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U.S. Crude Oil and Natural Gas Production in Federal and Nonfederal Areas

Marc Humphries
Specialist in Energy Policy

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Summary

A number of legislative proposals designed to increase domestic energy supply, enhance security, and/or amend the requirements of environmental statutes that apply to energy development are before the 114th Congress. Proposals range from leasing primarily in the Gulf of Mexico Outer Continental Shelf (OCS) via the Proposed Five-Year Program (PP) for FY2017-FY2022 or to implement the Proposed Draft for FY2010-FY2015 (a plan prepared by the Bush Administration), to a proposal to prohibit new fossil fuel leases on federal land. Several proposals include new revenue sharing provisions for coastal states.

A key question in this discussion is how much oil and gas is produced in the United States each year and how much of that comes from federal versus nonfederal areas. Oil production has fluctuated on federal lands over the past 10 fiscal years but has increased dramatically on nonfederal lands. Nonfederal crude oil production has rapidly increased in the past few years, partly due to better extraction technology, favorable geology, and the ease of leasing, more than doubling daily production between FY2006 and FY2015 (although because of recent low oil prices, production has dropped somewhat since a peak in mid-2015). The federal share of total U.S. crude oil production fell from its peak at nearly 36% in FY2010 to 21% in FY2015.

Natural gas production in the United States overall dramatically increased each year since 2006, in contrast, production on federal lands declined each year from FY2007 through FY2014. There was a small increase of 3.5% in FY2015 over FY2014. Much of the decline can be attributed to offshore production falling by over 50%. Onshore production declines were less dramatic. Federal natural gas production fluctuated around 30% of total U.S. production for much of the 1980s through the early 2000s, after which there began a steady decline through 2015. This picture of natural gas production is much different than that of federal crude oil in that federal natural gas had accounted for a much larger portion of total U.S. natural gas over the past few decades.

Another major issue that Congress may address is streamlining the processing of applications for permits to drill (APDs). Some Members contend that this would be one way to help boost energy production on federal lands. After a lease has been obtained, either competitively or noncompetitively, an application for a permit to drill must be approved for each oil and gas well. It took an average of 307 days for the Bureau of Land Management (BLM) to process (approve or deny) an onshore APD in FY2011, but that has declined to an average of 220 days in FY2015 (up from 194 days in FY2013). The BLM stated in its annual budget justifications (FY2012 and FY2016) that overall processing times per APD rose to such high levels in FY2011 and other years because of the complexity of the process, but they expect shorter timeframes in the future.

The Energy Policy Act of 2005 (EPACT '05, P.L. 109-58) included a provision to initiate and fund a pilot program at seven Bureau of Land Management (BLM) field offices in an effort to streamline the permitting process for oil and gas leases on federal lands. Funding for the pilot program was made permanent under the FY2016 National Defense Authorization Act (P.L. 114-92).

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Introduction¹

In 2015, the price of oil averaged about \$49 per barrel (average composite price), down from \$92 per barrel in 2014. Prices started dropping in June 2014, but dropped dramatically in December 2014, and by February 2016 crude oil prices were under around \$30 per barrel. The Energy Information Administration (EIA) projects crude oil prices to average about \$43 per barrel through 2016, but rising to about \$52 per barrel in 2017.² Current prices have risen to about \$50 per barrel. Prices are lower because of high global supply and a softening of demand. This lower price, if sustained, may impact long term oil development and lower production volumes.

A number of legislative proposals designed to increase domestic energy supply, enhance security, and/or amend the requirements of environmental statutes that apply to energy development are before the 114th Congress. Proposals range from authoring more leasing primarily in the Gulf of Mexico Outer Continental Shelf (OCS) via the Proposed Five-Year Program (PP)³ for FY2017-FY2022 or to implement the Proposed Draft for FY2010-FY2015 (a plan prepared by the Bush Administration), to a proposal to prohibit new fossil fuel leases on federal land. Several proposals include new revenue sharing provisions for coastal states.

A key question addressed in this discussion is how much oil and gas is produced in the United States each year and how much of that comes from federal versus nonfederal areas. Oil production has fluctuated on federal lands over the past 10 fiscal years but has increased dramatically on nonfederal lands. Nonfederal crude oil production rapidly increased in the past few years, primarily due to improved extraction technology, favorable geology, and the ease of leasing, more than doubling daily production between FY2006 and FY2015. The federal share of total U.S. crude oil production fell from its peak at nearly 36% in FY2010 to 21% in FY2015.

