OCS Advisory Board
January 31, 2018

WASHINGTON UPDATE

L. Poe Leggette
Partner-in-Charge, Denver
The Winds have changed

and it ain’t blowing from a Wind Farm off the Potomac.
“For those of you who’ve never seen a cat...”
Tax Reform

Intangible drilling costs retained

- This century-old tax treatment was the number one issue for the upstream independents (who produce the lion's share of oil and gas in the U.S. today).
- The industry's lobby and upstream trade associations worked overtime for the last eight years to educate members of Congress about how critical this tax provision is to the ability of this very capital-intensive industry to raise the capital necessary to keep drilling.
- Those efforts paid off in the end, as this key provision was retained in the final bill.

-- www.ipaa.org
Percentage depletion

- Part of the U.S. tax code since 1926.
- A form of depreciation for mineral resources that allows for a deduction from taxable income to reflect the declining production of reserves over time.
- Percentage depletion is only allowed for independent producers and royalty owners.
  - It is calculated by applying a 15 percent reduction to the taxable gross income of a productive well’s property. The reduction is determined on a property-by-property basis and is limited to the taxpayer’s first 1,000 barrels of oil (or 6,000 mcf of natural gas) of production per day. It is also capped at the net income of a well and limited to 65 percent of the taxpayer’s net income.
  - Because of these restrictions, only small independent producers and royalty owners are users of the percentage depletion deduction.
  - However, believe it or not, our nation’s smallest wells collectively make up a significant portion of America’s oil and natural gas production.
  - On average, these wells produce less than 15 barrels of oil per day, yet account for nearly 19 percent of U.S. oil production and less than 90 thousand cubic feet per day, yet account for 12 percent of U.S. natural gas.
  - Percentage depletion enables smaller operations to recover some of the high costs associated with keeping these marginal wells up and running.
Congressional Review Act

Trump has used the Congressional Review Act fifteen times since taking office. Three have been energy focused. They are:

1. Stream Protection Rule (OSM)
2. Disclosure of Payments by Resource Extraction Issuers (SEC)
3. Resource Management Planning (BLM)
“Waters of the United States”
Does Not Require Water

An interagency team performs a jurisdictional delineation of an alleged wetland on a proposed well pad in Utah.
Onshore

Venting and Flaring - 1 year compliance extension

• BLM temporarily suspended or delayed parts of its 2016 venting and flaring rule until Jan. 17, 2019.
• “By holding off on certain requirements, BLM now has sufficient time to review the final rule while avoiding any compliance costs on industry that may not be needed after the review,” Deputy Director for Policy and Programs Brian Steed.

BLM hydraulic fracturing rule rescission

• On Dec. 29, 2017, BLM rescinded the 2015 final rule regarding hydraulic fracturing on federal and tribal lands.
  • Nonetheless, the debate over federal regulation of hydraulic fracturing on public lands is far from over, and the rescission of the 2015 final rule will no doubt be challenged in federal court.
Mr. Pruitt outlined the changes he is looking to make in year two:

• repealing and rewriting Obama-era rules for power plant emissions
• speeding up the EPA’s permit review process
  • final permit decisions completed within six months
• implementing performance assessments across the agency
  • use metrics to measure the weekly performance of every EPA office

“We have permits that literally are sitting on a shelf, and just sitting there because there’s just no attention, no leadership, no direction. It’s that simple.”

--www.epa.gov
Toward an Energy Ethic

by L. Poe Leggette

This article originally appeared in 23 Petroleum Accounting and Financial Management Journal 1-23 © 2004, and is reprinted by permission of the Journal and the author.

We Americans consume energy conspicuously; yet many of us oppose energy development passionately. This paradox our society cannot long sustain. Within three years, the population of the United States will reach 300 million. By 2050, the population of the planet is likely to exceed 9 billion. Even the most rigorous programs of energy conservation will not cap, let alone reduce, America’s or the world’s demand for energy.

