

**Testimony before the U.S. House of Representatives
Subcommittee on Energy and Mineral Resources**

The National Petroleum Reserve Alaska Access Act

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Submitted by:

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Chairman Lamborn, Ranking Member Holt, and members of the House Subcommittee on Energy and Mineral Resources, on behalf of Governor Sean Parnell, the State of Alaska welcomes this opportunity to testify to you about our support for the objectives of this legislation. I also wish to express our eagerness to work with the U.S. Congress and the Administration to see that Alaska can meet its potential to deliver to the nation billions of barrels of domestically produced oil and trillions of cubic feet of gas for the U.S. economy.

More specifically, we want to demonstrate to this committee and the rest of your colleagues in the Congress the vital role Alaska can play in enhancing America's long-term energy security, expanding American employment, growing the economy, providing significant revenue to federal, state, and local governments, and delivering billions of barrels of domestically produced hydrocarbons to the U.S. marketplace. At a time when the Congress faces difficult choices between raising taxes and cutting spending development of our nation's natural resources offers a means to put Americans to work, increase federal revenue, and reduce the balance of trades deficit.

Before getting into substantive matters, I would like to briefly mention my professional background as it pertains to this testimony. I have been serving as deputy commissioner of the Alaska Department of Natural Resources (DNR), a state agency of over 1,100 personnel, since December 2010. Under the Alaska Constitution, the primary responsibility of the DNR is to maximize the development of the state's resources in a manner that furthers the public interest. DNR manages one of the largest portfolios of oil, gas, minerals, land, and water resources in the world, including approximately 100 million acres of uplands, 60 million acres of

tidelands, shore lands, and submerged lands, and 44,500 miles of coastline. I am responsible for the management of the Divisions of Oil and Gas (DOG), Geologic Geophysical Survey (DGGs), and Coastal and Ocean Management (DCOM), and the Offices of the State Pipeline Coordinator (SPCO), the Alaska Gasline Inducement Act Coordinator (ACO), and the Mental Health Land Trust (TLO).

General

This subcommittee has properly recognized that some of our country's biggest challenges center on energy security, national security, employment, and the national deficit. Pursuing smart policies that promote responsible energy development in America can help the country meet and overcome these challenges.

The National Petroleum Reserve Alaska Access Act is a good first step towards realizing the potential federal lands in Alaska have to provide domestic energy supplies. The provisions of the act are not unprecedented. Construction of TAPS required an Act of Congress—at a time when the US economy was in the doldrums, actions by OPEC was forcing prices into the stratosphere, and Americans were left wondering whether we still had what it takes to maintain our presence as a superpower. We hope this legislation is but one piece of a larger body of work by the Congress that will once again make clear that energy production from America's most prolific hydrocarbon province is a priority.

Before commenting on the legislation specifically, I'd like to bring the Committee's attention to the massive energy potential in Alaska. Alaska is a leader in promoting all types of energy, including our massive renewable energy base of hydro power, geothermal, wind, and biomass. We are also a national leader in promoting energy efficiency throughout the state. We cannot, however, talk about strategies to ensure our country's energy security without discussing our critical need to increase domestic production of oil and gas.

Alaska's Role in America's Energy Picture

Alaska is one of the nation's most critical and prolific oil-producing states. For more than 30 years Alaska has supplied domestic energy supplies to markets in the United States. When unscheduled disruptions to this supply occur, such as in August 2006 and in January of this year, prices move upward and refineries on the West Coast are forced to seek supplies from foreign sources. While production is less than 2/3 of its peak production, Alaska still supplies more than 600,000 barrels of oil every day.

The artery which gets that domestic energy to market is the Trans Alaska Pipeline. Eight hundred miles of 48" pipe, eleven pump stations, several hundred miles of feeder pipelines, and the Valdez Marine Terminal constitute the Trans-Alaska Pipeline System (TAPS). It is one of

the longest pipelines in the world; it crosses more than 500 rivers and streams and three mountain ranges as it carries Alaska's oil from Prudhoe Bay to Valdez.

