost and greater risk of fuel spills
- Aesthetic issues
  - “Blend into the landscape” requirement
  - “Enhanced visibility” to avoid bird strikes

# Animals Have Priority over Humans

- USFWS re non-threatened fish populations
- Endangered Species Act
  - Endangered plants
  - Endangered flowers
  - Endangered insects

What about Endangered human populations?



# Tracking Permit Process

With the transparency now afforded by the Internet, agencies should be required to maintain contemporaneous updates of the status of applications under consideration.

Very short construction seasons in Alaska are easily gained or lost when information is unavailable about where an applicant is in the approval schedule.

# Native Allotments

75 years ago, the federal government actively supported development of utilities to serve remote populations

Easements and rights-of-way were granted

ANILCA and other laws on the 1980s nullified easements and rights-of-way and imposed significant costs and obstacles to serving customers



# The Roadless Rule...

Is rendering vast tracts of USFS land inaccessible for building and operating electric transmission and distribution lines.

The people that these resources are supposed to benefit languish for lack of access to affordable energy!

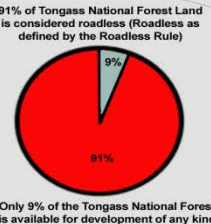


## Roadless Area Inventory

**Legend (based on 2008 TLMP)**

- **ROADLESS AREAS**  
(includes designated roadless, wilderness areas, and national monuments)
- **DEVELOPED AREAS**  
(Existing FS Roads; Logged)
- **GLACIER BAY NATIONAL MONUMENT**
- **NON-NATIONAL FOREST SYSTEM LAND WITHIN THE TONGASS BOUNDARY**
- **OTHER FEDERAL LAND OUTSIDE THE NATIONAL FOREST**
- **HAINES STATE FOREST**

According to the FEIS for the 2008 Forest Plan, 91% of the Tongass is in either Wilderness/Wilderness National Monument, or an Inventoried Roadless Area.



# Roadless Map in Southeast Alaska



# Thank You!

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