Opposition to energy development in the United States is fed (perhaps “fueled” would convey the irony better) by a basic set of values about protecting our environment and preserving areas of wilderness. These values, which may be called an environmental ethic and a wilderness ethic, frequently overpower arguments favoring development in our national discourse. But as good as we have become at opposing energy development, we remain largely ignorant of how the choices we make in consuming energy create an inexorable demand for more development. We lack, in short, an energy ethic.

This article proposes principles to undergird an energy ethic. It explores how that ethic might lead us to a national consensus on the balance of development, protection, and preservation needed for the years ahead.

The Environmental Ethic

In the last fifty years, the United States has made extraordinary progress toward an environmental ethic. You might not know this from our newspapers, our leading environmental organizations, and some of our national political figures. From them, we hear multiple messages with a common theme: American industry is at war with the environment, seeking short-term profit at the expense of the common good, and contributing heavily to the campaigns of political leaders to secure favorable laws and decisions.

This supposed “war” is being conducted on a far different battlefield than it was a half-century ago. Then, writers such as Rachel Carson and Aldo Leopold, calling attention to the dire effects of human activity on the...
PROJECTED HUMAN POPULATION

LEVELING OFF

If current trends continue, global population will peak at 11 billion around 2100.

Source: American Museum of Natural History, Human Population Through Time
https://www.youtube.com/watch?v=PUwmA3Q0_OE&feature=youtu.be
Global anthropogenic CO$_2$ emissions

Quantitative information of CH$_4$ and N$_2$O emission time series from 1850 to 1970 is limited

- Fossil fuels, cement and flaring
- Forestry and other land use

Source: IPCC Climate Change 2014 Synthesis Report, Topic 1 (Observed Changes and their Causes), Figure SPM.1
Contributions to observed surface temperature change over the period 1951–2010

Source: IPCC Climate Change 2014 Synthesis Report, Topic 1 (Observed Changes and their Causes), Figure SPM.3
Satellite TMT Time Series, Overlapping Trends, and Trend Significance

A. Average OBS time series

Source: www.nature.com - Scientific Reports | 7:2336 | DOI:10.1038/s41598-017-02520-7
The oil & gas industry is the number one reason the United States leads the world in reducing greenhouse gas emissions.
The oil & gas industry is responsible for 62% of the greenhouse gas emissions reductions in the electricity sector, compared to just 38% for wind, solar, and other non-carbon generation, according to the Energy Information Administration.

![Electric Power Sector CO2 Savings From Changes in Electricity Generation Mix](chart.png)
Xcel Energy Inc.
Changing Mix of Primary Energy

Domestic energy consumption remains relatively flat in the Reference case—

**Energy consumption (Reference case)**
quadtrillion British thermal units

- **2016**
  - history
  - projections

- **petroleum and other liquids**
- **natural gas**

- **other renewable energy**
- **coal**
- **nuclear**
- **hydro**
- **liquid biofuels**

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U.S. Energy Information Administration

#AEO2017 | www.eia.gov/aeo
Haiti

Please visit www.goalsbeyondthenet.org
Assuming President Obama’s Clean Power Plan

Energy-related carbon dioxide emissions decline in most AEO cases—

- No Clean Power Plan
- High Economic Growth
- Low Oil Price
- High Oil and Gas Resource and Technology Reference
- High Oil Price
- Low Oil and Gas Resource and Technology
- Low Economic Growth

U.S. Energy Information Administration
Climeworks AG
Rate of temperature change (°F per century):

Gray interval: -0.1 to 0.1°F

Is the Age of Petroleum Over?

Petroleum at Home
Living with the many petroleum-based products found in your home!

Building Materials and Fixtures

Electronics and Appliances

Personal Items and Clothing

Bedrooms and Closets

Gardens and Yards

Kitchens

Garages and Vehicles

Living rooms and Dens

Furniture and Carpeting

Furnace and

Source: energy.alberta.ca
Is the Age of Petroleum Over?

