

Subcommittee on Energy and Mineral Resources

Paul Gosar, Chairman

Hearing Memorandum

July 14, 2017

To: All Subcommittee on Energy and Mineral Resources Members

From: Majority Committee Staff – Ashley Nichols
Subcommittee on Energy and Mineral Resources (x5-9297)

Hearing: Oversight hearing entitled “*Promoting Onshore Oil and Gas Development in Alaska.*”

The Subcommittee hearing will take place on **July 18, 2017, at 2:00PM, in 1324 Longworth House Office Building**. This hearing will evaluate opportunities for new onshore oil and gas development on Federal lands in the State of Alaska.

Policy Overview

- Although the National Petroleum Reserve-Alaska (NPR-A) was set aside specifically for energy production, the Obama Administration restricted oil and gas leasing in roughly half of the Reserve in its 2013 Integrated Activity Plan. A recent Secretarial Order announced a review of the Integrated Activity Plan for the NPR-A. However, in order for Alaska’s onshore oil and gas production to flourish, steps must be taken to create more certainty in the permitting process and increase access to Federal land.
- Congress recognized the immense potential for oil and gas development in the Coastal Plain region of the Arctic National Wildlife Refuge (ANWR) and directed a study of its recoverable resources in 1980, which recommended full energy development of the 1002 area. In its Fiscal Year (FY) 2018 budget request, the Trump Administration has proposed authorizing oil and gas development in the Coastal Plain of ANWR. Lease sales could generate \$3.5 billion over 10 years, to be shared evenly between the Federal Government and the State of Alaska.¹
- Just as local Alaskan communities are reliant on the oil and gas industry for jobs, tax base and supply of electricity, they are also dependent upon the health of various species for subsistence and tourism purposes. Potential oil and gas development activities in the Coastal Plain must take the welfare of species such as caribou, musk oxen, polar bear and migratory birds into account.
- The previous Administration’s decision to restrict responsible new development has resulted in less oil production, requiring the Trans-Alaska Pipeline to operate in conditions it was not designed to handle. While the Alyeska Pipeline Service Company has responded to the challenges presented by the low flow of oil and maintained

¹ Department of Interior. FY18 Interior Budget in Brief. Legislative Proposals and Offsetting Collections. https://www.doi.gov/sites/doi.gov/files/uploads/fy2018_bib_dh019.pdf (Last visited July 14, 2017).

operations, these problems would be resolved more efficiently and cost effectively by increasing the flow of oil through the pipeline.

Invited Witnesses

Mr. Gary Dixon

Vice President

International Brotherhood of Teamsters Local 959 Alaska

Anchorage, Alaska

Mr. Richard Glenn

Executive Vice President for Lands & Natural Resources

Arctic Slope Regional Corporation

Anchorage, Alaska

Mr. Scott Jepsen

Vice President, External Affairs & Transportation

ConocoPhillips Alaska

Anchorage, Alaska

Mr. Pat Pourchot

Former Special Assistant to the Secretary of the Interior for Alaska Affairs

Anchorage, Alaska

Background

Alaska's North Slope region contains some of the nation's most abundant resources of oil and natural gas.² While the oil and gas sector has historically served as a significant source of employment, revenue and reliable energy for the State of Alaska and Alaska Natives, in recent years, low oil prices and production rates have negatively impacted the industry and the Alaskan economy.

The previous Administration's decision to restrict development on millions of acres in the North Slope, coupled with prolonged permitting processes, has stifled production in this resource rich region and left much of Alaska's North Slope untapped.

Achieving Energy Independence

The State of Alaska, with its abundant supply of oil and gas resources, represents a key component of the path to American energy independence. Although net imports have reached a 40 year low in recent years, the U.S. remains heavily dependent upon foreign resources. In 2016, foreign resources represented 25% of nation's net petroleum consumption and a significant share of some states' crude oil imports.³ California, for example, once imported over 45 percent of its

² Alaska Resource Development Council. Alaska's Oil and Gas Industry, <http://www.akrdc.org/oil-and-gas> (Last visited July 13, 2017).