Natural gas prices, on the other hand, have remained low for the past several years, as the shale gas boom has resulted in rising supplies of natural gas. This has allowed gas to become much more competitive with coal for power generation. Overall, annual U.S. natural gas production rose by about 10 trillion cubic feet (tcf) since FY2006, while annual production on federal lands (onshore and offshore) fell by about 1.6 tcf (or nearly 26%) over the same time period. Natural gas production on nonfederal lands nearly doubled over the same time period (see **Table 2**). The big shale gas plays have been primarily on nonfederal lands and have attracted a significant portion of investment for natural gas development. The federal share of natural gas production fell from 32.8% in FY2006 to 16% in FY2015.

This report examines U.S. oil and natural gas production data for federal and nonfederal areas with an emphasis on the past five fiscal years of production.⁴

¹ For a broader analysis of offshore oil and gas leasing and resources, see CRS Report R40645, *U.S. Offshore Oil and Gas Resources: Prospects and Processes*, by Marc Humphries and Robert Pirog.

² Energy Information Administration (EIA), *Short Term Energy Outlook*, <http://www.eia.gov/forecasts/steo>, June 2016.

³ The PP includes 13 lease sales (10 in the Gulf of Mexico and 3 offshore Alaska) over the five-year period.

⁴ For more information on U.S. oil development, see CRS Report R43148, *An Overview of Unconventional Oil and Natural Gas: Resources and Federal Actions*, by Michael Ratner and Mary Tiemann, and CRS Report R43429, *Federal Lands and Natural Resources: Overview and Selected Issues for the 114th Congress*, coordinated by Katie Hoover.

U.S. Crude Oil Production: Federal and Nonfederal Areas

Historically, according to Department of the Interior (DOI) data, crude oil production on federal lands (onshore and offshore) was consistently under 20% of total U.S. production until the late 1990s. Annual production then surged on federal lands (primarily offshore), rising to over 30% in the early 2000s and reaching a high point of nearly 36% in FY2010 (see **Table 1**).⁵ As a result of recent production increases on nonfederal lands, the question is raised whether nonfederal lands might regain a more dominant position of roughly 80%-85% of total U.S. crude oil production. The fact remains, however, that there are an estimated 5.3 billion barrels of proved oil reserves located on federal acreage onshore⁶ and another 4.3 billion barrels of proved reserves offshore (nearly all in the Gulf of Mexico).⁷ Taken together, U.S. federal oil reserves equal about 24% of all U.S. crude oil (and condensate) reserves, which are estimated at 39.9 billion barrels, according to the EIA.⁸ Proved oil reserves are amounts accessible under current policy, prices, and technology. Higher prices often translate into higher reserve estimates.

Crude oil production on federal lands, particularly offshore, is likely to continue to make a significant contribution to the U.S. energy supply picture and could remain consistently higher than previous decades depending on the level of total U.S. crude oil production. There is continued interest among some in Congress to open more federal lands for oil and gas development (e.g., the Arctic National Wildlife Refuge (ANWR) and areas offshore) and increase the speed of the permitting process. But having more lands accessible may not translate into higher levels of production on federal lands, as industry seeks out the most promising prospects and higher returns which in recent years have come on more accessible nonfederal lands. Others in Congress would like to discontinue the leasing of fossil fuels altogether on federal lands.

⁵ The early data (1980 and 1990s) were taken from annual Mineral Revenue reports. The data used at that time were accounting data which are considered by the Office of Natural Resources Revenue (ONRR) as not very reliable. ONRR currently provides more useful fiscal year production volume data.

⁶ U.S. Depts. of the Interior, Agriculture, and Energy, *Inventory of Onshore Federal Oil and Natural Gas Resources and Restrictions to Their Development (Phase III)*, May 2008, available on the BLM website at http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/EPCA_III.html.

⁷ BOEM, Estimated Oil and Gas Reserves, Gulf of Mexico, Pacific OCS Regions, as of December 2014.

⁸ EIA, U.S. Crude Oil and Natural Gas Proved Reserves, 2014, November 23, 2015, <http://www.eia.gov>.

