

Dorgan Amendment on Offshore Oil and Gas Production

Summary

The amendment contains four principal measures designed to increase domestic and regional production of oil and natural gas:

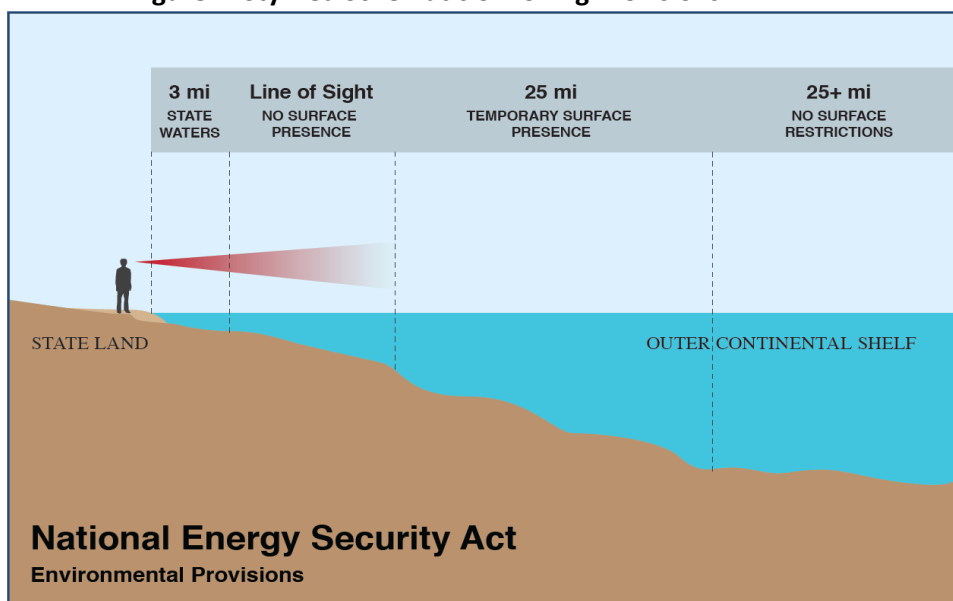
1. The amendment opens new areas in the Eastern Gulf of Mexico for exploration and production, including the Destin Dome, which is known to contain substantial reserves of natural gas. At the same time the bill preserves the integrity of Florida's coastal vistas by maintaining a 45-mile coastal buffer zone in which development is prohibited.
2. The amendment establishes a new framework for leasing resources in new areas of the OCS, such as the Atlantic and Pacific coasts. The new framework allows mineral rights to be leased in most areas, but requires companies to leverage existing and emerging technologies in order to minimize their environmental footprint.
3. The amendment allows U.S. companies to compete for offshore drilling with other countries in Cuban waters.
4. The amendment increases loan guarantee authority for the Alaska Natural Gas Pipeline to \$30 billion.

Where will new development take place under the amendment?

Senator Dorgan's amendment proposes to maximize responsible development of domestic resources by allowing the Secretary of Interior to lease mineral rights in most areas. It also opens new areas for development in the Eastern Gulf, which is currently largely off-limits. However, the bill establishes a strict zoning framework that clearly sets out what is—and what is not—allowable, placing the onus on individual companies to develop innovative solutions (See **Figure 1**). The specific requirements of the proposed zoning rules are as follows:

1. In federal waters that are beyond state boundaries and are determined by the Secretary to be within line-of-sight from the coast of any U.S. state, offshore development will be restricted from utilizing any (offshore) surface infrastructure.
2. In federal waters beyond the line-of-sight calculation, but within 25 miles of the coast of any U.S. state, offshore development will be restricted from utilizing permanent (offshore) surface infrastructure.
3. Beyond 25 miles, there are no specific restrictions on surface infrastructure, but the Secretary is instructed to seek to minimize the footprint of new OCS development.

Figure 1: Stylized Schematic of Zoning Provisions



Is this approach feasible?

There have been remarkable advances in offshore oil and gas production technology in recent decades. Subsea well heads, long distance tie-backs, and sea-floor separation units allow for a minimum surface presence throughout the

life-cycle of a project and also provide more flexibility to site infrastructure. Today, a single platform can produce oil and/or natural gas from a number of wells over substantial distances. A temporary surface presence is required for installation and maintenance, but current technologies offer the possibility of oil and gas production without the burden of numerous surface-level platforms. At StatoilHydro's Snohvit field in the Barents Sea, for example, subsea structures have been tied to onshore facilities 100 miles away. The project utilizes no surface-level structures offshore and sequesters separated CO₂ from produced natural gas.

Projects around the world are demonstrating that existing and emerging technologies can be leveraged to access significant resource volumes while maintaining a minimal environmental footprint. For fields close to the shore, for example, extended reach drilling allows many different deposits to be drilled from a single onshore pad by drilling wells horizontally under the seabed. The longest such wells—over seven miles long—have been drilled by ExxonMobil on Russia's Sakhalin Island. Because the drilling does not puncture the seabed, it dramatically reduces the already exceptionally low possibility of oil spills. This technique has been used to drill Poole Harbor in the UK—an ecologically sensitive and archeologically important area—from a disguised onshore drilling pad.

Development in Cuban Waters

The U.S. Geological Survey estimates that Cuban fields hold between 4.6 and 5 billion barrels of recoverable oil and between 9.8 and 10 trillion cubic feet of natural gas. Some experts believe Cuba could be producing 525,000 barrels of oil per day which would be enough to make them energy independent and possibly a net oil exporter in the future. However, the U.S. trade embargo which was imposed against Cuba in 1962 prevents U.S. oil and gas companies from competing with other nations for access to oil and gas development (onshore and offshore) in Cuba.

To date, the Cuban government has sold oil concessions to seven companies which are associated with Spain, India, Norway, Venezuela, Malaysia, and Vietnam. They are anticipating drilling for the first offshore production wells in the first half of 2009. There is additional interest in working with other nations including Brazil's Petrobras who have expertise in ultradeep water development. It is worth noting that exploration and development of the Cuban Continental Shelf could occur as close as 50 miles from the Florida Keys (closer than U.S. companies are allowed to go to Florida's coast at this time.)

The amendment opens the embargo wide enough to allow U.S. companies the ability to compete with other nations and independent oil and gas producers for concessions as they are opened by the Cuban Government. It also allows representatives of U.S. companies the ability to travel to Cuba for the purpose of engaging in bidding and production.

Fast Facts

Western and Central Gulf of Mexico

- 41 billion barrels of undiscovered technically recoverable oil
- 211 trillion cubic feet of undiscovered technically recoverable natural gas

Eastern Gulf of Mexico (based on existing, pre-moratorium data)

- 3.8 billion barrels of undiscovered technically recoverable oil
- 21.5 trillion cubic feet of undiscovered technically recoverable natural gas

Beaufort and Chukchi Planning Areas of Alaskan OCS

- 23.6 billion barrels of undiscovered technically recoverable oil
- 104.41 trillion cubic feet of undiscovered technically recoverable natural gas

Cuban Offshore Region

- 4.6 billion barrels of undiscovered technically recoverable oil
- 9.8 trillion cubic feet of undiscovered technically recoverable natural gas

OCS Revenues

- For 2008, MMS reported \$8.3 billion in offshore royalty receipts
- An additional \$9.7 billion in lease rents and bonuses associated with bids was also collected

Oil and the Trade Deficit

- The U.S. deficit in crude oil and petroleum products was \$383 billion in 2008, or 56 percent of the total.