³ U.S. Energy Information Administration. Frequently Asked Questions, <https://www.eia.gov/tools/faqs/faq.php?id=32&t=6> (Last visited July 12, 2017).

crude oil supply from Alaska. Today, over half of the resources processed at California refineries come from foreign sources and only 11 percent are sourced from Alaska.⁴ Meanwhile, the U.S. has long held the capacity to resource affordable, reliable oil and gas from the State of Alaska.

Economic Impact of Alaskan Oil and Gas Development

The oil and gas industry in the State of Alaska has produced over 17 billion barrels of oil and 13 billion cubic feet of natural gas.⁵ Production levels in Alaska reached their peak in 1988, with Alaska producing nearly 2 million barrels⁶ of oil per day and contributing 25 percent of all production in the U.S.⁷ Due to declining production and the low price of oil, the State now contributes roughly six percent of domestic oil production.⁸

Despite decreased production and low oil prices, the oil industry continues to be the largest source of unrestricted revenue to the state of Alaska. Since Alaska became a state in 1959, the oil and gas industry has contributed almost 90 percent of the state's unrestricted General Fund and over \$180 billion in total State revenue.⁹ Alaska anticipates the industry to contribute 67 percent of unrestricted General Fund revenues this fiscal year.¹⁰

In addition to supplying a sizable source of revenue for the state, the oil industry serves as an indispensable source of employment. Overall, the oil industry supports over 10,000 direct jobs and over 35,000 indirect and induced jobs in related or local industries throughout the state. However, in recent years, falling oil prices and slowed production have contributed to significant job losses for the Alaskan economy - totaling a net loss of 6,500 jobs from 2015 to 2016.¹¹ Even so, the oil and gas industry continues to offer some of the best paying jobs in the State. In 2016, average earnings in the industry were 2.5 times higher than the State average.¹²

The oil and gas industry in Alaska has far reaching impacts on other industries as well. Infrastructure developed for oil and gas operations are utilized well beyond the energy sector, enabling connectivity and economic development in rural communities and even military operations. Since the 1950s, oil and gas operators have invested over \$55 billion in developing infrastructure in the North Slope and Cook Inlet.¹³

⁴ California Energy Commission. Oil Supply Sources to California Refineries, http://www.energy.ca.gov/almanac/petroleum_data/statistics/crude_oil_receipts.html (Last visited July 12, 2017).

⁵ Alaska Oil and Gas Association. Facts and Figures, <http://www.aoga.org/facts-and-figures> (Last visited July 12, 2017).

⁶ Ibid.

⁷ Ibid., Note 2.

⁸ The McDowell Group. The Role of the Oil and Gas Industry in Alaska's Economy. May 2017.

http://www.aoga.org/sites/default/files/final_mcdowell_group_aoga_report_7.5.17.pdf

⁹ Ibid., Note 2.

¹⁰ Ibid., Note 2.

¹¹ Ibid. Note 7.

¹² Ibid., Note 2.

¹³ Ibid., Note 2.

Energy Development on Native Lands

The Alaska Native Claims Settlement Act (ANCSA), enacted by Congress in 1971, sought to ensure that Native communities receive revenues from the oil and gas produced on Native lands. The ANCSA defined 12 geographic regions within the state of Alaska and Native Regional Corporations were established, in part, to manage and promote economic development within each region. There are a total of 12 Alaska-based Native Regional Corporations, which own roughly 44 million acres throughout the state, and a 13th Regional Corporation, which represents non-resident Alaska Natives. Native Village Corporations within each region were permitted to select surface lands near their villages. These Regional and Village corporations work with industry to promote energy development for the benefit of Alaskan Native communities.¹⁴

Each Regional Corporation is required to redistribute 70 percent of all revenues received from timber and subsurface estate resources evenly among all 12 Regional Corporations in proportion to the number of Alaska Natives in each region. Half of these revenues must be distributed amongst the Native Village Corporations. Since the enactment of ANCSA, Regional Corporations have received over one billion in receipts from subsurface estate resources.¹⁵

Current Oil and Gas Development on Federal Land

Onshore oil and gas development and production takes place on federal, state and Native lands in Alaska's North Slope region. Oil and gas leasing on federal lands in the state of Alaska is managed by the Bureau of Land Management (BLM), which administers permits to operators for exploration, drilling and construction of pads and production facilities.