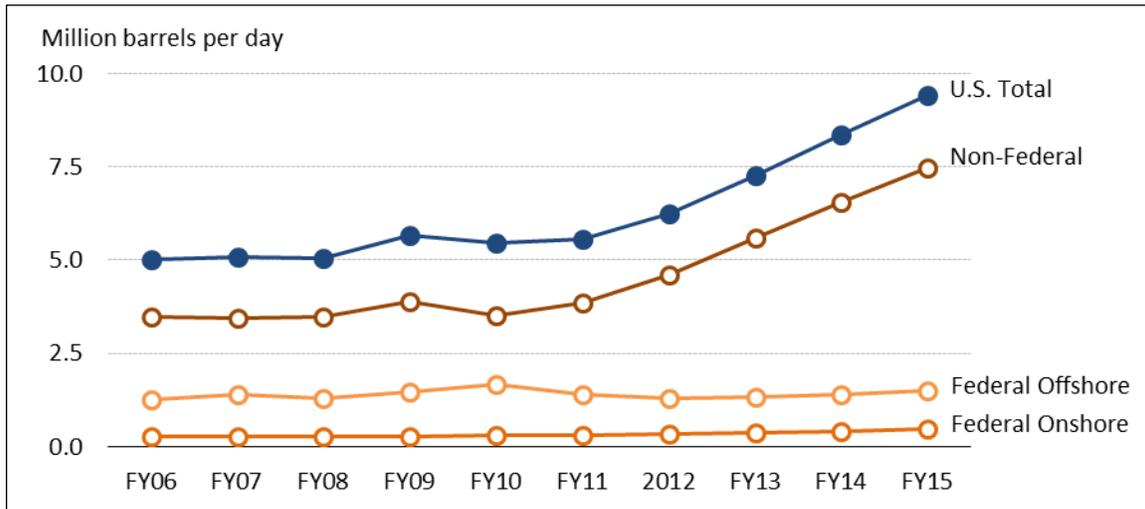
Table I. U.S. Crude Oil Production: Federal and Nonfederal Areas FY2006-FY2015
(million barrels per day)

| Fiscal Year | U.S. Total | Nonfederal | Total Federal (% of U.S. Total) | Federal Offshore | Federal Onshore |
|-------------|------------|------------|------------------------------------|---------------------|--------------------|
| 2015 | 9.415 | 7.46 | 1.955 (21.0) | 1.5 | 0.455 |
| 2014 | 8.362 | 6.553 | 1.809 (21.6) | 1.4 | 0.409 |
| 2013 | 7.249 | 5.581 | 1.698 (23.5) | 1.33 | 0.368 |
| 2012 | 6.224 | 4.586 | 1.638 (26.3) | 1.3 | 0.338 |
| 2011 | 5.551 | 3.843 | 1.708 (31.0) | 1.4 | 0.308 |
| 2010 | 5.441 | 3.501 | 1.940 (35.7) | 1.65 | 0.290 |
| 2009 | 5.643 | 3.893 | 1.75 (31.0) | 1.47 | 0.280 |
| 2008 | 5.037 | 3.467 | 1.57 (31.0) | 1.3 | 0.270 |
| 2007 | 5.092 | 3.444 | 1.648 (32.4) | 1.38 | 0.268 |
| 2006 | 5.006 | 3.474 | 1.532 (30.6) | 1.27 | 0.262 |

Source: Federal data obtained from the Office of Natural Resources Revenue (ONRR) Production Data, as of January 8, 2016, <http://www.onrr.gov>.

Notes: U.S. Fiscal Year Total data derived from EIA monthly production data contained in its publication *Petroleum and Other Liquids, U.S. Field Production of U.S. Crude Oil*, February 2016, <http://www.eia.gov>. Data includes lease condensate, defined by EIA as a liquid hydrocarbon recovered from lease separators or field facilities at associated and nonassociated natural gas wells.

**Figure I. U.S. Crude Oil Production:
Federal and Nonfederal Areas FY2006-FY2015**
(million barrels per day)



Source: Federal data obtained from ONRR Production Data, <http://www.onrr.gov>. Nonfederal from EIA. Figure created by CRS.

Note: This figure represents the data in **Table I** graphically.

U.S. Natural Gas Production: Federal and Nonfederal Areas

Natural gas production in the United States overall has dramatically increased each year since 2006, while production on federal lands has declined each year from FY2007 to FY2015. Much of the decline can be attributed to offshore production falling by over 50%. Onshore production declines, beginning in FY2010, were less dramatic. Federal natural gas production fluctuated around 30% of total U.S. production for much of the 1980s through the early 2000s, after which there began a steady decline (as a percent of U.S. total production) through FY2015. For example, natural gas production declined from about 33% of total U.S. production in FY2006 to 16% of U.S. production in FY2015; however, as noted below, this mostly reflects the dramatic growth in non-federal production rather than the decline in total federal production. This picture of natural gas production is much different than that of federal crude oil in that federal natural gas had accounted for a much larger portion of total U.S. natural gas over that previous few decades.

