GOVERNMENT EVENT SERVICES

ACEP Alaska Center for Energy and Power

2022 ASEC VIRTUAL WORKSHOP SERIES

NUCLEAR ENERGY IN ALASKA:
THE ISSUES, THE OPPORTUNITIES

READ AHEAD MATERIALS

The workshop presenters will be assuming all attendees have some familiarity with nuclear energy concepts. These reports provide some excellent background information and are a great resource toward that moment end!

Please click on the report titles below to access each document.

1. UAF/ACEP 2010 Report: Small Nuclear Energy: an option for Alaska?

ACEP 2010 report provides basic nuclear definitions and an overview of the history of the nuclear power industry (Section 1). Section 2 provides an overview of non-medical applications of nuclear science that have occurred or been proposed in Alaska. These include the proposed Project Chariot effort to build a harbor in northwest Alaska in the late 1950s, the small nuclear reactor operated at Fort Greely between 1962 and 1972, the underground weapons testing conducted on Amchitka between 1965 and 1973, and the proposed Toshiba 4S project in Galena, Alaska.

2. UAA/CED 2020 Report: Microreactors in Alaska Use Case Analysis

CED 2020 report provides several use case scenarios for micro nuclear reactors in Alaska: rural community, Rural hub community, Railbelt installation, and military installation. Each use case explores the Alaska energy market and their challenges, needs, and attitudes as they look toward the future.

3. UAF/ACEP 2021 Report: Small Nuclear Energy: an option for Alaska?

ACEP 2021 report provides a snapshot of the current status of small and micro nuclear reactor technologies, relevant state and national policies and regulations, and economics related to potential deployment in Alaska.

4. MIT/CEEPR 2021 Report: The Value of Nuclear Microreactors in Providing Heat and Electricity to Alaskan Communities

CEEPR 2021 report evaluated the system cost of providing electricity and heat to serve the load profiles of two types of Alaskan communities (Railbelt communities and mine/remote community) and calculated the cost efficiency of including a nuclear microreactor in the generation portfolio.