Onshore federal oil and gas leasing is concentrated in two regions of the state: the NPR-A in the North Slope and the Cook Inlet Region in Southcentral Alaska. Companies producing oil and gas on Alaska's federal lands must pay lease rentals and royalties to the Department of the Interior's Office of Natural Resource Revenue. The state of Alaska receives a percentage of the bonuses, rents and royalties received from production in each region: 90% from the Cook Inlet Region and 50% from the NPR-A. These funds are used to support public projects and services.¹⁶

¹⁴ Alaska Resource Development Council. Alaska Native Corporations. <http://www.akrdc.org/alaska-native-corporations> (Last visited July 12, 2017)

¹⁵ Ibid.

¹⁶ U.S. Department of Interior. BLM Alaska Oil and Gas. <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/about/alaska> (Last visited July 12, 2017).

Cook Inlet

The Cook Inlet basin, located in Southcentral Alaska, is the oldest producing oil and gas basin in the State. Exploration and production in the Cook Inlet region began in the 1950s and peaked in the 1970s at 230,000 barrels per day. However, current production has fallen to approximately 18,000 barrels per day.

During the most recent lease sale in June of 2017, the Bureau of Ocean Energy Management (BOEM) leased 14 federal offshore units covering 76,615 acres, indicating increased industry interest in oil and gas leasing in Southcentral Alaska.¹⁷



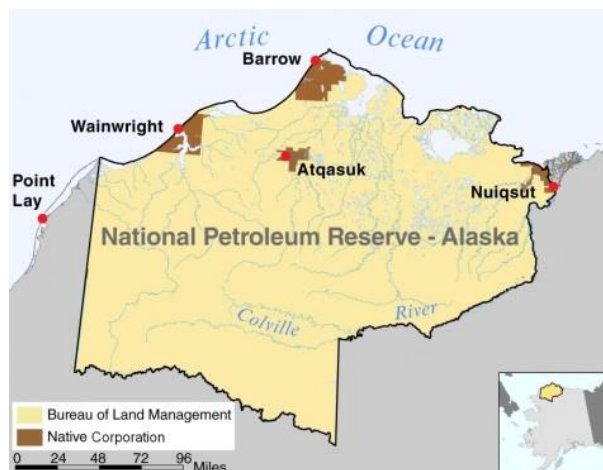
National Petroleum Reserve in Alaska (NPR-A)

History of the Reserve

The NPR-A, located in Alaska's North Slope, is a 22.8 million acre area owned by the federal government and managed by the BLM. Originally known as the Naval Petroleum Reserve No. 4, this 22.8 million acre area was set aside by President Harding as an emergency oil supply for the U.S. Navy in 1923.¹⁸

The Reserve was transferred to the Department of the Interior under the Naval Petroleum Reserves Production Act in 1976. This statute, as amended by the Department of Interior Appropriations Act of 1981, authorized oil and gas leasing in the NPR-A.¹⁹ The Mineral Leasing Act of 1920 and related regulations do not apply to Federal leases in the NPR-A.²⁰

Oil and gas lease sales in the NPR-A are conducted annually by the BLM. The most recent lease sale, conducted in December of 2016, generated \$18.8 million, half of which will be transferred to the state of Alaska. Five companies submitted bids on 67 tracks comprising 613,000 acres, signaling increased interest from industry in oil and gas development in the NPR-A. By



¹⁷ Rosen, Yereth. Hilcorp makes industry's first move in decades into federal waters of Cook Inlet. Alaska Dispatch News. (June 21, 2017) <https://www.adn.com/business-economy/energy/2017/06/21/hilcorp-makes-industrys-first-move-in-decades-into-federal-waters-of-cook-inlet/>

¹⁸ U.S. Department of Interior. National Petroleum Reserve in Alaska. <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/about/alaska/NPR-A> (Last visited July 12, 2017).

¹⁹ U.S. Department of Interior. National Petroleum Reserve in Alaska. <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/about/alaska/NPR-A> (Last visited July 12, 2017).