Any increase in production of natural gas on federal lands is likely to be easily outpaced by increases on nonfederal lands, particularly because shale plays are primarily situated on nonfederal lands and are located where most of the growth in production has occurred in recent years and where future growth is projected to occur.

U.S. dry gas proved reserves are estimated at about 388.8 trillion cubic feet (tcf) by the EIA,⁹ of which the federal share is about 22% (69 tcf onshore, 16 tcf offshore). Nearly all of the offshore proved reserves are located in the Central and Western Gulf of Mexico (GOM).

**Table 2. U.S. Natural Gas Production:
Federal and Nonfederal Areas FY2006-FY2015**
(billion cubic feet)

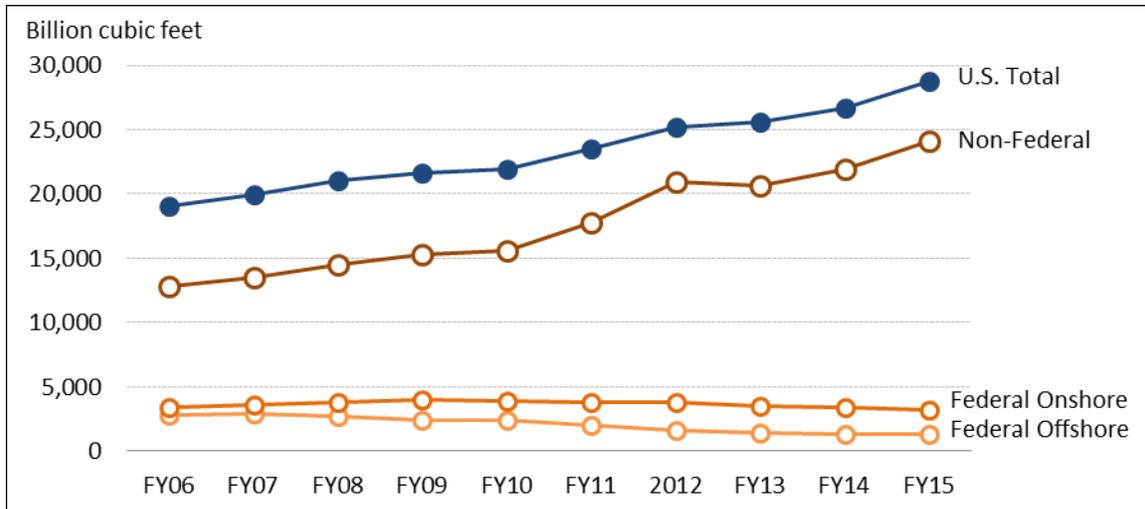
| Fiscal Year | U.S. Total | Nonfederal | Total Federal (% of U.S. Total) | Federal Offshore | Federal Onshore |
|-------------|------------|------------|------------------------------------|---------------------|--------------------|
| 2015 | 28,737 | 24,143 | 4,594 (16.0) | 1,356 | 3,238 |
| 2014 | 26,679 | 21,929 | 4,750 (17.8) | 1,336 | 3,414 |
| 2013 | 25,551 | 20,637 | 4,914 (19.2) | 1,449 | 3,465 |
| 2012 | 25,190 | 20,944 | 5,420 (21.5) | 1,632 | 3,788 |
| 2011 | 23,540 | 17,723 | 5,817 (19.5) | 2,005 | 3,812 |
| 2010 | 21,924 | 15,601 | 6,323 (28.8) | 2,395 | 3,928 |
| 2009 | 21,612 | 15,248 | 6,364 (29.4) | 2,390 | 3,974 |
| 2008 | 20,994 | 14,523 | 6,471 (31.0) | 2,663 | 3,808 |
| 2007 | 19,951 | 13,471 | 6,480 (32.5) | 2,886 | 3,594 |
| 2006 | 19,016 | 12,775 | 6,241 (32.8) | 2,837 | 3,404 |

Source: Federal data obtained from ONRR Production Data, <http://www.onrr.gov> (as of January 8, 2016).

Notes: U.S. Fiscal Year Total data derived from EIA monthly production data in its publication "Natural Gas, U.S. Natural Gas Marketed Production," March 30, 2015, <http://www.eia.gov>.

⁹ EIA, *U.S. Crude Oil and Natural Gas Proved Reserves, 2014*, November 23, 2015, <http://www.eia.gov>. Dry gas is marketed production less extraction losses.

Figure 2. U.S. Natural Gas Production: Federal and Nonfederal Areas FY2006-FY2015



Source: Federal data obtained from ONRR Statistics, <http://www.onrr.gov> (using sales year data). Figure created by CRS.

