



3 FUNCTIONS







DISASTER RESPONSE and RECOVERY

Risk:

Port is single point of failure for:

- Commerce (local, statewide and national)
- National defense
- Timely disaster response



Alaska challenge: Population is too small and dispersed to economically support more than one large, inbound, general cargo port.



Key threats

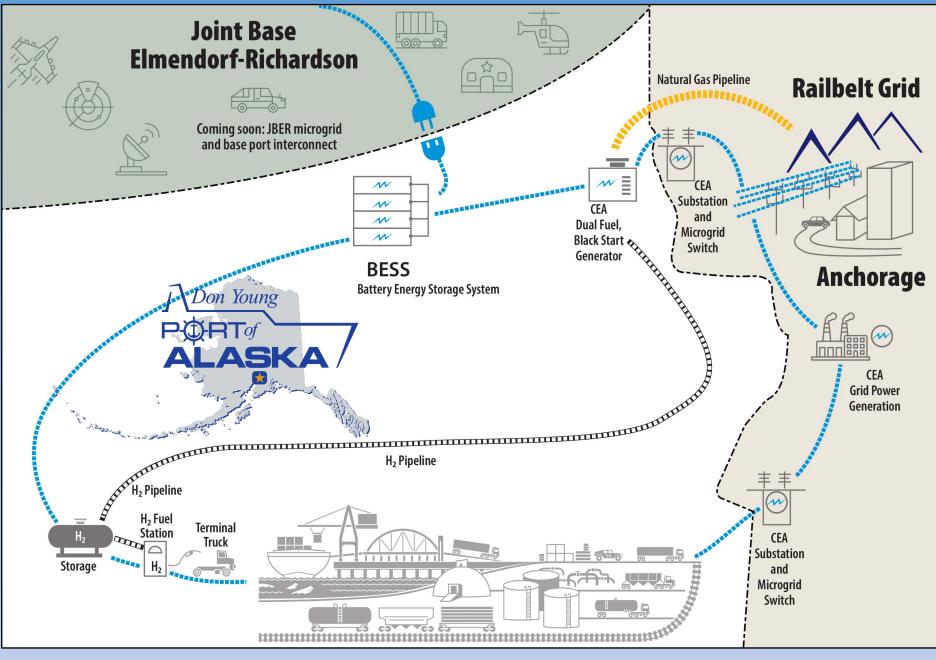
- Aging Infrastructure
- Power system failure
- Port access failure
- Security breach (physical or cyber)
- External supply chain failure/market shift





Port Power Plan

- Connected
 microgrid
- Energy storage
- Emergency generation
- Metering and controls
- Hydrogen derivative fuels



Strategy – plan, finance, develop phased series of small projects that have independent utility and combine into complete, sustainable and scalable power system

- Port connected microgrid w/ BESS and control system upgrades
- Additional energy storage (bigger battery)
- Emergency generation capacity
- EMS (Energy Management System)
- JBER microgrid interconnection
- Hydrogen derivative fuels capabilities

Initial Port/CEA project will

- Create grid connected port microgrid
- Build first phase of port Battery Energy Storage System (BESS)
- Utilize FY22 Defense Communities Infrastructure Program (DCIP) grant – \$5.3 million
- Improve port power system resiliency, economics, flexibility
- Enable additional phased power system upgrades

Proposed CEA contract scope:

- CEA will provide BESS specifications
- CEA will design, install, and commission interconnect facility and microgrid facility
- CEA will review and accept BESS equipment purchase, civil design, and construction.

POA intends to lease BESS facility to CEA to maintain and operate to provide negotiated POA benefits. POA and CEA anticipate future BESS facility expansion to provide additional POA microgrid and CEA grid services. POA is responsible for BESS equipment purchase, civil design, and construction.

Sole-source authorization:

CEA is POA's Regulatory Commission of Alaska-designated electric power utility.

Anchorage Code of Ordinances 7.20.080 A.1 authorizes solesource contracts with a "utility provider where Municipality has a financial responsibility or beneficial interest in entering into an agreement."



