

Subcommittee on Energy and Mineral Resources

Doug Lamborn, Chairman

Hearing Memo

June 12, 2015

To: All Natural Resource Committee Members

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

Subject: Oversight Hearing on “*Arctic Resources and American Competitiveness.*”

The subcommittee will hold an oversight hearing on “*Arctic Resources and American Competitiveness*” on **Tuesday, June 16, 2015 at 10:30 a.m. in Room 1334 Longworth House Office Building.** This hearing will focus on the importance of Arctic offshore energy development to Alaskan natives, the State of Alaska, the Trans-Alaska Pipeline System, and to our nation’s goal of energy security and independence.

Policy Overview

- The potential of our nation’s Arctic resources is vast – and the safe and efficient development of these resources is pivotal not only to local communities on the North Slope, but also to ensure our nation stays on our path to energy independence and global energy leadership.
- Development of these resources in shallow water can be done safely using existing technologies, as concluded by the National Petroleum Council study released in May 2015.
- Costly regulatory actions such as the promulgation of the Department of the Interior’s Arctic Rule earlier this year will likely make these valuable offshore resources not economically feasible to develop.
- Decisions made at the federal-level on the future of resource development in the Arctic have immediate and lasting impacts on local communities that rely on this development for economic stability. The State of Alaska and local native communities on the North Slope feel these impacts first-hand – and their input is integral to the decisions that are made in Washington, D.C.

Witnesses Invited

Panel I

Mr. Brian Salerno

Director

Bureau of Safety and Environmental Enforcement

U.S. Department of the Interior

Washington, D.C.

Mr. Richard Glenn

Executive Vice President of Lands and Natural Resources

Arctic Slope Regional Corporation

Barrow, AK

Ms. Drue Pearce

Senior Policy Advisor

Crowell & Moring

Washington, D.C.

Ms. Christine A. Resler

GeoMarket Manager

Slumberland Ltd. - Alaska

Anchorage, AK

Mr. Michael LeVine

Pacific Senior Counsel

Oceana

Juneau, AK

Hearing Focus

This hearing will focus on the vast potential of these resources that exist in our nation's Arctic outer Continental Shelf (OCS) areas off the coast of Alaska, and how the safe development of these resources is important to local economies and our nation as a whole. Regulatory actions by the federal government, such as leasing decisions, land withdrawals, and rulemakings by the Department of the Interior, have had a negative impact on the future prospects for development of these resources.

Extensive analysis conducted by National Petroleum Council on Arctic development has concluded that with thoughtful and performance-based policies, most U.S. Arctic offshore conventional resources can be developed using existing technology. This conclusion is not a theory that is incorporated into the Department of the Interior's Arctic Rule. Instead, the rule takes a more prescriptive approach to future development in the Arctic that does not reflect technological innovations or lessons learned by other companies in other Arctic waters.

Our nation's Arctic OCS resources will be a critical component in future decades to offset declining production in the lower-48. Ensuring safe and efficient development of these resources will keep our nation in the lead for energy production worldwide, while also benefiting the many native communities in the North Slope and all American citizens as we slowly awaken to realize the benefits of lower energy prices and greater diplomatic leverage on the geopolitical stage.

Background

Over half of our nation's 1.7 billion outer Continental Shelf (OCS) acres are located off the coast of Alaska in the Alaska OCS Planning areas¹. Comprised of over one billion acres (1,035,100,000), this acreage encompasses the Beaufort and Chukchi Seas, the Bering Sea, Cook Inlet, and the Gulf of Alaska. Just over three million (3,364,787)² of those acres are under lease³ – that is **less than one half of one percent** of the OCS acreage in Alaska. The only current federal offshore production that is occurring in the Alaskan OCS is from Northstar Island – a five-acre man-made gravel island owned and operated by Hilcorp Alaska and located 12 miles north of Prudhoe Bay in the Beaufort Sea. The reservoir spans both State and federal waters and the federal percentage of production from Northstar is 17.84%.⁴ In 2014, that was 625,304 barrels of oil and 31.3 billion cubic feet (Bcf) of natural gas⁵.