Source: Canada.com
Secretary Zinke

“Energy is an essential part of American life and a staple of the world economy. Achieving American dominance begins with recognizing that we have vast untapped domestic energy reserves. For too long America has been held back by burdensome regulations on our energy industry. The Department is committed to an America first energy strategy that lowers costs for hardworking Americans and maximizes the use of American resources, freeing us from dependence on foreign oil.”
What is a Five-Year Leasing Program?

• It’s a single sheet of paper, or can be.
• By statute, it is “a schedule of proposed lease sales indicating, as precisely as possible, the size, timing, and location of lease activity which [the Secretary] determines will best meet national energy needs for the five-year period following its approval or reapproval.”

## 2017 – 2022 Lease Sale Schedule

<table>
<thead>
<tr>
<th>Sale Number</th>
<th>Area</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>249</td>
<td>2017</td>
</tr>
<tr>
<td>2.</td>
<td>250</td>
<td>2018</td>
</tr>
<tr>
<td>3.</td>
<td>251</td>
<td>2018</td>
</tr>
<tr>
<td>4.</td>
<td>252</td>
<td>2019</td>
</tr>
<tr>
<td>5.</td>
<td>253</td>
<td>2019</td>
</tr>
<tr>
<td>6.</td>
<td>254</td>
<td>2020</td>
</tr>
<tr>
<td>7.</td>
<td>256</td>
<td>2020</td>
</tr>
<tr>
<td>8.</td>
<td>257</td>
<td>2021</td>
</tr>
<tr>
<td>9.</td>
<td>258</td>
<td>2021</td>
</tr>
<tr>
<td>10.</td>
<td>259</td>
<td>2021</td>
</tr>
<tr>
<td>11.</td>
<td>261</td>
<td>2022</td>
</tr>
</tbody>
</table>

What Must the Secretary Consider to Approve or Reapprove It?

Lots of stuff, but most significantly, four things:

1) “an equitable sharing of developmental benefits and risks among the various regions [of the OCS]”

2) “the location of such regions and respect to other uses of the sea and seabed[]”

3) “the interest of potential oil and gas producers…as indicated by exploration or nomination”

4) “the relative environmental sensitivity and marine productivity of different areas [of the OCS]”

43 U.S.C. §1344(a)(2)(B), (D), (E), and (G)
How Does the Secretary Strike the Right Balance?

- By following statutory procedures for stakeholder input [more later]
- By selecting “the timing and location of leasing, to the maximum extent practicable, so as to obtain a proper balance between the potential for environmental damage, the potential for the discovery of oil and gas, and the potential for adverse impact on the coastal zone.”

43 U.S.C. § 1344(a)(3)
Steps in the Process of Creating a New Program

The first step in the development process, a **Request for Information (RFI)**, was published in the Federal Register on July 3, 2017, with a 45-day comment period that closed on August 17, 2017. The first of three proposals for 2019–2024, the **Draft Proposed Program**, was released on January 4, 2018. Comments on the DPP or Programmatic EIS should be submitted by March 9, 2018. Comments can be submitted **Online (Preferred Method) or Mail/Hand delivered**.

https://www.boem.gov/National-Program-Learn/#regionalmaps
Prior Challenges to Five-Year Schedules

- *Center for Biological Diversity v. Dep’t of the Interior*, 563 F.3d 466 (D.C. Cir. 2009)
- *Center for Sustainable Economy v. Jewell*, 779 F.3d 588 (D.C. Cir. 2015)
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43 U.S.C. § 1344(a)(3)
Case 2

• *State of California v. Watt*, 712 F.2d 584 (D.C. Cir. 1983)
Case 3

Case 4

Center for Biological Diversity v. Dep’t of the Interior, 563 F.3d 466 (D.C. Cir. 2009)
Case 5