Spurred by global concern over the 1973 oil crisis (OPEC embargo) and spiking energy prices that resulted in a severe U.S. and global recession, the U.S. Congress was instrumental in the approval and rapid development of TAPS. Congress approved construction of the pipeline with the Trans Alaska Pipeline Authorization Act of 1973. The principle focus of this Act is as relevant today as it was in 1973: "the early development and delivery of oil and gas from Alaska's North Slope to domestic markets is in the national interest because of growing domestic shortages and increasing dependence upon insecure foreign sources."

Underscoring the urgency of the country's precarious energy security position, the Trans Alaska Pipeline Authorization Act also halted all legal challenges to delay construction of the pipeline and ensured that additional government studies would not be used to delay construction. Under its Congressional declaration of purpose the Act states: "The purpose of this chapter is to insure that, because of the extensive governmental studies already made of this project and the national interest in early delivery of North Slope oil to domestic markets, the trans-Alaska oil pipeline be constructed promptly without further administrative or judicial delay or impediment. To accomplish this purpose it is the intent of the Congress to exercise its constitutional powers to the fullest extent in the authorizations and directions herein made and in limiting judicial review of the actions taken pursuant thereto."

Alaska's Energy Potential

Alaska's North Slope, both on and offshore, remains a world-class hydrocarbon basin with extraordinary potential. According to the US Geological Survey, America's Arctic ranks as number one for undiscovered oil potential and number three for gas potential for the world's conventional petroleum resources north of the Arctic Circle. Nearly 50 billion barrels of conventional undiscovered, technically recoverable oil resources and 223 trillion feet of conventional undiscovered, technically recoverable gas resources may be found in the North Slope and the Arctic OCS off Alaska's northern coast. This represents 43 percent of the nation's total oil potential and 25 percent of its gas potential.

The development of these resources means jobs, domestic energy supplies, and revenues for the federal treasury. A recent study conducted by Northern Economics and the Institute for Social and Economic Research at the University of Alaska Anchorage examined the national benefits associated with commercialization of oil and gas resources in the Arctic OCS. Their findings demonstrate that there are significant, material gains available to the nation through development of domestic natural resources.

Based on a reasonable set of price estimates for oil and gas (\$65/bbl and \$6.40/mmBtu respectively), researchers estimated that \$193 billion in revenues would accrue to federal, state, and local governments over a 50-year period. If you assume a price for oil closer to what the market is trading at today, that revenue estimate climbs to nearly \$263 billion. From a jobs perspective, this economic activity would generate an annual average of 54,700 jobs nationwide, with an estimated cumulative payroll amounting to \$145 billion over the same time period.

These extraordinary benefits are those that can be derived from a single element of federal lands in the Arctic. In addition, the Arctic National Wildlife Refuge (ANWR) and the National Petroleum Reserve-Alaska contain large resource potential with further economic benefits available to the nation. While these benefits are impressive, they are based solely on conventional oil and gas resources.

Unconventional Resources

In addition to conventional oil and gas resources, Alaska's North Slope contains massive quantities of unconventional resources: shale oil and gas, coalbed methane, deep-basin gas, heavy and viscous oil, and gas hydrates (USGS mean estimate is 85 trillion cubic feet). The U.S. Department of Energy has estimated that there is 36 billion barrels of heavy oil on the North Slope. (No current estimates exist of Alaska's shale oil and gas reserves.) Most of these unconventional resources are located onshore near existing infrastructure. Energy companies are beginning to investigate developing some of these resources in Alaska, particularly shale oil.

The oil fields at Prudhoe Bay and Kuparuk are the two largest discovered in North America. The oil and gas contained in those fields was captured by geologic structures as the hydrocarbons migrated up from the source rocks that produced them. Those source rocks are well-known by geologists—and they are huge. While their potential is unknown, key indicators (thermal maturity, organic chemistry, petrophysics, and geomechanics) appear to be analogous to the Eagle Ford play in southern Texas.

Three different source rocks are present, representing distinct opportunities for development if a commercial means can be found to produce them. Key to that commercial determination is the cost of production and transportation. Their location runs from the base of the Brooks Range just outside of ANWR and proceeds west in a wide swath through the NPR-A all the way to the Chukchi coast.

The Future of Arctic Energy Production

The importance of federal land to the future of oil and gas development in Alaska's Arctic must not be underestimated. Many of the most promising oil and gas resources in Alaska

are in federal lands. Development of these lands, in particular from the OCS, Arctic National Wildlife Refuge, and National Petroleum Reserve – Alaska (NPR-A), could result in production of over a million barrels of oil a day. Unfortunately, the federal government has consistently denied access to these lands, made decisions that have added significant delays to promising projects, and pursued policies that have chilled the investment climate.