²⁰ U.S. Department of Interior. National Petroleum Reserve in Alaska. <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/about/alaska/NPR-A> (Last visited July 12, 2017).

contrast, BLM received six bids on 28,589 acres during the 2015 sale.²¹ The 2016 sale represented the second largest sale by acreage since for the state of Alaska since 1998, which received \$17.8 million in successful bids.²²

In 2013, the Obama Administration finalized the Integrated Activity Plan for the NPR-A. The Integrated Activity Plan established the BLM's management plan for the area and made nearly 11 million acres of the Reserve unavailable to leasing activity. The Department of Interior estimates that this decision placed 350 million barrels of oil and 45 trillion cubic feet of gas off limits to development.²³ These land restrictions prevent access to existing developments, hampering productivity at new and existing drill sites.

Current Production

Although exploration efforts were initiated in the NPR-A in the 1940s, oil production within the Reserve only began in 2015 when ConocoPhillips-Alaska announced first oil at its CD5 drill site. CD5 is located on Alaska Native lands owned by the Kuukpik Corporation, west of the Alpine oil field.²⁴ This project is the first commercial oil development within the boundaries of the NPR-A and is currently producing over 20,000 barrels per day, on average, with increased production expected in the future.²⁵

The first oil project on federal land within the NPR-A, ConocoPhillips' Greater Mooses Tooth 1 (GMT-1), is anticipated to begin production in 2018. The project, located eight miles west of the CD5 site, is permitted and under construction, with production anticipated to yield 30,000 barrels per day.²⁶ BLM is currently reviewing permitting applications for ConocoPhillips' Greater Mooses Tooth 2 (GMT-2) project.²⁷ This project is also expected to produce up to 30,000 barrels per day, with first oil expected in 2021.²⁸

²¹ NPR-A Oil and gas lease sale generates \$18.8 million. Alaska Native News. (December 15, 2016). <http://alaska-native-news.com/npr-a-oil-and-gas-lease-sale-generates-18-8-million-25642>

²² Harball, Elizabeth. Oil and gas companies snap up North Slope leases on state and federal lands. (December 15, 2016). <http://www.alaskapublic.org/2016/12/15/oil-and-gas-companies-snap-up-north-slope-leases-on-state-and-federal-lands/>

²³ U.S. Department of Interior. Secretary Zinke Signs Order to Jump-Start Alaskan Energy. (May 21, 2017). <https://www.doi.gov/pressreleases/secretary-zinke-signs-order-jump-start-alaskan-energy>

²⁴ DeMarban, Alex. After a decade, oil begins flowing from National Petroleum Reserve-Alaska. (July 7, 2016). <https://www.adn.com/alaska-news/article/after-decade-oil-begins-flowing-national-petroleum-reserve-alaska/2015/10/28/>

²⁵ ConocoPhillips Alaska. Projects. <http://alaska.conocophillips.com/who-we-are/Pages/projects.aspx> (Last visited July 13, 2017).

²⁶ ConocoPhillips Alaska. Greater Mooses Tooth 1. http://alaska.conocophillips.com/Documents/Fact_Sheet_GMT1_final.pdf (Last visited July 13, 2017)

²⁷ Brehmer, Elwood. ConocoPhillips announces big find on North Slope. <http://www.alaskajournal.com/2017-01-13/conocophillips-announces-big-find-north-slope> (Last visited July 12, 2017).

²⁸ DeMarban, Alex. New projects could add 100k barrels by 2021, but some are questionable. (April 29, 2017). <https://www.adn.com/business-economy/energy/2017/04/29/alaska-oil-production-could-jump-100000-barrels-by-2021-but-some-projects-are-questionable/>

In addition, the recently announced Willow Discovery in the NPR-A is estimated to contain 300 million barrels of recoverable resources. First oil is expected in 2023 and production could yield as much as 100,000 barrels per day.²⁹

Permitting and Access Challenges

The GMT-1 and GMT-2 projects, while promising developments that signal the potential for increased oil and gas development in the NPR-A, also illustrate permitting challenges that have hampered energy development in Alaska in recent years. BLM issued the GMT-1 Notice of Intent 25 days after receiving the Application for Permit to Drill (APD). By contrast, the GMT-2 Notice of Intent was released 11 months after the APD was submitted.³⁰ From start to finish, the permitting process for GMT-1 took 19 months.³¹ The slow pace of permitting, coupled with overly burdensome mitigation requirements, will continue to deter development unless action is taken to reduce permitting and compliance hurdles.

These new projects in the NPR-A also demonstrate impediments posed by the harsh environment and overall lack of infrastructure in the North Slope. Road access to the site is not year-round, creating obstacles for planning and logistics.