This minimal federal allocation of production is what represents current federal production in all of the one billion Alaskan OCS acres. To put this into perspective, in 2014, the Gulf of Mexico – which is roughly 160 million OCS acres - generated over half a billion barrels of oil (510,532,886) and 1.3 trillion cubic feet (Tcf) of natural gas. This production in the Gulf accounted for 18% of total U.S. crude oil production and 5% of total U.S. natural gas production.

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http://www.boem.gov/uploadedImages/BOEM/Oil_and_Gas_Energy_Program/Leasing/Regional_Leasing/Alaska_Region/AlaskaPlanningAreaMap.png

² <http://www.boem.gov/Combined-Leasing-Report-April-2015/>

³ <http://www.boem.gov/Alaska-Lease-Holdings-by-Owner-or-Partial-Owner/>

⁴ http://doa.alaska.gov/ogc/annual/current/18_Oil_Pools/Northstar-%20Oil/1_Oil_1.htm

⁵ http://www.data.bsee.gov/homepg/data_center/production/ocsprod.asp

Alaska’s extensive Outer Continental Shelf acreage encompasses the Beaufort and Chukchi Seas, the Bering Sea, Cook Inlet and the Gulf of Alaska. A 2011 Bureau of Ocean Energy Management (BOEM) conservative resource assessment included a mean estimate of 26.6 billion barrels of oil (Bbo) and 132 trillion cubic feet (Tcf) of natural gas in the Alaskan OCS.⁶