What concerns Alaskans and what should concern all Americans is the continued viability of TAPS to operate under its current configuration. Under the same law Congress enacted to ensure its construction, once TAPS is no longer operating it must be dismantled and removed. Without a pipeline to transport crude oil to the northernmost ice-free port in the U.S., very little of the potential identified above can ever be realized. The viability of TAPS as a continuing critical component of our nation's energy security infrastructure is an issue for all Americans. It is on this issue that the federal government can play a critical role.

The reduced flow of oil through TAPS has reached a point where the pipeline is now approximately two-thirds empty. Continued throughput decline raises a host of technical challenges due to the slower velocity of oil in the pipeline, longer transit times, and the resulting dramatic lowering of the temperature of oil during the winter months. These challenges include wax buildup, frost heaves, and ice crystals and ice plugs. The likelihood of these problems occurring increases with lower throughput, and they can cause additional TAPS shutdowns and oil leaks that could harm the environment. This past January, TAPS was shut down for five days as the result of a leak at Pump Station 1 that was contained in a building.

The State of Alaska is working with industry to ensure that we are prepared to address these additional challenges in the near term as TAPS throughput decline continues. But clearly, the most effective way to address these technical challenges and the environmental risks that they may entail is to increase TAPS throughput.

The January 2011 shutdown of TAPS, during the heart of a cold Alaskan winter, not only focused attention on the significant technical challenges of decreased TAPS throughput, but also raised the specter of a broader premature shutdown of TAPS. Such a shutdown would significantly undermine U.S. national security and energy security interests and would devastate the Alaskan economy.

A premature shutdown of TAPS would result in the stranding of billions of barrels of domestic oil in America's largest hydrocarbon basin. Oil prices would continue to soar. Thousands of jobs would be lost. U.S. refineries would likely have to turn to foreign sources of

oil, as they did when TAPS shutdown in January, thereby increasing the U.S. trade deficit and undermining American national and energy security.

A premature TAPS shutdown would also have a crushing impact on Alaskans. It has been estimated that one third of the Alaska economy is connected to the oil industry. The loss of North Slope oil production would deprive state and local governments of billions of dollars in annual revenue. Government services including education, public safety, and health care would be slashed and infrastructure projects would be significantly curtailed. Rural communities, particularly those that have significantly benefitted from oil development such as the North Slope Borough, would face a significant decrease in their standard of living.

But continued TAPS throughput decline does not need to be Alaska's or the country's destiny. The massive North Slope hydrocarbon resource base remains available for development. What is needed to ensure a reversal of this decline are state and federal policies that promote increased investment, responsible resource development, and increased job creation on the North Slope.

The Need for Investment

Despite the extraordinary production and massive hydrocarbon potential, Alaska remains relatively underexplored compared to any other prolific oil and gas region in North America. Only 500 exploration wells have been drilled within a 150,000-square-mile area on the North Slope—an area that maintains the highest undiscovered conventional oil and gas potential in Alaska. That calculates to three wells per 1,000 square miles. As a comparison, 75,000 square miles within the state of Wyoming, endowed with high oil and gas potential, has more than 19,000 exploration wells, or about 250 wells per 1,000 square miles.

With this remarkable potential, Alaska can play a pivotal role in helping our country meet its significant energy and security challenges; reduce our reliance on foreign oil; provide thousands of high paying jobs; reduce the nation's trade deficit; and provide significant revenue to local, state, and federal governments.

The Need for Affirmative Federal Support

Although both economics and federal policies are in play, the viability of TAPS is more of a political issue than an economic one. As a threshold matter, Alaska's North Slope has huge reserves and it is still relatively underexplored. Thus, the issue of TAPS' viability does not center on whether we have enough hydrocarbons to entice investment. With \$100/barrel oil, predictions that oil prices will remain over \$80-\$90 for much of the decade, and Alaska's

existing infrastructure to transport hydrocarbons, the viability of TAPS is clearly not solely economic.

