20. **POWER**

20.1 **Introduction**

The existing energy infrastructure in the regional study area in the Bristol Bay drainages was documented. The objective was to describe existing facilities for supply of electrical power and petroleum fuels in the communities nearest the Pebble Deposit area. The eight communities included in the study area are Port Alsworth, Nondalton, Pedro Bay, Iliamna, Newhalen, Kokhanok, Igiugig, and Levelock (Figure 20-1). Information was compiled from various publications and online information resources, supplemented by telephone interviews with staff of public agencies, local electrical utilities and fuel retailers, and fuel shippers.

20.2 **Results and Discussion**

Six local electrical utilities generate and distribute electrical power to the eight communities in the study area. The cost of diesel fuel for power generation is a major operating expense for the six utilities. Overall, the weighted average cost of fuel almost tripled from $1.89 per gallon in 2002 to $5.54 per gallon in 2009, a rise of 193 percent. Electrical power rates in the study area partly reflect the cost of fuel and other operating expenses.

The most important factor in rates for residential customers and local community facilities, however, is the subsidy provided by the State of Alaska’s Power Cost Equalization Program and other programs that help defray the capital cost of power facilities. Apart from Power Cost Equalization payments, governmental grants and low-interest loans may help defray capital costs for small rural utilities. Between fiscal year (FY) 2002 and FY 2005, residential rates in the study-area communities were approximately triple the rates prevailing in Anchorage and Homer.

All the communities import all the petroleum products used locally for power generation, space heating, and transportation, including aviation fuels. Thus, the cost and reliability of fuels delivery and storage are critical to the local economies and to the security of community life. In recent years, the Denali Commission has put high priority on installation of modern, environmentally safe bulk-fuel storage facilities throughout rural Alaska.

Almost all households in the study area depend on heating oil for home space heating. Thus, local heating-oil prices and price increases are of vital importance for household economies throughout the area. Likewise, the price of gasoline affects all consumers who purchase it to operate motor vehicles, snow machines, boats, or other gas-powered equipment. As of May 2010, the average price in the study-area communities for heating oil was $5.85 per gallon, and gasoline was $6.36 per gallon.
Figure 20-1
Power Study Area
Bristol Bay Drainages

Legend
- Iliamna/Lake Clark Communities
- Study Area
- General Deposit Location
- Existing Roads

Scale 1:800,000
Alaska State Plane Zone 5 (units feet)
1983 North American Datum

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