Note: This figure represents the data in **Table 2** graphically.

EIA Projections

In the short-term, the EIA estimates show oil production increasing in federal offshore areas (lower 48), from nearly 1.5 million barrels per day (mbd) in FY2015 to 1.9 mbd in 2017,¹⁰ while EIA’s longer-term estimates show a decrease in federal offshore (GOM) oil production overall, declining to 1.6 mbd during the 2030-2040 period.¹¹ Overall, the EIA projects in the short term, U.S. oil production reaching 8.2 mbd in 2017,¹² but long-term estimates show U.S. oil production rising to 11.3 mbd by 2040.¹³ According to these estimates, lower 48 offshore production in 2040 could account for about 14% total U.S. crude oil production. (See **Table 3**.)

Offshore natural gas production was projected to reverse a years-long decline in 2015 (**Table 2** shows a slight increase in production), with annual production rising to 2.0 tcf in 2040. Even though these projections are presented in calendar years, 2.0 tcf of natural gas would be about 33% higher than current offshore production (provided in fiscal years in the earlier sections of this report) and would only account for about a 4.6% share of total U.S. natural gas production in 2040. (See **Table 4**.)

¹⁰ EIA, *Short Term Energy Outlook*, <http://www.eia.gov/forecasts/steo>, June 2016.

¹¹ EIA, *Early Release: Annual Energy Outlook, 2016, Annotated Summary of 2 Cases*, May 17, 2016, p. 44.

¹² EIA, *Short Term Energy Outlook*, <http://www.eia.gov/forecasts/steo>, June 2016, p. 1.

¹³ EIA *Early Release*, May 17, 2016, p. 44.

Table 3. EIA Oil Production Projections
(million barrels per day)

| Year | U.S. Offshore (lower 48) | U.S. Total |
|------|-----------------------------|------------|
| 2017 | 1.9 | 8.2 |
| 2040 | 1.6 | 11.3 |

Source: EIA, Annual Energy Outlook, 2016, *Early Release: Annotated Summary of 2 Cases*, May 17, 2016, p. 44. (2017 offshore data from EIA Short Term Energy Outlook, June 2016, p. 7.)

Note: Nearly all of U.S. offshore oil and gas production is in the Gulf of Mexico.

Table 4. EIA Natural Gas Production Projections
(trillion cubic feet per year)

| Year | U.S. Offshore (lower 48) | U.S. Total |
|------|-----------------------------|------------|
| 2017 | 1.5 | 28.0 |
| 2040 | 1.7-2.0 | 43.0 |

Source: EIA, *Annual Energy Outlook, 2016, Early Release: Annotated Summary of 2 Cases*, May 17, 2016, p. 53.

Note: Nearly all of U.S. offshore oil and gas production is in the Gulf of Mexico

Oil and Natural Gas Lease Data for Federal Lands

Based on the federal government’s inter-agency’s Phase III report, 113 million acres of onshore federal lands are open and accessible for oil and gas development and about 166 million acres are off-limits or inaccessible.¹⁴ The BLM says it is addressing public concerns (including legal challenges) prior to a lease sale at a higher rate than in the past.

In 2015, 46% of onshore federal leases and 81% of offshore leases were not in production (see **Table 5**). Offshore, most of the 1.7 billion acres of federal water are no longer under leasing and development moratoria. The current (FY2012-FY2017) five-year leasing program has lease sales scheduled in Western and Central Gulf of Mexico and parts of Alaska.¹⁵ In the offshore areas,

¹⁴ U.S. Depts. of the Interior, Agriculture, and Energy, *Inventory of Onshore Federal Oil and Natural Gas Resources and Restrictions to Their Development (Phase III)*, May 2008, available on the BLM website at http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/EPCA_III.html.

The availability of public lands for oil and gas leasing can be divided into three categories: lands open under standard lease terms, open to leasing with restrictions, and closed to leasing. Areas are closed to leasing pursuant to land withdrawals or other mechanisms. Much of this withdrawn land consists of wilderness areas, military bases, national parks and monuments, and other unique and environmentally sensitive areas that are unlikely to be reopened to oil and gas leasing given their current status. Some lands are closed to leasing pending land use planning or NEPA compliance, while other areas are closed because of federal land management decisions on endangered species habitat or historical sites. Some of those restricted areas may be opened by future administrative decisions.

¹⁵ Nearly all of the Eastern GOM is under a leasing moratorium until 2022 under the Gulf of Mexico Energy Security Act (P.L. 109-432). the North Aleutian Basin of Alaska was withdrawn from leasing under an executive order by the (continued...)