Secretarial Orders and Steps Toward Further Exploration and Development

In May of 2017, the Secretary directed the U.S. Geological Survey (USGS) and the Bureaus of Land Management and Ocean Energy Management to develop plans to execute resource assessments for the North Slope, focusing on the NPR-A and the Coastal Plain of ANWR.³²

The USGS conducted its most recent assessment of the NPR-A in 2010 and found that the Reserve contains approximately **895 million barrels of recoverable oil** and nearly **53 million trillion cubic feet of natural gas**.³³ Given recent announcements of significant oil plays within and just outside of the Reserve's northeast quadrant, it is possible that resource estimates for the NPR-A will increase.³⁴

Earlier this month, Secretary Zinke also announced that the Department is taking steps to streamline the permitting process to cut down on backlogs and delays, signaling that regulatory relief may be in sight.³⁵ These announcements by the Department are important steps toward

²⁹ Ibid, Note 27.

³⁰ Brehmer, Elwood. Permitting delays put ConocoPhillips' GMT-2 timeline in jeopardy. (January 26, 2017). <http://www.alaskajournal.com/2017-01-26/permitting-delays-put-conocophillips%E2%80%99-gmt-2-timeline-jeopardy>

³¹ ConocoPhillips Alaska. Greater Mooses Tooth 1.

http://alaska.conocophillips.com/Documents/Fact_Sheet_GMT1_final.pdf (Last visited July 13, 2017).

³² Ibid., Note 23.

³³ Ibid.

³⁴ Brehmer, Elwood. Sun hasn't set yet on ANWR. (June 28, 2017). <http://www.alaskajournal.com/2017-06-28/sun-hasn%E2%80%99t-set-yet-anwr#.WWQVtSuQyT8>

³⁵ U.S. Department of Interior. Zinke signs secretarial order to streamline process for federal onshore oil and gas leasing permits. (July 6, 2017). <https://www.doi.gov/pressreleases/zinke-signs-secretarial-order-streamline-process-federal-onshore-oil-and-gas-leasing>

unlocking untapped oil and gas resources within the NPR-A and advancing projects already under development toward production.

Alaska LNG Project

The Alaska LNG project is being developed by the Alaska Gasline Development Corporation, an independent, public corporation of the state of Alaska. Alaska LNG is an integrated gas infrastructure project designed to prepare and deliver gas from the North Slope gas fields for in-state use and export. Gas transported by the pipeline is intended to meet the demand of local communities without access to affordable electricity, as well as international markets, particularly in Asia.³⁶

The project will consist of a gas treatment plant located at Prudhoe Bay, an 800 mile pipeline to Southcentral Alaska, and a natural gas liquefaction plant in Nikiski, Alaska. The pipeline will have five offtakes, making gas transported by the pipeline available for in-state use. Gas will be supplied to the pipeline from the Prudhoe Bay field and Point Thompson field, delivering an average of 3.5 billions of cubic feet (Bcf) of gas daily, with a maximum capacity of 3.9 Bcf per day.³⁷ The project is currently in the engineering and design phase and is undergoing regulatory review.³⁸

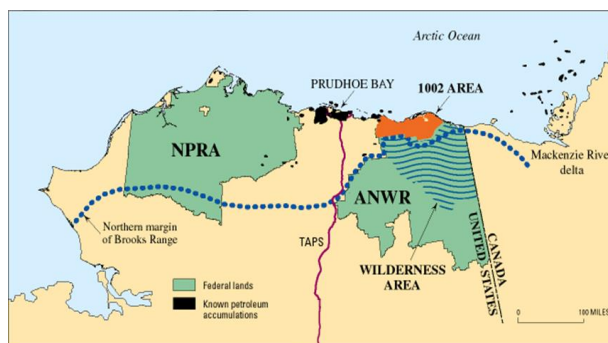
Spy Island Project

Eni US Operating Company Inc. recently submitted plans to BOEM to conduct extended-reach drilling in the Beaufort Sea from the Spy Island drill site, an artificial island in state waters Northwest of Prudhoe Bay. The BOEM recently issued conditional approval of the company's exploration plan, which involves drilling four wells offshore in federal waters from a manmade island. Drilling is scheduled to begin in December of 2017 and will only take place during the winter.³⁹

Arctic National Wildlife Refuge (ANWR)

History of the Refuge

The Arctic National Wildlife Refuge is administered by the Fish and Wildlife Service (FWS) as a unit of the National Wildlife Refuge System. It contains in its Northwest corner the Coastal Plain, or 1002 area, which was defined and set apart by Congress due to its significant potential for oil and gas development.