| Region | Undiscovered Technically Recoverable Oil and Gas Resources (UTRR) | | | | | | | | |
|---|---|-------|--------|-----------|--------|--------|-----------|--------|--------|
| | Oil (Bbo) | | | Gas (Tcf) | | | BOE (Bbo) | | |
| | 95% | Mean | 5% | 95% | Mean | 5% | 95% | Mean | 5% |
| Planning Area | | | | | | | | | |
| Alaska OCS* | 8.81 | 26.61 | 55.53 | 47.43 | 131.45 | 271.04 | 17.25 | 50.00 | 103.77 |
| Chukchi Sea | 2.32 | 15.38 | 40.08 | 10.32 | 76.77 | 209.53 | 4.15 | 29.04 | 77.36 |
| Beaufort Sea | 0.41 | 8.22 | 23.24 | 0.65 | 27.64 | 72.18 | 0.53 | 13.14 | 36.08 |
| Hope Basin | 0.00 | 0.15 | 0.60 | 0.00 | 3.77 | 14.98 | 0.00 | 0.82 | 3.27 |
| Navarin Basin | 0.00 | 0.13 | 0.62 | 0.00 | 1.22 | 5.80 | 0.00 | 0.35 | 1.65 |
| North Aleutian Basin | 0.02 | 0.75 | 2.50 | 0.40 | 8.62 | 23.28 | 0.09 | 2.29 | 6.65 |
| St. George Basin | 0.00 | 0.21 | 0.79 | 0.00 | 2.80 | 11.15 | 0.00 | 0.71 | 2.77 |
| Norton Basin | 0.00 | 0.06 | 0.24 | 0.00 | 3.06 | 13.27 | 0.00 | 0.60 | 2.61 |
| Cook Inlet | 0.06 | 1.01 | 2.85 | 0.03 | 1.20 | 3.48 | 0.06 | 1.23 | 3.47 |
| Gulf of Alaska | 0.00 | 0.63 | 2.04 | 0.00 | 4.04 | 13.87 | 0.00 | 1.34 | 4.51 |
| Shumagin | 0.00 | 0.01 | 0.05 | 0.00 | 0.49 | 2.04 | 0.00 | 0.10 | 0.42 |
| Kodiak | 0.00 | 0.05 | 0.20 | 0.00 | 1.84 | 7.62 | 0.00 | 0.38 | 1.55 |
| <small>*The Aleutian Arc, Aleutian Basin, Bowers Basin, and St. Matthew-Hall Planning Areas in the Alaska OCS Region were not evaluated in this study as their petroleum potential is negligible.</small> | | | | | | | | | |
| Atlantic OCS | 1.32 | 4.72 | 9.23 | 11.81 | 37.51 | 67.69 | 3.42 | 11.40 | 21.27 |
| North Atlantic | 0.06 | 1.75 | 5.19 | 1.05 | 11.94 | 32.53 | 0.25 | 3.88 | 10.98 |
| Mid-Atlantic | 0.06 | 2.42 | 5.58 | 1.01 | 23.38 | 48.45 | 0.24 | 6.58 | 14.20 |
| South Atlantic | 0.00 | 0.55 | 1.16 | 0.00 | 2.18 | 6.31 | 0.00 | 0.94 | 2.29 |
| Gulf of Mexico OCS | 38.86 | 48.40 | 59.18 | 193.99 | 219.46 | 245.25 | 73.38 | 87.45 | 102.82 |
| Western Gulf of Mexico | 8.58 | 12.38 | 17.15 | 57.39 | 69.45 | 81.94 | 18.79 | 24.74 | 31.73 |
| Central Gulf of Mexico | 22.54 | 30.93 | 40.69 | 111.77 | 133.90 | 156.62 | 42.43 | 54.76 | 68.55 |
| Eastern Gulf of Mexico | 3.46 | 5.07 | 6.95 | 12.34 | 16.08 | 20.68 | 5.66 | 7.93 | 10.63 |
| Straits of Florida | 0.01 | 0.02 | 0.03 | 0.01 | 0.02 | 0.03 | 0.01 | 0.02 | 0.03 |
| Pacific OCS | 6.73 | 10.20 | 14.30 | 10.11 | 16.10 | 23.75 | 8.53 | 13.07 | 18.52 |
| Washington/Oregon | < 0.01 | 0.40 | 1.15 | 0.03 | 2.28 | 5.79 | 0.01 | 0.81 | 2.18 |
| Northern California | 1.08 | 2.08 | 3.54 | 2.13 | 3.58 | 5.38 | 1.46 | 2.71 | 4.50 |
| Central California | 1.23 | 2.40 | 3.87 | 1.18 | 2.49 | 4.15 | 1.44 | 2.84 | 4.61 |
| Southern California | 2.52 | 5.32 | 8.83 | 3.27 | 7.76 | 14.42 | 3.10 | 6.70 | 11.40 |
| Total U.S. OCS | 67.44 | 90.02 | 120.72 | 306.59 | 404.60 | 552.69 | 121.99 | 162.01 | 219.07 |

The Arctic is defined as those areas that are north of the Arctic Circle – which in the United States includes areas of Northern Alaska such as the North Slope, as well as offshore resources in the Chukchi and Beaufort Sea Planning Areas and the Hope Basin. Currently, Arctic production in all Arctic countries accounts for 25 percent of the world’s natural gas and 10 percent of its oil. Industry has become increasingly interested in developing our nation’s Arctic offshore resources in Alaska given that over 90% of this significant resource potential is located in less than 100 meters of water where industry has significant exploration and production technology and operating experience.

⁶ <http://www.boem.gov/2011-National-Assessment-Factsheet/>

When President Obama announced his decision early this year to set aside over 12 million acres of the Alaska National Wildlife Refuge (ANWR) – including Section 1002 area located along the coastal plain that had originally been set aside for potential resource development – this announcement was a significant blow not only to the State of Alaska and the individuals seeking to develop those resources, but also to the Trans-Alaska Pipeline System (TAPS)⁷.

Constructed in just over three years between 1975 and 1977, this 800 mile long pipeline is the lifeline to Prudhoe Bay production – delivering American-made energy from the North Slope of Alaska to Valdez – the northernmost ice-free port in North America. From there, much of this crude makes its way to West Coast refiners. While the 48-inch diameter pipeline can accommodate over 2 million barrels of crude per day, current throughput is at 481,418 barrels⁸ and declining. Several projects, such as the announced Greater Mooses Tooth project, have the potential to help alleviate declining throughput⁹. But, the ANWR announcement was a significant setback, leaving much of the hope for increasing throughput in TAPS on the Arctic resources located offshore.