The State of Alaska is also doing as much as we can to make oil production on state lands as globally competitive as possible. The Governor's major tax reform legislation will do much to get us to such a position. While it is true that 98 percent of all of the oil production to date has come from state lands, the lion's share of the resource potential belongs to the federal government. In the estimates given above, fully 88 percent of the undiscovered technically recoverable oil and 79 percent of the gas will be explored for on land under federal jurisdiction.

For these reasons, the long-term viability of TAPS will primarily be determined by federal politics and policies. Unfortunately, the federal government has consistently denied access to these lands, made decisions that have added significant delays to promising projects, and pursued policies that have chilled the investment climate, discouraging companies from exploring and producing in Alaska. When Shell cannot drill one exploratory well in the OCS after five years of spending billions of dollars for leases and permits, and ConocoPhillips cannot get a permit, again after five years, to build a bridge across the Colville River to access CD-5 in the NPR-A, it is the federal government that is denying access to abundant hydrocarbon resources and, ultimately, jeopardizing the long-term viability of TAPS.

These are just a few examples of many where federal policies have focused on discouraging—not encouraging—the billions of dollars of investment needed to increase North Slope oil production. If we had a federal government that welcomed exploration and development and permitted operations in a timely and predictable manner, the economics of filling TAPS would take care of itself.

Protecting Alaska's Environment

Among the reasons for these actions is concern for the environment. This concern, however, is misguided. Failure to advance development of Alaska's domestic energy supplies does not advance global environmental protection. To the contrary, it does the opposite. When oil and energy development in Alaska is shut down by our own government, development for such resources is driven overseas to places like Brazil, Russia, Iraq, Azerbaijan, and Saudi Arabia. Environmental standards in these places are not nearly as strong or strictly enforced as in Alaska, where stringent regulations are the hallmark of hydrocarbon production on the North Slope.

Alaska has some of the most stringent environmental policies and regulations in the world and we are a leader in research for sound natural resource development. We love our

state, not only for its economic opportunities, but also for its natural beauty, and we are very focused on protecting our environment.

The State of Alaska strongly believes that responsible resource development and protecting the environment go hand in hand and we have a strong record of upholding the Alaska Constitution's mandate that the state pursue responsible resource development in a manner that safeguards the environment.

To ensure responsible resource development occurs in Alaska, the state has devised a comprehensive system that imposes rigorous environmental protections that meet or exceed federal standards. Wherever possible, we have assumed—or are in the process of assuming—primacy for the issuance of permits.

Our efforts at protecting the environment and wildlife have been successful. For example, when debating the development of TAPS, many predicted that oil and gas development would decimate caribou herds. These predictions have not come true. In fact, caribou numbers have increased dramatically over the past thirty years. The Central Arctic caribou herd, which occupies summer ranges surrounding Prudhoe Bay, has grown from 5,000 in 1975 to over 66,000 today.

Even with a robust regulatory regime, the state continues to look for ways to improve its regulatory oversight. Later this month, the state will release a comprehensive gap analysis conducted to: better understand the spectrum of state agency oversight; better understand the effectiveness of authorities and enforcement over oil and gas operations; and to identify gaps or redundancies in state oversight and determine if they need to be filled or eliminated as appropriate.

Because of the efforts taken by federal, state, and local governments and the energy industry, oil and gas development in Alaska is conducted in a safe and responsible manner with standards that exceed most other jurisdictions in the world.

NPR-A: a Logical First Step

Ironically, one place in federal jurisdiction where there should be less resistance to oil and gas development is the National Petroleum Reserve-Alaska (NPR-A). Early in the last century this land was specifically set aside by Congress for oil and gas exploration and production. As well, the State of Alaska has itself invested heavily in this area—and may be the largest single investor in recent exploration there. In just the last decade, the state of Alaska has awarded more than \$180 million in cash exploration incentive tax credits to several oil companies to conduct seismic surveys and drill exploration wells in the NPR-A on land that it

does not own. The objectives of the National Petroleum Reserve-Alaska Access Act address many of the challenges facing exploration and development on federal lands in Alaska.

Leasing

Access to Lands through predictable leasing programs allows those companies interested in exploring, finding, and producing to assess the opportunities and plan for participation. Exploration and development of oil and gas in Alaska is a long term proposition. A predictable leasing program is key to allowing companies to make the long-term investment of time, capital, and limited human resources necessary to realize tremendous gains from this relatively untapped resource.