³⁶ Alaska LNG. Project Map. <http://alaska-lng.com/> (Last visited July 13, 2017).

³⁷ Alaska LNG. Gas Treatment Plant. <http://alaska-lng.com/project-overview/gas-treatment-plant/> (Last visited July 13, 2017).

³⁸ Alaska LNG. Schedule. <http://alaska-lng.com/project-overview/schedule/> (Last visited July 13, 2017).

³⁹ Bureau of Ocean Energy Management. BOEM Approves Eni Beaufort Sea Exploration Plan. (July 12, 2017). <https://www.boem.gov/press07122017/>

Almost **10 million acres** of the Refuge were originally contained within ANWR, established in 1960 by Public Land Order 2214. This Order chose not to withdraw the land from mineral leasing laws, meaning that future oil and gas leasing was not expressly precluded. The Range was eventually expanded and re-designated as the Arctic National Wildlife Refuge under the Alaska National Interest Lands Conservation Act (ANILCA) in 1980.⁴⁰ The Refuge now encompasses 19.64 million acres in Northeastern Alaska.⁴¹

ANILCA designated **8 million acres** of the original Range as **wilderness** and defined the remainder of the original Range as the Coastal Plain. This 1.57 million acre area was known to have significant oil and gas deposits and was heavily debated by Congress before the passage of ANILCA. In Section 1002 of ANILCA, Congress directed a study of the resources in the Coastal Plain, which also became known as the “1002 area.” Section 1003 of the law prohibited oil and gas development in the Refuge unless specifically authorized by Congress.⁴²

The study directed under Section 1002 of ANILCA, known as the 1002 report or the Final Legislative Environmental Impact Statement (FLEIS), was completed in 1987 and recommended full energy development of the Coastal Plain. Congress has not yet taken action to implement the recommendations of the 1987 study.

The Refuge, while managed by FWS, is not entirely owned by the federal government. ANCSA, enacted in 1971, transferred parts of the Refuge to Native corporations, but requires that subsurface lands in refuges created before 1971 to be managed according to the refuge’s regulations, and oil development is restricted accordingly.⁴³

Recent Federal Actions and Secretarial Order

In 2015, the Obama Administration released FWS’s Revised Comprehensive Conservation Plan and Final Environmental Impact Statement (RCCP) for the Refuge, recommending that the Coastal Plain be designated as wilderness. This designation would have prohibited commercial development in the 1002 area, despite its immense potential for oil and gas production. Under the Wilderness Act, only Congress can designate an area as wilderness. Accordingly, the recommendations of the RCCP were not enacted and the Coastal Plain continues to be managed by FWS under the Minimum Management Policy, allowing for minimal human intervention but prohibiting energy development.⁴⁴

Restrictions on leasing and development of lands within the Coastal Plain have also prevented the initiation of field studies and seismic exploration needed to generate updated geologic data. The most recent geologic data is from the 1980s, gathered in the course of

⁴⁰ M. Lynne Corn, Michael Ratner, and Laura B. Comay. Arctic National Wildlife Refuge (ANWR): An Overview. (Congressional Research Service, RL33872), (2017).

⁴¹ U.S. Fish and Wildlife Service. About the refuge. <https://www.fws.gov/refuge/Arctic/about.html> (Last visited July 12, 2017).

⁴² *Ibid.*, Note 40.

