

## 1. PURPOSE AND NEED

The Alaska Gasline Development Corporation (AGDC) has prepared this Plan of Development (POD) to support the planning and development of the Alaska Stand Alone Gas Pipeline/*ASAP* (ASAP) Project. The POD provides detailed information to support regulatory processes, permit applications, and preparation of required National Environmental Policy Act (NEPA) documents. The POD includes information on the following:

- (1) Purpose and Need
- (2) Project Description
- (3) Right-of-Way Location
- (4) Facility Design Factors
- (5) Additional Components of the Right-of-Way
- (6) Government Agency Involvement
- (7) Project Construction
- (8) Resource Values and Environmental Concerns
- (9) Stabilization and Rehabilitation
- (10) Operation and Maintenance
- (11) Termination and Restoration

Revision 1 of this POD was published in March 2011. This Revision 2 updates Revision 1 based on information AGDC developed while the U.S. Army Corps of Engineers (USACE) prepared the environmental impact statement (EIS) for ASAP. These revisions are already reflected in responses AGDC provided to requests for information from the USACE during the EIS process. As the ASAP Project develops, this POD will be updated as necessary to incorporate new information.

### 1.1 PURPOSE

The Proposed Action is the construction and operation of ASAP from the North Slope to the Cook Inlet Area in Southcentral Alaska. The purpose of the project is to provide a long-term, stable supply of up to 500 million standard cubic feet per day (MMscfd) of natural gas and natural gas liquids (NGLs) from North Slope gas fields to markets in the Fairbanks and Cook Inlet areas.

### 1.2 NEED

ASAP would fulfill the following needs:

- A shortfall of natural gas supply in the Cook Inlet area, which is the primary fuel source for heating and electrical power generation, is projected in the near future (2013-2015).

- Fairbanks currently is in air pollution non-attainment area status due to particulate matter. Use of oil and wood for heating are major contributors to this problem in winter. Converting from existing heating sources to natural gas would reduce harmful air emissions and assist in achieving attainment status.
- A stable and reliable supply of natural gas is needed to spur economic development of commercial and industrial enterprises in Fairbanks and the Cook Inlet Area.
- A stable and reliable supply of natural gas and NGLs is needed to meet current and future demand of 500 MMscfd as follows:
  - 200 MMscfd – Cook Inlet area current demand
  - 50 MMscfd – Cook Inlet area future demand (2030)
  - 60 MMscfd – Fairbanks future demand
  - 60 MMscfd – NGL extracted at the Cook Inlet NGL Extraction Facility for future commercial and industrial use
  - 130 MMscfd – Future commercial and industrial use
- A secondary need is to use proven gas supplies that are readily available on the North Slope to provide economic benefit to the State through royalties and taxes.

### 1.3 BACKGROUND INFORMATION

For decades, various sponsors have studied projects to export natural gas from Alaska’s North Slope to North America, Asia, or both. To date, none of these projects have advanced past the feasibility study stage. In 2010, House Bill (HB) 369 was passed by the Alaska Legislature. Section 38.34.040 (d) of HB 369 provides the following stipulations for establishing a natural gas pipeline system:

- The route selected is economically feasible.
- Natural gas is made available to residents at the lowest possible cost.
- The project allows for connecting lines along the entire route to serve industrial, residential, and utility customers.
- The project can supply other regions of the state at commercially feasible rates.
- The project uses state land and existing state highway and Alaska Railroad Corporation (ARRC) rights-of-way to the maximum extent feasible.
- The project uses existing highway and ARRC railroad bridges, gravel sources, equipment yards, maintenance facilities, and other existing facilities and resources to the maximum extent feasible.

ASAP is an intrastate project independent of other proposed interstate natural gas pipeline projects. The Alaska Pipeline Project (APP), the project sponsored by the Alaska Gasline Inducement Act (AGIA), is studying the feasibility of exporting Alaska’s North Slope natural gas via a large-diameter pipeline. As these export plans and studies continue, the near-term needs (2013) remain for additional natural gas supplies to supplement Cook Inlet reserves and to serve developed and developing markets within Alaska.

The Cook Inlet gas fields have served the residential and commercial needs of Southcentral Alaska for decades supplying natural gas for heating and electrical power generation (93 percent of generated electricity uses natural gas). These fields also supply large industrial operations like the liquefied natural gas (LNG) export plant and the formerly operational Agrium fertilizer facility in Kenai. However, these fields cannot sustain the area’s needs without some form of supply expansion. Figure 1-1 illustrates this projected drop in production.