<table>
<thead>
<tr>
<th>Sale Year</th>
<th>OCS Region</th>
<th>Program Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 2019</td>
<td>Alaska</td>
<td>Beaufort Sea</td>
</tr>
<tr>
<td>2. 2020</td>
<td>Alaska</td>
<td>Chukchi Sea</td>
</tr>
<tr>
<td>3. 2020</td>
<td>Pacific</td>
<td>Southern California</td>
</tr>
<tr>
<td>4. 2020</td>
<td>Gulf of Mexico</td>
<td>Western, Central, and Eastern Gulf of Mexico*</td>
</tr>
<tr>
<td>5. 2020</td>
<td>Gulf of Mexico</td>
<td>Western, Central, and Eastern Gulf of Mexico*</td>
</tr>
<tr>
<td>6. 2020</td>
<td>Atlantic</td>
<td>South Atlantic</td>
</tr>
<tr>
<td>7. 2020</td>
<td>Atlantic</td>
<td>Mid-Atlantic</td>
</tr>
<tr>
<td>8. 2021</td>
<td>Alaska</td>
<td>Beaufort Sea</td>
</tr>
<tr>
<td>9. 2021</td>
<td>Alaska</td>
<td>Cook Inlet</td>
</tr>
<tr>
<td>10. 2021</td>
<td>Pacific</td>
<td>Washington/Oregon</td>
</tr>
<tr>
<td>11. 2021</td>
<td>Pacific</td>
<td>Northern California</td>
</tr>
<tr>
<td>12. 2021</td>
<td>Pacific</td>
<td>Central California</td>
</tr>
<tr>
<td>13. 2021</td>
<td>Atlantic</td>
<td>North Atlantic</td>
</tr>
<tr>
<td>14. 2021</td>
<td>Gulf of Mexico</td>
<td>Western, Central, and Eastern Gulf of Mexico*</td>
</tr>
<tr>
<td>15. 2021</td>
<td>Gulf of Mexico</td>
<td>Western, Central, and Eastern Gulf of Mexico*</td>
</tr>
<tr>
<td>16. 2022</td>
<td>Alaska</td>
<td>Chukchi Sea</td>
</tr>
<tr>
<td>17. 2022</td>
<td>Pacific</td>
<td>Southern California</td>
</tr>
<tr>
<td>18. 2022</td>
<td>Atlantic</td>
<td>Mid-Atlantic</td>
</tr>
<tr>
<td>19. 2022</td>
<td>Atlantic</td>
<td>South Atlantic</td>
</tr>
<tr>
<td>20. 2022</td>
<td>Gulf of Mexico</td>
<td>Western, Central, and Eastern Gulf of Mexico*</td>
</tr>
<tr>
<td>21. 2022</td>
<td>Gulf of Mexico</td>
<td>Western, Central, and Eastern Gulf of Mexico*</td>
</tr>
</tbody>
</table>

**Note:**

* All available areas, not including those subject to the GOMESA moratorium through June 30, 2022.