⁴³ *Ibid.*

⁴⁴ *Ibid.*

developing the 1987 1002 report.⁴⁵ In 2005, USGS estimated that there are roughly 7.1 billion barrels of economically recoverable oil and 10.4 billion barrels of technically recoverable oil on federal land within the Coastal Plain.⁴⁶

Recognizing the need for new data on the resources within ANWR, Secretary Zinke issued Secretarial Order 3352 on May 31, 2017. This order requires the Department to generate updated assessments of undiscovered, technically recoverable oil and natural gas resources in the Coastal Plain region of the Refuge.⁴⁷

Trans-Alaska Pipeline System (TAPS)

The Trans-Alaska Pipeline System (TAPS) is a key component of the energy infrastructure in Alaska and provides a reliable supply of domestically sourced oil to Alaska as well as the lower 48 States. In 1970, the Alyeska Pipeline Service Company was established to design, build, maintain and operate the pipeline system. Construction of the pipeline took roughly three years and cost over \$8 billion.⁴⁸

This 800 mile, 48 inch-wide pipeline is one of the largest in operation today and has transported 17.5 billion barrels of Alaskan crude oil since its completion in 1977. In 1988, at its peak, TAPS transmitted 2.1 million barrels per day and supplied 25 percent of U.S. energy production. Currently, the pipeline is only transporting roughly 500,000 barrels per day, which has forced Alyeska to reduce pumping stations from eleven to four.⁴⁹

In addition to serving as the main artery for the energy economy in Alaska, the pipeline has also enabled transportation and infrastructure improvements, bringing new opportunities to local Alaskan communities. These improvements include Dalton Highway, which connects some of the state's most remote regions. Development associated with TAPS has turned Valdez into a major port city and economic engine for the state.⁵⁰ A significant job creator, Alyeska has 800 direct employees, 21% of which are Alaska Natives.⁵¹

TAPS is a hot oil pipeline engineered for icy arctic conditions. At peak operation, the system could transport oil from Prudhoe Bay to Valdez in 3 or 4 days. In recent years, production has slowed and the pipeline is only operating at one-fourth of its capacity. As a result, the oil moves slower and loses its heat as it moves South, taking as many as 17 days to reach Valdez.⁵²

⁴⁵ Ibid.

⁴⁶ Ibid., Note 7.

⁴⁷ U.S. Department of Interior. Order Number 3352. <https://www.doi.gov/sites/doi.gov/files/uploads/so-3352.pdf>

⁴⁸ Ibid., Note 7.

⁴⁹ Arctic Energy Council. Still going strong: TAPS at 40. (June 22, 2017). <http://arcticenergycenter.com/still-going-strong-taps-at-40/>

⁵⁰ Ibid. Note 49.

⁵¹ Ibid., Note 8.

⁵² Carlson, Emily. TAPS faces new challenges on its 40th anniversary. KTVA Alaska. (June 20, 2017). <http://www.ktva.com/taps-faces-new-challenges-40th-anniversary-948/>

Alyeska has taken steps to keep the oil flowing in these adverse conditions, heating the oil as it travels, updating pumps, and maintaining thorough anti-corrosion practices. While heating the oil is critical to ensuring that it makes its way to through the pipeline, this practice results in the creation of paraffin wax. The company uses “pigs” to rid the pipeline’s interior of wax, water and ice buildup.

Modern Drilling Technology

Current operations on the North Slope feature modern drilling technology and illustrate the ability of current technology to minimize the footprint associated with drilling operations. Operations in the North Slope utilize directional drilling, allowing for more production with less environmental impact. Directional drilling can be used to drill horizontally, allowing operators to drill multiple wells and reach a variety of accumulations with significantly less impact on the surface.

For example, in 1970, when operations began in Prudhoe Bay, a 65 acre gravel pad could only support a drilling radius of 5,000 feet beneath the surface. Today, a 12-acre gravel pad can support a drilling radius of roughly 22,000 feet. This technology will only improve over time, enabling even more development with less impact to the surrounding community.⁵³

Conclusion

Responsible oil and gas development in the state of Alaska is central to achieving energy independence in the U.S. This resource-rich state has produced a reliable supply of affordable energy to the U.S. for over half of a century and depends on the oil and gas industry for employment, revenue and infrastructure investment.

Opening up previously restricted areas in the NPR-A and ANWR to energy development will generate billions in revenue for the state of Alaska and the federal government, create thousands of well-paying jobs and reduce our dependence on foreign resources.

While challenges remain with regard to permitting, infrastructure and land access, recent directives issued by the Secretary of the Interior signal a welcome and long overdue prioritization of this abundant region and its role in achieving American energy independence.

⁵³ ConocoPhillips. Alaska Western North Slope Overview. (May 2017).