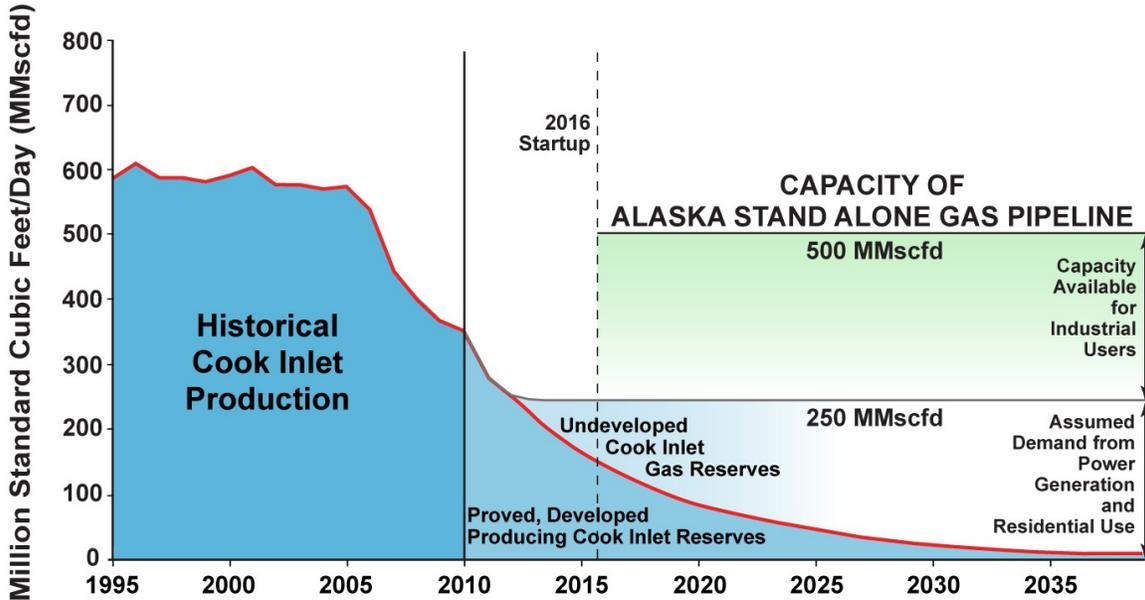


Figure 1-1. Cook Inlet Historic and Projected Natural Gas Production

The routing of ASAP will minimize total pipeline length; reduce the amount of challenging terrain and geologic special design areas; avoid and/or minimize impacts to rights-of-way (ROW); and avoid parks, preserves, refuges, and wilderness areas, thereby reducing construction impacts. To the extent feasible, existing state infrastructure and ROWs, including state/borough highways and road systems and the ARRC railroad, will be used for pipeline installation to minimize project impacts.

The Proposed Action will serve developed and developing markets within Alaska, including Fairbanks and the Railbelt. Much of Alaska has no long-term source of fuel other than oil. Currently, LNG is trucked in limited supplies to Fairbanks from Cook Inlet suppliers for a small local distribution system. A long-term, affordable energy source is needed for Fairbanks, the Railbelt, and western Alaska communities. Community, commercial, and industrial development in Interior Alaska could be facilitated with a reliable supply of natural gas. ASAP will provide construction and operational jobs and new business opportunities for Alaska citizens. New jobs and tax revenues will be created. Struggling or marginal businesses will be stimulated and expanded or new industrial activities, including mining, will have access to cost-effective energy.

## 1.4 EXPECTED PUBLIC BENEFITS

The expected public benefit of ASAP is the potential for delivery of a long-term, reasonably priced supply of natural gas to the Cook Inlet area and to Fairbanks and other communities along the pipeline corridor. Specifically, this supply could be used for:

- Heating homes, public safety facilities, military bases, and businesses.
- Generating electrical energy used throughout the region.
- Continuing economic stability and growth by supporting industrial users.
- Accommodating future population growth and increased commercial usage served by the existing ENSTAR Beluga local distribution system, and for the Fairbanks–North Pole area and other Railbelt communities.
- Promoting compressed natural gas (CNG) as a substitute for gasoline and diesel fuel used by cars and trucks in Fairbanks; for use by communities along the Parks Highway, including tour buses in Denali National Park and Preserve (DNP&P); and for use by Anchorage and communities on the Kenai Peninsula.
- Potentially providing CNG for distribution to rural Alaska communities via the Yukon and Tanana Rivers and marine barges from Cook Inlet.
- Providing infrastructure to allow more economic development of mining and oil/gas projects.