

# SB 123 Opportunities for Alaska



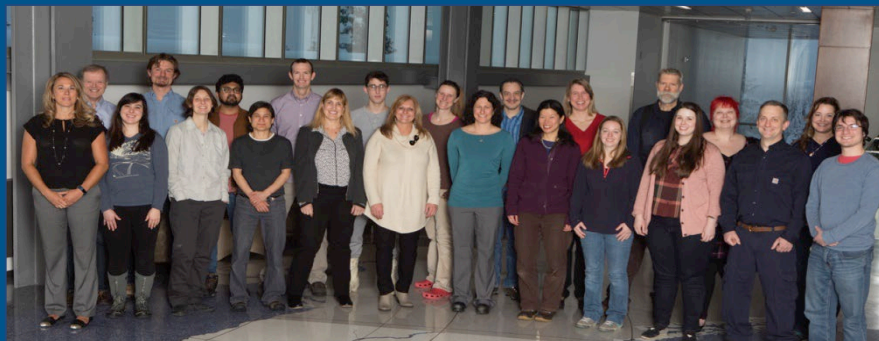
House Special Committee on Energy  
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# Alaska Center for Energy & Power

*Mission: Fostering development of practical, innovative and cost-effective energy solutions for Alaska and beyond*

- ❖ Applied energy research program
- ❖ Technology testing & optimization
- ❖ Energy systems modeling & analysis
- ❖ Knowledge network creation
- ❖ Commercializing energy innovation



# Some current ACEP Partners



**Safety:** You Have The Power



UAA Business Enterprise Institute  
UNIVERSITY of ALASKA ANCHORAGE



**ACEP**  
Alaska Center for Energy and Power



**ACEP**  
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What should RCA consider as it sets rules for reliability stds and integrated resource planning?

1 question about reliability,  
and

3 questions about  
Integrated Resource Planning  
for Alaska  
in the 21<sup>st</sup> Century



# 1. How should Alaska's “reliability” standards address “resilience” ?

Earthquakes,  
Wildfires,  
Transmission outages  
Fuel supply cut-offs...  
all while Cold,  
and Dark





# What should RCA consider when setting rules for IRP?

2. What is a resource?
3. How can we integrate?
4. What is planning?



# 1. What is a resource...

## Generation

Thermal, Hydro

Wind, solar, biomass, hydrokinetic, nuclear...



# 1. What is a resource...

Generation



Transmission

Distribution

Storage

Bradley Lake power line outage from wildfire tops \$10M in cost to Alaska Railbelt ratepayers





# 1. What is a resource...

Generation

Transmissi

Distributio

Storage

Loads



In other words,  
It's the network, stupid!



# 1. What is a resource...

## People



## 2. How can we integrate resources?

“Quantities”:

What, when, where to build



## 2. How can we integrate resources?

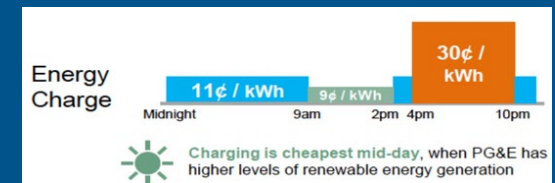
Quantities

What, when, where to build

*but also*

### “Prices”:

incentives – markets – mechanisms  
to empower users - buyers – sellers –  
innovators





### 3. What is [integrated resource] Planning?

**Forecast**

developing the expansion plans using Strategist®  
comparing the various expansion plan scenarios

PROMOD®, for additional analysis

a plan

to build

infrastructure

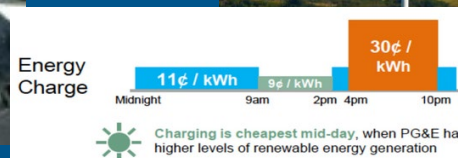


# 3. What is [integrated resource] Planning?

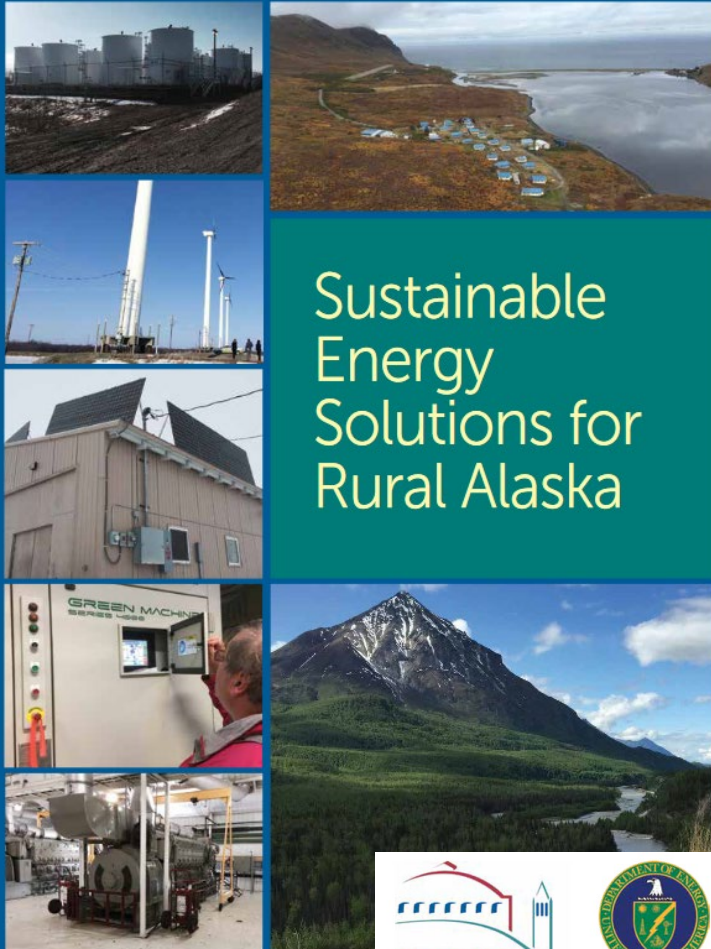
More than a plan to build infrastructure



- An ongoing, transparent process
- Iterative and adaptive
- Looks for shared goals using shared data
- Develops effective mechanisms to achieve goals
- Provides criteria for assessing projects and schemes
- Keeps people front and center



# Regulatory Assistance Project



Sustainable  
Energy  
Solutions for  
Rural Alaska

## ***Beneficial* Electrification (BE) - Three Conditions**



1. Saves Customers  
Money Over Long-Term



2. Reduces Environmental  
Impacts



3. Enables Better Grid  
Management

**What's special about EV charging?**



<http://acep.uaf.edu/outreach-education-publications/lectures-workshops/alaska-ev-workshop.aspx>



# Thank you

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