85% of the acreage that is leased is not in production, but may have an approved exploration or development plan.

Through FY2014, according to the BLM and the Bureau of Ocean Energy Management (BOEM), there were approximately 67 million acres of oil and gas leases in federal areas (onshore and offshore). About 34.6 million acres were located onshore and an additional 32.2 million acres were offshore. Approximately 12.7 million federal acres onshore and about 4.8 million federal acres offshore were in production. (See **Table 5**.)

Table 5. Oil and Gas Lease Data for Federal Lands

| | Onshore 2015 | Onshore 2014 | Offshore 2015 | Offshore 2014 |
|---|--------------------|--------------------|--------------------|--------------------|
| Acreage under lease | 32.2 million acres | 34.6 million acres | 27.5 million acres | 32 million acres |
| Leased acres producing | 12.8 million acres | 12.7 million acres | 4.75 million acres | 4.8 million acres |
| Leased acres not in production or exploration | 19.4 million acres | 21.9 million acres | 22.7 million acres | 27.3 million acres |
| Number of Leases | 44,000 | 46,193 | 4,985 | 5,938 |
| Producing Leases (or with approved DOCD) ^a | over 23,500 | 23,657 | 968 | 970 |
| Percentage of producing leases | 54 | 51 | 19 | 16 |

Source: Offshore data: DOI/BOEM, Combined Leasing Status Report, February 1, 2016 (www.boem.gov). Onshore data: DOI/BLM, Oil and Gas Statistics (http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/statistics.html), updated April 11, 2016.

- a. A DOCD is a Development Operations Coordination Document that must be submitted for approval to BOEM before development activities begin.

Leased and Producing Acres

The number of federal producing acres may or may not be a function of how many acres are leased, and the number of acres leased may or may not correlate to production levels, and it is beyond the scope of this report to examine that issue thoroughly. (**Table 6** provides data on the amount of federal acreage leased annually for onshore and offshore oil and gas development.) In recent years, some Members of Congress have proposed a \$4/acre lease fee for nonproducing leases. This proposal grew out of efforts to promote more oil and gas drilling and development on public land and water (offshore) when gasoline prices spiked in 2006-2008. Some in Congress noted that there were many leases they believed were not being developed in a timely manner, while at the same time, others in Congress were advocating greater access to areas off-limits (such as ANWR and areas under leasing moratoria offshore). Higher rents for offshore leases were imposed by the Secretary of the Interior in 2009 to discourage holding unused leases and to move more leases into production, if possible.¹⁶ Rents escalate over time. The escalation in annual rents is significant, as they rise from \$7/acre to \$28/acre (in year-8 forward) in water depths less than 200 meters, and increase from \$11/acre to \$44/acre (in year-8 forward) in water

(...continued)

Obama Administration. Separately, President Obama withdrew selected parts of the Chukchi and Beaufort Seas of Alaska indefinitely in January 2015.

¹⁶ The Secretary of the Interior has authority to establish rental rates under the Outer Continental Shelf Lands Act 43 U.S.C. §1337.

depths between 200 and 400 meters. However, Congress has not established a similar escalation for onshore leases, as they remain \$1.50/acre for years 1-5, and then rise to \$2/acre thereafter.¹⁷

A nonproducing fee or an escalation of rents may not increase production but may increase the ratio of producing leases to active leases if some leaseholders relinquish their leases rather than paying the fee. Thus, there might be fewer “idle” leases and acreage not in production or exploration. The BLM can re-lease acreage that has been relinquished or passed over at a future lease sale.

Table 6. Federal Onshore and Offshore Oil and Gas Leased Acreage Annually
(2000-2014)

| Year | Onshore Acres Leased | Offshore Acres Leased |
|------|----------------------|-----------------------|
| 2000 | 2,650,493 | 2,919,920 |
| 2001 | 3,997,271 | 5,004,472 |
| 2002 | 2,812,606 | 4,192,904 |
| 2003 | 2,064,289 | 4,848,116 |
| 2004 | 4,157,121 | 4,689,702 |
| 2005 | 4,314,207 | 4,635,967 |
| 2006 | 4,385,378 | 4,122,703 |
| 2007 | 4,634,736 | 5,760,793 |
| 2008 | 2,615,259 | 7,996,920 |
| 2009 | 1,913,602 | 2,668,409 |
| 2010 | 1,353,663 | 2,369,101 |
| 2011 | 2,016,176 | 1,036,205 |
| 2012 | 1,752,060 | 2,988,168 |
| 2013 | 1,172,808 | 1,938,317 |
| 2014 | 1,197,852 | 2,102,380 |

Source: Onshore data obtained from BLM: Oil and Gas Statistics, February 2016. Offshore data obtained from BOEM, Oil and Gas Leasing (<http://www.boem.gov>).