Most recently in 2012, Shell initiated exploratory drilling on leases acquired in the Chukchi and Beaufort seas. Though Shell was able to complete top hole drilling on both prospects, the company encountered several setbacks in the 2012 drilling season that led the Bureau of Safety and Environmental Enforcement (BSEE) to conduct a review of their drilling operations.¹⁰ Conclusions drawn from this report on one company’s operations during one season in the Arctic (Statoil and Conoco also hold leases¹¹ in the Arctic-though have not yet moved forward with exploration and development activities) were then utilized by the Department to formulate the basis of the Arctic Rule. Shell was recently approved to continue their operations to drill in the Arctic this summer, with President Obama supporting this endeavor.¹²



Figure 1-10. Map of Alaska Showing Discovered Fields and the Areas Assessed for Resource Potential

⁷ <http://www.alyeska-pipe.com/TAPS/PipelineFacts>

⁸ <https://twitter.com/AlyeskaPipeline/status/609023576239280128>

⁹ http://www.blm.gov/ak/st/en/prog/energy/oil_gas/npra/GMTU_proposed_dev_proj.html

¹⁰ <http://www.doi.gov/news/pressreleases/upload/Shell-report-3-8-13-Final.pdf>

¹¹ <http://www.boem.gov/Alaska-Detailed-Listing-of-Active-Leases/>

¹² <http://thehill.com/policy/energy-environment/242170-obama-defends-arctic-drilling-approval>

Arctic Rule

This February, the Bureau of Ocean Energy Management (BOEM) and BSEE published their proposed Arctic Rule¹³ for future offshore drilling operations off the coast of Alaska, focusing solely on the Beaufort and Chukchi Sea Planning Areas. The comment period closed on May 27, 2015. The rule focused on lessons learned from the 2012 drilling season. Main criticisms of the rule point out that the context is **largely prescriptive versus performance-based, extremely costly, and fails to take into account the vast innovations in safety technology** that are more suitable to a low temperature/low pressure environment in the Arctic – as opposed to the high temperature/high pressure needs of the Gulf of Mexico.

For instance, the rule requires that an additional rig be present and prepared to drill a relief well if necessary in the event of the loss of well control. However, this tactic fails to consider separate containment strategies, such as capping stack technology (which was the subject of the Full Committee’s hearing on April 22, 2015¹⁴) and other more innovative solutions that would be more appropriate to the geology of shallow-water, Arctic wells. Additionally BSEE’s cost-benefit analysis estimates that the rule will cost **\$1.5 billion to implement** (for one company). Exorbitant costs not only will cause other companies to rethink their investments in the leases they current hold in the Arctic, including the rent they currently pay to the federal government on those leases, but this prescriptive and costly regulation will also likely impact future scheduled lease sales in the Arctic.

National Petroleum Council Study on Arctic Potential

In October 2013, Secretary of Energy Ernest Moniz requested that the National Petroleum Council conduct a study on Arctic resource potential, specifically posing the question: “What research should the Department of Energy pursue and what technology constraints must be addressed to ensure prudent development of Arctic oil and gas resources while advancing U.S. energy and economic security and ensuring environmental stewardship?”¹⁵

The resulting study, entitled: “Arctic Potential – Realizing the Promise of U.S. Arctic Oil and Gas Resources,” was published on March 27, 2015 – just weeks after the Department of the Interior published their draft Arctic Rule. In fact, the Department of the Interior was a participant in the study. Though more than 250 people from over 100 organizations served on the study’s Committee, Subcommittee, and/or Subgroups, or participated in the Technology Workshops, less than 45% of those individuals work for oil and natural gas companies.¹⁶ The scope of the study focused on the prudent development of Arctic resources and took into account emerging research, technological innovations, and collaborative approaches that would help foster resource development. The study also focused on the needs for developing offshore

¹³ <http://www.regulations.gov/#!documentDetail:D=BSEE-2013-0011-0031>

¹⁴ <http://naturalresources.house.gov/calendar/eventsingle.aspx?EventID=398305>

¹⁵ http://www.npc.org/10-25-13_Sec_Moniz_Request_Letter_to_NPC.pdf

¹⁶ *Arctic Potential – Realizing the Promise of U.S. Oil and Gas Resources*; Executive Summary, p.3.

resources given that it was considered an area with the greatest needs and opportunities – and because onshore technologies and experience were more mature.