### 2019-2024 Draft Proposed Program Lease Sale Schedule (2023-24)

<table>
<thead>
<tr>
<th>#</th>
<th>Year</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>2023</td>
<td>Alaska Beaufort Sea</td>
</tr>
<tr>
<td>23</td>
<td>2023</td>
<td>Alaska Cook Inlet</td>
</tr>
<tr>
<td>24</td>
<td>2023</td>
<td>Alaska Hope Basin</td>
</tr>
<tr>
<td>25</td>
<td>2023</td>
<td>Alaska Norton Basin</td>
</tr>
<tr>
<td>26</td>
<td>2023</td>
<td>Alaska St. Matthew-Hall</td>
</tr>
<tr>
<td>27</td>
<td>2023</td>
<td>Alaska Navarin Basin</td>
</tr>
<tr>
<td>28</td>
<td>2023</td>
<td>Alaska Aleutian Basin</td>
</tr>
<tr>
<td>29</td>
<td>2023</td>
<td>Alaska St. George Basin</td>
</tr>
<tr>
<td>30</td>
<td>2023</td>
<td>Alaska Bowers Basin</td>
</tr>
<tr>
<td>31</td>
<td>2023</td>
<td>Alaska Aleutian Arc</td>
</tr>
<tr>
<td>32</td>
<td>2023</td>
<td>Alaska Shumagin</td>
</tr>
<tr>
<td>33</td>
<td>2023</td>
<td>Alaska Kodiak</td>
</tr>
<tr>
<td>34</td>
<td>2023</td>
<td>Alaska Gulf of Alaska</td>
</tr>
<tr>
<td>35</td>
<td>2023</td>
<td>Pacific Central California</td>
</tr>
<tr>
<td>36</td>
<td>2023</td>
<td>Pacific Northern California</td>
</tr>
<tr>
<td>37</td>
<td>2023</td>
<td>Gulf of Mexico Western, Central, and Eastern Gulf of Mexico*</td>
</tr>
<tr>
<td>38</td>
<td>2023</td>
<td>Gulf of Mexico Western, Central, and Eastern Gulf of Mexico*</td>
</tr>
<tr>
<td>39</td>
<td>2023</td>
<td>Gulf of Mexico Eastern and Central Gulf of Mexico**</td>
</tr>
<tr>
<td>40</td>
<td>2023</td>
<td>Atlantic Straits of Florida</td>
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<tr>
<td>41</td>
<td>2023</td>
<td>Atlantic North Atlantic</td>
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<tr>
<td>42</td>
<td>2024</td>
<td>Alaska Chukchi Sea</td>
</tr>
<tr>
<td>43</td>
<td>2024</td>
<td>Gulf of Mexico Western, Central, and Eastern Gulf of Mexico*</td>
</tr>
<tr>
<td>44</td>
<td>2024</td>
<td>Gulf of Mexico Western, Central, and Eastern Gulf of Mexico*</td>
</tr>
<tr>
<td>45</td>
<td>2024</td>
<td>Gulf of Mexico Eastern and Central Gulf of Mexico**</td>
</tr>
<tr>
<td>46</td>
<td>2024</td>
<td>Atlantic South Atlantic</td>
</tr>
<tr>
<td>47</td>
<td>2024</td>
<td>Atlantic Mid-Atlantic</td>
</tr>
</tbody>
</table>

**Note:**
* All available areas, not including those subject to the GOMESA moratorium through June 30, 2022.
** Those areas available following the expiration of the GOMESA moratorium.

Lower 48 States Program Area

Map showing the planning area for Outer Continental Shelf oil and gas leasing in the Lower 48 States from 2019 to 2024.
Alaska Region Program Area

2019–2024 Outer Continental Shelf Oil and Gas Leasing Draft Proposed Program Areas and Sale Years: Alaska

- Planning Area Boundary
- Draft Proposed Program Area
- Presidential Withdrawal Area

Legend:
- Chukchi Sea
  - 2019
  - 2021
  - 2023
- Beaufort Sea
  - 2020
  - 2021
  - 2023
- Hope Basin
  - 2023
- Norton Basin
  - 2023
- Navarin Basin
  - 2023
- St. Matthew-Hall
  - 2023
- Aleutian Basin
  - 2023
- Bowers Basin
  - 2023
- St. George Basin
  - 2023
- North Aleutian Basin
  - 2021
  - 2023
- Aleutian Arc
  - 2023
- Cook Inlet
  - 2021
  - 2023
- Shumagin
  - 2023
- Kodiak
  - 2023
- Gulf of Alaska
  - 2023

The maritime boundaries and limits shown herein, as well as the divisions between planning areas, are for initial planning purposes only and do not necessarily reflect the full extent of U.S. sovereign rights under international and domestic law.
Development of a New National OCS Program 2019-2024

Shortly after Secretary Zinke’s initial announcement, he “removed” Florida from the new draft five-year program, stating,

“I support the governor’s position that Florida is unique and its coasts are heavily reliant on tourism as an economic driver. As a result of discussion with Governor Scott’s and his leadership, I am removing Florida from consideration for any new oil and gas platforms.”
Gulf of Mexico Program Area
“If all it takes is an in-person meeting, this is great news. I urge every governor opposed to this radical plan to get in touch with Secretary Zinke as soon as possible. It’s time for Secretary Zinke to fully reverse course on this rash and ill-informed proposal.”

