

ENERGY & BULK FUEL PROGRAM

PARTNERING TO DEVELOP ALASKA'S BASIC INFRASTRUCTURE

20
YEARS



OF SERVICE
TO ALASKA

ECONOMIC DEVELOPMENT AND QUALITY OF LIFE

"Energy infrastructure is the essential element of public infrastructure. Absent a viable energy system, all other public infrastructure fails. Schools, public health facilities, water and waste-water systems, airports [and other] public buildings ... cannot exist for long without reliable, affordable energy."

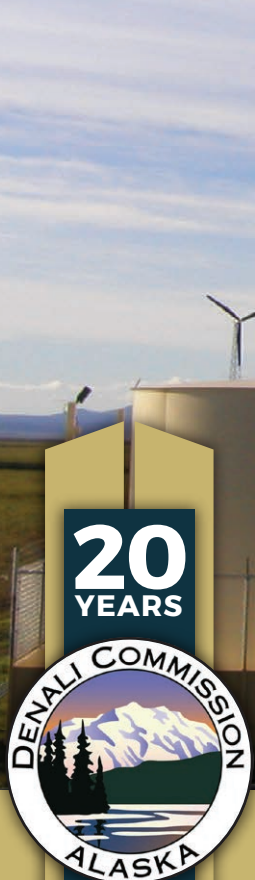
"Energy For A Sustainable Alaska – The Rural Conundrum" (Commonwealth North, 2012)

ENERGY & BULK FUEL PROGRAM

When the Denali Commission was established by Congress In 1998, virtually every tank farm in rural Alaska needed significant upgrades in order to be code-compliant, and there was a very real threat that communities would no longer be able to receive fuel in bulk quantities due to the substandard condition of their tank farms. Similarly, many of the power-generation and distribution systems in rural Alaska needed significant upgrades or replacement.

There are approximately 200 communities in the state that are off the road system and must provide and maintain their own independent, micro-grid power systems. In the 1930's and 40's, the federal government helped bring power to the rural parts of the Lower 48 through programs established under the Rural Electrification Act. The Denali Commission Act of 1998 provides the authority for similar projects in rural Alaska, although the challenges are greater due to the lack of a statewide road system, extreme weather conditions and the very high cost of fuel.

In 2016, the Alaska Energy Authority (AEA) reported that the median cost for electricity in communities outside the Railbelt was \$0.62 per KWh. The energy stress on rural Alaska residents is compounded because reliable electrical service is not a given, and many families spend nearly half their annual incomes on heating fuel (which can cost as much as \$11 per gallon), electricity, and gasoline.



“Adequate utilities are a basic foundation of economic and social well-being in American communities today. However, despite decades of effort ... this foundation is still out of reach for many residents of small communities in rural Alaska.”

Source: “Sustainable Utilities in Rural Alaska” (Institute of Social & Economic Research, 2003)

ACCOMPLISHMENTS TO DATE

Over the last 20 years, the Commission has helped fund the construction of 120 bulk-fuel facilities, 100 power plants, and 25 interties. The Commission has also invested over \$50 million in wind, hydro, biomass, and other renewable-energy projects. These projects have benefited 152 separate communities. The Commission also partnered with AEA to establish the Alaska Renewable Energy Grant Fund and the Emerging Energy Technology Fund, which the State has since supported with over \$270 million. All these energy-related investments have improved the quality of life in rural Alaska.



CURRENT PROJECTS

The Commission currently has 51 active energy/bulk-fuel-related projects totaling \$70.3 million of Commission funds that have leveraged an additional \$44.5 million from other agencies and partners. While the Commission continues to invest in new power plants and bulk-fuel tank farms, an increasing percentage of its funds are now going for lower-cost refurbishment, maintenance, training, and energy-efficiency-related projects. Approximately 114 communities are benefiting in one way or another from the Commission's current Energy & Bulk Fuel Program projects. More detailed information about these projects can be found on the Commission's database at www.denali.gov.



CURRENT PROGRAM FUNDING

The Commission currently has approximately \$14-16 million per year for all programs. In recent years, the Commission has allocated approximately 70% (\$9-11 million) of available funds towards power and bulk-fuel-related projects. The Commission relies on a needs-based, statewide priority system maintained by the Alaska Energy Authority to prioritize the funding of projects each year.

AEA estimates the unmet need related to bulk-fuel storage is \$170 million and \$200 million for rural power-system upgrades. Another \$250 million is needed for interties, according to the Alaska Village Electric Cooperative. The 2016 Alaska Affordable Energy Strategy estimated that \$37 million per year is needed to protect, maintain, and sustain existing rural power-system infrastructure (\$17 million for bulk-fuel storage and \$20 million for power generation). In 2012, Commonwealth North estimated an additional \$2 billion was needed for wind/micro-grids, renewables, and emerging technologies.



**FOR MORE INFORMATION ON THE
COMMISSION'S ENERGY & BULK FUEL
PROGRAM, VISIT WWW.DENALI.GOV OR
CALL 907-271-1414.**