The study produced seven key findings:

1. Arctic oil and gas resources are large and can contribute significantly to meeting future U.S. and global energy needs;
2. The Arctic environment poses some different challenges relative to other oil and gas production areas;
3. The oil and gas industry has a long history of success in Arctic conditions enabled by continuing technology advances;
4. Most of the U.S. Arctic offshore conventional oil & gas potential can be developed using existing field-proven technology;
5. The economic viability of U.S. Arctic development is challenged;
6. Realizing the promise of Arctic oil and gas requires securing public confidence; and
7. There have been substantial recent technology advancements to reduce the potential for and consequences of a spill.

The study is an interesting parallel to the Arctic Rule, as it provides a more extensive analysis of the challenges and potential successes for the safe and efficient development of these offshore resources. More importantly, the study draws on a wide range of expertise across industry, state and federal agencies, interest groups and academia to provide a more thorough understanding energy development in the Arctic environment.

The study addresses major issues which DOI's Arctic Rule fails to address – such as the significantly shorter drilling season in the Arctic. The study finds that policies and regulations must encourage innovation and take into account technological advancements – specifically recommending that BSEE review and update regulations that are “performance-based” and consider “lessons from other jurisdictions.”¹⁷

Ultimately, the study specifically finds that industry has a long history of success in the Arctic and can develop resources safely today with existing technology. The Department of the Interior's Arctic Rule sets up a new regulatory structure for offshore drilling in the Arctic. The findings of the NPC Study run contrary to the entire premise that an entirely new structure is needed.

¹⁷ Ibid., p. 50.