- Diane Hoskins, Oceana Campaign Director
DON’T TREAD ON MY OCS – ANSWERING THE CALL
Development of a New National OCS Program 2019-2024

@SecretaryZinke: California is also "unique" & our "coasts are heavily reliant on tourism as an economic driver." Our "local and state voice" is firmly opposed to any and all offshore drilling.

If that’s your standard, we, too, should be removed from your list. Immediately. twitter.com/SecretaryZinke...

7:39 PM - Jan 9, 2018

226 Retweets 2,063 Likes 4,196
In a letter to Secretary Zinke, on January 14th New Jersey Governor Chris Christie, Senators Cory A. Booker, and Robert Menendez expressed strong opposition to any development off the Atlantic.

“We write in strong opposition to any proposal that includes oil and gas drilling off the coast of New Jersey, which puts at risk the strength of New Jersey’s economy and the health of the state’s unique marine ecosystem.

The Jersey shore is our pride and joy, and as such has long enjoyed protection from oil and gas development by residents, stakeholders, and elected officials – Republicans and Democrats alike – for decades.”
GROWING OPPOSITION – THE STATES RALLY
Development of a New National OCS Program 2019-2024

- Florida
- New Hampshire
- New Jersey
- Delaware
- Maryland
- Virginia
- North Carolina
- South Carolina
- Oregon
- Washington
GROWING OPPOSITION –
Development of a New National OCS Program 2019-2024

- 150 East and West Coast Municipalities
- 1,200 local and state bipartisan officials
- Commercial and recreational fishing interests such as the Southeastern Fisheries Association, Fishers Survival Fund, Southern Shrimp Alliance, The Bill Fish Foundation and the International Game Fish Association
- California Fish and Game Commission
- California Coastal Commission
- California State Lands Commission and California Senate
On January 6, 2017, the Bureau of Ocean Energy Management (BOEM) announced a six-month delay in the implementation of the rigorous financial assurances required by Notice to Lessees and Operators NTL No. 2016-N01

- BOEM is still working on how to deal with the financial assurance issue.
Well Control Rule

Secretary Zinke is taking another look at regulations the Obama administration put in place after Deepwater Horizon, including a BSEE well control rule that required oil companies to have up-to-date spill-prevention technology in place.

• A draft of the proposed rule has been presented to the Office of Information and Regulatory Affairs
Royalty Deduction on deepwater tie-backs?
Royalty Deduction on deepwater tie-backs?

- Subsea tie-backs continue to provide one of the most economical means of developing deepwater fields.
  - a series of gathering lines that connect the production from multiple wells into a single processing hub, allowing the production from the wells to be transported to a platform, where the oil, gas and produced water are separated for transport to shore through a pipeline.

- These technologies enable long-distance tie-back opportunities for remote and marginal fields. Cost reduction is key to ensuring application of these technologies.

- Subsea expenditure accounts for 48% of total project expenditure between 2016 and 2020 - an 8% increase compared with the previous four year period.
Here’s our fracker! We’ll be drilling right off the coast of Mar-a-Lago. God Bless You Donald Trump for making this possible! The oil we drill just off your beach will pay 4 our entire show! And any spills - we’re going to let the ppl of Florida keep whatever they collect 4 free!
Energy Cases
To Watch
NEW YORK AND CALIFORNIA LEAD THE WAY IN CLIMATE CHANGE SUITES

On January 9th, the State of New York filed suit against BP p.l.c., Chevron, ConocoPhillips, Exxon Mobil Corporation, and Royal Dutch Shell in the Southern District of New York for the costs of protecting the city from the “existential threat” of climate change. The New York suit follows San Francisco, Oakland and several other California cities and counties that filed similar suits in 2017. The cases to watch are:

- **Cnty. of San Mateo v. Chevron Corp. et al.**, 3:17-cv-04929 (N.D. Cal.)
- **Cnty. of Marion v. Chevron Corp. et al.**, 3:17-cv-04935 (N.D. Cal.)
- **City of Imperial Beach v. Chevron Corp. et al.**, 3:17-CV-049394 (N.D. Cal.)