Transportation Infrastructure

The NPR-A Access Act recognizes the critical linkage between resource and transportation infrastructure—including roads and pipelines. The first production from CD-5—the expansion of the Colville River Unit operated by ConocoPhillips—was expected to start in 2012. Unfortunately, in February 2010, the U.S. Army Corps of Engineers (COE) reversed course and denied ConocoPhillips its permits to construct a pipeline and vehicle bridge across the Nigliq Channel in the Colville River Delta. Without the means to move it to market, this reserve of oil is effectively stranded. Many Alaskans viewed this decision as a shutdown of NPR-A development.

After five years of delays, the status of CD-5 remains uncertain, thereby chilling the investment climate over the entire NPR-A. Alaskans remain hopeful and we believe that the COE will recognize the efficacy of a bridge over the Nigliq Channel and approve ConocoPhillips' permit.

Deadlines for Permits

Predictability in regulatory timelines is critical. In Alaska, we pride ourselves on doing things right. One way we achieve that is by restricting certain activities to very specific windows of time throughout the year. If a critical permit is delayed by 30 days, the consequences to the execution of the project could be enormous.

Tundra travel in the Arctic is restricted to those months when the ground is frozen solid to a depth that ensures the surface will not be scarred by exploration activities. Operators need sufficient time to mobilize equipment to the site of the exploration activity, to conduct the relevant activity, and to demobilize the equipment and return it to permanent infrastructure.

Due to these limited windows of opportunity to conduct exploration and development activities, when critical permits are delayed for Alaska projects the consequence can be delay of the project for an entire year. This is particularly true for exploration conducted in the NPR-A since there is little to no permanent, year-round surface transportation infrastructure beyond the spine road at Kuparuk.

Planned ROW

Perhaps the most ambitious element of the proposed legislation, the call for a plan for approved rights-of-way for pipeline, road, and other surface infrastructure to ensure all leases are within 25 miles of an approved right-of-way complements plans by the State of Alaska. In 2009, Governor Parnell directed the State of Alaska to advance the permitting for a road and pipeline corridor from Umiat to the Dalton Highway and TAPS.

More than 90 miles west of the Dalton, Umiat is known to contain a discovery of oil at relatively shallow depths just inside the NPR-A. The company holding the leases at Umiat estimates the size of the field to be 250 million barrels, with peak production capable of reaching 50,000 barrels per day.

The road and pipeline would provide benefits not only for access and transportation of oil, but also for future exploration and development of gas in the Foothills. The road would also benefit to the U.S. Army Corps of Engineers as it continues cleanup of the former military site at Umiat. A total of \$24 million in state funds have been appropriated by the Alaska Legislature to complete the necessary EIS.

Accountability

Requiring a notification for applicants with specific information regarding delays in the issuance of permits is a novel approach that will inform operators of the likelihood they will succeed in obtaining the necessary permits and authorizations required to proceed with responsible development. Such notifications will allow operators to make reasoned decisions regarding the timing and efficacy of their exploration plans.

Resource Assessment

Activities currently underway by the USGS should make this relatively easy to achieve. SOA had concerns with the last revision made to assessments of the oil resources of the NPR-A. We remain bullish on the prospects of conventional oil discoveries yet to be found, and are certain that significant unconventional resources are in place throughout the region.

Conclusion

The State of Alaska welcomes Congress's involvement in ensuring that access to federal lands for responsible resource development occurs in a timely, predictable manner. We believe the NPR-A Access Act supports Alaska's goal of one million barrels a day through TAPS within a decade. By working together to champion such a goal, as well as the President's goal of reducing oil imports by one third, we can demonstrate how state and federal governments can come together to curb our dependence on foreign oil and create a brighter, more secure future for Americans.

The benefits of increased access to and production from federal lands in the Arctic promote numerous interests of America and Alaska:

- Economic and job security
- Trade deficit—promoting resource development in Alaska ensures that we import less oil from overseas
- Federal budget deficit—by providing Americans access to their own lands to produce oil, the federal government is opening the opportunity to earn billions in direct revenues, rather than forcing Americans to help fill the treasuries of countries such as Venezuela, Russia, and, Saudi Arabia.
- Energy security—promoting development of Alaska's massive sources of domestic energy reinforces U.S. energy security.