Historical List of Offshore Lease Sales in Alaska¹⁸

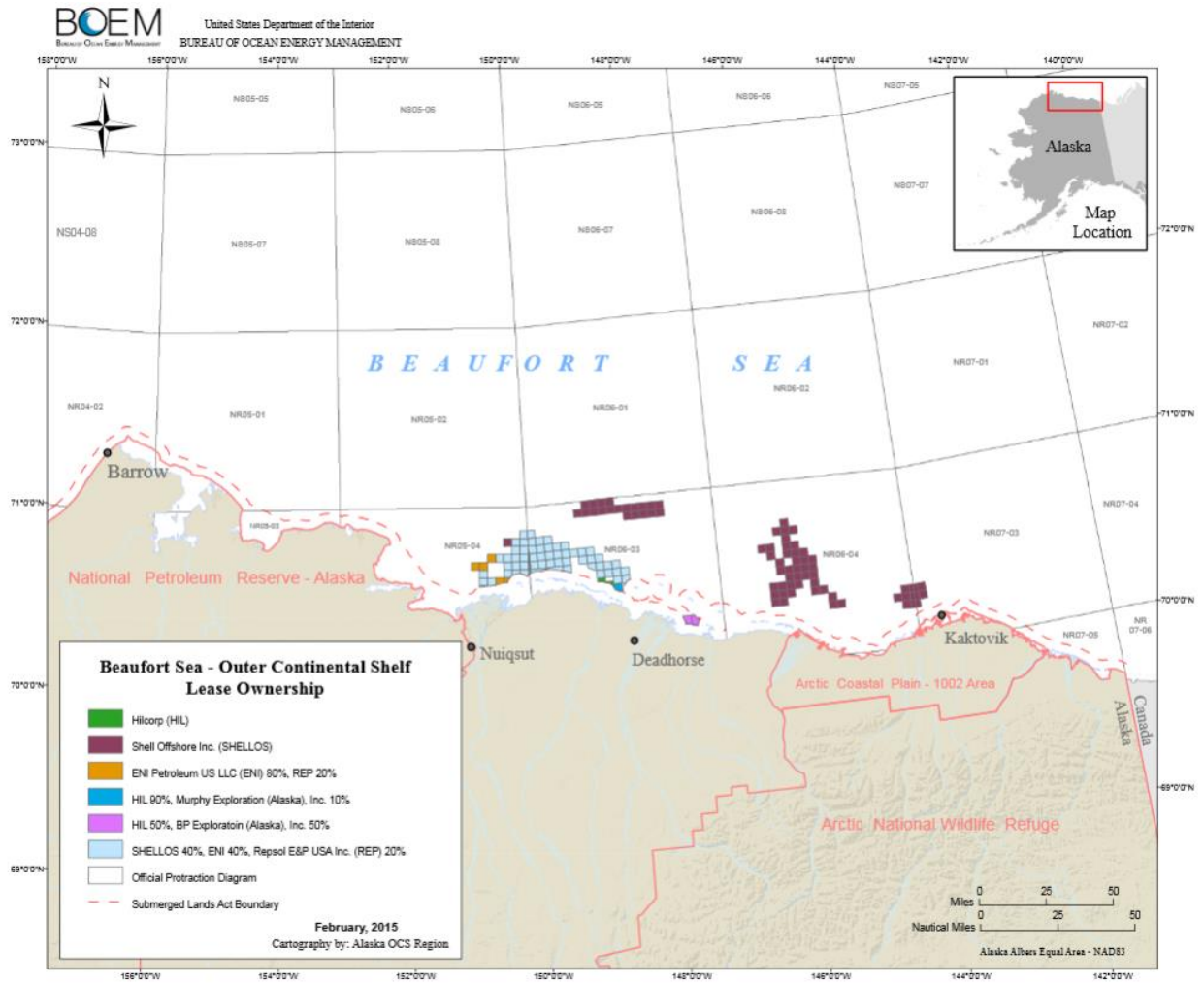
- Beaufort Sea Lease Sale 186. Held in 2003. 3 Companies participating; 37 bids received; \$8.9 million generated in revenue.
- Cook Inlet Lease Sale 191. Held May 19, 2004. No bids received.
- Chukchi Sea Oil and Gas Lease Sale 193. Held in February 2008. Largest Arctic Lease Sale in history. 7 companies participating; 667 bids received; \$2.6 billion generated in revenue.
- Beaufort Sea Lease Sale 195. Held in 2003. 4 companies participating; 121 bids received; \$46.7 million generated in revenue.
- Beaufort Sea Lease Sale 202. Held in 2005. 6 companies participating; 92 bids received; \$42.2 million generated in revenue.
- Cook Inlet Oil and Gas Lease Sale 211. Cancelled in 2009.
- North Aleutian Basin Lease Sale 214. Cancelled when the North Aleutian Basin was withdrawn from disposition for leasing through 2017; President Obama extended this withdrawal in December 2014 to prevent leasing in NAB in the 2017-2022 5-year plan.
- Cook Inlet Oil and Gas Lease Sale 219. Cancelled in 2011.
- Chukchi Sea Lease Sale 237 - Currently scheduled for 2016*
- Cook Inlet Lease Sale 244 - Currently scheduled for 2016*
- Beaufort Sea Lease Sale 242 - Currently scheduled for 2017*
- Beaufort Sea Lease Sale 255 - Proposed for 2020**
- Cook Inlet Lease Sale 258 - Proposed for 2021**
- Chukchi Sea Lease Sale 262 - Proposed for 2022**

**As currently scheduled in the 2012-2017 5-Year plan*

***As proposed in the 2017-2022 Draft Proposed 5-Year Plan*

¹⁸ <http://www.boem.gov/Alaska-Leasing/>

Current Leases in the Beaufort



Current Leases held in the Chukchi

