## **ACEP Railbelt Decarbonization Project**

AML Infrasructure Symposium – Priority Sustainable Energy Action Plan April 3, 2024

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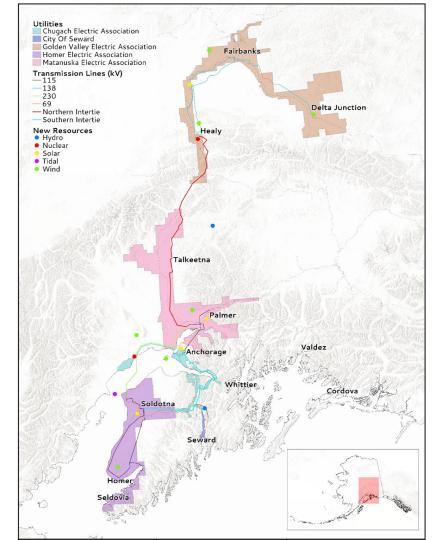
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### Steve Colt

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Railbelt 2050 Decarbonization **Scenarios Project** Goal: **Exploring and quantifying** scenarios that aim for 100% Railbelt Electric Grid Decarbonization in 2050.



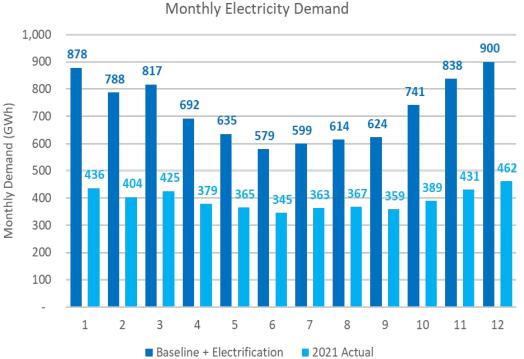
Or, Google: ACEP Railbelt decarb 2050

#### **Technical Advisory Group:**

Golden Valley Electric Association Chugach Electric Association Matanuska Electric Association Homer Electric Association Alaska Energy Authority Railbelt Regional Coordination

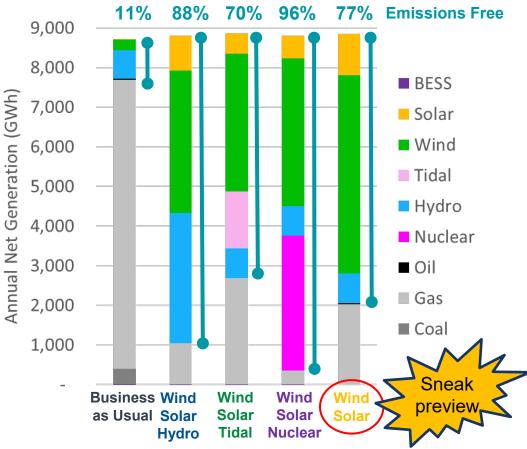
#### Funding:

Office of Naval Research State of Alaska FY23 Capital Hawaii Natural Energy Institute



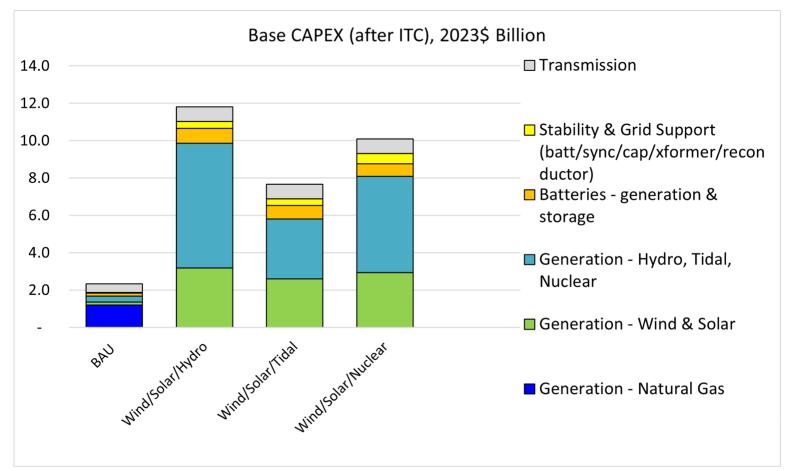
## Annual Energy Generation by Resource Type

- Low carbon vs. BAU:
  - Much lower fossil generation
- Wind/Solar vs. other L.C. scenarios
  - More fossil generation than W/S/Hydro and W/S/Nuclear

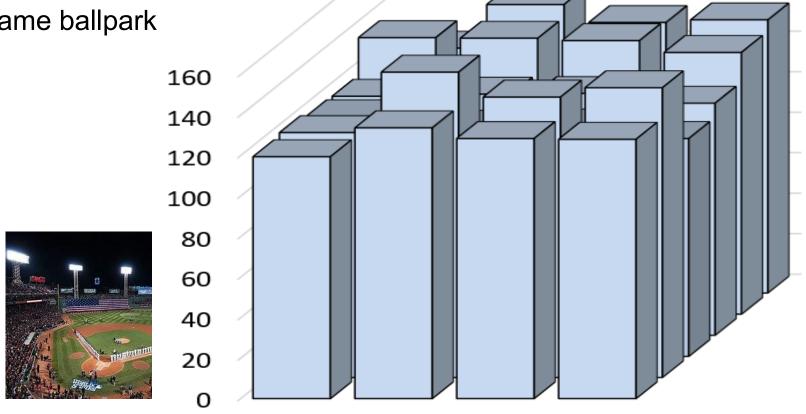


Curtailment stays below 10% across all portfolios

### **Required Capital Investment**



## Costs are all in the same ballpark



Generation & Transmission Cost of power, \$ per MWh

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# Thank you!









For more information, see our project website