Applications for Permits to Drill (APDs)

Another major issue that Congress may address (for onshore federal lands) is streamlining the processing of applications for permits to drill (APDs). Some Members contend that this would be one way to help boost energy production on federal lands. After a lease has been obtained, either competitively or noncompetitively, an application for a permit to drill must be approved for each oil and gas well.¹⁸ As stated in the Mineral Leasing Act, Section 226 (g) (for onshore federal lands), “no permit to drill on an oil and gas lease issued under this chapter may be granted

¹⁷ DOI, *Oil and Gas Lease Utilization, Onshore and Offshore, Updated Report to the President*, May 2012, p. 18. (Authority is under 30 U.S.C. §226.)

¹⁸ For more details on oil and gas leasing on federal lands, see CRS Report R40806, *Energy Projects on Federal Lands: Leasing and Authorization*, by Adam Vann.

without the analysis and approval by the Secretary concerned of a plan of operations covering proposed surface-disturbing activities within the lease area.” The application form (APD form 3160-3) must include, among other things, a drilling plan, a surface use plan, and evidence of bond/surety coverage. The surface use plan should contain information on drillpad location, pad construction, the method for containment and waste disposal, and plans for surface reclamation.¹⁹

Prior to the Energy Policy Act of 2005 (P.L. 109-58, EPAct ’05), a major concern that prompted the permit streamlining debate was the lengthy timetable to process an APD. The BLM attributed the longer timelines to the rewriting of outdated Resource Management Plans (RMPs). BLM revised several RMPs over the past decade. Leading up to the provisions in EPAct ’05 that attempted to streamline the permitting process, the BLM announced, in April 2003, new strategies to expedite the APD process. The new strategies included processing and conducting environmental analyses on multiple permit applications with similar characteristics, implementing geographic area development planning for an oil or gas field or an area within a field, establishing a standard operating practice agreement that identifies surface and drilling practices for oil and gas operators, allowing for a block survey of cultural resources, promoting consistent procedures across BLM offices, and revising relevant BLM manuals.²⁰ EPAct ’05 Section 366 (Deadline for Consideration of Application for Permits) provided a new timeline for BLM to process APDs.²¹

Addressing a backlog, the current Administration processed more APDs than it received from 2009 to 2013. It received far fewer applications over that period than had been received annually from 2006 to 2008. Even though the number of pending applications fell steadily from 2008 to 2013, the ratio of APDs pending to APDs processed was higher than during the period 2006-2008. The BLM expects to process about 4,500 APDs in each of the fiscal years 2016 and 2017. In addition, as of the beginning of 2016 there were 7,000 approved APDs not in the exploration or production stages (approved but not drilled).²²

Table 7. Onshore Oil and Gas Drilling Permits (FY2006-FY2015)

| Fiscal Year | New APDs Received | Total APDs Processed | APDs Pending at Year-End |
|-------------|-------------------|----------------------|--------------------------|
| 2015 | 4,475 | 4,913 | 3,785 |
| 2014 | 5,316 | 4,924 | 4,121 |
| 2013 | 4,757 | 4,892 | 3,546 |
| 2012 | 5,240 | 5,861 | 3,683 |
| 2011 | 4,728 | 5,200 | 4,108 |
| 2010 | 4,251 | 5,237 | 4,603 |
| 2009 | 5,257 | 5,306 | 5,589 |

¹⁹ U.S. Department of the Interior, Bureau of Land Management (BLM), *Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development*, The Gold Book, Fourth Edition-Revised 2007, p. 8.

²⁰ DOI/BLM Instruction Memorandum No. 2003-152, Application for Permit to Drill Process Improvement#1-Comprehensive Strategies, April 14, 2003.

²¹ Within 10 days of receiving the application from the operator, BLM shall notify the operator as to whether the application is complete and also schedule a site visit. If the application is not complete, the operator then has 45 days to submit additional information to BLM to complete the application or the application is returned to the operator. Within 30 days of receiving a completed application the BLM will approve or defer the application. If deferred, the operator has up to two years to take specified actions to complete the application or face the possibility of being denied a permit.

²² U.S Department of the Interior, *BLM Budget Justifications, Fiscal Year 2017*, p. VII-109.

| Fiscal Year | New APDs Received | Total APDs Processed | APDs Pending at Year-End |
|-------------|-------------------|----------------------|--------------------------|
| 2008 | 7,884 | 7,846 | 5,638 |
| 2007 | 8,370 | 8,964 | 5,600 |
| 2006 | 10,492 | 8,854 | 6,194 |

Source: DOI/ BLM, *FY2016 Budget Justification* for years FY2011-FY2016. For earlier years, see DOI, *Oil and Gas Utilization, Onshore and Offshore*, May 2012

It took an average of 307 days for the BLM to process (approve or deny) an APD in FY2011, but that declined to an average of 220 days in FY2015 (up from 194 days in FY2013).²³ The BLM stated in its annual budget justifications for FY2012 and FY2016 that overall processing times per APD rose to such high levels in FY2011 and other years because of the complexity of the process, but they expect shorter timeframes in the future.

Some critics of this lengthy timeframe highlight the relatively speedy process for permit processing on private and state lands. However, crude oil and gas development on federal lands takes place in a wholly different regulatory framework than that of development on private lands.²⁴ State agencies permit drilling activity on private lands within their states, with some approving permits within 10 business days of submission. This faster approval rate does not necessarily diminish the additional work required by the state to address other state requirements. But often, some surface management issues are negotiated between the producer and the individual land/mineral owner. A private land versus federal land permitting regime does not lend itself to an “apples-to-apples” comparison.

Concerns over Nonproducing Leases

A number of concerns may arise in the oil and gas leasing process that could delay or prevent oil and gas development from taking place, or might account for the relatively large number of leases held in nonproducing status. It should be noted that many leases expire without exploration or production ever occurring.

Below is a list of issues and practices which, individually or in combination, are often cited by various stakeholders to explain why more leases are not producing.

- Rig or equipment availability, particularly offshore;
- Oil and natural gas prices;
- High capital costs and available capital;
- Skilled labor shortages;
- Leases in the development cycle (e.g., conducting environmental reviews, permitting, or exploring) but not producing;

²³ Bureau of Land Management, “Average Application for Permit to Drill (APD) Approval Timeframes: FY2005-FY2015,” http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/statistics/apd_chart.html.

²⁴ Under the Federal Land Policy and Management Act (FLPMA), Resource Management Plans or Land Use Plans (43 U.S.C. 1712) are required for tracts or areas of public lands prior to development. The Bureau of Land Management (BLM) must consider environmental impacts during land-use planning when RMPs are developed and implemented. RMPs can cover large areas, often hundreds of thousands of acres across multiple counties. Through the land-use planning process, the BLM determines which lands with oil and gas potential will be made available for leasing.

- Legal challenges that might delay or prevent development;
- No commercial discovery on a lease tract;
- Holding leases (because of the lack of capital or as “speculators”) to sell or “farm out” at a later date;
- Ability to secure extensions on nonproducing leases;
- Ability to secure and being able to hold large number of lease tracts, often contiguous, to maximize return on investment; and
- The potential for inadequate coordination between the Department of the Interior’s lease management and regulatory agencies (Bureau of Ocean Energy Management and Bureau of Safety and Environmental Enforcement) and other federal agencies to ensure protection of federal areas encompassing coastal and marine sanctuaries.

Streamline Pilot

EPAAct ’05 also included a provision to initiate and fund a pilot program at seven BLM field offices in an effort to streamline the permitting process for oil and gas leases on federal lands. Initial results from the pilot project were published according to the timetable required by EPAAct ’05 (within three years after enactment). The conclusion was that the pilot made a difference in improving the processing times for APDs at the pilot offices overall and increased the number of environmental inspections. The BLM noted that the National Environmental Policy Act (NEPA) processing time for APDs and rights of way (ROW) applications fell from 81 to 61 days or roughly 25% due to “colocation” of agency staff. BLM reported that the number of environmental inspections went up by 78% from FY2006 to FY2007.²⁵ The BLM reported mixed results at the specific field offices. While some of the offices processed more permits in 2007 than they did in 2005, all the pilot sites reported more completed environmental inspections.²⁶ Funding for the pilot program was made permanent under the FY2016 National Defense Authorization Act (P.L. 114-92).

Author Contact Information

Marc Humphries
Specialist in Energy Policy
mhumphries@crs.loc.gov, 7-7264

²⁵ Bureau of Land Management, *BLM Year Two Report*, Section 365 of the Energy Policy Act of 2005 Pilot Project to Improve Federal Permit Coordination, February 2008.

²⁶ *Ibid.*